

BID OF _____

2014

PROPOSAL, CONTRACT, BOND AND SPECIFICATIONS

FOR

2014 PLAYGROUND IMPROVEMENTS - GROUP 2

CONTRACT NO. 7362

IN

MADISON, DANE COUNTY, WISCONSIN

AWARDED BY THE COMMON COUNCIL
MADISON, WISCONSIN ON _____

CITY ENGINEERING DIVISION
1600 EMIL STREET
MADISON, WISCONSIN 53713

<https://bidexpress.com/login>

**2014 PLAYGROUND IMPROVEMENTS - GROUP 2
CONTRACT NO. 7362**

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This Proposal, and Agreement have
been prepared by:

**CITY PARKS DIVISION
CITY OF MADISON
MADISON, DANE COUNTY, WISCONSIN**


Eric Knepp, Interim Parks Superintendent

EMK: SCLL

SECTION A: ADVERTISEMENT FOR BIDS AND INSTRUCTIONS TO BIDDERS

REQUEST FOR BID FOR PUBLIC WORKS CONSTRUCTION CITY OF MADISON, WISCONSIN

A BEST VALUE CONTRACTING MUNICIPALITY

PROJECT NAME:	2014 PLAYGROUND IMPROVEMENTS - GROUP 2
CONTRACT NO.:	7362
SBE GOAL	12%
BID BOND	5%
PRE BID MEETING (1:00 P.M.)	8/1/2014
PREQUALIFICATION APPLICATION DUE (1:00 P.M)	8/1/2014
BID SUBMISSION (1:00 P.M.)	8/8/2014
BID OPEN (1:30 P.M.)	8/8/2014
PUBLISHED IN WSJ	7/18/2014, 7/25/2014 & 8/1/2014

PRE BID MEETING: Representatives of the Affirmative Action Department will be present to discuss the Small Business Enterprise requirements at 1600 Emil Street, Madison Wisconsin.

PREQUALIFICATION APPLICATION: Forms are available on our website, www.cityofmadison.com/business/pw/forms.cfm. If not currently prequalified in the categories listed in Section A, an amendment to your Prequalification will need to be submitted prior to the same due date. Postmark is not applicable.

BIDS TO BE SUBMITTED by hand to 1600 EMIL ST., MADISON, WI 53713 or online at www.bidexpress.com.

THE BID OPENING is at 1600 EMIL ST., MADISON, WI 53713.

STANDARD SPECIFICATIONS

The City of Madison's Standard Specifications for Public Works Construction - 2014 Edition, as supplemented and amended from time to time, forms a part of these contract documents as if attached hereto.

These standard specifications are available on the City of Madison Public Works website, www.cityofmadison.com/Business/PW/specs.cfm.

The Contractor shall review these Specifications prior to preparation of proposals for the work to be done under this contract, with specific attention to Article 102, "BIDDING REQUIREMENTS AND CONDITIONS" and Article 103, "AWARD AND EXECUTION OF THE CONTRACT." For the convenience of the bidder, below are highlights of three subsections of the specifications.

SECTION 102.1: PRE-QUALIFICATION OF BIDDERS

In accordance with Wisconsin State Statutes 66.0901 (2) and (3), all bidders must submit to the Board of Public Works proof of responsibility on forms furnished by the City. The City requires that all bidders be qualified on a biennial basis.

Bidders must present satisfactory evidence that they have been regularly engaged in the type of work specified herein and they are fully prepared with necessary capital, materials, machinery and supervisory personnel to conduct the work to be contracted for to the satisfaction of the City. All bidders must be pre-

qualified by the Board of Public Works for the type of construction on which they are bidding prior to the opening of the bid.

In accordance with Section 39.02(9)(a)l. of the General Ordinances, all bidders shall submit in writing to the Affirmative Action Division Manager of the City of Madison, a Certificate of Compliance or an Affirmative Action Plan at the same time or prior to the submission of the proof of responsibility forms.

The bidder shall be disqualified if the bidder fails to or refuses to, prior to opening of the bid, submit a Certificate of compliance, Affirmative Action Plan or Affirmative Action Data Update, as applicable, as defined by Section 39.02 of the General Ordinances (entitled Affirmative Action) and as required by Section 102.11 of the Standard Specifications.

SECTION 102.4 PROPOSAL

No bid will be accepted that does not contain an adequate or reasonable price for each and every item named in the Schedule of Unit Prices.

A lump sum bid for the work in accordance with the plans and specifications is required. The lump sum bid must be the same as the total amounts bid for the various items and it shall be inserted in the space provided.

All papers bound with or attached to the proposal form are considered a part thereof and must not be detached or altered when the proposal is submitted. The plans, specifications and other documents designated in the proposal form will be considered a part of the proposal whether attached or not.

A proposal submitted by an individual shall be signed by the bidder or by a duly authorized agent. A proposal submitted by a partnership shall be signed by a member/partner or by a duly authorized agent thereof. A proposal submitted by a corporation shall be signed by an authorized officer or duly authorized registered agent of such corporation, and the proposal shall show the name of the State under the laws of which such corporation was chartered. The required signatures shall in all cases appear in the space provided thereof on the proposal.

Each proposal shall be placed, together with the proposal guaranty, in a sealed envelope, so marked as to indicate name of project, the contract number or option to which it applies, and the name and address of the Contractor or submitted electronically through Bid Express (www.bidexpress.com). Proposals will be accepted at the location, the time and the date designated in the advertisement. Proposals received after the time and date designated will be returned to the bidder unopened.

The Bidder shall execute the Disclosure of Ownership form. REFER TO SECTION F.

SECTION 102.5: BID DEPOSIT (PROPOSAL GUARANTY)

All bids, sealed or electronic, must be accompanied with a Bid Bond equal to at least 5% of the bid or a Certificate of Annual/Biennial Bid Bond or certified check, payable to the City Treasurer. Bid deposit of the successful bidders shall be returned within forty-eight (48) hours following execution of the contract and bond as required.

PREVAILING WAGE RATES

Prevailing Wage Rates may be required and are attached in Section J of the contract. See Special Provisions to determine applicability.

Bidders for this Contract(s) must be Pre-Qualified for at least one of the following type(s) of construction denoted by an

Building Demolition

- 101 Asbestos Removal
- 120 House Mover

- 110 Building Demolition

Street, Utility and Site Construction

- 201 Asphalt Paving
- 205 Blasting
- 210 Boring/Pipe Jacking
- 215 Concrete Paving
- 220 Con. Sidewalk/Curb & Gutter/Misc. Flat Work
- 221 Concrete Bases and Other Concrete Work
- 222 Concrete Removal
- 225 Dredging
- 230 Fencing
- 235 Fiber Optic Cable/Conduit Installation
- 240 Grading and Earthwork
- 241 Horizontal Saw Cutting of Sidewalk
- 242 Infrared Seamless Patching
- 245 Landscaping, Maintenance
- 250 Landscaping, Site and Street
- 251 Parking Ramp Maintenance
- 252 Pavement Marking
- 255 Pavement Sealcoating and Crack Sealing
- 260 Petroleum Above/Below Ground Storage Tank Removal/Installation
- 262 Playground Installer
- 265 Retaining Walls, Precast Modular Units

- 270 Retaining Walls, Reinforced Concrete
- 275 Sanitary, Storm Sewer and Water Main Construction
- 276 Sawcutting
- 280 Sewer Lateral Drain Cleaning/Internal TV Insp.
- 285 Sewer Lining
- 290 Sewer Pipe Bursting
- 295 Soil Borings
- 300 Soil Nailing
- 305 Storm & Sanitary Sewer Laterals & Water Svc.
- 310 Street Construction
- 315 Street Lighting
- 318 Tennis Court Resurfacing
- 320 Traffic Signals
- 325 Traffic Signing & Marking
- 332 Tree pruning/removal
- 333 Tree, pesticide treatment of
- 335 Trucking
- 340 Utility Transmission Lines including Natural Gas, Electrical & Communications
- 399 Other _____

Bridge Construction

- 501 Bridge Construction and/or Repair

Building Construction

- 401 Floor Covering (including carpet, ceramic tile installation, rubber, VCT)
- 402 Building Automation Systems
- 403 Concrete
- 404 Doors and Windows
- 405 Electrical - Power, Lighting & Communications
- 410 Elevator - Lifts
- 412 Fire Suppression
- 413 Furnishings - Furniture and Window Treatments
- 415 General Building Construction, Equal or Less than \$250,000
- 420 General Building Construction, \$250,000 to \$1,500,000
- 425 General Building Construction, Over \$1,500,000
- 428 Glass and/or Glazing
- 429 Hazardous Material Removal
- 430 Heating, Ventilating and Air Conditioning (HVAC)
- 433 Insulation - Thermal
- 435 Masonry/Tuck pointing

- 437 Metals
- 440 Painting and Wallcovering
- 445 Plumbing
- 450 Pump Repair
- 455 Pump Systems
- 460 Roofing and Moisture Protection
- 464 Tower Crane Operator
- 461 Solar Photovoltaic/Hot Water Systems
- 465 Soil/Groundwater Remediation
- 466 Warning Sirens
- 470 Water Supply Elevated Tanks
- 475 Water Supply Wells
- 480 Wood, Plastics & Composites - Structural & Architectural
- 499 Other _____

State of Wisconsin Certifications

- 1 Class 5 Blaster - Blasting Operations and Activities 2500 feet and closer to inhabited buildings for quarries, open pits and road cuts.
- 2 Class 6 Blaster - Blasting Operations and Activities 2500 feet and closer to inhabited buildings for trenches, site excavations, basements, underwater demolition, underground excavations, or structures 15 feet or less in height.
- 3 Class 7 Blaster - Blasting Operations and Activities for structures greater than 15 ' in height, bridges, towers, and any of the objects or purposes listed as "Class 5 Blaster or Class 6 Blaster".
- 4 Petroleum Above/Below Ground Storage Tank Removal and Installation (Attach copies of State Certifications.)
- 5 Hazardous Material Removal (Contractor to be certified for asbestos and lead abatement per the Wisconsin Department of Health Services, Asbestos and Lead Section (A&LS).) See the following link for application: www.dhs.wisconsin.gov/Asbestos/Cert. State of Wisconsin Performance of Asbestos Abatement Certificate must be attached.
- 6 Certification number as a Certified Arborist or Certified Tree Worker as administered by the International Society of Arboriculture
- 7 Pesticide application (Certification for Commercial Applicator For Hire with the certification in the category of turf and landscape (3.0) and possess a current license issued by the DATCP)
- 8 State of Wisconsin Master Plumbers License.

SECTION B: PROPOSAL

Please refer to the
Bid Express Website
at <https://bidexpress.com>
look up contract number
and go to
Section B: Proposal Page

You can access all City of Madison bid solicitations for FREE at www.bidexpress.com

Click on the "Register for Free" button and follow the instructions to register your company and yourself. You will be asked for a payment subscription preference, since you may wish to bid online someday. Simply choose the method to pay on a 'per bid' basis. This requires no payment until / unless you actually bid online. You can also choose the monthly subscription plan at this time. You will, however, be asked to provide payment information. Remember, you can change your preference at anytime. You will then be able to complete your free registration and have full access to the site. Your free access does not require completion of the 'Digital ID' process, so you will have instant access for viewing and downloading. To be prepared in case you ever do wish to bid online, you may wish to establish your digital ID also, since you cannot bid without a Digital ID.

If you have any problems with the free registration process, you can call the bidexpress help team, toll free at 1-888-352-2439 (option 1, option1).

SECTION C: SMALL BUSINESS ENTERPRISE

Instructions to Bidders City of Madison SBE Program Information

2 Small Business Enterprise (SBE) Program Information

2.1 Policy and Goal

The City of Madison reaffirms its policy of nondiscrimination in the conduct of City business by maintaining a procurement process which remains open to all who have the potential and ability to sell goods and services to the City. It is the policy of the City of Madison to allow Small Business Enterprises (SBE) maximum feasible opportunity to participate in City of Madison contracting. The bidder acknowledges that its bid has been submitted in accordance with the SBE program and is for the public's protection and welfare.

Please refer to the "ADVERTISEMENT FOR BIDS" for the goal for the utilization of SBEs on this project. SBEs may participate as subcontractors, vendors and/or suppliers, which provide a commercially useful function. The dollar value for SBE suppliers or 'materials only' vendors shall be discounted to 60% for purposes of meeting SBE goals.

A bidder which achieves or exceeds the SBE goal will be in compliance with the SBE requirements of this project. In the event that the bidder is unable to achieve the SBE goal, the bidder must demonstrate that a good faith effort to do so was made. Failure to either achieve the goal or demonstrate a good faith effort to do so will be grounds for the bidder being deemed a non-responsible contractor ineligible for award of this contract.

A bidder may count towards its attainment of the SBE goal only those expenditures to SBEs that perform a commercially useful function. For purposes of evaluating a bidder's responsiveness to the attainment of the SBE goal, the contract participation by an SBE is based on the percentage of the total base bid proposed by the Contractor. The total base bid price is inclusive of all addenda.

Work performed by an SBE firm in a particular transaction can be counted toward the goal only if it involves a commercially useful function. That is, in light of industry practices and other relevant considerations, does the SBE firm have a necessary and useful role in the transaction, of a kind for which there is a market outside the context of the SBE Program, or is the firm's role a superfluous step added in an attempt to obtain credit towards goals? If, in the judgment of the Affirmative Action Division, the SBE firm will not perform a commercially useful function in the transaction, no credit towards goals will be awarded.

The question of whether a firm is performing a commercially useful function is completely separate from the question of whether the firm is an eligible SBE. A firm is eligible if it meets the definitional criteria and ownership and control requirements, as set forth in the City of Madison's SBE Program.

If the City of Madison determines that the SBE firm is performing a commercially useful function, then the City of Madison must then decide what that function is. If the commercially useful function is that of an SBE vendor / supplier that regularly transacts business with the respective product, then the City of Madison will count 60% of the value of the product supplied toward SBE goals.

To be counted, the SBE vendor / supplier must be engaged in selling the product in question to the public. This is important in distinguishing an SBE vendor / supplier, which has a regular trade with a variety of customers, from a firm which performs supplier-like functions on an ad hoc basis or for only one or two contractors with whom it has a special relationship.

A supplier of bulk goods may qualify as an eligible SBE vendor / supplier if it either maintains an inventory or owns or operates distribution equipment. With respect to the distribution equipment; e.g., a fleet of trucks, the term "operates" is intended to cover a situation in which the supplier leases the equipment on a regular basis for its entire business. It is not intended to cover a situation in which the firm simply provides drivers for trucks owned or leased by another party; e.g., a prime contractor, or leases such a party's trucks on an ad hoc basis for a specific job.

If the commercially useful function being performed is not that of a qualified SBE vendor / supplier, but rather that of delivery of products, obtaining bonding or insurance, procurement of personnel, acting as a broker or manufacturer's representative in the procurement of supplies, facilities, or materials, etc., only the fees or commissions will apply towards the goal.

For example, a business that simply transfers title of a product from manufacturer to ultimate purchaser; e. g., a sales representative who re-invoices a steel product from the steel company to the Contractor, or a firm that puts a product into a container for delivery would not be considered a qualified SBE vendor / supplier. The Contractor would not receive credit based on a percentage of the cost of the product for working with such firms.

Concerning the use of services that help the Contractor obtain needed supplies, personnel, materials or equipment to perform a contract: only the fee received by the service provider will be counted toward the goal. For example, use of a SBE sales representative or distributor for a steel company, if performing a commercially useful function at all, would entitle the Contractor receiving the steel to count only the fee paid to the representative or distributor toward the goal. This provision would also govern fees for professional and other services obtained expressly and solely to perform work relating to a specific contract.

Concerning transportation or delivery services: if an SBE trucking company picks up a product from a manufacturer or a qualified vendor / supplier and delivers the product to the Contractor, the commercially useful function it is performing is not that of a supplier, but simply that of a transporter of goods. Unless the trucking company is itself the manufacturer or a qualified vendor / supplier in the product, credit cannot be given based on a percentage of the cost of the product. Rather, credit would be allowed for the cost of the transportation service.

The City is aware that the rule's language does not explicitly mention every kind of business that may contribute work on this project. In administering these programs, the City would, on a case-by-case basis, determine the appropriate counting formula to apply in a particular situation.

2.2 Contract Compliance

Questions concerning the SBE Program shall be directed to the Contract Compliance Officer of the City of Madison Department of Civil Rights, Affirmative Action Division, 210 Martin Luther King, Jr. Blvd., Room 523, Madison, WI 53703; telephone (608) 266-4910.

2.3 Certification of SBE by City of Madison

The Affirmative Action Division maintains a directory of SBEs which are currently certified as such by the City of Madison. Contact the Contract Compliance Officer as indicated in Section 2.2 to receive a copy of the SBE Directory or you may access the SBE Directory online at www.cityofmadison.com/dcr/aaTBDir.cfm.

All contractors, subcontractors, vendors and suppliers seeking SBE status must complete and submit the **Targeted Business Certification Application** to the City of Madison Affirmative Action Division by the time and date established for receipt of bids. A copy of the Targeted Business Certification Application is available by contacting the Contract Compliance Officer at the address and telephone indicated in Section 2.2 or you may access the Targeted Business Certification Application online at www.cityofmadison.com/dcr/aaTBDir.cfm. Submittal of the Targeted Business Certification Application by the time specified does not guarantee that the applicant will be certified as a SBE eligible to be utilized towards meeting the SBE goal for this project.

2.4 Small Business Enterprise Compliance Report

2.4.1 Good Faith Efforts

Bidders shall take all necessary affirmative steps to assure that SBEs are utilized when possible and that the established SBE goal for this project is achieved. A contractor who self performs a portion of the work, and is pre-qualified to perform that category of work, may subcontract that portion of the work, but shall not be required to do so. When a bidder is unable to achieve the established SBE goal, the bidder must demonstrate that a good faith effort to do so was made. Such a good faith effort should include the following:

- 2.4.1.1 Attendance at the pre-bid meeting.
- 2.4.1.2 Using the City of Madison's directory of certified SBEs to identify SBEs from which to solicit bids.
- 2.4.1.3 Assuring that SBEs are solicited whenever they are potential sources.
- 2.4.1.4 Referring prospective SBEs to the City of Madison Affirmative Action Division for certification.
- 2.4.1.5 Dividing total project requirements into smaller tasks and/or quantities, where economically feasible, to permit maximum feasible SBE participation.
- 2.4.1.6 Establishing delivery schedules, where requirements permit, which will encourage participation by SBEs.
- 2.4.1.7 Providing SBEs with specific information regarding the work to be performed.
- 2.4.1.8 Contacting SBEs in advance of the deadline to allow such businesses sufficient time to prepare a bid.
- 2.4.1.9 Utilizing the bid of a qualified and competent SBE when the bid of such a business is deemed reasonable (i.e. 5% above the lowest bidder), although not necessarily low.
- 2.4.1.10 Contacting SBEs which submit a bid, to inquire about the details of the bid and confirm that the scope of the work was interpreted as intended.

2.4.2 Reporting SBE Utilization and Good Faith Efforts

The Small Business Enterprise Compliance Report is to be submitted by the bidder with the bid. This report is due by the specified bid closing time and date. Bids submitted without a completed SBE Compliance Report as outlined below

shall be deemed non-responsible and the bidder ineligible for award of this contract.

2.4.2.1 If the Bidder meets or exceeds the goal established for SBE utilization, the Small Business Enterprise Compliance Report shall consist of the following:

2.4.2.1.1 **Cover Page**, Page C-6; and

2.4.2.1.2 **Summary Sheet**, C-7.

2.4.2.2 If the bidder does not meet the goal established for SBE utilization, the Small Business Enterprise Compliance Report shall consist of the following:

2.4.2.2.1 **Cover Page**, Page C-6;

2.4.2.2.2 **Summary Sheet**, C-7; and

2.4.2.2.3 **SBE Contact Report**, C-8 and C-9. (A separate Contact Report must be completed for each applicable SBE which is not utilized.)

2.5 Appeal Procedure

A bidder which does not achieve the established goal and is deemed non-responsible for failure to demonstrate a good faith effort to achieve such goal and subsequently denied eligibility for award of contract may, within 72 hours of receiving such notification, appeal that decision to a special appeals committee composed of three (3) members of the Affirmative Action Commission, three (3) members of the Board of Public Works and a seventh member appointed by the Mayor. All appeals must be made in writing to the City Engineer and received within 72 hours of City of Madison's notice. Postmark not applicable.

2.6 SBE Requirements After Award of the Contract

The successful bidder shall identify SBE subcontractors, suppliers and vendors on the subcontractor list in accordance with the specifications. The Contractor shall submit a detailed explanation of any variances between the listing of SBE subcontractors, vendors and/or suppliers on the subcontractor list and the Contractor's SBE Compliance Report for SBE participation.

No change in SBE subcontractors, vendors and/or suppliers from those SBEs indicated in the SBE Compliance Report will be allowed without prior approval from the Engineer and the Affirmative Action Division. The contractor shall submit in writing to the City of Madison Affirmative Action Division a request to change any SBE citing specific reasons which necessitate such a change. The Affirmative Action Division will use a general test of reasonableness in approving or rejecting the contractor's request for change. If the request is approved, the Contractor will make every effort to utilize another SBE if available.

The City will monitor the project to ensure that the actual percentage commitment to SBE firms is carried out.

2.7 SBE Definition and Eligibility Guidelines

A Small Business Enterprise is a business concern awarded certification by the City of Madison. For the purposes of this program a Small Business Enterprise is defined as:

- A. An independent business operated under a single management. The business may not be a subsidiary of any other business and the stock or ownership may not be held by any individual or any business operating in the same or a similar field. In determining whether an entity qualifies as a SBE, the City shall consider all factors relevant to being an independent business including, but not limited to, the date the business was established, adequacy of its resources for the work in which it proposes to involve itself, the degree to which financial, equipment leasing and other relationships exist with other ineligible firms in the same or similar lines of work. SBE owner(s) shall enjoy the customary incidents of ownership and shall share in the risks and profits commensurate with their enjoyment interests, as demonstrated by an examination of the substance rather than form or arrangements that may be reflected in its ownership documents.
- B. A business that has averaged no more than \$4.0 million in annual gross receipts over the prior three year period and the principal owner(s) do not have a personal net worth in excess of \$1.32 million.

Firm and/or individuals that submit fraudulent documents/testimony may be barred from doing business with the City and/or forfeit existing contracts.

SBE certification is valid for one (1) year unless revoked.

**2014 PLAYGROUND IMPROVEMENTS - GROUP 2
CONTRACT NO. 7362**

Small Business Enterprise Compliance Report

**This information may be submitted electronically through
Bid Express or submitted with bid in sealed envelope.**

Cover Sheet

Prime Bidder Information

Company: _____

Address: _____

Telephone Number: _____ Fax Number: _____

Contact Person/Title: _____

Prime Bidder Certification

I, _____, _____ of
Name Title
_____ certify that the information
Company

contained in this SBE Compliance Report is true and correct to the best of my knowledge and belief.

Witness' Signature

Bidder's Signature

Date

**2014 PLAYGROUND IMPROVEMENTS - GROUP 2
CONTRACT NO. 7362**

Small Business Enterprise Compliance Report

SBE Contact Report

Submit separate copy of this form for each SBE which you are not able to utilize towards meeting the SBE goal for this project. Attach separate sheets if necessary.

SBE Information

Company: _____

Address: _____

Telephone Number: _____

Contact Person/Title: _____

1. Outline below all efforts to solicit a bid from the above SBE. Include date, means of contact, who from your company made this contact and the result.

2. Describe the information provided to the aforementioned SBE regarding the scope of work for which he/she was to provide a bid.

Is this the same scope of work on which the subcontractor you intend to utilize based his/her bid?

Yes No

3. Did this SBE submit a bid? Yes No

4. Is the General Contractor pre-qualified to self-perform this category of work?

Yes No

5. If you responded "Yes" to Question 3, please check the items below which apply and provide the requested detail. If you responded "No" to Question 3, please skip ahead to item 6 below.

The SBE listed above is unavailable for work on this project for the following reasons. Provide specific detail for this conclusion.

The SBE listed above is unqualified for work on this project. Provide specific details for this conclusion.

The SBE listed above provided a price that was unreasonable (i.e. more than 5% above the lowest bidder). Provide specific detail for this conclusion including the SBE's price and the price of the subcontractor you intend to utilize.

A contract with the SBE listed above may constitute a breach of the bidder's collective bargaining agreements. Provide specific detail for this conclusion including, but not limited to, correspondence from the SBE indicating it will not sign a project labor agreement and/or correspondence from the applicable trade union indicating a project labor agreement will not be allowed at the time of project bidding.

Other; please specify reason(s) other than listed above which made it impossible for you to utilize this SBE on this project.

6. Describe any other good faith efforts:

SECTION D: SPECIAL PROVISIONS

2014 PLAYGROUND IMPROVEMENTS - GROUP 2 CONTRACT NO. 7362

It is the intent of these Special Provisions to set forth the final contractual intent as to the matter involved and shall prevail over the Standard Specifications and plans whenever in conflict therewith. In order that comparisons between the Special Provisions can be readily made, the numbering system for the Special Provisions is equivalent to that of the Specifications.

Whenever in these Specifications the term "Standard Specifications" appears, it shall be taken to refer to the City of Madison Standard Specifications for Public Works Construction and Supplements thereto.

SECTION 102.1: PREQUALIFICATION OF BIDDERS

The bidder for this contract must be pre-qualified in at least one of several different categories due to the nature of work involved with this contract. If the General Contractor is prequalified in a category other than Playground Installer (#262 under Street, Utility and Site Construction), their sub contractor must be prequalified as a Playground Installer. Work to be performed by prequalified category #262 Playground Installer, shall include (but not be limited to) BID ITEM 90001 – PLAYGROUND EQUIPMENT INSTALLATION. General Contractors who are not prequalified as a Playground Installer under prequalification category #262 must submit proof that their sub contractor is prequalified under category #262 within 2 business days of submitting their bid.

SECTION 102.10: PREVAILING WAGE

For this project, payment of prevailing wages (white sheet) shall be required unless the box indicating prevailing wages are not required is checked below.

Prevailing wages shall not be required when this box is checked.

If prevailing wages (white sheets) are required, the wages and benefits paid on the contract shall not be less than those specified in the Prevailing Wage Determination included with these contract documents for the following types of work:

- Building or Heavy Construction
- Sewer, Water, or Tunnel Construction
- Local Street or Miscellaneous Paving Construction
- Residential or Agricultural Construction

When multiple boxes are checked, worker's wages may vary according to the type and area of work performed. It is the responsibility of the Contractor to determine and apply the appropriate wage rate for the specific work assigned.

SECTION 102.12: BEST VALUE CONTRACTING

This Contract shall be considered a Best Value Contract if the Contractor's bid is equal to or greater than \$54,000 for a single trade contract; or equal to or greater than \$264,500 for a multi-trade contract pursuant to MGO 33.07(7).

SECTION 104: SCOPE OF WORK

This project consists of installation of new playground equipment and associated site and playground amenities, under drain and paths at various City of Madison project sites.

The Contractor shall view the sites prior to bidding to become familiar with the existing conditions. The Contractor shall work with the existing utilities to resolve conflicts during the construction process.

SECTION 105.9: SURVEYS, POINTS, AND INSTRUCTION

The Contractor is responsible for the layout of the playground under drain system per Bid Item 20130. The City of Madison shall be responsible for setting all other lines and/or grades required to complete the work for the 2014 Playground Improvements – Group 2. Any questions regarding the layout and staking of this project should be directed to City of Madison Parks Surveyor Dan Rodman at 266-6674.

SECTION 105.12: COOPERATION BY CONTRACTOR

Several utilities exist on site. The Contractor shall perform a One Call through Digger's Hotline for each site at least three days prior to beginning construction. To ensure that Parks-owned utilities are also marked, include the park name at the beginning of the Marking Instructions field on the ticket, and send a copy of the ticket to the City of Madison Parks Surveyor (Dan Rodman / drodman@cityofmadison.com / tel (608)266-6674 / fax (608)267-1162).

The Contractor shall secure materials at the end of each work day to deter any potential vandalism and theft.

The Contractor shall attend a pre-construction meeting prior to the start of construction.

The Contractor warrants that its services are performed, within the limits prescribed by the City, with the usual thoroughness and competence of the consulting profession; in accordance with the standard for professional services at the time those services are rendered. The Contractor shall be responsible for the accuracy of the work performed under this Agreement, and shall promptly make necessary revisions or corrections resulting from their negligent acts, errors or omissions without additional compensation. The Contractor shall be responsible for any damages incurred as a result of their errors, omissions, or negligent acts and for any losses or costs to repair or remedy construction.

The Contractor shall take care when accessing the site not to damage the existing utilities, concrete curb, sidewalk or asphalt pavement. Any damage shall be repaired by the Contractor per City of Madison Standard Specifications for Public Works Construction and considered incidental to this contract.

The Contractor shall contact the Construction Inspector each day to inform the Construction Inspector the location of the day's proposed playground construction.

SECTION 105.13: ORDER OF COMPLETION

The Contractor shall complete the playground improvements in the following order:

1. Huegel Park, 5902 Williamsburg Way, Madison, 53719
2. Lucy Lincoln Park, 1506 Prairie Road, Madison, 53711
3. Fisher Street Park, 1834 Fisher Street, Madison, 53713
4. Burrows Park, 25 Burrows Road, Madison, 53704

Prior to beginning construction, the Contractor shall submit to the City a detailed schedule showing the sequence and anticipated dates of all playground installation operations.

The Contractor shall not be allowed to leave any site open, and/or unfinished from the time construction temporarily ends in winter 2014, until the time construction restarts in 2015 (with the exception that dormant seeding will be allowed).

Construction of playgrounds may be run concurrently.

Construction of the Huegel Park Playground must be completed by 11/30/2014.

SECTION 107.7: MAINTENANCE OF TRAFFIC

All traffic control shall conform to Part VI of the Federal Highways Administrations "Manual on Uniform Traffic Control Devices" (MUTCD), the State of Wisconsin Standard Facilities Development Manual (including Chapter 16 – Standard Detail Drawings) and the City of Madison Standards for sidewalk and bikeway closures.

The Contractor shall submit an acceptable, complete Traffic Control Plan, including all necessary phases and any required sidewalk or bike route closures, to the office of the City Traffic Engineer, at 215 Martin Luther King, Jr. Blvd, Suite 100, Madison, WI 53703, a minimum of five (5) working days, prior to the pre-construction meeting. The Traffic Control Plan shall address all requirements of this section of the Special Provisions. The Contractor shall not start work on this project until the Traffic Engineering Division has approved a traffic control plan and traffic control devices have been installed, in accordance with the approved plan. Failure of the Contractor to obtain approval of a Traffic Control Plan, as specified above, may prevent the Contractor from starting work and shall be considered a delay of the project, caused by the Contractor.

The Contractor shall be responsible for installing and maintaining traffic control in accordance with the Traffic Control Plan and as directed by the City Traffic Engineer. The Contractor shall install and maintain modifications or additions to the traffic control, as directed by the City Traffic Engineer, at no cost to the City.

The Contractor shall provide ADA/Handicap Accessible pedestrian access at all intersections within the construction area at all times. Sidewalks shall be maintained on at least one side of the street at all times unless otherwise required.

The Contractor may remove parking within the project limits as indicated on the Traffic Control Plan. The Contractor shall be responsible for posting and maintaining NO PARKING signs in accordance with City of Madison Police Department's "Guidelines for Temporary No Parking Restrictions for Construction or Special Events".

No construction equipment or materials shall be stored in the roadway or street right-of-way that is open to traffic during non-working hours. Construction equipment and materials are not to be stored within the street right-of-way that is outside the project limits as shown on the approved plan.

Contact Thomas Mohr, Traffic Engineering Division, 267-8725, with any questions concerning these traffic control specifications.

SECTION 107.13: TREE PROTECTION SPECIFICATIONS

The Contractor is advised to review Article 107.13 of the Standard Specifications for tree protection. Note that Articles 107.13(a) Underground Utility Excavation & Installation, 107.13(b) Curb Excavation and Installation, and 107.13(c) Sidewalk Excavation and Installation are not applicable to this project except as noted below.

The intent of these designs is to minimize the damage to those trees that remain following construction. Trees that must be protected are designated on the plans.

107.13(e) Terrace Restoration

It is recognized that grading operations and root cutting of some trees will need to occur within 5 feet of trees in order to complete the work, and care must be taken in these areas. For trees where construction operations, including grading, stone placement, filling, etc. occur within 5 feet of the trunk, construction operations near these trees shall be done under the supervision of a City of Madison Forestry Representative. The sequence to construct in these areas shall be as follows:

1. Trees within 5' of construction operations shall not be disturbed until inspected by a City of Madison Forestry Representative.
2. The Contractor shall place a yellow ribbon around the tree to highlight these trees for the equipment operator.
3. The ribbon shall remain until the area is fine graded and seeded or sodded. Roots shall be cut cleanly by using a saw, ax, lopping shears, chain saw, stump grinder, or other means which will produce a clean cut. Exposed roots shall be covered as soon as excavation and installation are complete. All roots over one (1) inch in diameter that are damaged shall be cleanly cut immediately back of the damaged section on the same day of the excavation. The Contractor shall not rip or pull roots out towards the trunk of a tree while excavating with a backhoe. The use of a backhoe to cut roots is NOT acceptable.

All provisions of Articles 107.13(d), 107.13(f) Bark Abrasions and Limb Damage, 107.13(g) Soil Compaction, 107.13(h) Contractor/Foreperson Acknowledgement, and 107.13(i) Cost Recovery and Liquidated Damages are applicable to this contract.

Protection of these trees shall be paid under Bid Item 10800 – Root Cutting.

SECTION 108.2: PERMITS

The following permits have been applied for by the City of Madison:

1. City of Madison Erosion Control Permit

The Contractor shall meet the conditions of all permits and must keep a copy of each individual permit on site at all times throughout construction.

The Contractor shall meet the conditions of the permits including properly installing and maintaining the erosion control measures shown on the plans, specified in these Special Provisions, or as directed by the Engineer or his designees. This work shall be paid for under the appropriate bid items, or if appropriate items are not included in the contract, they shall be paid for as Extra Work.

The City's obtaining these permits is not intended to be exhaustive of all permits that may be required to be obtained by the Contractor for construction of this project. It shall be the responsibility of the Contractor to identify and obtain any other permits needed for construction.

SECTION 109.2: PROSECUTION OF THE WORK

Work cannot start on this contract until after the "Start to Work" letter has been received. Construction work must begin within seven (7) calendar days after the date appearing on the mailed notice to do so that was sent to the Contractor. Construction work shall be carried at a rate so as to secure full completion within the contract times outlined in Section 109.7, the rate of progress and the time of completion being essential conditions of this Agreement.

The fixed, agreed upon, liquidated damages for failure to complete all work within the contract, unless otherwise specified in this section, shall be calculated in accordance with Article 109 of the Standard Specifications. The Contractor shall limit workdays from 7:00 am to 7:00 pm, Monday - Friday, unless approved by the Engineer in writing.

SECTION 109.7: TIME OF COMPLETION

Work on the 2014 Playground Improvements – Group 2 shall start on or around 10/02/2014 and shall be completed by 7/01/2015.

Construction of the Huegel Park Playground must be completed by 11/30/2014.

BID ITEM 10701 – TRAFFIC CONTROL

DESCRIPTION

Construction at Fisher Street Park and Huegel Park shall not require a Traffic Control Plan, but shall require a Maintenance of Traffic special provision. The Contractor shall post "ROAD WORK AHEAD" signs on streets adjacent to playground construction, in both directions of traffic, and in advance of construction.

Construction at Burrows Park does not require a Traffic Control Plan or a Maintenance of Traffic special provision.

Construction at Lucy Lincoln Hiestand Park shall require a Traffic Control Plan per the Maintenance of Traffic special provision.

Work under this item shall be bid per Section 107.7 MAINTENANCE OF TRAFFIC per this contract.

METHOD OF MEASUREMENT

Traffic control shall be measured lump sum for each individual site.

BASIS OF PAYMENT

Traffic control shall be paid at the total completion of project as determined by the Engineer. This item shall not be paid in full if at any time the Contractor fails to properly erect, maintain and coordinate traffic control per Section 107.7 MAINTENANCE OF TRAFFIC.

BID ITEM 10911 - MOBILIZATION

DESCRIPTION

Work under this item shall include all costs associated with mobilization of the Contractor to each park playground location.

Parking of equipment, storage of materials, and staging shall be allowed within project limits, per Section 107.7 MAINTENANCE OF TRAFFIC and as shown on plans.

The Contractor may only enter the construction site through an area bordered by construction fencing as shown on the plans. **THE CONTRACTOR MAY NOT DRIVE OR STORE EQUIPMENT ON ANY PORTION OF THE PARK OUTSIDE THE CONSTRUCTION LIMITS UNLESS INDICATED OTHERWISE ON PLANS OR DIRECTED IN THE FIELD.**

All materials purchased by the City of Madison shall be ordered for delivery to pre-determined receiving locations as described in the individual bid item descriptions. The Contractor shall provide equipment and labor for receiving, trucking and off-loading as needed.

Contractor is responsible for securing all deliveries and insuring the completeness of the order prior to installation.

The Contractor is responsible for restoration of any damage to the site due to construction access.

METHOD OF MEASUREMENT

Mobilization shall be paid as a lump sum for mobilization related to each project site.

BASIS OF PAYMENT

Mobilization shall be measured as described above and shall be paid for at the contract price which shall be full compensation for all work, materials, tools, equipment, labor, and incidentals required to complete the work as set forth in the description.

BID ITEM 20101 – EXCAVATION CUT

DESCRIPTION

Excavation Cut shall consist of the loosening, loading, hauling and disposal of all materials, excluding the existing pea gravel playground surfacing which shall be paid for under BID ITEM 20103 EXCAVATION CUT – PEA GRAVEL. Excavation cut shall be in accordance with Article 201 of the City of Madison Standard Specifications for Public Works Contracts.

The excavation quantities for this contract have been calculated by subtracting digital terrain models of the existing and proposed surfaces and sub surfaces within the different material areas. Cut (in place quantities) and fill have been estimated from these models. Cut and fill quantities have been determined based on an estimated existing playground surface depth of 17". No shrinkage factor has been applied to fill quantities to estimate net volume. The Contractor is responsible to review attached earthwork calculations. Three-dimensional Microstation (.dgn) files containing the digital terrain models used for the earthwork calculations are available.

The proposal quantity was computed by Microstation InRoads surface data volume computations and the assumptions listed above. Adjustments were made for topsoil assuming excavation of four (4) inches of existing topsoil, placement of six (6) inches of proposed topsoil, and placement of either twelve (12) or nine (9) inches of playground surfacing (depending on the surfacing type).

Excess excavated material deemed unusable shall be disposed of at a suitable location determined by the Contractor at no additional cost to the City of Madison.

Suitable materials (to be determined by the Engineer) may be reused as fill within the project limits. Placement of these fill materials shall be considered incidental to this bid item and shall not be compensated separately. All double handling and subsoil placement is included in this bid item.

Any additional undercut required due to field conditions shall be paid for at the Excavation Cut unit bid price.

Test rolling for undercut determination is required at all playground sites and is incidental to this bid item.

Final playground subgrade must be within +/- 1". The Contractor shall contact the Engineer to proof subgrade prior to installation of fabric over playground subgrade.

Contractor to note all excavated areas shall be filled at the end of each work day. No excavated areas shall be "open" during non work hours.

METHOD OF MEASUREMENT

Excavation Cut shall be measured by the cubic yard quantity as listed in the proposal page without measurement thereof.

BASIS OF PAYMENT

Excavation Cut shall be measured as described above and shall be paid for at the contract unit price which shall be full compensation for all work, materials, labor, tools, equipment, disposal, and incidentals required to complete the work as set forth in the description.

BID ITEM 20103 – EXCAVATION CUT - PEA GRAVEL

DESCRIPTION

Excavation Cut – Pea Gravel shall consist of the loosening, loading, hauling and disposal of the existing pea gravel playground surfacing as identified on the plans per Article 201 of the City of Madison Standard Specifications for Public Works Construction.

The excavation quantities for this contract have been calculated by subtracting digital terrain models of the existing and proposed surfaces and sub surfaces within the different material areas. Cut (in place quantities) and fill have been estimated from these models. Cut and fill quantities have been determined based on an estimated existing playground surface depth of 17". No shrinkage factor has been applied to fill quantities to estimate net volume. The Contractor is responsible to review attached earthwork calculations. Three-dimensional Microstation (.dgn) files containing the digital terrain models used for the earthwork calculations are available.

The proposal quantity was computed by Microstation InRoads surface data volume computations and the assumptions listed above. Adjustments were made for excavation of seventeen (17) inches of existing playground surfacing.

Excess material shall be disposed offsite at a location to be determined and provided by the City at no extra cost to the City. The location shall be within the City of Madison. Double handling, stockpiling and placing topsoil is included in this bid item.

All double handling is included in this bid item.

Contractor to note all excavated areas shall be filled at the end of each work day. No excavated areas shall be "open" during non work hours.

METHOD OF MEASUREMENT

Excavation Cut – Pea Gravel within the limits shown on the plans shall be measured by the cubic yard quantity as listed in the proposal page without measurement thereof.

BASIS OF PAYMENT

Excavation Cut – Pea Gravel shall be measured as described above and shall be paid for at the contract unit price which shall be full compensation for all work, materials, labor, tools, equipment, disposal, and incidentals required to complete the work as set forth in the description.

BID ITEM 20130 - UNDER DRAIN

DESCRIPTION

This work shall include all labor, equipment, materials, and incidentals required to install and connect four-inch perforated pipe under drain, wrapped, including open graded base course and filter fabric sock as shown on the plans or as directed by the Engineer.

Drain pipe shall pitch at a minimum 0.5% slope in a bed open graded base course to cover and envelope the pipe a minimum of 3" around. Drain pipe shall be located to intersect a main run that shall daylight to a low spot noted on the plan and confirmed in the field. The pipe end shall include a secured mitered drain grate (Drain-Tech # 0499MDB or approved equal). Installation of the secured mitered drain grate, stone, filter fabric sock, perforated pipe and excavation cut is incidental to this bid item.

When installing the under drain system the Contractor shall maintain a 24" minimum clearance from playground equipment footings.

The Contractor shall be responsible for staking horizontal and vertical alignment of drain tile. The Contractor shall contact City of Madison Parks Surveyor, Dan Rodman at 209-7012 at least 48 hours prior to field check under drain elevations prior to backfilling.

METHOD OF MEASUREMENT

Under Drain shall be measured by the linear foot quantity determined in the field.

BASIS OF PAYMENT

Under Drain shall be measured as described above and shall be paid for at the contract unit price which shall be full compensation for all work, materials, tools, equipment, labor, hauling, placement, and incidentals required to complete the work as set forth in the description.

BID ITEM 20140 – GEOTEXTILE FABRIC TYPE SAS NON WOVEN

DESCRIPTION

Work under this bid item shall include all necessary work, labor and incidentals required to install Type SAS Non Woven Geotextile Fabric between the proposed subgrade/under drain and the playground surfacing (installed by others).

Geotextile fabric shall have a minimum 4 oz/sy fabric strength.

Overlap and staple pattern shall be in accordance with the manufacturer's recommendations, or as modified or approved in the field to accommodate the underlying play equipment. The Contractor shall provide to the City the manufacturer's recommended staple pattern.

METHOD OF MEASUREMENT

Geotextile Fabric Type SAS Non Woven shall be measured by the square yard quantity as listed in the proposal page without measurement thereof, not including run out in anchor trenches or overlap.

BASIS OF PAYMENT

Geotextile Fabric Type SAS Non Woven shall be measured as described above and shall be paid for at the contract unit price which shall be full compensation for all work, materials, labor, tools, equipment, and incidentals required to complete the work as set forth in the description.

BID ITEM 20201 - FILL

DESCRIPTION

This item shall include all necessary work, labor and incidentals required to import and distribute fill to meet proposed subgrades. Fill shall comply with material described in Article 202 of the City of Madison Standard Specifications for Public Works Construction.

The fill quantities for this contract have been computed by Microstation InRoads surface data volume. Adjustments were made for topsoil assuming excavation of four (4) inches of existing topsoil, excavation of seventeen (17) inches of existing playground surfacing, placement of six (6) inches of proposed topsoil, and placement of either twelve (12) or nine (9) inches of playground surfacing (depending on the surfacing type).

Double handling, stockpiling and placing fill is included in this bid item.

METHOD OF MEASUREMENT

Fill shall be measured by the cubic yard quantity as listed in the proposal page without measurement thereof.

BASIS OF PAYMENT

Fill shall be measured as described above and shall be paid for at the contract unit price which shall be full compensation for all work, materials, labor, tools, equipment, disposal, and incidentals required to complete the work as set forth in the description.

BID ITEM 20217 – CLEAR STONE

DESCRIPTION

This item shall include the quantity of clear stone required for the construction entrance per BID ITEM 21011 – CONSTRUCTION ENTRANCE and does not include stone for construction of the under drain. Stone required for construction of the under drain shall be incidental to BID ITEM 20130 – UNDER DRAIN.

METHOD OF MEASUREMENT

Clear Stone shall be measured by the ton as listed in the proposal page without measurement thereof.

BASIS OF PAYMENT

Clear Stone shall be measured as described above and shall be paid for at the contract unit price which shall be full compensation for all work, materials, labor, tools, equipment, disposal, and incidentals required to complete the work as set forth in the description.

BID ITEM 20221 - TOPSOIL

DESCRIPTION

This item shall include all necessary work, labor and incidentals required to distribute and dispose of topsoil to meet proposed grades. Topsoil shall comply with Article 202 of the City of Madison Standard Specifications for Public Works Construction.

Stripped topsoil can be stockpiled on site within the construction fence boundary.

Excess material shall be disposed offsite at a location to be determined and provided by the City at no extra cost to the City. The location shall be within the City of Madison. Double handling, stockpiling and placing topsoil is included in this bid item.

Contractor to note - the City of Madison Parks Division is to be called to inspect and approve the finish grade prior to seeding and mulching.

The topsoil quantities for this contract have been computed by Microstation InRoads surface data volume computations and the assumptions listed above. Adjustments were made for topsoil assuming excavation of four (4) inches of existing topsoil, seventeen (17) inches of existing playground surfacing, and placement of six (6) inches of proposed topsoil.

METHOD OF MEASUREMENT

Topsoil shall be measured by the square yard quantity as listed in the proposal page without measurement thereof.

BASIS OF PAYMENT

Topsoil shall be measured as described above and shall be paid for at the contract unit price which shall be full compensation for all work, materials, labor, tools, equipment, disposal, and incidentals required to complete the work as set forth in the description.

BID ITEM 20701 – TERRACE SEEDING

DESCRIPTION

This work shall consist of preparing seed beds, furnishing and sowing the required seed, furnishing and applying the required stabilizers, fertilizer, and mulching material on all disturbed areas including areas damaged by construction activities, in accordance with Article 207 of the City of Madison Standard Specifications for Public Works Construction. Seed mixture shall be either in whole, or a mixture of the City of Madison sun terrace mix and shade terrace mix applied appropriately based on shady and sunny areas of the construction site.

Since construction is limited to within the construction fence, no additional compensation shall be given for seeding quantities beyond what is specified in this contract.

Contractor to note – the City of Madison Playground Construction Inspector shall be called to inspect and approve the finish grade prior to seeding and mulching.

Contractor is responsible for obtaining seed bed germination per Article 207 of the City of Madison Standard Specifications for Public Works Construction, regardless of site conditions.

METHOD OF MEASUREMENT

Terrace Seeding shall be measured by the square yard quantity as listed in the proposal page without measurement thereof.

BASIS OF PAYMENT

Terrace Seeding shall be measured as described above and shall be paid for at the contract unit price which shall be full compensation for all work, materials, tools, equipment, labor, hauling, placement, and incidentals required to complete the work as set forth in the description.

BID ITEM 21024 - SILT SOCK (12 INCH) - COMPLETE

DESCRIPTION

Work under this item shall include all work, materials, labor, and incidentals required to install, maintain and remove silt sock at locations shown on the plans and around any subsoil/topsoil staging piles and to install, maintain and remove additional undistributed silt sock as a precautionary measure to address emergency erosion control. The proposal quantities include an additional 200 linear feet of undistributed silt sock per park. It is probable that the additional linear feet of undistributed silt sock shall be reduced or eliminated from the proposal quantities.

METHOD OF MEASUREMENT

Silt Sock (12 inch) – Complete, shall be measured by linear foot for the completed work as described above.

BASIS OF PAYMENT

Silt Sock (12 inch) – Complete, shall be measured as described above and shall be paid for at the contract unit price which shall be full compensation for all work, materials, tools, equipment, labor, hauling, placement, disposal and incidentals required to complete the work as set forth in the description.

BID ITEM 21061 - EROSION MATTING, CLASS I URBAN TYPE A – ORGANIC

DESCRIPTION

Work under this bid item shall include installation of Erosion Matting, Class I Urban Type A - Organic on all seeded slopes steeper than 5:1 or at locations identified on plans.

Work under this bid item shall be as set forth in the latest edition of the City of Madison Standard Specifications for Public Works Construction, except the Contractor shall note that special care with anchorage devices shall be required so as to not injure park users. Anchorage devices for the mat are required to be a product identified on the Wisconsin Department of Transportation Erosion Control Product Acceptability List (PAL) under the category of "Anchoring Devices for Class I, Urban Erosion Mat.

Anchorage devices shall be completely biodegradable, and photobiodegradable or metal anchorage devices shall not be allowed. Materials deemed to present a hazard from splintering or spearing shall not be approved, including solid wood devices.

Photobiodegradable matting is not allowed.

Erosion Matting, Class I Urban Type A – Organic shall be installed correctly with correct anchorage, staple pattern, and overlap. To verify the staple pattern, the Contractor shall provide to the Engineer a manufacturer's recommended staple pattern for the type of matting installed.

Trimming of the Erosion Matting, Class I Urban Type A required to accommodate existing tree locations shall be considered incidental to this bid item.

METHOD OF MEASUREMENT

Erosion Matting, Class I Urban Type A- Organic shall be measured by the square yard quantity as listed in the proposal page without measurement thereof, not including run out and overlap.

BASIS OF PAYMENT

Erosion Matting, Class I Urban Type A shall be measured as described above and shall be paid for at the contract unit price which shall be full compensation for all work, materials, tools, equipment, labor, hauling, placement, disposal and incidentals required to complete the work as set forth in the description. Seeding shall be paid separately under BID ITEM 20701 – TERRACE SEEDING.

BID ITEM 40102 – CRUSHED AGGREGATE BASE COURSE GRADATION NO. 2

DESCRIPTION

Work under this bid item shall include provision and installation of 9 inches of Crushed Aggregate Base Course Gradation No. 2 for asphalt path construction.

All aggregate base course shall extend 6 inches beyond the proposed pavement edge and shall have 3 inches of topsoil and terrace seed over the extended gravel base to be paid for under BID ITEM 20221 – TOPSOIL and 20701 – TERRACE SEEDING for all paved paths, except for where the path extends into the playground.

The Contractor shall contact Dan Rodman at 209-7012 at least 48 hours prior to proof subgrade elevations prior to paving.

METHOD OF MEASUREMENT

Crushed Aggregate Base Course Gradation No. 2 shall be measured by the plan ton quantity as listed in the proposal page without measurement thereof.

BASIS OF PAYMENT

Crushed Aggregate Base Course Gradation No. 2 shall be measured as described above and shall be paid for at the contract unit price which shall be full compensation for all work, materials, tools, equipment, labor, hauling, placement, disposal and incidentals required to complete the work as set forth in the description.

BID ITEM 40201 – 3 INCH DEPTH HMA PAVEMENT TYPE E-0.3

DESCRIPTION

Work under this item shall include all work, materials, labor and incidentals necessary for the Contractor to provide and install 3 Inch Depth HMA Pavement Type E-0.3 in accordance with these plans and specifications and the latest edition of the City of Madison Standard Specifications for Public Works Construction.

METHOD OF MEASUREMENT

3 Inch Depth HMA Pavement Type E-0.3 shall be measured by the ton as listed on the proposal page.

BASIS OF PAYMENT

3 Inch Depth HMA Pavement Type E-0.3 shall be measured as described above and shall be paid for at the contract unit price which shall be full compensation for all work, materials, tools, equipment, labor, hauling, placement, disposal and incidentals required to complete the work as set forth in the description.

BID ITEM 90000 - CONSTRUCTION FENCING (PLASTIC)

Work under this item shall include all work, materials, labor and incidentals necessary for the Contractor to provide, install, maintain and remove construction fence from the project site as shown on the plans.

Construction fencing shall be installed to discourage access to the construction area by the general public during the course of the project. Fencing shall be maintained throughout construction and adjusted or removed at the request of the Engineer.

This fence shall be highly visible (orange), constructed of a plastic web, and able to withstand the expected amount of use it shall receive on a construction site. Relocation of fencing may be required as the work progresses. No extra payment shall be made for temporarily opening and re-closing the fence, or relocation of the fencing as needed to perform the work. Fencing shall be left in place until construction operations are complete.

Construction fencing shall be International Orange color, high-density polyethylene mesh conforming to the following:

- Mesh opening: 1 inch minimum to 3 inch maximum
- Height: 4 feet
- Ultimate tensile strength: Avg 3000 lb per 4' width (ASTM D638)

METHOD OF MEASUREMENT

Construction Fence (Plastic) shall be measured by the plan linear foot quantity as listed in the proposal page without measurement thereof.

BASIS OF PAYMENT

Construction Fence (Plastic) shall be measured as described above and shall be paid for at the contract unit price which shall be full compensation for all work, materials, tools, equipment, labor, hauling, placement, disposal and incidentals required to complete the work as set forth in the description.

BID ITEM 90001 - PLAYGROUND EQUIPMENT INSTALLATION

DESCRIPTION

All play equipment shall be purchased by the City of Madison and ordered for delivery from the play equipment vendor to the Contractor's pre-determined receiving location. The Contractor shall provide equipment and labor for off-loading, loading, and trucking as needed. Contractor is responsible for storing all equipment, securing all deliveries and insuring the completeness of the playground equipment order prior to installation. Original packing slips from each shipment shall be provided to the Engineer.

The Contractor shall contact Engineer within three (3) working days of receipt of the playground equipment to confirm equipment matches what was specified.

The Contractor shall contact the City of Madison Playground Construction Inspector both prior to installation to coordinate exact date for playground installation and after installation is complete to verify correct layout.

All installation of equipment shall adhere and conform to the installation specifications as provided by the playground manufacturer, and shall be further inspected by the City of Madison Playground Construction Inspector and manufacturer following installation. The Contractor is required to make any necessary adjustments to the play equipment installation determined by the City of Madison Playground Construction Inspector to rectify incorrect installation. Actual layout of play system and components to be installed shall comply with that shown in the plans and be confirmed in the field the City of Madison Playground Construction Inspector (225-0810) and Dan Rodman (209-7012), the City of Madison Parks Surveyor. Please allow 48 hours to schedule.

The playground shall be installed to the correct elevations as specified by the playground manufacturer and installation specifications to meet required elevations based on the finished playground surfacing elevations as shown on the plans.

See Appendix 1 for the Manufacturers' Playground Equipment Installation Instructions for each park.

For Lucy Lincoln Park, play equipment installation shall also include installation of the Gerber Bird Ruff Rider. This piece of equipment shall be removed from its current location by City staff, and stored at the Goodman Maintenance Facility located at 1402 Wingra Creek Parkway, for pickup by the Contractor to install at Lucy Lincoln Park.

The Contractor shall contact the City of Madison Parks Surveyor throughout installation to verify that playground equipment is installed at the correct horizontal layout and vertical elevations with respect to the proposed playground surfacing elevation identified on the plans.

METHOD OF MEASUREMENT

Playground Equipment Installation shall be measured by lump sum per each park playground site for the completed work as described above.

BASIS OF PAYMENT

Playground Equipment Installation shall be measured as described above and shall be paid at the contract unit price which shall be full compensation for all work, materials, tools, equipment, labor, hauling, placement, disposal and incidentals required to complete the work as set forth in the description. Playground equipment concrete footing installation, materials and excavation are incidental to this bid item.

BID ITEM 90002 - PLAYGROUND TIMBERS

DESCRIPTION

Work under this item shall include all work, materials, labor and incidentals necessary for the Contractor to install playground timbers (Landscape Structures Tuff Timbers™ Edging) at each project site as shown on the plans.

Border timbers shall be purchased by the City of Madison and ordered for delivery from the vendor to the Contractor's pre-determined receiving location. The Contractor shall provide equipment and labor for off-loading, loading, and trucking as needed. Contractor is responsible for storing and securing all deliveries and insuring the completeness of the playground timber order prior to installation. Original packing slips from each shipment shall be provided to the Engineer.

All installation of equipment shall adhere and conform to the installation specifications as provided by the playground timber manufacturer, and shall be further inspected by the Playground Construction Inspector following installation. Actual layout of playground timbers shall comply with the dimensions shown on the plans and be confirmed in the field by the Playground Construction Inspector. The playground timbers shall be installed at the correct elevations as specified on the plans. The Contractor shall field confirm playground timber placement does not encroach upon the play equipment fall zones as shown in the attached plans.

The Contractor shall contact the Parks Surveyor throughout installation to verify that playground timbers are installed at the correct horizontal and vertical location.

METHOD OF MEASUREMENT

Playground Timbers shall be measured per each playground timber as listed in the proposal page without measurement thereof.

BASIS OF PAYMENT

Playground Timbers shall be measured as described above and shall be paid for at the contract unit price which shall be full compensation for all work, materials, tools, equipment, labor, hauling, placement, disposal and incidentals required to complete the work as set forth in the description.

BID ITEM 90003 – PLAYGROUND SURFACING WOOD FIBER MULCH

DESCRIPTION

This item shall include all necessary work, labor and incidentals required to load, transport and distribute wood fiber mulch playground surfacing.

All playground surfacing wood fiber mulch shall be provided by the City of Madison at the City's pre-determined mulch receiving location. The wood fiber mulch shall be available at the City of Madison Transfer Station, 121 E. Olin Ave. The transfer station's hours of operation are 7:30 am to 2:30 pm, Monday thru Friday, excluding City holidays. The Contractor shall contact Bill Durkin at the City of Madison Streets Department (phone: 608-266-4911) a minimum of seven (7) working days prior to any anticipated dates of wood fiber mulch pick up. The Contractor shall provide equipment and labor for loading, trucking and off-loading as needed.

The playground surfacing shall be installed to the finished elevations as indicated on the plans. Minimum installed depth of wood fiber mulch is twelve (12) inches.

Double handling, stockpiling and placing wood fiber mulch is included in this bid item.

METHOD OF MEASUREMENT

Playground Surfacing Wood Fiber Mulch shall be measured by the cubic yard quantity as listed in the proposal page without measurement thereof.

BASIS OF PAYMENT

Playground Surfacing Wood Fiber Mulch shall be measured as described above and shall be paid for at the contract unit price which shall be full compensation for all work, labor, tools, equipment, and incidentals required to complete the work as set forth in the description.

BID ITEM 90004 – PLAYGROUND SURFACING RUBBER MULCH

DESCRIPTION

This item shall include all necessary work, labor and incidentals required to receive, store, transport and distribute rubber mulch playground surfacing.

All playground surfacing rubber mulch shall be purchased by the City of Madison and ordered for delivery from the rubber mulch vendor to the City's pre-determined receiving location. The rubber mulch shall be available at the City of Madison Goodman Maintenance Facility, 1402 Wingra Creek Parkway, or the Forest Hill Cemetery, 1 Speedway Road, depending upon available storage area. These facilities are open 7:30 am to 2:00 pm for Contractor pickup. The Contractor shall provide equipment and labor for loading, trucking and off-loading as needed. Contractor is responsible for securing all deliveries and insuring the completeness of the playground surfacing rubber mulch order prior to installation.

The playground surfacing shall be installed to the finished elevations as indicated on the plans. Minimum installed depth of rubber mulch is nine (9) inches.

Double handling, stockpiling and placing rubber mulch is included in this bid item.

METHOD OF MEASUREMENT

Playground Surfacing Rubber Mulch shall be measured by the cubic yard quantity as listed in the proposal page without measurement thereof.

BASIS OF PAYMENT

Playground Surfacing Rubber Mulch shall be measured as described above and shall be paid for at the contract unit price which shall be full compensation for all work, labor, tools, equipment, and incidentals required to complete the work as set forth in the description.

BID ITEM 90005 –BENCH INSTALLATION

Work under this item shall include all work, materials, labor and incidentals necessary for the Contractor to assemble and install KayPark (Part #6BARP) bench, surface mounted at the locations specified on the plans. All handling and installation shall be according to manufacturer's specifications. The complete installation specifications shall be included in the shipment of equipment from the vendor.

METHOD OF MEASUREMENT

Bench Installation shall be measured per each individual installed bench as listed in the proposal page.

BASIS OF PAYMENT

Bench Installation shall be measured as described above and shall be paid for at the contract unit price which shall be full compensation for all work, materials, tools, equipment, labor, hauling, placement, disposal and incidentals required to complete the work as set forth in the description.

BID ITEM–90006 REMOVE BLOCK RETAINING WALL

DESCRIPTION

Work under this item shall include all work, materials, labor, disposal and incidentals required to remove and dispose of the existing block retaining wall.

The maximum above ground height of the wall is approximately 3' high. The depth of wall below the ground is unknown. Removal and disposal of wall below ground is incidental to this bid item. Excavation Cut and Fill related to removal of the existing block retaining wall shall be paid separately under BID ITEM 20101 – EXCAVATION CUT and BID ITEM 20201 - FILL.

Excavation and disposal of block retaining wall is incidental to this bid item. All block retaining wall is to be disposed of offsite, at a location to be determined and provided by the Contractor, at no extra charge to the City.

METHOD OF MEASUREMENT

Remove Block Retaining Wall shall be measured by the linear foot quantity as listed in the proposal page without measurement thereof.

BASIS OF PAYMENT

Remove Block Retaining Wall shall be measured as described above and shall be paid for at the contract unit price which shall be full compensation for all work, labor, tools, equipment, and incidentals required to complete the work as set forth in the description.

BID ITEM 90007–MODULAR BLOCK RETAINING WALL

DESCRIPTION

This bid item includes all work, materials, equipment and incidentals to install Modular Block Retaining Wall at the locations indicated on the plans. All excavation, base materials, geotextile fabric, clear stone backfill, and modular block components shall be considered incidental to this bid item.

PROPRIETARY MODULAR BLOCK WALL SYSTEMS

Proprietary wall systems may be used for this work, but must conform to the requirements of this specification. The Modular Block Retaining Wall basis of design is:

Unilock Pisa2 Retaining Wall System
Color: Sierra
Unilock
W4814 County Highway A
Elkhorn, WI 53121
Phone: 262-742-3890

For any substitutions, the Contractor must provide a submittal package for consideration by 2:00 PM Wednesday, June 11th. The substitution submittal shall include block dimensions, a picture of the block face texture, the manufacturer's ASTM testing information and installation instructions, and a color image of the available colors.

MATERIALS

Materials furnished under this contract shall conform to the following requirements.

Leveling Pad: The wall leveling pad shall be non-frost susceptible, well graded compacted crushed aggregate (GW-Unified Soil Classification). The wall leveling pad shall be as wide as the proposed blocks or 12 inches (minimum) whichever is greater and shall be compacted to 98% Standard Proctor Density. The bottom of the bottom row of blocks shall be flat and 100% of the block surface shall bear on the leveling pad. The leveling pad shall step to follow the general slope of the ground line. The leveling pad steps shall keep the bottom of the wall within one block thickness of the minimum embedment, i.e., a minimum embedment plus an additional embedment of up to one block's thickness. Additional embedment may be detailed, but shall not be measured for payment.

Wall Facing: Wall facing units shall consist of precast modular concrete blocks. All units shall incorporate a mechanism or devices which shall develop a mechanical connection between vertical block layers. A single block type and style shall be used throughout each wall. The color of the block shall be as given on the plan or chosen by the Engineer. Modular block facing units which are chipped, cracked or unsightly shall not be used.

The top course of facing units shall be a solid precast concrete unit designed to be compatible with the remainder of the wall. The finishing course shall be bonded to the underlying facing units with a durable, high strength, flexible adhesive compound compatible with the block material. A formed cast-in-place concrete cap may also be used to finish the wall. A cap of this type shall be designed to have texture, color, and appearance which complements the remainder of the wall. The vertical dimension of the cap shall not be less than 3-1/2 inches. Expansion joints shall be placed in the cap to correspond with each 24 inch change in vertical wall height or at a maximum spacing of 10 feet. Concrete for all cast-in-place caps shall be Grade A and shall conform to the requirements of Subsection 501.4 of the WisDOT Standard Specifications.

Block dimensions may vary no more than $\pm 1/8$ inch from the standard values published by the manufacturer. Blocks must have a minimum depth (front face to back face) of 8 inches. The minimum front face thickness of blocks shall be 4 inches measured perpendicular from the front face to inside voids greater than 4 square inches. Also the minimum allowed thickness of any other portions of the block is 2 inches. The front face of the blocks shall conform to plan requirements for color, texture, or patterns.

Connectors: Pins, rods, clips, or other devices used to develop mechanical interlock between facing unit block layers shall be manufactured from corrosion resistant materials. The Contractor shall furnish documentation which establishes and substantiates the design life of such devices.

Backfill Materials: Wall backfill material shall comply with the requirements for City of Madison Standard Specifications for Public Works Construction for Clear Stone.

All other backfill materials required to finish the wall and restore the ground surface may be selected material available on the project which meets the Engineer's approval.

CONSTRUCTION METHODS

After completion of excavation, the Engineer shall inspect the site and determine if the foundation is adequate for the intended loads. The Engineer shall be allowed two working days to perform the inspection.

The wall facing units shall be placed in accordance with the manufacturer's instructions to the lines, elevations, batter, and tolerances as shown on the plans. The initial layer of facing units shall be centered on the leveling pad, leveled and brought to proper alignment. Formed voids or openings in the facing units shall be filled with Clear Stone. Each layer of facing units shall be swept clean of all debris before the next layer of facing units is placed.

All pins, rods, clips, or other devices used to develop mechanical interlock between facing unit layers shall be installed in accordance with the manufacturer's directions. Wall units which are cracked, chipped, or unsightly shall be rejected by the Engineer.

At the end of each working day, the Contractor shall provide good temporary drainage such that the backfill shall not become contaminated with run-off soil or water if it should rain. No materials or large equipment shall be stockpiled or stored within 10 feet of the front face of the wall.

Backfill: Materials shall be placed in the areas as indicated on the plans and as detailed in this specification. Backfill lifts shall be no more than 8-inches in depth. Backfilling shall closely follow erection of each course of wall facing units. Compaction of wall backfill shall be accomplished by at least three passes of lightweight manually operated compaction equipment acceptable to the Engineer.

Backfilling operations shall be conducted in such a manner as to prevent damage or misalignment of the wall facing units, soil reinforcement, or other wall components. Any such damage or misalignment shall be corrected at the Contractor's expense as directed by the Engineer. A field representative of the wall supplier shall be available during wall construction to provide technical assistance to the Contractor and the Engineer.

No tracked or wheeled equipment may operate on the backfill within 3 feet from the back face of modular blocks. The Engineer may order the removal of any large or heavy equipment which may cause damage or misalignment of the wall facing units.

METHOD OF MEASUREMENT

Modular Block Retaining Wall shall be measured by the square foot of face on a vertical plane between the top of the leveling pad and a line indicating the top of wall including wall cap or copings as required and shown on the plans. Unless ordered by the Engineer, wall area constructed above or below these limits shall not be measured for payment. The total quantity shall be the sum of the quantities for each wall segment.

BASIS OF PAYMENT

Modular Retaining Block Wall, measured as provided above, shall be paid for at the contract unit price per square foot, which shall be full compensation for site preparation, including all necessary excavation and disposal of surplus materials, supplying all necessary wall components to produce a functional system, construction of the retaining system, backfill, backfilling, compaction, and for furnishing all tools, labor, and equipment necessary to complete the work.

SECTION E: BIDDERS ACKNOWLEDGEMENT

**2014 PLAYGROUND IMPROVEMENTS - GROUP 2
CONTRACT NO. 7362**

Bidder must state a Unit Price and Total Bid for each item. The Total Bid for each item must be the product of quantity, by Unit Price. The Grand Total must be the sum of the Total Bids for the various items. In case of multiplication errors or addition errors, the Grand Total with corrected multiplication and/or addition shall determine the Grand Total bid for each contract. The Unit Price and Total Bid must be entered numerically in the spaces provided. All words and numbers shall be written in ink.

1. The undersigned having familiarized himself/herself with the Contract documents, including Advertisement for Bids, Instructions to Bidders, Form of Proposal, City of Madison Standard Specifications for Public Works Construction - 2014 Edition thereto, Form of Agreement, Form of Bond, and Addenda issued and attached to the plans and specifications on file in the office of the City Engineer, hereby proposes to provide and furnish all the labor, materials, tools, and expendable equipment necessary to perform and complete in a workmanlike manner the specified construction on this project for the City of Madison; all in accordance with the plans and specifications as prepared by the City Engineer, including Addenda to the Contract Nos. _____ through _____ issued thereto, at the prices for said work as contained in this proposal. (Electronic bids submittals shall acknowledge addendum under Section E and shall not acknowledge here)
2. If awarded the Contract, we will initiate action within seven (7) days after notification or in accordance with the date specified in the contract to begin work and will proceed with diligence to bring the project to full completion within the number of work days allowed in the Contract or by the calendar date stated in the Contract.
3. The undersigned Bidder or Contractor certifies that he/she is not a party to any contract, combination in form of trust or otherwise, or conspiracy in restraint of trade or commerce or any other violation of the anti-trust laws of the State of Wisconsin or of the United States, with respect to this bid or contract or otherwise.
4. I hereby certify that I have met the Bid Bond Requirements as specified in Section 102.5. *(IF BID BOND IS USED, IT SHALL BE SUBMITTED ON THE FORMS PROVIDED BY THE CITY. FAILURE TO DO SO MAY RESULT IN REJECTION OF THE BID).*
5. I hereby certify that all statements herein are made on behalf of _____ (name of corporation, partnership, or person submitting bid) a corporation organized and existing under the laws of the State of _____ a partnership consisting of _____; an individual trading as _____; of the City of _____ State of _____; that I have examined and carefully prepared this Proposal, from the plans and specifications and have checked the same in detail before submitting this Proposal; that I have fully authority to make such statements and submit this Proposal in (its, their) behalf; and that the said statements are true and correct.

SIGNATURE

TITLE, IF ANY

Sworn and subscribed to before me this _____ day of _____, 20_____.

(Notary Public or other officer authorized to administer oaths)
My Commission Expires _____

Bidders shall not add any conditions or qualifying statements to this Proposal.

SECTION F: DISCLOSURE OF OWNERSHIP & BEST VALUE CONTRACTING

2014 PLAYGROUND IMPROVEMENTS - GROUP 2 CONTRACT NO. 7362

State of Wisconsin
Department of Workforce Development
Equal Rights Division
Labor Standards Bureau

Disclosure of Ownership

<p>Notice required under Section 15.04(1)(m), Wisconsin Statutes. The statutory authority for the use of this form is prescribed in Sections 66.0903(12)(d) and 103.49(7)(d), Wisconsin Statutes. The use of this form is mandatory. The penalty for failing to complete this form is prescribed in Section 103.005(12), Wisconsin Statutes. Personal information you provide may be used for secondary purposes.</p>			
<p>(1) On the date a contractor submits a bid to or completes negotiations with a state agency or local governmental unit, on a project subject to Section 66.0903 or 103.49, Wisconsin Statutes, the contractor shall disclose to such state agency or local governmental unit the name of any "other construction business", which the contractor, or a shareholder, officer or partner of the contractor, owns or has owned within the preceding three (3) years.</p> <p>(2) The term "other construction business" means any business engaged in the erection, construction, remodeling, repairing, demolition, altering or painting and decorating of buildings, structures or facilities. It also means any business engaged in supplying mineral aggregate, or hauling excavated material or spoil as provided by Sections 66.0903(3), 103.49(2) and 103.50(2), Wisconsin Statutes.</p> <p>(3) This form must ONLY be filed, with the state agency or local governmental unit that will be awarding the contract, if both (A) and (B) are met.</p> <p>(A) The contractor, or a shareholder, officer or partner of the contractor:</p> <p style="margin-left: 20px;">(1) Owns at least a 25% interest in the "other construction business", indicated below, on the date the contractor submits a bid or completes negotiations.</p> <p style="margin-left: 20px;">(2) Or has owned at least a 25% interest in the "other construction business" at any time within the preceding three (3) years.</p> <p>(B) The Wisconsin Department of Workforce Development (DWD) has determined that the "other construction business" has failed to pay the prevailing wage rate or time and one-half the required hourly basic rate of pay, for hours worked in excess of the prevailing hours of labor, to any employee at any time within the preceding three (3) years.</p>			
Other Construction Business			
Not Applicable <input type="checkbox"/>			
Name of Business			
Street Address or P O Box	City	State	Zip Code
Name of Business			
Street Address or P O Box	City	State	Zip Code
Name of Business			
Street Address or P O Box	City	State	Zip Code
<p>I hereby state under penalty of perjury that the information, contained in this document, is true and accurate according to my knowledge and belief.</p>			
Print the Name of Authorized Officer			
Signature of Authorized Officer		Date Signed	
Name of Corporation, Partnership or Sole Proprietorship			
Street Address or P O Box	City	State	Zip Code

If you have any questions call (608) 266-0028

ERD-7777-E (R. 09/2003)

**2014 PLAYGROUND IMPROVEMENTS - GROUP 2
CONTRACT NO. 7362**

Best Value Contracting

1. The Contractor shall indicate the non-apprenticeable trades used on this contract.

2. Madison General Ordinance (M.G.O.), 33.07(7), does provide for some exemptions from the active apprentice requirement. Apprenticeable trades are those trades considered apprenticeable by the State of Wisconsin. Please check applicable box if you are seeking an exemption.

- Contractor has a total skilled workforce of four or less individuals in all apprenticeable trades combined.
- No available trade training program; The Contractor has been rejected by the only available trade training program, or there is no trade training program within 90 miles.
- Contractor is not using an apprentice due to having a journey worker on layoff status, provided the journey worker was employed by the contractor in the past six months.
- First-time Contractor on City of Madison Public Works contract requests a onetime exemption but intends to comply on all future contracts and is taking steps typical of a "good faith" effort.
- Contractor has been in business less than one year.
- Contractor doesn't have enough journeyman trade workers to qualify for a trade training program in that respective trade

3. The Contractor shall indicate on the following section which apprenticeable trades are to be used on this contract. Compliance with active apprenticeship, to the extent required by M.G.O. 33.07(7), shall be satisfied by documentation from an applicable trade training body; an apprenticeship contract with the Wisconsin Department of Workforce Development or a similar agency in another state; or the U.S Department of Labor. This documentation is required prior to the Contractor beginning work on the project site.

- The Contractor has reviewed the list and shall not use any apprenticeable trades on this project.

LIST APPRENTICABLE TRADES (check all that apply to your work to be performed on this contract)

- BRICKLAYER
- CARPENTER
- CEMENT MASON / CONCRETE FINISHER
- CEMENT MASON (HEAVY HIGHWAY)
- CONSTRUCTION CRAFT LABORER
- DATA COMMUNICATION INSTALLER
- ELECTRICIAN
- ENVIRONMENTAL SYSTEMS TECHNICIAN / HVAC SERVICE TECH/HVAC INSTALL / SERVICE
- GLAZIER
- HEAVY EQUIPMENT OPERATOR / OPERATING ENGINEER
- INSULATION WORKER (HEAT & FROST)
- IRON WORKER
- IRON WORKER (ASSEMBLER, METAL BLDGS)
- PAINTER & DECORATOR
- PLASTERER
- PLUMBER
- RESIDENTIAL ELECTRICIAN
- ROOFER & WATER PROOFER
- SHEET METAL WORKER
- SPRINKLER FITTER
- STEAMFITTER
- STEAMFITTER (REFRIGERATION)
- STEAMFITTER (SERVICE)
- TAPER & FINISHER
- TELECOMMUNICATIONS (VOICE, DATA & VIDEO) INSTALLER-TECHNICIAN
- TILE SETTER

SECTION G: BID BOND

KNOW ALL MEN BY THESE PRESENT, THAT _____ (a corporation of the State of _____) (individual), (partnership), hereinafter referred to as the "Principal") and _____, a corporation of the State of _____ (hereinafter referred to as the "Surety") and licensed to do business in the State of Wisconsin, are held and firmly bound unto the City of Madison, (hereinafter referred to as the "Obligee"), in the sum of five per cent (5%) of the amount of the total bid or bids of the Principal herein accepted by the Obligee, for the payment of which the Principal and the Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

The conditions of this obligation are such that, whereas the Principal has submitted, to the City of Madison a certain bid, including the related alternate, and substitute bids attached hereto and hereby made a part hereof, to enter into a contract in writing for the construction of:

2014 PLAYGROUND IMPROVEMENTS - GROUP 2 CONTRACT NO. 7362

1. If said bid is rejected by the Obligee, then this obligation shall be void.
2. If said bid is accepted by the Obligee and the Principal shall execute and deliver a contract in the form specified by the Obligee (properly completed in accordance with said bid) and shall furnish a bond for his/her faithful performance of said contract, and for the payment of all persons performing labor or furnishing materials in connection therewith, and shall in all other respects perform the agreement created by the acceptance of said bid, then this obligation shall be void.

If said bid is accepted by the Obligee and the Principal shall fail to execute and deliver the contract and the performance and payment bond noted in 2. above executed by this Surety, or other Surety approved by the City of Madison, all within the time specified or any extension thereof, the Principal and Surety agree jointly and severally to forfeit to the Obligee as liquidated damages the sum mentioned above, it being understood that the liability of the Surety for any and all claims hereunder shall in no event exceed the sum of this obligation as stated, and it is further understood that the Principal and Surety reserve the right to recover from the Obligee that portion of the forfeited sum which exceed the actual liquidated damages incurred by the Obligee.

The Surety, for value received, hereby stipulates and agrees that the obligations of said Surety and its bond shall be in no way impaired or affected by an extension of the time within which the Obligee may accept such bid, and said Surety does hereby waive notice of any such extension.

IN WITNESS WHEREOF, the Principal and the Surety have hereunto set their hands and seals, and such of them as are corporations have caused their corporate seals to be hereto affixed and these presents to be signed by their proper officers, on the day and year set forth below.

Seal

Principal Date

By:

Name of Surety

By:

_____ Date

This certifies that I have been duly licensed as an agent for the above company in Wisconsin under License No. _____ for the year _____, and appointed as attorney in fact with authority to execute this bid bond and the payment and performance bond referred to above, which power of attorney has not been revoked.

Date

Agent

Address

City, State and Zip Code

Telephone Number

NOTE TO SURETY & PRINCIPAL

The bid submitted which this bond guarantees shall be rejected if the following instrument is not attached to this bond:

Power of Attorney showing that the agent of Surety is currently authorized to execute bonds on behalf of the Surety, and in the amounts referenced above.

Certificate of Biennial Bid Bond

TIME PERIOD - VALID (FROM/TO)
NAME OF SURETY
NAME OF CONTRACTOR
CERTIFICATE HOLDER <p style="text-align: center;">City of Madison, Wisconsin</p>

This is to certify that a biennial bid bond issued by the above-named Surety is currently on file with the City of Madison.

This certificate is issued as a matter of information and conveys no rights upon the certificate holder and does not amend, extend or alter the coverage of the biennial bid bond.

Cancellation: Should the above policy be cancelled before the expiration date, the issuing Surety will give thirty (30) days written notice to the certificate holder indicated above.

Signature of Authorized Contractor Representative

Date

SECTION H: AGREEMENT

THIS AGREEMENT made this _____ day of _____ in the year Two Thousand and Fourteen between _____ hereinafter called the Contractor, and the City of Madison, Wisconsin, hereinafter called the City.

WHEREAS, the Common Council of the said City of Madison under the provisions of a resolution adopted _____, and by virtue of authority vested in the said Council, has awarded to the Contractor the work of performing certain construction.

NOW, THEREFORE, the Contractor and the City, for the consideration hereinafter named, agree as follows:

1. **Scope of Work.** The Contractor shall, perform the construction, execution and completion of the following listed complete work or improvement in full compliance with the Plans, Specifications, Standard Specifications, Supplemental Specifications, Special Provisions and contract; perform all items of work covered or stipulated in the proposal; perform all altered or extra work; and shall furnish, unless otherwise provided in the contract, all materials, implements, machinery, equipment, tools, supplies, transportation, and labor necessary to the prosecution and completion of the work or improvements:

2014 PLAYGROUND IMPROVEMENTS - GROUP 2 CONTRACT NO. 7362

2. **Completion Date/Contract Time.** Construction work must begin within seven (7) calendar days after the date appearing on mailed written notice to do so shall have been sent to the Contractor and shall be carried on at a rate so as to secure full completion SEE SPECIAL PROVISIONS, the rate of progress and the time of completion being essential conditions of this Agreement.
3. **Contract Price.** The City shall pay to the Contractor at the times, in the manner and on the conditions set forth in said specifications, the sum of _____ (\$ _____) Dollars being the amount bid by such Contractor and which was awarded to him/her as provided by law.
4. **Wage Rates for Employees of Public Works Contractors**

General and Authorization. The Contractor shall compensate its employees at the prevailing wage rate in accordance with section 66.0903, Wis. Stats., DWD 290 of the Wisconsin Administrative Code and as hereinafter provided unless otherwise noted in Section D: Special Provisions, Subsection 102.10 – Minimum Rate of Wage Scale.

“Public Works” shall include building or work involving the erection, construction, remodeling, repairing or demolition of buildings, parking lots, highways, streets, bridges, sidewalks, street lighting, traffic signals, sanitary sewers, water mains and appurtenances, storm sewers, and the grading and landscaping of public lands.

“Building or work” includes construction activity as distinguished from manufacturing, furnishing of materials, or servicing and maintenance work, except for the delivery of mineral aggregate such as sand, gravel, bituminous asphaltic concrete or stone which is incorporated into the work under contract with the City by depositing the material directly in final place from transporting vehicle.

“Erection, construction, remodeling, repairing” means all types of work done on a particular building or work at the site thereof in the construction or development of the project, including without limitation, erecting, construction, remodeling, repairing, altering, painting, and decorating, the transporting of materials and supplies to or from the building or work done by the employees of the Contractor, Subcontractor, or Agent thereof, and the manufacturing or furnishing of

materials, articles, supplies or equipment on the site of the building or work, by persons employed by the Contractor, Subcontractor, or Agent thereof.

"Employees working on the project" means laborers, workers, and mechanics employed directly upon the site of work.

"Laborers, Workers, and Mechanics" include pre-apprentices, helpers, trainees, learners and properly registered and indentured apprentices but exclude clerical, supervisory, and other personnel not performing manual labor.

Establishment of Wage Rates. The Department of Public Works shall periodically obtain a current schedule of prevailing wage rates from DWD. The schedule shall be used to establish the City of Madison Prevailing Wage Rate Schedule for Public Works Construction (prevailing wage rate). The Department of Public Works may include known increases to the prevailing wage rate which can be documented and are to occur on a future specific date. The prevailing wage rate shall be included in public works contracts subsequently negotiated or solicited by the City. Except for known increases contained within the schedule, the prevailing wage rate shall not change during the contract. The approved wage rate is attached hereto.

Workforce Profile. The Contractor shall, at the time of signature of the contract, notify the City Engineer in writing of the names and classifications of all the employees of the Contractor, Subcontractors, and Agents proposed for the work. In the alternative, the Contractor shall submit in writing the classifications of all the employees of the Contractor, Subcontractors and Agents and the total number of hours estimated in each classification for the work. This workforce profile(s) shall be reviewed by the City Engineer who may, within ten (10) days, object to the workforce profile(s) as not being reflective of that which would be required for the work. The Contractor may request that the workforce profile, or a portion of the workforce profile, be submitted after the signature of the contract but at least ten (10) days prior to the work commencing. Any costs or time loss resulting from modifications to the workforce profile as a result of the City Engineer's objections shall be the responsibility of the Contractor.

Payrolls and Records. The Contractor shall keep weekly payroll records setting forth the name, address, telephone number, classification, wage rate and fringe benefit package of all the employees who work on the contract, including the employees of the Contractor's subcontractors and agents. Such weekly payroll records must include the required information for all City contracts and all other contracts on which the employee worked during the week in which the employee worked on the contract. The Contractor shall also keep records of the individual time each employee worked on the project and for each day of the project. Such records shall also set forth the total number of hours of overtime credited to each such employee for each day and week and the amount of overtime pay received in that week. The records shall set forth the full weekly wages earned by each employee and the actual hourly wage paid to the employee.

The Contractor shall submit the weekly payroll records, including the records of the Contractor's subcontractors and agents, to the City Engineer for every week that work is being done on the contract. The submittal shall be within twenty-one (21) calendar days of the end of the Contractor's weekly pay period.

Employees shall receive the full amounts accrued at the time of the payment, computed at rates not less than those stated in the prevailing wage rate and each employee's rate shall be determined by the work that is done within the trade or occupation classification which should be properly assigned to the employee.

An employee's classification shall not be changed to a classification of a lesser rate during the contract. If, during the term of the contract, an employee works in a higher pay classification than the one which was previously properly assigned to the employee, then that employee shall be considered to be in the higher pay classification for the balance of the contract, receive the appropriate higher rate of pay, and she/he shall not receive a lesser rate during the balance of the

contract. For purposes of clarification, it is noted that there is a distinct difference between working in a different classification with higher pay and doing work within a classification that has varying rates of pay which are determined by the type of work that is done within the classification. For example, the classification "Operating Engineer" provides for different rates of pay for various classes of work and the Employer shall compensate an employee classified as an "Operating Engineer" based on the highest class of work that is done in one day. Therefore, an "Operating Engineer's" rate may vary on a day to day basis depending on the type of work that is done, but it will never be less than the base rate of an "Operating Engineer". Also, as a matter of clarification, it is recognized that an employee may work in a higher paying classification merely by chance and without prior intention, calculation or design. If such is the case and the performance of the work is truly incidental and the occurrence is infrequent, inconsequential and does not serve to undermine the single classification principle herein, then it may not be required that the employee be considered to be in the higher pay classification and receive the higher rate of pay for the duration of the contract. However, the Contractor is not precluded or prevented from paying the higher rate for the limited time that an employee performs work that is outside of the employee's proper classification.

Questions regarding an employee's classification, rate of pay or rate of pay within a classification, shall be resolved by reference to the established practice that predominates in the industry and on which the trade or occupation rate/classification is based. Rate of pay and classification disputes shall be resolved by relying upon practices established by collective bargaining agreements and guidelines used in such determination by appropriate recognized trade unions operating within the City of Madison.

The Contractor, its Subcontractors and Agents shall submit to interrogation regarding compliance with the provisions of this ordinance.

Mulcting of the employees by the Contractor, Subcontractor, and Agents on Public Works contracts, such as by kickbacks or other devices, is prohibited. The normal rate of wage of the employees of the Contractor, Subcontractor, and Agents shall not be reduced or otherwise diminished as a result of payment of the prevailing wage rate on a public works contract.

Hourly contributions. Hourly contributions shall be determined in accordance with the prevailing wage rate and with DWD. 290.01(10), Wis. Admin. Code.

Apprentices and Subjourney persons. Apprentices and sub journeypersons performing work on the project shall be compensated in accordance with the prevailing wage rate and with DWD 290.02, and 290.025, respectively, Wis. Admin. Code.

Straight Time Wages. The Contractor may pay straight time wages as determined by the prevailing wage rate and DWD 290.04, Wis. Admin. Code.

Overtime Wages. The Contractor shall pay overtime wages as required by the prevailing wage rate and DWD 290.05, Wis. Admin. Code.

Posting of Wage Rates and Hours. A clearly legible copy of the prevailing wage rate, together with the provisions of Sec. 66.0903(10)(a) and (11)(a), Wis. Stats., shall be kept posted in at least one conspicuous and easily accessible place at the project site by the Contractor and such notice shall remain posted during the full time any laborers, workers or mechanics are employed on the contract.

Evidence of Compliance by Contractor. Upon completion of the contract, the Contractor shall file with the Department of Public Works an affidavit stating:

- a. That the Contractor has complied fully with the provisions and requirements of Sec. 66.0903(3), Wis. Stats., and Chapter DWD 290, Wis. Admin. Code; the Contractor has received evidence of compliance from each of the agents and subcontractors; and the

names and addresses of all of the subcontractors and agents who worked on the contract.

- b. That full and accurate records have been kept, which clearly indicate the name and trade or occupation of every laborer, worker or mechanic employed by the Contractor in connection with work on the project. The records shall show the number of hours worked by each employee and the actual wages paid therefore; where these records will be kept and the name, address and telephone number of the person who will be responsible for keeping them. The records shall be retained and made available for a period of at least three (3) years following the completion of the project of public works and shall not be removed without prior notification to the municipality.

Evidence of Compliance by Agent and Subcontractor. Each agent and subcontractor shall file with the Contractor, upon completion of their portion of the work on the contract an affidavit stating that all the provisions of Sec. 66.0903(3), Wis. Stats., have been fully complied with and that full and accurate records have been kept, which clearly indicate the name and trade or occupation of every laborer, worker or mechanic employed by the Contractor in connection with work on the project. The records shall show the number of hours worked by each employee and the actual wages paid therefore; where these records shall be kept and the name, address and telephone number of the person who shall be responsible for keeping them. The records shall be retained and made available for a period of at least three (3) years following the completion of the project of public works and shall not be removed without prior notification to the municipality.

Failure to Comply with the Prevailing Wage Rate. If the Contractor fails to comply with the prevailing wage rate, she/he shall be in default on the contract.

5. **Affirmative Action.** In the performance of the services under this Agreement the Contractor agrees not to discriminate against any employee or applicant because of race, religion, marital status, age, color, sex, disability, national origin or ancestry, income level or source of income, arrest record or conviction record, less than honorable discharge, physical appearance, sexual orientation, gender identity, political beliefs, or student status. The Contractor further agrees not to discriminate against any subcontractor or person who offers to subcontract on this contract because of race, religion, color, age, disability, sex, sexual orientation, gender identity or national origin.

The Contractor agrees that within thirty (30) days after the effective date of this agreement, the Contractor will provide to the City Affirmative Action Division certain workforce utilization statistics, using a form to be furnished by the City.

If the contract is still in effect, or if the City enters into a new agreement with the Contractor, within one year after the date on which the form was required to be provided, the Contractor will provide updated workforce information using a second form, also to be furnished by the City. The second form will be submitted to the City Affirmative Action Division no later than one year after the date on which the first form was required to be provided.

The Contractor further agrees that, for at least twelve (12) months after the effective date of this contract, it will notify the City Affirmative Action Division of each of its job openings at facilities in Dane County for which applicants not already employees of the Contractor are to be considered. The notice will include a job description, classification, qualifications and application procedures and deadlines. The Contractor agrees to interview and consider candidates referred by the Affirmative Action Division if the candidate meets the minimum qualification standards established by the Contractor, and if the referral is timely. A referral is timely if it is received by the Contractor on or before the date started in the notice.

Articles of Agreement
Article I

The Contractor shall take affirmative action in accordance with the provisions of this contract to insure that applicants are employed, and that employees are treated during employment without regard to race, religion, color, age, marital status, disability, sex, sexual orientation, gender identity or national origin and that the employer shall provide harassment free work environment for the realization of the potential of each employee. Such action shall include, but not be limited to, the following: employment, upgrading, demotion or transfer, recruitment or recruitment advertising, layoff or termination, rates of pay or other forms of compensation and selection for training including apprenticeship insofar as it is within the control of the Contractor. The Contractor agrees to post in conspicuous places available to employees and applicants notices to be provided by the City setting out the provisions of the nondiscrimination clauses in this contract.

Article II

The Contractor shall in all solicitations or advertisements for employees placed by or on behalf of the Contractor state that all qualified or qualifiable applicants will be employed without regard to race, religion, color, age, marital status, disability, sex, sexual orientation, gender identity or national origin.

Article III

The Contractor shall send to each labor union or representative of workers with which it has a collective bargaining agreement or other contract or understanding a notice to be provided by the City advising the labor union or worker's representative of the Contractor's equal employment opportunity and affirmative action commitments. Such notices shall be posted in conspicuous places available to employees and applicants for employment.

Article V

The Contractor agrees that it will comply with all provisions of the Affirmative Action Ordinance of the City of Madison, including the contract compliance requirements. The Contractor agrees to submit the model affirmative action plan for public works contractors in a form approved by the Affirmative Action Division Manager.

Article VI

The Contractor will maintain records as required by Section 39.02(9)(f) of the Madison General Ordinances and will provide the City Affirmative Action Division with access to such records and to persons who have relevant and necessary information, as provided in Section 39.02(9)(f). The City agrees to keep all such records confidential, except to the extent that public inspection is required by law.

Article VII

In the event of the Contractor's or subcontractor's failure to comply with the Equal Employment Opportunity and Affirmative Action Provisions of this contract or Section 39.03 and 39.02 of the Madison General Ordinances, it is agreed that the City at its option may do any or all of the following:

1. Cancel, terminate or suspend this Contract in whole or in part.
2. Declare the Contractor ineligible for further City contracts until the Affirmative Action requirements are met.

3. Recover on behalf of the City from the prime Contractor 0.5 percent of the contract award price for each week that such party fails or refuses to comply, in the nature of liquidated damages, but not to exceed a total of five percent (5%) of the contract price, or five thousand dollars (\$5,000), whichever is less. Under public works contracts, if a subcontractor is in noncompliance, the City may recover liquidated damages from the prime Contractor in the manner described above. The preceding sentence shall not be construed to prohibit a prime Contractor from recovering the amount of such damage from the non-complying subcontractor.

Article VIII

The Contractor shall include the above provisions of this contract in every subcontract so that such provisions will be binding upon each subcontractor. The Contractor shall take such action with respect to any subcontractor as necessary to enforce such provisions, including sanctions provided for noncompliance.

Article IX

The Contractor shall allow the maximum feasible opportunity to small business enterprises to compete for any subcontracts entered into pursuant to this contract. (In federally funded contracts the terms "DBE, MBE and WBE" shall be substituted for the term "small business" in this Article.)

**2014 PLAYGROUND IMPROVEMENTS - GROUP 2
CONTRACT NO. 7362**

IN WITNESS WHEREOF, the Contractor has hereunto set his/her hand and seal and the City has caused these presents to be sealed with its corporate seal and to be subscribed by its Mayor and City Clerk the day and year first above written.

Countersigned:

	Company Name
Witness	Date
Witness	Date

	President
Witness	Date
Witness	Date

CITY OF MADISON, WISCONSIN

Provisions have been made to pay the liability that will accrue under this contract.

Approved as to form:

Finance Director	City Attorney
Signed this _____ day of _____, 20_____	
Witness	Date
Witness	Date

SECTION I: PAYMENT AND PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS, that we _____
as _____ principal, _____ and

Company of _____ as surety, are held and firmly bound unto the City of
Madison, Wisconsin, in the sum of _____ (\$_____) Dollars, lawful money of the
United States, for the payment of which sum to the City of Madison, we hereby bind ourselves and our
respective executors and administrators firmly by these presents.

The condition of this Bond is such that if the above bounden shall on his/her part fully and faithfully
perform all of the terms of the Contract entered into between him/herself and the City of Madison for the
construction of:

**2014 PLAYGROUND IMPROVEMENTS - GROUP 2
CONTRACT NO. 7362**

in Madison, Wisconsin, and shall pay all claims for labor performed and material furnished in the
prosecution of said work, and save the City harmless from all claims for damages because of negligence
in the prosecution of said work, and shall save harmless the said City from all claims for compensation
(under Chapter 102, Wisconsin Statutes) of employees and employees of subcontractor, then this Bond is
to be void, otherwise of full force, virtue and effect.

Signed and sealed this _____ day of _____

Countersigned:

Company Name (Principal)

Witness

President Seal

Secretary

Approved as to form:

Surety Seal
 Salary Employee Commission

City Attorney

By _____
Attorney-in-Fact

This certifies that I have been duly licensed as an agent for the above company in Wisconsin under
License No. _____ for the year 20_____, and appointed as attorney-in-fact with
authority to execute this payment and performance bond which power of attorney has not been revoked.

Date

Agent Signature

SECTION J: PREVAILING WAGE RATES

PREVAILING WAGE RATE DETERMINATION

Issued by the State of Wisconsin
Department of Workforce Development
Pursuant to s. 66.0903, Wis. Stats.
Issued On: 01/06/2014
Amended On: 02/28/2014

DETERMINATION NUMBER: 201400001

EXPIRATION DATE: Prime Contracts MUST Be Awarded or Negotiated On Or Before 12/31/2014. If NOT, You MUST Reapply.

PROJECT NAME: ALL PUBLIC WORKS PROJECTS UNDER SEC 66.0903, STATS - CITY OF MADISON

PROJECT LOCATION: MADISON CITY, DANE COUNTY, WI

CONTRACTING AGENCY: CITY OF MADISON-ENGINEERING

CLASSIFICATION:	Contractors are responsible for correctly classifying their workers. Either call the Department of Workforce Development (DWD) with trade or classification questions or consult DWD's Dictionary of Occupational Classifications & Work Descriptions on the DWD website at: dwd.wisconsin.gov/er/prevailing_wage_rate/Dictionary/dictionary_main.htm .
OVERTIME:	<p>Time and one-half must be paid for all hours worked:</p> <ul style="list-style-type: none">- over 10 hours per day on prevailing wage projects- over 40 hours per calendar week- Saturday and Sunday- on all of the following holidays: January 1; the last Monday in May; July 4; the 1st Monday in September; the 4th Thursday in November; December 25;- The day before if January 1, July 4 or December 25 falls on a Saturday;- The day following if January 1, July 4 or December 25 falls on a Sunday. <p>Apply the time and one-half overtime calculation to whichever is higher between the Hourly Basic Rate listed on this project determination or the employee's regular hourly rate of pay. Add any applicable Premium or DOT Premium to the Hourly Basic Rate before calculating overtime.</p> <p>A DOT Premium (discussed below) may supersede this time and one-half requirement.</p>
FUTURE INCREASE:	When a specific trade or occupation requires a future increase, you MUST add the full hourly increase to the "TOTAL" on the effective date(s) indicated for the specific trade or occupation.
PREMIUM PAY:	If indicated for a specific trade or occupation, the full amount of such pay MUST be added to the "HOURLY BASIC RATE OF PAY" indicated for such trade or occupation, whenever such pay is applicable.
DOT PREMIUM:	This premium only applies to highway and bridge projects owned by the Wisconsin Department of Transportation and to the project type heading "Airport Pavement or State Highway Construction." DO NOT apply the premium calculation under any other project type on this determination.
APPRENTICES:	Pay apprentices a percentage of the applicable journey person's hourly basic rate of pay and hourly fringe benefit contributions specified in this determination. Obtain the appropriate percentage from each apprentice's contract or indenture.
SUBJOURNEY:	Subjourney wage rates may be available for some of the trades or occupations indicated below with the exception of laborers, truck drivers and heavy equipment operators. Any employer interested in using a subjourney classification on this project MUST complete Form ERD-10880 and request the applicable wage rate from the Department of Workforce Development PRIOR to using the subjourney worker on this project.

This document **MUST BE POSTED** by the **CONTRACTING AGENCY** in at least one conspicuous and easily accessible place **on the site of the project**. A local governmental unit may post this document at the place normally used to post public notices if there is no common site on the project. This document **MUST** remain posted during the entire time any worker is employed on the project and **MUST** be physically incorporated into the specifications and all contracts and subcontracts. If you have any questions, please write to the Equal Rights Division, Labor Standards Bureau, P.O. Box 8928, Madison, Wisconsin 53708 or call (608) 266-6861.

The following statutory provisions apply to local governmental unit projects of public works and are set forth below pursuant to the requirements of s. 66.0903(8), Stats.

s. 66.0903 (1) (f) & s. 103.49 (1) (c) "PREVAILING HOURS OF LABOR" for any trade or occupation in any area means 10 hours per day and 40 hours per week and may not include any hours worked on a Saturday or Sunday or on any of the following holidays:

1. January 1.
2. The last Monday in May.
3. July 4.
4. The first Monday in September.
5. The 4th Thursday in November.
6. December 25.
7. The day before if January 1, July 4 or December 25 falls on a Saturday.
8. The day following if January 1, July 4 or December 25 falls on a Sunday.

s. 66.0903 (10) RECORDS; INSPECTION; ENFORCEMENT.

(a) Each contractor, subcontractor, or contractor's or subcontractor's agent performing work on a project of public works that is subject to this section shall keep full and accurate records clearly indicating the name and trade or occupation of every person performing the work described in sub. (4) and an accurate record of the number of hours worked by each of those persons and the actual wages paid for the hours worked.

s. 66.0903 (11) LIABILITY AND PENALTIES.

(a) 1. Any contractor, subcontractor, or contractor's or subcontractor's agent who fails to pay the prevailing wage rate determined by the department under sub. (3) or who pays less than 1.5 times the hourly basic rate of pay for all hours worked in excess of the prevailing hours of labor is liable to any affected employee in the amount of his or her unpaid wages or his or her unpaid overtime compensation and in an additional amount as liquidated damages as provided under subd. 2., 3., whichever is applicable.

2. If the department determines upon inspection under sub. (10) (b) or (c) that a contractor, subcontractor, or contractor's or subcontractor's agent has failed to pay the prevailing wage rate determined by the department under sub. (3) or has paid less than 1.5 times the hourly basic rate of pay for all hours worked in excess of the prevailing hours of labor, the department shall order the contractor to pay to any affected employee the amount of his or her unpaid wages or his or her unpaid overtime compensation and an additional amount equal to 100 percent of the amount of those unpaid wages or that unpaid overtime compensation as liquidated damages within a period specified by the department in the order.

3. In addition to or in lieu of recovering the liability specified in subd. 1. as provided in subd. 2., any employee for and in behalf of that employee and other employees similarly situated may commence an action to recover that liability in any court of competent jurisdiction. If the court finds that a contractor, subcontractor, or contractor's or subcontractor's agent has failed to pay the prevailing wage rate determined by the department under sub. (3) or has paid less than 1.5 times the hourly basic rate of pay for all hours worked in excess of the prevailing hours of labor, the court shall order the contractor, subcontractor, or agent to pay to any affected employee the amount of his or her unpaid wages or his or her unpaid overtime compensation and an additional amount equal to 100 percent of the amount of those unpaid wages or that unpaid overtime compensation as liquidated damages.

5. No employee may be a party plaintiff to an action under subd. 3. unless the employee consents in writing to become a party and the consent is filed in the court in which the action is brought. Notwithstanding s. 814.04 (1), the court shall, in addition to any judgment awarded to the plaintiff, allow reasonable attorney fees and costs to be paid by the defendant.

BUILDING OR HEAVY CONSTRUCTION

Includes sheltered enclosures with walk-in access for the purpose of housing persons, employees, machinery, equipment or supplies and non-sheltered work such as canals, dams, dikes, reservoirs, storage tanks, etc. A sheltered enclosure need not be "habitable" in order to be considered a building. The installation of machinery and/or equipment, both above and below grade level, does not change a project's character as a building. On-site grading, utility work and landscaping are included within this definition. Residential buildings of four (4) stories or less, agricultural buildings, parking lots and driveways are NOT included within this definition.

SKILLED TRADES

<u>CODE</u>	<u>TRADE OR OCCUPATION</u>	<u>HOURLY BASIC RATE OF PAY</u>	<u>HOURLY FRINGE BENEFITS</u>	<u>TOTAL</u>
		\$	\$	\$
101	Acoustic Ceiling Tile Installer	30.48	15.90	46.38
102	Boilermaker Future Increase(s): Add \$1.50/hr on 1/01/2015; Add \$1.50/hr. on 01/01/2016	32.05	28.04	60.09
103	Bricklayer, Blocklayer or Stonemason Premium Increase(s): DOT PREMIUM: Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day.	32.01	17.35	49.36
104	Cabinet Installer	30.48	15.90	46.38
105	Carpenter	30.48	15.90	46.38
106	Carpet Layer or Soft Floor Coverer	30.48	15.90	46.38
107	Cement Finisher	31.58	16.13	47.71
108	Drywall Taper or Finisher	24.80	16.60	41.40
109	Electrician Premium Increase(s): DOT PREMIUM: Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day.	34.07	19.25	53.32
110	Elevator Constructor	42.86	23.84	66.70
111	Fence Erector	24.72	0.00	24.72
112	Fire Sprinkler Fitter	36.07	18.73	54.80
113	Glazier	38.03	13.42	51.45
114	Heat or Frost Insulator	33.68	24.31	57.99
115	Insulator (Batt or Blown)	15.00	9.50	24.50
116	Ironworker	31.25	19.46	50.71
117	Lather	30.48	15.90	46.38

Fringe Benefits Must Be Paid On <u>All</u> Hours Worked		HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
CODE	TRADE OR OCCUPATION	\$	\$	\$
118	Line Constructor (Electrical)	38.25	17.31	55.56
119	Marble Finisher	26.89	19.18	46.07
120	Marble Mason	32.01	17.35	49.36
121	Metal Building Erector	22.00	10.00	32.00
122	Millwright	32.11	15.95	48.06
123	Overhead Door Installer	20.95	4.94	25.89
124	Painter	24.50	16.60	41.10
125	Pavement Marking Operator	30.00	0.00	30.00
126	Piledriver	30.98	15.90	46.88
127	Pipeline Fuser or Welder (Gas or Utility)	30.79	19.74	50.53
129	Plasterer	31.03	17.71	48.74
130	Plumber Future Increase(s): Add \$1/hr on 6/1/2014.	36.42	16.87	53.29
132	Refrigeration Mechanic	41.60	16.71	58.31
133	Roofer or Waterproofer	29.40	6.25	35.65
134	Sheet Metal Worker	34.45	22.57	57.02
135	Steamfitter Future Increase(s): Add \$1.70/hr on 6/1/2014.	42.95	17.81	60.76
137	Teledata Technician or Installer Premium Increase(s): DOT PREMIUM: Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day.	22.25	12.24	34.49
138	Temperature Control Installer	32.94	18.80	51.74
139	Terrazzo Finisher	26.89	19.18	46.07
140	Terrazzo Mechanic	30.20	18.42	48.62
141	Tile Finisher	23.85	17.18	41.03
142	Tile Setter	29.81	17.18	46.99
143	Tuckpointer, Caulker or Cleaner	35.25	13.15	48.40
144	Underwater Diver (Except on Great Lakes)	34.48	15.90	50.38
146	Well Driller or Pump Installer	25.32	15.65	40.97
147	Siding Installer	25.92	18.04	43.96

Fringe Benefits Must Be Paid On <u>All</u> Hours Worked		HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
CODE	TRADE OR OCCUPATION	\$	\$	\$
150	Heavy Equipment Operator - ELECTRICAL LINE CONSTRUCTION ONLY	29.16	14.34	43.50
151	Light Equipment Operator -ELECTRICAL LINE CONSTRUCTION ONLY	30.60	14.86	45.46
152	Heavy Truck Driver - ELECTRICAL LINE CONSTRUCTION ONLY	26.78	13.63	40.41
153	Light Truck Driver - ELECTRICAL LINE CONSTRUCTION ONLY	24.86	12.97	37.83
154	Groundman - ELECTRICAL LINE CONSTRUCTION ONLY	21.75	12.70	34.45

TRUCK DRIVERS

Fringe Benefits Must Be Paid On <u>All</u> Hours Worked		HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
CODE	TRADE OR OCCUPATION	\$	\$	\$
201	Single Axle or Two Axle	32.39	18.46	50.85
203	Three or More Axle	18.00	22.88	40.88
204	Articulated, Euclid, Dumptor, Off Road Material Hauler	32.89	18.96	51.85
205	Pavement Marking Vehicle	18.00	22.88	40.88
207	Truck Mechanic	18.00	22.88	40.88

LABORERS

Fringe Benefits Must Be Paid On <u>All</u> Hours Worked		HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
CODE	TRADE OR OCCUPATION	\$	\$	\$
301	General Laborer Premium Increase(s): Add \$1.00/hr for certified welder; Add \$.25/hr for mason tender	24.21	14.63	38.84
302	Asbestos Abatement Worker	24.36	14.44	38.80
303	Landscaper	21.01	9.37	30.38
310	Gas or Utility Pipeline Laborer (Other Than Sewer and Water)	21.01	13.63	34.64
311	Fiber Optic Laborer (Outside, Other Than Concrete Encased) Premium Increase(s): DOT PREMIUMS: Pay two times the hourly basic rate on New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day.	18.33	13.65	31.98
314	Railroad Track Laborer	23.46	3.30	26.76
315	Final Construction Clean-Up Worker	16.00	0.00	16.00

**HEAVY EQUIPMENT OPERATORS
SITE PREPARATION, UTILITY OR LANDSCAPING WORK ONLY**

Fringe Benefits Must Be Paid On <u>All</u> Hours Worked		HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
CODE	TRADE OR OCCUPATION	\$	\$	\$
501	Air Track, Rotary or Percussion Drilling Machine &/or Hammers, Blaster; Asphalt Milling Machine; Boring Machine (Directional, Horizontal or Vertical); Backhoe (Track Type) Having a Mfgr's Rated Capacity of 130,000 Lbs. or Over; Backhoe (Track Type) Having a Mfgr's Rated Capacity of Under 130,000 Lbs., Backhoe (Mini, 15,000 Lbs. & Under); Bulldozer or Endloader (Over 40 hp); Compactor (Self-Propelled 85 Ft Total Drum Width & Over, or Tractor Mounted, Towed & Light Equipment); Concrete Batch Plant, Batch Hopper; Concrete Breaker (Large, Auto, Vibratory/Sonic, Manual or Remote); Crane, Shovel, Dragline, Clamshells; Forklift (Machinery Moving or Steel Erection, 25 Ft & Over); Gradall (Cruz-Aire Type); Grader or Motor Patrol; Master Mechanic; Mechanic or Welder; Robotic Tool Carrier (With or Without Attachments); Scraper (Self Propelled or Tractor Drawn) 5 cu yds or More Capacity; Tractor or Truck Mounted Hydraulic Backhoe; Tractor or Truck Mounted Hydraulic Crane (10 Tons or Under); Tractor (Scraper, Dozer, Pusher, Loader); Trencher (Wheel Type or Chain Type Having Over 8 Inch Bucket).	33.42	18.96	52.38
502	Backfiller; Broom or Sweeper; Bulldozer or Endloader (Under 40 hp); Environmental Burner; Forestry Equipment, Timbco, Tree Shear, Tub Grinder, Processor; Jeep Digger; Screed (Milling Machine); Skid Rig; Straddle Carrier or Travel Lift; Stump Chipper; Trencher (Wheel Type or Chain Type Having 8 Inch Bucket & Under).	32.89	18.96	51.85
503	Air Compressor (&/or 400 CFM or Over); Augers (Vertical & Horizontal); Compactor (Self-Propelled 84 Ft Total Drum Width & Under, or Tractor Mounted, Towed & Light Equipment); Crusher, Screening or Wash Plant; Farm or Industrial Type Tractor; Forklift; Generator (&/or 150 KW or Over); Greaser; High Pressure Utility Locating Machine (Daylighting Machine); Mulcher; Oiler; Post Hole Digger or Driver; Pump (3 Inch or Over) or Well Points; Refrigeration Plant or Freeze Machine; Rock, Stone Breaker; Skid Steer Loader (With or Without Attachments); Vibratory Hammer or Extractor, Power Pack.	30.82	18.96	49.78
504	Work Performed on the Great Lakes Including Diver; Wet Tender or Hydraulic Dredge Engineer.	38.80	20.17	58.97
505	Work Performed on the Great Lakes Including Crane or Backhoe Operator; Assistant Hydraulic Dredge Engineer; Hydraulic Dredge Leverman or Diver's Tender; Mechanic or Welder; 70 Ton & Over Tug Operator. Premium Increase(s): Add \$.50/hr for Friction Crane, Lattice Boom or Crane Certification (CCO).	41.65	21.71	63.36
506	Work Performed on the Great Lakes Including Deck Equipment Operator or Machineryman (Maintains Cranes Over 50 Tons or Backhoes 115,000 Lbs. or More); Tug, Launch or Loader, Dozer or Like Equipment When Operated on a Barge, Breakwater Wall, Slip, Dock or Scow, Deck Machinery.	37.10	21.57	58.67

507	Work Performed on the Great Lakes Including Deck Equipment Operator, Machineryman or Fireman (Operates 4 Units or More or Maintains Cranes 50 Tons or Under or Backhoes 115,000 Lbs. or Under); Deck Hand, Deck Engineer or Assistant Tug Operator; Off Road Trucks - Great Lakes ONLY.	34.50	20.04	54.54
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**HEAVY EQUIPMENT OPERATORS
EXCLUDING SITE PREPARATION, UTILITY, PAVING LANDSCAPING WORK**

CODE	TRADE OR OCCUPATION	Fringe Benefits Must Be Paid On <u>All</u> Hours Worked		
		HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
		\$	\$	\$
508	Boring Machine (Directional); Crane, Tower Crane, Pedestal Tower or Derrick, With or Without Attachments, With a Lifting Capacity of Over 100 Tons, Self-Erecting Tower Crane With a Lifting Capacity of Over 4,000 Lbs., Crane With Boom Dollies; Crane, Tower Crane, Pedestal Tower or Derrick, With Boom, Leads &/or Jib Lengths Measuring 176 Ft or Over; Master Mechanic. Premium Increase(s): Add \$.50/hr for >200 Ton / Add \$1/hr at 300 Ton / Add \$1.50/hr at 400 Ton / Add \$2/hr at 500 Ton & Over.	35.62	18.96	54.58
509	Backhoe (Track Type) Having a Mfgr's Rated Capacity of 130,000 Lbs. or Over; Boring Machine (Horizontal or Vertical); Caisson Rig; Crane, Tower Crane, Portable Tower, Pedestal Tower or Derrick, With or Without Attachments, With a Lifting Capacity of 100 Tons or Under, Self-Erecting Tower Crane With A Lifting Capacity Of 4,000 Lbs. & Under; Crane, Tower Crane, Portable Tower, Pedestal Tower or Derrick, With Boom, Leads &/or Jib Lengths Measuring 175 Ft or Under; Pile Driver; Versi Lifts, Tri-Lifts & Gantrys (20,000 Lbs. & Over).	36.35	6.95	43.30
510	Backhoe (Track Type) Having a Mfgr.'s Rated Capacity of Under 130,000 Lbs., Backhoe (Mini, 15,000 Lbs. & Under); Concrete Bump Cutter, Grinder, Planing or Grooving Machine; Concrete Laser/Screed; Concrete Paver (Slipform); Concrete Pump (Over 46 Meter), Concrete Conveyor (Rotec or Bidwell Type); Concrete Slipform Placer Curb & Gutter Machine; Concrete Spreader & Distributor; Dredge (NOT Performing Work on the Great Lakes); Forklift (Machinery Moving or Steel Erection, 25 Ft & Over); Gradall (Cruz-Aire Type); Hydro-Blaster (10,000 PSI or Over); Milling Machine; Skid Rig; Traveling Crane (Bridge Type).	33.42	18.96	52.38
511	Air, Track, Rotary or Percussion Drilling Machine &/or Hammers, Blaster; Bulldozer or Endloader (Over 40 hp); Compactor (Self-Propelled 85 Ft Total Drum Width & Over, or Tractor Mounted, Towed & Light Equipment); Concrete Pump (46 Meter & Under), Concrete Conveyor (Rotec or Bidwell Type); Crane (Carry Deck, Mini) or Truck Mounted Hydraulic Crane (10 Tons or Under); Environmental Burner; Gantrys (Under 20,000 Lbs.); Grader or Motor Patrol; High Pressure Utility Locating Machine (Daylighting Machine); Manhoist; Material or Stack Hoist; Mechanic or Welder; Railroad Track Rail Leveling Machine, Tie Placer, Extractor, Tamper, Stone Leveler or Rehabilitation Equipment; Roller (Over 5 Ton); Scraper (Self Propelled or Tractor Drawn) 5 cu yd or More Capacity; Screed (Milling Machine); Sideboom; Straddle Carrier or Travel Lift; Tining or Curing Machine; Tractor (Scraper, Dozer, Pusher, Loader); Tractor or Truck Mounted Hydraulic Backhoe; Tractor or Truck Mounted Hydraulic Crane (10 Tons or Under); Trencher (Wheel Type or Chain Type Having Over 8-Inch Bucket).	32.89	18.96	51.85

Fringe Benefits Must Be Paid On <u>All</u> Hours Worked		HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
CODE	TRADE OR OCCUPATION	\$	\$	\$
512	Backfiller; Broom or Sweeper; Bulldozer or Endloader (Under 40 hp); Compactor (Self-Propelled 84 Ft Total Drum Width & Under, or Tractor Mounted, Towed & Light Equipment); Concrete Batch Plant, Batch Hopper; Concrete Breaker (Large, Auto, Vibratory/Sonic, Manual or Remote); Concrete Conveyor System; Concrete Finishing Machine (Road Type); Fireman (Pile Driver & Derrick NOT Performing Work on the Great Lakes); Grout Pump; Hoist (Tugger, Automatic); Industrial Locomotives; Jeep Digger; Lift Slab Machine; Mulcher; Roller (Rubber Tire, 5 Ton or Under); Screw or Gypsum Pumps; Stabilizing or Concrete Mixer (Self-Propelled or 14S or Over); Stump Chipper; Trencher (Wheel Type or Chain Type Having 8-Inch Bucket & Under); Winches & A-Frames.	30.82	18.96	49.78
513	Air Compressor (&/or 400 CFM or Over); Air, Electric or Hydraulic Jacking System; Augers (Vertical & Horizontal); Boatmen (NOT Performing Work on the Great Lakes); Boiler (Temporary Heat); Crusher, Screening or Wash Plant; Elevator; Farm or Industrial Type Tractor; Fireman (Asphalt Plant NOT Performing Work on the Great Lakes); Forklift; Generator (&/or 150 KW or Over); Greaser; Heaters (Mechanical); Loading Machine (Conveyor); Oiler; Post Hole Digger or Driver; Prestress Machine; Pump (3 Inch or Over) or Well Points; Refrigeration Plant or Freeze Machine; Robotic Tool Carrier (With or Without Attachments); Rock, Stone Breaker; Skid Steer Loader (With or Without Attachments); Vibratory Hammer or Extractor, Power Pack.	24.19	17.89	42.08
514	Gas or Utility Pipeline, Except Sewer & Water (Primary Equipment).	36.34	21.14	57.48
515	Gas or Utility Pipeline, Except Sewer & Water (Secondary Equipment). Future Increase(s): Add \$1.60/hr on 06/01/2014; Add \$1.65/hr on 06/01/2015.	32.32	18.55	50.87
516	Fiber Optic Cable Equipment Future Increase(s): Add \$1.75/hr on 02/01/2014.	27.89	17.20	45.09

SEWER, WATER OR TUNNEL CONSTRUCTION
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Includes those projects that primarily involve public sewer or water distribution, transmission or collection systems and related tunnel work (excluding buildings).

SKILLED TRADES

CODE	TRADE OR OCCUPATION	HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
		\$	\$	\$
103	Bricklayer, Blocklayer or Stonemason Premium Increase(s): DOT PREMIUM: Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day.	35.10	18.40	53.50
105	Carpenter Future Increase(s): Add \$1.25/hr on 6/2/2014. Premium Increase(s): DOT PREMIUM: Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day.	33.68	19.81	53.49
107	Cement Finisher Future Increase(s): Add \$1.87 on 6/1/14; Add \$1.87 on 6/1/15; Add \$1.75 on 6/1/16. Premium Increase(s): DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.40/hr when the Wisconsin Department of Transportation or responsible governing agency requires that work be performed at night under artificial illumination with traffic control and the work is completed after sunset and before sunrise.	33.51	16.13	49.64
109	Electrician Premium Increase(s): DOT PREMIUM: Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day.	32.82	22.61	55.43
111	Fence Erector	24.72	0.00	24.72
116	Ironworker	31.25	19.46	50.71
118	Line Constructor (Electrical)	38.25	17.31	55.56
125	Pavement Marking Operator	16.00	7.35	23.35
126	Piledriver	30.98	15.90	46.88
130	Plumber	33.75	14.07	47.82
135	Steamfitter	42.45	16.71	59.16
137	Teledata Technician or Installer	21.89	11.85	33.74

Fringe Benefits Must Be Paid On <u>All</u> Hours Worked		HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
CODE	TRADE OR OCCUPATION	\$	\$	\$
143	Tuckpointer, Caulker or Cleaner	35.25	13.15	48.40
144	Underwater Diver (Except on Great Lakes)	38.80	20.17	58.97
146	Well Driller or Pump Installer	25.32	15.65	40.97
150	Heavy Equipment Operator - ELECTRICAL LINE CONSTRUCTION ONLY	29.16	14.34	43.50
151	Light Equipment Operator -ELECTRICAL LINE CONSTRUCTION ONLY	30.60	14.86	45.46
152	Heavy Truck Driver - ELECTRICAL LINE CONSTRUCTION ONLY	26.78	13.63	40.41
153	Light Truck Driver - ELECTRICAL LINE CONSTRUCTION ONLY	24.86	12.97	37.83
154	Groundman - ELECTRICAL LINE CONSTRUCTION ONLY	21.75	12.70	34.45

TRUCK DRIVERS

Fringe Benefits Must Be Paid On <u>All</u> Hours Worked		HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
CODE	TRADE OR OCCUPATION	\$	\$	\$
201	Single Axle or Two Axle	30.00	15.00	45.00
203	Three or More Axle	16.00	7.35	23.35
204	Articulated, Euclid, Dumptor, Off Road Material Hauler	32.89	18.96	51.85
205	Pavement Marking Vehicle	16.00	7.35	23.35
207	Truck Mechanic	16.00	7.35	23.35

LABORERS

Fringe Benefits Must Be Paid On <u>All</u> Hours Worked		HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
CODE	TRADE OR OCCUPATION	\$	\$	\$
301	General Laborer Premium Increase(s): Add \$.20 for blaster, bracer, manhole builder, caulker, bottomman and power tool; Add \$.55 for pipelayer; Add \$1.00 for tunnel work 0-15 lbs. compressed air; Add \$2.00 for over 15-30 lbs. compressed air; Add \$3.00 for over 30 lbs. compressed air.	25.60	14.62	40.22
303	Landscaper	25.28	11.46	36.74
304	Flagperson or Traffic Control Person	24.70	10.72	35.42
311	Fiber Optic Laborer (Outside, Other Than Concrete Encased)	18.31	12.67	30.98
314	Railroad Track Laborer	23.46	3.30	26.76

**HEAVY EQUIPMENT OPERATORS
SEWER, WATER OR TUNNEL WORK**

Fringe Benefits Must Be Paid On <u>All</u> Hours Worked		HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
CODE	TRADE OR OCCUPATION	\$	\$	\$
521	Backhoe (Track Type) Having a Mfgr.'s Rated Capacity of 130,000 Lbs. or Over; Caisson Rig; Crane, Tower Crane, Pedestal Tower or Derrick, With Boom, Leads &/or Jib Lengths Measuring 176 Ft or Over; Crane, Tower Crane, Pedestal Tower or Derrick, With or Without Attachments, With a Lifting Capacity of Over 100 Tons, Self-Erecting Tower Crane With a Lifting Capacity Of Over 4,000 Lbs., Crane With Boom Dollies; Master Mechanic; Pile Driver. Premium Increase(s): Add \$.25/hr for all >45 Ton lifting capacity cranes	34.62	18.96	53.58
522	Backhoe (Track Type) Having a Mfgr.'s Rated Capacity of Under 130,000 Lbs., Backhoe (Mini, 15,000 Lbs. & Under); Boring Machine (Directional); Concrete Bump Cutter, Grinder, Planing or Grooving Machine; Concrete Laser/Screed; Concrete Paver (Slipform); Concrete Pump (Over 46 Meter), Concrete Conveyor (Rotec or Bidwell Type); Concrete Spreader & Distributor; Crane, Tower Crane, Portable Tower, Pedestal Tower or Derrick, With Boom, Leads &/or Jib Lengths Measuring 175 Ft or Under; Crane, Tower Crane, Portable Tower, Pedestal Tower or Derrick, With or Without Attachments, With a Lifting Capacity of 100 Tons or Under, Self-Erecting Tower Crane With a Lifting Capacity of 4,000 Lbs. & Under; Dredge (NOT Performing Work on the Great Lakes); Milling Machine; Skid Rig; Telehandler; Traveling Crane (Bridge Type).	33.42	18.96	52.38
523	Air Track, Rotary or Percussion Drilling Machine &/or Hammers, Blaster; Boring Machine (Horizontal or Vertical); Bulldozer or Endloader (Over 40 hp); Crane (Carry Deck, Mini) or Truck Mounted Hydraulic Crane (10 Tons or Under); Concrete Pump (46 Meter & Under), Concrete Conveyor (Rotec or Bidwell Type); Concrete Slipform Placer Curb & Gutter Machine; Gradall (Cruz-Aire Type); Grader or Motor Patrol; Hydro-Blaster (10,000 PSI or Over); Manhoist; Material or Stack Hoist; Mechanic or Welder; Roller (Over 5 Ton); Scraper (Self Propelled or Tractor Drawn) 5 cu yd or More Capacity; Screed (Milling Machine); Sideboom; Straddle Carrier or Travel Lift; Tractor (Scraper, Dozer, Pusher, Loader); Tractor or Truck Mounted Hydraulic Backhoe; Tractor or Truck Mounted Hydraulic Crane (10 Tons or Under); Trencher (Wheel Type or Chain Type Having Over 8-Inch Bucket).	32.89	18.96	51.85

Fringe Benefits Must Be Paid On <u>All</u> Hours Worked		HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
CODE	TRADE OR OCCUPATION	\$	\$	\$
524	Backfiller; Broom or Sweeper; Bulldozer or Endloader (Under 40 hp); Compactor (Self-Propelled 85 Ft Total Drum Width & Over, or Tractor Mounted, Towed & Light Equipment); Concrete Batch Plant, Batch Hopper; Concrete Breaker (Large, Auto, Vibratory/Sonic, Manual or Remote); Concrete Conveyor System; Concrete Finishing Machine (Road Type); Environmental Burner; Fireman (Pile Driver & Derrick NOT Performing Work on the Great Lakes); Forestry Equipment, Timbco, Tree Shear, Tub Grinder, Processor; Hoist (Tugger, Automatic); Grout Pump; Jeep Digger; Lift Slab Machine; Mulcher; Power Subgrader; Pump (3 Inch or Over) or Well Points; Robotic Tool Carrier (With or Without Attachments); Roller (Rubber Tire, 5 Ton or Under); Screw or Gypsum Pumps; Stabilizing or Concrete Mixer (Self-Propelled or 14S or Over); Stump Chipper; Tining or Curing Machine; Trencher (Wheel Type or Chain Type Having 8-Inch Bucket & Under); Winches & A-Frames. Future Increase(s): Add \$1.05/hr on 6/2/2014; Add \$1.55/hr on 6/1/2015. Premium Increase(s): Add \$.25/hr for operating tower crane.	35.11	19.45	54.56
525	Air Compressor (&/or 400 CFM or Over); Air, Electric or Hydraulic Jacking System; Augers (Vertical & Horizontal); Compactor (Self-Propelled 84 Ft Total Drum Width & Under, or Tractor Mounted, Towed & Light Equipment); Crusher, Screening or Wash Plant; Farm or Industrial Type Tractor; Fireman (Asphalt Plant NOT Performing Work on the Great Lakes); Generator (&/or 150 KW or Over); Heaters (Mechanical); High Pressure Utility Locating Machine (Daylighting Machine); Loading Machine (Conveyor); Post Hole Digger or Driver; Refrigeration Plant or Freeze Machine; Rock, Stone Breaker; Skid Steer Loader (With or Without Attachments); Vibratory Hammer or Extractor, Power Pack.	30.19	20.94	51.13
526	Boiler (Temporary Heat); Forklift; Greaser; Oiler.	24.19	17.89	42.08
527	Work Performed on the Great Lakes Including Diver; Wet Tender or Hydraulic Dredge Engineer.	38.80	20.17	58.97
528	Work Performed on the Great Lakes Including 70 Ton & Over Tug Operator; Assistant Hydraulic Dredge Engineer; Crane or Backhoe Operator; Hydraulic Dredge Leverman or Diver's Tender; Mechanic or Welder.	38.80	20.17	58.97
529	Work Performed on the Great Lakes Including Deck Equipment Operator or Machineryman (Maintains Cranes Over 50 Tons or Backhoes 115,000 Lbs. or More); Tug, Launch or Loader, Dozer or Like Equipment When Operated on a Barge, Breakwater Wall, Slip, Dock or Scow, Deck Machinery.	34.50	20.04	54.54
530	Work Performed on the Great Lakes Including Deck Equipment Operator; Machineryman or Fireman (Operates 4 Units or More or Maintains Cranes 50 Tons or Under or Backhoes 115,000 Lbs. or Under), Deck Hand, Deck Engineer or Assistant Tug Operator; Off Road Trucks - Great Lakes ONLY.	34.50	20.04	54.54

AIRPORT PAVEMENT OR STATE HIGHWAY CONSTRUCTION

Includes all airport projects (excluding buildings) and all projects awarded by the Wisconsin Department of Transportation (excluding buildings).

SKILLED TRADES

<u>CODE</u>	<u>TRADE OR OCCUPATION</u>	Fringe Benefits Must Be Paid On <u>All</u> Hours Worked		
		<u>HOURLY BASIC RATE OF PAY</u> \$	<u>HOURLY FRINGE BENEFITS</u> \$	<u>TOTAL</u> \$
103	Bricklayer, Blocklayer or Stonemason	32.01	17.35	49.36
105	Carpenter	30.48	15.90	46.38
107	Cement Finisher Future Increase(s): Add \$1.87 on 6/1/14; Add \$1.87 on 6/1/15; Add \$1.75 on 6/1/16. Premium Increase(s): DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.40/hr when the Wisconsin Department of Transportation or responsible governing agency requires that work be performed at night under artificial illumination with traffic control and the work is completed after sunset and before sunrise.	33.51	16.13	49.64
109	Electrician Premium Increase(s): DOT PREMIUM: Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day.	34.07	19.25	53.32
111	Fence Erector	24.72	0.00	24.72
116	Ironworker	31.25	19.46	50.71
118	Line Constructor (Electrical)	38.25	17.31	55.56
124	Painter	21.87	11.37	33.24
125	Pavement Marking Operator	30.00	0.00	30.00
126	Piledriver	30.98	15.90	46.88
133	Rofer or Waterproofer	29.40	6.25	35.65
137	Teledata Technician or Installer	21.89	11.85	33.74
143	Tuckpointer, Caulker or Cleaner	35.25	13.15	48.40
144	Underwater Diver (Except on Great Lakes)	34.48	15.90	50.38
150	Heavy Equipment Operator - ELECTRICAL LINE CONSTRUCTION ONLY	34.43	15.24	49.67
151	Light Equipment Operator -ELECTRICAL LINE CONSTRUCTION ONLY	35.50	15.89	51.39

Fringe Benefits Must Be Paid On <u>All</u> Hours Worked		HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
CODE	TRADE OR OCCUPATION	\$	\$	\$
152	Heavy Truck Driver - ELECTRICAL LINE CONSTRUCTION ONLY	26.78	13.63	40.41
153	Light Truck Driver - ELECTRICAL LINE CONSTRUCTION ONLY	24.86	12.97	37.83
154	Groundman - ELECTRICAL LINE CONSTRUCTION ONLY	21.75	12.70	34.45

TRUCK DRIVERS

Fringe Benefits Must Be Paid On <u>All</u> Hours Worked		HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
CODE	TRADE OR OCCUPATION	\$	\$	\$
201	Single Axle or Two Axle	34.22	19.90	54.12
203	Three or More Axle Future Increase(s): Add \$1.30/hr on 6/1/2014. Premium Increase(s): DOT PREMIUM: Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day.	24.52	17.77	42.29
204	Articulated, Euclid, Dumptor, Off Road Material Hauler Future Increase(s): Add \$1.75/hr on 6/1/14); Add \$1.25/hr on 6/1/15); Add \$1.30/hr on 6/1/16); Add \$1.25/hr on 6/1/17. Premium Increase(s): DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.50/hr night work premium. See DOT'S website for details about the applicability of this night work premium at: http://www.dot.wi.gov/busines/civilrights/laborwages/pwc.htm .	29.27	20.40	49.67
205	Pavement Marking Vehicle	23.31	17.13	40.44
206	Shadow or Pilot Vehicle	34.22	19.90	54.12
207	Truck Mechanic	23.31	17.13	40.44

LABORERS

Fringe Benefits Must Be Paid On <u>All</u> Hours Worked		HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
CODE	TRADE OR OCCUPATION	\$	\$	\$
301	General Laborer Future Increase(s): Add \$1.60/hr on 6/1/2014. Premium Increase(s): Add \$.10/hr for topman, air tool operator, vibrator or tamper operator (mechanical hand operated), chain saw operator and demolition burning torch laborer; Add \$.15/hr for bituminous worker (raker and luteman), formsetter (curb, sidewalk and pavement) and strike off man; Add \$.20/hr for blaster and powderman; Add \$.25/hr for bottomman; Add \$.35/hr for line and grade specialist; Add \$.45/hr for pipelayer. / DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.25/hr for work on projects involving temporary traffic control setup, for lane and shoulder closures, when work under artificial illumination conditions is necessary as required by the project provisions (including prep time prior to and/or cleanup after such time period).	29.32	14.63	43.95
302	Asbestos Abatement Worker	24.36	14.44	38.80
303	Landscaper Future Increase(s): Add \$1.60/hr on 6/1/14. Premium Increase(s): DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.25/hr for work on projects involving temporary traffic control setup, for lane and shoulder closures, when work under artificial illumination conditions is necessary as required by the project provisions (including prep time prior to and/or cleanup after such time period).	29.32	14.63	43.95
304	Flagperson or Traffic Control Person Future Increase(s): Add \$1.60/hr on 6/1/2014. Premium Increase(s): DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.25/hr when the Wisconsin Department of Transportation or responsible governing agency requires that work be performed at night under artificial illumination with traffic control and the work is completed after sunset and before sunrise.	25.67	14.63	40.30
311	Fiber Optic Laborer (Outside, Other Than Concrete Encased)	18.31	12.67	30.98
314	Railroad Track Laborer	23.46	3.30	26.76

**HEAVY EQUIPMENT OPERATORS
AIRPORT PAVEMENT OR STATE HIGHWAY CONSTRUCTION**

Fringe Benefits Must Be Paid On <u>All</u> Hours Worked		HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
CODE	TRADE OR OCCUPATION	\$	\$	\$
531	Crane, Tower Crane, Pedestal Tower or Derrick, With Boom, Leads &/or Jib Lengths Measuring 176 Ft or Over; Crane, Tower Crane, Pedestal Tower or Derrick, With or Without Attachments, With a Lifting Capacity of Over 100 Tons, Self-Erecting Tower Crane With a Lifting Capacity Of Over 4,000 Lbs., Crane With Boom Dollies; Traveling Crane (Bridge Type). Future Increase(s): Add \$1.75/hr on 6/1/2014); Add \$1.25/hr on 6/1/2015); Add \$1.30/hr on 6/1/2016); Add \$1.25/hr on 6/1/2017. Premium Increase(s): DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.50/hr night work premium. See DOT'S website for details about the applicability of this night work premium at: http://www.dot.wi.gov/business/civilrights/laborwages/pwc.htm .	36.72	20.40	57.12
532	Backhoe (Track Type) Having a Mfgr.'s Rated Capacity of 130,000 Lbs. or Over; Caisson Rig; Crane, Tower Crane, Portable Tower, Pedestal Tower or Derrick, With Boom, Leads &/or Jib Lengths Measuring 175 Ft or Under; Crane, Tower Crane, Portable Tower, Pedestal Tower or Derrick, With or Without Attachments, With a Lifting Capacity of 100 Tons or Under, Self-Erecting Tower Crane With A Lifting Capacity Of 4,000 Lbs., & Under; Dredge (NOT Performing Work on the Great Lakes); Licensed Boat Pilot (NOT Performing Work on the Great Lakes); Pile Driver. Future Increase(s): Add \$1.75/hr on 6/1/2014); Add \$1.25/hr on 6/1/2015); Add \$1.30/hr on 6/1/2016); Add \$1.25/hr on 6/1/2017. Premium Increase(s): DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.50/hr night work premium. See DOT'S website for details about the applicability of this night work premium at: http://www.dot.wi.gov/business/civilrights/laborwages/pwc.htm .	36.22	20.40	56.62

Fringe Benefits Must Be Paid On All Hours Worked

<u>CODE</u>	<u>TRADE OR OCCUPATION</u>	<u>HOURLY BASIC RATE OF PAY</u> \$	<u>HOURLY FRINGE BENEFITS</u> \$	<u>TOTAL</u> \$
533	<p>Air Track, Rotary or Percussion Drilling Machine &/or Hammers, Blaster; Asphalt Heater, Planer & Scarifier; Asphalt Milling Machine; Asphalt Screed; Automatic Subgrader (Concrete); Backhoe (Track Type) Having a Mfgr.'s Rated Capacity of Under 130,000 Lbs., Backhoe (Mini, 15,000 Lbs. & Under); Bituminous (Asphalt) Plant & Paver, Screed; Boatmen (NOT Performing Work on the Great Lakes); Boring Machine (Directional, Horizontal or Vertical); Bridge (Bidwell) Paver; Bulldozer or Endloader; Concrete Batch Plant, Batch Hopper; Concrete Breaker (Large, Auto, Vibratory/Sonic, Manual or Remote); Concrete Bump Cutter, Grinder, Planing or Grooving Machine; Concrete Conveyor System; Concrete Laser/Screed; Concrete Paver (Slipform); Concrete Pump, Concrete Conveyor (Rotec or Bidwell Type); Concrete Slipform Placer Curb & Gutter Machine; Concrete Spreader & Distributor; Crane (Carry Deck, Mini) or Truck Mounted Hydraulic Crane (10 Tons or Under); Crane Wlth a Lifting Capacity of 25 Tons or Under; Forestry Equipment, Timbco, Tree Shear, Tub Grinder, Processor; Gradall (Cruz-Aire Type); Grader or Motor Patrol; Grout Pump; Hydro-Blaster (10,000 PSI or Over); Loading Machine (Conveyor); Material or Stack Hoist; Mechanic or Welder; Milling Machine; Post Hole Digger or Driver; Roller (Over 5 Ton); Scraper (Self Propelled or Tractor Drawn) 5 cu yds or More Capacity; Shoulder Widener; Sideboom; Skid Rig; Stabilizing or Concrete Mixer (Self-Propelled or 14S or Over); Straddle Carrier or Travel Lift; Tractor (Scraper, Dozer, Pusher, Loader); Tractor or Truck Mounted Hydraulic Backhoe; Trencher (Wheel Type or Chain Type); Tube Finisher; Tugger (NOT Performing Work on the Great Lakes); Winches & A-Frames.</p> <p>Future Increase(s): Add \$1.75/hr on 6/1/2014); Add \$1.25/hr on 6/1/2015); Add \$1.30/hr on 6/1/2016); Add \$1.25/hr on 6/1/2017.</p> <p>Premium Increase(s): DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.50/hr night work premium. See DOT'S website for details about the applicability of this night work premium at: http://www.dot.wi.gov/business/civilrights/laborwages/pwc.htm.</p>	35.72	20.40	56.12

Fringe Benefits Must Be Paid On <u>All</u> Hours Worked		HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
CODE	TRADE OR OCCUPATION	\$	\$	\$
534	<p>Belting, Burlap, Texturing Machine; Broom or Sweeper; Compactor (Self-Propelled or Tractor Mounted, Towed & Light Equipment); Concrete Finishing Machine (Road Type); Environmental Burner; Farm or Industrial Type Tractor; Fireman (Asphalt Plant, Pile Driver & Derrick NOT Performing Work on the Great Lakes); Forklift; Greaser; Hoist (Tugger, Automatic); Jeep Digger; Joint Sawyer (Multiple Blade); Launch (NOT Performing Work on the Great Lakes); Lift Slab Machine; Mechanical Float; Mulcher; Power Subgrader; Robotic Tool Carrier (With or Without Attachments); Roller (Rubber Tire, 5 Ton or Under); Self Propelled Chip Spreader; Shouldering Machine; Skid Steer Loader (With or Without Attachments); Telehandler; Tining or Curing Machine.</p> <p>Future Increase(s): Add \$1.75/hr on 6/1/2014); Add \$1.25/hr on 6/1/2015); Add \$1.30/hr on 6/1/2016); Add \$1.25/hr on 6/1/2017.</p> <p>Premium Increase(s): DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.50/hr night work premium. See DOT'S website for details about the applicability of this night work premium at: http://www.dot.wi.gov/business/civilrights/laborwages/pwc.htm.</p>	35.46	20.40	55.86
535	<p>Air Compressor (&/or 400 CFM or Over); Air, Electric or Hydraulic Jacking System; Augers (Vertical & Horizontal); Automatic Belt Conveyor & Surge Bin; Boiler (Temporary Heat); Concrete Proportioning Plant; Crusher, Screening or Wash Plant; Generator (&/or 150 KW or Over); Heaters (Mechanical); High Pressure Utility Locating Machine (Daylighting Machine); Mudjack; Oiler; Prestress Machine; Pug Mill; Pump (3 Inch or Over) or Well Points; Rock, Stone Breaker; Screed (Milling Machine); Stump Chipper; Tank Car Heaters; Vibratory Hammer or Extractor, Power Pack.</p> <p>Future Increase(s): Add \$1.75/hr on 6/1/2014); Add \$1.25/hr on 6/1/2015); Add \$1.30/hr on 6/1/2016); Add \$1.25/hr on 6/1/2017.</p> <p>Premium Increase(s): DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.50/hr night work premium. See DOT'S website for details about the applicability of this night work premium at: http://www.dot.wi.gov/business/civilrights/laborwages/pwc.htm.</p>	35.17	20.40	55.57
536	Fiber Optic Cable Equipment.	26.69	16.65	43.34
537	Work Performed on the Great Lakes Including Diver; Wet Tender or Hydraulic Dredge Engineer.	38.80	20.17	58.97
538	Work Performed on the Great Lakes Including 70 Ton & Over Tug Operator; Assistant Hydraulic Dredge Engineer; Crane or Backhoe Operator; Hydraulic Dredge Leverman or Diver's Tender; Mechanic or Welder.	38.80	20.17	58.97

Fringe Benefits Must Be Paid On <u>All</u> Hours Worked		HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
<u>CODE</u>	<u>TRADE OR OCCUPATION</u>	\$	\$	\$
539	Work Performed on the Great Lakes Including Deck Equipment Operator or Machineryman (Maintains Cranes Over 50 Tons or Backhoes 115,000 Lbs. or More); Tug, Launch or Loader, Dozer or Like Equipment When Operated on a Barge, Breakwater Wall, Slip, Dock or Scow, Deck Machinery.	34.50	20.04	54.54
540	Work Performed on the Great Lakes Including Deck Equipment Operator, Machineryman or Fireman (Operates 4 Units or More or Maintains Cranes 50 Tons or Under or Backhoes 115,000 Lbs. or Under); Deck Hand, Deck Engineer or Assistant Tug Operator; Off Road Trucks-Great Lakes ONLY.	34.50	20.04	54.54

LOCAL STREET OR MISCELLANEOUS PAVING CONSTRUCTION
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Includes roads, streets, alleys, trails, bridges, paths, racetracks, parking lots and driveways (except residential or agricultural), public sidewalks or other similar projects (excluding projects awarded by the Wisconsin Department of Transportation).

SKILLED TRADES

Fringe Benefits Must Be Paid On <u>All</u> Hours Worked		HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
<u>CODE</u>	<u>TRADE OR OCCUPATION</u>	\$	\$	\$
103	Bricklayer, Blocklayer or Stonemason	32.01	17.35	49.36
105	Carpenter	32.93	19.93	52.86
107	Cement Finisher	31.48	15.68	47.16
109	Electrician	31.27	22.81	54.08
111	Fence Erector	24.72	0.00	24.72
116	Ironworker	31.25	19.46	50.71
118	Line Constructor (Electrical)	38.25	17.31	55.56
124	Painter	24.50	16.60	41.10
125	Pavement Marking Operator	30.00	0.00	30.00
126	Piledriver	30.98	15.90	46.88
133	Rofer or Waterproofer	29.40	6.25	35.65
137	Teledata Technician or Installer	21.89	11.85	33.74
143	Tuckpointer, Caulker or Cleaner	35.25	13.15	48.40
144	Underwater Diver (Except on Great Lakes)	38.80	20.17	58.97
150	Heavy Equipment Operator - ELECTRICAL LINE CONSTRUCTION ONLY	34.43	15.24	49.67
151	Light Equipment Operator -ELECTRICAL LINE CONSTRUCTION ONLY	30.60	14.86	45.46
152	Heavy Truck Driver - ELECTRICAL LINE CONSTRUCTION ONLY	26.78	13.63	40.41
153	Light Truck Driver - ELECTRICAL LINE CONSTRUCTION ONLY	24.86	12.97	37.83
154	Groundman - ELECTRICAL LINE CONSTRUCTION ONLY	21.75	12.70	34.45

TRUCK DRIVERS

Fringe Benefits Must Be Paid On <u>All</u> Hours Worked		HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
<u>CODE</u>	<u>TRADE OR OCCUPATION</u>	\$	\$	\$
201	Single Axle or Two Axle	30.00	15.00	45.00

Fringe Benefits Must Be Paid On <u>All</u> Hours Worked		HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
CODE	TRADE OR OCCUPATION	\$	\$	\$
203	Three or More Axle	17.00	0.00	17.00
204	Articulated, Euclid, Dumptor, Off Road Material Hauler	32.89	18.96	51.85
205	Pavement Marking Vehicle	17.00	0.00	17.00
206	Shadow or Pilot Vehicle	30.00	15.00	45.00
207	Truck Mechanic	17.00	0.00	17.00

LABORERS

Fringe Benefits Must Be Paid On <u>All</u> Hours Worked		HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
CODE	TRADE OR OCCUPATION	\$	\$	\$
301	General Laborer	28.07	13.25	41.32
303	Landscaper Future Increase(s): Add \$1.60/hr on 6/1/14. Premium Increase(s): DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.25/hr for work on projects involving temporary traffic control setup, for lane and shoulder closures, when work under artificial illumination conditions is necessary as required by the project provisions (including prep time prior to and/or cleanup after such time period).	29.04	14.63	43.67
304	Flagperson or Traffic Control Person	24.70	10.72	35.42
311	Fiber Optic Laborer (Outside, Other Than Concrete Encased)	18.31	12.67	30.98
314	Railroad Track Laborer	23.46	3.30	26.76

**HEAVY EQUIPMENT OPERATORS
CONCRETE PAVEMENT OR BRIDGE WORK**

Fringe Benefits Must Be Paid On <u>All</u> Hours Worked		HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
CODE	TRADE OR OCCUPATION	\$	\$	\$
541	Crane, Tower Crane, Pedestal Tower or Derrick, With or Without Attachments, With a Lifting Capacity of Over 100 Tons, Self-Erecting Tower Crane With a Lifting Capacity Of Over 4,000 Lbs., Crane With Boom Dollies; Crane, Tower Crane, Pedestal Tower or Derrick, With Boom, Leads &/or Jib Lengths Measuring 176 Ft or Over; Master Mechanic. Future Increase(s): Add \$1.75/hr on 6/1/2014); Add \$1.25/hr on 6/1/2015); Add \$1.30/hr on 6/1/2016); Add \$1.25/hr on 6/1/2017. Premium Increase(s): DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.50/hr night work premium. See DOT'S website for details about the applicability of this night work premium at: http://www.dot.wi.gov/business/civilrights/laborwages/pwc.htm .	36.72	20.40	57.12
542	Backhoe (Track Type) Having a Mfgr.'s Rated Capacity of 130,000 Lbs. or Over; Caisson Rig; Crane, Tower Crane, Portable Tower, Pedestal Tower or Derrick, With or Without Attachments, With a Lifting Capacity of 100 Tons or Under, Self-Erecting Tower Crane With a Lifting Capacity of 4,000 Lbs. & Under; Crane, Tower Crane Portable Tower, Pedestal Tower or Derrick, With Boom, Leads &/or Jib Lengths Measuring 175 Ft or Under; Dredge (NOT Performing Work on the Great Lakes); Licensed Boat Pilot (NOT Performing Work on the Great Lakes); Pile Driver. Future Increase(s): Add \$1.75/hr on 6/1/2014); Add \$1.25/hr on 6/1/2015); Add \$1.30/hr on 6/1/2016); Add \$1.25/hr on 6/1/2017. Premium Increase(s): DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.50/hr night work premium. See DOT'S website for details about the applicability of this night work premium at: http://www.dot.wi.gov/business/civilrights/laborwages/pwc.htm .	36.22	20.40	56.62

Fringe Benefits Must Be Paid On <u>All</u> Hours Worked		HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
CODE	TRADE OR OCCUPATION	\$	\$	\$
543	<p>Air Track, Rotary or Percussion Drilling Machine &/or Hammers, Blaster; Automatic Subgrader (Concrete); Backhoe (Track Type) Having a Mfgr.'s Rated Capacity of Under 130,000 Lbs., Backhoe (Mini, 15,000 Lbs. & Under); Boring Machine (Directional, Horizontal or Vertical); Bridge (Bidwell) Paver; Bulldozer or Endloader; Concrete Batch Plant, Batch Hopper; Concrete Breaker (Large, Auto, Vibratory/Sonic, Manual or Remote); Concrete Bump Cutter, Grinder, Planing or Grooving Machine; Concrete Conveyor System; Concrete Laser/Screed; Concrete Paver (Slipform); Concrete Pump, Concrete Conveyor (Rotec or Bidwell Type); Concrete Slipform Placer Curb & Gutter Machine; Concrete Spreader & Distributor; Crane (Carry Deck, Mini) or Truck Mounted Hydraulic Crane (10 Tons or Under); Crane With a Lifting Capacity of 25 Tons or Under; Forestry Equipment, Timbco, Tree Shear, Tub Grinder, Processor; Gradall (Cruz-Aire Type); Grader or Motor Patrol; Grout Pump; Hydro-Blaster (10,000 PSI or Over); Loading Machine (Conveyor); Manhoist; Material or Stack Hoist; Mechanic or Welder; Milling Machine; Post Hole Digger or Driver; Scraper (Self Propelled or Tractor Drawn) 5 cu yds or More Capacity; Shoulder Widener; Sideboom; Skid Rig; Stabilizing or Concrete Mixer (Self-Propelled or 14S or Over); Straddle Carrier or Travel Lift; Tractor (Scraper, Dozer, Pusher, Loader); Tractor or Truck Mounted Hydraulic Backhoe; Trencher (Wheel Type or Chain Type); Tube Finisher; Tugger (NOT Performing Work on the Great Lakes); Winches & A-Frames.</p> <p>Future Increase(s): Add \$1.75/hr on 6/1/2014); Add \$1.25/hr on 6/1/2015); Add \$1.30/hr on 6/1/2016); Add \$1.25/hr on 6/1/2017.</p> <p>Premium Increase(s): DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.50/hr night work premium. See DOT'S website for details about the applicability of this night work premium at: http://www.dot.wi.gov/business/civilrights/laborwages/pwc.htm.</p>	35.72	20.40	56.12
544	<p>Backfiller; Belting, Burlap, Texturing Machine; Broom or Sweeper; Compactor (Self-Propelled or Tractor Mounted, Towed & Light Equipment); Concrete Finishing Machine (Road Type); Environmental Burner; Farm or Industrial Type Tractor; Fireman (Pile Driver & Derrick NOT Performing Work on the Great Lakes); Forklift; Greaser; Jeep Digger; Joint Sawyer (Multiple Blade); Launch (NOT Performing Work on the Great Lakes); Lift Slab Machine; Mechanical Float; Mulcher; Power Subgrader; Robotic Tool Carrier (With or Without Attachments); Self Propelled Chip Spreader; Shouldering Machine; Skid Steer Loader (With or Without Attachments); Telehandler; Tining or Curing Machine.</p>	33.96	19.79	53.75
545	<p>Air Compressor (&/or 400 CFM or Over); Air, Electric or Hydraulic Jacking System; Automatic Belt Conveyor & Surge Bin; Boiler (Temporary Heat); Concrete Proportioning Plant; Crusher, Screening or Wash Plant; Generator (&/or 150 KW or Over); Heaters (Mechanical); High Pressure Utility Locating Machine (Daylighting Machine); Mudjack; Oiler; Prestress Machine; Pug Mill; Pump (3 Inch or Over) or Well Points; Rock, Stone Breaker; Screed (Milling Machine); Stump Chipper; Tank Car Heaters; Vibratory Hammer or Extractor, Power Pack.</p>	30.32	18.46	48.78
546	Fiber Optic Cable Equipment.	26.69	16.65	43.34

Fringe Benefits Must Be Paid On <u>All</u> Hours Worked				
CODE	TRADE OR OCCUPATION	HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
		\$	\$	\$
547	Work Performed on the Great Lakes Including Diver; Wet Tender or Hydraulic Dredge Engineer.	38.80	20.17	58.97
548	Work Performed on the Great Lakes Including 70 Ton & Over Tug Operator; Assistant Hydraulic Dredge Engineer; Crane or Backhoe Operator; Hydraulic Dredge Leverman or Diver's Tender; Mechanic or Welder.	38.80	20.17	58.97
549	Work Performed on the Great Lakes Including Deck Equipment Operator or Machineryman (Maintains Cranes Over 50 Tons or Backhoes 115,000 Lbs. or more); Tug, Launch or Loader, Dozer or Like Equipment When Operated on a Barge, Breakwater Wall, Slip, Dock or Scow, Deck Machinery.	34.50	20.04	54.54
550	Work Performed on the Great Lakes Including Deck Equipment Operator; Machineryman or Fireman (Operates 4 Units or More or Maintains Cranes 50 Tons or Under or Backhoes 115,000 Lbs. or Under); Deck Hand, Deck Engineer or Assistant Tug Operator; Off Road Trucks - Great Lakes ONLY.	34.50	20.04	54.54

**HEAVY EQUIPMENT OPERATORS
ASPHALT PAVEMENT OR OTHER WORK**

Fringe Benefits Must Be Paid On <u>All</u> Hours Worked				
CODE	TRADE OR OCCUPATION	HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
		\$	\$	\$
551	Crane, Tower Crane, Pedestal Tower or Derrick, With or Without Attachments, With a Lifting Capacity of Over 100 Tons, Self Erecting Tower Crane With a Lifting Capacity of Over 4,000 Lbs., Crane With Boom Dollies; Crane, Tower Crane, Pedestal Tower or Derrick, With Boom, Leads and/or Jib Lengths Measuring 176 Ft or Over; Master Mechanic.	35.12	18.46	53.58
552	Backhoe (Track Type) Having a Mfgr.'s Rated Capacity of 130,000 Lbs. or Over; Caisson Rig; Crane, Tower Crane, Portable Tower, Pedestal Tower or Derrick, With or Without Attachments, With a Lifting Capacity of 100 Tons or Under, Self-Erecting Tower Crane With a Lifting Capacity Of 4,000 Lbs. & Under; Crane, Tower Crane, Portable Tower, Pedestal Tower or Derrick, With Boom, Leads &/or Jib Lengths Measuring 175 Ft or Under; Dredge (NOT Performing Work on the Great Lakes); Licensed Boat Pilot (NOT Performing Work on the Great Lakes); Pile Driver. Future Increase(s): Add \$1.75/hr on 6/1/2014); Add \$1.25/hr on 6/1/2015); Add \$1.30/hr on 6/1/2016); Add \$1.25/hr on 6/1/2017. Premium Increase(s): DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.50/hr night work premium. See DOT'S website for details about the applicability of this night work premium at: http://www.dot.wi.gov/business/civilrights/laborwages/pwc.htm .	36.22	20.40	56.62

Fringe Benefits Must Be Paid On <u>All</u> Hours Worked		HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
CODE	TRADE OR OCCUPATION	\$	\$	\$
553	Air, Track, Rotary or Percussion Drilling Machine &/or Hammers, Blaster; Asphalt Heater, Planer & Scarifier; Asphalt Milling Machine; Asphalt Screed; Backhoe (Track Type) Having a Mfgr.'s Rated Capacity of Under 130,000 Lbs., Backhoe (Mini, 15,000 Lbs. & Under); Bituminous (Asphalt) Plant & Paver, Screed; Boring Machine (Directional, Horizontal or Vertical); Bulldozer or Endloader; Concrete Breaker (Large, Auto, Vibratory/Sonic, Manual or Remote); Concrete Conveyor System; Concrete Laser/Screed; Concrete Slipform Placer Curb & Gutter Machine; Crane (Carry Deck, Mini) or Truck Mounted Hydraulic Crane (10 Tons or Under); Crane With a Lifting Capacity of 25 Tons or Under; Forestry Equipment, Timbco, Tree Shear, Tub Grinder, Processor; Gradall (Cruz-Aire Type); Grader or Motor Patrol; Hydro-Blaster (10,000 PSI or Over); Loading Machine (Conveyor); Manhoist; Material or Stack Hoist; Mechanic or Welder; Milling Machine; Post Hole Digger or Driver; Railroad Track Rail Leveling Machine, Tie Placer, Extractor, Tamper, Stone Leveler or Rehabilitation Equipment; Roller (Over 5 Ton); Scraper (Self Propelled or Tractor Drawn) 5 cu yds or More Capacity; Shoulder Widener; Sideboom; Skid Rig; Stabilizing or Concrete Mixer (Self-Propelled or 14S or Over); Tractor (Scraper, Dozer, Pusher, Loader); Tractor or Truck Mounted Hydraulic Backhoe; Trencher (Wheel Type or Chain Type); Tube Finisher; Tugger (NOT Performing Work on the Great Lakes); Winches & A-Frames.	32.89	18.96	51.85
554	Backfiller; Broom or Sweeper; Compactor (Self-Propelled or Tractor Mounted, Towed & Light Equipment); Concrete Finishing Machine (Road Type); Environmental Burner; Farm or Industrial Type Tractor; Fireman (Asphalt Plant, Pile Driver & Derrick NOT Performing Work on the Great Lakes); Forklift; Greaser; Hoist (Tugger, Automatic); Jeep Digger; Joint Sawyer (Multiple Blade); Launch (NOT Performing Work on the Great Lakes); Lift Slab Machine; Mechanical Float; Mulcher; Power Subgrader; Robotic Tool Carrier (With or Without Attachments); Roller (Rubber Tire, 5 Ton or Under); Self-Propelled Chip Spreader; Shouldering Machine; Skid Steer Loader (With or Without Attachments); Telehandler.	33.67	19.48	53.15
555	Air Compressor (&/or 400 CFM or Over); Air, Electric or Hydraulic Jacking System; Augers (Vertical & Horizontal); Automatic Belt Conveyor & Surge Bin; Boiler (Temporary Heat); Crusher, Screening or Wash Plant; Generator (&/or 150 KW or Over); Heaters (Mechanical); High Pressure Utility Locating Machine (Daylighting Machine); Mudjack; Oiler; Prestress Machine; Pug Mill; Pump (3 Inch or Over) or Well Points; Rock, Stone Breaker; Screed (Milling Machine); Stump Chipper; Tank Car Heaters; Vibratory Hammer or Extractor, Power Pack. Future Increase(s): Add \$1.75/hr on 6/1/2014); Add \$1.25/hr on 6/1/2015); Add \$1.30/hr on 6/1/2016); Add \$1.25/hr on 6/1/2017. Premium Increase(s): DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.50/hr night work premium. See DOT'S website for details about the applicability of this night work premium at: http://www.dot.wi.gov/business/civilrights/laborwages/pwc.htm .	35.17	20.40	55.57
556	Fiber Optic Cable Equipment.	26.69	16.65	43.34

RESIDENTIAL OR AGRICULTURAL CONSTRUCTION

Includes single family houses or apartment buildings of no more than four (4) stories in height and all buildings, structures or facilities that are primarily used for agricultural or farming purposes, excluding commercial buildings. For classification purposes, the exterior height of a residential building, in terms of stories, is the primary consideration. All incidental items such as site work, driveways, parking lots, private sidewalks, private septic systems or sewer and water laterals connected to a public system and swimming pools are included within this definition. Residential buildings of five (5) stories and above are NOT included within this definition.

SKILLED TRADES

<u>CODE</u>	<u>TRADE OR OCCUPATION</u>	<u>HOURLY BASIC RATE OF PAY</u>	<u>HOURLY FRINGE BENEFITS</u>	<u>TOTAL</u>
		\$	\$	\$
101	Acoustic Ceiling Tile Installer Future Increase(s): Add \$1.25/hr on 6/2/2014.	33.68	19.81	53.49
102	Boilermaker	26.00	4.73	30.73
103	Bricklayer, Blocklayer or Stonemason	32.01	13.26	45.27
104	Cabinet Installer	22.00	1.05	23.05
105	Carpenter	30.48	3.24	33.72
106	Carpet Layer or Soft Floor Coverer	23.68	3.20	26.88
107	Cement Finisher	20.93	5.94	26.87
108	Drywall Taper or Finisher	22.50	0.88	23.38
109	Electrician	27.50	7.47	34.97
110	Elevator Constructor	42.86	23.84	66.70
111	Fence Erector	18.52	4.89	23.41
112	Fire Sprinkler Fitter	52.82	5.54	58.36
113	Glazier	38.03	13.42	51.45
114	Heat or Frost Insulator	30.00	0.00	30.00
115	Insulator (Batt or Blown)	19.00	14.33	33.33
116	Ironworker	31.25	19.46	50.71
117	Lather	30.48	3.24	33.72
119	Marble Finisher	26.89	19.18	46.07
120	Marble Mason	32.01	13.26	45.27
121	Metal Building Erector	17.00	3.82	20.82
123	Overhead Door Installer	12.00	0.00	12.00
124	Painter	20.00	4.22	24.22

Fringe Benefits Must Be Paid On <u>All</u> Hours Worked		HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
CODE	TRADE OR OCCUPATION	\$	\$	\$
125	Pavement Marking Operator	30.00	0.00	30.00
129	Plasterer	25.00	0.00	25.00
130	Plumber	30.00	10.62	40.62
132	Refrigeration Mechanic	19.75	8.56	28.31
133	Roofer or Waterproofer	17.00	3.72	20.72
134	Sheet Metal Worker	21.03	3.40	24.43
135	Steamfitter	31.72	16.10	47.82
137	Teledata Technician or Installer	24.75	8.09	32.84
138	Temperature Control Installer	22.50	0.70	23.20
139	Terrazzo Finisher	26.89	19.18	46.07
140	Terrazzo Mechanic	30.20	18.42	48.62
141	Tile Finisher	23.77	16.50	40.27
142	Tile Setter	21.00	0.00	21.00
143	Tuckpointer, Caulker or Cleaner	32.50	0.02	32.52
146	Well Driller or Pump Installer	27.60	5.80	33.40
147	Siding Installer	20.18	0.00	20.18

TRUCK DRIVERS

Fringe Benefits Must Be Paid On <u>All</u> Hours Worked		HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
CODE	TRADE OR OCCUPATION	\$	\$	\$
201	Single Axle or Two Axle	28.05	4.16	32.21
203	Three or More Axle	18.00	2.37	20.37
205	Pavement Marking Vehicle	18.00	2.37	20.37
207	Truck Mechanic	19.00	1.85	20.85

LABORERS

Fringe Benefits Must Be Paid On <u>All</u> Hours Worked		HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
CODE	TRADE OR OCCUPATION	\$	\$	\$
301	General Laborer	18.14	10.16	28.30
302	Asbestos Abatement Worker	17.00	3.86	20.86

Fringe Benefits Must Be Paid On <u>All</u> Hours Worked		HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
CODE	TRADE OR OCCUPATION	\$	\$	\$
303	Landscaper	30.00	0.00	30.00
311	Fiber Optic Laborer (Outside, Other Than Concrete Encased)	18.31	12.67	30.98
315	Final Construction Clean-Up Worker	16.00	0.00	16.00

**HEAVY EQUIPMENT OPERATORS
RESIDENTIAL OR AGRICULTURAL CONSTRUCTION**

Fringe Benefits Must Be Paid On <u>All</u> Hours Worked		HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
CODE	TRADE OR OCCUPATION	\$	\$	\$
557	Asphalt Heater, Planer & Scarifier; Asphalt Milling Machine; Asphalt Screed; Backhoe (Track Type); Backhoe (Mini, 15,000 Lbs. & Under); Bituminous (Asphalt) Plant & Paver, Screed; Boring Machine (Directional, Horizontal or Vertical); Bulldozer or Endloader; Concrete Breaker (Large, Auto, Vibratory/Sonic, Manual or Remote); Concrete Bump Cutter, Grinder, Planing or Grooving Machine; Concrete Conveyor System; Concrete Laser/Screed; Concrete Paver (Slipform); Concrete Pump, Concrete Conveyor (Rotec or Bidwell Type); Concrete Slipform Placer Curb & Gutter Machine; Concrete Spreader & Distributor; Crane (Carry Deck, Mini) or Truck Mounted Hydraulic Crane (10 Tons or Under); Crane With a Lifting Capacity of 25 Tons or Under; Crane, Shovel, Dragline, Clamshells; Forestry Equipment, TImbco, Tree Shear, Tub Grinder, Processor; Grader or Motor Patrol; Grout Pump; Hydro-Blaster (10,000 PSI or Over); Loading Machine (Conveyor); Manhoist; Material or Stack Hoist; Mechanic or Welder; Milling Machine; Roller (Over 5 Ton); Scraper (Self Propelled or Tractor Drawn) 5 cu yds or More Capacity; Shoulder Widener; Skid Rig; Stabilizing or Concrete Mixer (Self-Propelled or 14S or Over); Tractor (Scraper, Dozer, Pusher, Loader); Tractor or Truck Mounted Hydraulic Backhoe; Tractor or Truck Mounted Hydraulic Crane (10 Tons or Under); Trencher (Wheel Type or Chain Type); Winches & A-Frames.	29.70	20.08	49.78
558	Air Compressor (&/or 400 CFM or Over); Air, Electric or Hydraulic Jacking System; Backfiller; Belting, Burlap, Texturing Machine; Boiler (Temporary Heat); Broom or Sweeper; Compactor (Self-Propelled or Tractor Mounted, Towed & Light Equipment); Concrete Finishing Machine (Road Type); Farm or Industrial Type Tractor; Forklift; Generator (&/or 150 KW or Over); Heaters (Mechanical); High Pressure Utility Locating Machine (Daylighting Machine); Jeep Digger; Lift Slab Machine; Mulcher; Oiler; Post Hole Digger or Driver; Power Subgrader; Pump (3 Inch or Over) or Well Points; Robotic Tool Carrier (With or Without Attachments); Rock, Stone Breaker; Roller (Rubber Tire, 5 Tons or Under); Screed (Milling Machine); Self Propelled Chip Spreader; Shouldering Machine; Skid Steer Loader (With or Without Attachments); Stump Chipper; Telehandler; Vibratory Hammer or Extractor, Power Pack.	29.70	16.00	45.70

***** END OF RATES *****

APPENDIX 1:

MANUFACTURERS' PLAYGROUND EQUIPMENT INSTALLATION INSTRUCTIONS

Notes for all instructions, installation time estimates, equipment perspectives and footing layouts:

1. Equipment perspectives provided by manufacturer do not reflect correct placement of play structure and swings in field. Refer to site plans for placement of components on site. Perspectives are provided for reference only.
2. Installation hours have been provided by manufacturer for information only and are not to be assumed to be the actual time required to install parts. The Contractor will not be compensated to discrepancies between estimated install hours and the Contractor's actual install hours.
3. Footing plans provided by the manufacturer may not reflect the correct placement of the play structure relative to the placement of swings. Refer to site plans for placement of components on site. Footing plans are provided for reference only.

BURROWS PARK

PLAYGROUND MANUFACTURERS' INSTALLATION INFORMATION

Important ! Please Read Completely Before Beginning Installation. According to a report published by the U. S. Consumer Product Safety Commission (C.P.S.C.) 72% of all playground injuries result from accidental falls. With this in mind, this equipment is designed to fill the need for safe yet challenging play. In conjunction with design efforts to reduce the possibilities of injuries, this equipment **must** be installed "Step by Step" per our installation instructions. As a new owner you are responsible for the correct installation, safe use, and maintenance of your equipment.

Installation Guidelines

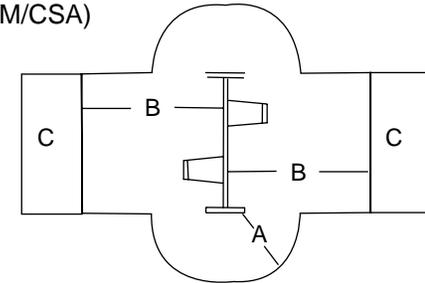
- Identify all parts and thoroughly read the assembly instructions before beginning construction.
- Refer to your playground equipment plan and footing diagram to assure the equipment purchased will fit into your selected site area. The use and no-encroachment zones around the play equipment shall be obstacle-free areas designated for unrestricted circulation.

(ASTM / CSA)

- For belt and rigid swing seats, the use zone for swing equipment should extend to the front and rear of a single axis swing a minimum distance of twice the height measured from the pivot point above the surfacing material measured from a point directly beneath the pivot on the supporting structure. The use zone on the sides of the swing should extend a minimum of 72 inches (1829 mm). A no-encroachment zone is also required for installations in areas overseen by the Canadian Standards Association (C.S.A.). In addition to the use zone measurement on both sides of the top rail, this zone will extend an additional 72 inches (1829 mm) and may **not** be overlapped by the use or no-encroachment zones of adjacent play equipment. See diagram.
- For enclosed infant swing seats, the use zone for swing equipment should extend to the front and rear of a single axis swing a minimum distance of twice the measurement from the pivot point to the swing seat surface measured from a point directly beneath the pivot on the supporting structure. The use zone on the ends of the swing (support structure) should extend a minimum of 72 inches (1829 mm). A no-encroachment zone is also required for installations in areas overseen by the Canadian Standards Association (C.S.A.). In addition to the use zone measurement on both sides of the top rail, this zone will extend an additional 72 inches (1829 mm) and may **not** be overlapped by the use or no-encroachment zones of adjacent play equipment. See diagram.

Belt/Rigid Seat Swing Zones (ASTM/CSA)

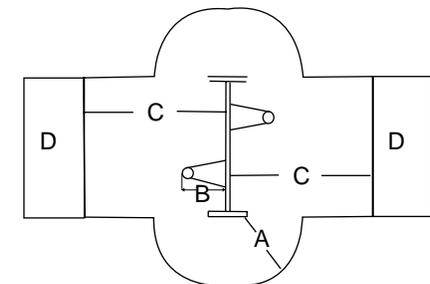
- A =** Side Use Zone
72 in. (1829 mm)
- B =** End Use Zone
Height of Pivot Point
from Surfacing x 2
Both Sides of Top Rail
- C =** No-encroachment Zone
72 in. (1829 mm)



- The use zone on either end of the swing (72 inches [1829 mm]) may be overlapped by the use zone on either end of another swing (72 inches [1829 mm]). Swing zones on either side of the top rail may **not** be overlapped by the use zones of other play equipment.

Infant Seat Swing Zones

- A =** Side Use Zone
72 in. (1829 mm)
- B =** Distance from Pivot Point
to Swing Seat Surface
- C =** End Use Zone: B x 2
Both Sides of Top Rail
- D =** No-encroachment Zone
72 in. (1829 mm)



Installation Instructions

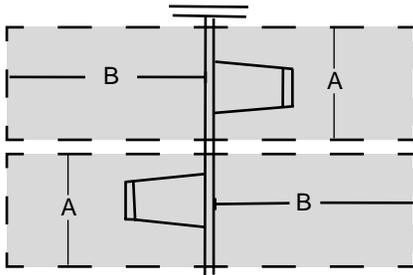
(EN)

• For areas conforming to the EN-1176 Standard, the impact area shall be determined by calculating the horizontal distance where the swing seat is at an 60° arc and adding the appropriate amount of distance based upon the type of protective surfacing. This distance shall be covered by protective surfacing on both sides of the top rail. The protective surfacing shall be appropriate for the maximum fall height of the swing. There is no difference in the calculation based on the type of swing seat.

The impact area on both sides of top rail = $(0.867 \times \text{Distance from pivot point to seat}) + \text{either } 1750 \text{ mm if unitary surfacing or } 2250 \text{ mm if loose-fill surfacing}$ is used. There shall be a minimum corridor of 1750 mm centered on each swing seat for the length of the impact area.

Use Zones - EN Compliance

- A =** Width of the corridor centered on the swing seat
1750 mm
- B =** Length of the use zone on both sides of the top rail (8ft)
Tot Seats: 3290 mm for unitary surfaced areas
or 3790 mm for areas covered with loose fill surfacing.
Belt / Rigid Seats: 3510 mm for unitary surfaced areas
or 4010 mm for areas covered with loose fill surfacing



- Site layout is a critical part of the overall installation. Footings must be measured and marked accurately according to the footing diagram. A level and clear installation site is ideal.
- Good drainage around the structure and its supports is important. Inquire with local contractors for appropriate recommendations.
- After laying out all footings and before digging holes, be sure to inquire about underground utilities that may exist.
- Do not leave the job site unattended without making sure that all fastening hardware on all components are tightened according to tightening torque specifications listed on every installation guide. We also recommend roping off construction area and covering all holes that do not contain a piece of equipment with plywood or other suitable material.
- Excavate holes as shown in the footing detail. If a level and clear site cannot be obtained, adjust the depth of footing to maintain a level footing base. If soil conditions are loose or unstable, a larger diameter footing may be required. Inquire with local contractors for appropriate recommendations. Be sure concrete that might have splashed onto the unit is washed off before it dries. Allow concrete to harden 72 hours before allowing your structure to be used. **Assemble the entire structure before pouring concrete unless specifically instructed to do so in the installation instructions.**
- Insure that hard surface warning/Playworld Systems identification labels are properly affixed to the play equipment. Labels are to be plainly visible according to current playground equipment guidelines.
- **IMPORTANT!** Because accidental falls around your playground equipment can occur, Playworld Systems recommends that the area under and around the structure be covered with a resilient material such as sand, bark mulch, or wood chips. If loose fill surfacing materials are used, Playworld Systems recommends a depth of 12 in. (305 mm). An approved rubber safety matting can also be used. **Many protective surfacing materials can become compacted due to weather and use, which reduces their shock absorbency. It is strongly recommended that the surfacing be checked weekly and material added or replaced as necessary. Hard surfaces, such as asphalt, concrete and packed earth are not acceptable for use under playground equipment.**

Installation Instructions

- The entire area, under and around the playground equipment, must be covered with protective surfacing material. The impact attenuation of the protective surfacing under and around playground equipment should be rated to have a critical height value of at least the height of the highest accessible part of the equipment. The critical height for surfacing is to be rated in accordance with A.S.T.M. standard, designated F1292, [A Standard Specification for Impact Attenuation of Surface Systems Under and Around Playground Equipment](#). Contact the manufacturer of unitary surfacing materials (rubber matting) for the critical height rating for their products.

Tools Required: Playworld Systems supplies a service kit that contains commonly used hex key wrenches required to assemble your equipment. You may also need: shovel, digging iron, post hole digger, steel rake, wheelbarrow, garden hoe, water hose, tape measure, level, alignment tool, 3/8" ratchet with 9/16" socket, and 9/16" combination wrench.

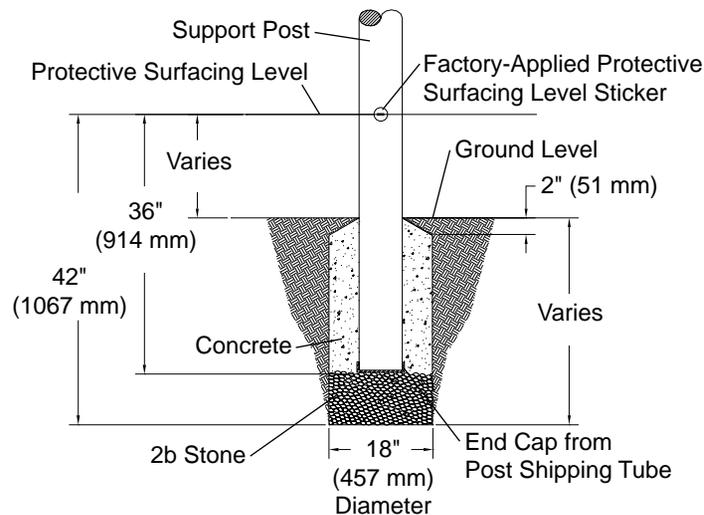
Maintenance

- Inadequate maintenance of equipment has resulted in injuries on the playground. Because the safety of playground equipment and its stability depends on good inspection and maintenance, **a comprehensive maintenance program must be developed for each playground and strictly followed.** All equipment must be inspected frequently for any potential hazards. Special attention must be given to moving parts and other components that can be expected to wear. Inspections must be carried out in a systematic manner by trained personnel. Any damaged or worn parts, or any other hazards identified during inspections must be repaired or replaced immediately. Complete documentation of all maintenance inspections and repairs must be retained.

Supervision Guidelines

- Playworld Systems strongly recommends close supervision of the children as they play as well as intensive classroom and home instruction about safe behavior on playground equipment.
- Playground supervisors should be aware that not all playground equipment is appropriate for all children who may use the playground. Signs should be posted near the equipment indicating the recommended age of the users. Supervisors should direct children to equipment appropriate for their age.
- It is important that playground supervisors recognize that preschool-age children require more attentive supervision on playgrounds than older children.
- Do not permit the use of wet playground equipment. Wet equipment will inhibit necessary traction and gripping capabilities. Slips or falls could occur.
- Do not permit too many children on the same piece of equipment at the same time. It is suggested that children take turns.
- Constantly observe play patterns to discover possible hazardous play and suggest changes in equipment use or play patterns.

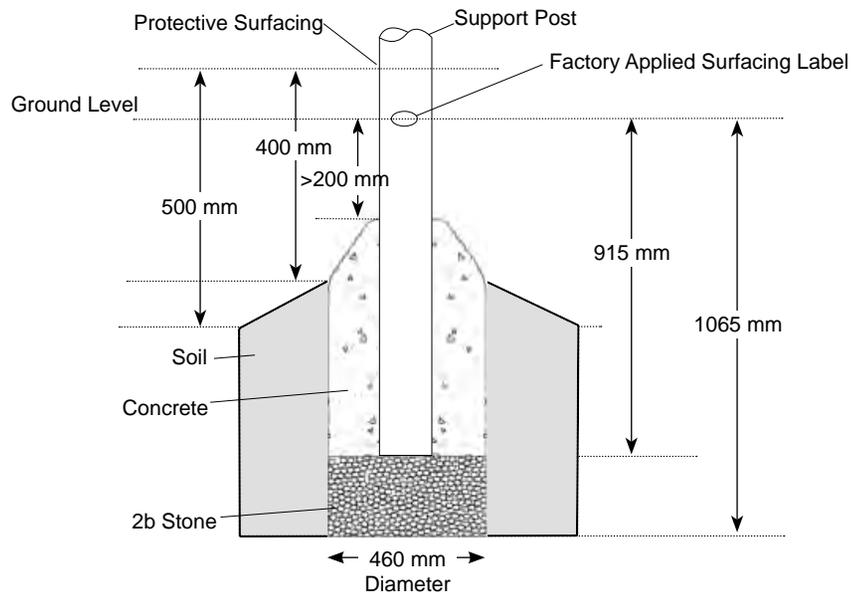
Installation Instructions



Support Post Footing Detail (ASTM/CSA)

FOOTING NOTES

- Support post footing depth equals 42 in. (1067 mm) less the depth of the protective surfacing material. The post is designed to have 24" (610 mm) in concrete.
Example: If 12 in. (305 mm) of wood mulch is used for surfacing, the footing depth would be 30 in. (762 mm).
- All support posts and component support legs shall have either a factory-applied sticker with line, or factory-applied mark designating protective surfacing level on a clear and level installation site.
- If play structure is installed on uneven terrain, maintain support post mark at protective surfacing level at lowest grade. Adjust other footings accordingly. Support posts and all attaching decks and play components must be plumb and level.
- Do not encase bottom of support post in concrete. Place post directly on packed stone.
- The footings shown on Playworld Systems' documentation are recommendations based on historical performance in average soil conditions. Footing dimensions may be modified by the owner based on actual soil conditions.
For example:
 - If local soil is loose or unstable, a larger footing may be required.
 - If local soil is considered stable, such as bedrock, clay or hard packed earth, a smaller footing may be used. Before changing footing dimensions, we strongly recommend that the footings be reviewed and approved by a registered engineer.
- Base of footing must be below frost line.
- Assemble the entire structure before pouring concrete unless specifically instructed to do so in the individual component installation instructions.



Footing Detail Support Post (EN)



PLAYWORLD SYSTEMS®

The world needs play.™



Assembly View (representative model)

Installation Instructions

Playworld Systems® Model XX0287
 5 in. (127 mm) O.D. 2-Unit Aluminum Arch Swing
 8 ft. (2438 mm) Top Rail

Installation Preparation

Recommended Crew: Four (4) adults
 Installation Time: 3 man-hours
 Weight: *214 lbs. (97,3 kg)
 Concrete Required: 0.48 cubic yard (0,37 cubic meters)
 Use Zone: Refer to Master Drawing
 User Group Age (years): ASTM/CSA: 2-12, EN: 2-14

**Weights are approximate for determining manpower.*

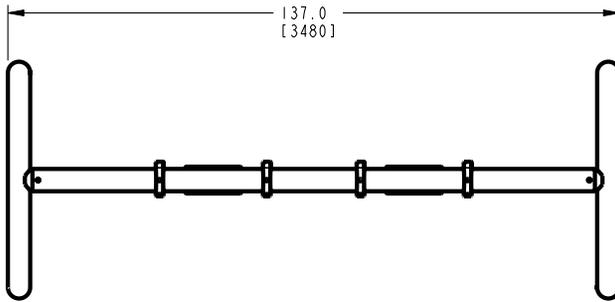
ICON KEY			
	Fully Tighten Hardware		Add 1 Drop of Thread Locking Adhesive
	Do Not Fully Tighten Hardware		Pour Concrete
	Drill		Dig Footing Holes
	Hammer		Critical Fall Height



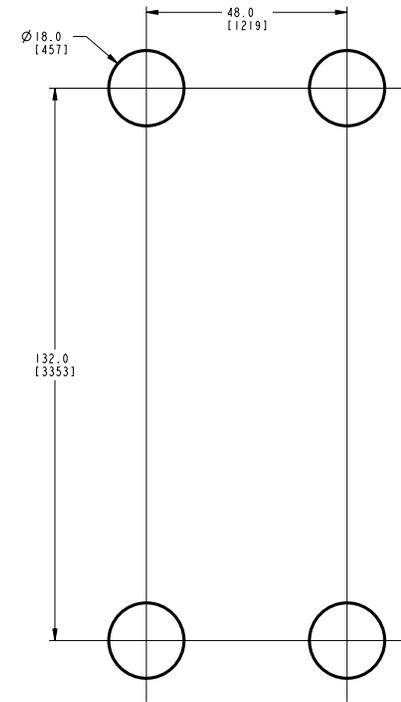
Installation Instructions

KEY	
Position	Unit of Measurement
Top #	Inches
Bottom #	[Millimeters]

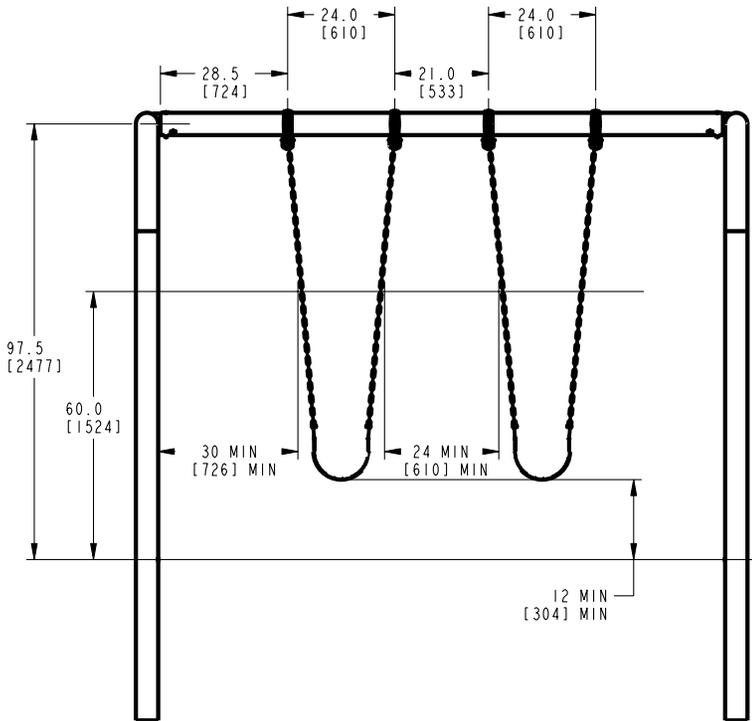
Top View



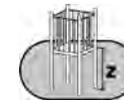
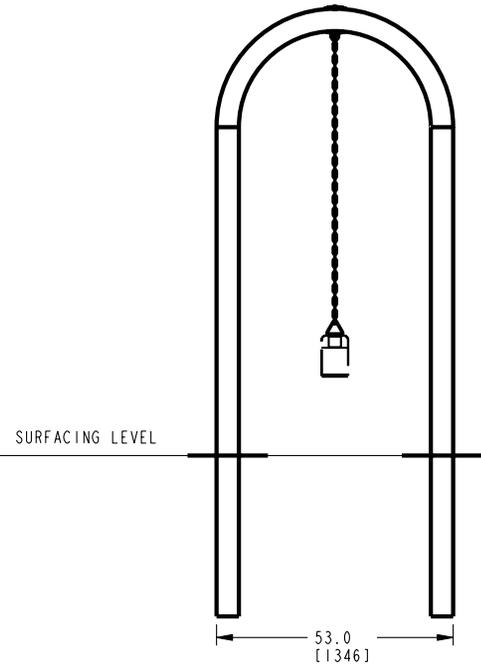
Note: Swing Hanger locations are dimensioned from end of the Top Rail to center of Swing Hanger.



Footing Diagram



Elevation Views



Critical Fall Height

EN: belt seat - 1390 mm (mounted as shown)
tot seat - 1545 mm (with seat at 610 above surfacing)



Installation Instructions

Follow the details in alphabetical order. For clarification, each detail references the step description. The step descriptions start on page 9.

Top Rail Beam
APT0432
(1 Total)

Arch Post
APT0144
(2 Total)

Arch Post

Top Rail Beam

3/8" x 1/2" Set Screw
BAE0630
(4 Total)

Underneath View

Detail B
Step 5
Secure the top rail to the arch posts.

3/8" x 5-1/2" Button Head Bolt
BAE06686
(2 Total)

3/8" Lock Nut
BAE0620
(2 Total)

Detail A
Step 4
Attach the top rail to the arch posts.

CAUTION
Swing hangers cannot be completely drawn together when attaching to the swing top rail. When properly installed, a gap of approximately 1/8" (3 mm) gap will exist between the swing hanger castings. Extreme care must be taken that nuts on swing hangers are drawn up evenly. Do **NOT** over tighten or exceed 25 ft lbs (33.9 Nm) of torque.

Warning!
Exceeding 25 ft lbs (33.9 Nm) of torque on the swing hanger bolts may cause damage to the swing band.

3/8" x 1-1/4" Tamper Resistant Bolt
BAE0662
(4 Total)

Swing Hanger
AAU0155
(4 Total)

Top Rail Beam

3/8" T Nut
BAE0670
(4 Total)

When tightening the bolt ensure that the T nut does not protrude past the edge of the clamp.

Detail C
Step 8
Attach swing hangers to the top rail.

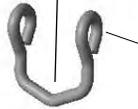


Installation Instructions

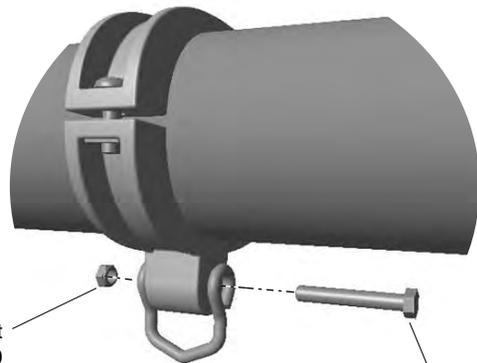
Swing Hanger



Swing Clevis Connector
ABC0704
(4 Total)



Swing Clevis Connector
ABC0704
(4 Total)



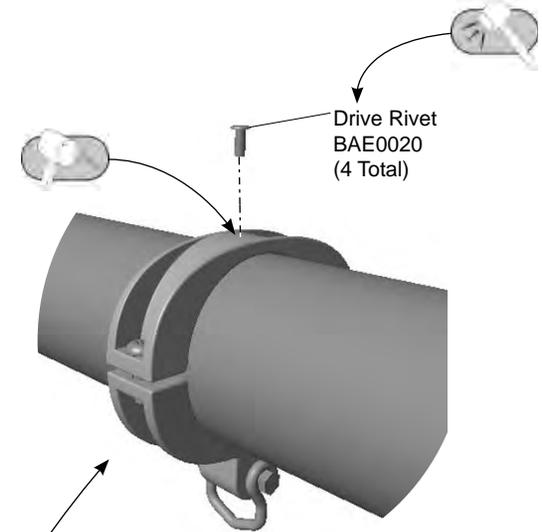
3/8" Thin Series Lock Nut
BAE0610
(4 Total)

3/8" x 2-1/2"
Hex Head Shoulder Bolt
BAE0412
(4 Total)



Detail D
Step 9

Attach each clevis to a swing hanger.



Drive Rivet
BAE0020
(4 Total)



Detail E
Step 12

*Secure the swing hangers
to the top rail.*

Installation Instructions

Notes Before You Begin: Do not over tighten bolts during assembly, only snug tighten them until assembly is complete.

Carefully read and understand these installation instructions before you begin.

Step 1: Before attempting to assemble your equipment, please review all installation information carefully. Should you experience any difficulty during the installation process, please call us at the phone number shown on the last page of these instructions.

Step 2: Separate and identify all components and hardware.

Step 3: Prepare footings as shown in the **Support Post Details** on **Page 4**.

Assemble the swing frame.

Step 4: Attach the top rail to the arch support posts. See **Detail A**. Slide each end of the top rail into a post stub and align holes. Insert each bolt through the *top* hole in the post stub, through the top rail, out the bottom side of the post stub, and thread into a lock nut.

Step 5: Secure the top rail to the arch posts. See **Detail B**. Apply a drop of loctite to the set screw threads and thread each screw into a hole on the underside of the post stub. Fully tighten connections according to tightening torque specifications.

Torque Specifications:

Bolts and nuts - Snug tighten and then tighten an additional one half turn.

Set Screws - Snug tighten and tighten an additional full turn.

Position the swing frame.

Step 6: Place the swing frame into the footings. Square and level the swing frame assembly at specified footing depth. Top rail height shall be 96 in. (2438 mm) as measured from top of the protective surfacing material level to the bottom of the top rail. Fully tighten all bolts in accordance with tightening torque installation instructions. Block and brace for concrete.

Step 7: Fill the footings with concrete to within 2 in. (51 mm) of ground level as shown in the **Footing Detail**. Plumb and level the component. Block and brace for concrete. Allow concrete to harden for 72 hours before proceeding with **Step 8**.

Attach swing hangers to the top rail.

Step 8: Attach swing hangers to the top rail. See **Detail C**. Close the swing hangers around the top rail and attach as shown. Ensure hangers are properly spaced and positioned on top rail (See **Elevation View**). There is a ridge on the underside of the bottom band to keep the T nut from rotating. **When tightening the bolt ensure that the T nut does not protrude past the edge of the clamp.**

Note: Please read **CAUTION** before fully tightening the connections.

Important Note: Swing hangers should be positioned a minimum of 20" (508 mm) apart. Additionally, the horizontal distance between the vertical support and the swing shall be no less than 30 in. (760 mm) when measured at 60 in. (1524 mm) from the level of protective surfacing. Please refer to the USCPSC Handbook for Public Playground Safety for proper placement.

Step 9: Attach each clevis to a swing hanger. See **Detail D**. Position each clevis over the bottom hanger bushing and align holes. Insert a hex head bolt through the clevis eye, through the hanger bushing, through the other clevis eye and secure with a thin series lock nut.

Important Note: Tighten the thin series lock nut on shoulder bolt until the clevis binds on the swing hanger casting. Then loosen the thin series lock nut approximately 1/4 turn until the swing clevis moves freely. Insure the bolt threads are fully engaged into the nut's locking device.

Note: Swing clevises will need to be removed from swing hangers to install selected swing seat.

Final Details

Step 10: See Swing Seat Installation Instruction sheet for swing seat attachment. Swing seats are ordered separately.

Step 11: Tighten **all** fasteners. Fully tighten all fasteners according to tightening torque specifications.

Torque Specifications:

Bolts and nuts - Snug tighten and then tighten an additional one half turn.

Set Screws - Snug tighten and tighten an additional full turn.

Installation Instructions

Step 12: Install drive rivets. See **Detail E**. After the equipment assembly is complete, install a drive rivet in each clamp to permanently secure it to the support post. Using a 1/4" drill bit, drill through the clamp and support post. Insert the drive rivet into drilled hole until the head of the rivet is against the surface of the clamp. Using a hammer, drive the pin of the rivet until it is flush with the surface of the rivet head.

Note: This step should be executed after structure has been assembled and properly footed.

Step 13: For areas complying with ASTM standard F1487 or the CSA Z-614, apply the age appropriate label to the equipment at eye level.



**XX0287 - 5 in. O.D. 2-UNIT ALUMINUM ARCH SWING
8 ft. (2438 mm) TOP RAIL**

PART NO.	DESCRIPTION	QTY.
AAU0155	HANGER - 5" SWING	4
ABC0704	CONNECTOR - SWING CLEVIS	4
APT0144	POST - 5" O.D. x 133 1/2" ALUMINUM ARCH SUPPORT	2
APT0432	BEAM - 5" x 126" ARCH SWING TOP RAIL	1
BAD0085	THREAD LOCKING ADHESIVE	1
BAE0020	RIVET - 1/4" x 11/16" DRIVE	4
BAE0412	BOLT - 3/8"-16 x 2 1/2" HEX HEAD SHOULDER	4
BAE0610	NUT - 3/8"-16 THIN LOCK	4
BAE0620	NUT - 3/8"-16 LOCK w/NYLON CAP	2
BAE0630	SCREW - 3/8"-16 x 1/2" SOCKET SET SS	4
BAE0662	BOLT - 3/8"-16 x 1-1/4" TAMP RESIST w/TORX DRIVE	4
BAE06686	BOLT - 3/8"-16 x 5.50" BUTTON HEAD - SS	2
BAE0670	T-NUT - 3/8"-16 x 7/16" - SS	4
BAE0905	WRENCH - 3/16" SHORT HEX KEY	1
BAE0915	BIT - 3/8" TAMPER RESISTANT	1
BAE0922	TOOL - TT 45 L WRENCH	1
ALB0025	LABEL - AGE APPROPRIATE	1



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800-233-8404 or
570-522-9800 OUTSIDE U.S.

1000 Buffalo Road • Lewisburg, PA 17837
www.playworldsystems.com



Installation Instructions

FINAL INSPECTION

- Playworld Systems® insists on the installation of protective surfacing within the use zone of each play structure in accordance with the applicable standard for your area, appropriate for the fall height of each structure.
- Playworld Systems® strongly recommends close supervision of children as they play. The owners of playground equipment and the parents or guardians of children are responsible for this proper supervision.
- As the owner of playground equipment, you are responsible for the maintenance of the equipment and surrounding play area. A comprehensive maintenance and inspection schedule must be developed and all equipment inspected frequently. Refer to the inspection and maintenance schedule in the back of this booklet.
- Perform a thorough final check on the installed equipment to insure all equipment is installed as specified by manufacturer's installation instructions.
 - Review all Installation Instructions for specified dimensions. Make sure dimensions called for in instructions agree with actual installation.
 - Double check height dimensions. Height measurements are taken from the top of the protective surfacing material.
 - Insure all fasteners are tightened according to tightening torque specifications listed on your installation instructions.
 - Clean dried concrete off of components and any other affected surface.
 - Touch-up any scratches or installation damage to powder coated finish with color-matched spray paint.
 - Allow adequate time for proper curing, both for concrete and urethane cement if rubber safety surfacing tiles have been installed.
 - Insure that protective surfacing is properly installed according to recommendations. Footings must not be exposed. Refer to the florescent orange sheet included in the front of the installation instruction booklet titled "Owners Manual".
 - Insure that hard surface warning/Playworld Systems® identification labels (shown below) are properly affixed to the play equipment. Labels are to be plainly visible according to current playground equipment guidelines. For areas complying with ASTM F-1487 or CSA Z-614 an age appropriate label must be applied in a visible location.

- Dispose of all packaging material properly. These materials which include large plastic bags and sheets can be a suffocation hazard. Dispose of these materials out of reach or contact of small children.



Swing Hangers

- Inspect swing hangers to insure they are properly secured to the support posts.
- Use the supplied torx-style tamper-resistant bit to insure bolt connection is tight.
- Use the supplied 3/16" hex key wrench to insure the set screw connection is tight.
- Inspect drive rivets to insure they are intact and secure.
- Visually inspect swing hangers for cracks or breakage. If any damage is detected, barricade equipment to prevent use until repair is completed. Contact your sales representative immediately for a replacement part.

Fasteners

- Inspect for loose fasteners.
Tightening torque specifications are:
Bolts and Nuts: Snug tighten and tighten an additional one-half turn.
Set Screws: Snug tighten and tighten an additional full turn.
- Inspect drive rivets to insure they are intact and secure.
- If during the maintenance process a bolt needs to be removed from a part or parts, it will be necessary to apply a drop of liquid thread lock / loctite to the bolt before reinstallation.
- Inspect for missing, worn or broken fasteners. If any missing, worn or broken fasteners are found, refer to the installation instructions for proper replacement fastener. If any damage is detected, barricade equipment to prevent use until repair is completed. Contact your sales representative immediately for a replacement part.

Welds

- Inspect all welded joints. If any broken welds are detected, barricade equipment to prevent use until repair is completed. Contact your sales representative immediately for a replacement part.

Finish

- Inspect metal parts for finish damage.
To repair painted surfaces, sand damaged area with sandpaper and wipe clean. Mask area and paint with primer and allow to dry. Paint primed area with color-matching paint and allow to dry. Recoat area with color-matching paint if required. Drying time is approximately 8 hours between coats.

Footings

- Inspect component to be solid in footing and secure. If any damage is detected, barricade equipment to prevent use until repair is completed.

Surfacing

- Refer to the specific surfacing maintenance detail sheet for additional information.

Replacement Parts

- Refer to your installation instructions to obtain replacement part number.
- Contact your sales representative or call Playworld Systems' Customer Service for a replacement part.

Equipment Maintenance Playworld Systems® Model XX0287 5 in. (127 mm) O.D. 2-Unit Aluminum Arch Swing 8 ft. (2438 mm) Top Rail



Warning!
Exceeding 25 ft lbs (33.9 Nm) of torque
on the swing hanger bolts may
cause damage to the swing band.



Inspection Form

- Be sure that you are using a copy of this Inspection Form and not your original.
- Use the Inspection Codes listed below and record condition of equipment at time of examination on the Inspection Checklist.
- Document any item from the Inspection Checklist that will require maintenance along with any corrective action on the Maintenance Schedule.
- Be sure to include appropriate dates and signatures on each section to properly document maintenance procedure.

Preventive Maintenance ... for Safety's Sake!

INSPECTION CHECKLIST	Frequency	Inspection Code	Date	Date Repairs Completed
Inspect surfacing to insure proper depth and distribution.	High			
Inspect swing hangers for tightness and damage.	High			
Inspect metal parts for structural and finish damage.	Medium			
Inspect for loose, missing, worn, or broken fasteners.	High			
Inspect footing to insure support is secure and footing is not damaged.	Low			

Inspection Codes
P = Pass F = Fail NA = Not Applicable

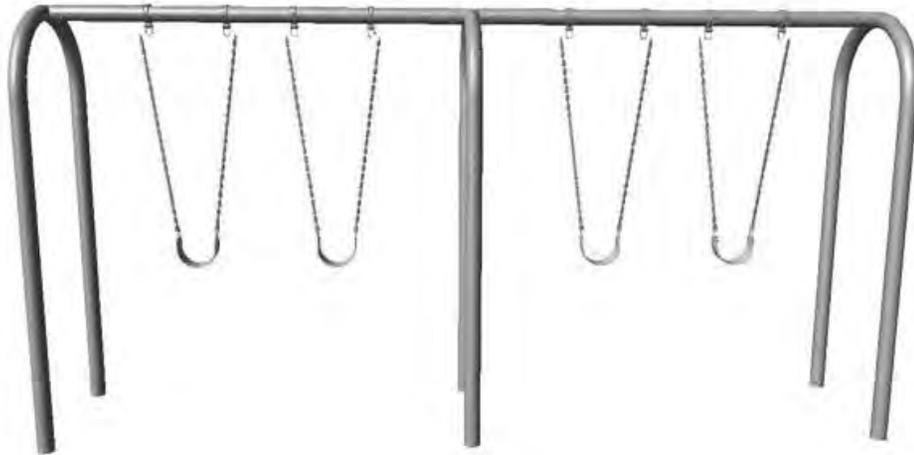
Inspector: Name (Please Print) _____ Signature: _____ Date: ___/___/___

MAINTENANCE SCHEDULE

Item in Question	Description of Problem	Corrective Action	Date

Repairer: Name (Please Print) _____ Signature: _____ Date: ___/___/___

Installation Instructions
Playworld Systems® Model XX0370
5 in. (127 mm) O.D. Aluminum Arch Swing
2-Unit Add-A-Bay

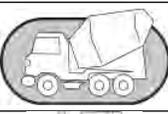
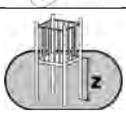


Assembly View

Installation Preparation

Recommended Crew: Three (3) adults
 Installation Time: 2 man-hours
 Weight: *156.2 lbs. (70,3 kg)
 Concrete Required: 0.24 cubic yard (0,18 cubic meters)
 Use Zone: Refer to Master Drawing
 User Group Age (years): ASTM/CSA: 2-12, EN: 2-14

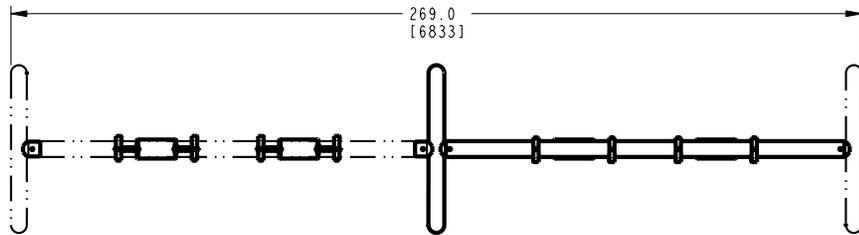
**Weights are approximate for determining manpower.*

ICON KEY			
	Fully Tighten Hardware		Add 1 Drop of Thread Locking Adhesive
	Do Not Fully Tighten Hardware		Pour Concrete
	Drill		Dig Footing Holes
	Hammer		Critical Fall Height

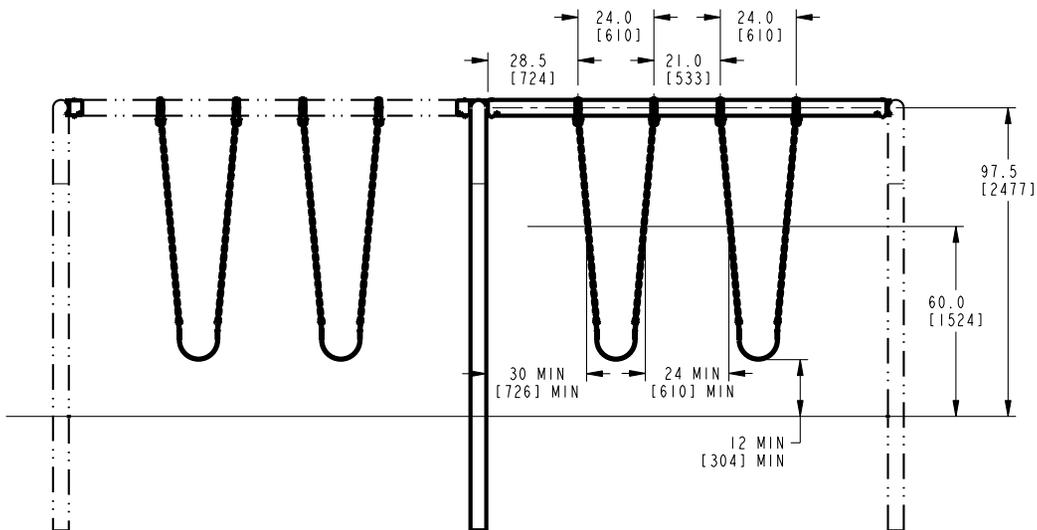
Installation Instructions

KEY	
Position	Unit of Measurement
Top #	Inches
Bottom #	[Millimeters]

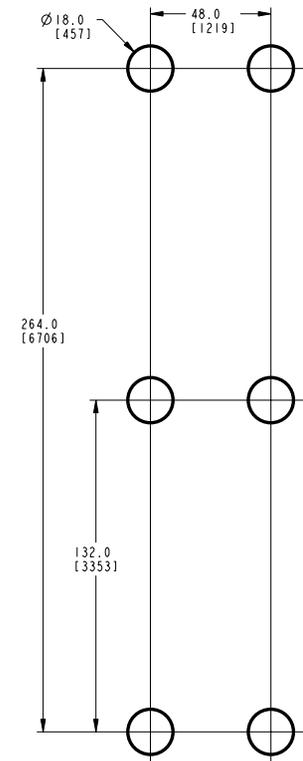
Top View



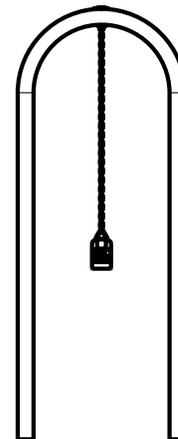
Note: Swing Hanger locations are dimensioned from end of the Top Rail to center of Swing Hanger.



Elevation Views

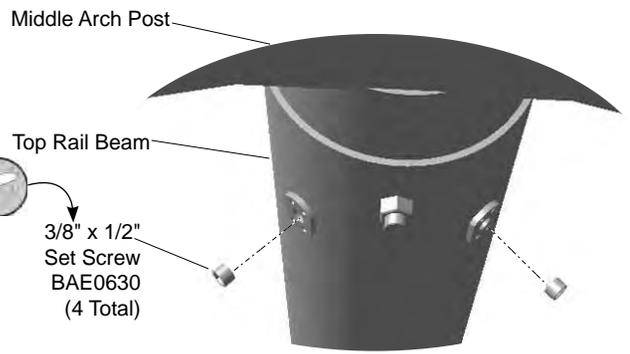
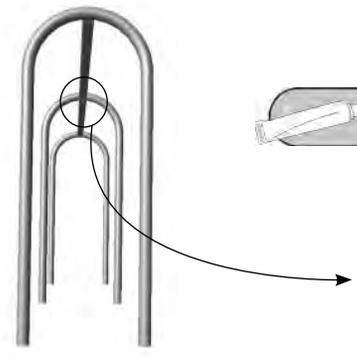
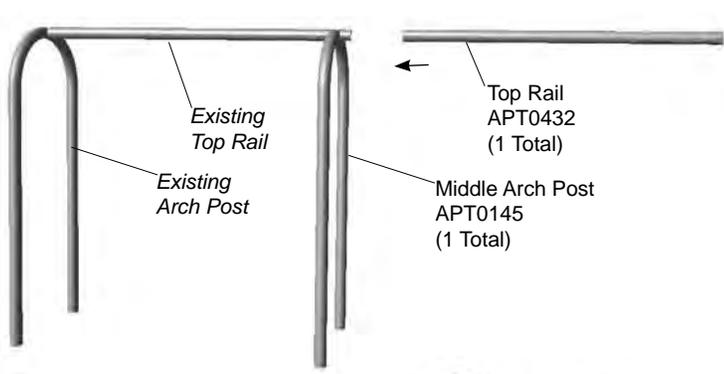


Footing Diagram



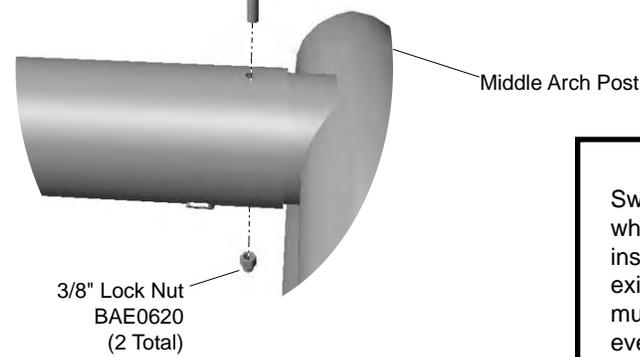
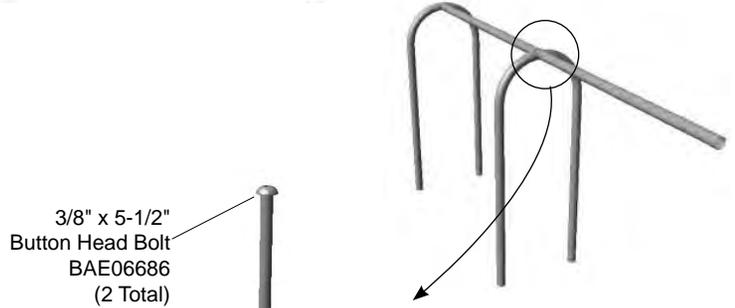
Installation Instructions

Follow the details in alphabetical order. For clarification, each detail references the step description. The step descriptions start on page 9.



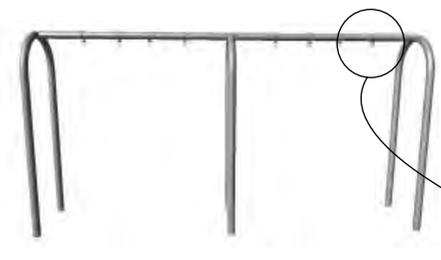
Detail B Step 7

Secure the top rails to the middle arch post.



Detail A Step 5

Attach both top rails (new and existing) to the middle arch support.



3/8" x 1-1/4" Tamper Resistant Bolt BAE0662 (4 Total)

3/8" T Nut BAE0670 (4 Total)

When tightening the bolt ensure that the T nut does not protrude past the edge of the clamp.

Detail C Step 10

Attach swing hangers to the top rail.

CAUTION

Swing hangers cannot be completely drawn together when attaching to the swing top rail. When properly installed, a gap of approximately 1/8" (3 mm) gap will exist between the swing hanger castings. Extreme care must be taken that nuts on swing hangers are drawn up evenly. Do **NOT** over tighten or exceed 25 ft lbs (33.9 Nm) of torque.

Warning!

Exceeding 25 ft lbs (33.9 Nm) of torque on the swing hanger bolts may cause damage to the swing band.



Installation Instructions

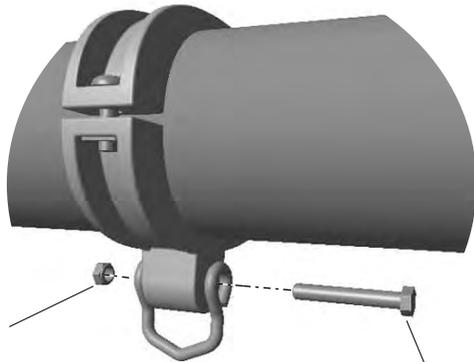
Swing Hanger



Swing Clevis Connector
ABC0704
(4 Total)



Swing Clevis Connector
ABC0704
(4 Total)



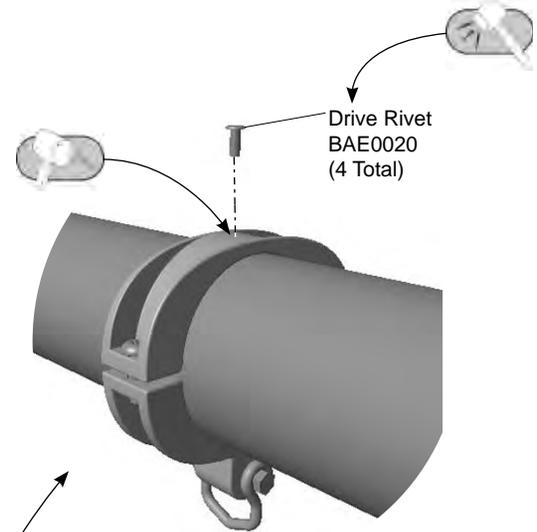
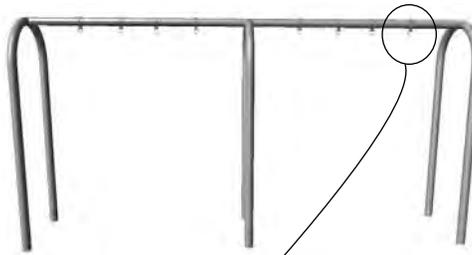
3/8" Thin Series Lock Nut
BAE0610
(4 Total)

3/8" x 2-1/2"
Hex Head Shoulder Bolt
BAE0412
(4 Total)



Detail D
Step 11

Attach each clevis to a swing hanger.



Drive Rivet
BAE0020
(4 Total)

Detail E
Step 14
*Secure the swing hangers
to the top rail.*

Installation Instructions

Notes Before You Begin: Do not over tighten bolts during assembly, only snug tighten them until assembly is complete.

Carefully read and understand these installation instructions before you begin.

Step 1: Before attempting to assemble your equipment, please review all installation information carefully. Should you experience any difficulty during the installation process, please call us at the phone number shown on the last page of these instructions.

Step 2: Separate and identify all components and hardware.

Step 3: Prepare footings as shown in the **Support Post Details** on **Page 4**.

Existing Swing

Step 4: Applies to adding an additional bay to a pre-existing product, remove (1) one of the existing arch supports by unscrewing and removing the connection to the top rail. Dig around the footing of the support post and transplant it to the opposing end of the bay addition as shown in the **Footing Diagram**. After completing, proceed to **Step 5**.

New Installation

Assemble the swing frame.

Step 5: Attach both top rails (new and existing) to the middle arch support. See **Detail A**. Select the top rail, the middle arch support, and the appropriate hardware. There are (2) two connections. Place the middle arch support in the excavated footings and brace. Place the top rail onto the arch stub and align holes. Attach as shown.

Re-Connect opposite end of frame.

Step 6: Re-attach arch support to opposite end of frame using existing hardware. Refer to the documentation that came with your original swing frame.

Step 7: Secure the top rails to the arch posts. See **Detail B**. Apply a drop of loctite to the set screw threads and thread each screw into a hole on the underside of the post stub. Fully tighten connections according to tightening torque specifications.

Torque Specifications:

Bolts and nuts - Snug tighten and then tighten an additional one half turn.

Set Screws - Snug tighten and tighten an additional full turn.

Position the swing frame.

Step 8: Place the swing frame into the footings. Square and level the swing frame assembly at specified footing depth. Top rail height shall be 96 in. (2438 mm) as measured from top of the protective surfacing material level to the bottom of the top rail. Fully tighten all bolts in accordance with tightening torque installation instructions. Block and brace for concrete.

Step 9: Fill the footings with concrete to within 2 in. (51 mm) of ground level as shown in the **Footing Detail**. Plumb and level the component. Block and brace for concrete. Allow concrete to harden for 72 hours before proceeding with **Step 10**.

Attach swing hangers to the top rail.

Step 10: Attach swing hangers to the top rail. See **Detail C**. Close the clamps around the top rail and attach as shown. Ensure hangers are properly spaced and positioned on top rail (See **Elevation View**). There is a ridge on the underside of the bottom band to keep the T nut from rotating. **When tightening the bolt ensure that the T nut does not protrude past the edge of the clamp.**

Note: Please read **CAUTION** before fully tightening the connections.

Important Note: Swing hangers should be positioned a minimum of 20" (508 mm) apart. Additionally, the horizontal distance between the vertical support and the swing shall be no less than 30 in. (760 mm) when measured at 60 in. (1524 mm) from the level of protective surfacing. Please refer to the USCPSC Handbook for Public Playground Safety for proper placement.

Step 11: Attach each clevis to a swing hanger. See **Detail D**. Position each clevis over the bottom hanger bushing and align holes. Insert a hex head bolt through the clevis eye, through the hanger bushing, through the other clevis eye and secure with a thin series lock nut.

Important Note: Tighten the thin series lock nut on shoulder bolt until the clevis binds on the swing hanger casting. Then loosen the thin series lock nut approximately 1/4 turn until the swing clevis moves freely. Insure the bolt threads are fully engaged into the nut's locking device.

Note: Swing clevises will need to be removed from swing hangers to install selected swing seat.

Final Details

Step 12: See Swing Seat Installation Instruction sheet for swing seat attachment. Swing seats are ordered separately.

Step 13: Tighten **all** fasteners. Fully tighten all fasteners according to tightening torque specifications.

Torque Specifications:

Bolts and nuts - Snug tighten and then tighten an additional one half turn.

Set Screws - Snug tighten and tighten an additional full turn.

Step 14: Install drive rivets. See **Detail E**. After the equipment assembly is complete, install a drive rivet in each clamp to permanently secure it to the support post. Using a 1/4" drill bit, drill through the clamp and support post. Insert the drive rivet into drilled hole until the head of the rivet is against the surface of the clamp. Using a hammer, drive the pin of the rivet until it is flush with the surface of the rivet head.

Note: This step should be executed after structure has been assembled and properly footed.

Step 15: For areas complying with ASTM standard F1487 or the CSA Z-614, apply the age appropriate label to the equipment at eye level.

XX0370 - 5 in. O.D.(127 mm) 2-UNIT ALUMINUM ARCH SWING ADD-A-BAY

PART NO.	DESCRIPTION	QTY.
AAU0155	HANGER - 5" SWING	4
ABC0704	CONNECTOR - SWING CLEVIS	4
APT0145	POST - 5" O.D. x 133-1/2" DUAL ALUM ARCH SUPPORT	1
APT0432	BEAM - 5" x 126" ARCH SWING TOP RAIL	1
BAD0085	THREAD LOCKING ADHESIVE	1
BAE0020	RIVET - 1/4" x 11/16" DRIVE	4
BAE0412	BOLT - 3/8"-16 x 2 1/2" HEX HEAD SHOULDER	4
BAE0610	NUT - 3/8"-16 THIN LOCK	4
BAE0620	NUT - 3/8"-16 LOCK w/NYLON CAP	2
BAE0630	SCREW - 3/8"-16 x 1/2" SOCKET SET SS	4
BAE0662	BOLT - 3/8"-16 x 1-1/4" TAMP RESIST w/TORX DRIVE	4
BAE06686	BOLT - 3/8"-16 x 5.50" BUTTON HEAD - SS	2
BAE0670	T-NUT - 3/8"-16 x 7/16" - SS	4
BAE0905	WRENCH - 3/16" SHORT HEX KEY	1
BAE0915	BIT - 3/8" TAMPER RESISTANT	1
BAE0922	TOOL - TT 45 L WRENCH	1
ALB0025	LABEL - ASTM AGE APPROPRIATE	1



Installation Instructions

FINAL INSPECTION

- Playworld Systems® insists on the installation of protective surfacing within the use zone of each play structure in accordance with the applicable standard for your area, appropriate for the fall height of each structure.
- Playworld Systems® strongly recommends close supervision of children as they play. The owners of playground equipment and the parents or guardians of children are responsible for this proper supervision.
- As the owner of playground equipment, you are responsible for the maintenance of the equipment and surrounding play area. A comprehensive maintenance and inspection schedule must be developed and all equipment inspected frequently. Refer to the inspection and maintenance schedule in the back of this booklet.
- Perform a thorough final check on the installed equipment to insure all equipment is installed as specified by manufacturer's installation instructions.
 - Review all Installation Instructions for specified dimensions. Make sure dimensions called for in instructions agree with actual installation.
 - Double check height dimensions. Height measurements are taken from the top of the protective surfacing material.
 - Insure all fasteners are tightened according to tightening torque specifications listed on your installation instructions.
 - Clean dried concrete off of components and any other affected surface.
 - Touch-up any scratches or installation damage to powder coated finish with color-matched spray paint.
 - Allow adequate time for proper curing, both for concrete and urethane cement if rubber safety surfacing tiles have been installed.
 - Insure that protective surfacing is properly installed according to recommendations. Footings must not be exposed. Refer to the florescent orange sheet included in the front of the installation instruction booklet titled "Owners Manual".
 - Insure that hard surface warning/Playworld Systems® identification labels (shown below) are properly affixed to the play equipment. Labels are to be plainly visible according to current playground equipment guidelines. For areas complying with ASTM F-1487 or CSA Z-614 an age appropriate label must be applied in a visible location.

- Dispose of all packaging material properly. These materials which include large plastic bags and sheets can be a suffocation hazard. Dispose of these materials out of reach or contact of small children.



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intentionally left blank.



Swing Hangers

- Inspect swing hangers to insure they are properly secured to the support posts.
- Use the supplied torx-style tamper-resistant bit to insure bolt connection is tight.
- Use the supplied 3/16" hex key wrench to insure the set screw connection is tight.
- Inspect drive rivets to insure they are intact and secure.
- Visually inspect swing hangers for cracks or breakage. If any damage is detected, barricade equipment to prevent use until repair is completed. Contact your sales representative immediately for a replacement part.

Fasteners

- Inspect for loose fasteners.
Tightening torque specifications are:
Bolts and Nuts: Snug tighten and tighten an additional one-half turn.
Set Screws: Snug tighten and tighten an additional full turn.
- If during the maintenance process a bolt needs to be removed from a part or parts, it will be necessary to apply a drop of liquid thread lock / loctite to the bolt before reinstallation.
- Inspect for missing, worn or broken fasteners. If any missing, worn or broken fasteners are found, refer to the installation instructions for proper replacement fastener. If any damage is detected, barricade equipment to prevent use until repair is completed. Contact your sales representative immediately for a replacement part.

Welds

- Inspect all welded joints. If any broken welds are detected, barricade equipment to prevent use until repair is completed. Contact your sales representative immediately for a replacement part.

Finish

- Inspect metal parts for finish damage.
To repair painted surfaces, sand damaged area with sandpaper and wipe clean. Mask area and paint with primer and allow to dry. Paint primed area with color-matching paint and allow to dry. Recoat area with color-matching paint if required. Drying time is approximately 8 hours between coats.

Footings

- Inspect component to be solid in footing and secure. If any damage is detected, barricade equipment to prevent use until repair is completed.

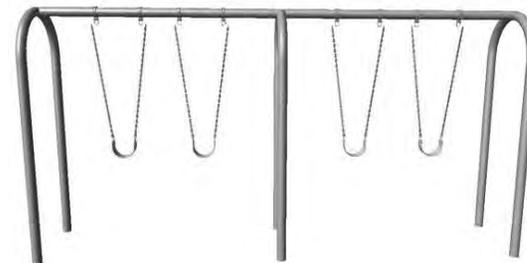
Surfacing

- Refer to the specific surfacing maintenance detail sheet for additional information.

Replacement Parts

- Refer to your installation instructions to obtain replacement part number.
- Contact your sales representative or call Playworld Systems' Customer Service for a replacement part.

Equipment Maintenance Playworld Systems® Model XX0370 5 in. (127 mm) O.D. 2-Unit Aluminum Arch Swing Add-A-Bay



Warning!
Exceeding 25 ft lbs (33.9 Nm) of torque
on the swing hanger bolts may
cause damage to the swing band.

PLAYWORLD SYSTEMS
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1000 Buffalo Road • Lewisburg, PA 17837
www.playworldsystems.com

Inspection Form

- Be sure that you are using a copy of this Inspection Form and not your original.
- Use the Inspection Codes listed below and record condition of equipment at time of examination on the Inspection Checklist.
- Document any item from the Inspection Checklist that will require maintenance along with any corrective action on the Maintenance Schedule.
- Be sure to include appropriate dates and signatures on each section to properly document maintenance procedure.

Preventive Maintenance **... for Safety's Sake!**

INSPECTION CHECKLIST	Frequency	Inspection Code	Date	Date Repairs Completed
Inspect surfacing to insure proper depth and distribution.	High			
Inspect swing hangers for tightness and damage.	High			
Inspect metal parts for structural and finish damage.	Medium			
Inspect for loose, missing, worn, or broken fasteners.	High			
Inspect footing to insure support is secure and footing is not damaged.	Low			

Inspection Codes
P = Pass F = Fail NA = Not Applicable

Inspector: Name (Please Print) _____ Signature: _____ Date: ___/___/___

MAINTENANCE SCHEDULE

Item in Question	Description of Problem	Corrective Action	Date

Repairer: Name (Please Print) _____ Signature: _____ Date: ___/___/___





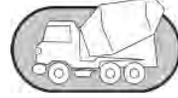
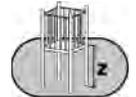
Assembly View

Refer to the Elevation View for the specific Critical Fall Height for the component.

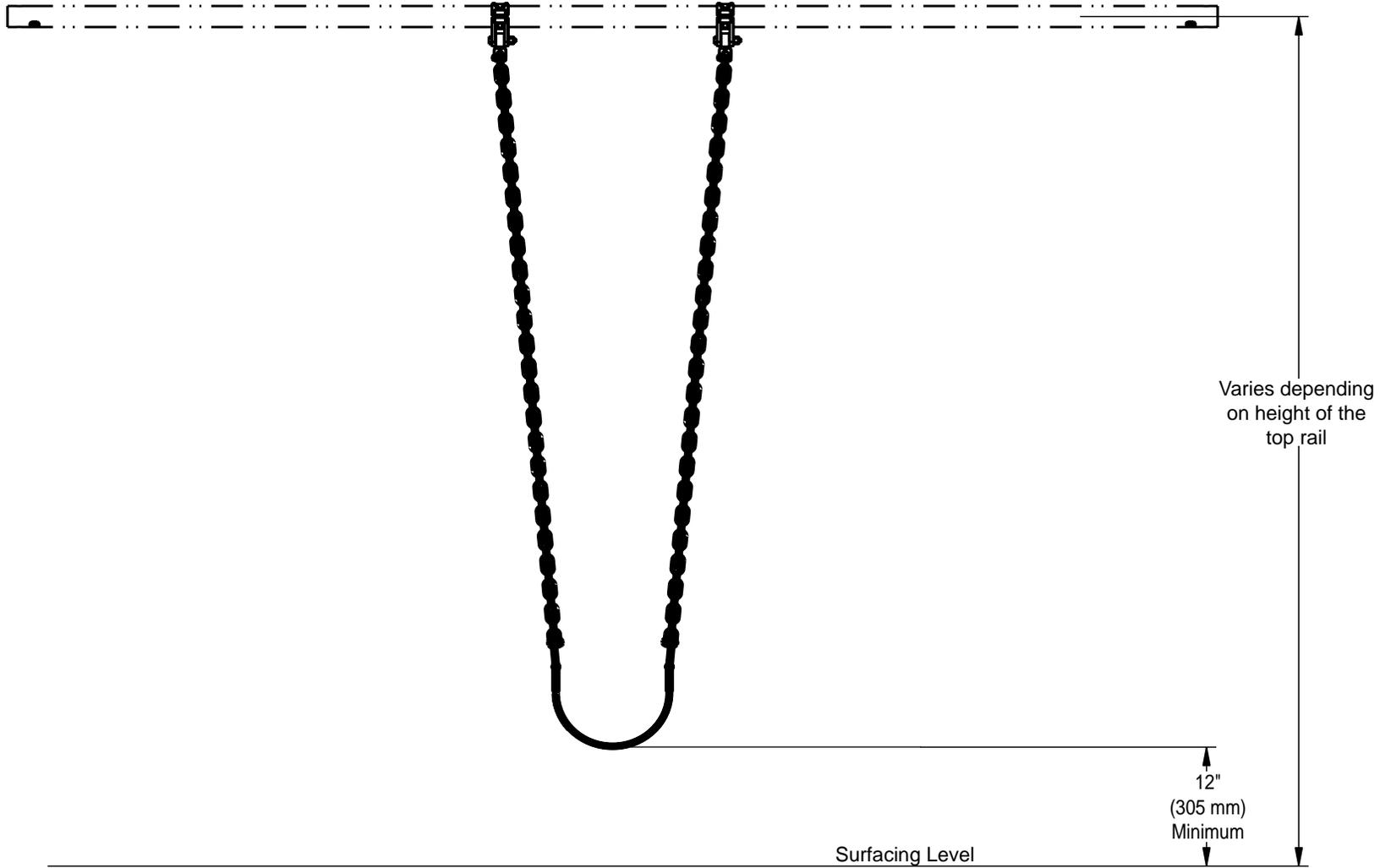
Installation Instructions
Playworld Systems®
Models XX0260, XX0261, & XX0324
Belt Seat with Galvanized Chain

Installation Preparation

Recommended Crew: One (1) adult
 Installation Time: 0.25 hour
 Use Zone: Refer to the swing frame instructions
 User Group Age (years): ASTM/CSA: 2-12, EN: 2-14

ICON KEY	
	Fully Tighten Hardware
	Do Not Fully Tighten Hardware
	Drill
	Hammer
	Add 1 Drop of Thread Locking Adhesive
	Pour Concrete
	Dig Footing Holes
	Critical Fall Height

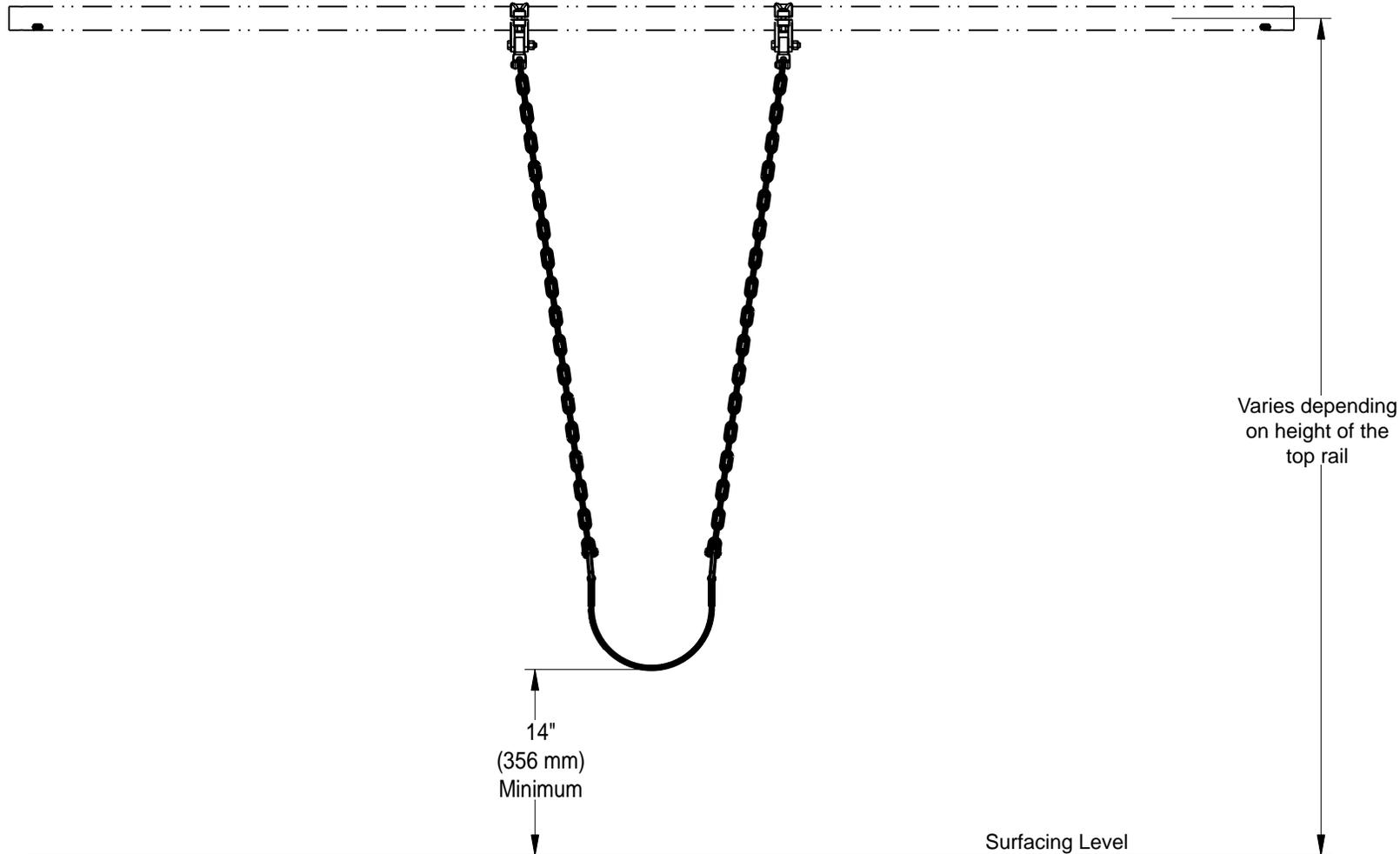
Installation Instructions



Elevation View
(ASTM/CSA)

Model Number	Critical Fall Height - ASTM/CSA	Top Rail Height
ZZXX0324	7 ft. (2134 mm)	7 ft. (2134 mm)
ZZXX0260	8 ft. (2440 mm)	8 ft. (2440 mm)
ZZXX0261	10 ft. (3050 mm)	10 ft. (3050 mm)

Installation Instructions

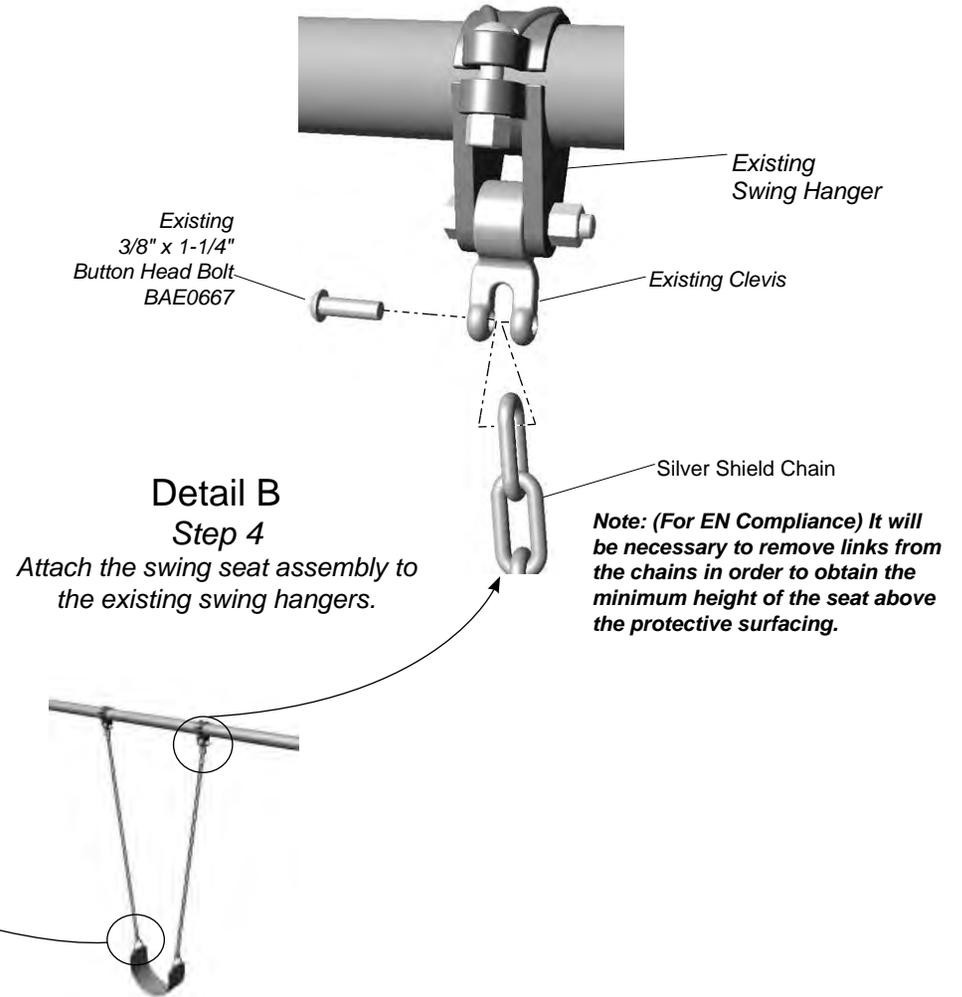
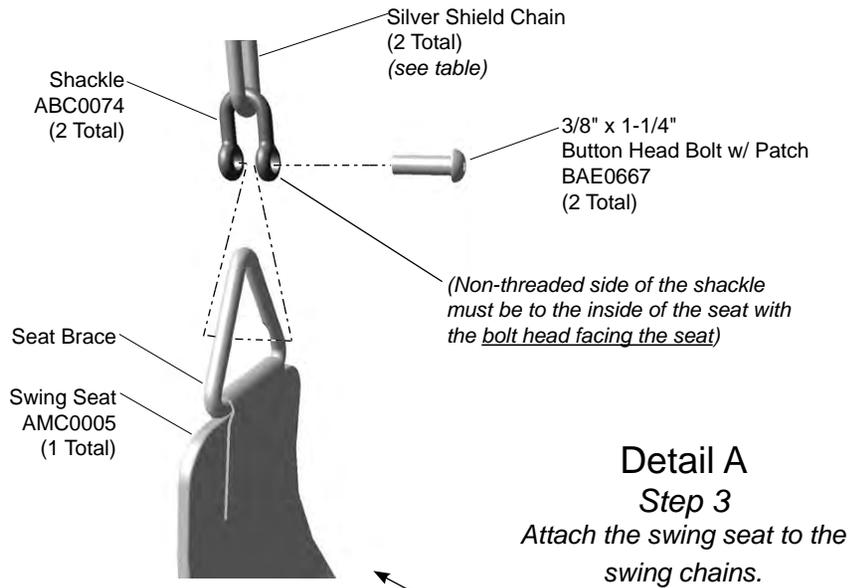


Elevation View
(EN)

Model Number	Critical Fall Height - EN	Top Rail Height
ZZXX0324	1220 mm	7 ft. (2134 mm)
ZZXX0260	1370 mm	8 ft. (2440 mm)
ZZXX0261	1675 mm	10 ft. (3050 mm)

Installation Instructions

Follow the details in alphabetical order. For clarification, each detail references the step description. The step descriptions start on page 5.



Model Number	Silver Shield Chain Part No.	Top Rail Height
ZZXX0324	ACN0090	7 ft. (2134 mm)
ZZXX0260	ACN0091	8 ft. (2440 mm)
ZZXX0261	ACN0092	10 ft. (3050 mm)

Installation Instructions

Notes Before You Begin: Do not over tighten bolts during assembly, only snug tighten them until assembly is complete.

Carefully read and understand these installation instructions before you begin.

Step 1: Before attempting to assemble your equipment, please review all installation information carefully. Should you experience any difficulty during the installation process, please call us at the phone number shown on the last page of these instructions.

Step 2: Separate and identify all components and hardware.

Step 3: Attach the swing seat to the swing chains. See **Detail A**. Attach the seats to the chains as shown. Ensure that the non-threaded side of the shackle is to the inside of the seat.

Step 4: Attach the swing seat assembly to the existing swing hangers. See **Detail B**. Remove the 1-1/4" bolt from the swing hanger clevis with the included wrench. Select the swing seat assembly and place last link of chain between the open end of the clevis and attach as shown. Ensure that the bolt is inserted through the non-threaded side of the clevis and threaded into the opposite side.

Note: (For EN Compliance) It will be necessary to remove links from the chains in order to obtain the minimum height of the seat above the protective surfacing.

Final Details.

Step 5: Fully tighten all fasteners according to tightening torque specifications.

Torque specifications - Nuts and Bolts: Snug tighten and tighten an additional one-half turn.



ZZXX0324 - BELT SEAT WITH GALVANIZED CHAIN
- 7 ft. (2134 mm) TOP RAIL HEIGHT

PART NO.	DESCRIPTION	QTY.
ABC0074	CNCTR - 5/16" CHAIN SHACKLE w/3/8"-16 THREAD	2
ACN0090	CHAIN - 53.71" 4/0 SILVER SHIELD	2
AMC0005	SEAT - SLASH PROOF BELT	1
BAE0667	BOLT - 3/8"-16 x 1-1/4" BUTTON HEAD w/NYLON PATCH	2
BAE0922	TOOL - TT 45 L WRENCH	1

ZZXX0260 - BELT SEAT WITH GALVANIZED CHAIN
- 8 ft. (2438 mm) TOP RAIL HEIGHT

PART NO.	DESCRIPTION	QTY.
ABC0074	CONNECTOR - 5/16" CHAIN SHACKLE w/3/8"-16 THREAD	2
ACN0091	CHAIN - 65.11" 4/0 SILVER SHIELD	2
AMC0005	SEAT - SLASH PROOF BELT	1
BAE0667	BOLT - 3/8"-16 x 1-1/4" BUTTON HEAD w/NYLON PATCH	2
BAE0922	TOOL - TT 45 L WRENCH	1

ZZXX0261 - BELT SEAT WITH GALVANIZED CHAIN
- 10 ft. (3048 mm) TOP RAIL HEIGHT

PART NO.	DESCRIPTION	QTY.
ABC0074	CONNECTOR - 5/16" CHAIN SHACKLE w/3/8"-16 THREAD	2
ACN0092	CHAIN - 89.01" 4/0 SILVER SHIELD	2
AMC0005	SEAT - SLASH PROOF BELT	1
BAE0667	BOLT - 3/8"-16 x 1-1/4" BUTTON HEAD w/NYLON PATCH	2
BAE0922	TOOL - TT 45 L WRENCH	1



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Swing Seat

- Inspect swing seat for sharp points, breaks, cracks or jagged edges. If any damage is detected and is determined to be unsafe, barricade equipment to prevent use until repair is completed.

Fasteners

- Inspect for loose fasteners.
Tightening torque specifications are:
Bolts and Nuts: Snug tighten and tighten an additional one-half turn.
- If during the maintenance process a bolt needs to be removed from a part or parts, it will be necessary to apply a drop of liquid thread lock to the bolt before reinstallation.
- Inspect for missing, worn or broken fasteners. If any missing, worn or broken fasteners are found, refer to the installation instructions for proper replacement fastener. If any damage is detected, barricade equipment to prevent use until repair is completed. Contact your sales representative immediately for a replacement part.

Finish

- Inspect metal parts for finish damage.
To repair painted surfaces, sand damaged area with sandpaper and wipe clean. Mask area and paint with primer and allow to dry. Paint primed area with color-matching paint and allow to dry. Recoat area with color-matching paint if required. Drying time is approximately 8 hours between coats.

Surfacing

- Refer to the specific surfacing maintenance detail sheet for additional information.

Replacement Parts

- Refer to your installation instructions to obtain replacement part number.
- Contact your sales representative or call Playworld Systems' Customer Service for a replacement part.

Equipment Maintenance Playworld Systems® Models XX0324, XX0260 & XX0261 Belt Seat with Galvanized Chain



Inspection Form

Preventive Maintenance

... for Safety's Sake!

- Be sure that you are using a copy of this Inspection Form and not your original.
- Use the Inspection Codes listed below and record condition of equipment at time of examination on the Inspection Checklist.
- Document any item from the Inspection Checklist that will require maintenance along with any corrective action on the Maintenance Schedule.
- Be sure to include appropriate dates and signatures on each section to properly document maintenance procedure.

INSPECTION CHECKLIST

	Frequency	Inspection Code	Date	Date Repairs Completed
Inspect chain and swing seat for damage.	Medium			
Inspect surfacing to insure proper depth and distribution.	High			
Inspect metal parts for structural and finish damage.	Medium			
Inspect for loose, missing, worn, or broken fasteners.	High			

Inspection Codes
P = Pass F = Fail
NA = Not Applicable

Inspector: Name (Please Print) _____ Signature: _____ Date: ___ / ___ / ___

MAINTENANCE SCHEDULE

Item in Question	Description of Problem	Corrective Action	Date

Repairer: Name (Please Print) _____ Signature: _____ Date: ___ / ___ / ___





Assembly View

Refer to the Elevation View for the specific Critical Fall Height for the component.

Installation Instructions
Playworld Systems®
Models XX0265, XX0266, & XX0325
Infant Swing Seat with Galvanized Chain

Installation Preparation

Recommended Crew: One (1) adult
Installation Time: 0.25 hour
Weight: See table below
Use Zone: Refer to the swing frame instructions
User Group: Ages 2 - 5 years

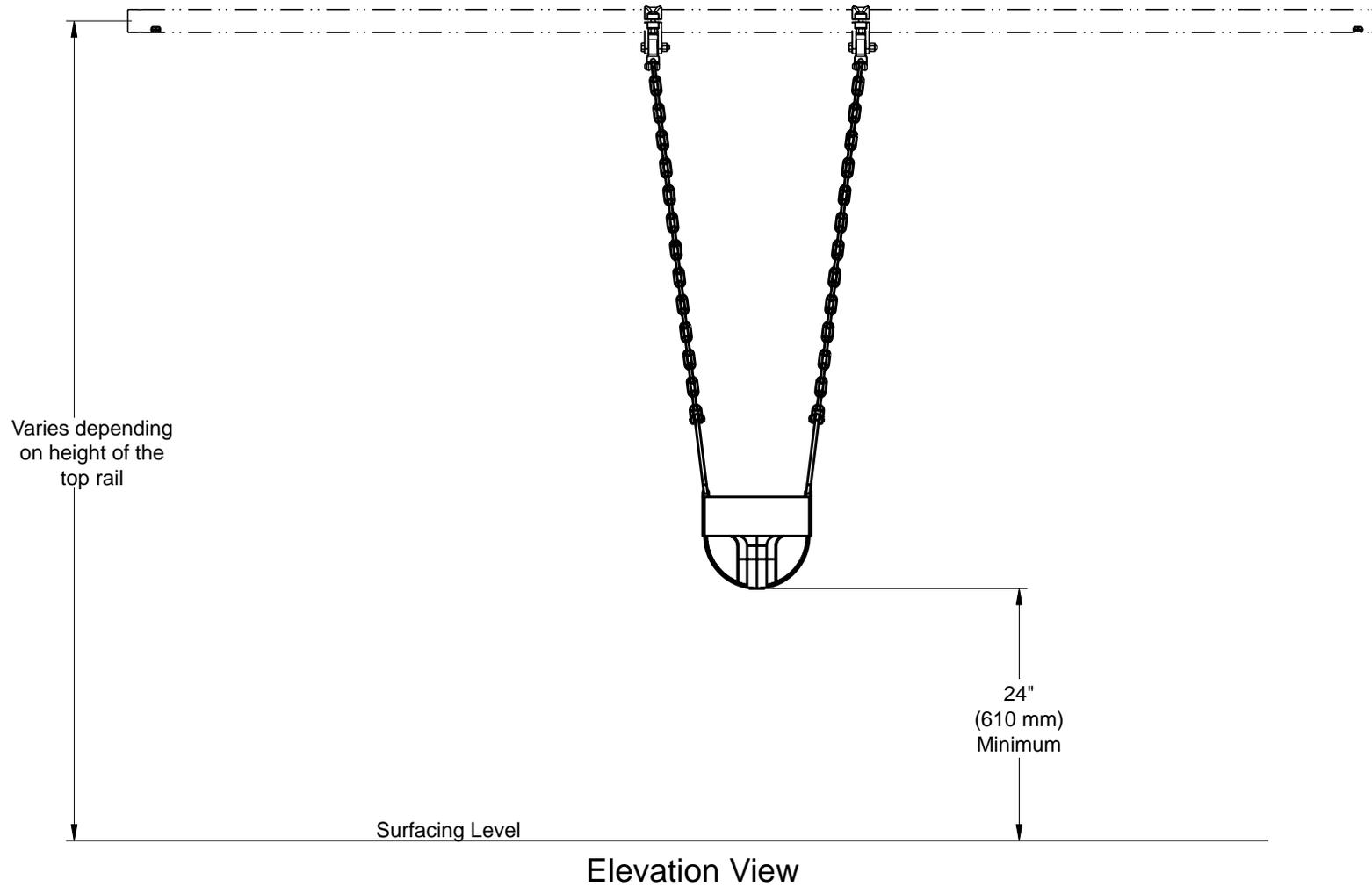
Model Number	Weight	Top Rail Height
ZZXX0325	12.8 Lbs. (5,8 Kilos)	7 ft. (2134 mm)
ZZXX0265	11 Lbs. (5 Kilos)	8 ft. (2440 mm)
ZZXX0266	12.6 Lbs. (5,7 Kilos)	10 ft. (3050 mm)

ICON KEY



Fully Tighten
Hardware

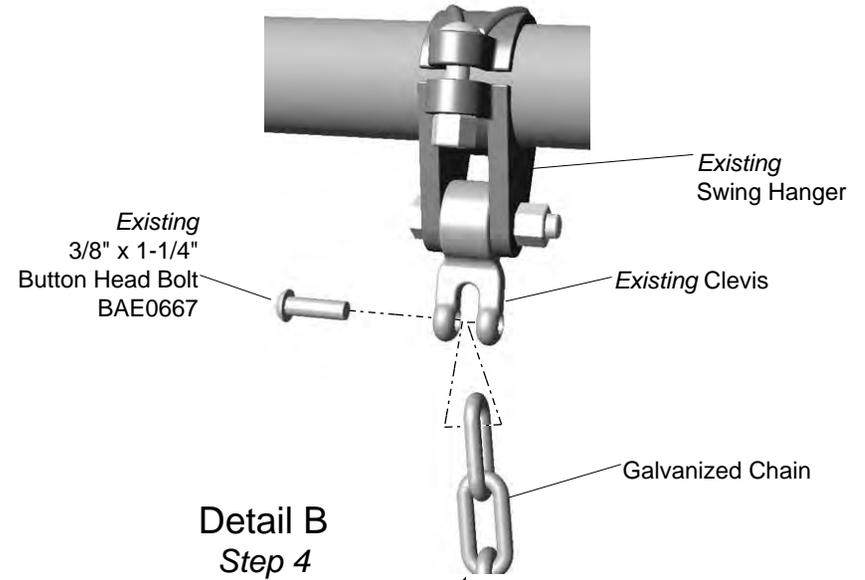
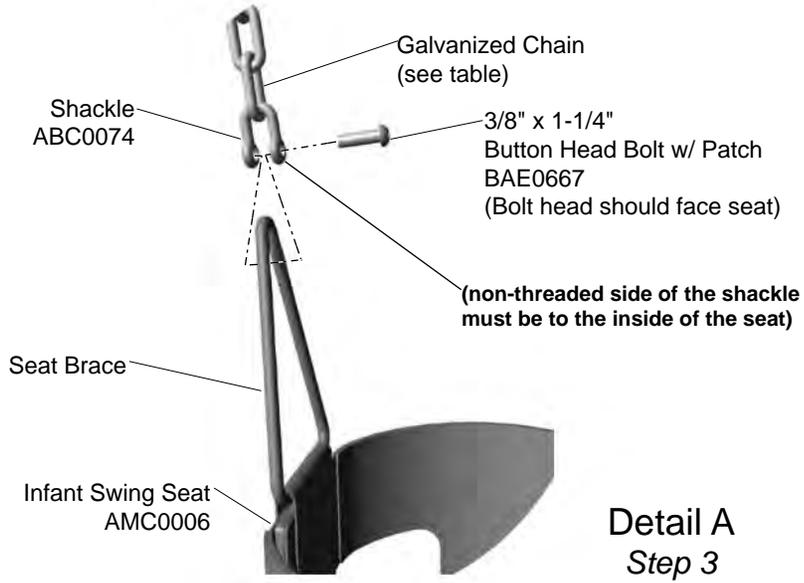
Installation Instructions



Model Number	Critical Fall Height - EN	Top Rail Height
ZZXX0325	1345 mm	7 ft. (2134 mm)
ZZXX0265	1525 mm	8 ft. (2440 mm)
ZZXX0266	1830 mm	10 ft. (3050 mm)

Installation Instructions

Follow the details in alphabetical order. For clarification, each detail references the step description. The step descriptions start on page 4.



Model Number	Galvanized Chain Part No.	Top Rail Height
ZZXX0325	ACN0050	7 ft. (2134 mm)
ZZXX0265	ACN0040	8 ft. (2440 mm)
ZZXX0266	ACN0041	10 ft. (3050 mm)



Installation Instructions

__Notes Before You Begin: Do not over tighten bolts during assembly, only snug tighten them until assembly is complete.

Carefully read and understand these installation instructions before you begin.

__Step 1: Before attempting to assemble your equipment, please review all installation information carefully. Should you experience any difficulty during the installation process, please call us at the phone number shown on the last page of these instructions.

__Step 2: Separate and identify all components and hardware.

Attach the swing seat to the swing chains.

__Step 3: Attach the swing seat to the swing chains. See **Detail A**. Select the swing seat, and (2) two of the following: bolts, chains, and shackles. Attach the seats to the chains as shown. Ensure that the non-threaded side of the shackle is to the inside of the seat.

Attach the swing seat assembly to the existing swing hangers.

__Step 4: Attach the swing seat assembly to the existing swing hangers. See **Detail B**. Remove the 1-1/4" bolt from the swing hanger clevis with the included hex key wrench. Select the swing seat assembly and place last link of chain between the open end of the clevis and attach as shown.

Ensure that the bolt is inserted through the non-threaded side of the clevis and threaded into the opposite side.

Important Note: The vertical distance between an occupied seat and the protective surface shall be no less than 24" (610 mm). Remove any excess chain.

Final Details.

__Step 5: Fully tighten all fasteners according to tightening torque specifications.

Torque specifications - Nuts and Bolts: Snug tighten and tighten an additional one-half turn.

ZZXX0325 - INFANT SWING SEAT WITH GALVANIZED CHAIN
- 7 ft. (2134 mm) TOP RAIL HEIGHT

PART NO.	DESCRIPTION	QTY.
ABC0074	CNECTR - 5/16" CHAIN SHACKLE w/3/8"-16 THREAD	2
ACN0050	CHAIN - 36" 4/0 GALVANIZED	2
AMC0006	SEAT - EXTRA TOUGH TOT	1
BAE0667	BOLT - 3/8"-16 x 1-1/4" BUTTON HEAD w/NYLON PATCH	2
BAE0902	TOOL - 7/32" SHORT HEX KEY WRENCH	1

ZZXX0265 - INFANT SWING SEAT WITH GALVANIZED CHAIN
- 8 ft. (2438 mm) TOP RAIL HEIGHT

PART NO.	DESCRIPTION	QTY.
ABC0074	CONNECTOR - 5/16" CHAIN SHACKLE w/3/8"-16 THREAD	2
ACN0040	CHAIN - 47" 4/0 GALVANIZED	2
AMC0006	SEAT - EXTRA TOUGH TOT	1
BAE0667	BOLT - 3/8"-16 x 1-1/4" BUTTON HEAD w/NYLON PATCH	2
BAE0902	TOOL - 7/32" SHORT HEX KEY WRENCH	1

ZZXX0266 - INFANT SWING SEAT WITH GALVANIZED CHAIN
- 10 ft. (3048 mm) TOP RAIL HEIGHT

PART NO.	DESCRIPTION	QTY.
ABC0074	CONNECTOR - 5/16" CHAIN SHACKLE w/3/8"-16 THREAD	2
ACN0041	CHAIN - 72" 4/0 GALVANIZED	2
AMC0006	SEAT - EXTRA TOUGH TOT	1
BAE0667	BOLT - 3/8"-16 x 1-1/4" BUTTON HEAD w/NYLON PATCH	2
BAE0902	TOOL - 7/32" SHORT HEX KEY WRENCH	1



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Swing Seat

- Inspect swing seat for sharp points, breaks, cracks or jagged edges. If any damage is detected and is determined to be unsafe, barricade equipment to prevent use until repair is completed.

Fasteners

- Inspect for loose fasteners.
Tightening torque specifications are:
Bolts and Nuts: Snug tighten and tighten an additional one-half turn.
- If during the maintenance process a bolt needs to be removed from a part or parts, it will be necessary to apply a drop of liquid thread lock / loctite to the bolt before reinstallation.
- Inspect for missing, worn or broken fasteners. If any missing, worn or broken fasteners are found, refer to the installation instructions for proper replacement fastener. If any damage is detected, barricade equipment to prevent use until repair is completed. Contact your sales representative immediately for a replacement part.

Finish

- Inspect metal parts for finish damage.
To repair painted surfaces, sand damaged area with sandpaper and wipe clean. Mask area and paint with primer and allow to dry. Paint primed area with color-matching paint and allow to dry. Recoat area with color-matching paint if required. Drying time is approximately 8 hours between coats.

Surfacing

- Refer to the specific surfacing maintenance detail sheet for additional information.

Replacement Parts

- Refer to your installation instructions to obtain replacement part number.
- Contact your sales representative or call Playworld Systems' Customer Service for a replacement part.

Equipment Maintenance Playworld Systems® Models XX0265, XX0266, & XX0325 Infant Swing Seat with Galvanized Chain



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570-522-9800 OUTSIDE U.S.
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Inspection Form

Preventive Maintenance

... for Safety's Sake!

- Be sure that you are using a copy of this Inspection Form and not your original.
- Use the Inspection Codes listed below and record condition of equipment at time of examination on the Inspection Checklist.
- Document any item from the Inspection Checklist that will require maintenance along with any corrective action on the Maintenance Schedule.
- Be sure to include appropriate dates and signatures on each section to properly document maintenance procedure.

INSPECTION CHECKLIST	Frequency	Inspection Code	Date	Date Repairs Completed
Inspect chain and swing seat for damage.	Medium			
Inspect surfacing to insure proper depth and distribution.	High			
Inspect metal parts for structural and finish damage.	Medium			
Inspect for loose, missing, worn, or broken fasteners.	High			

Inspection Codes P = Pass F = Fail NA = Not Applicable
--

Inspector: Name (Please Print) _____ Signature: _____ Date: ___ / ___ / ___

MAINTENANCE SCHEDULE

Item in Question	Description of Problem	Corrective Action	Date

Repairer: Name (Please Print) _____ Signature: _____ Date: ___ / ___ / ___



**FISHER STREET PARK PLAYGROUND
MANUFACTURERS' INSTALLATION INFORMATION**

FISHER STREET PARK

MADISON, WI

OPTION #1

LR
LEE
RECREATION LLC
PLAYGROUND & RECREATION EQUIPMENT
www.leerecreation.com

P.O. Box 93
Cambridge, WI 53523
Phone: (800) 775-8937
Fax: (608) 423-7655
email: info@leerecreation.com



VIEW A

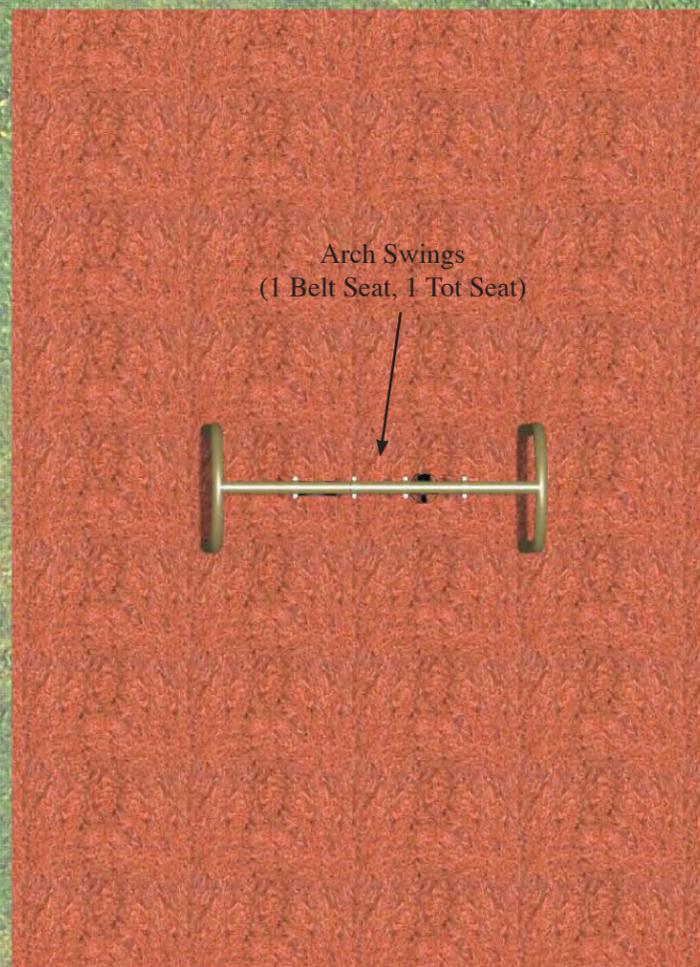
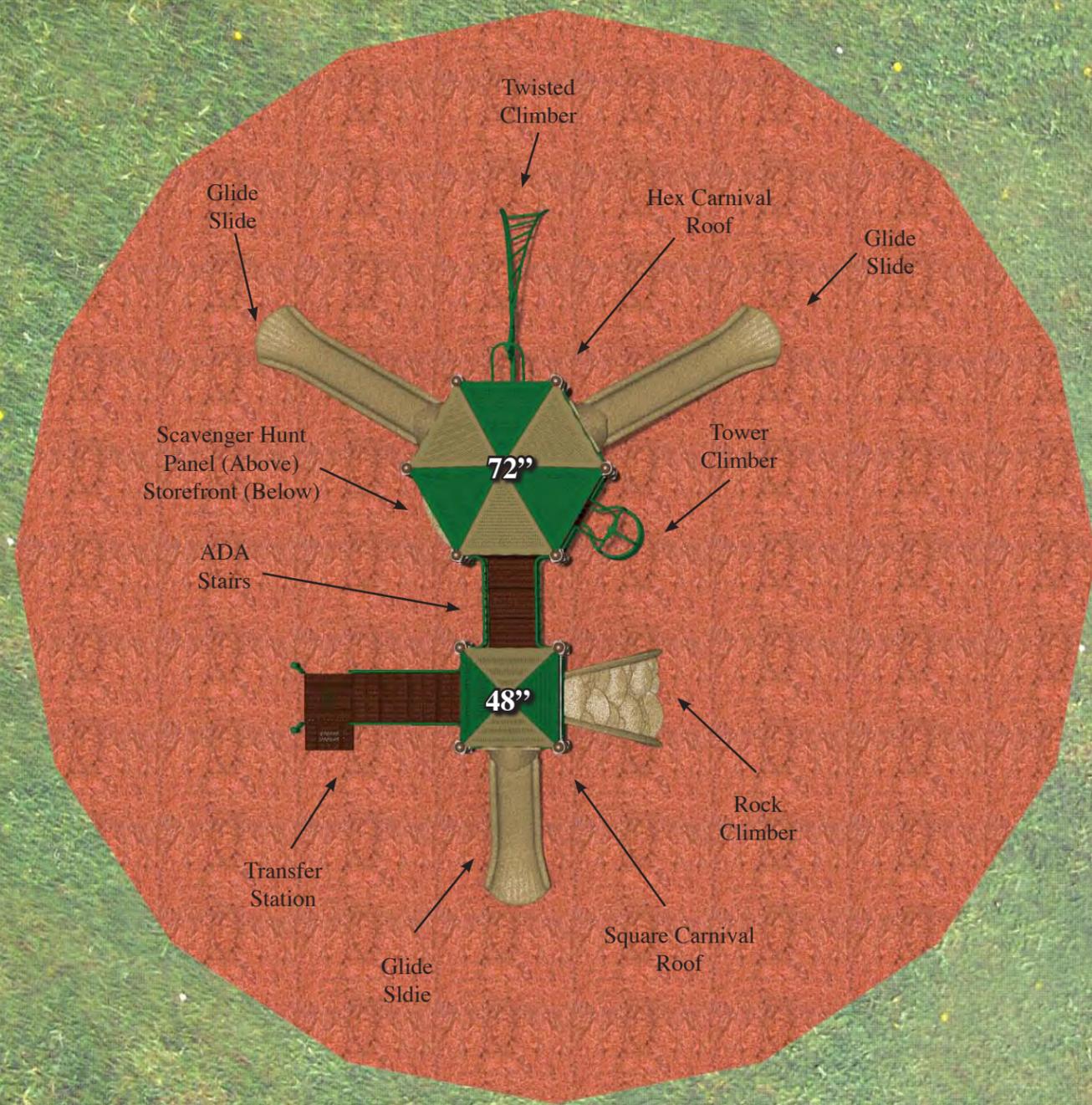


VIEW B

FISHER STREET PARK

MADISON, WI

OPTION #1



809 Bluebird Pass
Cambridge, WI 53523
TEL: 800-775-8937
FAX: 608-423-7655
www.leerecreation.com

- Complies With:
- ASTM F1487-01
 - ASTM F1487-98
 - CPSC #325
 - ADA-ADAAG

Design Number: PW041814
Use Zone:
of Users: 37
of Active Play Events: 10

Colors Shown:



Fisher

Design Number: 12 - Bill Of Material

Ref. No.	Part No.	Description	Quantity
Posts			
1	ZZPM0036A	5in OD X 144in ALUMINUM POST W/ RIVETED CAP	4
2	ZZPM0066A	5in OD X 180in ALUMINUM POST W/ RIVETED CAP	6
Decks & Kick Plates			
3	ZZPM0616	SQUARE COATED DECK ASSEMBLY	1
4	ZZPM0619	HEX COATED DECK ASSEMBLY	1
ADA Items			
5	ZZPM2027	TRANSFER STATION (48in DECK)	1
6	ZZUN2019	APPROACH STEP FOR TRANSFER STATION	1
Slides			
7	ZZPM2696	GLIDE SLIDE (72in DECK)	2
8	ZZPM3126	GLIDE SLIDE (48in DECK)	1
Activity Panels			
9	ZZPM4546	SCAVENGER HUNT (DECK LEVEL)	1
10	ZZPM4646	STOREFRONT PANEL	1
Climbers			
11	ZZPM7160	6ft TWISTED CLIMBER	1
12	ZZPM7168	6ft TOWER CLIMBER	1
13	ZZPM7439	ROCK CLIMBER (48in DECK)	1
Roofs & Arches			
14	ZZPM9828	CARNIVAL ROOF - SMALL PERF (SQUARE)	1
15	ZZPM9856	CARNIVAL ROOF SQUARE CAP	1
16	ZZPM9887	CARNIVAL ROOF - SMALL PERF (HEX)	1
17	ZZPM9898	CARNIVAL ROOF HEX CAP	1
Stairs and Ladders			
18	ZZPM9170	24in ACCESSIBLE STEPPED PLATFORM (DECK TO DECK)	1



Fisher

Design Number: 12 - Compliance and Technical Data

Reference Document: ASTM F1487

Ref. No.	Part No.	Qty.	Description	Unit ASTM Status	Total Weight (lbs)	Pre-Consumer Recycled (lbs)	Post-Consumer Content (lbs)	CO2e Footprint (kgs)	Users	Install Hours	Concrete (Yds3)	Active Play Events
1	ZZXX0260	1	BELT SEAT W/SILVER SHIELD CHAIN FOR 8ft TOP RAIL	Certified	8.80			54	1	0.25	0.00	1
2	ZZXX0265	1	INFANT SEAT W/SILVER SHIELD FOR 8ft TOP RAIL	Certified	11.31			90	1	0.25	0.00	1
3	ZZXX0287	1	5in OD 2-UNIT ALUMINUM ARCH SWING W-8ft TOP RAIL	Certified	213.00			1,166	0	3.00	0.52	0
4	ZZPM0036A	4	5in OD X 144in ALUMINUM POST W/ RIVETED CAP	Certified	141.64			515	0	4.00	0.52	0
5	ZZPM0066A	6	5in OD X 180in ALUMINUM POST W/ RIVETED CAP	Certified	271.86			942	0	6.00	0.78	0
6	ZZPM0616	1	SQUARE COATED DECK ASSEMBLY	Certified	90.36			221	4	1.00	0.00	0
7	ZZPM0619	1	HEX COATED DECK ASSEMBLY	Certified	228.72			638	8	2.00	0.00	0
8	ZZPM2027	1	TRANSFER STATION (48in DECK)	Certified	287.44			567	3	2.00	0.09	0
9	ZZUN2019	1	APPROACH STEP FOR TRANSFER STATION	Certified	35.83			72	1	1.00	0.04	0
10	ZZPM2696	2	GLIDE SLIDE (72in DECK)	Certified	326.88			1,356	4	4.00	0.06	2
11	ZZPM3126	1	GLIDE SLIDE (48in DECK)	Certified	131.54			517	2	2.00	0.03	1
12	ZZPM4546	1	SCAVENGER HUNT (DECK LEVEL)	Certified	52.85			568	3	2.00	0.00	1
13	ZZPM4646	1	STOREFRONT PANEL	Certified	44.80			279	2	1.00	0.00	1
14	ZZPM7160	1	6ft TWISTED CLIMBER	Certified	128.99			256	2	2.00	0.60	1
15	ZZPM7168	1	6ft TOWER CLIMBER	Certified	112.11			256	2	2.00	0.90	1
16	ZZPM7439	1	ROCK CLIMBER (48in DECK)	Certified	153.48			607	3	2.00	0.03	1
17	ZZPM9828	1	CARNIVAL ROOF - SMALL PERF (SQUARE)	Certified	133.26			463	0	2.00	0.00	0
18	ZZPM9856	1	CARNIVAL ROOF SQUARE CAP	Certified	6.11			23	0	0.25	0.00	0
19	ZZPM9887	1	CARNIVAL ROOF - SMALL PERF (HEX)	Certified	268.37			763	0	3.00	0.00	0
20	ZZPM9898	1	CARNIVAL ROOF HEX CAP	Certified	6.11			147	0	0.25	0.00	0
21	ZZPM9170	1	24in ACCESSIBLE STEPPED PLATFORM (DECK TO DECK)	Certified	174.86			374	1	2.00	0.00	0
Totals:					2,828.32	659	550	9,874	37	42.00	3.57	10
					1,272.74 Kg	297 Kg	248 Kg	10 Metric Tons			2.71 m3	



Fisher

Design Number: 12 - Compliance and Technical Data

Reference Document: ASTM F1487

Ref. No.	Part No.	Qty.	Description	Unit ASTM Status	Total Weight (lbs)	Pre-Consumer Recycled (lbs)	Post-Consumer Content (lbs)	CO2e Footprint (kgs)	Users	Install Hours	Concrete (Yds3)	Active Play Events
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ASTM F1487

The lay-out for this custom playscape, design number 12, has been configured to meet the requirements of the ASTM F1487 standard. In addition, each of the above components listed as "Certified" have been tested and are IPEMA certified. Components listed as "Not Applicable" do not fall within the scope of the ASTM F1487 standard and have not been tested. IPEMA certification can be verified on the IPEMA website, www.ipema.org. In the interest of playground safety, IPEMA provides a Third Party Certification Service which validates compliance.

2010 ADA Standards for Accessible Design

The lay-out was also designed to meet the 2010 Standards published 15-Sep-2010, by the Department of Justice when installed over a properly maintained surfacing material that is in compliance with ASTM F1951 "Accessibility of Surface Systems Under and Around Playground Equipment" as well as ASTM F1292, "Impact Attenuation of Surfacing Materials Within the Use Zone of Playground Equipment", appropriate for the fall height of the structure.

Installation Times

Installation times are based on one experienced installer. A crew of three experienced individuals can perform the installation within the given time, each member working 1/3 of the given hours. [Eg. Installation Time = 30 hours. For a crew of three, each member will work 10 hours on the installation for a total of 30 hours on the project.]

Carbon Footprint

The CO2e (carbon footprint given in Kilograms and Metric Tons) listed above is a measure of the environmental impact this play structure represents from harvesting raw materials to the time it leaves our shipping dock. Playworld Systems nurtures a total corporate culture that is focused on eliminating carbon producing processes and products, reducing our use of precious raw materials, reusing materials whenever possible and recycling materials at every opportunity. Playworld Systems elected to adopt the Publicly Available Specification; PAS 2050 as published by the British Standards Institute and sponsored by Defra and the Carbon Trust. The PAS 2050 has gained international acceptance as a specification that measures the greenhouse gas emissions in services and goods throughout their entire life cycle.

Pre-Consumer Recycle Content

A measurement, in pounds, that qualifies the amount of material that was captured as waste and diverted from landfill during an initial manufacturing process and is being redirected to a separate manufacturing process to become a different product. E.g. 100% of our Aluminum Tubing is made from captured waste material during the manufacturing process of extruded Aluminum products such as rods, flat bars and H-channels.

Post-Consumer Recycle Content

A measurement, in pounds, that qualifies the amount of material that was once another product that has completed its lifecycle and has been diverted from a landfill as a solid waste through recycling and is now being used in a Playworld Systems' product. E.g. **20% to 40% of the steel in our steel tubing and sheet steel have been diverted from landfills. Automobiles are scrapped and recyclable steel is purchased by the steel mill that produces our raw product.

** The amount of Post-Consumer recycled steel fluctuates daily based on the availability of the recycled steel.





Assembly View *(representative model)*

Installation Instructions

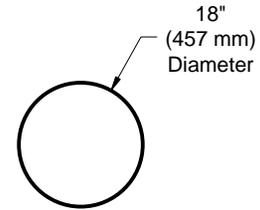
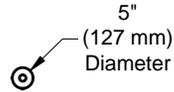
Playmakers® Models PM0006A, PM0008A, PM0016A,
PM0026A, PM0036A, PM0046A, PM0056A, PM0066A,
PM0078A, PM0128A, PM0266A, PM0268A
Aluminum Support Post w/ Cap
96 in. (2438 mm) to 229 in. (5817 mm)

Installation Preparation

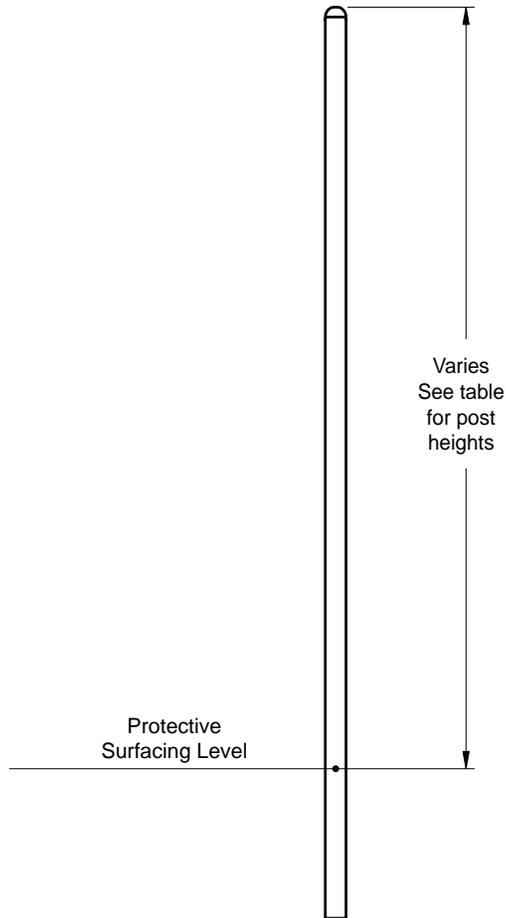
Recommended Crew: Two (2) adults
Installation Time: 1 man-hour
Weight: (refer to table on the next page)
Concrete Required: 0.12 cubic yard (0,09 cubic meters)

Installation Instructions

Top View



Footing Diagram



Elevation View

Model	Post Height	Weight
ZZPM0006A	96" (2438 mm)	25 lbs. (11,4 kg)
ZZPM0008A	108" (2743 mm)	27.4 lbs. (12,3 kg)
ZZPM0016A	120" (3048 mm)	29.4 lbs. (13,2 kg)
ZZPM0026A	132" (3353 mm)	34.2 lbs. (15,5 kg)
ZZPM0036A	144" (3658 mm)	35,4 lbs. (16,1 kg)
ZZPM0046A	156" (3962 mm)	37.3 lbs. (17 kg)
ZZPM0056A	168" (4267 mm)	40.4 lbs. (18,2 kg)
ZZPM0066A	180" (4623 mm)	43 lbs. (19,5 kg)
ZZPM0078A	205" (5207 mm)	49 lbs. (22,3 kg)
ZZPM0128A	192" (4877 mm)	45 lbs. (20,4 kg)
ZZPM0266A	217" (5512 mm)	42.5 lbs. (19,3 kg)
ZZPM0268A	229" (5817 mm)	45 lbs. (20,4 kg)

Installation Instructions

___ **Notes Before You Begin:** Do not over tighten bolts during assembly, only snug tighten them until assembly is complete.

Carefully read and understand these installation instructions before you begin.

___ **Step 1:** Before attempting to assemble your equipment, please review all installation information carefully. Should you experience any difficulty during the installation process, please call us at the phone number shown on the last page of these instructions.

___ **Step 2:** Separate and identify all components and hardware.

___ **Step 3:** Excavate footings as shown in the **Footing Details**.

___ **Step 4:** Set the support post into excavated footings in accordance with placement called out on the footing diagram. The post should be placed on a perforated shipping tube cap or on another porous flat surface to prevent any buildup of moisture in the base of the post. Block the support post at the specified depth.

Note: Heights of the decks and play components are measured from the top of protective surfacing.

Final Details.

___ **Step 5:** Plumb and level the support post. Block and brace for concrete. Pour concrete after all equipment has been assembled. Allow 72 hours for concrete to completely cure.



PM0006A - ALUMINUM SUPPORT POST w/ CAP 96 in. (2438 mm)

PART NO.	DESCRIPTION	QTY.
CAP5007	POST - 5" O.D. x 96" ALUMINUM w/ CAP & LBL AT 36"	1

PM0008A - ALUMINUM SUPPORT POST w/ CAP 108 in. (2743 mm)

PART NO.	DESCRIPTION	QTY.
CAP5009	POST - 5" O.D. x 108" ALUMINUM w/ CAP & LBL AT 36"	1

PM0016A - ALUMINUM SUPPORT POST w/ CAP 120 in. (3048 mm)

PART NO.	DESCRIPTION	QTY.
CAP5011	POST - 5" O.D. x 120" ALUMINUM w/ CAP & LBL AT 36"	1

PM0026A - ALUMINUM SUPPORT POST w/ CAP 132 in. (3353 mm)

PART NO.	DESCRIPTION	QTY.
CAP5013	POST - 5" O.D. x 132" ALUMINUM w/ CAP & LBL AT 36"	1

PM0036A - ALUMINUM SUPPORT POST w/ CAP 144 in. (3658 mm)

PART NO.	DESCRIPTION	QTY.
CAP5015	POST - 5" O.D. x 144" ALUMINUM w/ CAP & LBL AT 36"	1

PM0046A - ALUMINUM SUPPORT POST w/ CAP 156 in. (3962 mm)

PART NO.	DESCRIPTION	QTY.
CAP5017	POST - 5" O.D. x 156" ALUMINUM w/ CAP & LBL AT 36"	1

PM0056A - ALUMINUM SUPPORT POST w/ CAP 168 in. (4267 mm)

PART NO.	DESCRIPTION	QTY.
CAP5019	POST - 5" O.D. x 168" ALUMINUM w/ CAP & LBL AT 36"	1

PM0066A - ALUMINUM SUPPORT POST w/ CAP 180 in. (4623 mm)

PART NO.	DESCRIPTION	QTY.
CAP5021	POST - 5" O.D. x 180" ALUMINUM w/ CAP & LBL AT 36"	1

PM0078A - ALUMINUM SUPPORT POST w/ CAP 205 in. (5207 mm)

PART NO.	DESCRIPTION	QTY.
CAP5023	POST - 5" O.D. x 205" ALUMINUM w/ CAP & LBL AT 36"	1

PM0128A - ALUMINUM SUPPORT POST w/ CAP 192 in. (4877 mm)

PART NO.	DESCRIPTION	QTY.
CAP5063	POST - 5" O.D. x 205" ALUMINUM w/ CAP & LBL AT 36"	1

PM0266A - ALUMINUM SUPPORT POST w/ CAP 217 in. (5512 mm)

PART NO.	DESCRIPTION	QTY.
CAP0425	POST - 5" O.D. x 217" ALUMINUM w/ CAP & LBL AT 36"	1

PM0268A - ALUMINUM SUPPORT POST w/ CAP 229 in. (5817 mm)

PART NO.	DESCRIPTION	QTY.
CAP0427	POST - 5" O.D. x 229" ALUMINUM w/ CAP & LBL AT 36"	1

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Installation Instructions

Playmakers® Models PM0006A, PM0008A, PM0016A,
PM0026A, PM0036A, PM0046A, PM0056A, PM0066A,
PM0078A, PM0128A, PM0266A, PM0268A
Aluminum Support Post w/ Cap
96 in. (2438 mm) to 229 in. (5817 mm)



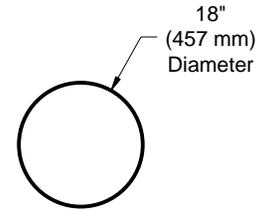
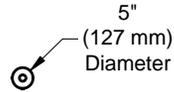
Assembly View *(representative model)*

Installation Preparation

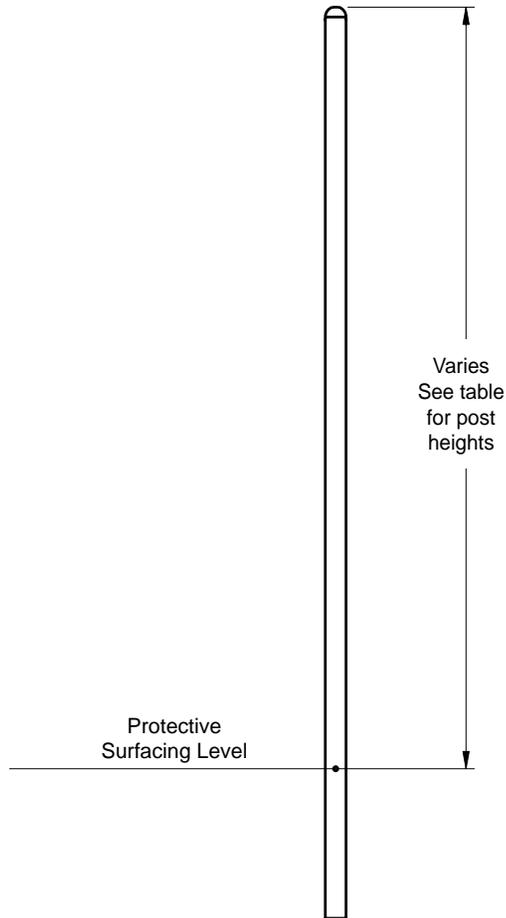
Recommended Crew: Two (2) adults
Installation Time: 1 man-hour
Weight: (refer to table on the next page)
Concrete Required: 0.12 cubic yard (0,09 cubic meters)

Installation Instructions

Top View



Footing Diagram



Elevation View

Model	Post Height	Weight
ZZPM0006A	96" (2438 mm)	25 lbs. (11,4 kg)
ZZPM0008A	108" (2743 mm)	27.4 lbs. (12,3 kg)
ZZPM0016A	120" (3048 mm)	29.4 lbs. (13,2 kg)
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ZZPM0046A	156" (3962 mm)	37.3 lbs. (17 kg)
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ZZPM0078A	205" (5207 mm)	49 lbs. (22,3 kg)
ZZPM0128A	192" (4877 mm)	45 lbs. (20,4 kg)
ZZPM0266A	217" (5512 mm)	42.5 lbs. (19,3 kg)
ZZPM0268A	229" (5817 mm)	45 lbs. (20,4 kg)

Installation Instructions

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___ **Step 2:** Separate and identify all components and hardware.

___ **Step 3:** Excavate footings as shown in the **Footing Details**.

___ **Step 4:** Set the support post into excavated footings in accordance with placement called out on the footing diagram. The post should be placed on a perforated shipping tube cap or on another porous flat surface to prevent any buildup of moisture in the base of the post. Block the support post at the specified depth.

Note: Heights of the decks and play components are measured from the top of protective surfacing.

Final Details.

___ **Step 5:** Plumb and level the support post. Block and brace for concrete. Pour concrete after all equipment has been assembled. Allow 72 hours for concrete to completely cure.



PM0006A - ALUMINUM SUPPORT POST w/ CAP 96 in. (2438 mm)

PART NO.	DESCRIPTION	QTY.
CAP5007	POST - 5" O.D. x 96" ALUMINUM w/ CAP & LBL AT 36"	1

PM0008A - ALUMINUM SUPPORT POST w/ CAP 108 in. (2743 mm)

PART NO.	DESCRIPTION	QTY.
CAP5009	POST - 5" O.D. x 108" ALUMINUM w/ CAP & LBL AT 36"	1

PM0016A - ALUMINUM SUPPORT POST w/ CAP 120 in. (3048 mm)

PART NO.	DESCRIPTION	QTY.
CAP5011	POST - 5" O.D. x 120" ALUMINUM w/ CAP & LBL AT 36"	1

PM0026A - ALUMINUM SUPPORT POST w/ CAP 132 in. (3353 mm)

PART NO.	DESCRIPTION	QTY.
CAP5013	POST - 5" O.D. x 132" ALUMINUM w/ CAP & LBL AT 36"	1

PM0036A - ALUMINUM SUPPORT POST w/ CAP 144 in. (3658 mm)

PART NO.	DESCRIPTION	QTY.
CAP5015	POST - 5" O.D. x 144" ALUMINUM w/ CAP & LBL AT 36"	1

PM0046A - ALUMINUM SUPPORT POST w/ CAP 156 in. (3962 mm)

PART NO.	DESCRIPTION	QTY.
CAP5017	POST - 5" O.D. x 156" ALUMINUM w/ CAP & LBL AT 36"	1

PM0056A - ALUMINUM SUPPORT POST w/ CAP 168 in. (4267 mm)

PART NO.	DESCRIPTION	QTY.
CAP5019	POST - 5" O.D. x 168" ALUMINUM w/ CAP & LBL AT 36"	1

PM0066A - ALUMINUM SUPPORT POST w/ CAP 180 in. (4623 mm)

PART NO.	DESCRIPTION	QTY.
CAP5021	POST - 5" O.D. x 180" ALUMINUM w/ CAP & LBL AT 36"	1

PM0078A - ALUMINUM SUPPORT POST w/ CAP 205 in. (5207 mm)

PART NO.	DESCRIPTION	QTY.
CAP5023	POST - 5" O.D. x 205" ALUMINUM w/ CAP & LBL AT 36"	1

PM0128A - ALUMINUM SUPPORT POST w/ CAP 192 in. (4877 mm)

PART NO.	DESCRIPTION	QTY.
CAP5063	POST - 5" O.D. x 205" ALUMINUM w/ CAP & LBL AT 36"	1

PM0266A - ALUMINUM SUPPORT POST w/ CAP 217 in. (5512 mm)

PART NO.	DESCRIPTION	QTY.
CAP0425	POST - 5" O.D. x 217" ALUMINUM w/ CAP & LBL AT 36"	1

PM0268A - ALUMINUM SUPPORT POST w/ CAP 229 in. (5817 mm)

PART NO.	DESCRIPTION	QTY.
CAP0427	POST - 5" O.D. x 229" ALUMINUM w/ CAP & LBL AT 36"	1

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Installation Instructions Playmakers® PM0616 and PM0629 Square and Long Coated Perforated Decks



ZZPM0616
Square Deck



ZZPM0629
Long Deck

Assembly View

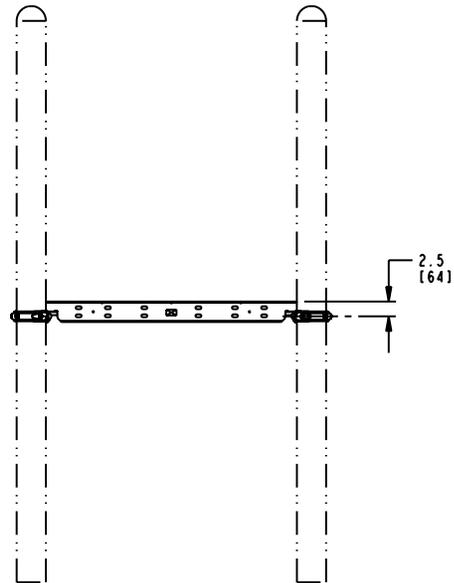
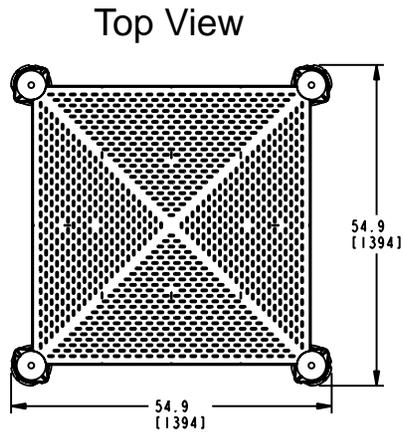
Installation Preparation

Recommended Crew (PM0616):..... Two (2) adults
 Recommended Crew (PM0629):..... Four (4) adults
 Installation Time (PM0616): 1 man-hour
 Installation Time (PM0629): 2 man-hours
 Use Zone:..... Refer to Master Drawing
 User Group Age (years): ASTM/CSA: 2-12, EN: 2-14

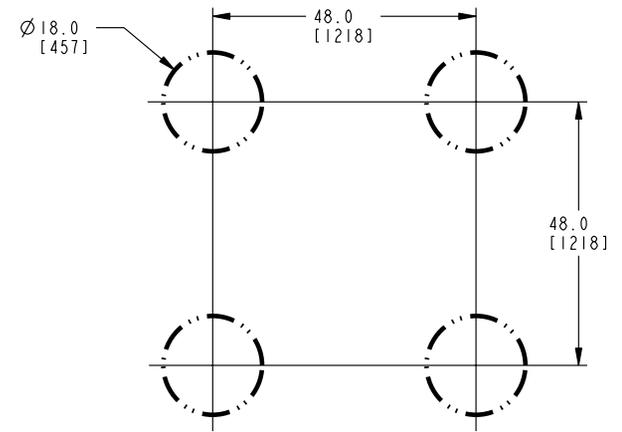
ICON KEY			
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	Do Not Fully Tighten Hardware		Pour Concrete
	Drill		Dig Footing Holes
	Hammer		Critical Fall Height

Installation Instructions

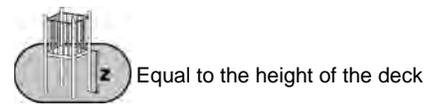
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Top #	Inches
Bottom #	[Millimeters]



Elevation View
Model PM0616

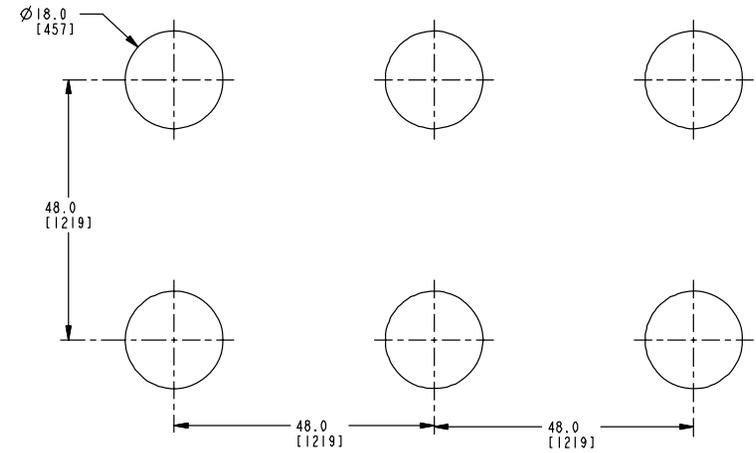
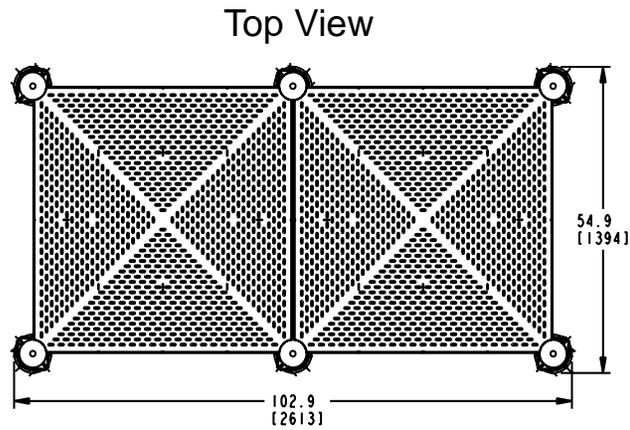


Footing Diagram

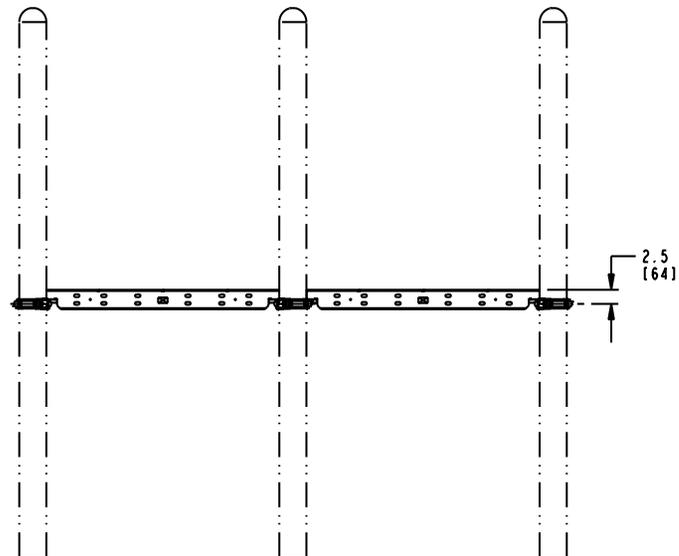


Installation Instructions

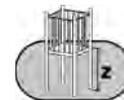
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Bottom #	[Millimeters]



Footing Diagram



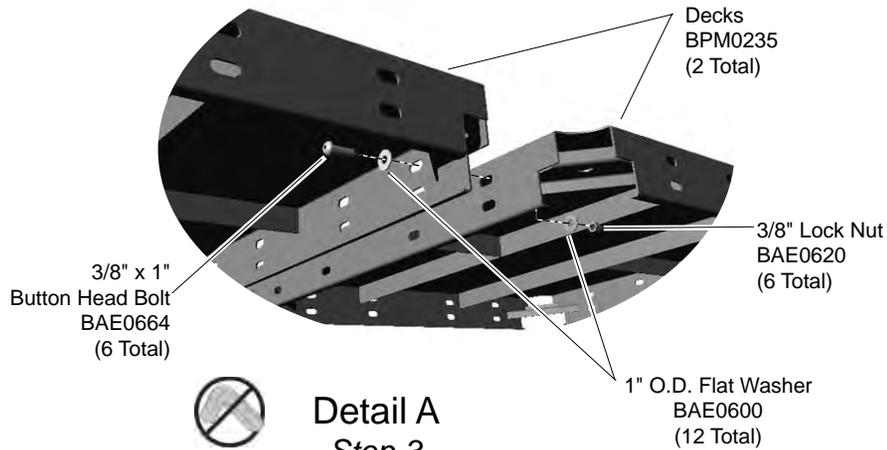
Elevation View
Model PM0629



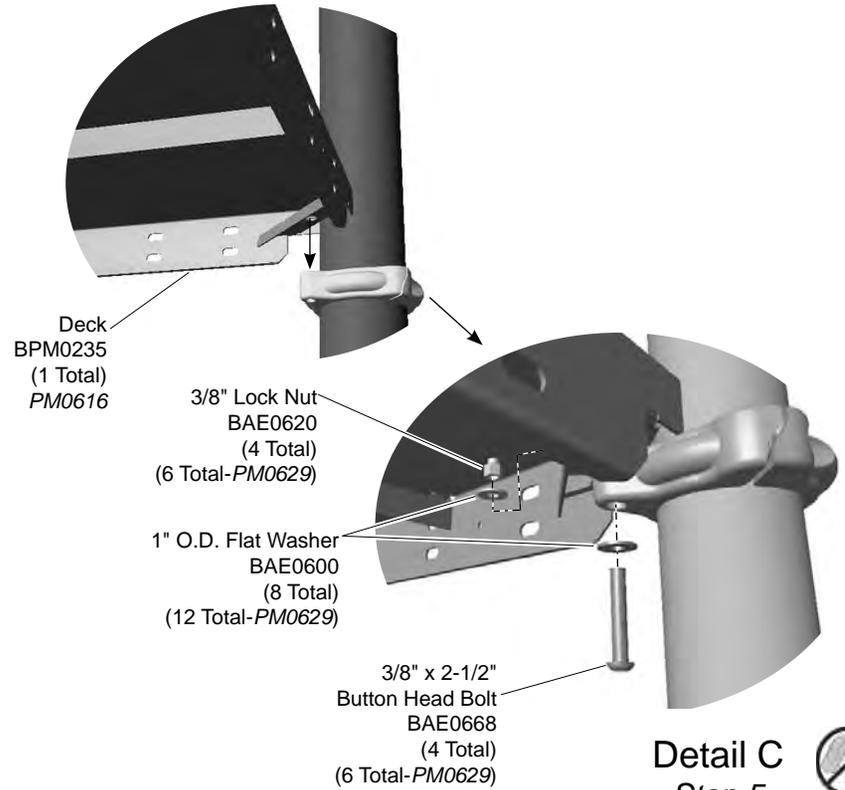
Equal to the height of the deck

Installation Instructions

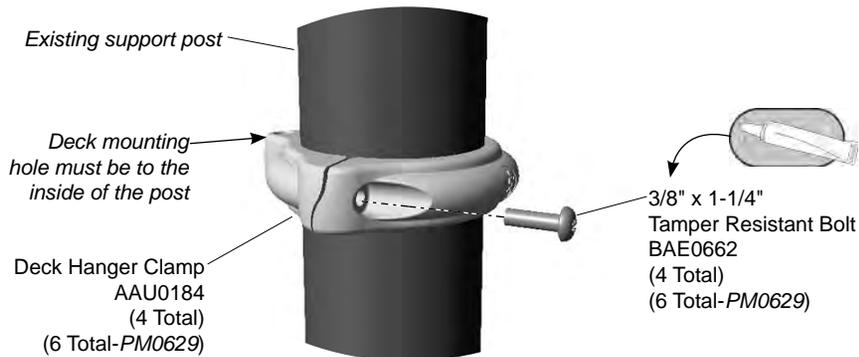
Follow the details in alphabetical order. For clarification, each detail references the step description. The step descriptions start on page 5.



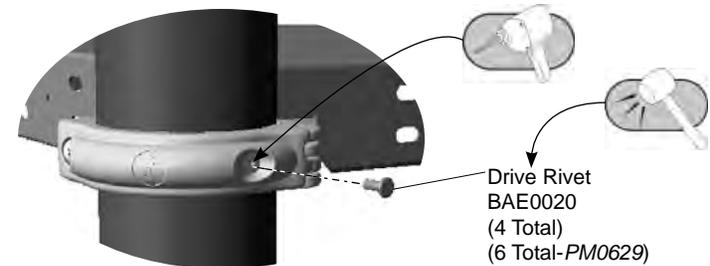
Detail A
Step 3
(Model PM0629 Only)
Attach the two decks together.



Detail C
Step 5
Attach the decks to the clamps.



Detail B
Step 4
Attach the deck clamps to the support posts.



Detail D
Step 7
Secure the clamps to the support posts.

Installation Instructions

Notes Before You Begin: Do not over tighten bolts during assembly, only snug tighten them until assembly is complete.

Carefully read and understand these installation instructions before you begin.

Step 1: Before attempting to assemble your equipment, please review all installation information carefully. Should you experience any difficulty during the installation process, please call us at the phone number shown on the last page of these instructions.

Step 2: Separate and identify all components and hardware. *Reference the master layout drawing at the beginning of the instruction booklet for location and heights of the decks.*

Step 3: *(Model PM0629 Only)* Attach the two decks together. **See Detail A.** Place both decks upside down on a flat surface. Match the long edges, align the holes, and attach as shown.

Step 4: Attach the deck clamps to the support posts. **See Detail B.** Position the clamps on the post at an appropriate height, apply a drop of thread locking adhesive to the bolt threads, and attach as shown. Ensure that all clamps are turned the same way, with deck connection inward.

Step 5: Attach the deck(s) to the clamps. **See Detail C.** Position the deck corners on top of the clamps and attach as shown.

Final Details.

Step 6: Plumb and level the component. Tighten **all** fasteners. Fully tighten all fasteners according to tightening torque specifications.

Torque Specifications:

Bolts and nuts - Snug tighten and then tighten an additional one half turn.

Step 7: Install drive rivets. **See Detail D.** After the equipment assembly is complete, install a drive rivet in each clamp to permanently secure it to the support post. Using a 1/4" drill bit, drill through the clamp and support post. Insert the drive rivet into drilled hole until the head of the rivet is against the surface of the clamp. Using a hammer, drive the pin of the rivet until it is flush with the surface of the rivet head.

Note: This step should be executed after structure has been assembled and properly footed.



PM0616 - SQUARE COATED PERFORATED DECK

PART NO.	DESCRIPTION	QTY.
AAU0184	CLAMP - 5" DECK HANGER DIE CAST	4
BAD0085	THREAD LOCKING ADHESIVE	1
BAE0020	RIVET - 1/4" x 11/16" DRIVE	4
BAE0600	WASHER - 1" O.D. FLAT	8
BAE0620	NUT - 3/8"-16 LOCK w/NYLON CAP	4
BAE0662	BOLT - 3/8"-16 x 1-1/4" TAMP RESIST w/TORX DRIVE	4
BAE0668	BOLT - 3/8"-16 x 2-1/2" BUTTON HEAD - SS	4
BPM0235	PLATFORM - PM SQUARE PERF	1

PM0629 - LONG COATED PERFORATED DECK

PART NO.	DESCRIPTION	QTY.
AAU0184	CLAMP - 5" DECK HANGER DIE CAST	6
BAD0085	THREAD LOCKING ADHESIVE	1
BAE0020	RIVET - 1/4" x 11/16" DRIVE	6
BAE0600	WASHER - 1" O.D. FLAT	24
BAE0620	NUT - 3/8"-16 LOCK w/NYLON CAP	12
BAE0662	BOLT - 3/8"-16 x 1-1/4" TAMP RESIST w/TORX DRIVE	6
BAE0664	BOLT - 3/8"-16 x 1" BUTTON HEAD - SS	6
BAE0668	BOLT - 3/8"-16 x 2-1/2" BUTTON HEAD - SS	6
BPM0235	PLATFORM - PM SQUARE PERF	2

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Installation Instructions Playmakers® PM0618 and PM0619 Half Hex and Hex Coated, Perforated Deck



ZZPM0618
Half Hex Deck



ZZPM0619
Hex Deck

Assembly View

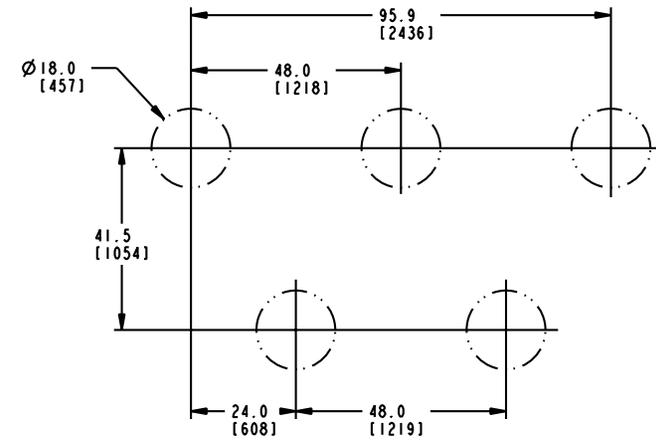
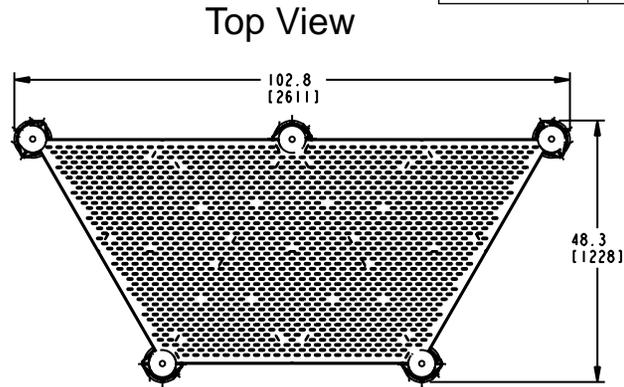
Installation Preparation

Recommended Crew: Four (4) adults
 Installation Time: 2 man-hours
 Use Zone: Refer to Master Drawing
 User Group Age (years): ASTM/CSA: 2-12, EN: 2-14

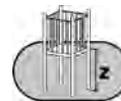
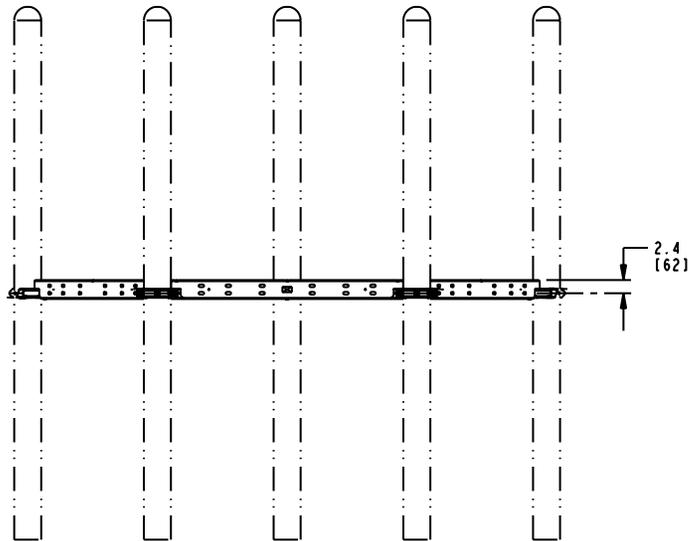
ICON KEY			
	Fully Tighten Hardware		Add 1 Drop of Thread Locking Adhesive
	Do Not Fully Tighten Hardware		Pour Concrete
	Drill		Dig Footing Holes
	Hammer		Critical Fall Height

Installation Instructions

KEY	
Position	Unit of Measurement
Top #	Inches
Bottom #	[Millimeters]



Footing Diagram



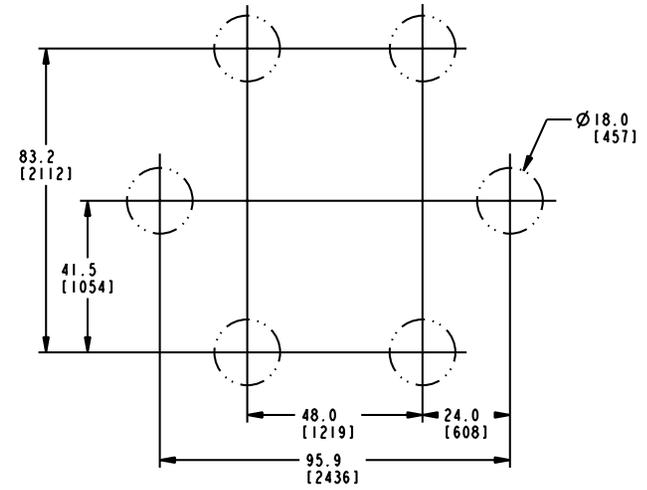
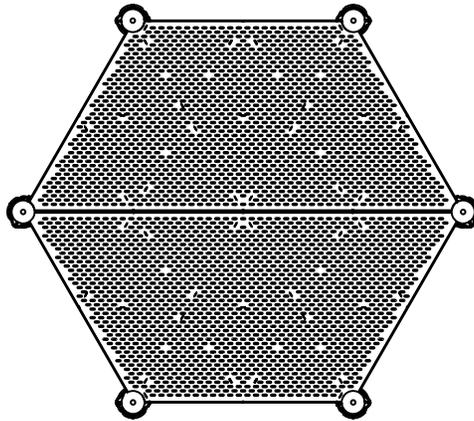
Equal to the height of the deck

Elevation View
PM0618

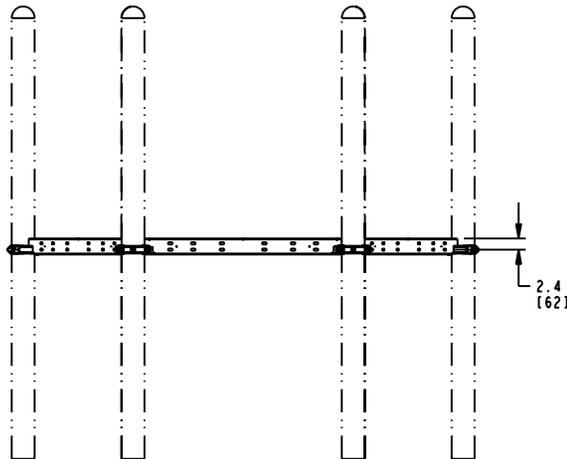
Installation Instructions

KEY	
Position	Unit of Measurement
Top #	Inches
Bottom #	[Millimeters]

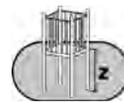
Top View



Footing Diagram



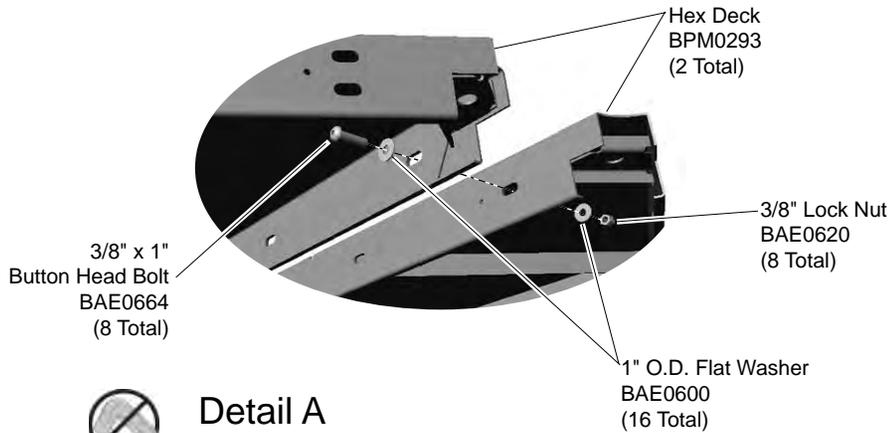
Elevation View
PM0619



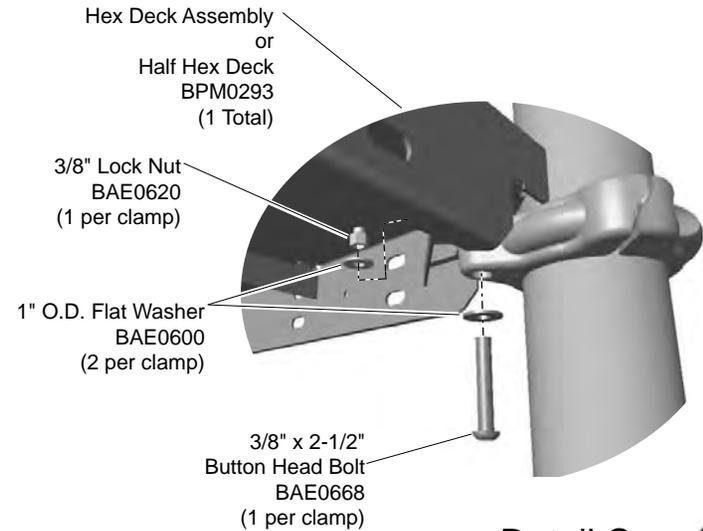
Equal to the height of the deck

Installation Instructions

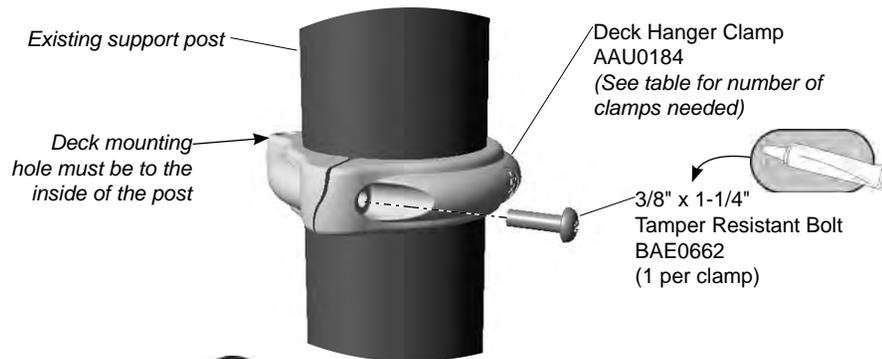
Follow the details in alphabetical order. For clarification, each detail references the step description. The step descriptions start on page 5.



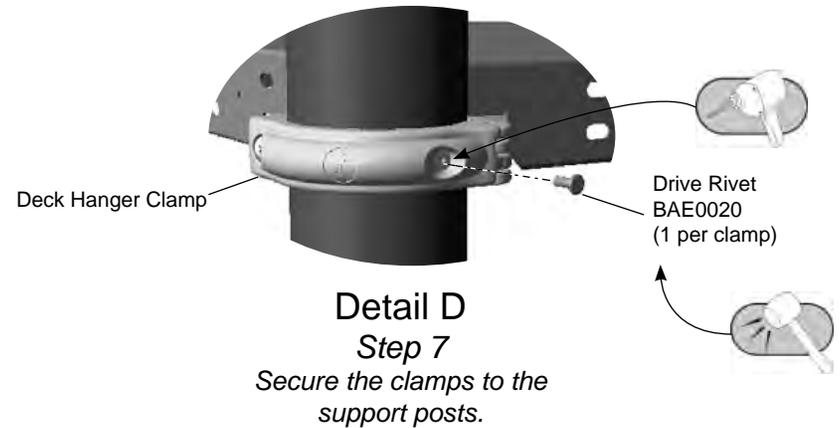
Detail A
Step 3
(Model PM0619 Only)
 Attach the hex decks together.



Detail C
Step 5
 Attach the deck to the deck hanger clamps.



Detail B
Step 4
 Attach the deck hanger clamps to the support posts.



Detail D
Step 7
 Secure the clamps to the support posts.

Model	Deck Shape	Deck Part Number	Number of Clamps
ZZPM0618	Half Hex Deck	BPM0292	5
ZZPM0619	Hex Deck	BPM0293	6



Installation Instructions

Notes Before You Begin: Do not over tighten bolts during assembly, only snug tighten them until assembly is complete.

Carefully read and understand these installation instructions before you begin.

Step 1: Before attempting to assemble your equipment, please review all installation information carefully. Should you experience any difficulty during the installation process, please call us at the phone number shown on the last page of these instructions.

Step 2: Separate and identify all components and hardware.

Note: It is recommended that (4-5) four to five adults lift the assembled deck into place.

Attach the decks together.

Step 3: Attach the decks together (*Model PM6019 only*). See **Detail A**. Orient the long side of the decks flush together and attach as shown.

Step 4: Attach the clamps to the support posts. See **Detail B**. Position the deck clamps on the support posts so that the top of the clamp is 1-3/4 in. (43 mm) below the suggested deck height. Ensure deck mount portion of the clamp points inward from the post. Apply a drop of loctite to the bolt threads and attach as shown.

Step 5: Attach the hex deck assembly or the half hex deck to the clamps. See **Detail C**. With adequate manpower, lift the deck onto the clamps, align the holes in the deck with those in the clamps and attach as shown.

Note: For the hex deck assembly each deck must be attached to (3) three clamps.

Final Details.

Step 6: Square and level the support posts and deck assembly. Check to ensure deck assembly is at the specified height above the surfacing material level. Tighten **all** fasteners. Fully tighten all fasteners according to tightening torque specifications.

Torque Specifications:

Bolts and nuts - Snug tighten and then tighten an additional one half turn.

Step 7: Install drive rivets. See **Detail D**. After the equipment assembly is complete, install a drive rivet in each clamp to permanently secure it to the support post. Using a 1/4" drill bit, drill through the clamp and support post. Insert the drive rivet into drilled hole until the head of the rivet is against the surface of the clamp. Using a hammer, drive the pin of the rivet until it is flush with the surface of the rivet head.

Note: This step should be executed after structure has been assembled and properly footed.



PM0618 - HALF HEX COATED PERFORATED DECK

PART NO.	DESCRIPTION	QTY.
AAU0184	CLAMP - 5" DECK HANGER DIE CAST	5
BAD0085	THREAD LOCKING ADHESIVE	1
BAE0020	RIVET - 1/4" x 11/16" DRIVE	5
BAE0600	WASHER - 1" O.D. FLAT	10
BAE0620	NUT - 3/8"-16 LOCK w/NYLON CAP	5
BAE0662	BOLT - 3/8"-16 x 1-1/4" TAMP RESIST w/TORX DRIVE	5
BAE0668	BOLT - 3/8"-16 x 2-1/2" BUTTON HEAD - SS	5
BPM0292	PLATFORM - PM HALF HEX PERF	1

PM0619 - HEX COATED PERFORATED DECK

PART NO.	DESCRIPTION	QTY.
AAU0184	CLAMP - 5" DECK HANGER DIE CAST	6
BAD0085	THREAD LOCKING ADHESIVE	1
BAE0020	RIVET - 1/4" x 11/16" DRIVE	6
BAE0600	WASHER - 1" O.D. FLAT	28
BAE0620	NUT - 3/8"-16 LOCK w/NYLON CAP	14
BAE0662	BOLT - 3/8"-16 x 1-1/4" TAMP RESIST w/TORX DRIVE	6
BAE0664	BOLT - 3/8"-16 x 1" BUTTON HEAD - SS	8
BAE0668	BOLT - 3/8"-16 x 2-1/2" BUTTON HEAD - SS	6
BPM0293	PLATFORM - PM HEX PERF	2

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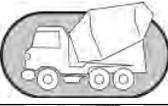
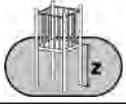
Installation Instructions Playmakers® Models PM2027 and PM2027S 48 in. (1219 mm) Transfer Station In-Ground and Surface Mount



Assembly View (representative model)

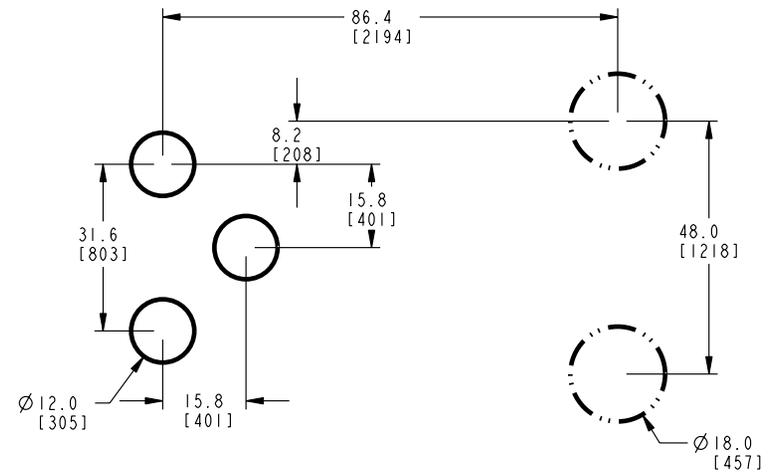
Installation Preparation

Recommended Crew: Two (2) adults
 Installation Time (In-Ground): 3 man-hours
 Installation Time (Surface Mount): 1.5 man-hours
 Concrete Required: 0.09 cubic yard (0,07 cubic meters)
 Use Zone: Refer to Master Drawing
 User Group Age (years): ASTM/CSA: 2-12, EN: 2-14

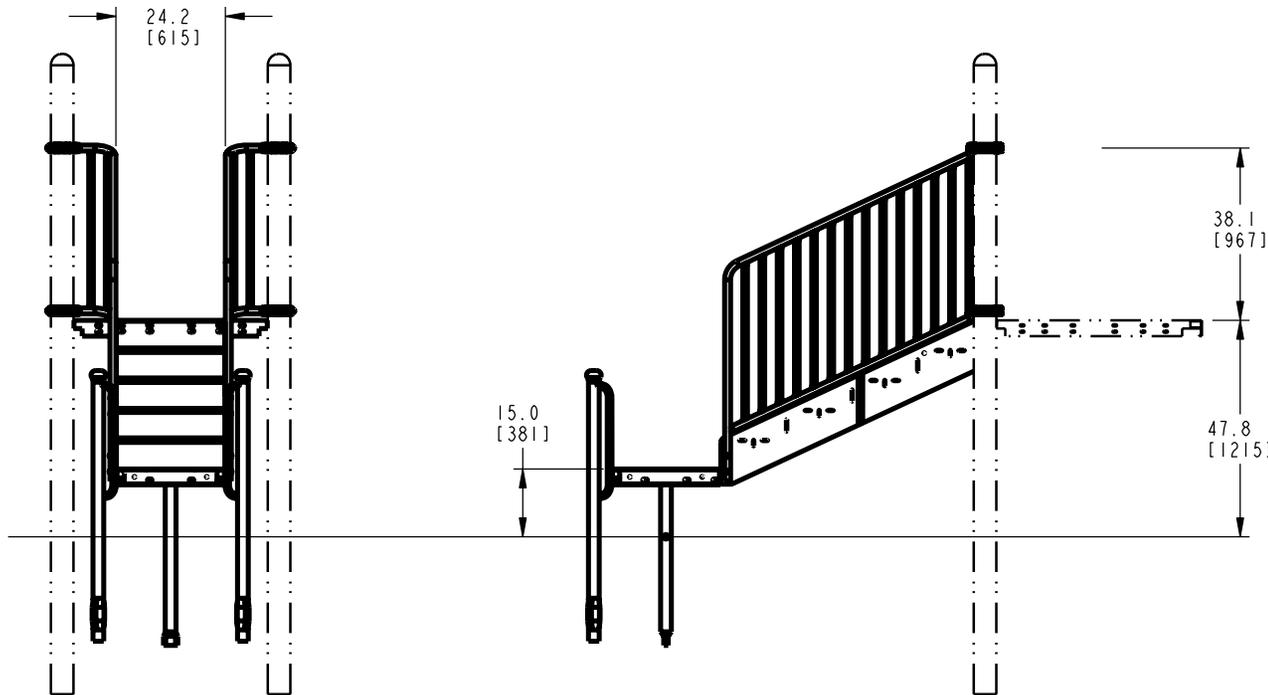
ICON KEY	
	Fully Tighten Hardware
	Do Not Fully Tighten Hardware
	Drill
	Hammer
	Add 1 Drop of Thread Locking Adhesive
	Pour Concrete
	Dig Footing Holes
	Critical Fall Height

Installation Instructions

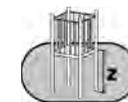
KEY	
Position	Unit of Measurement
Top #	Inches
Bottom #	[Millimeters]



Footing Diagram



Elevation Views
PM2027

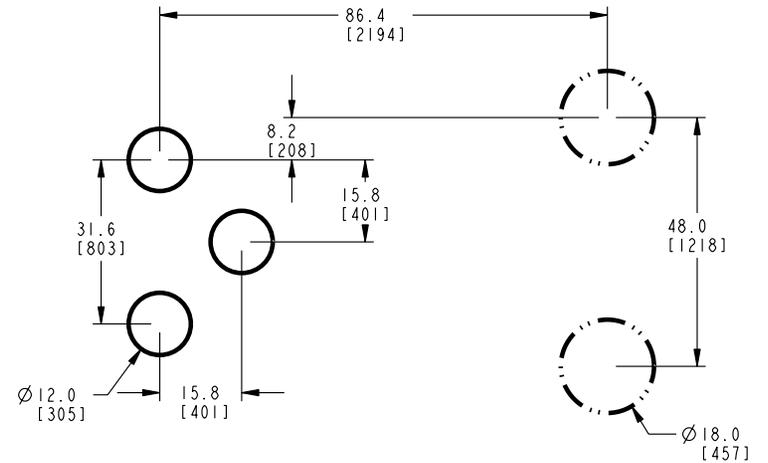


39" (990 mm)

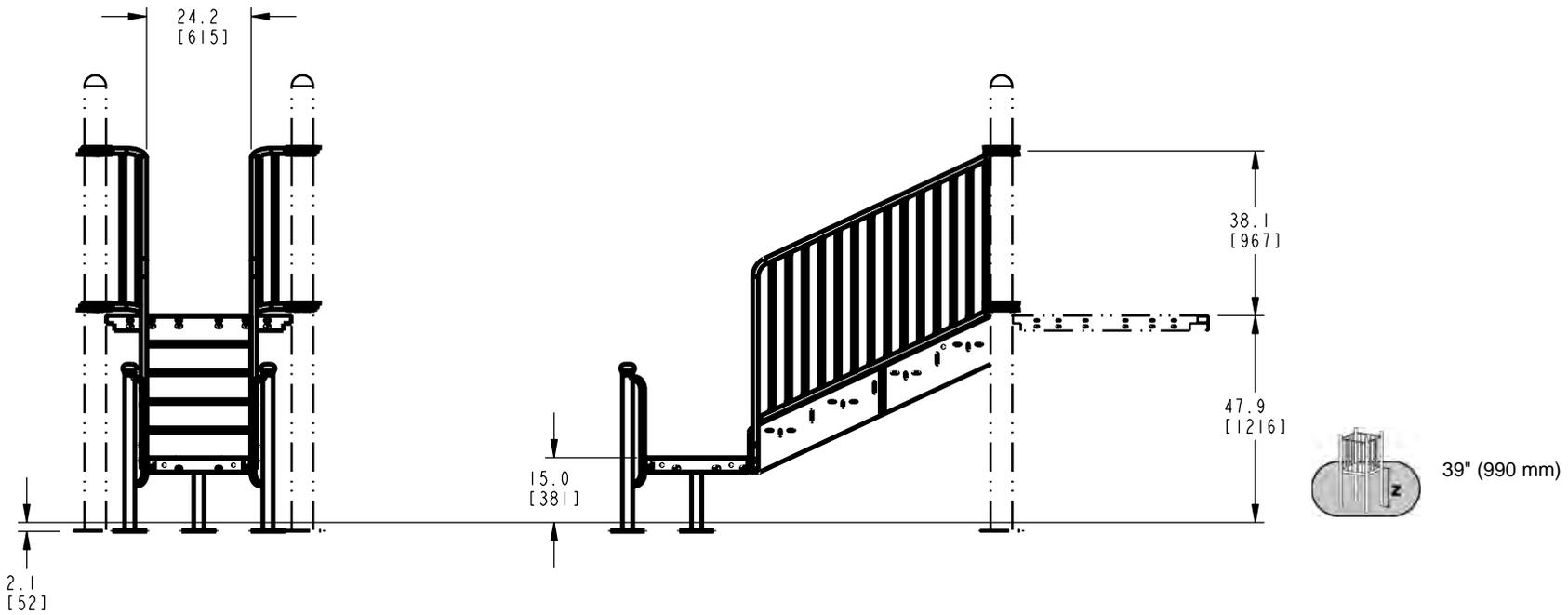


Installation Instructions

KEY	
Position	Unit of Measurement
Top #	Inches
Bottom #	[Millimeters]



Footing Diagram

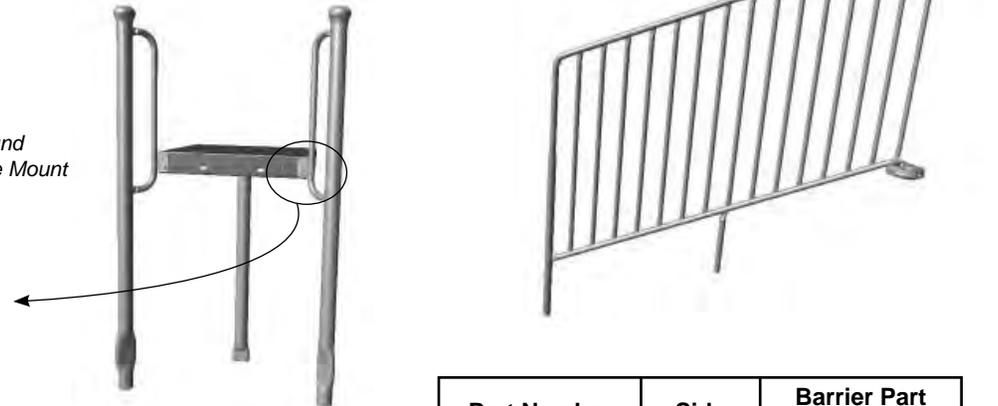
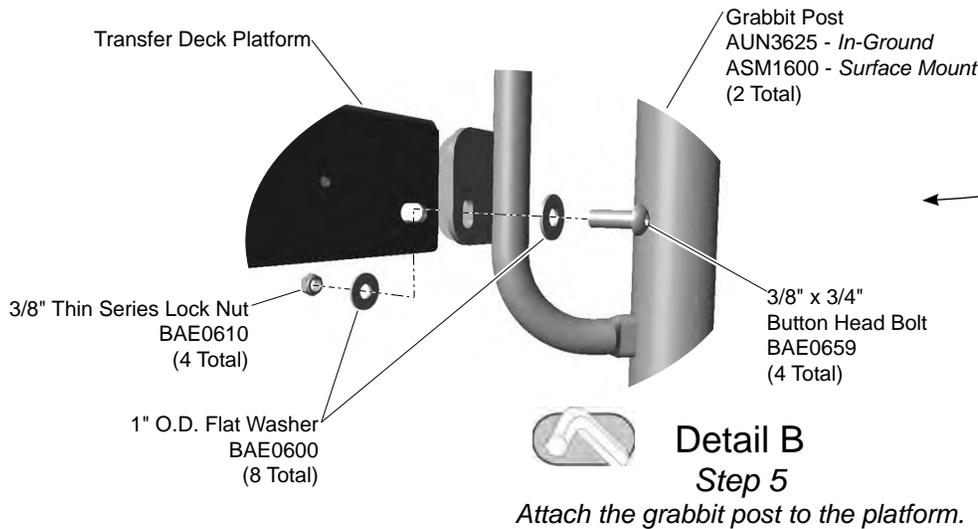
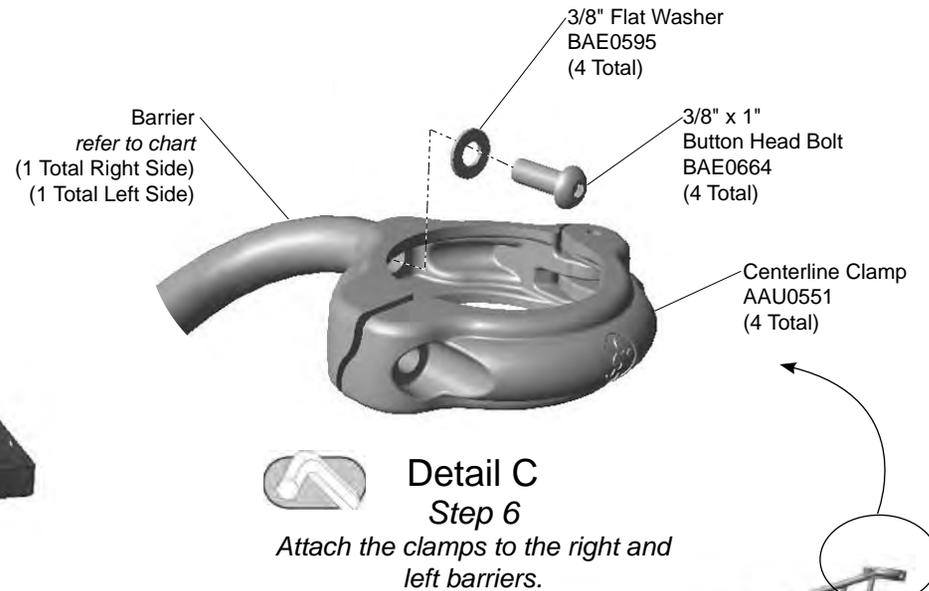
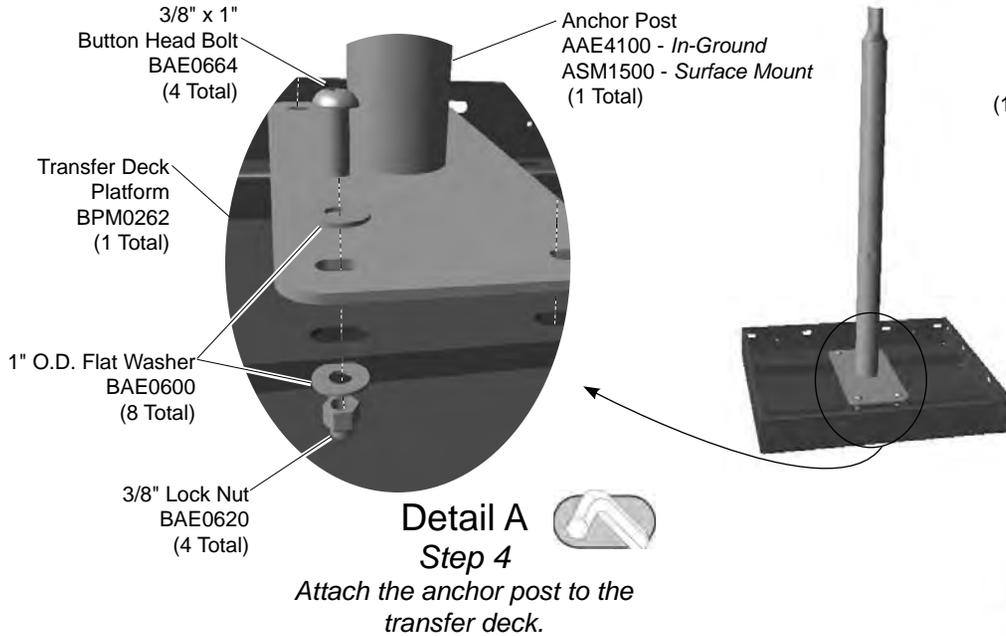


Elevation Views
PM2027S



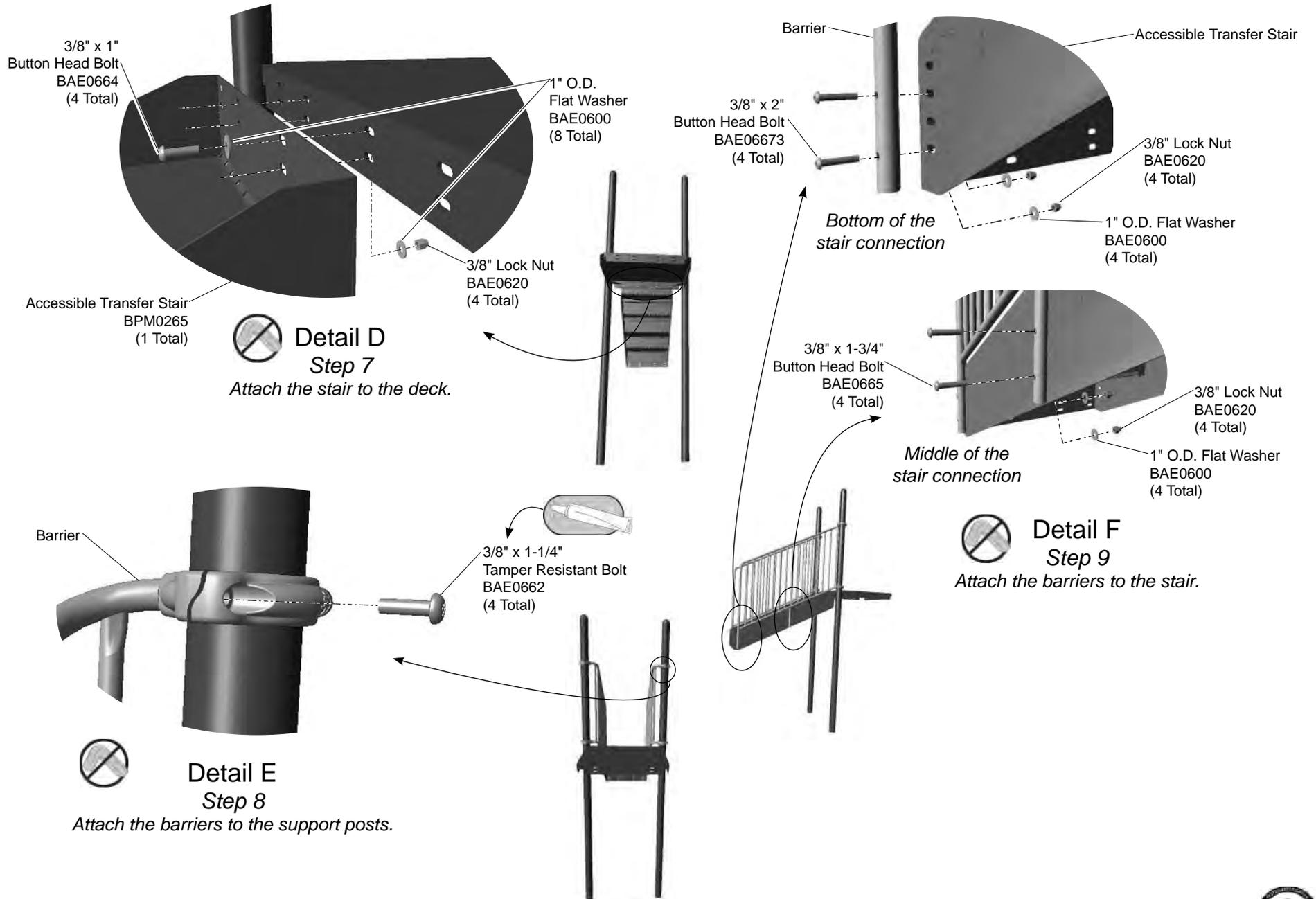
Installation Instructions

Follow the details in alphabetical order. For clarification, each detail references the step description. The step descriptions start on page 7.

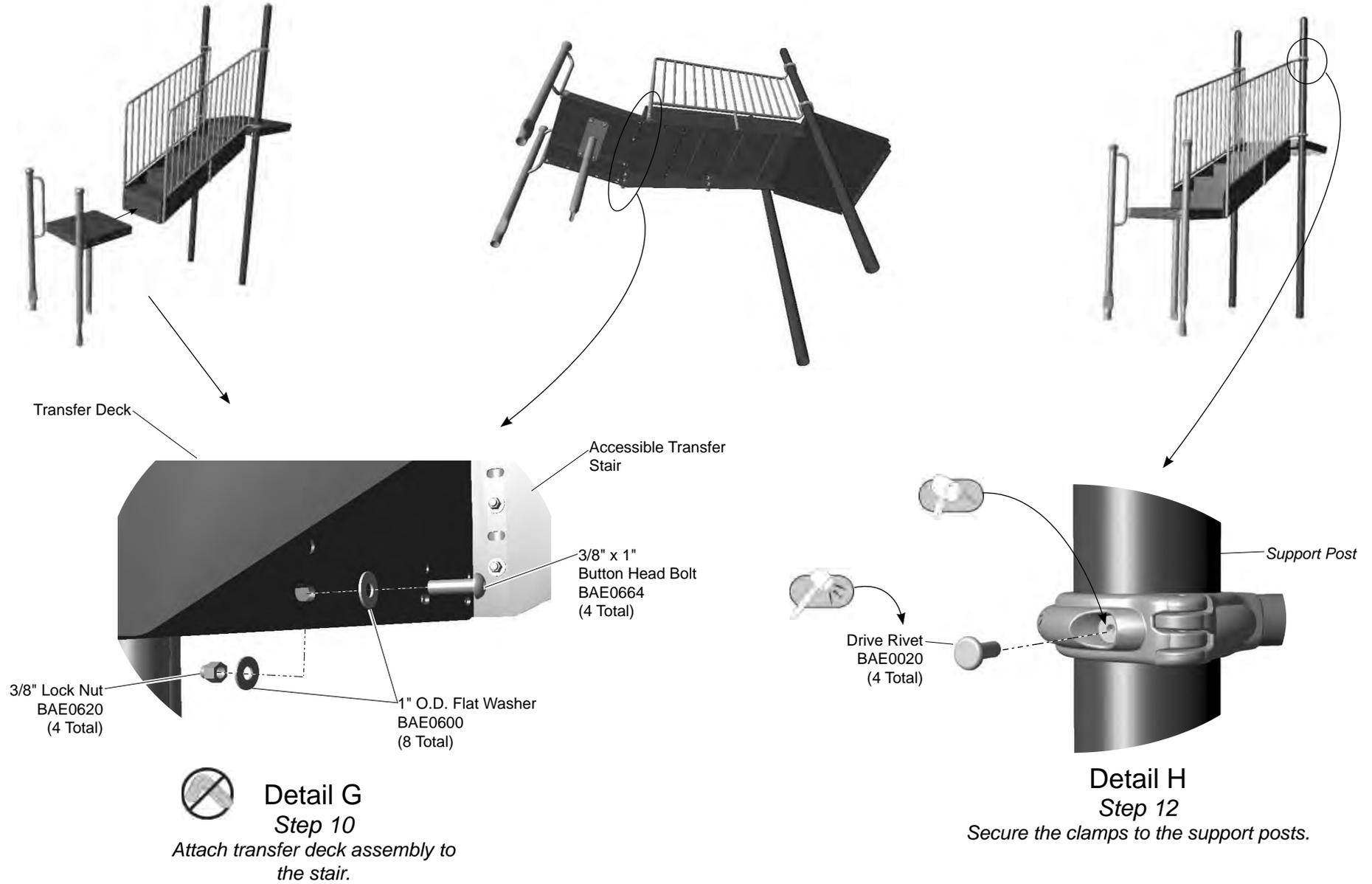


Part Number	Side	Barrier Part Number
ZZPM2027	Left	AEN0165
ZZPM2027	Right	AEN0164
ZZPM2027S	Left	AEN0165
ZZPM2027S	Right	AEN0164

Installation Instructions



Installation Instructions



Installation Instructions

Notes Before You Begin: Do not over tighten bolts during assembly, only snug tighten them until assembly is complete.

Carefully read and understand these installation instructions before you begin.

Step 1: Before attempting to assemble your equipment, please review all installation information carefully. Should you experience any difficulty during the installation process, please call us at the phone number shown on the last page of these instructions.

Step 2: Separate and identify all components and hardware.

Step 3: Excavate, or prepare, the footings as shown in the *Guidelines at the beginning of this document*. Use the **Component Footing Details** for the in-ground model.

Attach the anchor post to the transfer deck.

Step 4: Attach the anchor post to the underside of transfer deck. See **Detail A**. Flip the transfer deck over and align the holes in the anchor post mounting plate with the underside of the deck. Attach as shown. Center the leg on the deck and fully tighten connections. See **Step 11** for the torque specifications.

Attach grabbits to transfer deck.

Step 5: Attach grabbits to transfer deck. See **Detail B**. Align the corner bracket on the grabbit with the mounting holes on the transfer deck. Attach as shown. Attach the other grabbit to an adjacent deck corner in the same manner.

Attach the clamps to the barriers.

Step 6: Attach the clamps to barriers. See **Detail C**. Position the end of each barrier top and bottom rail against the neck of a clamp and attach as shown.

Attach the stairs to existing support deck.

Two (2) adults and a brace for the stair section are recommended to complete Steps 7-10.

Step 7: Attach the stairs to existing support deck. See **Detail D**. Center stair on the side of the deck and align the upper holes. Attach as shown.

Note: The upper edge of the top stair riser should be flush with, and not protruding above the supporting deck surface.

Important note: The bottom of the stairs will need to be supported until the transfer deck is added.

Attach barriers to the support posts.

Step 8: Attach barriers to the support posts. See **Detail E** and Elevation View. Lift each barrier into position between the post and the stairs. Close the clamps around the support post. Apply a drop of thread locking adhesive to the bolt threads and attach as shown. Snug tighten connection only. The location of the clamps may need to be adjusted to align stair connection holes.

Attach barriers to the stair.

The barriers can be attached to the stair using either the first and third holes or the second and fourth holes in the stair side rails, depending on adjacent clamp positions. Both barriers should be mounted at the same height.

Step 9: Attach the barriers to the bottom and middle of the stair. See **Detail F**. Align the barrier holes with the holes in the bottom and middle of the stair side rail. Attach as shown.

Attach transfer deck assembly to the stair.

Step 10: Attach transfer deck assembly to the stair. See **Detail G**. Place the transfer deck assembly into, or onto, the prepared footings and align the bottom set of holes in the stair with those on the transfer deck. Attach as shown.

Final Details.

Step 11: Plumb and level the component. Tighten **all** fasteners. Fully tighten all fasteners according to tightening torque specifications.

Torque Specifications:

Bolts and nuts - Snug tighten and then tighten an additional one half turn.

In-ground: Block and brace for concrete. Pour concrete after all equipment has been assembled. Allow 72 hours for concrete to completely cure.

Surface Mount: Bolt down all surface mount supports in accordance with specifications provided by your registered structural engineer.

Important Note: Surface mount hardware is not supplied. Customer is responsible for concrete base and for providing surface mount hardware as specified by a registered structural engineer for each specific project application.

Installation Instructions

Step 12: Install drive rivets. See **Detail H**. After the equipment assembly is complete, install a drive rivet in each clamp to permanently secure it to the support post. Using a 1/4" drill bit, drill through the clamp and support post. Insert the drive rivet into drilled hole until the head of the rivet is against the surface of the clamp. Using a hammer, drive the pin of the rivet until it is flush with the surface of the rivet head.

Note: This step should be executed after structure has been assembled and properly footed.



ZZPM2027 - 48 in. (1219 mm) TRANSFER STATION

PART NO.	DESCRIPTION	QTY.
AAE4100	POST - 14" x 37-3/16" w/PLATE	1
AAU0551	CLAMP - 5" CENTERLINE DIE CAST	4
AEN0164	BARRIER - 48" TRANSFER STATION (RIGHT)	1
AEN0165	BARRIER - 48" TRANSFER STATION (LEFT)	1
AUN3625	POST - 59.81" GRABBIT	2
BAD0085	THREAD LOCKING ADHESIVE	1
BAE0020	RIVET - 1/4" x 11/16" DRIVE	4
BAE0595	WASHER - 3/8" SAE FLAT	4
BAE0600	WASHER - 1" O.D. FLAT	40
BAE0610	NUT - 3/8"-16 THIN LOCK	4
BAE0620	NUT - 3/8"-16 LOCK w/NYLON CAP	20
BAE0659	BOLT - 3/8-16 x 3/4" BUTTON HEAD - SS	4
BAE0662	BOLT - 3/8"-16 x 1-1/4" TMRP RESISTANT w/TORX DRIVE	4
BAE0664	BOLT - 3/8"-16 x 1" BUTTON HEAD - SS	16
BAE0665	BOLT - 3/8"-16 x 1-3/4" BUTTON HEAD - SS	4
BAE06673	BOLT - 3/8-16 X 2" BUTTON HEAD - SS	4
BPM0262	PLATFORM - 24" x 24" TRANSFER DECK	1
BPM0265	STAIR - 33" ACSBLE COATED TRANSFER	1

ZZPM2027S - 48 in. (1219 mm) TRANSFER STATION SURFACE MOUNT

PART NO.	DESCRIPTION	QTY.
AAU0551	CLAMP - 5" CENTERLINE DIE CAST	4
AEN0164	BARRIER - 48" TRANSFER STATION (RIGHT)	1
AEN0165	BARRIER - 48" TRANSFER STATION (LEFT)	1
ASM1500	POST - 14" x 15-3/16" w/2 PLATES	1
ASM1600	POST - 38.69" GRABBIT SURFACE MOUNT	2
BAD0085	THREAD LOCKING ADHESIVE	1
BAE0020	RIVET - 1/4" x 11/16" DRIVE	4
BAE0595	WASHER - 3/8" SAE FLAT	4
BAE0600	WASHER - 1" O.D. FLAT	40
BAE0610	NUT - 3/8"-16 THIN LOCK	4
BAE0620	NUT - 3/8"-16 LOCK w/NYLON CAP	20
BAE0659	BOLT - 3/8-16 x 3/4" BUTTON HEAD - SS	4
BAE0662	BOLT - 3/8"-16 x 1-1/4" TMRP RESISTANT w/TORX DRIVE	4
BAE0664	BOLT - 3/8"-16 x 1" BUTTON HEAD - SS	16
BAE0665	BOLT - 3/8"-16 x 1-3/4" BUTTON HEAD - SS	4
BAE06673	BOLT - 3/8"-16 x 2" BUTTON HEAD - SS	4
BPM0262	PLATFORM - 24" x 24" TRANSFER DECK	1
BPM0265	STAIR - 33" ACCESSIBLE COATED TRANSFER	1

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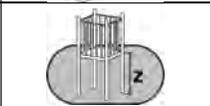


Assembly View

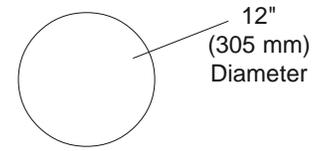
Installation Instructions Universal Model UN2019 Platform Approach Step

Installation Preparation

Recommended Crew: Two (2) adults
 Installation Time: 1 man-hour
 Weight: 40.4 lbs. (18,2 kg)
 Concrete Required: 0.03 cubic yard (0,02 cubic meters)
 Use Zone: Refer to Master Drawing
 User Group Age (years): ASTM/CSA: 2-12, EN: 2-14

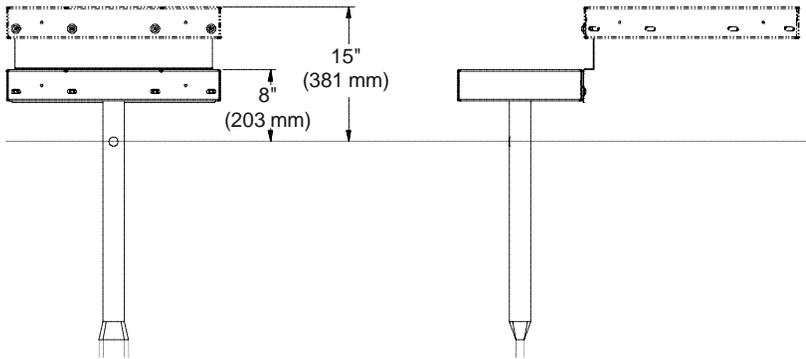
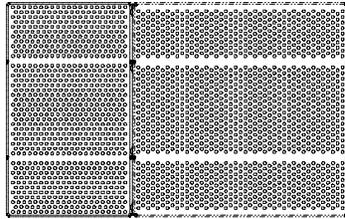
ICON KEY	
	Fully Tighten Hardware
	Do Not Fully Tighten Hardware
	Drill
	Hammer
	Add 1 Drop of Thread Locking Adhesive
	Pour Concrete
	Dig Footing Holes
	Critical Fall Height

Installation Instructions

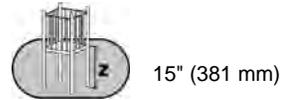


Footing Diagram

Top View

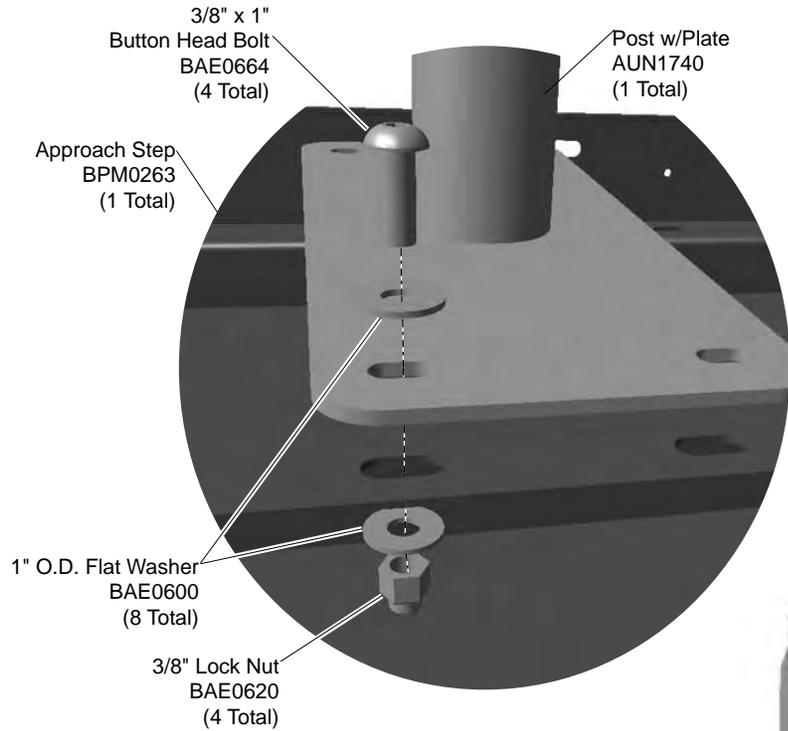


Elevation Views



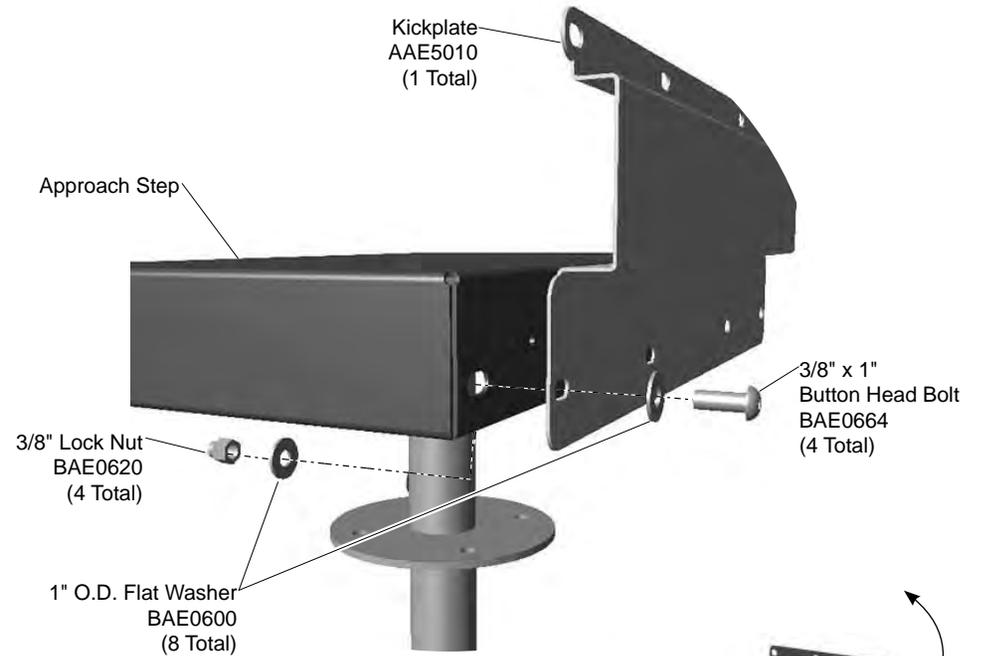
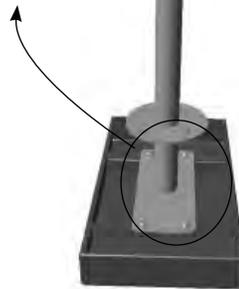
Installation Instructions

Follow the details in alphabetical order. For clarification, each detail references the step description. The step descriptions start on page 5.



Detail A Step 4

Attach the anchor post to the approach step.

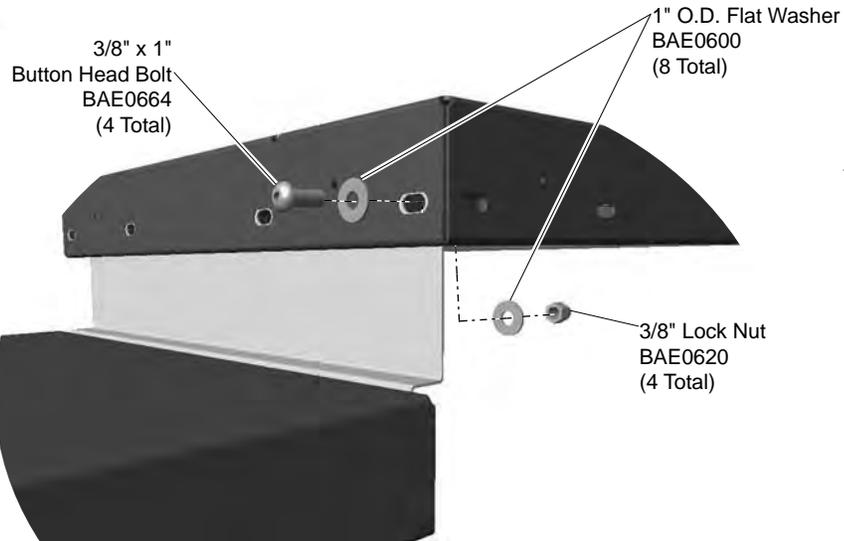
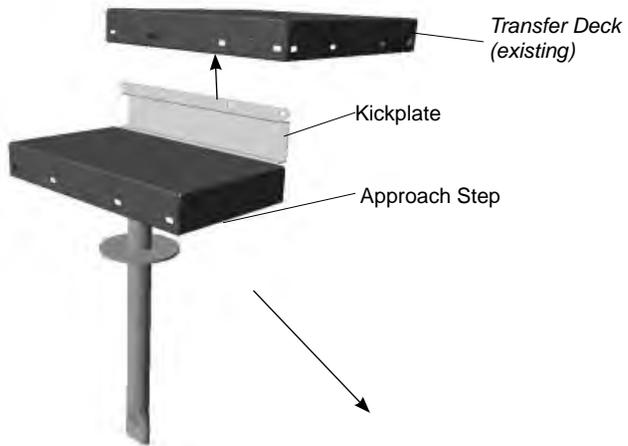


Detail B Step 5

Attach the kickplate to the approach step.



Installation Instructions



Detail C Step 6

Attach the kickplate to the transfer deck.



Step 7



Installation Instructions

Notes Before You Begin: Do not over tighten bolts during assembly, only snug tighten them until assembly is complete.

Carefully read and understand these installation instructions before you begin.

Step 1: Before attempting to assemble your equipment, please review all installation information carefully. Should you experience any difficulty during the installation process, please call us at the phone number shown on the last page of these instructions.

Step 2: Separate and identify all components and hardware.

Step 3: Excavate footings as shown in the **Component Footing Details** in the *Guidelines at the beginning of this document*.

Attach the support leg to the approach step.

Step 4: Attach the support leg to the approach step. See **Detail A**. Turn the approach step upside down. Align the mounting slots on the underside of the step with those in the support leg plate. Attach as shown.

Attach the kickplate to the approach step.

Step 5: Attach the kickplate to the approach step. See **Detail B**. Position the kickplate so that holes in the wide flange align with the holes of the approach step. Attach as shown.

Attach the approach step assembly to the transfer deck.

Step 6: Attach the approach step assembly to the transfer deck. See **Detail C**. Place the support leg into the excavated footing and position the kickplate inside and under the transfer deck. Attach as shown.

Note: The approach step can be placed on any open side of the transfer deck.

Final Details.

Step 7: Plumb and level the component. Tighten **all** fasteners. Fully tighten all fasteners according to tightening torque specifications. Block and brace for concrete. Pour concrete after all equipment has been assembled. Allow 72 hours for concrete to completely cure.

Torque Specifications:

Bolts and nuts - Snug tighten and then tighten an additional one half turn.

UN2019 - PLATFORM-APPROACH STEP

PART NO.	DESCRIPTION	QTY.
AAE5010	KICKPLATE - 7" x 23"	1
AUN1740	POST - 2-3/8" O.D. x 30-3/16" SUPPORT LEG w/PLATE	1
BAE0600	WASHER - 1" O.D. FLAT	24
BAE0620	NUT - 3/8"-16 LOCK w/ NYLON CAP	12
BAE0664	BOLT - 3/8"-16 x 1" BUTTON HEAD - SS	12
BPM0263	PLATFORM- 14" x 24" APPROACH STEP	1

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Assembly View (representative model)

Model	Deck Height	Weight
PM3128	24-30" (610-762 mm)	111 lbs. (50,5 kg)
PM3127	36" (915 mm)	110 lbs. (50 kg)
PM3126	48" (1220 mm)	131.4 lbs. (59,7 kg)
PM2658	60" (1525 mm)	145.7 lbs. (66,2 kg)
PM2696	72" (1830 mm)	161.9 lbs. (73,6 kg)

Installation Instructions

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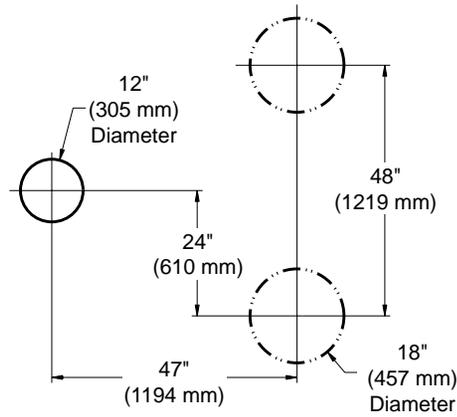
Models PM2658, PM2696, PM3126-PM3128
24"-72" (610-1829 mm) Glide Slides

Installation Preparation

Recommended Crew: Two (2) adults
 Installation Time: 1.5 man-hours
 Weight: refer to the table at left
 Concrete Required: 0.03 cubic yard (0,02 cubic meters)
 Use Zone: Refer to Master Drawing
 User Group Age (years): 24"-60": ASTM/CSA: 2-12, EN: 2-14
 72": ASTM/CSA: 5-12, EN: 6-14

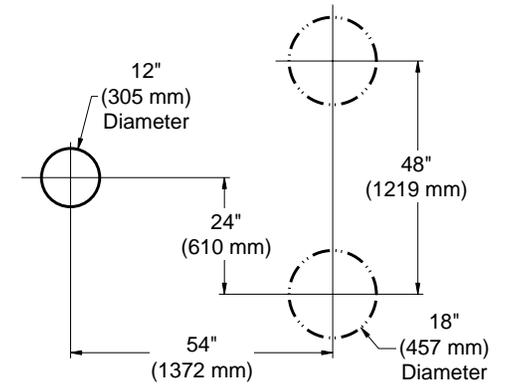
ICON KEY	
	Fully Tighten Hardware
	Add 1 Drop of Thread Locking Adhesive
	Do Not Fully Tighten Hardware
	Pour Concrete
	Drill
	Dig Footing Holes
	Hammer
	Critical Fall Height

Installation Instructions

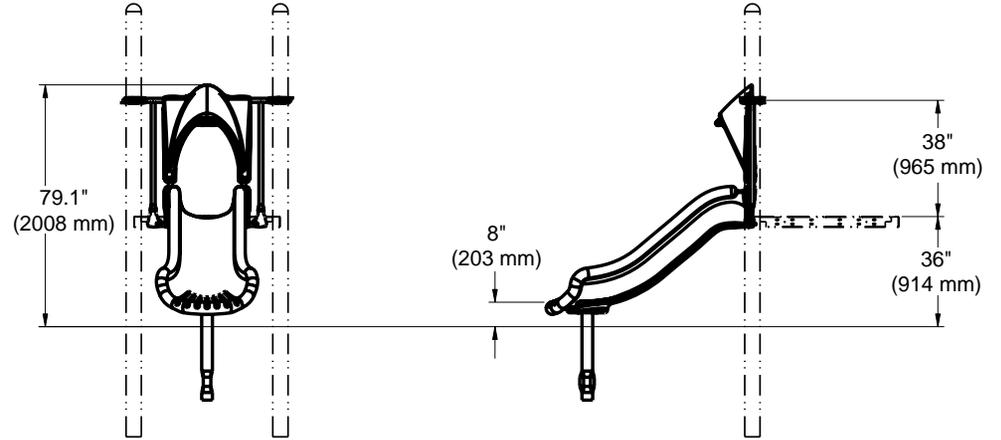
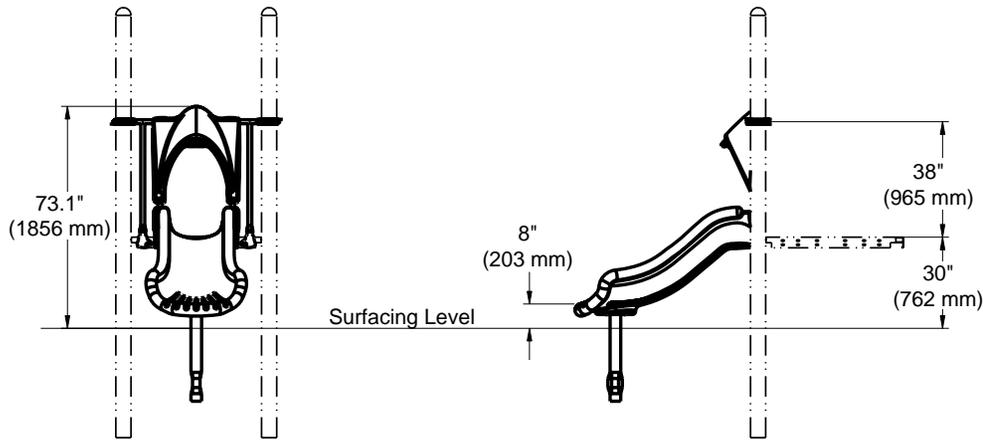
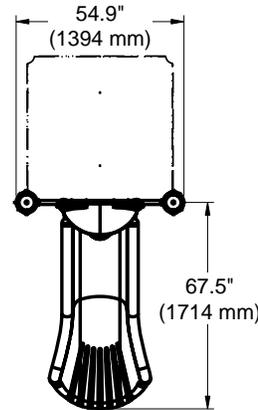
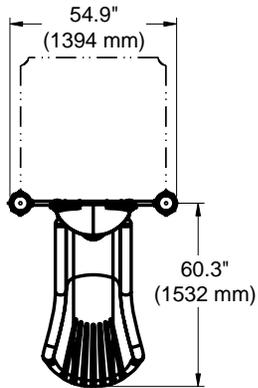


Footing Diagram

If the slide will be connected to a 24" (610 mm) deck, the exit post will need to be footed 6" (152 mm) deeper.



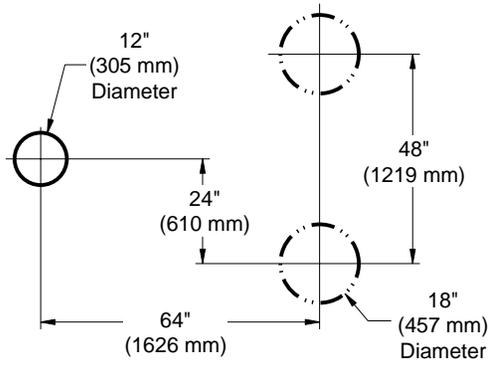
Footing Diagram



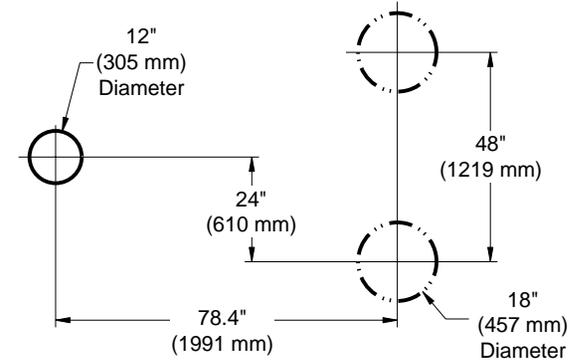
Elevation View PM3128 - 30" Glide Slide
(24" slide: exit will be 2" (50mm) above the surfacing level)

Elevation View PM3127 - 36" Glide Slide

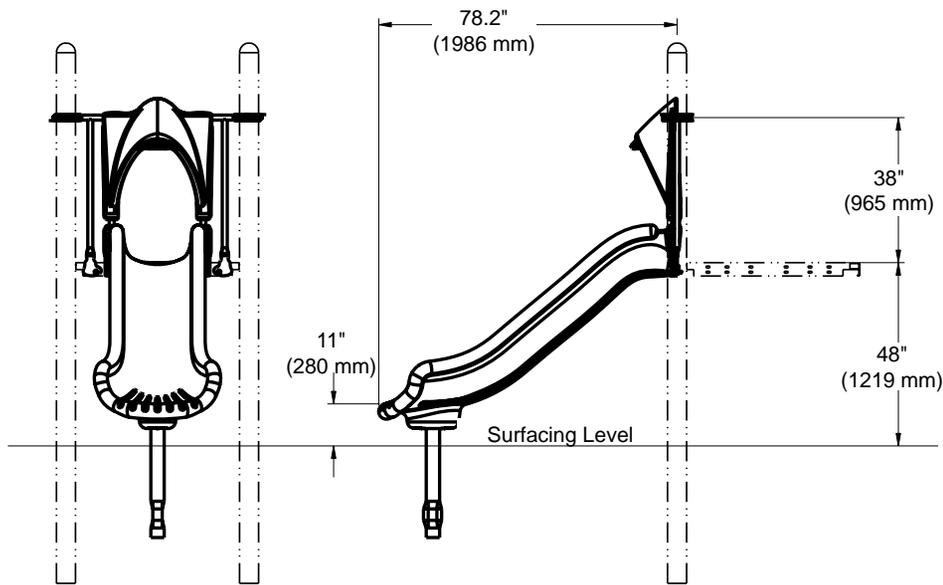
Installation Instructions



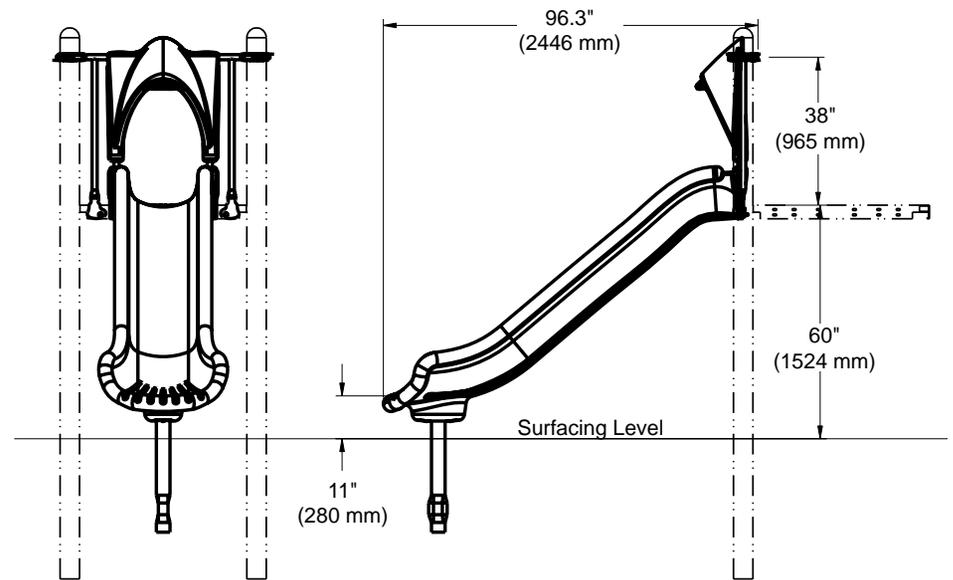
Footring Diagram



Footring Diagram

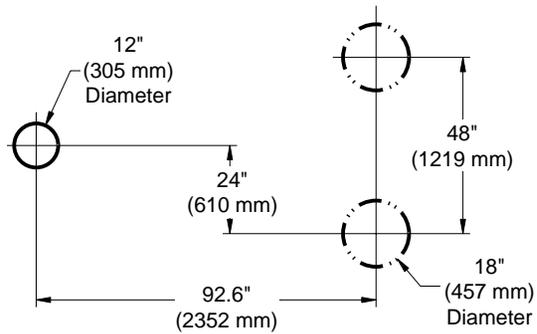


Elevation View PM3126 - 48" Glide Slide

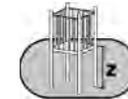


Elevation View PM2658 - 60" Glide Slide

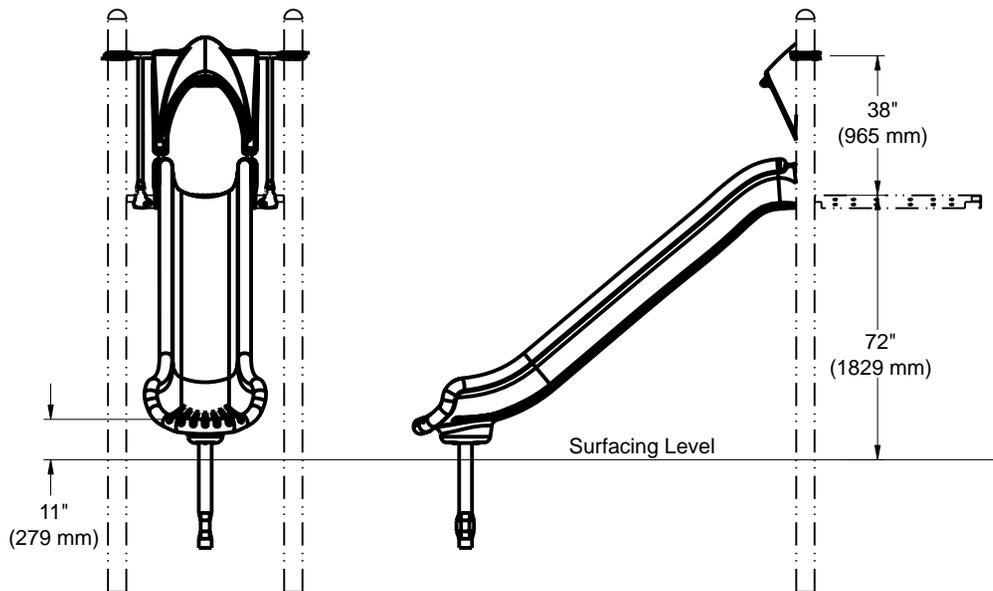
Installation Instructions



Footings Diagram



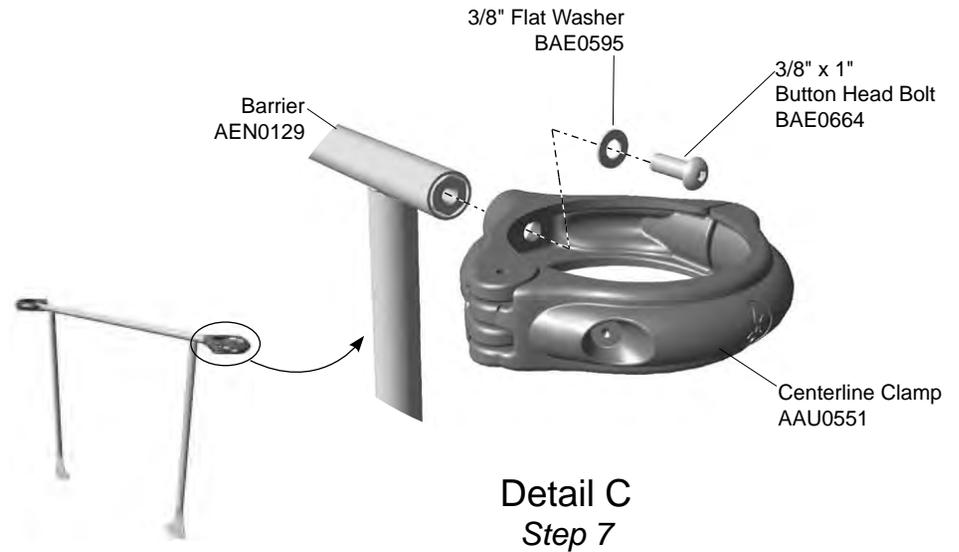
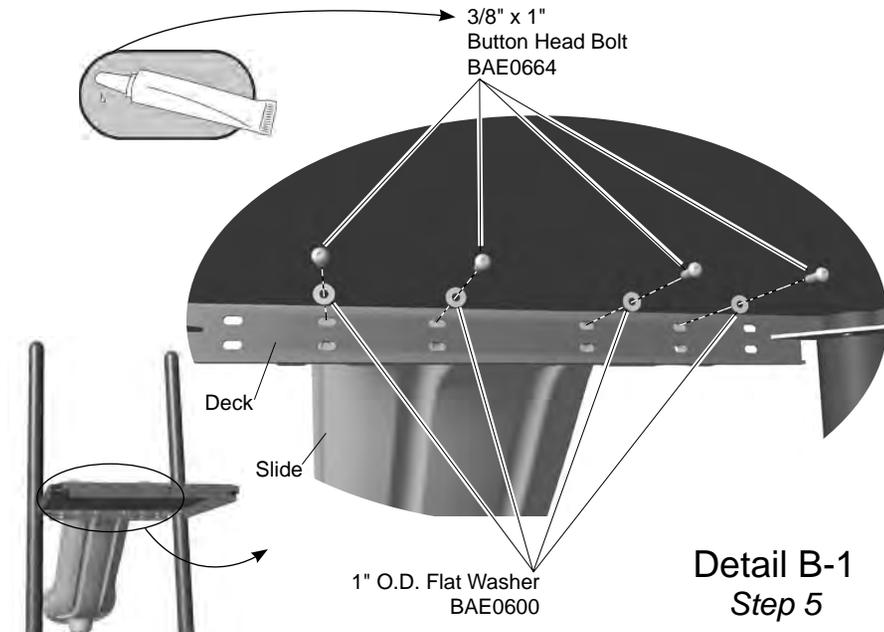
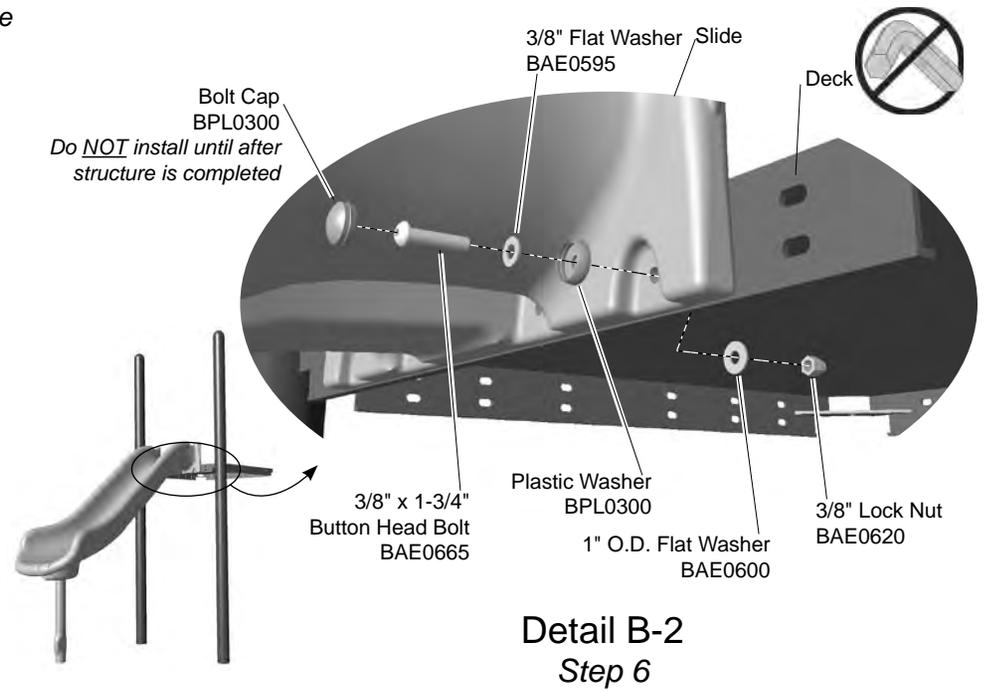
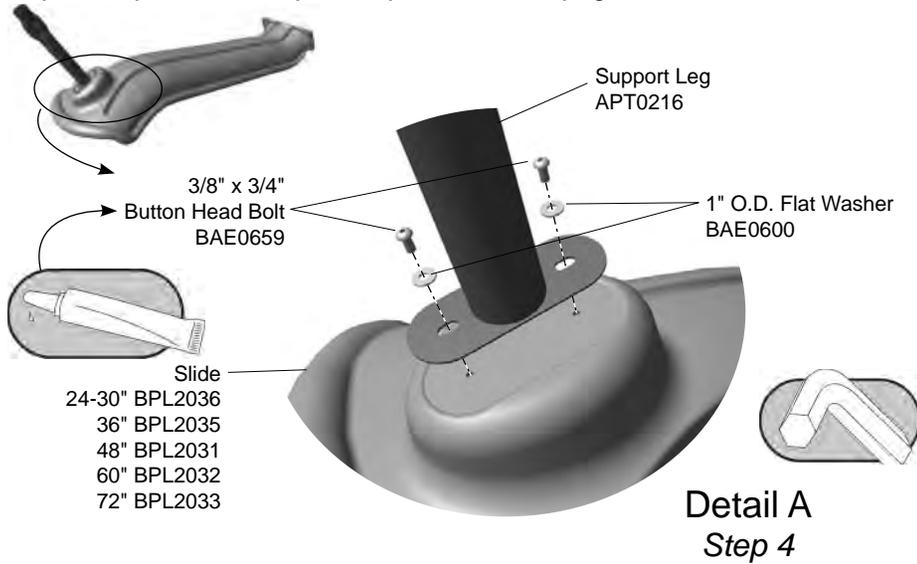
(A) Deck Height	Critical Fall Height (EN)
24-30" (610-762 mm)	610-760 mm
36" (914 mm)	915 mm
48" (1219 mm)	1220 mm
60" (1524 mm)	1525 mm
72" (1829 mm)	1830 mm



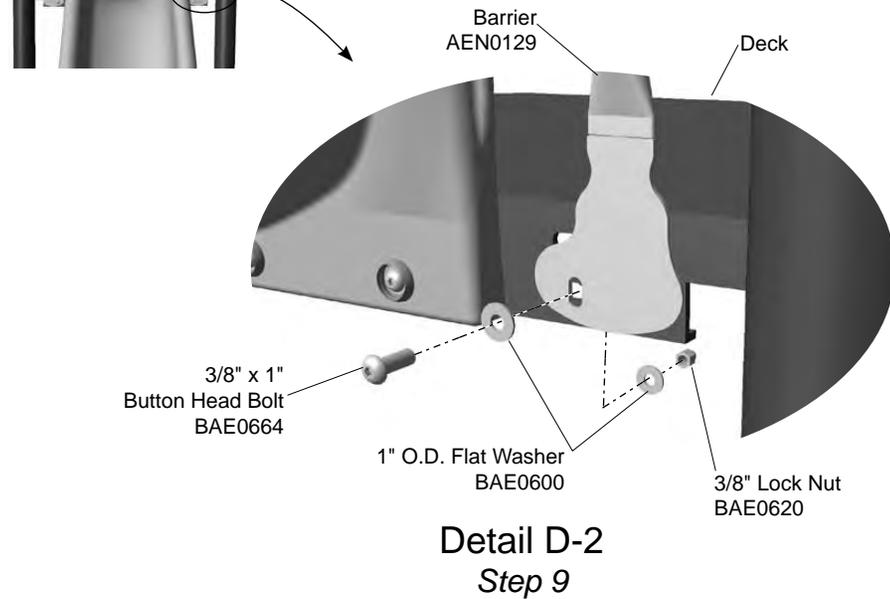
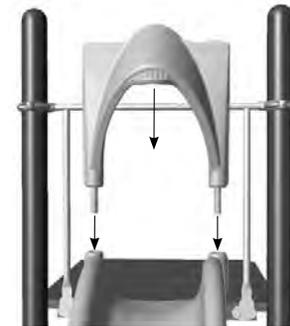
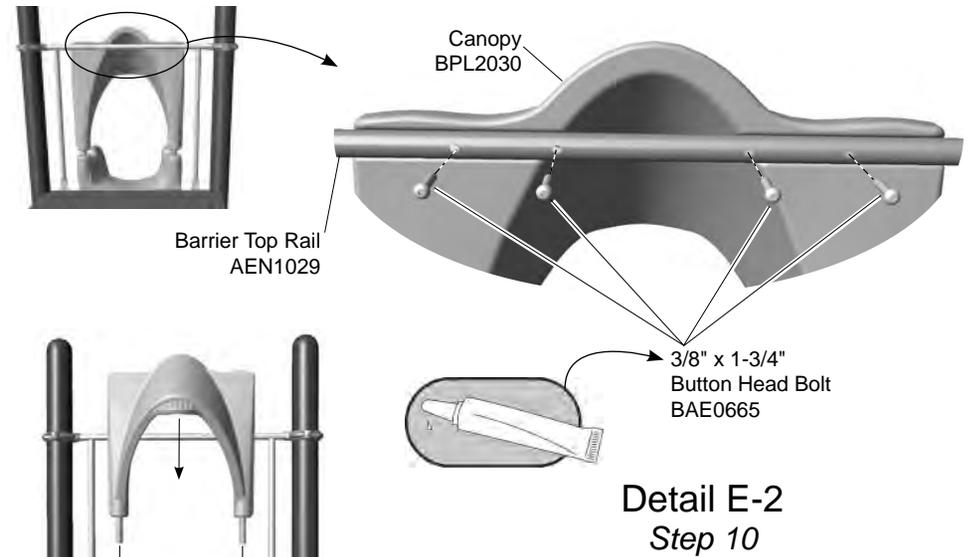
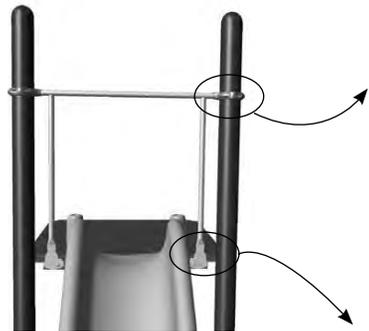
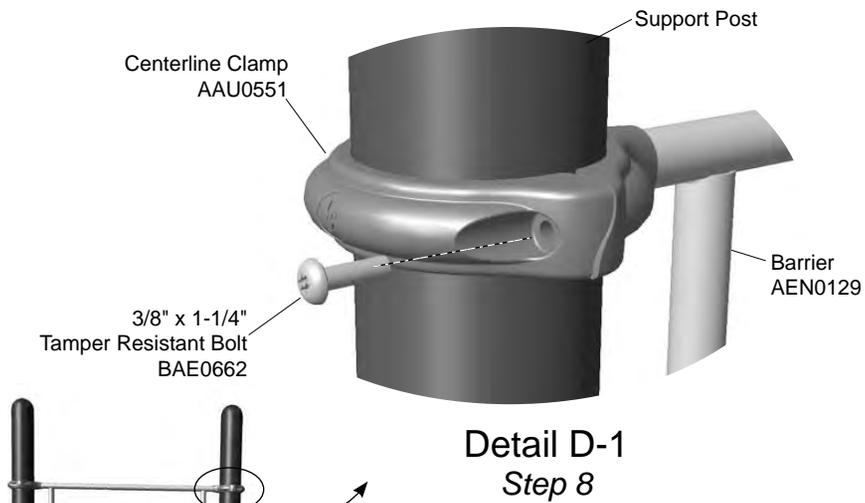
Elevation View PM2696 - 72" Glide Slide

Installation Instructions

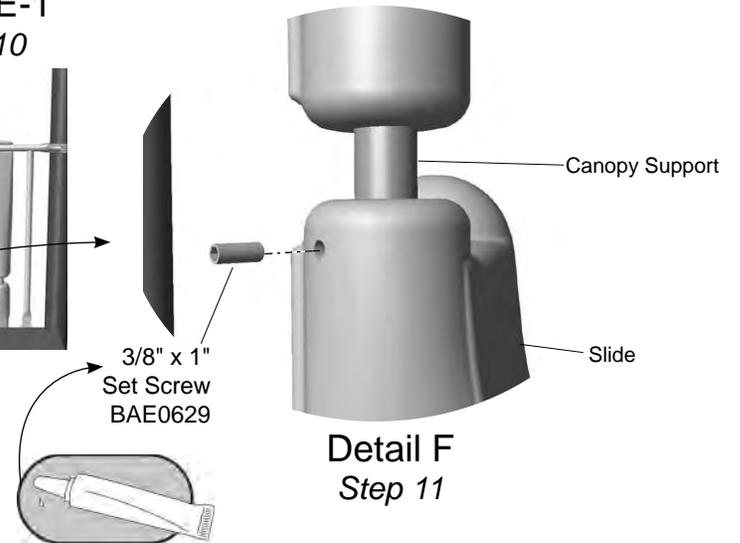
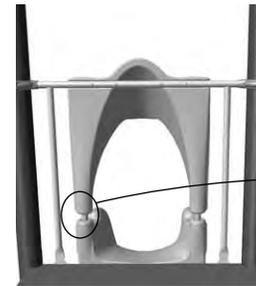
Follow the details in alphabetical order. For clarification, each detail references the step description. The step descriptions start on page 8.



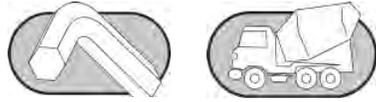
Installation Instructions



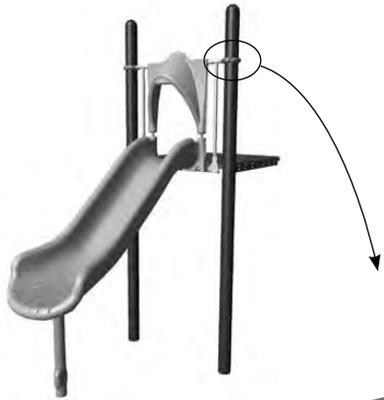
**Detail E-1
Step 10**



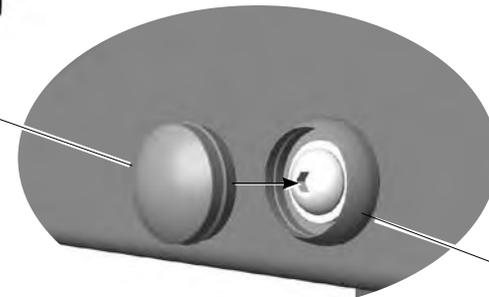
Installation Instructions



Step 12

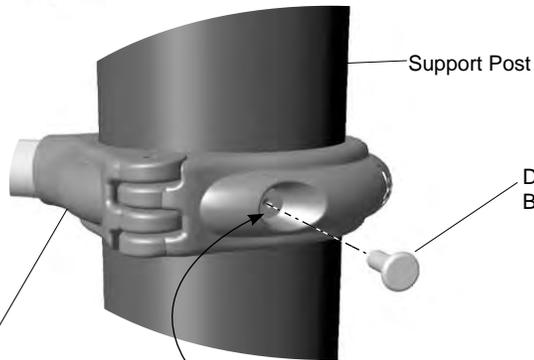


Bolt Cap
BPL0300



Plastic Washer
BPL0300

Detail H
Step 14
(refer to Detail B-2 also)



Support Post

Centerline Clamp
AAU0551

Drive Rivet
BAE0020

Detail G
Step 13



Installation Instructions

__Notes Before You Begin: Do not over tighten bolts during assembly, only snug tighten them until assembly is complete. Do not install bolt caps until the structure is completely assembled and properly footed.

Carefully read and understand these installation instructions before you begin.

__Step 1: Before attempting to assemble your equipment, please review all installation information carefully. Should you experience any difficulty during the installation process, please call us at the phone number shown on the last page of these instructions.

__Step 2: Separate and identify all components and hardware.

__Step 3: Lay out the footings as shown on the structure master footing diagram. Excavate the holes as shown in the **Component Footing Details** in the *Guidelines* at the beginning of this booklet.

Attach the exit support post to the slide.

__Step 4: Attach the exit support post to slide. See **Detail A**. Select the slide, the exit support post and the appropriate hardware. Place the exit support post into the indentation under the slide. Using a drop of loctite on the bolt threads, attach as shown. Fully tighten the connections.

Attach the slide to the deck.

__Step 5: Attach the slide to the deck. See **Detail B-1**. Select the slide and the appropriate hardware. Position the slide against the deck and align holes in the slide with those in the deck. Use an alignment tool through the lower outside holes to hold it in place. Make the *upper* attachments from underneath the deck and using loctite on the bolts. Attach as shown. *The middle of the slide bedway should be flush to, and level with the deck.* Leave connections loose for alignment adjustments.

__Step 6: Make the *lower* attachments to the slide and deck. See **Detail B-2**. Select the appropriate hardware. Make the lower attachments as shown. Leave the connections loose. Do not attach bolt caps until the structure is completely assembled and properly footed.

__Step 7: Connect the clamps to the barrier top rail. See **Detail C**. Select (2) two centerline clamps, the barrier and the appropriate hardware. Place a clamp against each end of the top rail and attach as shown. Turn the clamps so that the hinges are on the same side and fully tighten the connections.

__Step 8: Attach the barrier to the posts. See **Detail D-1**. Select the barrier and appropriate hardware. Position the barrier between the posts and close the clamps around the posts. Thread a bolt into each clamp as shown. Leave the connections loose.

__Step 9: Attach the bottom of the barrier to the deck. See **Detail D-2**. Select the appropriate hardware. Attach as shown using either set of holes in the deck. The lower holes are the preferred location, but use whichever suits the location of the adjacent clamps.

Secure the canopy to the slide.

__Step 10: Position and attach the canopy. See **Details E-1 and E-2**. Select the slide canopy and the appropriate hardware. Place the canopy above the slide and slide the canopy supports into the sockets in the slide until fully seated. The top rail should fit into the indentation in the back of the canopy. Using loctite on the bolts, attach the barrier to the canopy as shown. If there is a clamp conflict the barrier can be moved up to 40" (1016 mm).

__Step 11: Secure the lower canopy supports to the slide. See **Detail F**. Select (2) two 3/8" x 1" set screws. Apply a drop of loctite to the screw threads and thread each screw into the slide until the screw is tight against the canopy supports.

Note: It may be necessary to use a 3/8" -16 tap to clean excess plastic to allow the screw to contact the canopy support.

Final Details.

__Step 12: Plumb and level the entire slide. Tighten **all** fasteners keeping all the joints flush and even. Fully tighten all fasteners according to tightening torque specifications. Block and brace for concrete. Pour concrete after all equipment has been assembled. Allow 72 hours for concrete to completely cure. Adjust the exit height of the slide so it will not hold water. See **Elevation View**.

24" - 48" Slides: The slide height can be adjusted to avoid retaining water but can be no greater than 11 in. (279 mm) from the protective surfacing.

60" - 72" Slides: The slide height can be adjusted to avoid retaining water but can be no less than 7 in. (178 mm) and no greater than 15 in. (381 mm) from the protective surfacing.

Torque specifications :

Nuts and Bolts: Snug tighten and tighten an additional one-half turn.

Set Screws: Snug tighten and tighten an additional turn.

Installation Instructions

__ **Step 13:** Install drive rivets. See **Detail G**. After the equipment assembly is complete, install a drive rivet in each clamp to permanently secure it to the support post. Using a 1/4" drill bit, drill through the clamp and support post. Insert the drive rivet into drilled hole until the head of the rivet is against the surface of the clamp. Using a hammer, pound the pin of the rivet until it is flush with the surface of the rivet head.

Note: This step should be executed after structure has been assembled and properly footed.

__ **Step 14:** Select the plastic bolt caps and press into the plastic washers. See **Details B-2 and H**. The bolt caps install more easily when they are warm.

__ **Step 15:** Apply the hood string entanglement warning label to the equipment at eye level.

PM2658 - 60 in. (1524 mm) GLIDE SLIDE

PART NO.	DESCRIPTION	QTY.
AAU0551	CLAMP - 5" CENTERLINE DIE CAST	2
AEN0129	BARRIER - 1.315" O.D. x 41.00" x 42.10"	1
APT0216	POST - 3-1/2" O.D. x 28-3/4" EXIT SUPPORT	1
BAD0085	THREAD LOCKING ADHESIVE	1
BAE0020	RIVET - 1/4" x 11/16" DRIVE	2
BAE0595	WASHER - 3/8" SAE FLAT	6
BAE0600	WASHER - 1" O.D. FLAT	14
BAE0620	NUT - 3/8"-16 LOCK w/NYLON CAP	6
BAE0629	SCREW - 3/8"-16 x 1" SOCKET SET SS	2
BAE0659	BOLT - 3/8"-16 x 3/4" BUTTON HEAD - SS	2
BAE0662	BOLT - 3/8"-16 x 1-1/4" TPR RESIST w/TORX DRIVE	2
BAE0664	BOLT - 3/8"-16 x 1" BUTTON HEAD - SS	8
BAE0665	BOLT - 3/8"-16 x 1-3/4" BUTTON HEAD - SS	8
BPL0300	CAP - 3/8" BOLT	4
BPL2030	CANOPY - SINGLE GLIDE SLIDE	1
BPL2032	SLIDE - 60" SINGLE GLIDE	1
ALB0030	LABEL-HOOD STRING ENTNGLMNT WRNG LABEL	1

PM2696 - 72 in. (1829 mm) GLIDE SLIDE

PART NO.	DESCRIPTION	QTY.
AAU0551	CLAMP - 5" CENTERLINE DIE CAST	2
AEN0129	BARRIER - 1.315" O.D. x 41.00" x 42.10"	1
APT0216	POST - 3-1/2" O.D. x 28-3/4" EXIT SUPPORT	1
BAD0085	THREAD LOCKING ADHESIVE	1
BAE0020	RIVET - 1/4" x 11/16" DRIVE	2
BAE0595	WASHER - 3/8" SAE FLAT	6
BAE0600	WASHER - 1" O.D. FLAT	14
BAE0620	NUT - 3/8"-16 LOCK w/NYLON CAP	6
BAE0629	SCREW - 3/8"-16 x 1" SOCKET SET SS	2
BAE0659	BOLT - 3/8"-16 x 3/4" BUTTON HEAD - SS	2
BAE0662	BOLT - 3/8"-16 x 1-1/4" TPR RESIST w/TORX DRIVE	2
BAE0664	BOLT - 3/8"-16 x 1" BUTTON HEAD - SS	8
BAE0665	BOLT - 3/8"-16 x 1-3/4" BUTTON HEAD - SS	8
BPL0300	CAP - 3/8" BOLT	4
BPL2030	CANOPY - SINGLE GLIDE SLIDE	1
BPL2033	SLIDE - 72" SINGLE GLIDE	1
ALB0030	LABEL-HOOD STRING ENTNGLMNT WRNG LABEL	1

PM3126 - 48 in. (1219 mm) GLIDE SLIDE

PART NO.	DESCRIPTION	QTY.
AAU0551	CLAMP - 5" CENTERLINE DIE CAST	2
AEN0129	BARRIER - 1.315" O.D. x 41.00" x 42.10"	1
APT0216	POST - 3-1/2" O.D. x 28-3/4" EXIT SUPPORT	1
BAD0085	THREAD LOCKING ADHESIVE	1
BAE0020	RIVET - 1/4" x 11/16" DRIVE	2
BAE0595	WASHER - 3/8" SAE FLAT	6
BAE0600	WASHER - 1" O.D. FLAT	14
BAE0620	NUT - 3/8"-16 LOCK w/NYLON CAP	6
BAE0629	SCREW - 3/8"-16 x 1" SOCKET SET SS	2
BAE0659	BOLT - 3/8"-16 x 3/4" BUTTON HEAD - SS	2
BAE0662	BOLT - 3/8"-16 x 1-1/4" TPR RESIST w/TORX DRIVE	2
BAE0664	BOLT - 3/8"-16 x 1" BUTTON HEAD - SS	8
BAE0665	BOLT - 3/8"-16 x 1-3/4" BUTTON HEAD - SS	8
BPL0300	CAP - 3/8" BOLT	4
BPL2030	CANOPY - SINGLE GLIDE SLIDE	1
BPL2031	SLIDE - 48" SINGLE GLIDE	1
ALB0030	LABEL-HOOD STRING ENTNGLMNT WRNG LABEL	1

PM3127 - 36 in. (914 mm) GLIDE SLIDE

PART NO.	DESCRIPTION	QTY.
AAU0551	CLAMP - 5" CENTERLINE DIE CAST	2
AEN0129	BARRIER - 1.315" O.D. x 41.00" x 42.10"	1
APT0216	POST - 3-1/2" O.D. x 28-3/4" EXIT SUPPORT	1
BAD0085	THREAD LOCKING ADHESIVE	1
BAE0020	RIVET - 1/4" x 11/16" DRIVE	2
BAE0595	WASHER - 3/8" SAE FLAT	6
BAE0600	WASHER - 1" O.D. FLAT	14
BAE0620	NUT - 3/8"-16 LOCK w/NYLON CAP	6
BAE0629	SCREW - 3/8"-16 x 1" SOCKET SET SS	2
BAE0659	BOLT - 3/8"-16 x 3/4" BUTTON HEAD - SS	2
BAE0662	BOLT - 3/8"-16 x 1-1/4" TPR RESIST w/TORX DRIVE	2
BAE0664	BOLT - 3/8"-16 x 1" BUTTON HEAD - SS	8
BAE0665	BOLT - 3/8"-16 x 1-3/4" BUTTON HEAD - SS	8
BPL0300	CAP - 3/8" BOLT	4
BPL2030	CANOPY - SINGLE GLIDE SLIDE	1
BPL2035	SLIDE - 36" SINGLE GLIDE	1
ALB0030	LABEL-HOOD STRING ENTNGLMNT WRNG LABEL	1



PM3128 - 24-30 in. (610-762 mm) GLIDE SLIDE

PART NO.	DESCRIPTION	QTY.
AAU0551	CLAMP - 5" CENTERLINE DIE CAST	2
AEN0129	BARRIER - 1.315" O.D. x 41.00" x 42.10"	1
APT0216	POST - 3-1/2" O.D. x 28-3/4" EXIT SUPPORT	1
BAD0085	THREAD LOCKING ADHESIVE	1
BAE0020	RIVET - 1/4" x 11/16" DRIVE	2
BAE0595	WASHER - 3/8" SAE FLAT	6
BAE0600	WASHER - 1" O.D. FLAT	14
BAE0620	NUT - 3/8"-16 LOCK w/NYLON CAP	6
BAE0629	SCREW - 3/8"-16 x 1" SOCKET SET SS	2
BAE0659	BOLT - 3/8"-16 x 3/4" BUTTON HEAD - SS	2
BAE0662	BOLT - 3/8"-16 x 1-1/4" TPR RESIST w/TORX DRIVE	2
BAE0664	BOLT - 3/8"-16 x 1" BUTTON HEAD - SS	8
BAE0665	BOLT - 3/8"-16 x 1-3/4" BUTTON HEAD - SS	8
BPL0300	CAP - 3/8" BOLT	4
BPL2030	CANOPY - SINGLE GLIDE SLIDE	1
BPL2036	SLIDE - 30"/24" SINGLE GLIDE	1
ALB0030	LABEL-HOOD STRING ENTNGLMNT WRNG LABEL	1

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Assembly View (representative model)

Model	Deck Height	Weight
PM3128	24-30" (610-762 mm)	111 lbs. (50,5 kg)
PM3127	36" (915 mm)	110 lbs. (50 kg)
PM3126	48" (1220 mm)	131.4 lbs. (59,7 kg)
PM2658	60" (1525 mm)	145.7 lbs. (66,2 kg)
PM2696	72" (1830 mm)	161.9 lbs. (73,6 kg)

Installation Instructions

Playmakers®

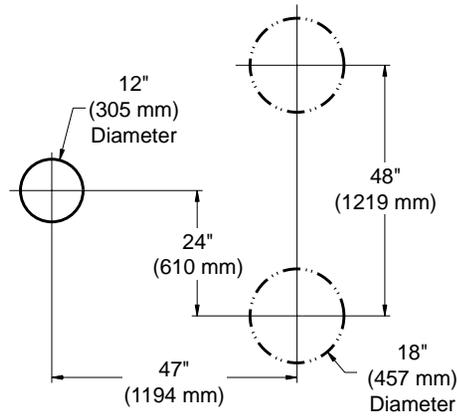
Models PM2658, PM2696, PM3126-PM3128
24"-72" (610-1829 mm) Glide Slides

Installation Preparation

Recommended Crew: Two (2) adults
 Installation Time: 1.5 man-hours
 Weight: refer to the table at left
 Concrete Required: 0.03 cubic yard (0,02 cubic meters)
 Use Zone: Refer to Master Drawing
 User Group Age (years): 24"-60": ASTM/CSA: 2-12, EN: 2-14
 72": ASTM/CSA: 5-12, EN: 6-14

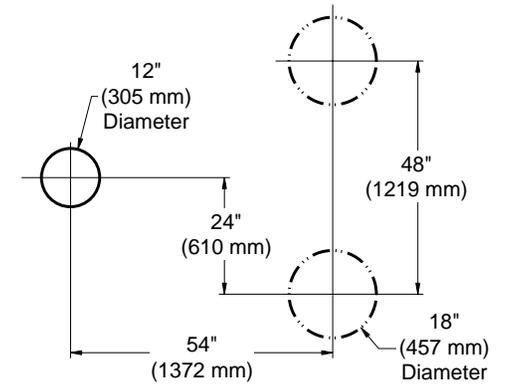
ICON KEY	
	Fully Tighten Hardware
	Do Not Fully Tighten Hardware
	Add 1 Drop of Thread Locking Adhesive
	Pour Concrete
	Drill
	Dig Footing Holes
	Hammer
	Critical Fall Height

Installation Instructions

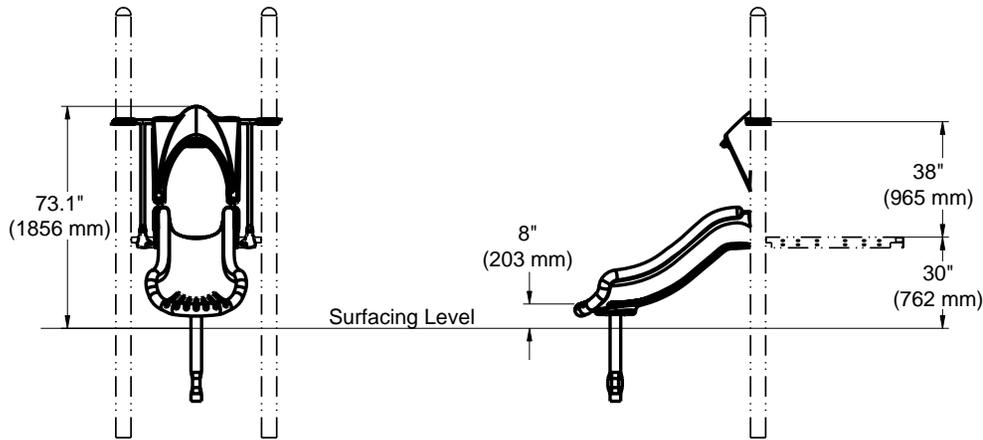
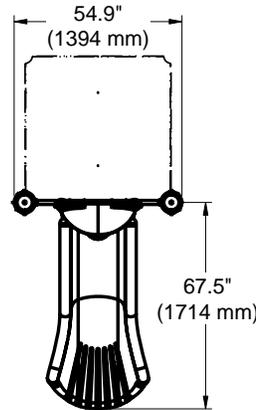
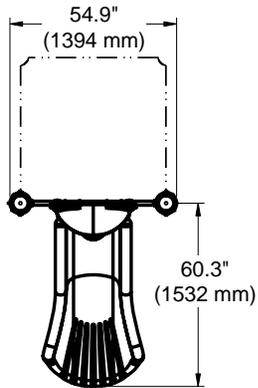


Footing Diagram

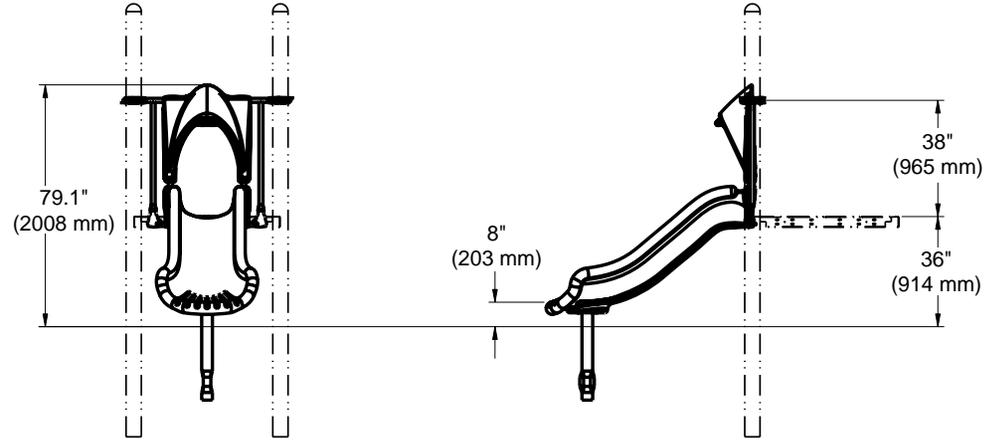
If the slide will be connected to a 24" (610 mm) deck, the exit post will need to be footed 6" (152 mm) deeper.



Footing Diagram

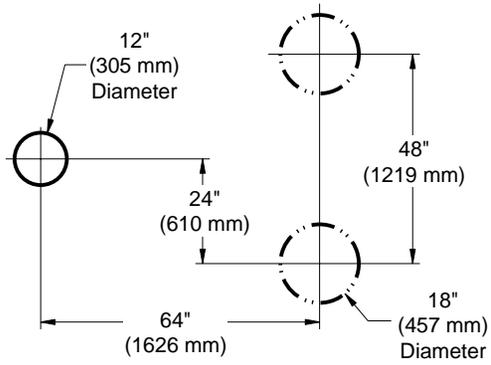


Elevation View PM3128 - 30" Glide Slide
(24" slide: exit will be 2" (50mm) above the surfacing level)

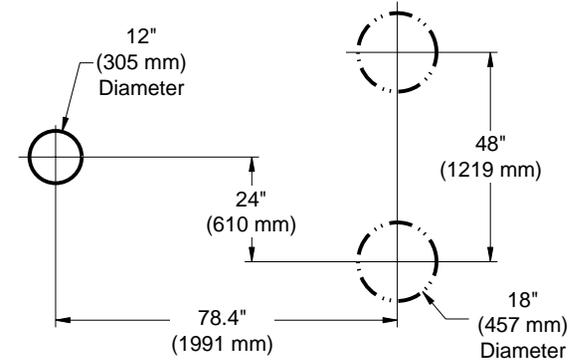


Elevation View PM3127 - 36" Glide Slide

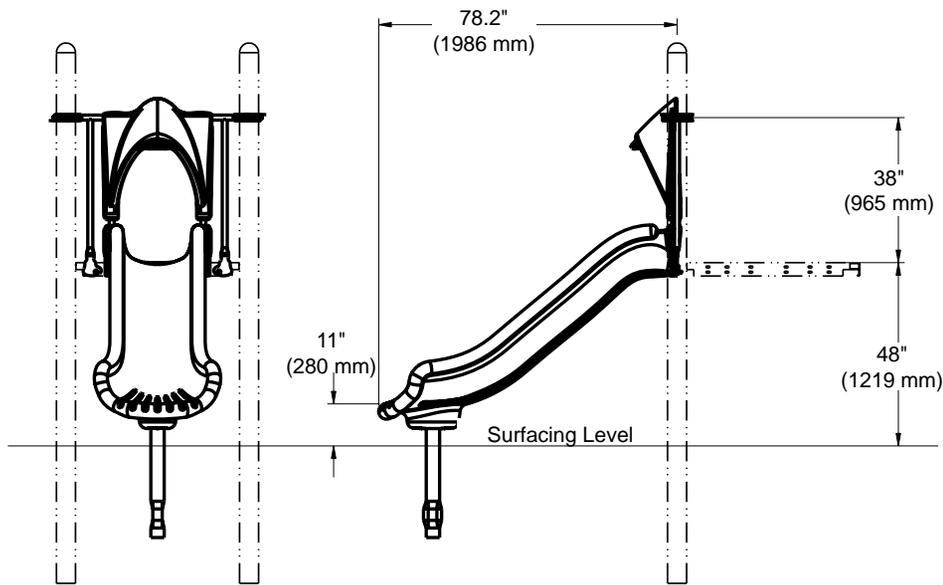
Installation Instructions



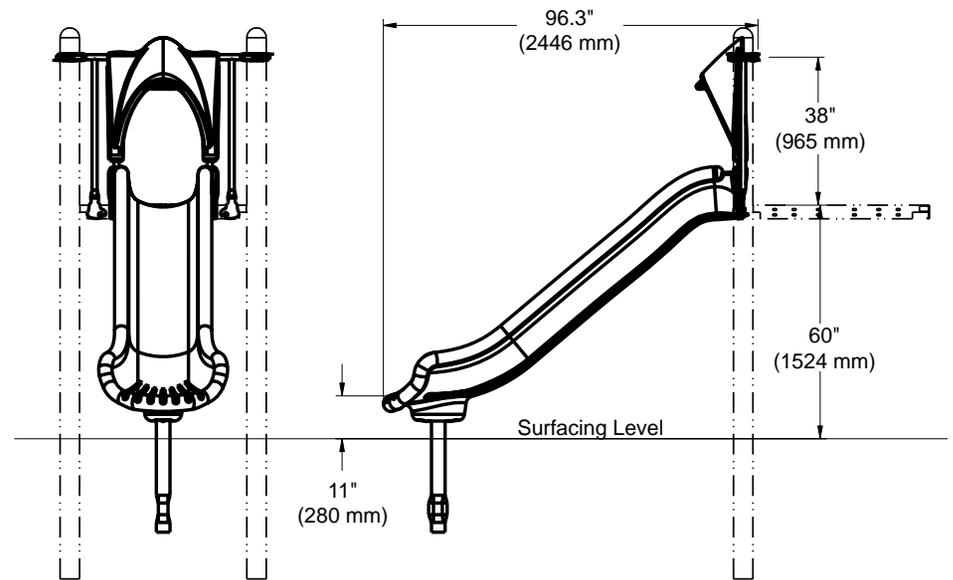
Footring Diagram



Footring Diagram

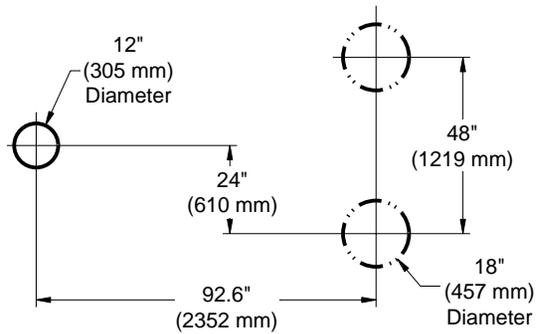


Elevation View PM3126 - 48" Glide Slide

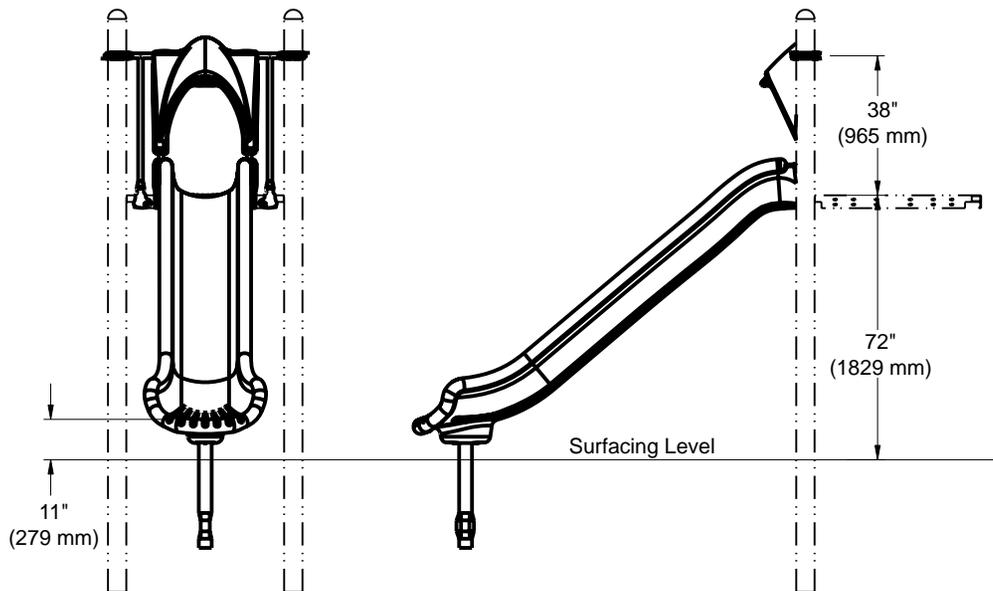
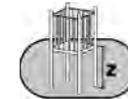


Elevation View PM2658 - 60" Glide Slide

Installation Instructions



Footings Diagram

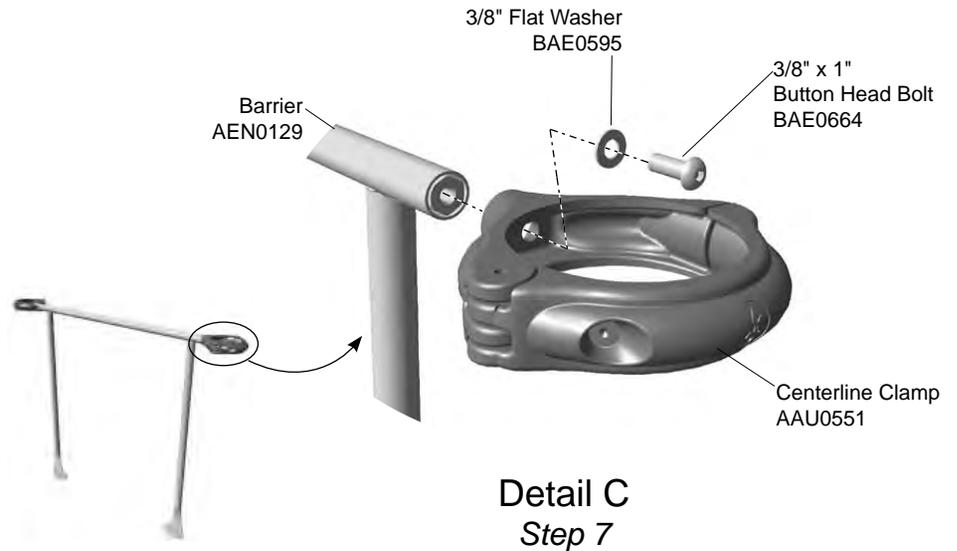
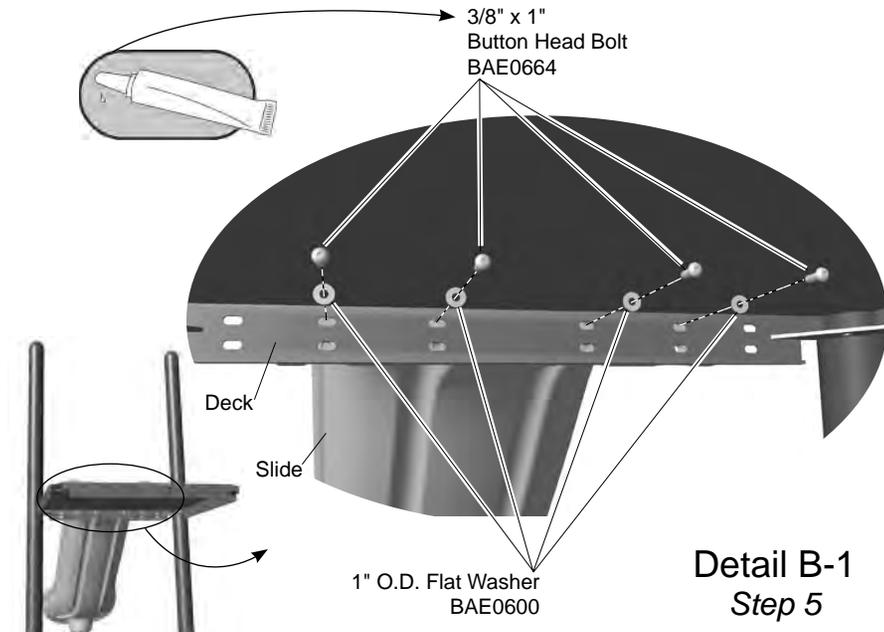
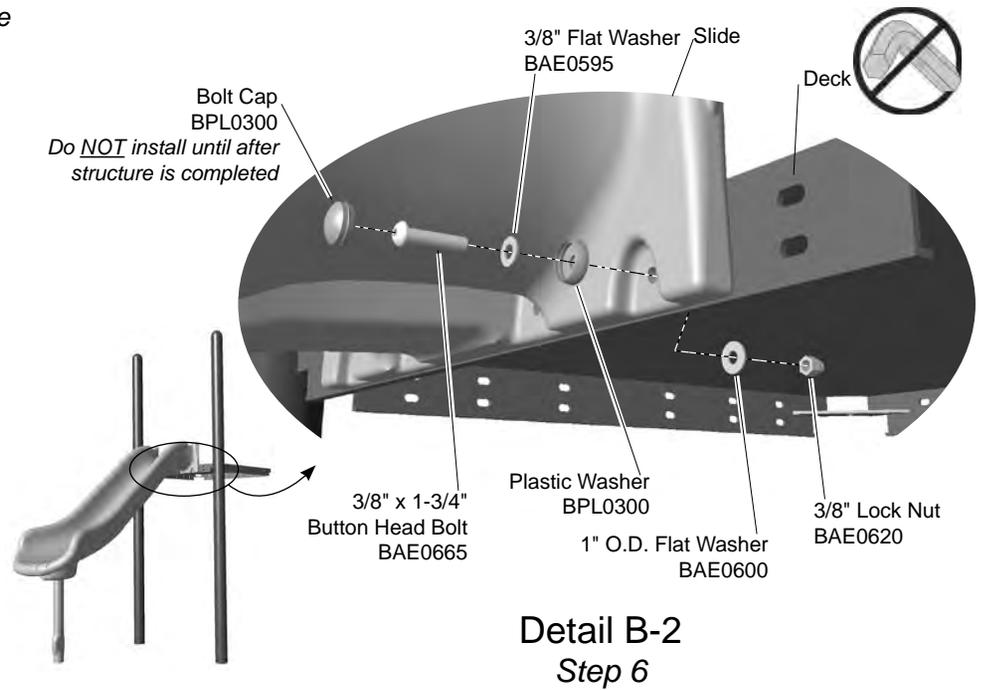
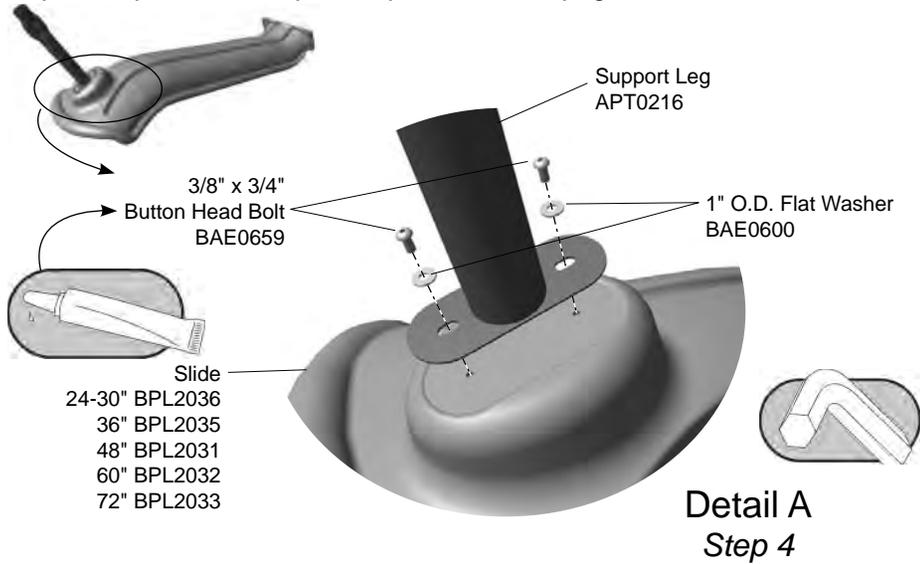


Elevation View PM2696 - 72" Glide Slide

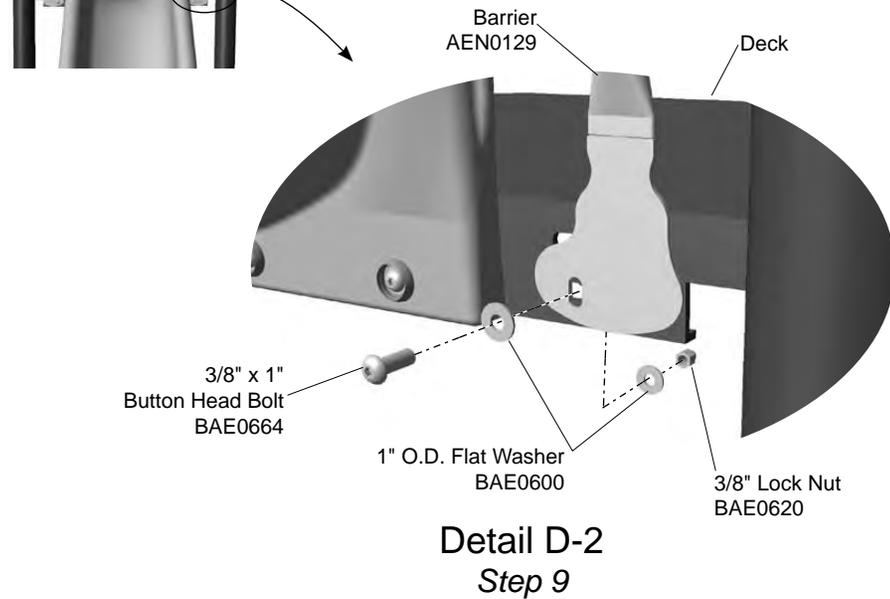
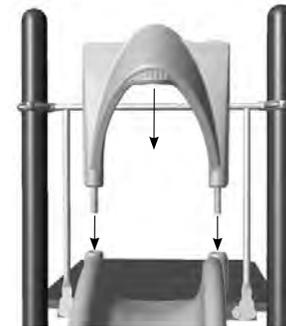
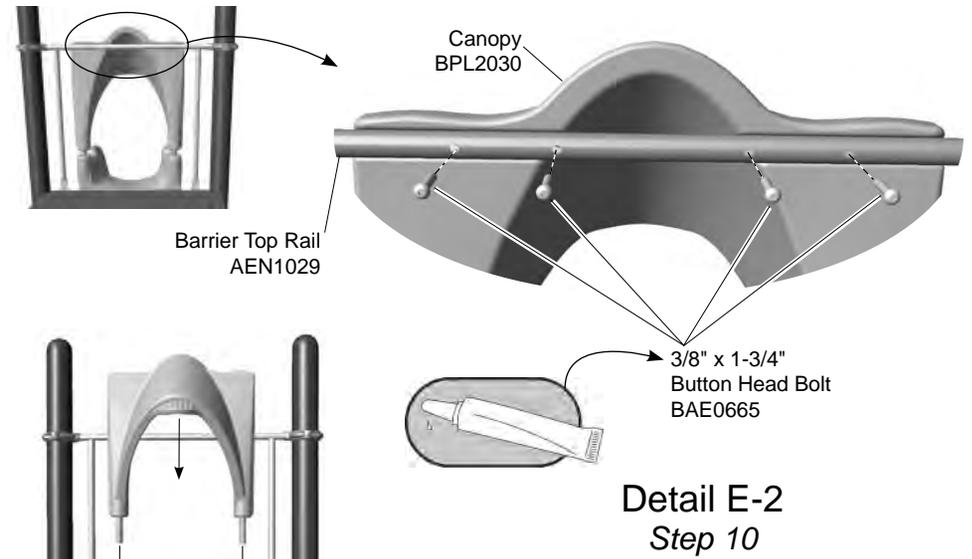
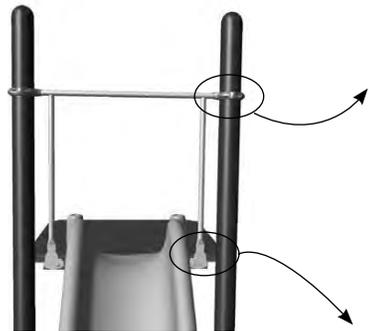
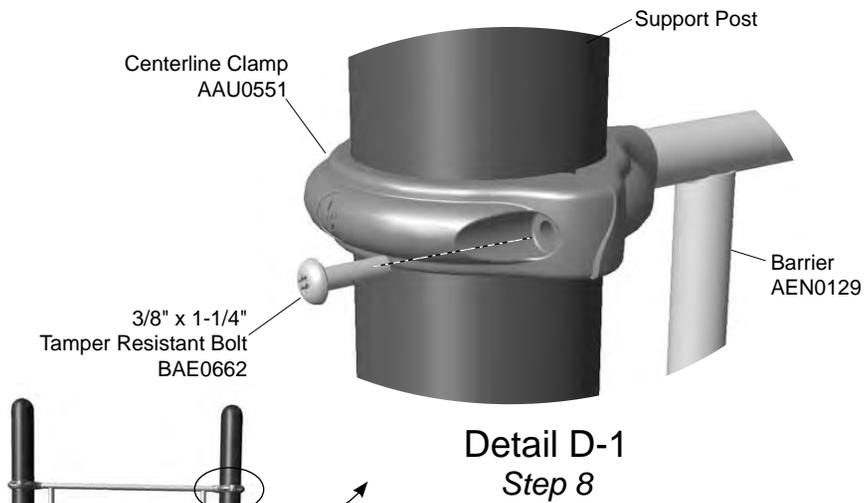
(A) Deck Height	Critical Fall Height (EN)
24-30" (610-762 mm)	610-760 mm
36" (914 mm)	915 mm
48" (1219 mm)	1220 mm
60" (1524 mm)	1525 mm
72" (1829 mm)	1830 mm

Installation Instructions

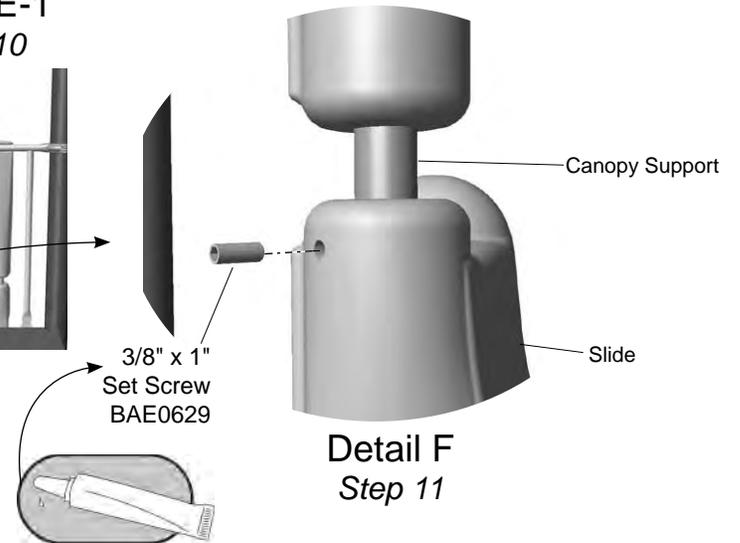
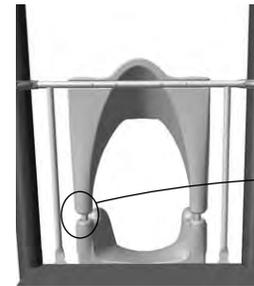
Follow the details in alphabetical order. For clarification, each detail references the step description. The step descriptions start on page 8.



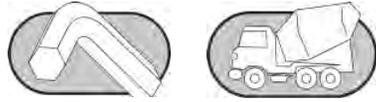
Installation Instructions



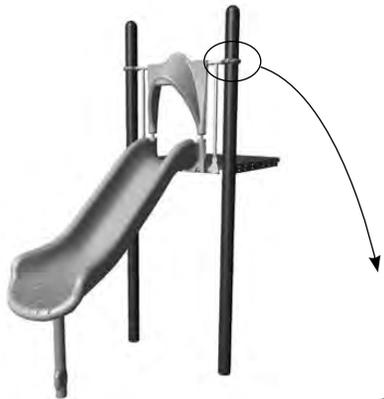
**Detail E-1
Step 10**



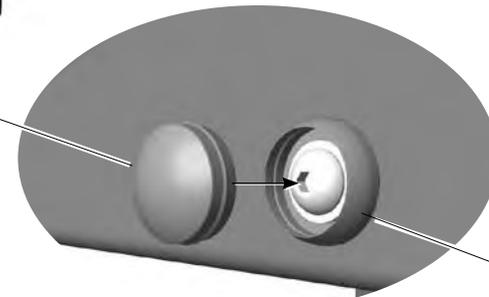
Installation Instructions



Step 12

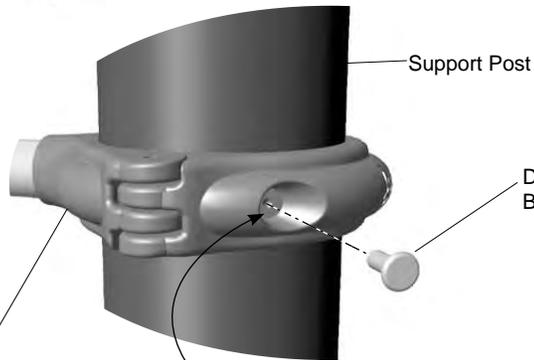


Bolt Cap
BPL0300



Plastic Washer
BPL0300

Detail H
Step 14
(refer to Detail B-2 also)



Support Post

Drive Rivet
BAE0020

Centerline Clamp
AAU0551

Detail G
Step 13

Installation Instructions

__Notes Before You Begin: Do not over tighten bolts during assembly, only snug tighten them until assembly is complete. Do not install bolt caps until the structure is completely assembled and properly footed.

Carefully read and understand these installation instructions before you begin.

__Step 1: Before attempting to assemble your equipment, please review all installation information carefully. Should you experience any difficulty during the installation process, please call us at the phone number shown on the last page of these instructions.

__Step 2: Separate and identify all components and hardware.

__Step 3: Lay out the footings as shown on the structure master footing diagram. Excavate the holes as shown in the **Component Footing Details** in the *Guidelines* at the beginning of this booklet.

Attach the exit support post to the slide.

__Step 4: Attach the exit support post to slide. See **Detail A**. Select the slide, the exit support post and the appropriate hardware. Place the exit support post into the indentation under the slide. Using a drop of loctite on the bolt threads, attach as shown. Fully tighten the connections.

Attach the slide to the deck.

__Step 5: Attach the slide to the deck. See **Detail B-1**. Select the slide and the appropriate hardware. Position the slide against the deck and align holes in the slide with those in the deck. Use an alignment tool through the lower outside holes to hold it in place. Make the *upper* attachments from underneath the deck and using loctite on the bolts. Attach as shown. *The middle of the slide bedway should be flush to, and level with the deck.* Leave connections loose for alignment adjustments.

__Step 6: Make the *lower* attachments to the slide and deck. See **Detail B-2**. Select the appropriate hardware. Make the lower attachments as shown. Leave the connections loose. Do not attach bolt caps until the structure is completely assembled and properly footed.

__Step 7: Connect the clamps to the barrier top rail. See **Detail C**. Select (2) two centerline clamps, the barrier and the appropriate hardware. Place a clamp against each end of the top rail and attach as shown. Turn the clamps so that the hinges are on the same side and fully tighten the connections.

__Step 8: Attach the barrier to the posts. See **Detail D-1**. Select the barrier and appropriate hardware. Position the barrier between the posts and close the clamps around the posts. Thread a bolt into each clamp as shown. Leave the connections loose.

__Step 9: Attach the bottom of the barrier to the deck. See **Detail D-2**. Select the appropriate hardware. Attach as shown using either set of holes in the deck. The lower holes are the preferred location, but use whichever suits the location of the adjacent clamps.

Secure the canopy to the slide.

__Step 10: Position and attach the canopy. See **Details E-1 and E-2**. Select the slide canopy and the appropriate hardware. Place the canopy above the slide and slide the canopy supports into the sockets in the slide until fully seated. The top rail should fit into the indentation in the back of the canopy. Using loctite on the bolts, attach the barrier to the canopy as shown. If there is a clamp conflict the barrier can be moved up to 40" (1016 mm).

__Step 11: Secure the lower canopy supports to the slide. See **Detail F**. Select (2) two 3/8" x 1" set screws. Apply a drop of loctite to the screw threads and thread each screw into the slide until the screw is tight against the canopy supports.

Note: It may be necessary to use a 3/8" -16 tap to clean excess plastic to allow the screw to contact the canopy support.

Final Details.

__Step 12: Plumb and level the entire slide. Tighten **all** fasteners keeping all the joints flush and even. Fully tighten all fasteners according to tightening torque specifications. Block and brace for concrete. Pour concrete after all equipment has been assembled. Allow 72 hours for concrete to completely cure. Adjust the exit height of the slide so it will not hold water. See **Elevation View**.

24" - 48" Slides: The slide height can be adjusted to avoid retaining water but can be no greater than 11 in. (279 mm) from the protective surfacing.

60" - 72" Slides: The slide height can be adjusted to avoid retaining water but can be no less than 7 in. (178 mm) and no greater than 15 in. (381 mm) from the protective surfacing.

Torque specifications :

Nuts and Bolts: Snug tighten and tighten an additional one-half turn.

Set Screws: Snug tighten and tighten an additional turn.

Installation Instructions

__ **Step 13:** Install drive rivets. See **Detail G**. After the equipment assembly is complete, install a drive rivet in each clamp to permanently secure it to the support post. Using a 1/4" drill bit, drill through the clamp and support post. Insert the drive rivet into drilled hole until the head of the rivet is against the surface of the clamp. Using a hammer, pound the pin of the rivet until it is flush with the surface of the rivet head.

Note: This step should be executed after structure has been assembled and properly footed.

__ **Step 14:** Select the plastic bolt caps and press into the plastic washers. See **Details B-2 and H**. The bolt caps install more easily when they are warm.

__ **Step 15:** Apply the hood string entanglement warning label to the equipment at eye level.

PM2658 - 60 in. (1524 mm) GLIDE SLIDE

PART NO.	DESCRIPTION	QTY.
AAU0551	CLAMP - 5" CENTERLINE DIE CAST	2
AEN0129	BARRIER - 1.315" O.D. x 41.00" x 42.10"	1
APT0216	POST - 3-1/2" O.D. x 28-3/4" EXIT SUPPORT	1
BAD0085	THREAD LOCKING ADHESIVE	1
BAE0020	RIVET - 1/4" x 11/16" DRIVE	2
BAE0595	WASHER - 3/8" SAE FLAT	6
BAE0600	WASHER - 1" O.D. FLAT	14
BAE0620	NUT - 3/8"-16 LOCK w/NYLON CAP	6
BAE0629	SCREW - 3/8"-16 x 1" SOCKET SET SS	2
BAE0659	BOLT - 3/8"-16 x 3/4" BUTTON HEAD - SS	2
BAE0662	BOLT - 3/8"-16 x 1-1/4" TPR RESIST w/TORX DRIVE	2
BAE0664	BOLT - 3/8"-16 x 1" BUTTON HEAD - SS	8
BAE0665	BOLT - 3/8"-16 x 1-3/4" BUTTON HEAD - SS	8
BPL0300	CAP - 3/8" BOLT	4
BPL2030	CANOPY - SINGLE GLIDE SLIDE	1
BPL2032	SLIDE - 60" SINGLE GLIDE	1
ALB0030	LABEL-HOOD STRING ENTNGLMNT WRNG LABEL	1

PM2696 - 72 in. (1829 mm) GLIDE SLIDE

PART NO.	DESCRIPTION	QTY.
AAU0551	CLAMP - 5" CENTERLINE DIE CAST	2
AEN0129	BARRIER - 1.315" O.D. x 41.00" x 42.10"	1
APT0216	POST - 3-1/2" O.D. x 28-3/4" EXIT SUPPORT	1
BAD0085	THREAD LOCKING ADHESIVE	1
BAE0020	RIVET - 1/4" x 11/16" DRIVE	2
BAE0595	WASHER - 3/8" SAE FLAT	6
BAE0600	WASHER - 1" O.D. FLAT	14
BAE0620	NUT - 3/8"-16 LOCK w/NYLON CAP	6
BAE0629	SCREW - 3/8"-16 x 1" SOCKET SET SS	2
BAE0659	BOLT - 3/8"-16 x 3/4" BUTTON HEAD - SS	2
BAE0662	BOLT - 3/8"-16 x 1-1/4" TPR RESIST w/TORX DRIVE	2
BAE0664	BOLT - 3/8"-16 x 1" BUTTON HEAD - SS	8
BAE0665	BOLT - 3/8"-16 x 1-3/4" BUTTON HEAD - SS	8
BPL0300	CAP - 3/8" BOLT	4
BPL2030	CANOPY - SINGLE GLIDE SLIDE	1
BPL2033	SLIDE - 72" SINGLE GLIDE	1
ALB0030	LABEL-HOOD STRING ENTNGLMNT WRNG LABEL	1

PM3126 - 48 in. (1219 mm) GLIDE SLIDE

PART NO.	DESCRIPTION	QTY.
AAU0551	CLAMP - 5" CENTERLINE DIE CAST	2
AEN0129	BARRIER - 1.315" O.D. x 41.00" x 42.10"	1
APT0216	POST - 3-1/2" O.D. x 28-3/4" EXIT SUPPORT	1
BAD0085	THREAD LOCKING ADHESIVE	1
BAE0020	RIVET - 1/4" x 11/16" DRIVE	2
BAE0595	WASHER - 3/8" SAE FLAT	6
BAE0600	WASHER - 1" O.D. FLAT	14
BAE0620	NUT - 3/8"-16 LOCK w/NYLON CAP	6
BAE0629	SCREW - 3/8"-16 x 1" SOCKET SET SS	2
BAE0659	BOLT - 3/8"-16 x 3/4" BUTTON HEAD - SS	2
BAE0662	BOLT - 3/8"-16 x 1-1/4" TPR RESIST w/TORX DRIVE	2
BAE0664	BOLT - 3/8"-16 x 1" BUTTON HEAD - SS	8
BAE0665	BOLT - 3/8"-16 x 1-3/4" BUTTON HEAD - SS	8
BPL0300	CAP - 3/8" BOLT	4
BPL2030	CANOPY - SINGLE GLIDE SLIDE	1
BPL2031	SLIDE - 48" SINGLE GLIDE	1
ALB0030	LABEL-HOOD STRING ENTNGLMNT WRNG LABEL	1

PM3127 - 36 in. (914 mm) GLIDE SLIDE

PART NO.	DESCRIPTION	QTY.
AAU0551	CLAMP - 5" CENTERLINE DIE CAST	2
AEN0129	BARRIER - 1.315" O.D. x 41.00" x 42.10"	1
APT0216	POST - 3-1/2" O.D. x 28-3/4" EXIT SUPPORT	1
BAD0085	THREAD LOCKING ADHESIVE	1
BAE0020	RIVET - 1/4" x 11/16" DRIVE	2
BAE0595	WASHER - 3/8" SAE FLAT	6
BAE0600	WASHER - 1" O.D. FLAT	14
BAE0620	NUT - 3/8"-16 LOCK w/NYLON CAP	6
BAE0629	SCREW - 3/8"-16 x 1" SOCKET SET SS	2
BAE0659	BOLT - 3/8"-16 x 3/4" BUTTON HEAD - SS	2
BAE0662	BOLT - 3/8"-16 x 1-1/4" TPR RESIST w/TORX DRIVE	2
BAE0664	BOLT - 3/8"-16 x 1" BUTTON HEAD - SS	8
BAE0665	BOLT - 3/8"-16 x 1-3/4" BUTTON HEAD - SS	8
BPL0300	CAP - 3/8" BOLT	4
BPL2030	CANOPY - SINGLE GLIDE SLIDE	1
BPL2035	SLIDE - 36" SINGLE GLIDE	1
ALB0030	LABEL-HOOD STRING ENTNGLMNT WRNG LABEL	1



PM3128 - 24-30 in. (610-762 mm) GLIDE SLIDE

PART NO.	DESCRIPTION	QTY.
AAU0551	CLAMP - 5" CENTERLINE DIE CAST	2
AEN0129	BARRIER - 1.315" O.D. x 41.00" x 42.10"	1
APT0216	POST - 3-1/2" O.D. x 28-3/4" EXIT SUPPORT	1
BAD0085	THREAD LOCKING ADHESIVE	1
BAE0020	RIVET - 1/4" x 11/16" DRIVE	2
BAE0595	WASHER - 3/8" SAE FLAT	6
BAE0600	WASHER - 1" O.D. FLAT	14
BAE0620	NUT - 3/8"-16 LOCK w/NYLON CAP	6
BAE0629	SCREW - 3/8"-16 x 1" SOCKET SET SS	2
BAE0659	BOLT - 3/8"-16 x 3/4" BUTTON HEAD - SS	2
BAE0662	BOLT - 3/8"-16 x 1-1/4" TPR RESIST w/TORX DRIVE	2
BAE0664	BOLT - 3/8"-16 x 1" BUTTON HEAD - SS	8
BAE0665	BOLT - 3/8"-16 x 1-3/4" BUTTON HEAD - SS	8
BPL0300	CAP - 3/8" BOLT	4
BPL2030	CANOPY - SINGLE GLIDE SLIDE	1
BPL2036	SLIDE - 30"/24" SINGLE GLIDE	1
ALB0030	LABEL-HOOD STRING ENTNGLMNT WRNG LABEL	1

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Assembly View



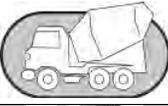
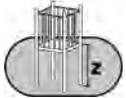
Frog Button
(example of one
of ten buttons)

Installation Instructions Playmakers® Model PM4546 Scavenger Hunt Deck Level

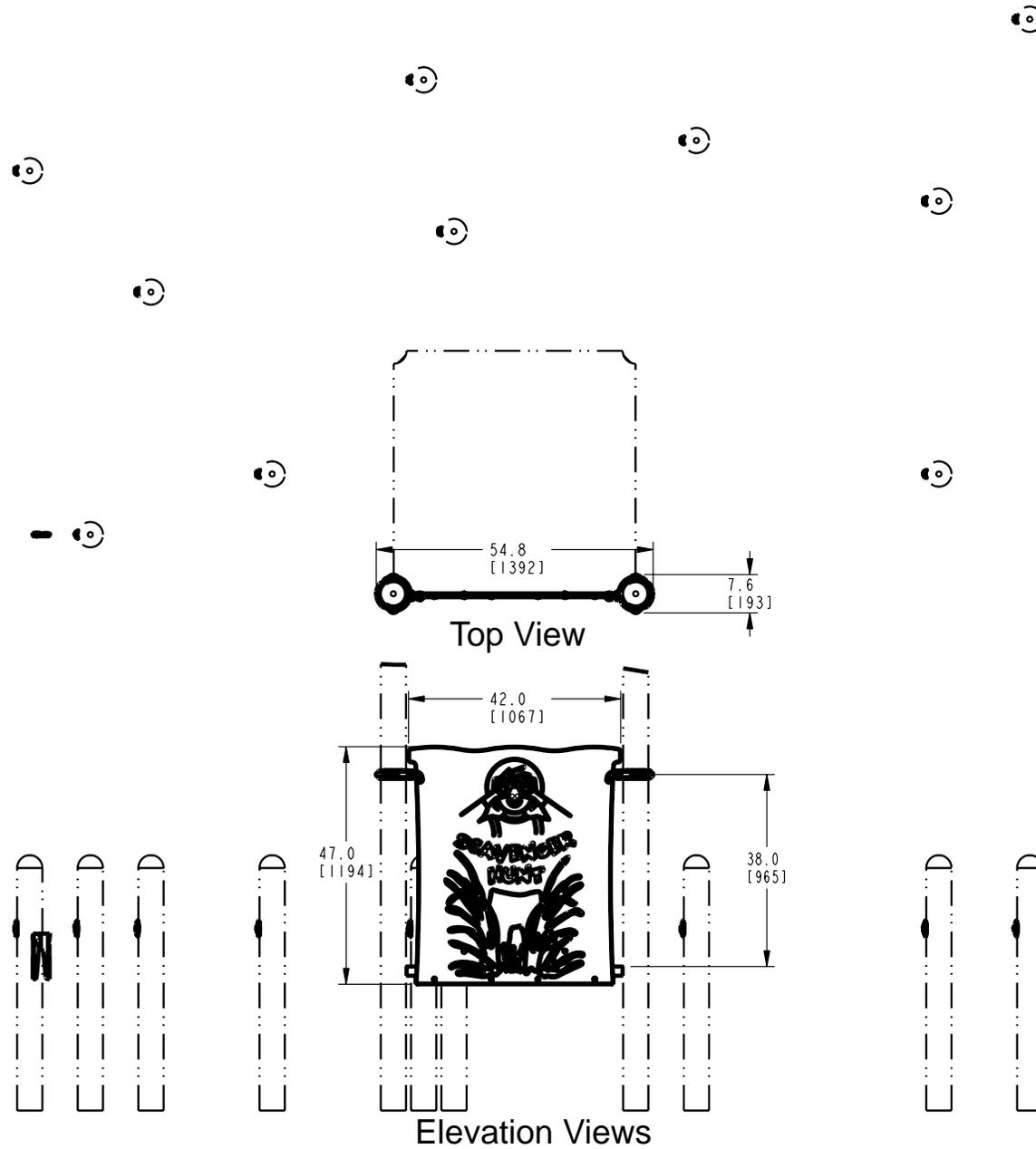
Installation Preparation

Recommended Crew: Two (2) adults
 Installation Time: 2 man-hours
 Weight: *52.8 lbs. (24 kg)
 Use Zone:..... Refer to Master Drawing
 User Group Age (years): ASTM/CSA: 2-12, EN: 2-14

**Weights are approximate for determining manpower.*

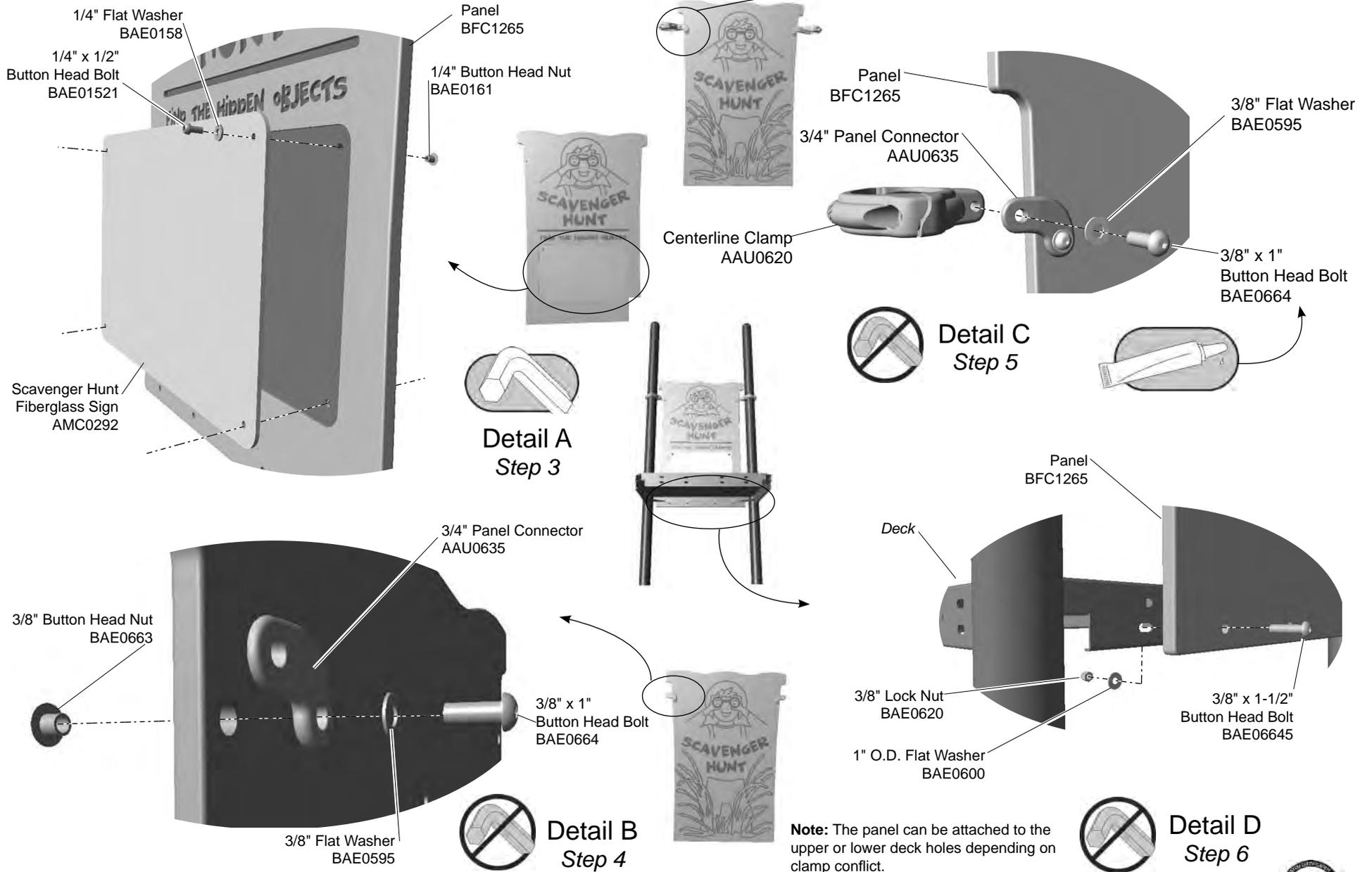
ICON KEY			
	Fully Tighten Hardware		Add 1 Drop of Thread Locking Adhesive
	Do Not Fully Tighten Hardware		Pour Concrete
	Drill		Dig Footing Holes
	Hammer		Critical Fall Height

Installation Instructions

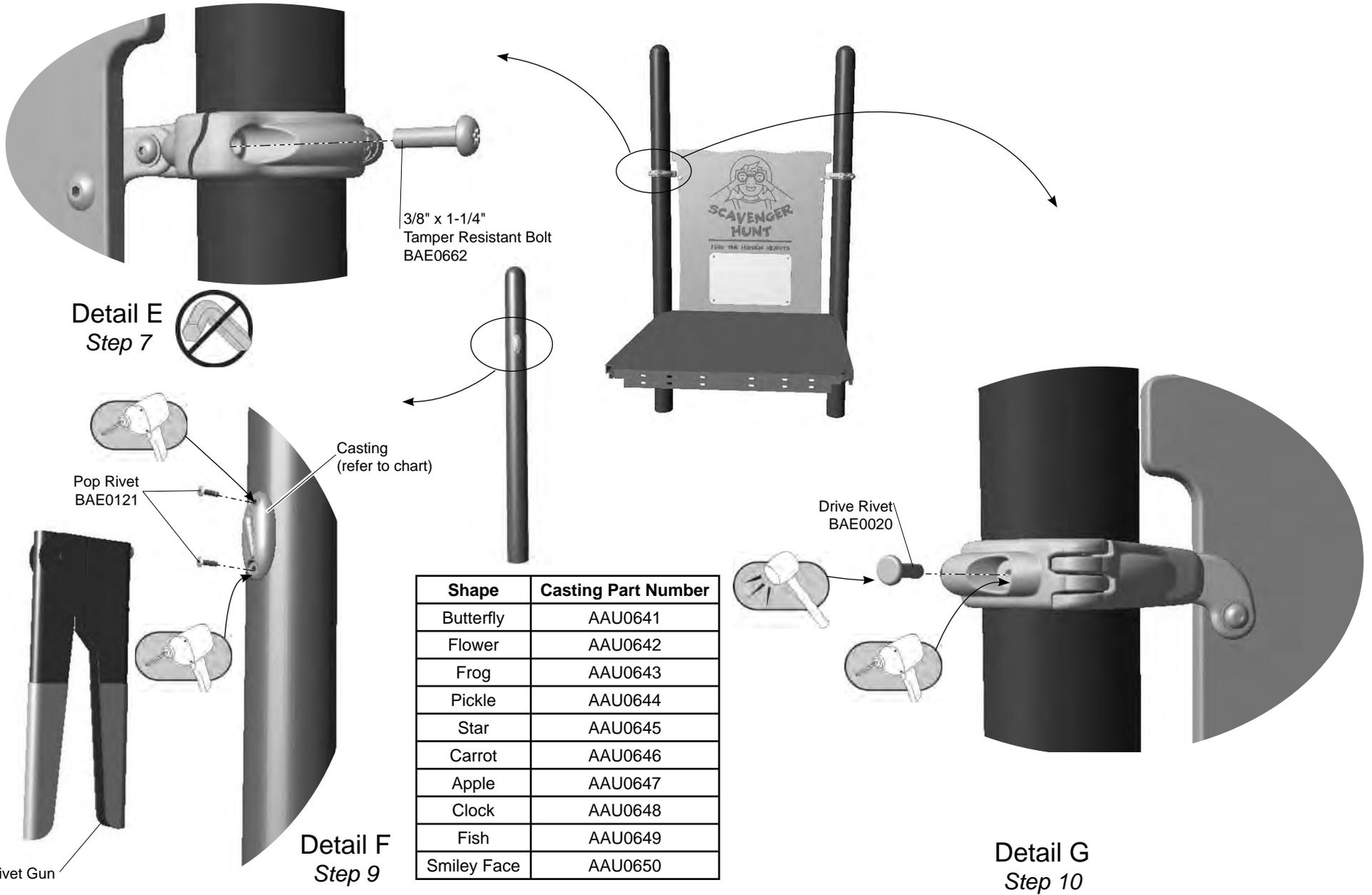


Installation Instructions

Follow the details in alphabetical order. For clarification, each detail references the step description. The step descriptions start on page 5.



Installation Instructions



Installation Instructions

___ **Notes Before You Begin:** Do not over tighten bolts during assembly, only snug tighten them until assembly is complete.

Carefully read and understand these installation instructions before you begin.

___ **Step 1:** Before attempting to assemble your equipment, please review all installation information carefully. Should you experience any difficulty during the installation process, please call us at the phone number shown on the last page of these instructions.

___ **Step 2:** Separate and identify all components and hardware.

Attach the fiberglass sign to the panel.

___ **Step 3:** Attach the fiberglass sign to the panel. See **Detail A**. Select the scavenger hunt panel, the fiberglass sign, and the appropriate hardware. There are (4) four connections. Position the fiberglass sign in the cutout section of the panel and attach as shown.

Attach the panel connectors to the panel.

___ **Step 4:** Attach the panel connectors to the panel. See **Detail B**. Select the panel connectors, and the appropriate hardware. There are (2) two connections. Each panel connector looks like an 'L'. Position each panel connector so that the short leg points down. The long leg should point out away from the panel. The panel connectors must all attach to the same side of the panel (this side will face in). Align the connectors with the holes and attach as shown. Leave the connections loose.

___ **Step 5:** Attach the clamps to the panel connectors. See **Detail C**. Select the clamps and the appropriate hardware. There are (2) two connections. Place the flat side of each clamp against the outside of the panel connector. Attach as shown. Leave the connections loose for alignment adjustment.

Attach the panel to the deck.

___ **Step 6:** Attach the panel to the deck. See **Detail D**. Select the appropriate hardware. There are (4) four connections. Raise the panel into place against the deck and align the holes in the panel with the lower holes in the deck. Attach as shown.

Note: The panel can be attached to the upper or lower deck holes depending on clamp conflict.

Attach the panel to the support posts.

___ **Step 7:** Attach the panel to support posts. See **Detail E** and **Elevation View**. Select the clamps and the appropriate hardware. There are (2) two connections. Move the panel into position on the outside of the posts and close the clamps. Attach as shown.

Note: In the event of a clamp conflict with an adjacent component, the panel connector can be flipped upside down and reconnected to the panel.

Important Note: The long portion of the panel connector must be level to prevent any string entanglement issues.

Final Details.

___ **Step 8:** Plumb and level the component. Tighten **all** fasteners. Fully tighten all fasteners according to tightening torque specifications.

Torque Specifications:

Bolts and nuts - Snug tighten and then tighten an additional one half turn.

Attach the castings to support posts.

___ **Step 9:** Attach the castings to the support posts. See **Detail F**. Select the appropriate hardware. There are (2) two connections per casting, (20) twenty total connections. Choose various locations around the playground to locate the castings. Using a 3/16" drill bit, drill a hole in the post at the appropriate location and insert a pop rivet through the casting into the post using the standard rivet gun supplied.

___ **Step 10:** Install drive rivets in the clamps. See **Detail G**. After the equipment assembly is complete, install a drive rivet in each clamp to permanently secure it to the support post. Using a 1/4" drill bit, drill through the clamp and support post. Insert the drive rivet into drilled hole until the head of the rivet is against the surface of the clamp. Using a hammer, drive the pin of the rivet until it is flush with the surface of the rivet head.

Note: This step should be executed after structure has been assembled and properly footed.

___ **Step 11:** For areas complying with ASTM standard F1487 or the CSA Z-614, apply the age appropriate label to the component at eye level.

ZZPM4546 - SCAVENGER HUNT DECK LEVEL

PART NO.	DESCRIPTION	QTY.
AAU0620	CLAMP - 5" OFFSET CENTERLINE DIE CAST	2
AAU0635	CONNECT - 3/4" PANEL	2
AAU0641	CASTING - BUTTERFLY	1
AAU0642	CASTING - FLOWER	1
AAU0643	CASTING - FROG	1
AAU0644	CASTING - PICKLE	1
AAU0645	CASTING - STAR	1
AAU0646	CASTING - CARROT	1
AAU0647	CASTING - APPLE	1
AAU0648	CASTING - CLOCK	1
AAU0649	CASTING - FISH	1
AAU0650	CASTING - SMILEY FACE	1
AMC0292	SIGN - SCAVENGER HUNT FIBERGLASS	1
AMC0304	TOOL - 3/16" STANDARD RIVET GUN	1
BAE0020	RIVET - 1/4" x 11/16" DRIVE	2
BAE0121	RIVET - 3/16" x .56 ALUM POP (.251" - .375" GRIP RANGE)	20
BAE01521	BOLT - 1/4"-20 x 1/2" BUTTON HEAD - SS	4
BAE0158	WASHER - 1/4" SAE FLAT	4
BAE0161	NUT - 1/4"-20 x 7/16" BUTTON HEAD	4
BAE0595	WASHER - 3/8" SAE FLAT	4
BAE0600	WASHER - 1" O.D. FLAT	4
BAE0620	NUT - 3/8"-16 LOCK w/NYLON CAP	4
BAE0662	BOLT - 3/8"-16 x 1-1/4" TMRP RESISTANT w/TORX DRIVE	2
BAE0663	NUT - 3/8"-16 x 7/16" BUTTON HEAD	2
BAE0664	BOLT - 3/8"-16 x 1" BUTTON HEAD - SS	4
BAE06645	BOLT - 3/8"-16 x 1-1/2" BUTTON HEAD - SS	4
BAE1668	MISC - 3/16" DRILL BIT	1
BFC1265	SHEET - 42.00" x 47.00" SCAVENGER HUNT	1
ALB0025	LABEL - AGE APPROPRIATE SHEET	1

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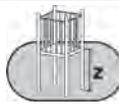


Assembly View

Installation Instructions Playmakers® Model PM4646 Storefront Panel

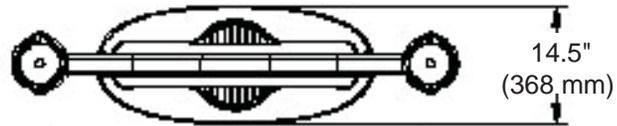
Installation Preparation

Recommended Crew: Two (2) adults
 Installation Time: 1 man-hour
 Weight: 44.8 lbs. (20.2 kg)
 Use Zone: Refer to Master Drawing
 User Group Age (years): ASTM/CSA: 2-5, EN: 1-6

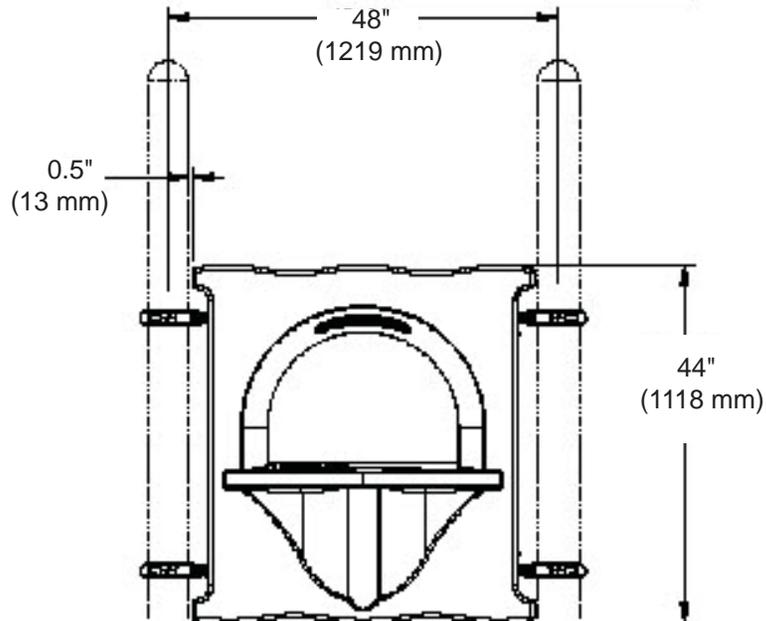
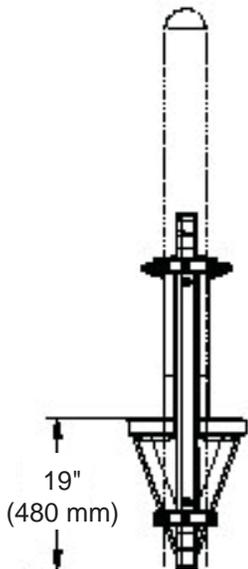
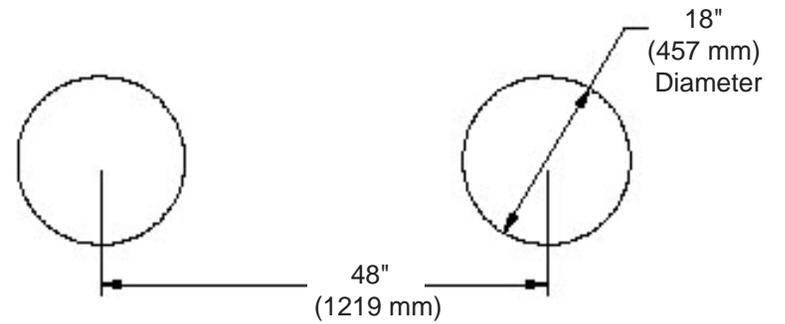
ICON KEY	
	Fully Tighten Hardware
	Add 1 Drop of Thread Locking Adhesive
	Do Not Fully Tighten Hardware
	Drill
	Hammer
	Critical Fall Height

Installation Instructions

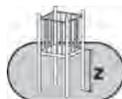
Top View



Footing Diagram



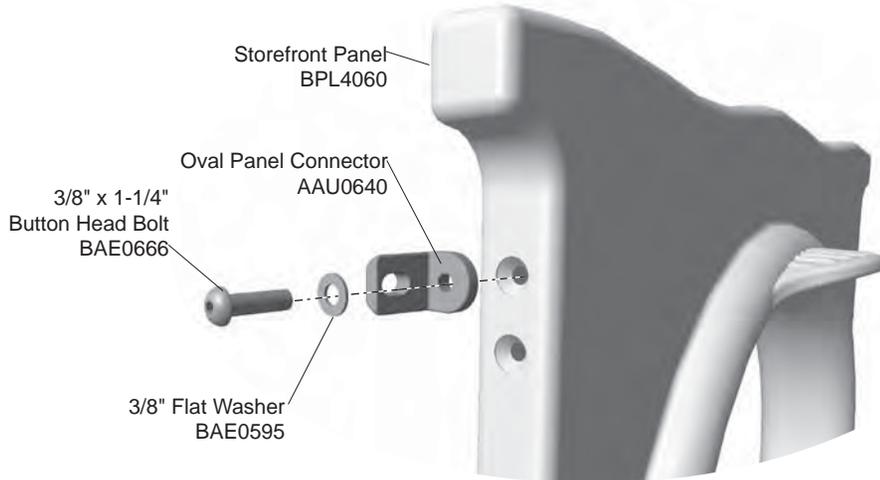
Elevation Views



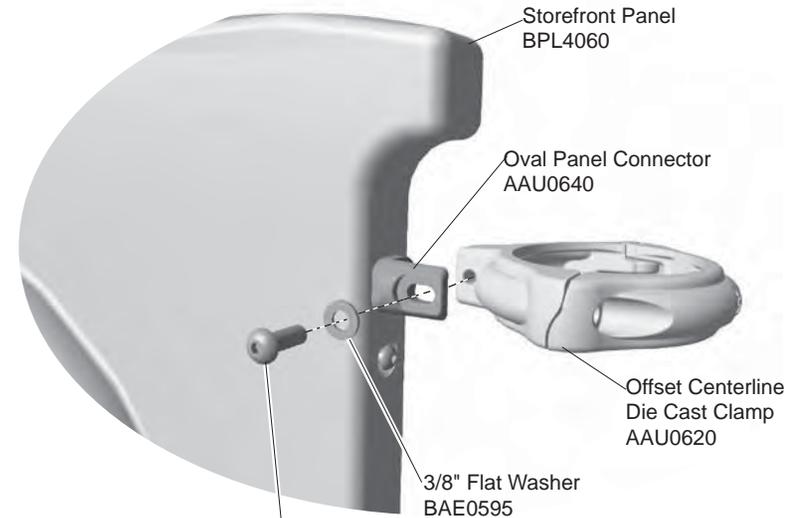
EN: 480 mm

Installation Instructions

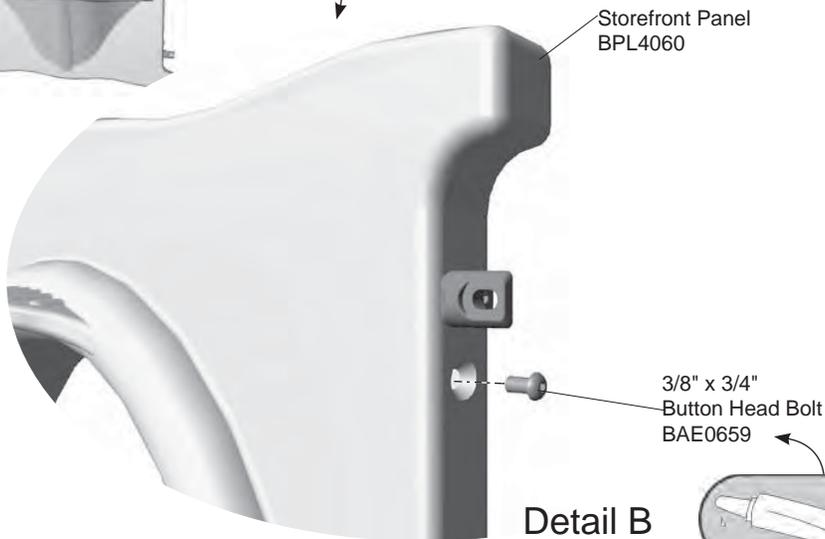
Follow the details in alphabetical order. For clarification, each detail references the step description. The step descriptions start on page 5.



Detail A
Step 3



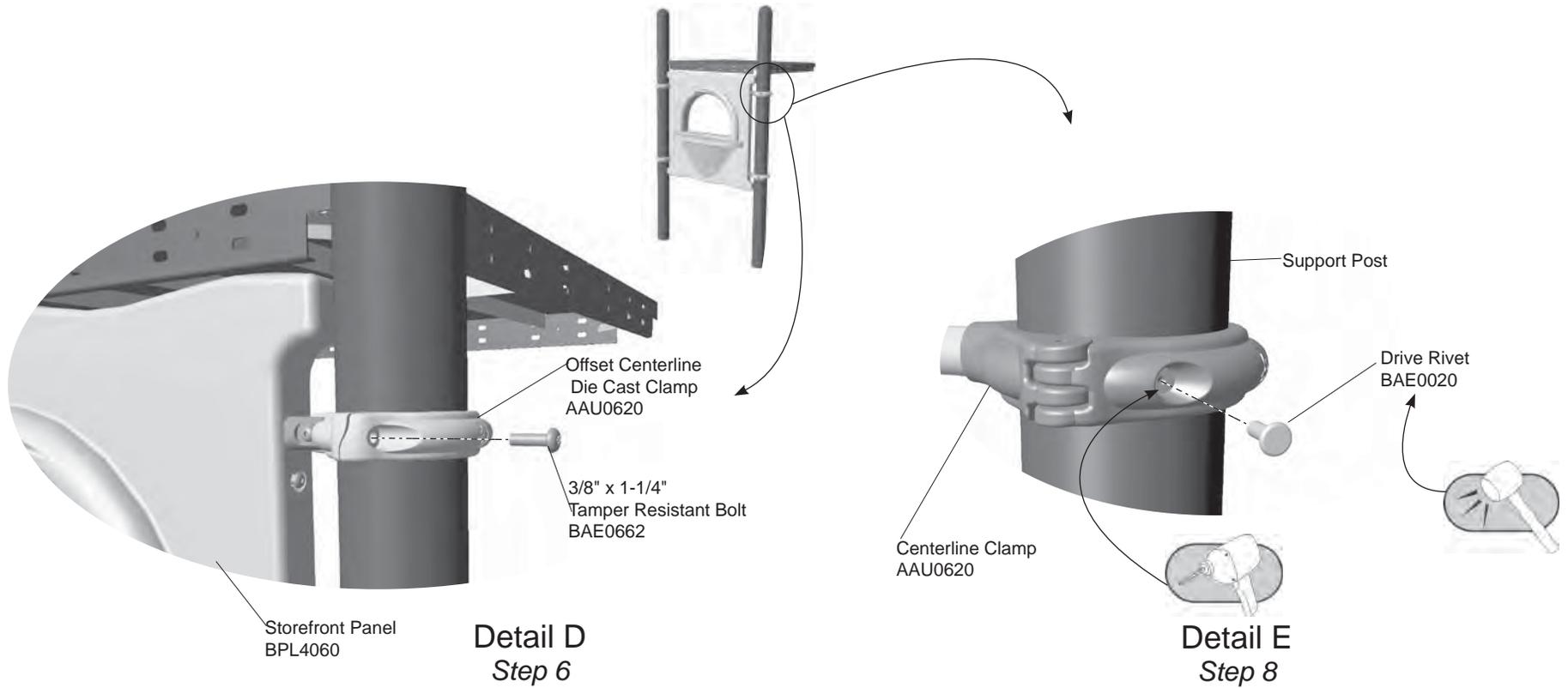
Detail C
Step 5



Detail B
Step 4



Installation Instructions



Installation Instructions

__Notes Before You Begin: Do not over tighten bolts during assembly, only snug tighten them until assembly is complete.

Carefully read and understand these installation instructions before you begin.

__Step 1: Before attempting to assemble your equipment, please review all installation information carefully. Should you experience any difficulty during the installation process, please call us at the phone number shown on the last page of these instructions.

__Step 2: Separate and identify all components and hardware.

Attach the oval panel connectors to the panel.

__Step 3: Attach the panel connectors to the storefront panel. See **Detail A**. Select the storefront panel, the oval panel connectors, and the appropriate hardware. There are (4) connections. Turn the connectors so that the flat sides are all on the same side. Attach as shown.

Note: The panel has two connection points to attach the panel connectors. The upper and lower connection points are provided if you experience a conflict with adjacent components. In the event of a clamp interference, select the location that best suits your condition.

__Step 4: Fill the unused panel holes. See **Detail B**. Select the appropriate hardware. There are (4) four connections. Apply a drop of loctite and attach as shown.

Attach the clamps to the panel.

__Step 5: Attach the clamps to the panel. See **Detail C**. Select the clamps and the appropriate hardware. There are (4) four connections. Place a clamp against the flat side of each connector and align the holes. Apply a drop of loctite to the bolt threads and attach as shown.

Note: Make sure that each clamp opens in the same direction.

Attach the panel to the support posts.

__Step 6: Attach the storefront panel to the support posts. See **Detail D**. Select the storefront panel and the appropriate hardware. There are (4) four connections. Position the storefront at the appropriate height and attach as shown.

Final Details.

__Step 7: Plumb and level the component. Tighten **all** fasteners. Fully tighten all fasteners according to tightening torque specifications.

Torque Specifications:

Bolts and nuts - Snug tighten and then tighten an additional one half turn.

__Step 8: Install drive rivets. See **Detail E**. After the equipment assembly is complete, install a drive rivet in each clamp to permanently secure it to the support post. Using a 1/4" drill bit, drill through the clamp and support post. Insert the drive rivet into drilled hole until the head of the rivet is against the surface of the clamp. Using a hammer, drive the pin of the rivet until it is flush with the surface of the rivet head.

Note: This step should be executed after structure has been assembled and properly footed.

PM4646 - STOREFRONT PANEL

PART NO.	DESCRIPTION	QTY.
AAU0620	CLAMP - 5" OFFSET CENTERLINE DIE CAST	4
AAU0640	CONNECT - OVAL PANEL	4
BAD0085	THREAD LOCKING ADHESIVE	1
BAE0020	RIVET - 1/4" x 11/16" DRIVE	4
BAE0595	WASHER - 3/8" SAE FLAT	8
BAE0659	BOLT - 3/8"-16 x 3/4" BUTTON HEAD - SS	4
BAE0662	BOLT - 3/8"-16 x 1-1/4" TAMPER RESISTANT	4
BAE0664	BOLT - 3/8"-16 x 1" BUTTON HEAD - SS	4
BAE0666	BOLT - 3/8"-16 x 1-1/4" BUTTON HEAD - SS	4
BPL4060	PANEL - 42" STOREFRONT	1

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Assembly View (representative model)

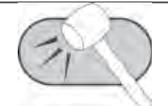
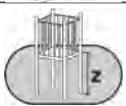
Model	Deck Height	Weight
ZZPM7160	72" (1830 mm)	129 lbs. (58,6 kg)
ZZPM7166	84" (2134 mm)	135.3 lbs. (61,5 kg)
ZZPM7167	96" (2743 mm)	142.1 lbs. (64,6 kg)

Installation Instructions Playmakers® Models PM7160, PM7166, and PM7167 Twisted Climber

6 ft. (1829 mm), 7 ft. (2134 mm), and 8 ft. (2438 mm)

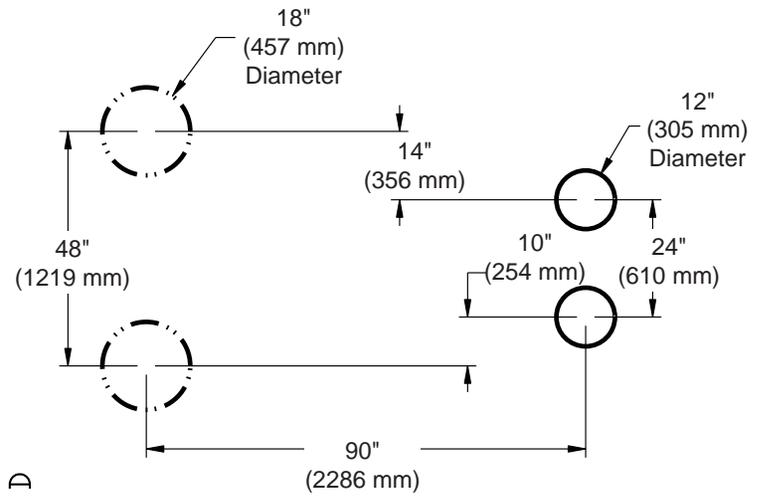
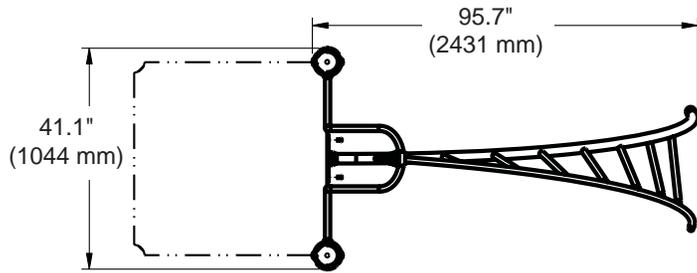
Installation Preparation

Recommended Crew: Two (2) adults
 Installation Time: 2 installation-hours
 Weight: (refer to table)
 Concrete Required: 0.6 cubic yard (0,4 cubic meters)
 Use Zone: Refer to Master Drawing
 User Group Age (years): ASTM/CSA: 5-12, EN: 2-14

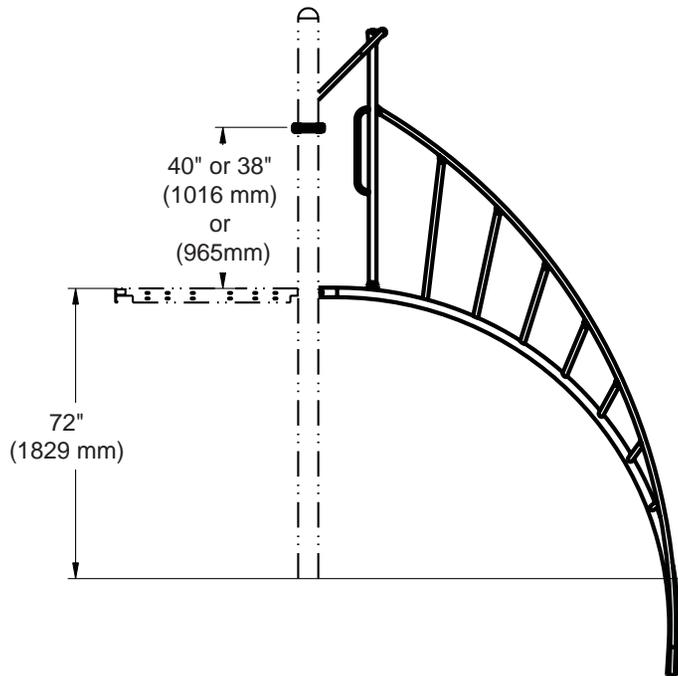
ICON KEY	
	Fully Tighten Hardware
	Do Not Fully Tighten Hardware
	Add 1 Drop of Thread Locking Adhesive
	Pour Concrete
	Drill
	Dig Footing Holes
	Hammer
	Critical Fall Height

Installation Instructions

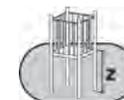
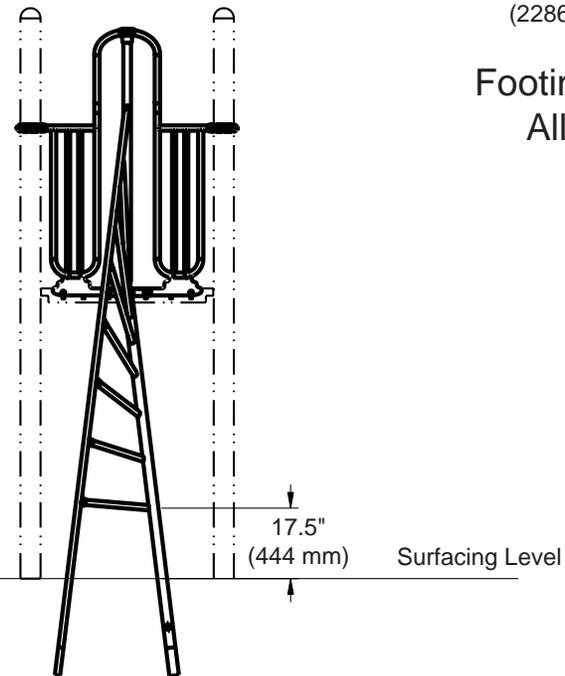
Top View



Footing Diagram
All Models



Elevation Views
ZZPM7160

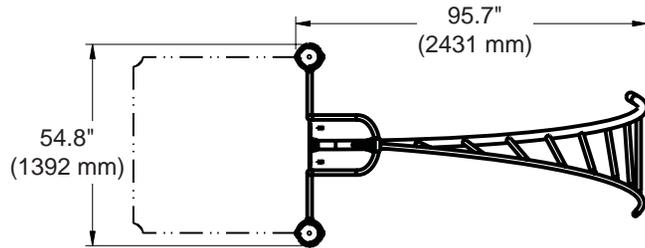


EN: 1829 mm

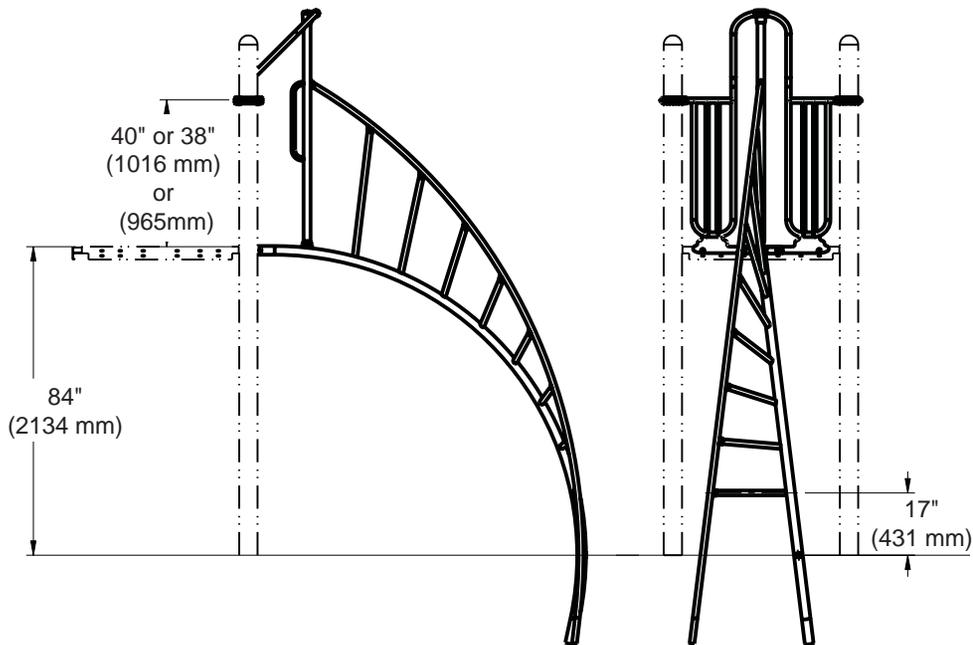
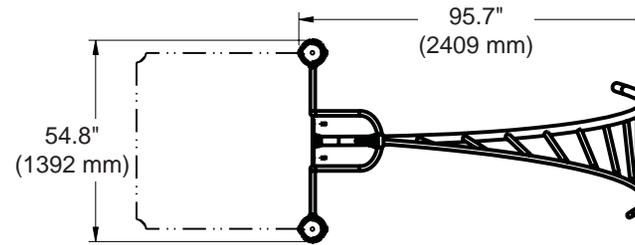


Installation Instructions

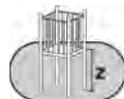
Top View



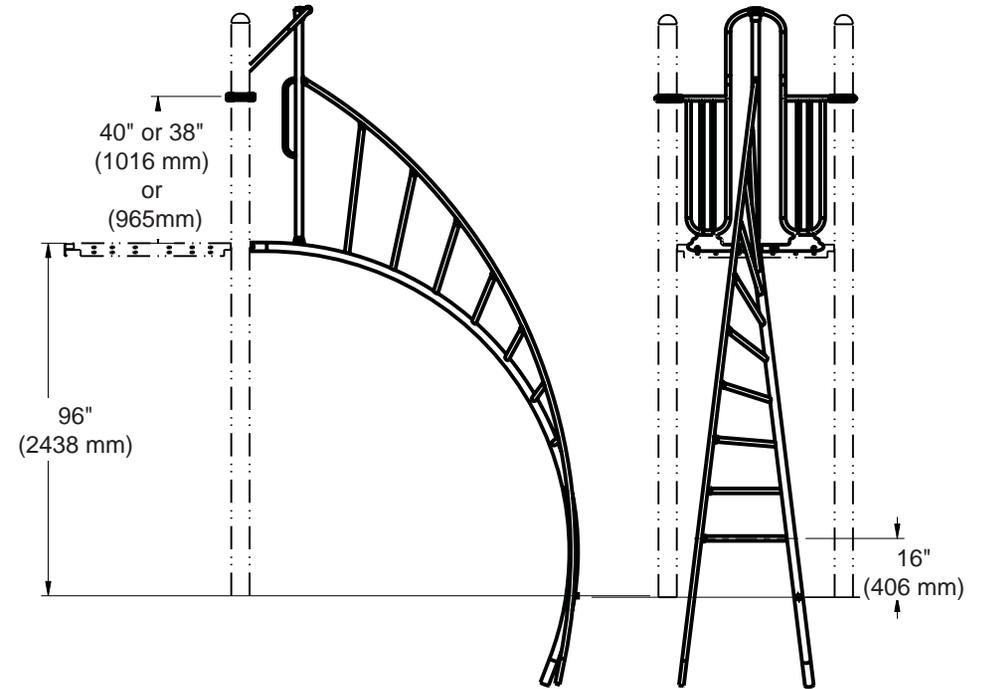
Top View



Elevation Views
ZZPM7166



EN: 2134 mm



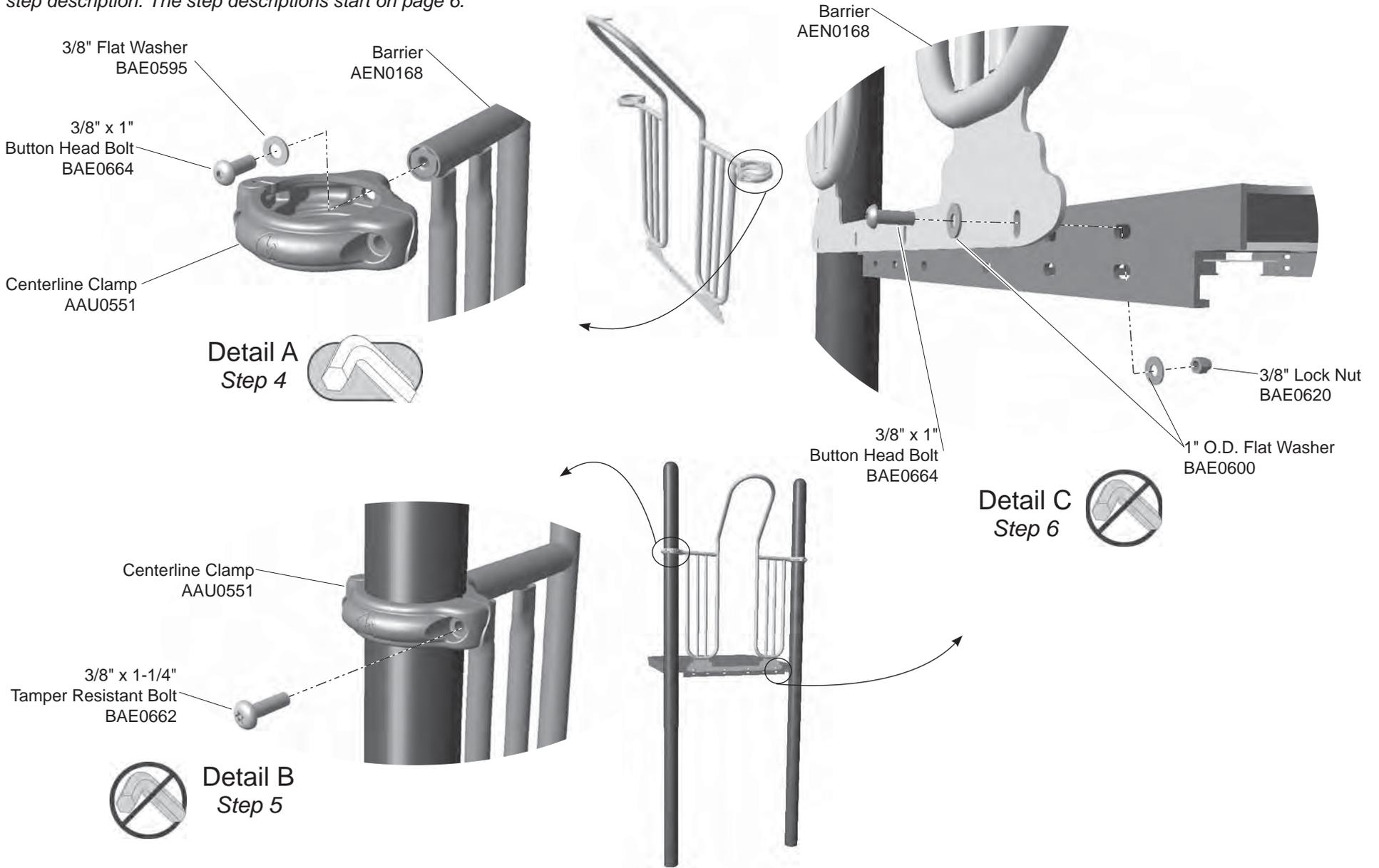
Elevation Views
ZZPM7167



EN: 2438 mm

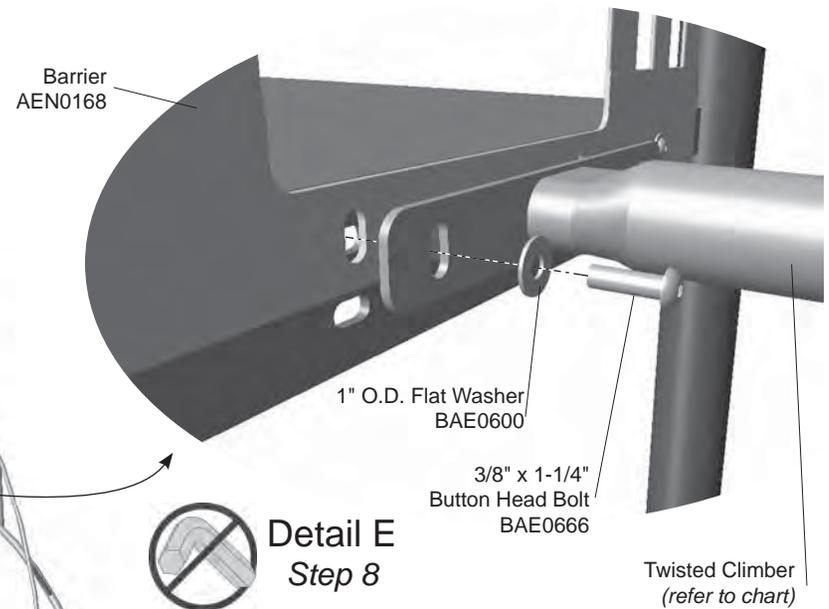
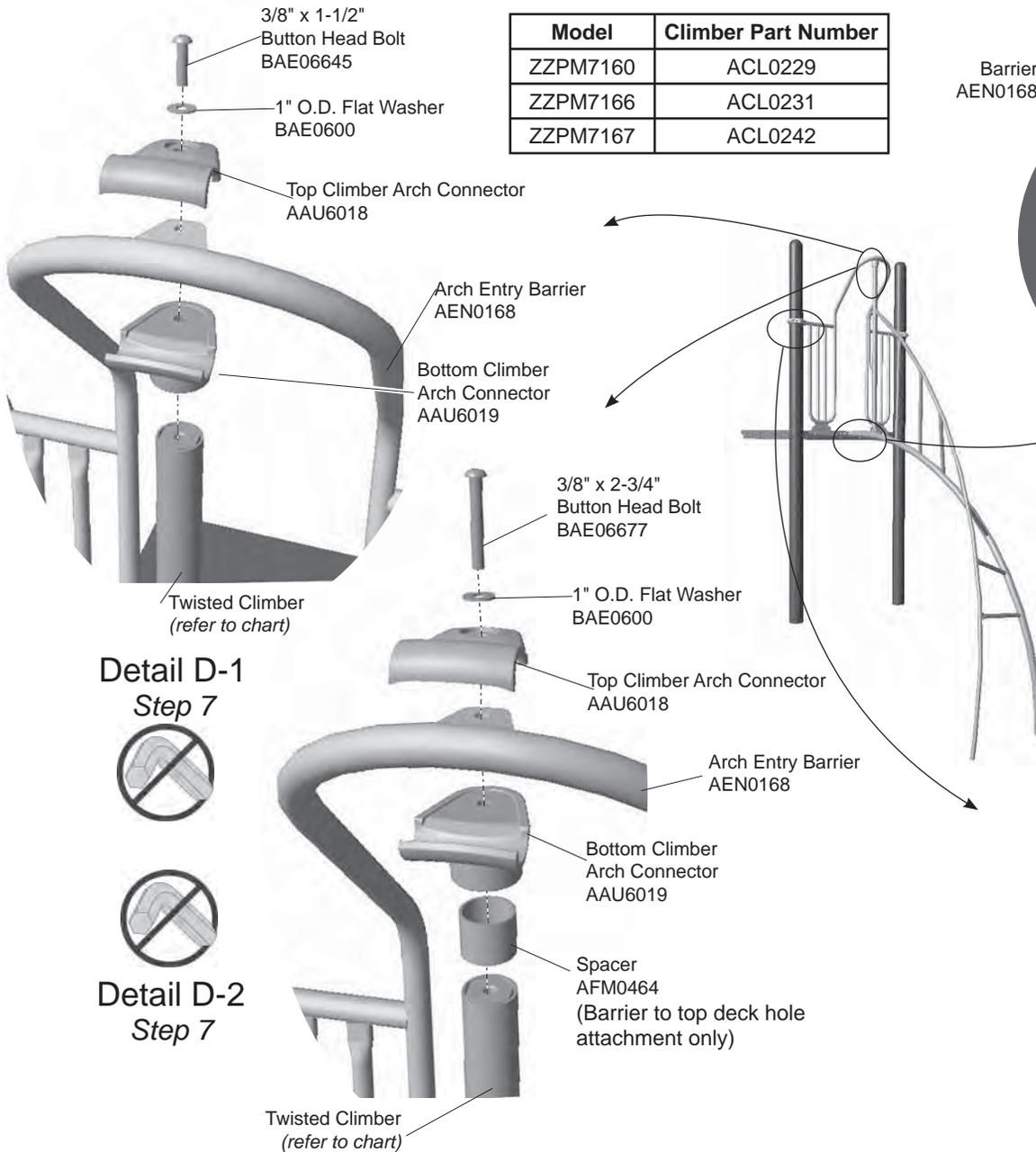
Installation Instructions

Follow the details in alphabetical order. For clarification, each detail references the step description. The step descriptions start on page 6.



Installation Instructions

Model	Climber Part Number
ZZPM7160	ACL0229
ZZPM7166	ACL0231
ZZPM7167	ACL0242



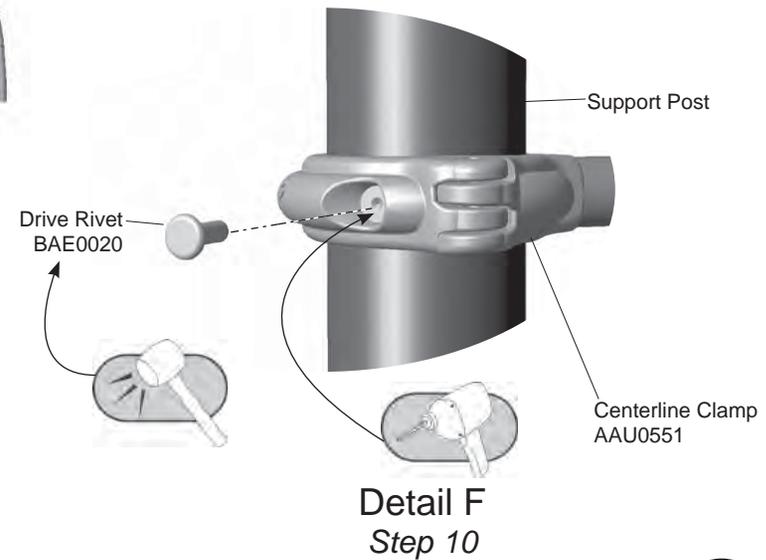
Detail E
Step 8

Important Note: If attaching the barrier through the lower hole, the climber will attach to the upper deck hole with a 1" bolt (BAE0664).

Detail D-1
Step 7



Detail D-2
Step 7



Detail F
Step 10



Installation Instructions

__Notes Before You Begin: Do not over tighten bolts during assembly, only snug tighten them until assembly is complete.

Carefully read and understand these installation instructions before you begin.

__Step 1: Before attempting to assemble your equipment, please review all installation information carefully. Should you experience any difficulty during the installation process, please call us at the phone number shown on the last page of these instructions.

__Step 2: Separate and identify all components and hardware.

__Step 3: Excavate footings as shown in the **Component Footing Details** in the *Playmaker Guidelines*.

Attach the clamps to the arch entry barrier.

__Step 4: Attach the clamps to the barrier. See **Detail A**. Select the arch entry barrier, centerline clamps, and the appropriate hardware. There are (2) two connections. Position the neck of each clamp against an end of the barrier top rail and align holes. Attach as shown. Turn the clamp so that the hinge faces away from the entry, and fully tighten bolt.

Attach the clamps to the support posts.

__Step 5: Attach the clamps to the posts. See **Detail B**. Select the appropriate hardware. There are (2) two connections. Lift the barrier into position against deck and close the clamps around the posts. Insert and thread each bolt into a clamp. Leave the clamp connection loose for deck connection adjustments.

Attach the barrier to the deck.

__Step 6: Attach the barrier to the deck. See **Detail C**. Select the appropriate hardware. There are (2) two connections. *Attach only the outside holes*. The barrier can be attached to either the *upper* or *lower* deck holes to avoid conflicts with adjacent clamps. Attach as shown.

Note: The upper or lower deck attachment will effect connections in *Step 7*.

Attach the climber to the barrier.

__Step 7: Attach the climber to the top of the barrier. See **Details D-1 and D-2**. Select the climber, the top and bottom climber connectors, the spacer, and the appropriate hardware. There is (1) one connection. Place the climber into the excavated footing. Align the climber with the holes in the barrier. If the barrier is mounted to the lower deck holes, *do not use the spacer*. Refer to **Detail D-1**. If the barrier is mounted in the *upper* set of deck holes, *use the spacer as shown*. Refer to **Detail D-2**. Do not fully tighten the connection.

__Step 8: Attach the climber to the barrier/deck. See **Detail E**. Select the appropriate hardware. There are (2) two connections. Align the climber with the holes in the barrier. Attach as shown.

Important Note: If the barrier is attached through the lower hole in **Step 6**, the climber will attach to the upper deck hole with a 1" bolt (BAE0664).

Final Details.

__Step 9: Plumb and level the component. Tighten **all** fasteners. Fully tighten all fasteners according to tightening torque specifications. Block and brace for concrete. Pour concrete after all equipment has been assembled. Allow 72 hours for concrete to completely cure.

Torque Specifications:

Bolts and nuts - Snug tighten and then tighten an additional one half turn.

__Step 10: Install drive rivets. See **Detail F**. After the equipment assembly is complete, install a drive rivet in each clamp to permanently secure it to the support post. Using a 1/4" drill bit, drill through the clamp and support post. Insert the drive rivet into drilled hole until the head of the rivet is against the surface of the clamp. Using a hammer, drive the pin of the rivet until it is flush with the surface of the rivet head.

Note: This step should be executed after structure has been assembled and properly footed.

PM7160 - 6 ft. (1829 mm) TWISTED CLIMBER

PART NO.	DESCRIPTION	QTY.
AAU0551	CLAMP - 5" CENTERLINE DIE CAST	2
AAU6018	CONNECTOR - CLIMBER ARCH TOP	1
AAU6019	CONNECTOR - CLIMBER ARCH BOTTOM	1
ACL0229	CLIMBER - 6' TWISTED	1
AEN0168	BARRIER - ARCH ENTRY 65.98" x 41.00"	1
AFM0464	CUT TUBING - 1.90" O.D. x 1.50"	1
BAD0085	THREAD LOCKING ADHESIVE	1
BAE0020	RIVET - 1/4" x 11/16" DRIVE	2
BAE0595	WASHER - 3/8" SAE FLAT	2
BAE0600	WASHER - 1" O.D. FLAT	13
BAE0620	NUT - 3/8"-16 LOCK w/NYLON CAP	6
BAE0662	BOLT - 3/8"-16 x 1-1/4" TPR RESISTANT w/TORX DRIVE	2
BAE0664	BOLT - 3/8"-16 x 1" BUTTON HEAD - SS	6
BAE06645	BOLT - 3/8"-16 x 1-1/2" BUTTON HEAD - SS	1
BAE0666	BOLT - 3/8"-16 x 1-1/4" BUTTON HEAD - SS	2
BAE06677	BOLT - 3/8"-16 x 2-3/4" BUTTON HEAD - SS	1

PM7167 - 8 ft. (2438 mm) TWISTED CLIMBER

PART NO.	DESCRIPTION	QTY.
AAU0551	CLAMP - 5" CENTERLINE DIE CAST	2
AAU6018	CONNECTOR - CLIMBER ARCH TOP	1
AAU6019	CONNECTOR - CLIMBER ARCH BOTTOM	1
ACL0242	CLIMBER - 8' TWISTED	1
AEN0168	BARRIER - ARCH ENTRY 65.98" x 41.00"	1
AFM0464	CUT TUBING - 1.90" O.D. x 1.50"	1
BAD0085	THREAD LOCKING ADHESIVE	1
BAE0020	RIVET - 1/4" x 11/16" DRIVE	2
BAE0595	WASHER - 3/8" SAE FLAT	2
BAE0600	WASHER - 1" O.D. FLAT	13
BAE0620	NUT - 3/8"-16 LOCK w/NYLON CAP	6
BAE0662	BOLT - 3/8"-16 x 1-1/4" TPR RESISTANT w/TORX DRIVE	2
BAE0664	BOLT - 3/8"-16 x 1" BUTTON HEAD - SS	6
BAE06645	BOLT - 3/8"-16 x 1-1/2" BUTTON HEAD - SS	1
BAE0666	BOLT - 3/8"-16 x 1-1/4" BUTTON HEAD - SS	2
BAE06677	BOLT - 3/8"-16 x 2-3/4" BUTTON HEAD - SS	1

PM7166 - 7 ft. (2134 mm) TWISTED CLIMBER

PART NO.	DESCRIPTION	QTY.
AAU0551	CLAMP - 5" CENTERLINE DIE CAST	2
AAU6018	CONNECTOR - CLIMBER ARCH TOP	1
AAU6019	CONNECTOR - CLIMBER ARCH BOTTOM	1
ACL0231	CLIMBER - 7' TWISTED	1
AEN0168	BARRIER - ARCH ENTRY 65.98" x 41.00"	1
AFM0464	CUT TUBING - 1.90" O.D. x 1.50"	1
BAD0085	THREAD LOCKING ADHESIVE	1
BAE0020	RIVET - 1/4" x 11/16" DRIVE	2
BAE0595	WASHER - 3/8" SAE FLAT	2
BAE0600	WASHER - 1" O.D. FLAT	13
BAE0620	NUT - 3/8"-16 LOCK w/NYLON CAP	6
BAE0662	BOLT - 3/8"-16 x 1-1/4" TPR RESISTANT w/TORX DRIVE	2
BAE0664	BOLT - 3/8"-16 x 1" BUTTON HEAD - SS	6
BAE06645	BOLT - 3/8"-16 x 1-1/2" BUTTON HEAD - SS	1
BAE0666	BOLT - 3/8"-16 x 1-1/4" BUTTON HEAD - SS	2
BAE06677	BOLT - 3/8"-16 x 2-3/4" BUTTON HEAD - SS	1

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Assembly View (representative model)

Model	Deck Height
ZZPM7168	72" (1829 mm)
ZZPM7169	84" (2134 mm)
ZZPM7170	96" (2438 mm)

Installation Instructions

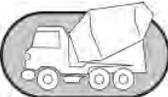
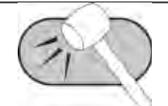
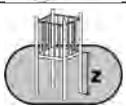
Playmakers® Models PM7168,
PM7169, and PM7170

Tower Climber

6 ft. (1829 mm), 7 ft. (2134 mm), and 8 ft. (2438 mm)

Installation Preparation

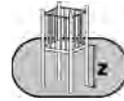
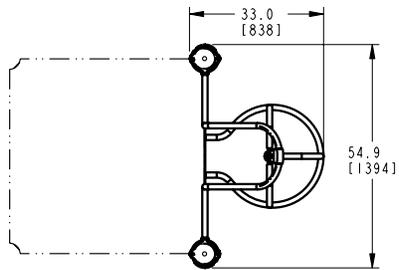
Recommended Crew: Two (2) adults
 Installation Time: 2 man-hours
 Concrete Required: 0.06 cubic yard (0,04 cubic meters)
 Use Zone: Refer to Master Drawing
 User Group Age (years): ASTM/CSA: 5-12, EN: 2-14

ICON KEY	
	Fully Tighten Hardware
	Do Not Fully Tighten Hardware
	Add 1 Drop of Thread Locking Adhesive
	Pour Concrete
	Drill
	Dig Footing Holes
	Hammer
	Critical Fall Height

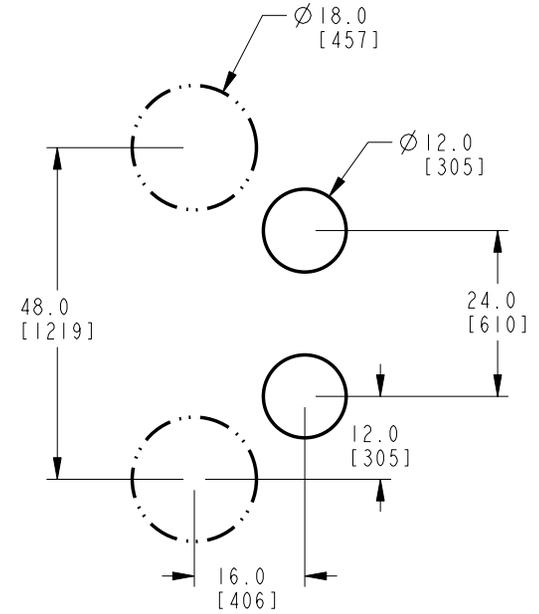
Installation Instructions

KEY	
Position	Unit of Measurement
Top #	Inches
Bottom #	[Millimeters]

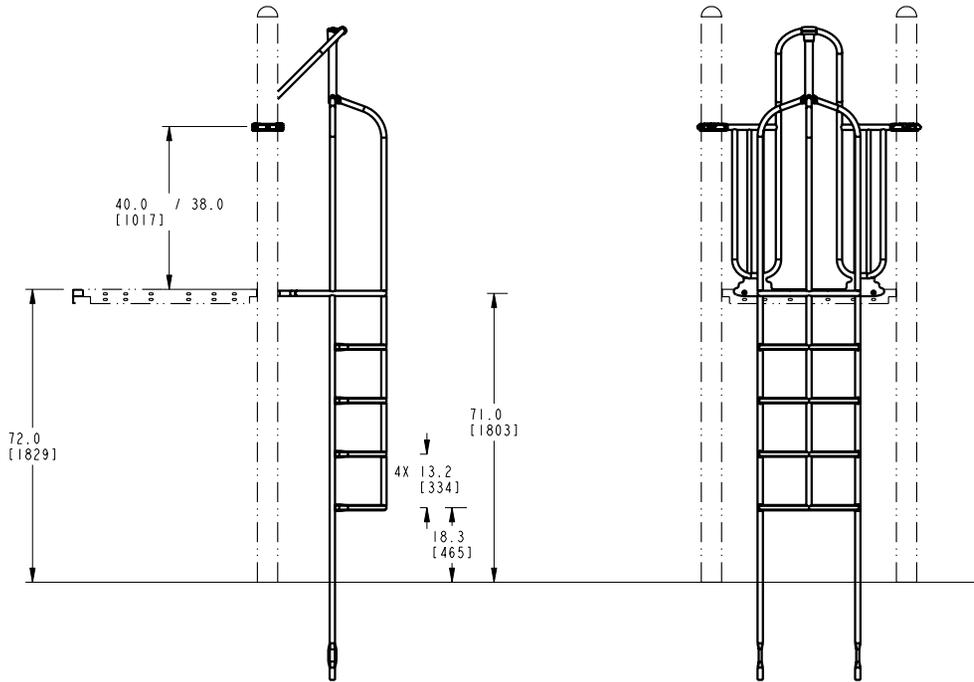
Top View



72" (1829 mm)



Footing Diagram
All Models



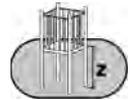
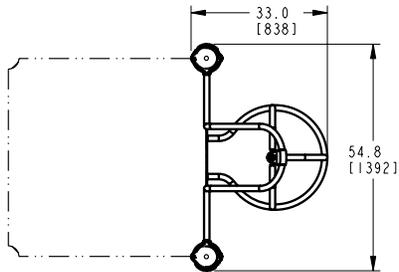
Elevation Views
ZZPM7168



Installation Instructions

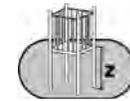
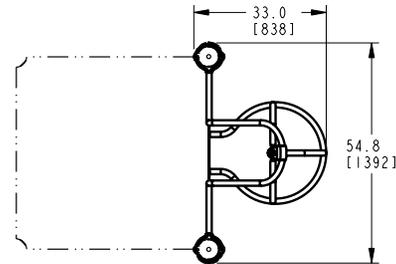
KEY	
Position	Unit of Measurement
Top #	Inches
Bottom #	[Millimeters]

Top View

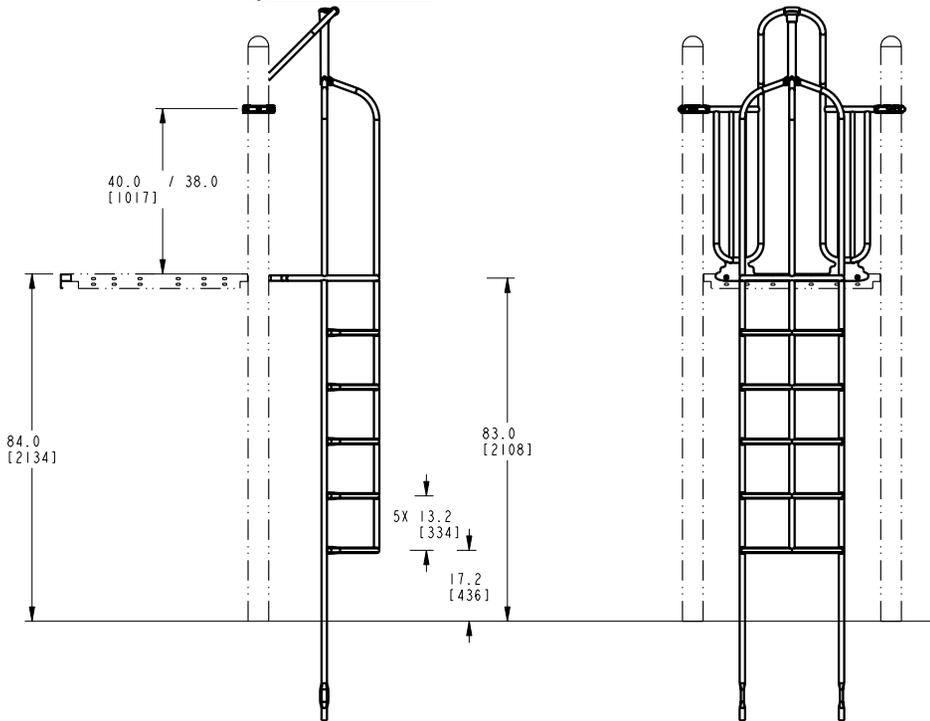


84" (2134 mm)

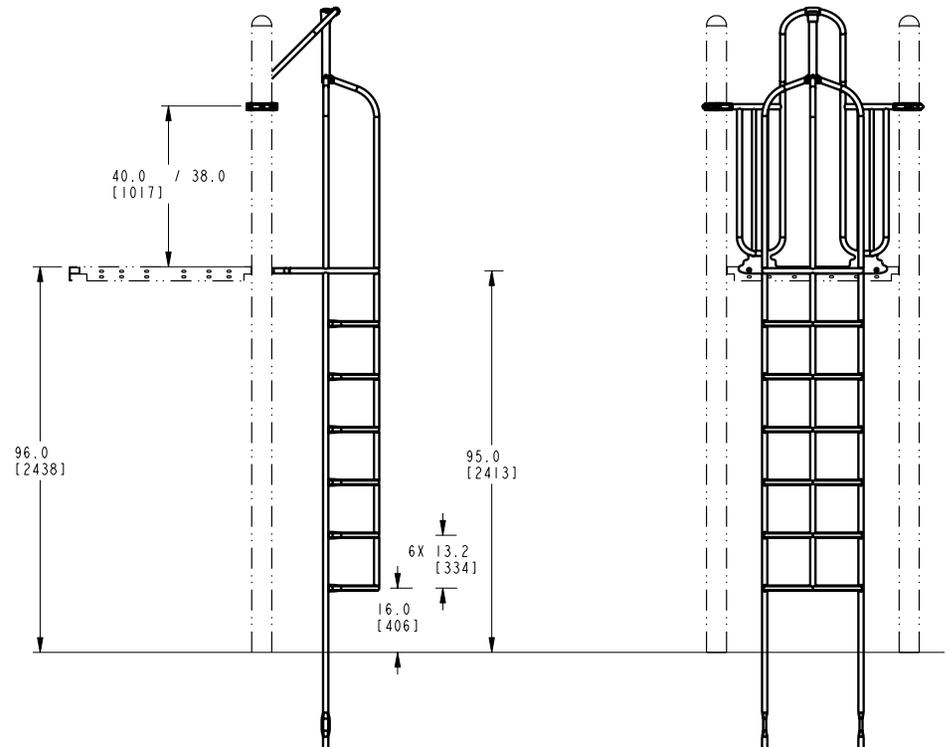
Top View



96" (2438 mm)



Elevation Views
ZZPM7169

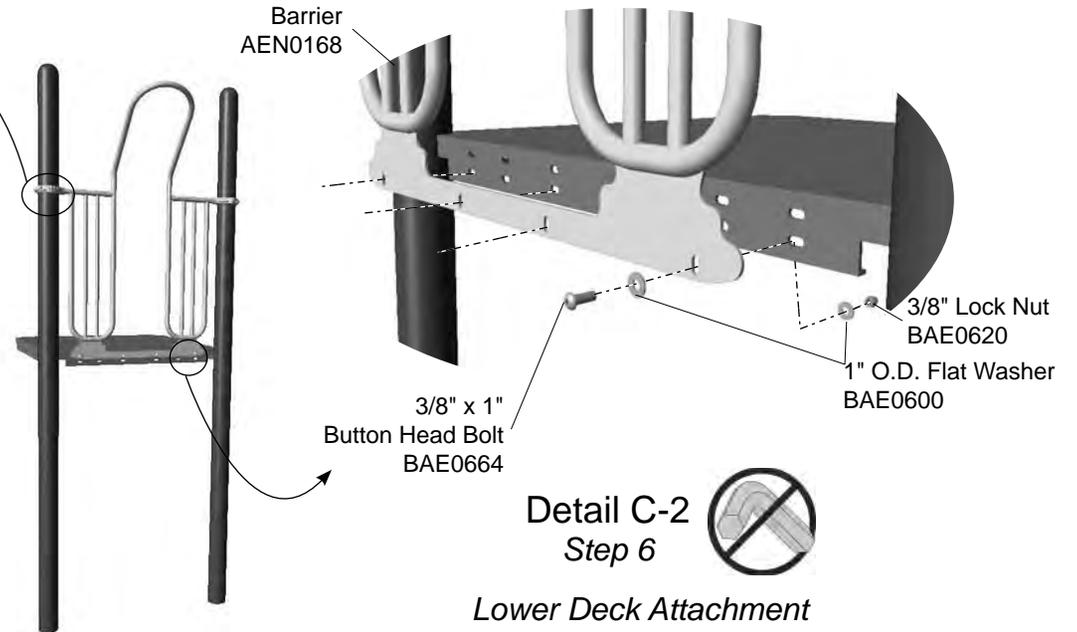
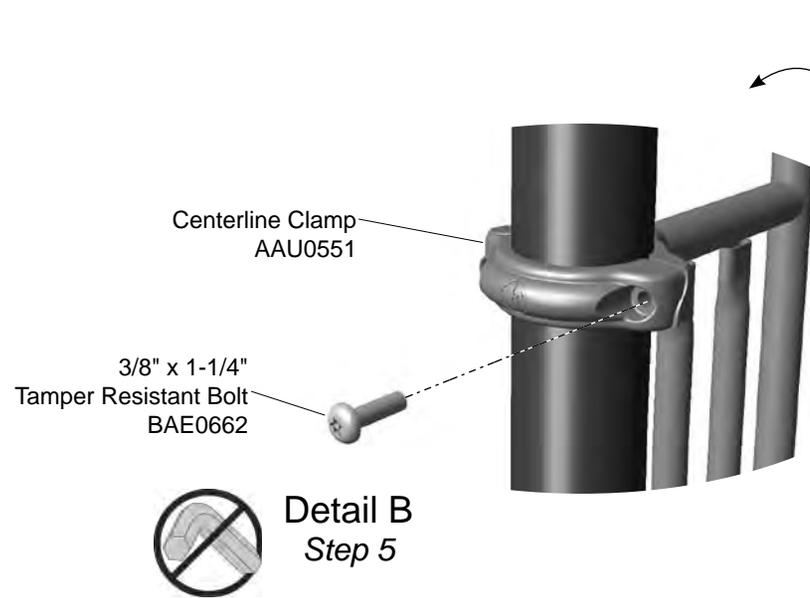
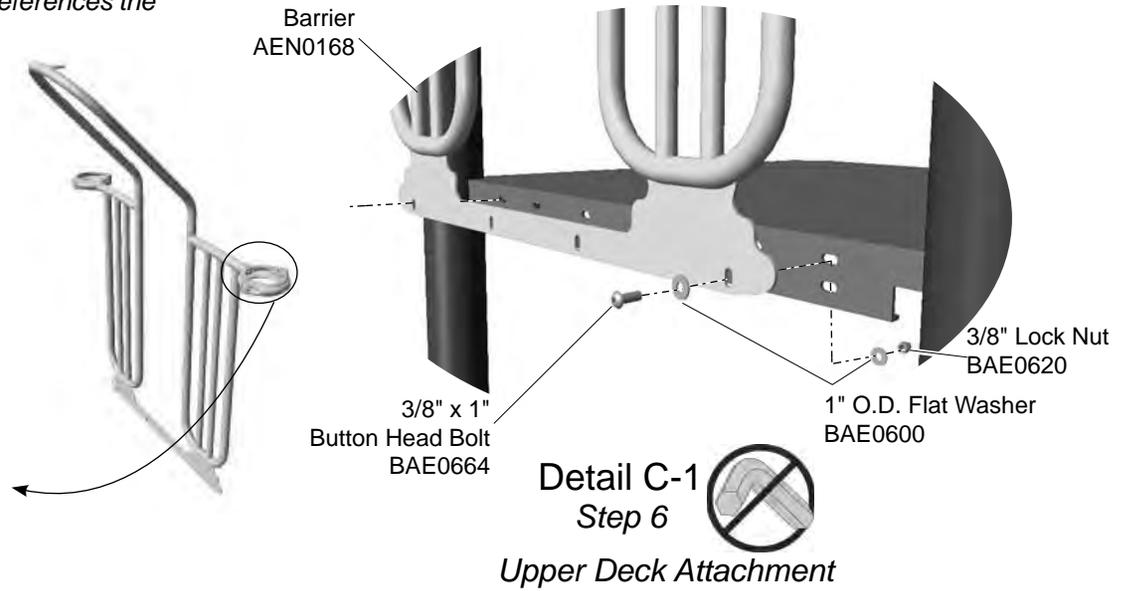
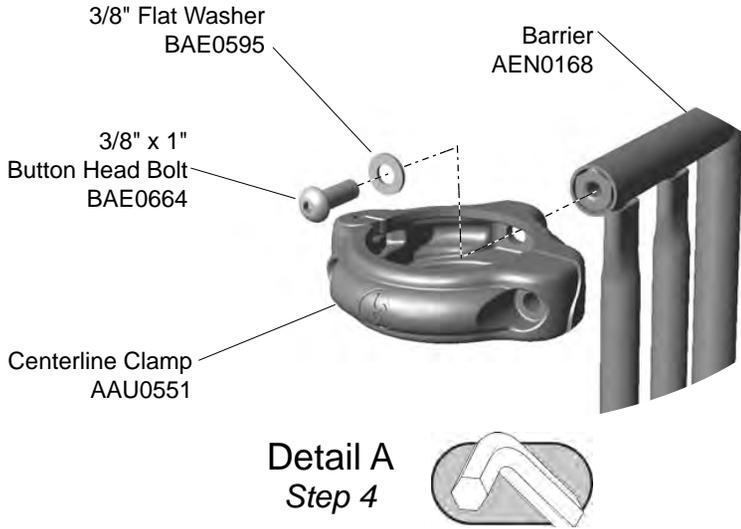


Elevation Views
ZZPM7170

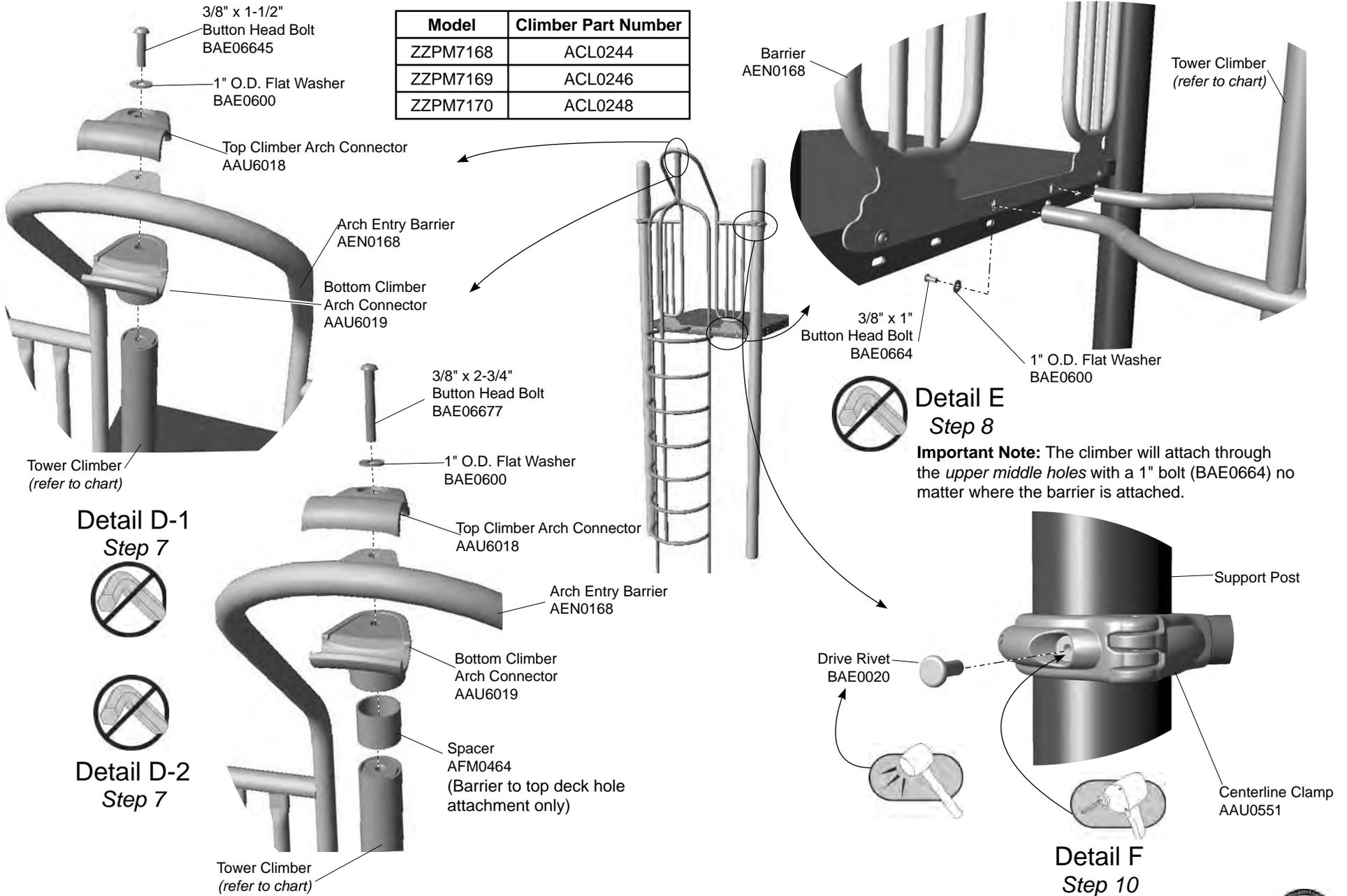


Installation Instructions

Follow the details in alphabetical order. For clarification, each detail references the step description. The step descriptions start on page 6.



Installation Instructions



Model	Climber Part Number
ZZPM7168	ACL0244
ZZPM7169	ACL0246
ZZPM7170	ACL0248



Detail E Step 8

Important Note: The climber will attach through the *upper middle holes* with a 1" bolt (BAE0664) no matter where the barrier is attached.

Detail D-1 Step 7



Detail D-2 Step 7



Detail F Step 10



Installation Instructions

Notes Before You Begin: Do not over tighten bolts during assembly, only snug tighten them until assembly is complete.

Carefully read and understand these installation instructions before you begin.

Step 1: Before attempting to assemble your equipment, please review all installation information carefully. Should you experience any difficulty during the installation process, please call us at the phone number shown on the last page of these instructions.

Step 2: Separate and identify all components and hardware.

Step 3: Excavate footings as shown in the **Component Footing Details** in the *Playmaker Guidelines*.

Attach the clamps to the arch entry barrier.

Step 4: Attach the clamps to the barrier. See **Detail A**. Select the arch entry barrier, centerline clamps, and the appropriate hardware. There are (2) two connections. Position the neck of each clamp against an end of the barrier top rail and align holes. Attach as shown. Turn the clamp so that the hinge faces away from the entry, and fully tighten bolt.

Attach the clamps to the support posts.

Step 5: Attach the clamps to the posts. See **Detail B**. Select the appropriate hardware. There are (2) two connections. Lift the barrier into position against deck and close the clamps around the posts. Insert and thread each bolt into a clamp. Leave the clamp connection loose for deck connection adjustments.

Attach the barrier to the deck.

Step 6: Attach the barrier to the deck. See **Detail C-1 or Detail C-2**. Select the appropriate hardware. The barrier can be attached to either the *upper* or *lower* deck holes to avoid conflicts with adjacent clamps. Follow the appropriate direction.

Upper deck attachment: If the barrier attaches to the upper deck holes, there are (2) two connections. See **Detail C-1**. *Attach only the outside holes*. Attach as shown.

Lower deck attachment: If the barrier attaches to the lower deck holes, there are (4) four connections. See **Detail C-2** *Connect through all four holes*. Attach as shown.

Note: The upper or lower deck attachment will effect connections in **Step 7**.

Attach the climber to the barrier.

Step 7: Attach the climber to the top of the barrier. See **Details D-1 and D-2**. Select the climber, the top and bottom climber connectors, the spacer, and the appropriate hardware. There is (1) one connection. Place the climber into the excavated footing. Align the climber with the holes in the barrier. If the barrier is mounted to the lower deck holes, *do not use the spacer*. Refer to **Detail D-1**. If the barrier is mounted in the *upper* set of deck holes, *use the spacer as shown*. Refer to **Detail D-2**. Do not fully tighten the connection.

Step 8: Attach the climber to the barrier/deck. See **Detail E**. Select the appropriate hardware. There are (2) two connections. Align the climber with the *upper* holes in the barrier. Attach as shown.

Important Note: The climber will attach through the *upper middle holes* with a 1" bolt (BAE0664) no matter where the barrier is attached in **step 6**.

Final Details.

Step 9: Plumb and level the component. Tighten **all** fasteners. Fully tighten all fasteners according to tightening torque specifications. Block and brace for concrete. Pour concrete after all equipment has been assembled. Allow 72 hours for concrete to completely cure.

Torque Specifications:

Bolts and nuts - Snug tighten and then tighten an additional one half turn.

Step 10: Install drive rivets. See **Detail F**. After the equipment assembly is complete, install a drive rivet in each clamp to permanently secure it to the support post. Using a 1/4" drill bit, drill through the clamp and support post. Insert the drive rivet into drilled hole until the head of the rivet is against the surface of the clamp. Using a hammer, drive the pin of the rivet until it is flush with the surface of the rivet head.

Note: This step should be executed after structure has been assembled and properly footed.



PM7168 - 6 ft. (1829 mm) TOWER CLIMBER

PART NO.	DESCRIPTION	QTY.
AAU0551	CLAMP - 5" CENTERLINE DIE CAST	2
AAU6018	CONNECTOR - CLIMBER ARCH TOP	1
AAU6019	CONNECTOR - CLIMBER ARCH BOTTOM	1
ACL0244	CLIMBER - 6' TOWER	1
AEN0168	BARRIER - ARCH ENTRY 65.98" x 41.00"	1
AFM0464	CUT TUBING - 1.90" O.D. x 1.50"	1
BAD0085	THREAD LOCKING ADHESIVE	1
BAE0020	RIVET - 1/4" x 11/16" DRIVE	2
BAE0595	WASHER - 3/8" SAE FLAT	2
BAE0600	WASHER - 1" O.D. FLAT	11
BAE0620	NUT - 3/8"-16 LOCK w/NYLON CAP	4
BAE0662	BOLT - 3/8"-16 x 1-1/4" TPR RESISTANT w/TORX DRIVE	2
BAE0664	BOLT - 3/8"-16 x 1" BUTTON HEAD - SS	8
BAE06645	BOLT - 3/8"-16 x 1-1/2" BUTTON HEAD - SS	1
BAE06677	BOLT - 3/8"-16 x 2-3/4" BUTTON HEAD - SS	1

PM7170 - 8 ft. (2438 mm) TOWER CLIMBER

PART NO.	DESCRIPTION	QTY.
AAU0551	CLAMP - 5" CENTERLINE DIE CAST	2
AAU6018	CONNECTOR - CLIMBER ARCH TOP	1
AAU6019	CONNECTOR - CLIMBER ARCH BOTTOM	1
ACL0248	CLIMBER - 8' TOWER	1
AEN0168	BARRIER - ARCH ENTRY 65.98" x 41.00"	1
AFM0464	CUT TUBING - 1.90" O.D. x 1.50"	1
BAD0085	THREAD LOCKING ADHESIVE	1
BAE0020	RIVET - 1/4" x 11/16" DRIVE	2
BAE0595	WASHER - 3/8" SAE FLAT	2
BAE0600	WASHER - 1" O.D. FLAT	11
BAE0620	NUT - 3/8"-16 LOCK w/NYLON CAP	4
BAE0662	BOLT - 3/8"-16 x 1-1/4" TPR RESISTANT w/TORX DRIVE	2
BAE0664	BOLT - 3/8"-16 x 1" BUTTON HEAD - SS	8
BAE06645	BOLT - 3/8"-16 x 1-1/2" BUTTON HEAD - SS	1
BAE06677	BOLT - 3/8"-16 x 2-3/4" BUTTON HEAD - SS	1

PM7169 - 7 ft. (2134 mm) TOWER CLIMBER

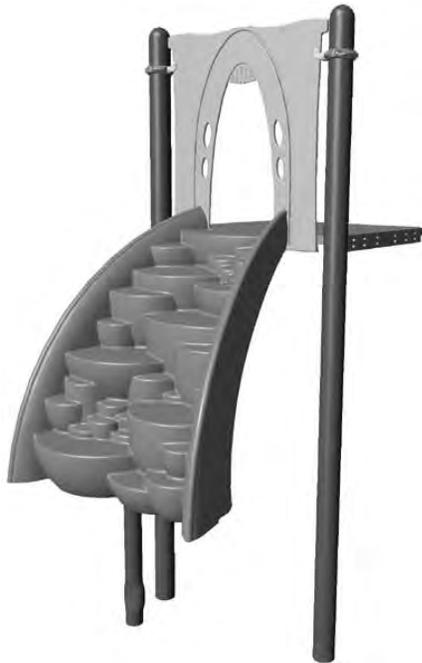
PART NO.	DESCRIPTION	QTY.
AAU0551	CLAMP - 5" CENTERLINE DIE CAST	2
AAU6018	CONNECTOR - CLIMBER ARCH TOP	1
AAU6019	CONNECTOR - CLIMBER ARCH BOTTOM	1
ACL0246	CLIMBER - 7' TOWER	1
AEN0168	BARRIER - ARCH ENTRY 65.98" x 41.00"	1
AFM0464	CUT TUBING - 1.90" O.D. x 1.50"	1
BAD0085	THREAD LOCKING ADHESIVE	1
BAE0020	RIVET - 1/4" x 11/16" DRIVE	2
BAE0595	WASHER - 3/8" SAE FLAT	2
BAE0600	WASHER - 1" O.D. FLAT	11
BAE0620	NUT - 3/8"-16 LOCK w/NYLON CAP	4
BAE0662	BOLT - 3/8"-16 x 1-1/4" TPR RESISTANT w/TORX DRIVE	2
BAE0664	BOLT - 3/8"-16 x 1" BUTTON HEAD - SS	8
BAE06645	BOLT - 3/8"-16 x 1-1/2" BUTTON HEAD - SS	1
BAE06677	BOLT - 3/8"-16 x 2-3/4" BUTTON HEAD - SS	1

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Assembly View

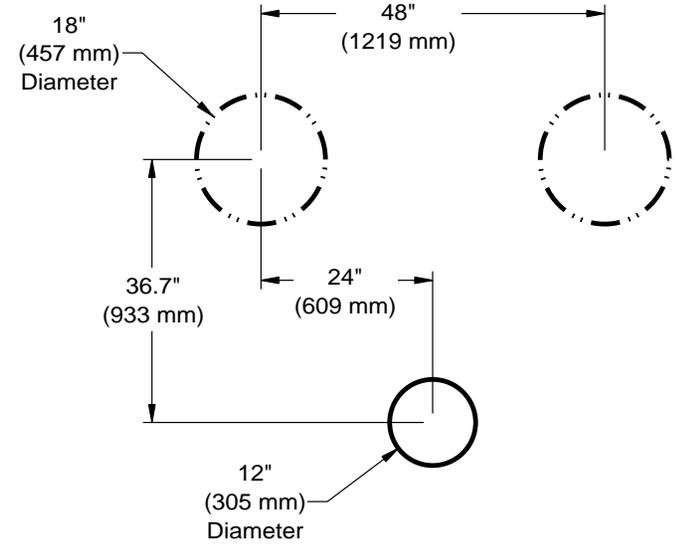
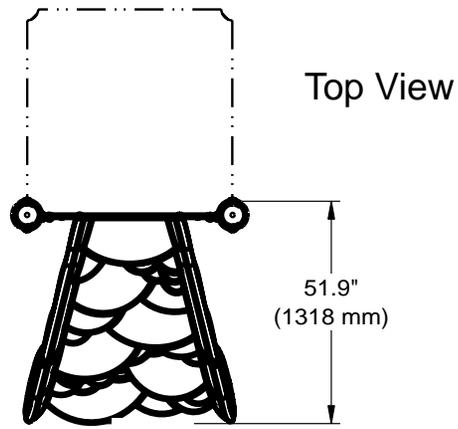
Installation Instructions Playmakers® Model PM7439 Rock Climber To Deck

Installation Preparation

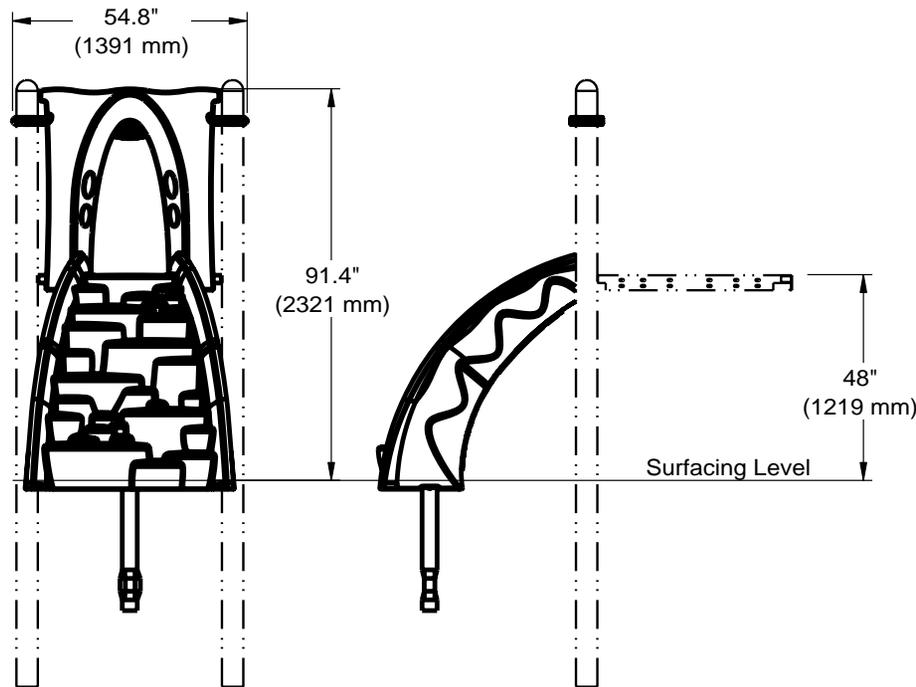
Recommended Crew: Two (2) adults
 Installation Time: 2 man-hours
 Weight: 153.5 lbs. (69,8 kg)
 Concrete Required: 0.03 cubic yard (0,02 cubic meters)
 Use Zone: Refer to Master Drawing
 User Group Age (years): ASTM/CSA: 2-12, EN: 2-14

ICON KEY			
	Fully Tighten Hardware		Add 1 Drop of Thread Locking Adhesive
	Do Not Fully Tighten Hardware		Pour Concrete
	Drill		Dig Footing Holes
	Hammer		Critical Fall Height

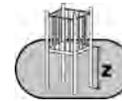
Installation Instructions



Footing Diagram



Elevation Views



EN: 1219 mm

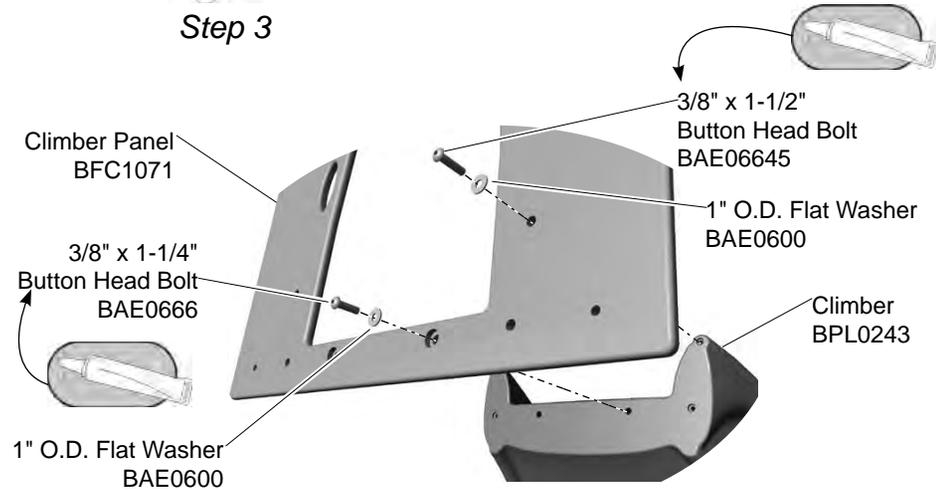


Installation Instructions

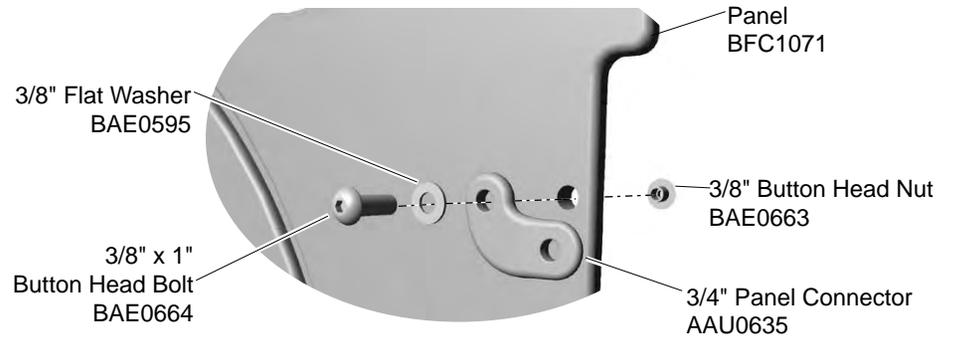
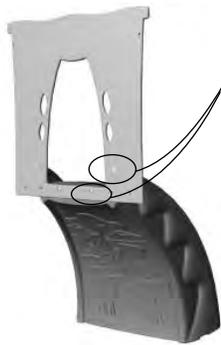
Follow the details in alphabetical order. For clarification, each detail references the step description. The step descriptions start on page 6.



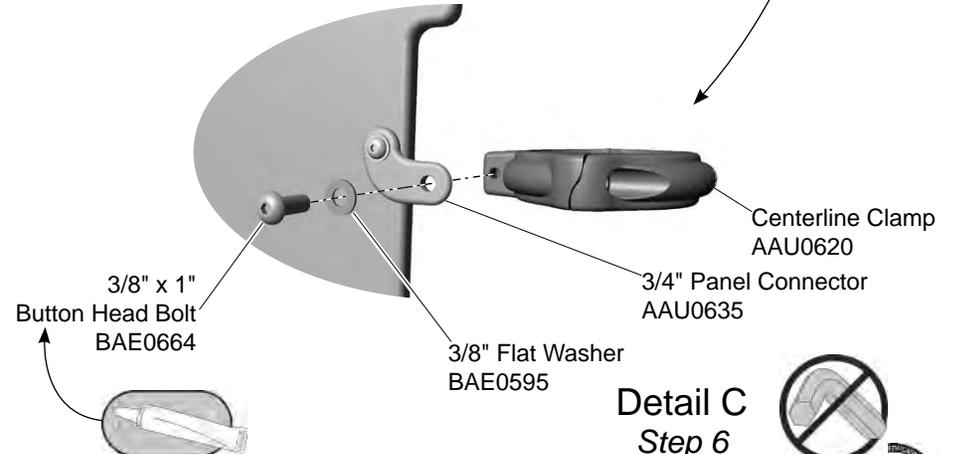
Step 3



**Detail A
Step 4**



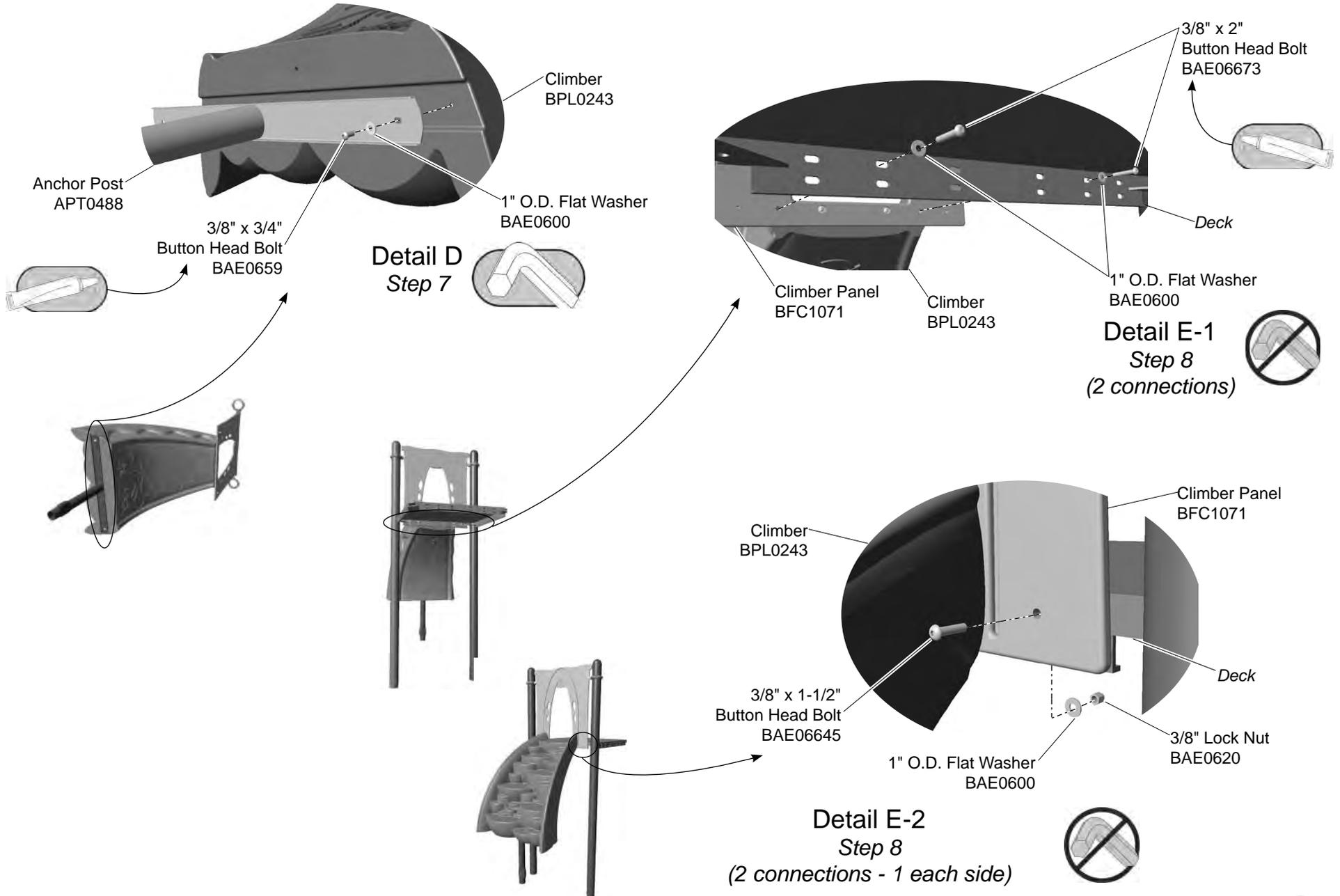
**Detail B
Step 5**



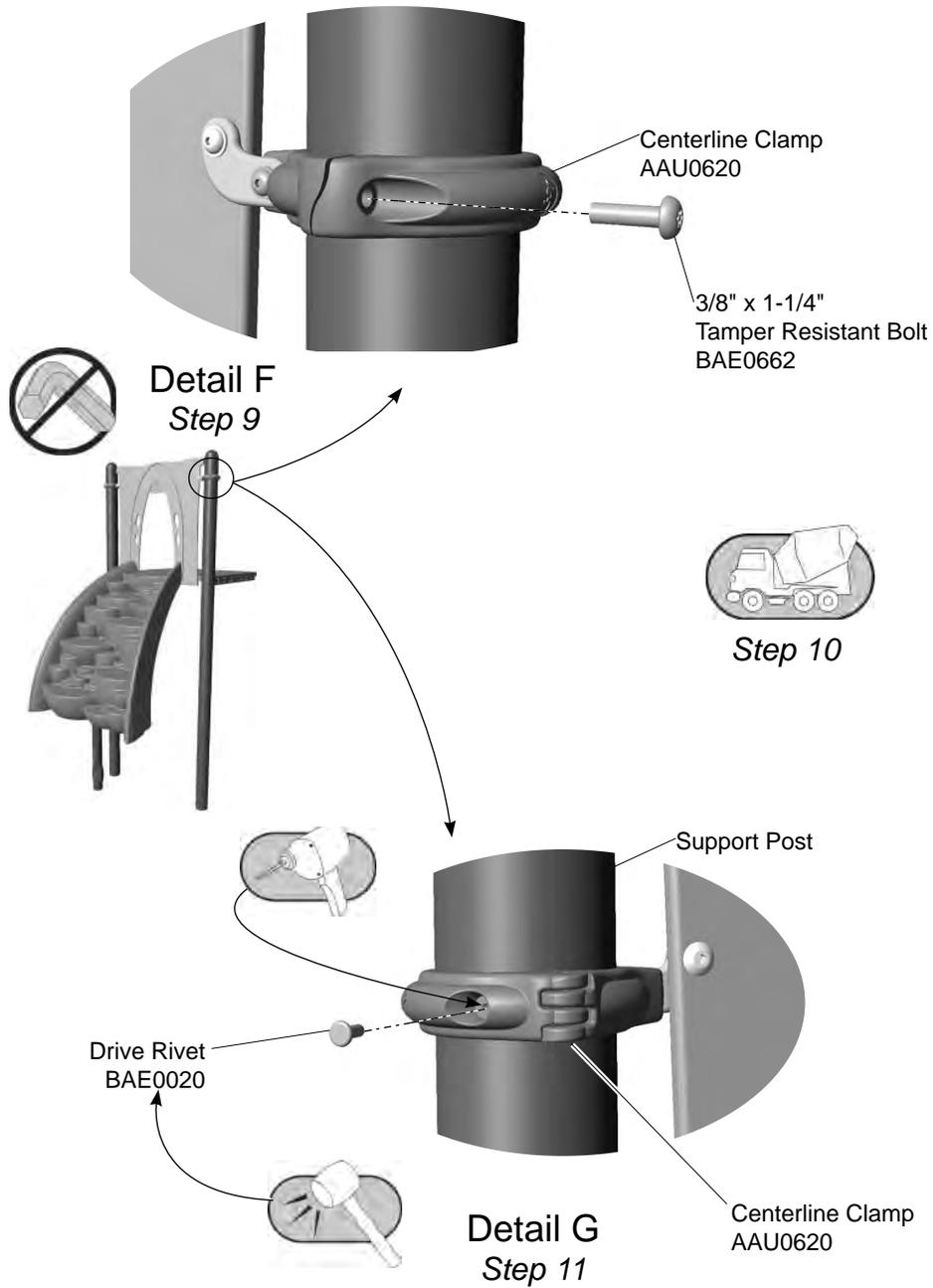
**Detail C
Step 6**



Installation Instructions



Installation Instructions



Installation Instructions

Notes Before You Begin: Do not over tighten bolts during assembly, only snug tighten them until assembly is complete

Carefully read and understand these installation instructions before you begin.

Step 1: Before attempting to assemble your equipment, please review all installation information carefully. Should you experience any difficulty during the installation process, please call us at the phone number shown on the last page of these instructions.

Step 2: Separate and identify all components and hardware.

Step 3: Excavate footing as shown in the **Component Footing Details**. See the *Playmaker Guidelines*.

Attach the climber panel to the climber.

Step 4: Attach the climber panel to the panel. See **Detail A**. Select the climber panel, the climber, and the appropriate hardware. There are (2) two connections for each size bolt. With the flat side of the panel facing away from the climber, apply a drop of loctite to the bolt threads and attach the panel to the climber as shown. Fully tighten connections. The *bottom outside* holes must be left open for attachment to the deck.

Attach the panel connectors and clamps to the panel.

Step 5: Attach the panel connectors to the panel. See **Detail B**. Select (2) two panel connectors, and the appropriate hardware. Attach the *short* leg of the connectors to the climber side of the panel as shown.

Step 6: Attach the clamps to the connectors. See **Detail C**. Select (2) two offset centerline clamps, and the appropriate hardware. Attach each clamp to the *panel* side of a connector as shown.

Step 7: Attach the anchor post to the climber. See **Detail D**. Select the anchor post and the appropriate hardware. There are (2) two connections. Apply a drop of loctite to the bolt threads and attach the anchor post to the bottom of the climber as shown. Fully tighten connections.

Step 8: Attach the climber and panel to the deck. See **Details E1 and E2**. Select the climber assembly and the appropriate hardware. There are (4) four total connections, (2) two for each size bolt. With adequate manpower, lift the climber into place against the deck with the support post in the footing. Attach to the deck as shown in the details. Apply a drop of loctite to the 2" bolt threads before threading into to climber.

Secure the clamps to the support posts.

Step 9: Secure the clamps to the support posts. See **Detail F**. Select (2) two 3/8" x 1-1/4" tamper resistant bolts. Attach each clamp to a post as shown.

Final Details.

Step 10: Plumb and level the component. Tighten **all** fasteners. Fully tighten all fasteners according to tightening torque specifications. Block and brace for concrete. Pour concrete after all equipment has been assembled. Allow 72 hours for concrete to completely cure.

Torque specifications - Nuts and Bolts: Snug tighten and tighten an additional one-half turn.

Step 11: Install the drive rivets. See **Detail G**. After the equipment assembly is complete, install a drive rivet in each clamp to permanently secure it to the support post. Using a 1/4" drill bit, drill through the clamp and support post. Insert the drive rivet into drilled hole until the head of the rivet is against the surface of the clamp. Using a hammer, pound the pin of the rivet until it is flush with the surface of the rivet head.

Note: This step should be executed after structure has been assembled and properly footed.

ZZPM7439 - ROCK CLIMBER TO DECK

PART NO.	DESCRIPTION	QTY.
AAU0620	CLAMP - 5" OFFSET CENTERLINE DIE CAST	2
AAU0635	CONNECT - 3/4" PANEL	2
APT0488	POST - 45.00" x 22.42" x 3.75"	1
BAD0085	THREAD LOCKING ADHESIVE	1
BAE0020	RIVET - 1/4" x 11/16" DRIVE	2
BAE0595	WASHER - 3/8" SAE FLAT	4
BAE0600	WASHER - 1" O.D. FLAT	10
BAE0620	NUT - 3/8"-16 LOCK w/NYLON CAP	2
BAE0659	BOLT - 3/8"-16 x 3/4" BUTTON HEAD - SS	2
BAE0662	BOLT - 3/8"-16 x 1-1/4" TMPR RESISTANT w/TORX DRV	2
BAE0663	NUT - 3/8"-16 x 7/16" BUTTON HEAD	2
BAE0664	BOLT - 3/8"-16 x 1" BUTTON HEAD - SS	4
BAE06645	BOLT - 3/8"-16 x 1-1/2" BUTTON HEAD - SS	4
BAE0666	BOLT - 3/8"-16 x 1-1/4" BUTTON HEAD - SS	2
BAE06673	BOLT - 3/8"-16 x 2" BUTTON HEAD - SS	2
BFC1071	SHEET - 42.00" x 47.00" x .75" ROCK CLIMBER PANEL	1
BPL0243	ROCK CLIMBER	1

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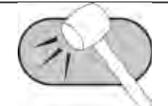
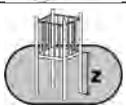
Assembly View (representative model)

Model	Description	Weight
ZZPM9828	Small Perforated (Square)	133.2 lbs. (60,6 kg)
ZZPM9829	Large Perforated (Square)	123.2 lbs. (56 kg)

Installation Instructions Playmakers® Models PM9828 & PM9829 Carnival Roof Small & Large Perforated (Square)

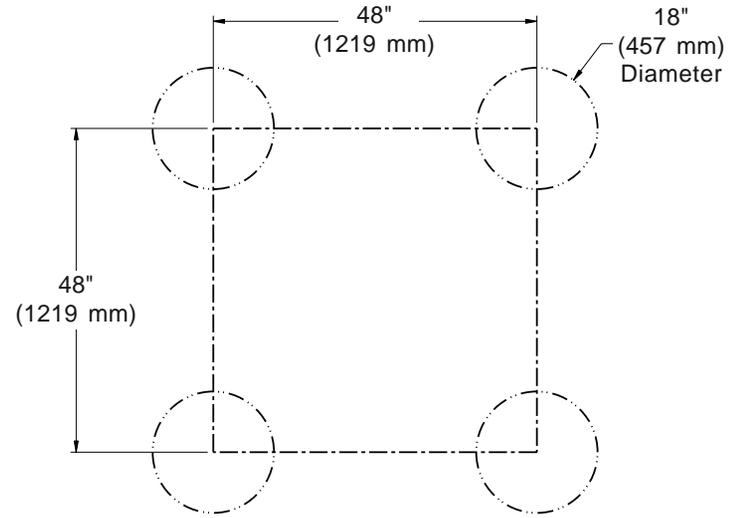
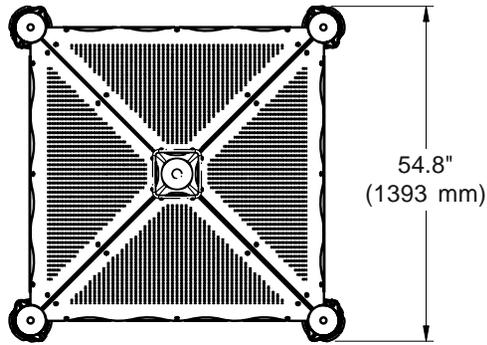
Installation Preparation

Recommended Crew: Two (2) adults
 Installation Time: 2 installation-hours
 Weight: (refer to the table below)
 Use Zone:..... Refer to Master Drawing

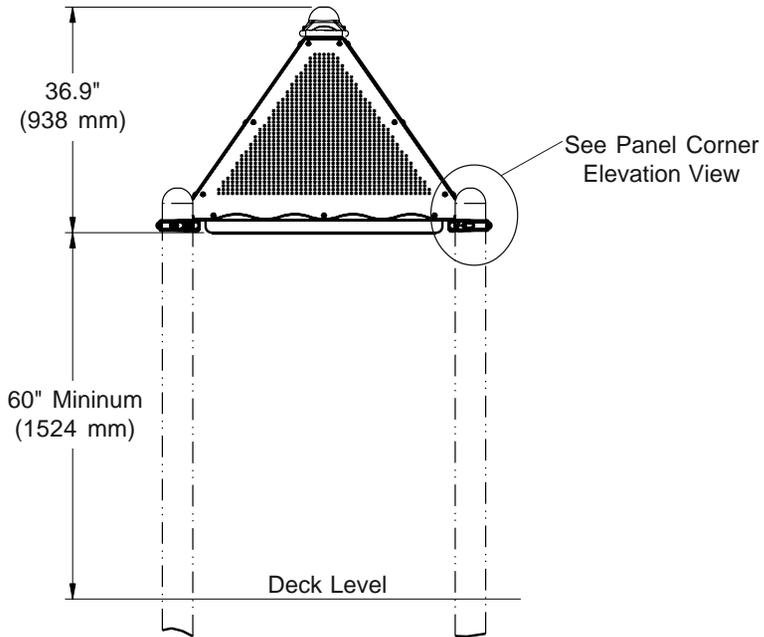
ICON KEY	
	Fully Tighten Hardware
	Do Not Fully Tighten Hardware
	Add 1 Drop of Thread Locking Adhesive
	Pour Concrete
	Drill
	Dig Footing Holes
	Hammer
	Critical Fall Height

Installation Instructions

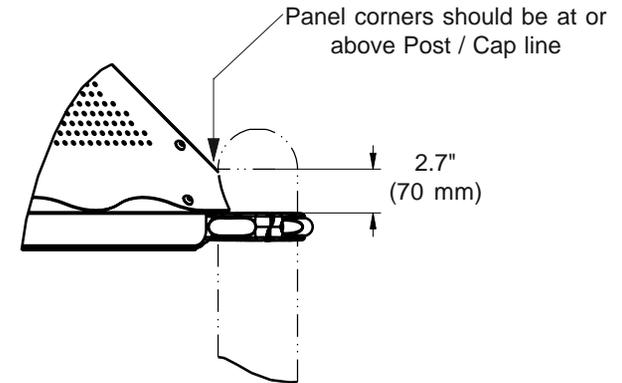
Top View



Footing Diagram

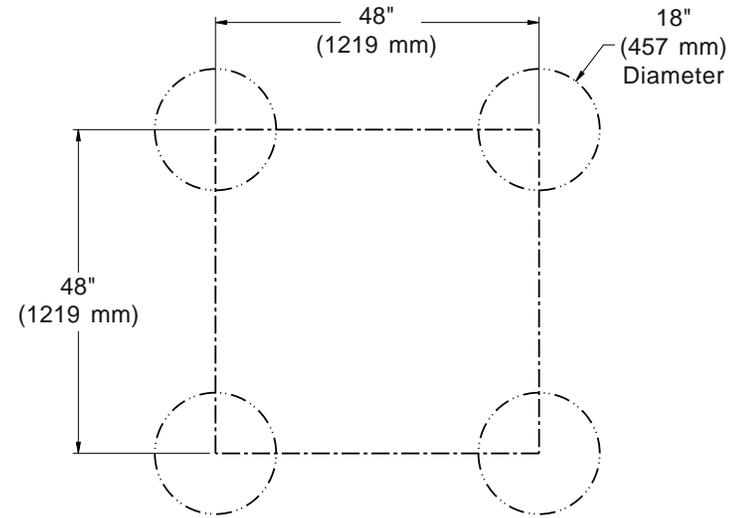
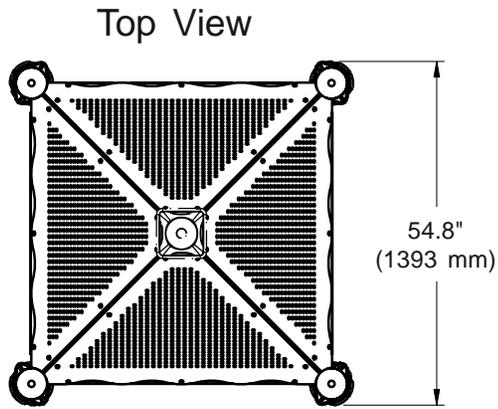


Elevation Views
PM9828

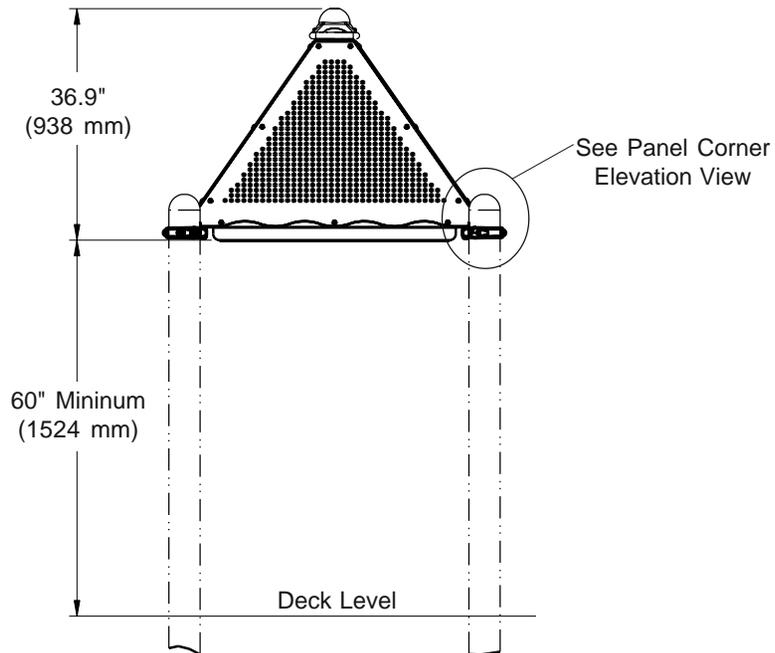


Panel Corner Elevation View

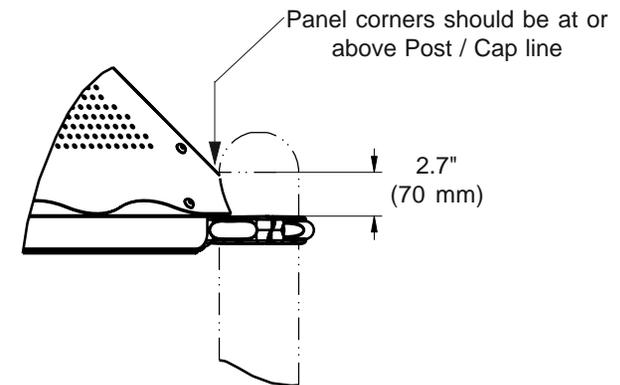
Installation Instructions



Footing Diagram



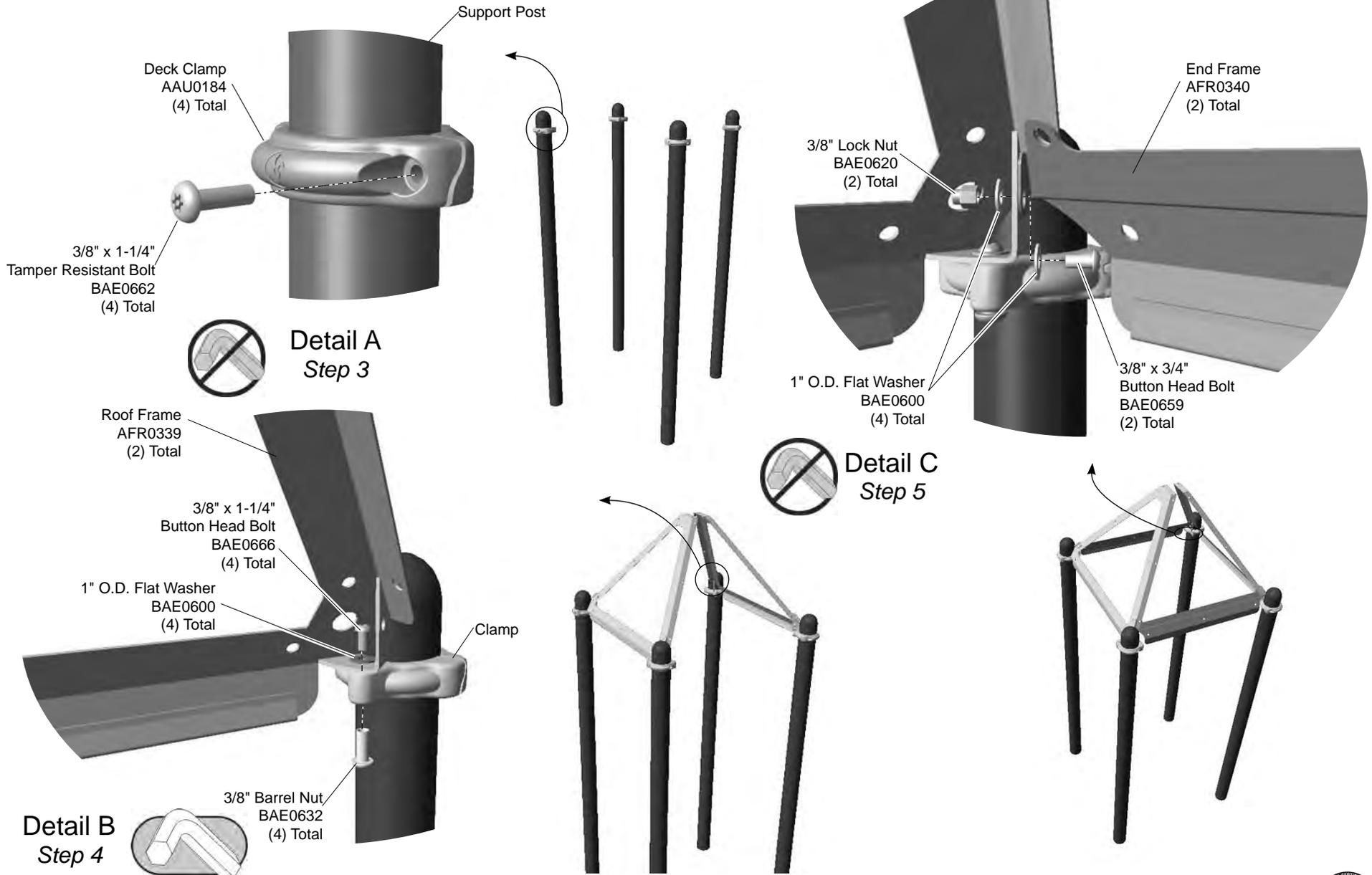
Elevation Views
PM9829



Panel Corner Elevation View

Installation Instructions

Follow the details in alphabetical order. For clarification, each detail references the step description. The step descriptions start on page 6.



Installation Instructions

Roof Cap
(Sold Separately)

Roof Frame

3/8" Flat Washer
BAE0595
(4) Total

3/8" x 3/4" Button Head Bolt
BAE0659
(4) Total

Detail D
Step 6

Roof Panel
(refer to chart)
(4) Total

3/8" x 3/4" Button Head Bolt
BAE0659
(36) Total

1" O.D. Flat Washer
BAE0600
(36) Total

3/8" Lock Nut
BAE0620
(36) Total

Detail E
Step 7

Model	Roof Panel Part #
ZZPM9828	AFM2491
ZZPM9829	AFM2489

Note: Attach two panels on opposite sides of the roof frame first. Then Attach the final two.

Clamp

Drive Rivet
BAE0020
(4) Total

Detail F
Step 9

Installation Instructions

Notes Before You Begin: Do not over tighten bolts during assembly, only snug tighten them until assembly is complete.

Carefully read and understand these installation instructions before you begin.

Step 1: Before attempting to assemble your equipment, please review all installation information carefully. Should you experience any difficulty during the installation process, please call us at the phone number shown on the last page of these instructions.

Step 2: Separate and identify all components and hardware.

Attach the clamps to the support posts.

Step 3: See **Detail A** and **Elevation Views**. Position the clamps so that the frame mounts face in towards the center of the deck. Do not fully tighten connections. Clamps may need to be rotated to attach the roof frames.

Attach the roof frames to the clamps.

Step 4: See **Detail B**. With the roof frames facing each other, position the bottom corners of each frame on top of the clamps. The top of the frames will rest against each other. The cutout sections of the frames should be flush against the support posts. Attach as shown. Fully tighten all connections.

Note: For ease of installation, the roof frame has an oversize hole to allow easy access with tools from above.

Attach the end frames to the roof frames.

Step 5: See **Detail C**. Position each end frame on an open side between the support posts. The mounting tabs should be flush against the bottom corner brackets of the roof frames. The bent portion of the end frame should be on the bottom and should angle in toward the deck. Attach as shown. Leave the connections loose.

Attach the square roof cap to the roof frames.

Step 6: See **Detail D**. Place the roof cap on top the roof frames and align the holes. Apply a drop of loctite to the bolt threads and attach as shown.

Note: The square roof cap is sold separately.

Attach the roof panels to the roof frames.

Step 7: See **Detail E**. Position each panel, with the side containing the part number facing the frame, on opposite sides of the roof frame. Slide the top of each panel up against the roof cap and snap the bottom down over the post caps so that the panel cutouts are flush against the caps. See **Panel Corner Elevation View**. Align holes in the panel with the holes in the frame. Attach as shown.

Important Note: If the panel cutouts aren't flush against the post cap, loosen the roof frame and clamp, then rotate the clamp to pull the panel flush.

Note: Attach two panels on opposite side of the roof frame first. Then attach the second set of panels.

-Use of an alignment pin will aid in aligning the holes in the panels and the frame.

Final Details.

Step 8: Plumb and level the component. Tighten **all** fasteners. Fully tighten all fasteners according to tightening torque specifications.

Torque Specifications:

Bolts and nuts - Snug tighten and then tighten an additional one half turn.

Step 9: Install drive rivets. See **Detail F**. After the equipment assembly is complete, install a drive rivet in each clamp to permanently secure it to the support post. Using a 1/4" drill bit, drill through the clamp and support post. Insert the drive rivet into drilled hole until the head of the rivet is against the surface of the clamp. Using a hammer, drive the pin of the rivet until it is flush with the surface of the rivet head.

Note: This step should be executed after structure has been assembled and properly footed.

PM9828 - CARNIVAL ROOF - SMALL PERFORATED (SQUARE)

PART NO.	DESCRIPTION	QTY.
AAU0184	CLAMP - 5" DECK HANGER DIE CAST	4
AFM2491	PANEL - 44.34" x 36.08" w/ SMALL HOLES	4
AFR0339	FRAME - 44.51" x 39.46" x 2.47" ROOF	2
AFR0340	FRAME - 44.21" x 7.72" x 1.79" END	2
BAD0085	THREAD LOCKING ADHESIVE	1
BAE0020	RIVET - 1/4" x 11/16" DRIVE	4
BAE0595	WASHER - 3/8" SAE FLAT	4
BAE0600	WASHER - 1" O.D. FLAT	48
BAE0620	NUT - 3/8"-16 LOCK w/ NYLON CAP	40
BAE0632	NUT - 3/8"-16 x 1-1/4" BARREL w/ PATCH	4
BAE0659	BOLT - 3/8"-16 x 3/4" BUTTON HEAD - SS	44
BAE0662	BOLT - 3/8"-16 x 1-1/4" TMPR RESISTANT w/ TORX DRV	4
BAE0666	BOLT - 3/8"-16 x 1-1/4" BUTTON HEAD - SS	4

PM9829 - CARNIVAL ROOF - LARGE PERFORATED (SQUARE)

PART NO.	DESCRIPTION	QTY.
AAU0184	CLAMP - 5" DECK HANGER DIE CAST	4
AFM2489	PANEL - 44.34" x 36.08" W/ LARGE HOLES	4
AFR0339	FRAME - 44.51" x 39.46" x 2.47" ROOF	2
AFR0340	FRAME - 44.21" x 7.72" x 1.79" END	2
BAD0085	THREAD LOCKING ADHESIVE	1
BAE0020	RIVET - 1/4" x 11/16" DRIVE	4
BAE0595	WASHER - 3/8" SAE FLAT	4
BAE0600	WASHER - 1" O.D. FLAT	48
BAE0620	NUT - 3/8"-16 LOCK w/ NYLON CAP	40
BAE0632	NUT - 3/8"-16 x 1-1/4" BARREL W/ PATCH	4
BAE0659	BOLT - 3/8"-16 x 3/4" BUTTON HEAD - SS	44
BAE0662	BOLT - 3/8"-16 x 1-1/4" TMPR RESISTANT W/ TORX DRV	4
BAE0666	BOLT - 3/8"-16 x 1-1/4" BUTTON HEAD - SS	4

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INSTALLATION INSTRUCTIONS

PLAYMAKERS® MODEL PM9856

CARNIVAL ROOF SQUARE CAP



Assembly View

Installation Preparation . . .

Recommended Crew: One (1) adult
Installation Time: 0.25 hour
Weight: 6.1 Lbs. (2.8 Kilos)

Torque Specification:

Bolts & Nuts: Snug tighten and
tighten an additional one-half turn.
Set Screws: Snug tighten and
tighten an additional full turn.

Maintenance . . .

- Playworld Systems strongly recommends the use of protective surfacing within the use zone of each play structure in accordance with ASTM specification F1292 appropriate for the fall height of each structure.
- Playworld Systems strongly recommends close supervision of children as they play. The owners of playground equipment and the parents or guardians of children are responsible for this proper supervision. Do not use playground equipment when it is wet or snow covered.
- As the owner of playground equipment, you are responsible for the maintenance of the equipment and surrounding play area. A comprehensive maintenance and inspection schedule must be developed and all equipment inspected frequently.

INSTALLATION INSTRUCTIONS

INSTALLATION

✓Notes Before You Begin:

- Do not over tighten bolts during assembly, only snug tighten them until assembly is complete.
- If during the installation process a bolt needs to be removed from a part or parts, it will be necessary to apply a drop of liquid thread lock / loctite to the bolt before reinstallation.

Carefully read and understand these installation instructions before you begin.

Step 1: Before attempting to assemble your equipment, please review all installation information carefully. Should you experience any difficulty during the installation process, please call us at the (800) number shown on the last page of these instructions.

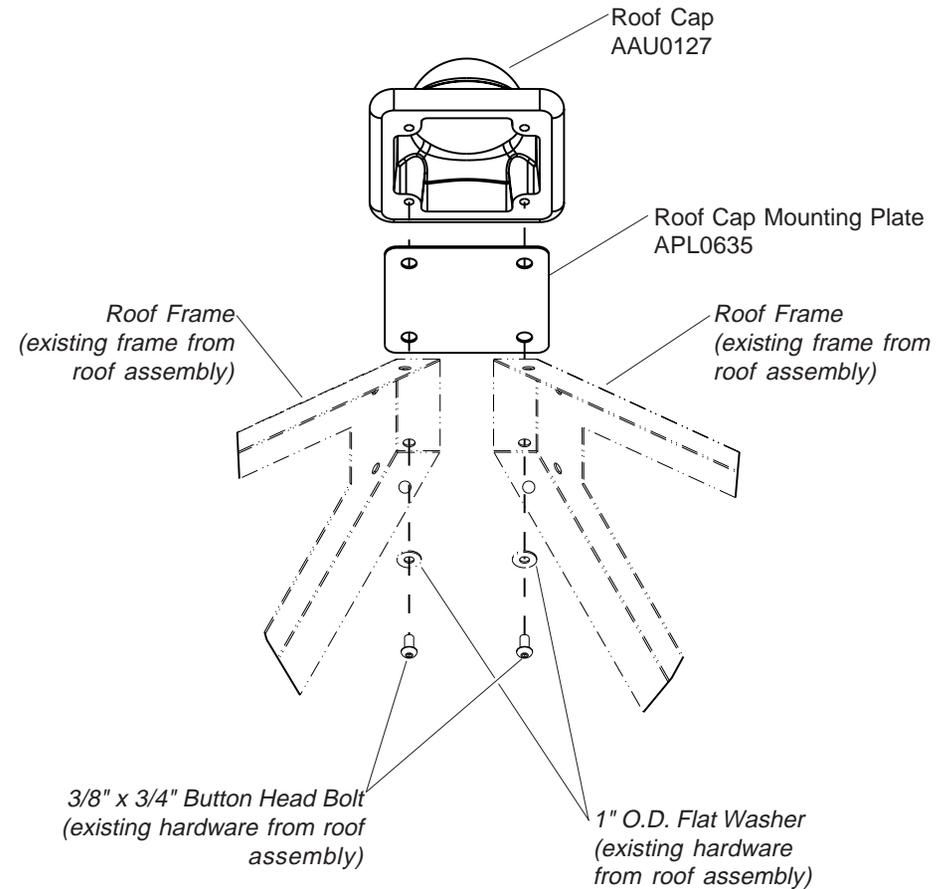
Step 2: Separate and identify all components and hardware by referencing the detail drawings and packing list.

Attach the square roof cap to the roof frames.

Step 3: Attach the square roof cap to the roof frames. **See Detail A.** Select the roof cap and the mounting plate. Using hardware that is included in the associated roof assembly, select (4) four of the following: 3/8" x 3/4" button head bolts and 1" O.D. flat washers. Place the roof cap mounting plate on top of the existing roof frames and align holes. Position the roof cap on top of the mounting plate and align holes. Apply a drop of loctite to the bolt threads and insert each bolt through a washer, up through the roof frame, through the mounting plate, and thread into the roof cap. Snug tighten connections.

Final Details.

Step 4: Tighten **all** fasteners at completion of the roof assembly. See the associated roof assembly instructions for full details. Fully tighten all fasteners according to tightening torque specifications. See page 1 of these instructions.



Detail A

INSTALLATION INSTRUCTIONS

BILL OF MATERIAL

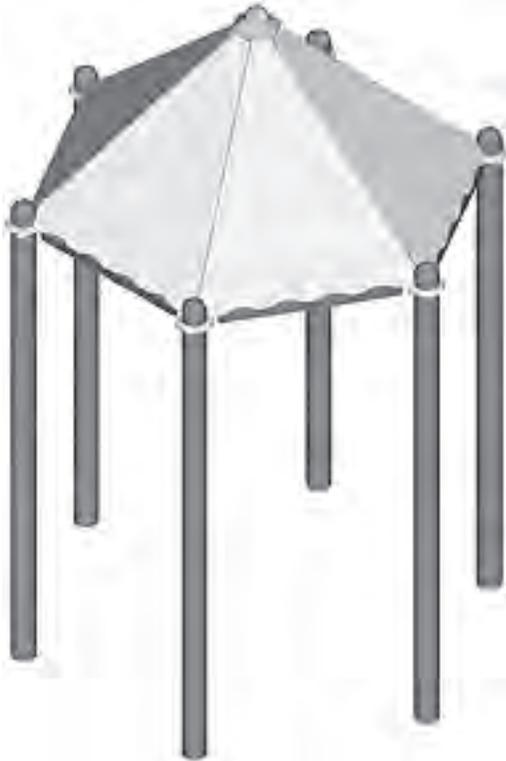
PM - CARNIVAL ROOF SQUARE CAP

PART NO.	DESCRIPTION	QTY.
AAU0127	CAP - 8.00" x 8.00" x 4.80"	1
APL0635	PLATE - 6.75" x 6.75" x 14 GA w/ 4 HOLES	1



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**PLAYMAKERS®
MODEL PM9887****CARNIVAL ROOF - SMALL PERFORATED (HEX)****Assembly View****Installation Preparation . . .**

Recommended Crew: Two (2) adults
Installation Time: 3 man-hours
Weight: 268.4 Lbs. (122 Kilos)

Torque Specification:

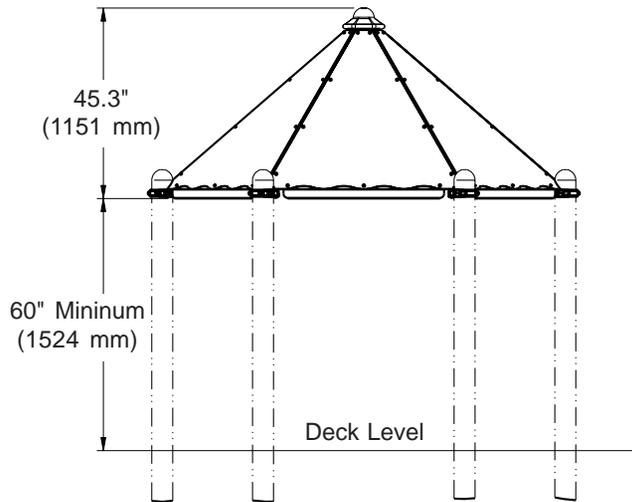
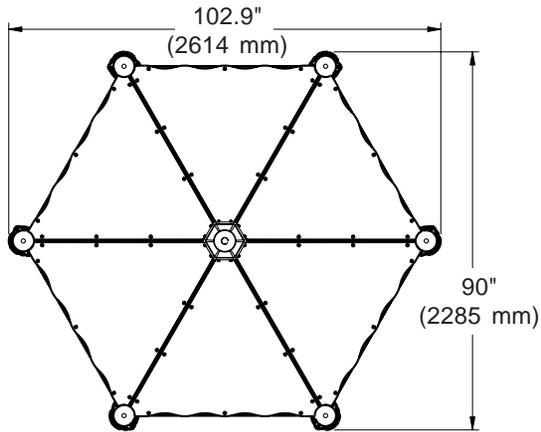
Bolts & Nuts: Snug tighten and
tighten an additional one-half turn.
Set Screws: Snug tighten and
tighten an additional full turn.

Maintenance . . .

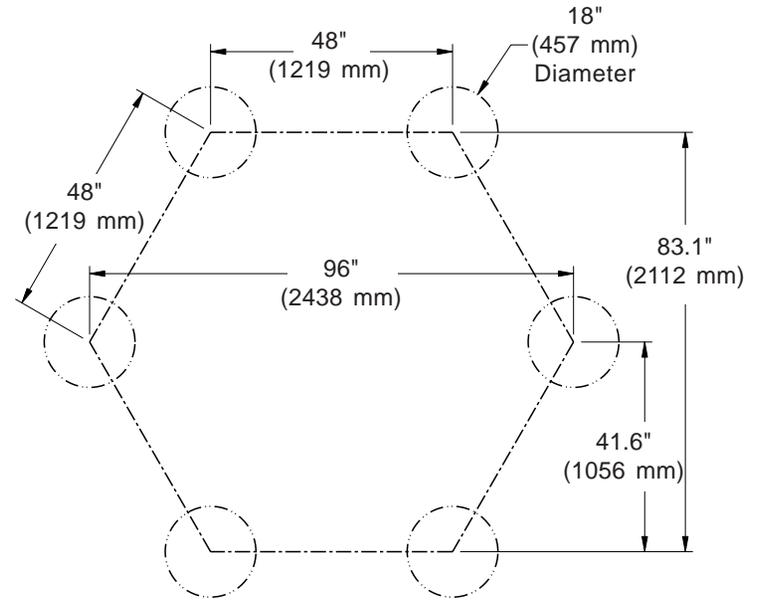
- Playworld Systems strongly recommends the use of protective surfacing within the use zone of each play structure in accordance with ASTM specification F1292 appropriate for the fall height of each structure.
- Playworld Systems strongly recommends close supervision of children as they play. The owners of playground equipment and the parents or guardians of children are responsible for this proper supervision. Do not use playground equipment when it is wet or snow covered.
- As the owner of playground equipment, you are responsible for the maintenance of the equipment and surrounding play area. A comprehensive maintenance and inspection schedule must be developed and all equipment inspected frequently.

INSTALLATION INSTRUCTIONS

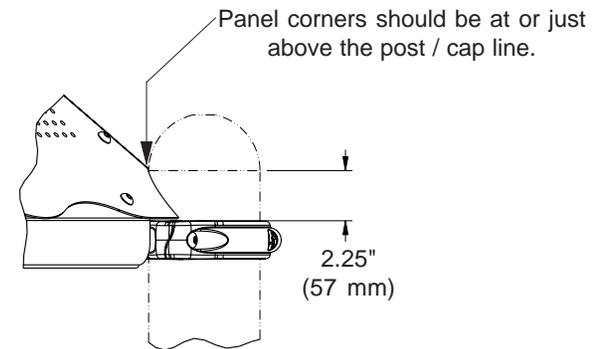
Top View



Elevation View



Footing Diagram



Panel Corner Elevation View

INSTALLATION INSTRUCTIONS

INSTALLATION

✓Notes Before You Begin:

- Do not over tighten bolts during assembly, only snug tighten them until assembly is complete.
- If a bolt has been removed from the barrel nut, button head nut, or lock nut more than 3-4 times, apply a drop of loctite to the bolts threads before re-installation.

Carefully read and understand these installation instructions before you begin.

Step 1: Before attempting to assemble your equipment, please review all installation information carefully. Should you experience any difficulty during the installation process, please call us at the (800) number shown on the last page of these instructions.

Step 2: Separate and identify all components and hardware by referencing the detail drawings and packing list.

Attach the clamps to the support posts.

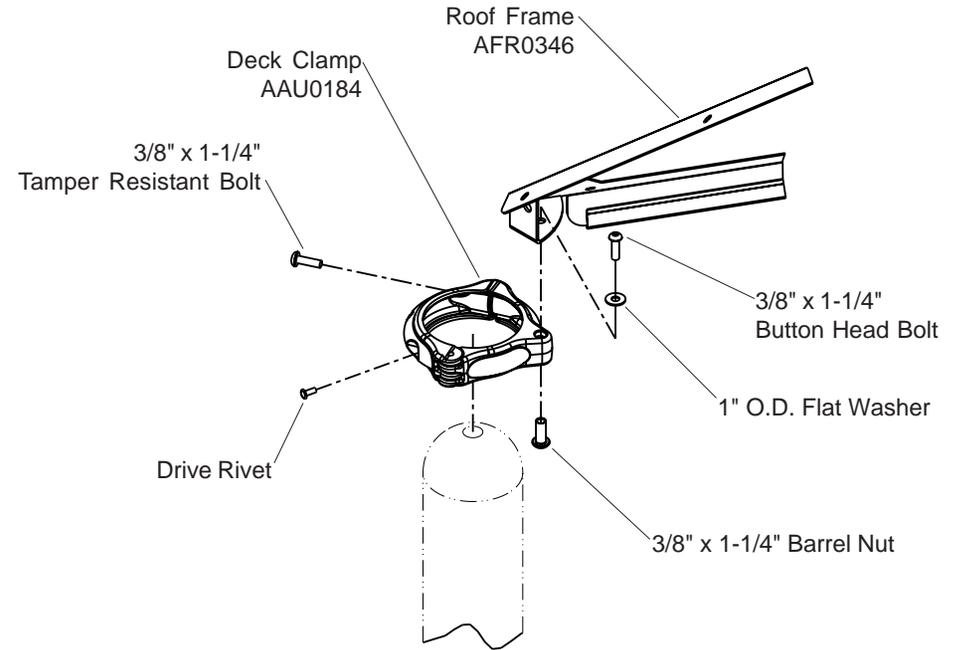
Step 3: Attach the clamps to the support posts. **See Detail A and Elevation Views.** Select (6) six deck clamps and (6) six 3/8" x 1-1/4" tamper resistant bolts. Open and close each clamp around a support post at the height indicated on the **Elevation Views**. Apply a drop of loctite to the bolt threads and thread each bolt into a clamp. Position the clamps so that the frame mounts face in towards the center of the deck. **Do not** fully tighten connections. Clamps may need to be rotated to attach the roof frames.

Attach the roof frames to the clamps.

Step 4: Attach the roof frames to the clamps. **See Detail A.** Select (3) three roof frames and (6) six of the following: 3/8" x 1-1/4" button head bolts, 3/8" x 1-1/4" barrel nuts, and 1" O.D. flat washers. With the roof frames facing each other and forming a tripod, position the bottom corners of each frame on top of the deck clamps with the tops against each other. The cutout sections of the frames should be flush against the support posts. Align the hole in each corner of a frame with the mounting hole in the deck clamp. Insert each bolt through a washer, down through the frame, through the clamp, and thread into a barrel nut.

Fully tighten all connections. See **page 1** of these instructions for torque specifications.

Note: For ease of installation, the roof frame has an oversize hole to allow easy access with tools from above.



Detail A

INSTALLATION INSTRUCTIONS

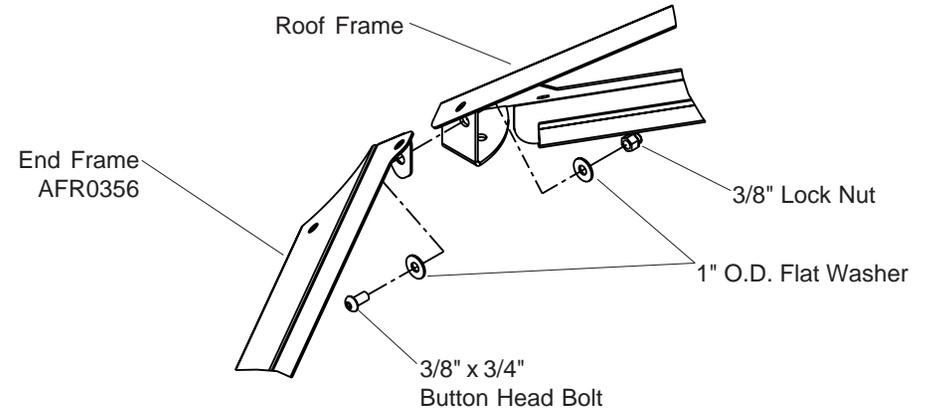
Attach the end frames to the roof frames.

Step 5: Attach the end frames to the roof frames. **See Detail B.** Select (3) three end frames, (12) twelve 1" O.D. flat washers, and (6) six of the following: 3/8" x 3/4" button head bolts and 3/8" lock nuts. Position each end frame on an open side between the support posts. The mounting tabs should be flush against the bottom corner brackets of the roof frames. The bent portion of the end frame should be on the bottom and should angle in toward the deck. Align holes. Insert each bolt through a washer, through the end frame mounting tab, through the roof frame bracket, through another washer, and secure with a lock nut. Leave connections loose.

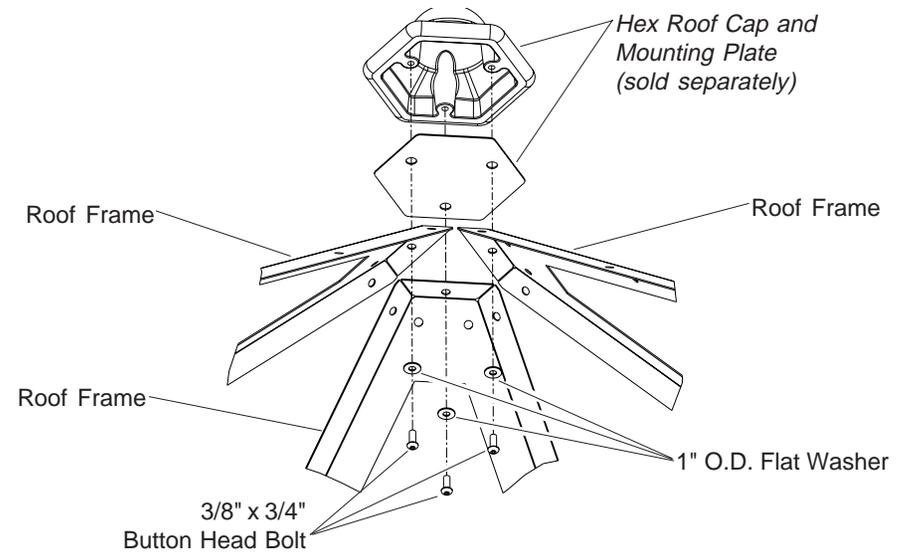
Attach the hex roof cap to the roof frames.

Step 6: Attach the hex roof cap to the roof frames. **See Detail C.** Select the hex roof cap, the roof cap mounting plate and (3) three of the following: 3/8" x 3/4" button head bolts and 1" O.D. flat washers. Place the roof cap mounting plate on top the roof frames and align holes. Place the roof cap on top of the mounting plate and align holes. Apply a drop of loctite to the bolt threads and insert each bolt through a washer, up through the roof frame, through the mounting plate, and thread into the roof cap. Snug tighten connections.

Note: The hex roof cap and mounting plate are sold separately.



Detail B



Detail C

INSTALLATION INSTRUCTIONS

Attach the roof panels to the roof frames.

Step 7: Attach the roof panels to the roof frames. See **Detail D**, **Detail E**, and **Panel Corner Elevation View**. Select (3) three roof panels and (33) thirty three of the following: 3/8" x 3/4" button head bolts, 3/8" lock nuts, and 1" O.D. flat washers. Position each panel, with the side containing the *part number* facing the frame, on every other side of the roof frame. Slide the top of each panel up against the roof cap and snap the bottom down over the post caps so that the panel cutouts are flush against the caps. See **Panel Corner Elevation View**. Align holes in the panel with the holes in the frame. Insert each bolt through the panel, through the roof frame, through a washer and thread into a lock nut. Leave connections loose.

Note: Use of an alignment pin will aid in aligning the holes in the panels and the frame.

Hint: If the panel cutouts aren't flush against the post cap, loosen the roof frame and clamp then rotate the clamp in to draw panel flush.

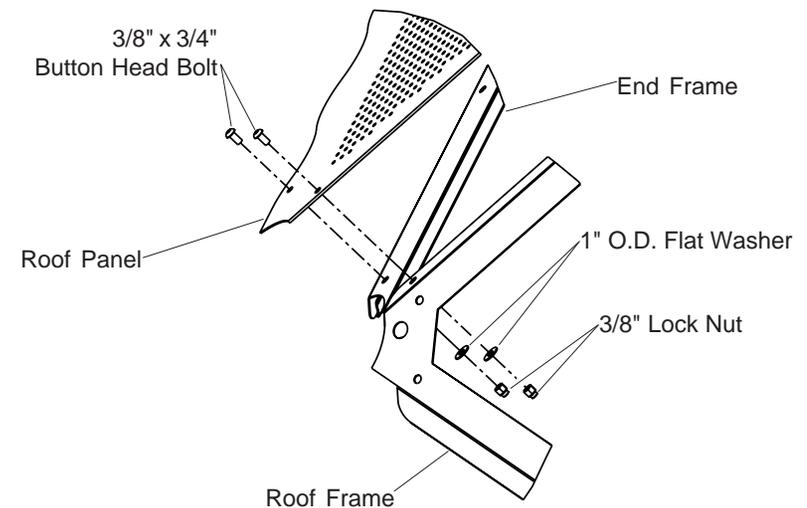
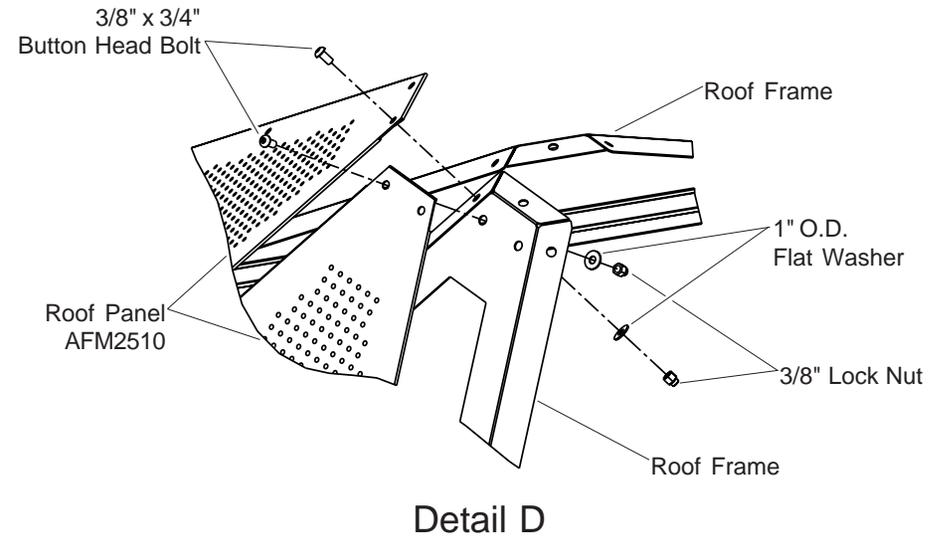
Step 8: Attach the remaining roof panels to the roof frames. See **Detail D**, **Detail E**, and **Panel Corner Elevation View**. Select the remaining (3) three roof panels and (33) thirty three of the following: 3/8" x 3/4" button head bolts, 3/8" lock nuts, and 1" O.D. flat washers. Position each panel, with the side containing the *part number* facing the frame, on the remaining open sides of the roof frame. Slide the top of each panel up against the roof cap and snap the bottom down over the post caps so that the panel cutouts are flush against the caps. See **Panel Corner Elevation View**. Align holes in the panel with the holes in the frame. Attach in the same way as in **Step 7**. Leave connections loose.

Final Details.

Step 9: Plumb and level entire component. Tighten **all** fasteners. Fully tighten all fasteners according to tightening torque specifications. See **page 1** of these instructions.

Step 10: Install drive rivets. See **Detail A**. After the equipment assembly is complete, install a drive rivet in each clamp to permanently secure it to the support post. Using a 1/4" drill bit, drill through the clamp and support post. Insert the drive rivet into drilled hole until the head of the rivet is against the surface of the clamp. Using a hammer, drive the pin of the rivet until it is flush with the surface of the rivet head.

Note: This step should be executed after structure has been assembled and properly footed.



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INSTALLATION INSTRUCTIONS

BILL OF MATERIAL

PM - CARNIVAL ROOF - SMALL PERFORATED (HEX)

PART NO.	DESCRIPTION	QTY.
AAU0184	CLAMP - 5" DECK HANGER DIE CAST	6
AFM2510	PANEL - 45.11" x 53.57" w/ SMALL HOLES	6
AFR0346	FRAME - 47.07" x 56.65" x 2.68" ROOF	3
AFR0356	FRAME - 45.17" x 7.11" x 1.61" END	3
BAD0085	THREAD LOCKING ADHESIVE	1
BAE0020	RIVET - 1/4" x 11/16" DRIVE	6
BAE0600	WASHER - 1" O.D. FLAT	87
BAE0620	NUT - 3/8"-16 LOCK w/ NYLON CAP	72
BAE0632	NUT - 3/8"-16 x 1-1/4" BARREL w/ PATCH	6
BAE0659	BOLT - 3/8"-16 x 3/4" BUTTON HEAD - SS	75
BAE0662	BOLT - 3/8"-16 x 1-1/4" TMPR RESISTANT w/ TORX DRV	6
BAE0666	BOLT - 3/8"-16 x 1-1/4" BUTTON HEAD - SS	6



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INSTALLATION INSTRUCTIONS

PLAYMAKERS® MODEL PM9898 CARNIVAL ROOF HEX CAP



Assembly View

Installation Preparation . . .

Recommended Crew: One (1) adult
Installation Time: 0.25 hour
Weight: 6.1 Lbs. (2.8 Kilos)

Torque Specification:

Bolts & Nuts: Snug tighten and
tighten an additional one-half turn.
Set Screws: Snug tighten and
tighten an additional full turn.

Maintenance . . .

- Playworld Systems strongly recommends the use of protective surfacing within the use zone of each play structure in accordance with ASTM specification F1292 appropriate for the fall height of each structure.
- Playworld Systems strongly recommends close supervision of children as they play. The owners of playground equipment and the parents or guardians of children are responsible for this proper supervision. Do not use playground equipment when it is wet or snow covered.
- As the owner of playground equipment, you are responsible for the maintenance of the equipment and surrounding play area. A comprehensive maintenance and inspection schedule must be developed and all equipment inspected frequently.

INSTALLATION INSTRUCTIONS

INSTALLATION

✓Notes Before You Begin:

- Do not over tighten bolts during assembly, only snug tighten them until assembly is complete.
- If during the installation process a bolt needs to be removed from a part or parts, it will be necessary to apply a drop of liquid thread lock / loctite to the bolt before reinstallation.

Carefully read and understand these installation instructions before you begin.

Step 1: Before attempting to assemble your equipment, please review all installation information carefully. Should you experience any difficulty during the installation process, please call us at the (800) number shown on the last page of these instructions.

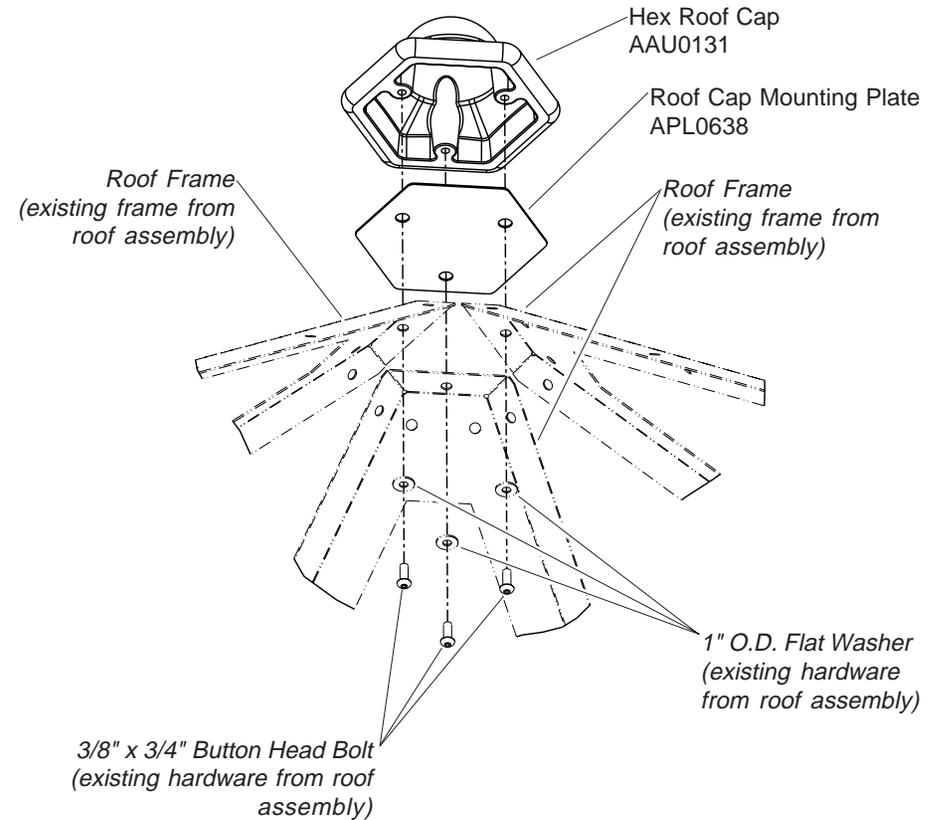
Step 2: Separate and identify all components and hardware by referencing the detail drawings and packing list.

Attach the hex roof cap to the roof frames.

Step 3: Attach the hex roof cap to the roof frames. **See Detail A.** Select the hex roof cap and the roof cap mounting plate. Using hardware that is included in the associated roof assembly, select (3) three of the following: 3/8" x 3/4" button head bolts and 1" O.D. flat washers. Place the mounting plate and the roof cap on top of the existing roof frames and align holes. Apply a drop of loctite to the bolt threads and insert each bolt through a washer, up through the roof frame, through the mounting plate, and thread into the roof cap. Snug tighten connections.

Final Details.

Step 4: Tighten **all** fasteners at completion of the roof assembly. See the associated roof assembly instructions for full details. Fully tighten all fasteners according to tightening torque specifications. See page 1 of these instructions.



Detail A

INSTALLATION INSTRUCTIONS

BILL OF MATERIAL

PM - CARNIVAL ROOF HEX CAP

PART NO.	DESCRIPTION	QTY.
AAU0131	CAP - 9.00" x 10.08" x 4.87" HEX	1
APL0638	PLATE - 14 GA. x 7.75" x 8.83" HEX w/ 3 HOLES	1



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Installation Instructions

Playmakers®

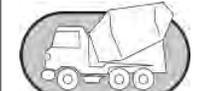
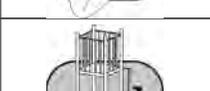
Models PM9168, PM9170 and PM9177
 Deck to Deck Accessible Tiered Platform
 12 in. (305 mm), 24 in. (610 mm) and
 36" (914 mm) Rise Height



Assembly View (representative model)

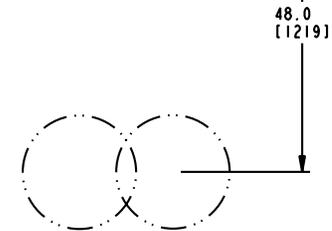
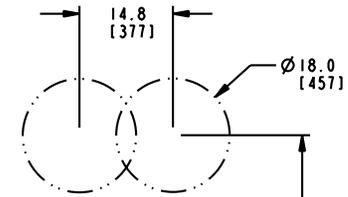
Installation Preparation

Recommended Crew: Two - Three (2-3) adults
 Installation Time: 2 man-hours
 Use Zone:..... Refer to Master Drawing
 User Group Age (years): ASTM/CSA: 2-12, EN: 2-14

ICON KEY	
	Fully Tighten Hardware
	Do Not Fully Tighten Hardware
	Drill
	Hammer
	Add 1 Drop of Thread Locking Adhesive
	Pour Concrete
	Dig Footing Holes
	Critical Fall Height

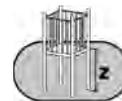
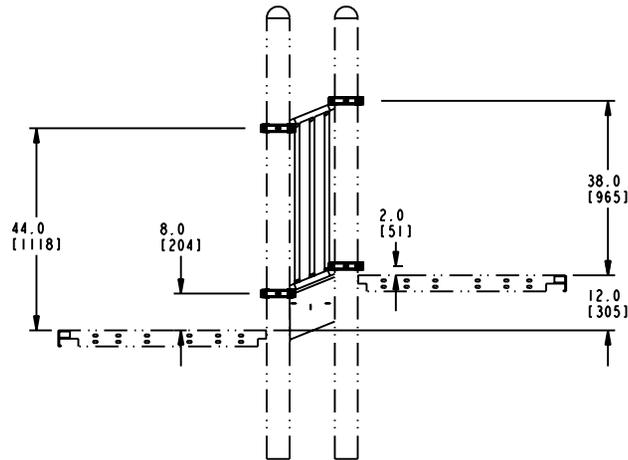
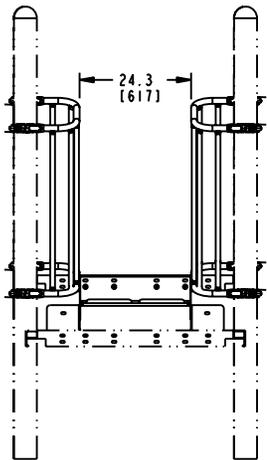
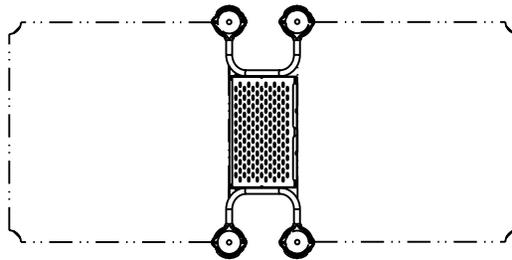
Installation Instructions

KEY	
Position	Unit of Measurement
Top #	Inches
Bottom #	[Millimeters]



Footing Diagram

Top View



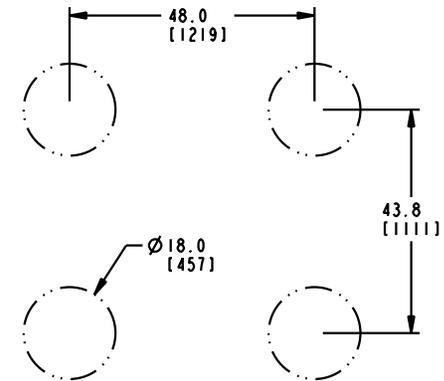
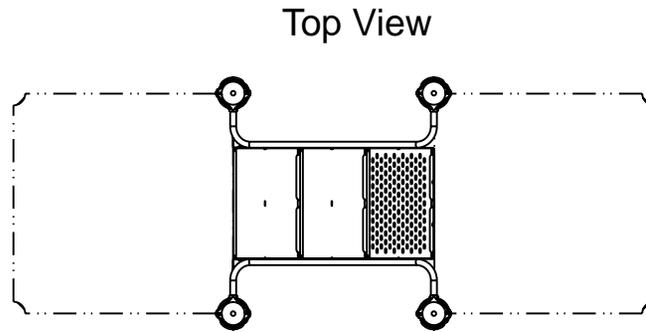
Height of the upper deck
minus 6" (152 mm)

Elevation Views
PM9168

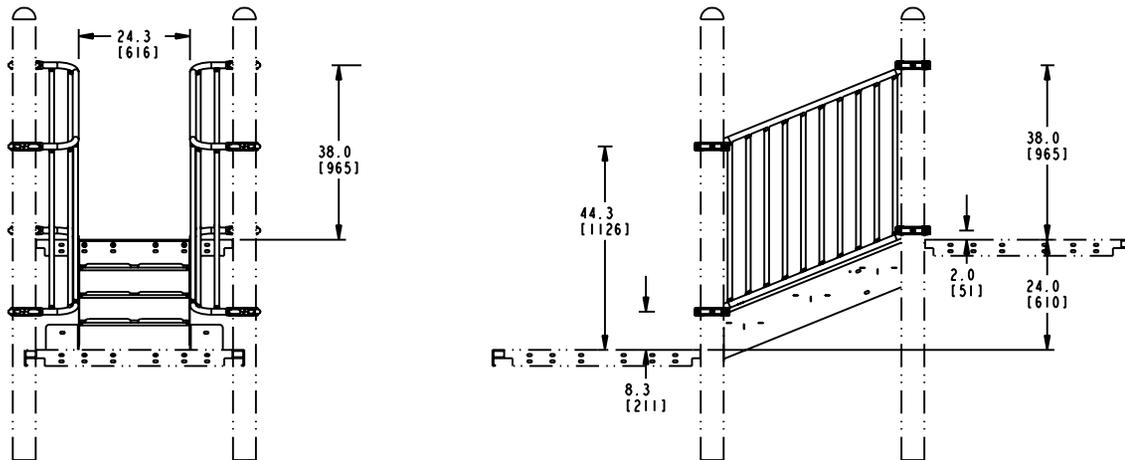


Installation Instructions

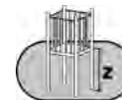
KEY	
Position	Unit of Measurement
Top #	Inches
Bottom #	[Millimeters]



Footing Diagram



Elevation Views
PM9170

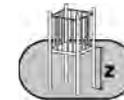
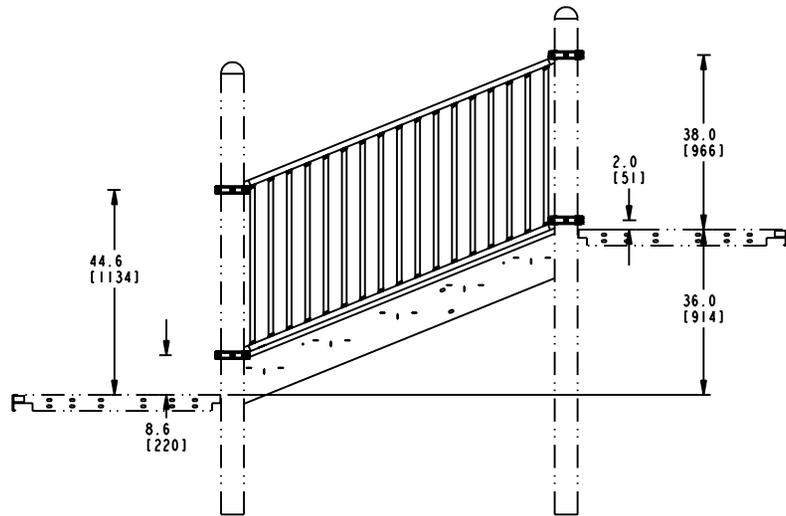
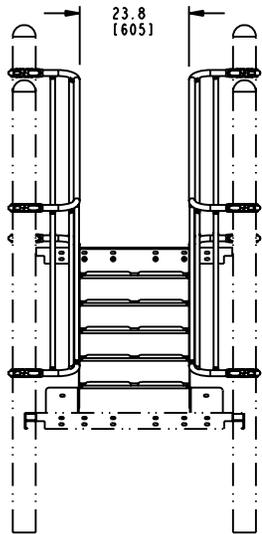
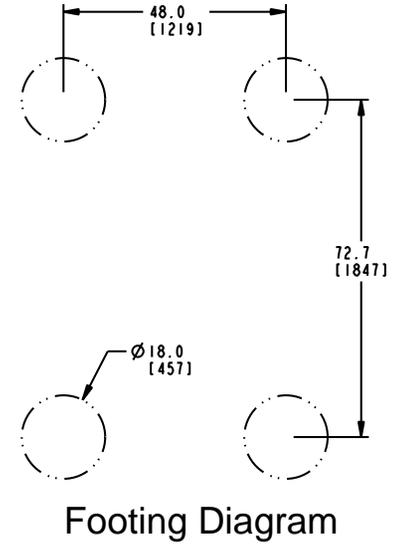
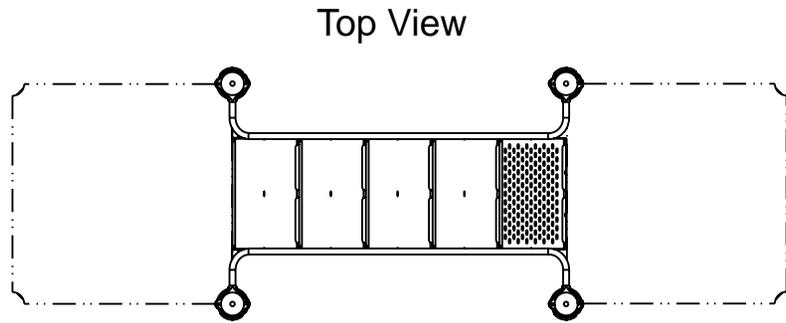


Height of the upper deck
minus 6" (152 mm)



Installation Instructions

KEY	
Position	Unit of Measurement
Top #	Inches
Bottom #	[Millimeters]

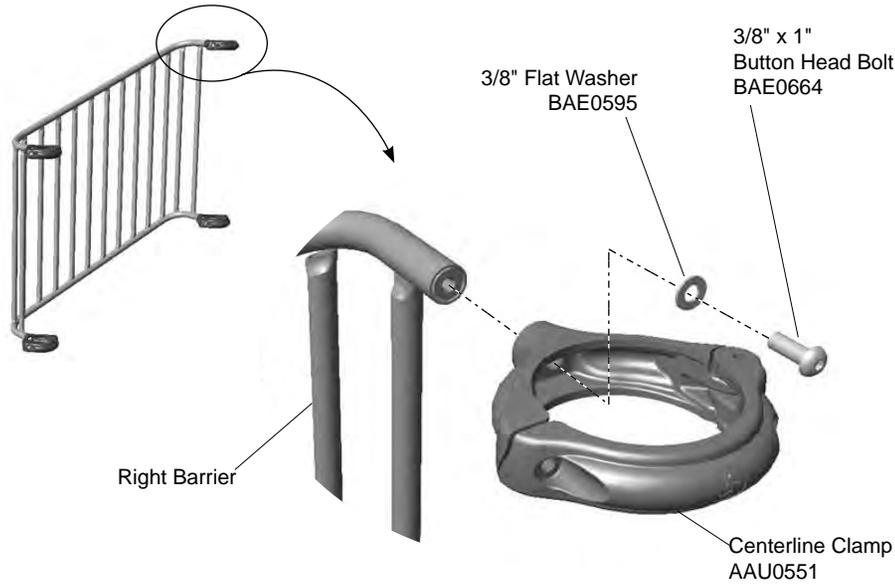


Height of the upper deck
minus 6" (152 mm)

Elevation Views
PM9177

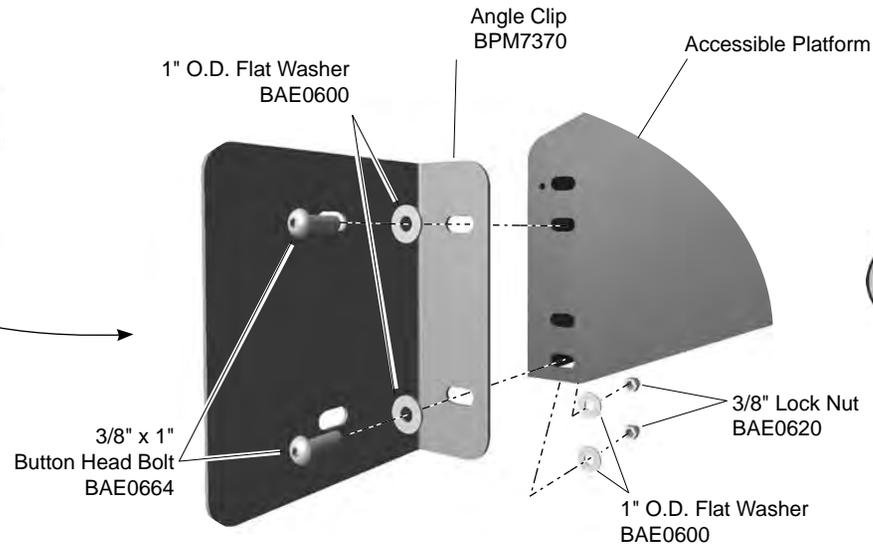
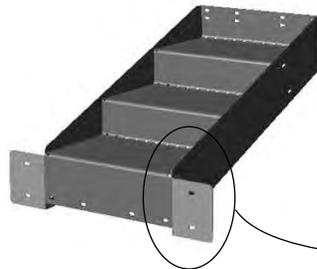
Installation Instructions

Follow the details in alphabetical order. For clarification, each detail references the step description. The step descriptions start on page 7.

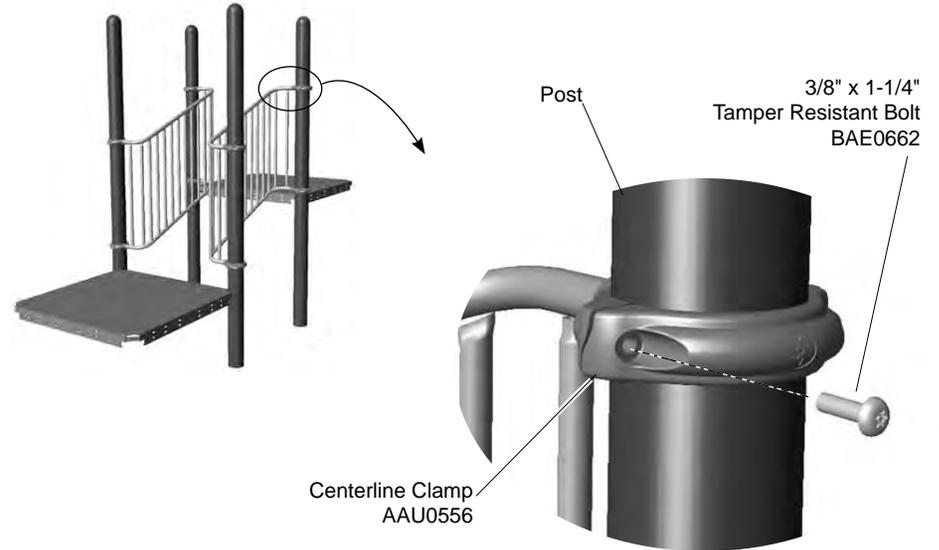


Detail A
Step 4

The front of angle clip should be even with the face of the platform



Detail C
Step 6



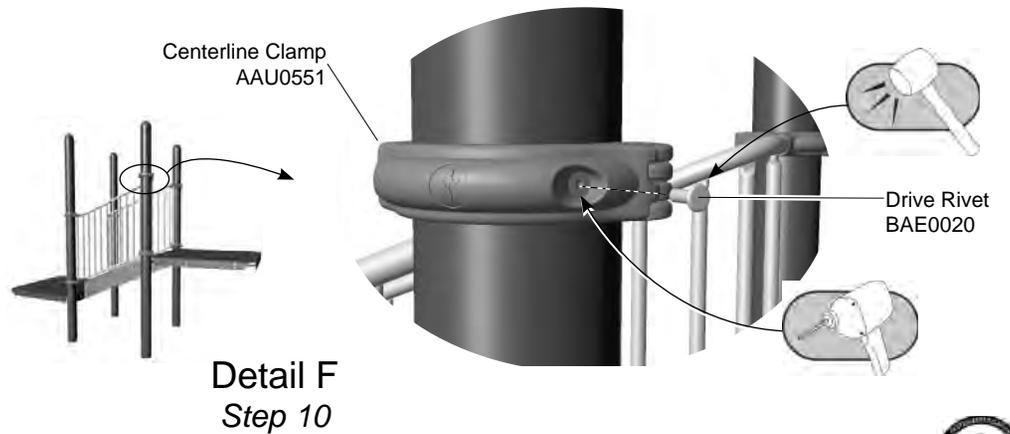
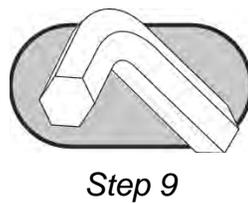
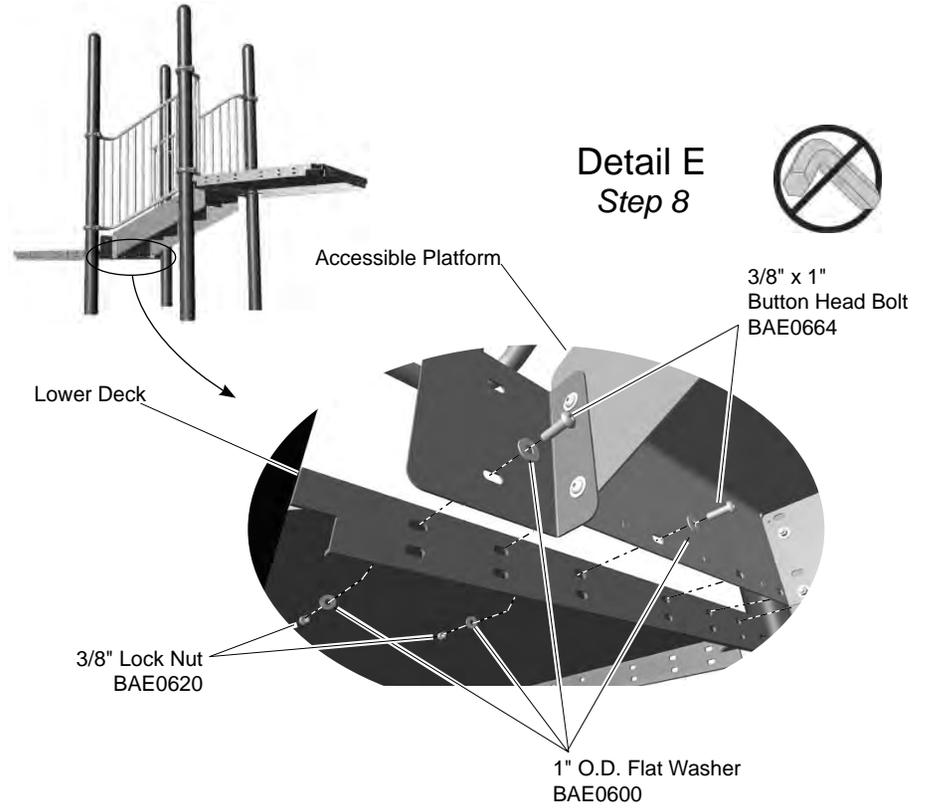
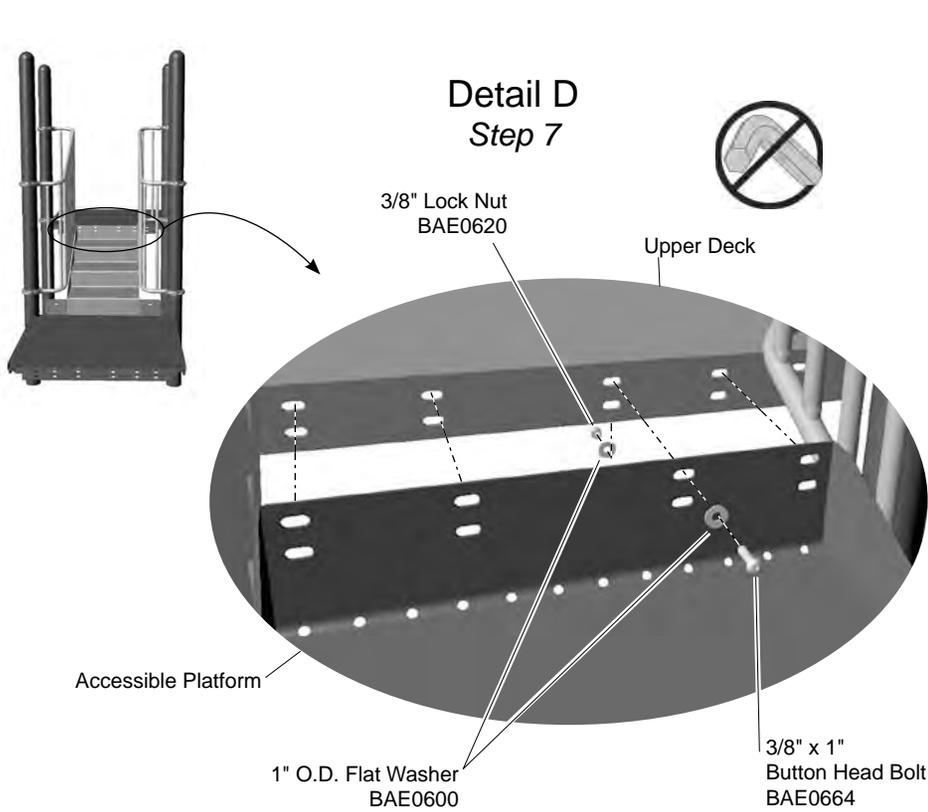
Detail B
Step 5



Model	Barriers (Right / Left)	Tiered Platform
ZZPM9168	AEN0487 / AEN0488	BPM0296
ZZPM9170	AEN0489 / AEN0490	BPM0298
ZZPM9177	AEN0491 / AEN0492	BPM0299



Installation Instructions



Installation Instructions

Notes Before You Begin: Do not over tighten bolts during assembly, only snug tighten them until assembly is complete.

Carefully read and understand these installation instructions before you begin.

Step 1: Before attempting to assemble your equipment, please review all installation information carefully. Should you experience any difficulty during the installation process, please call us at the phone number shown on the last page of these instructions.

Step 2: Separate and identify all components and hardware.

Step 3: Determine location of the platform by referring to the master layout drawing.

Step 4: Attach the clamps to the barriers. See **Detail A**. Select both barriers, the clamps, and the appropriate hardware. Attach a clamp to each of the ends of the barrier rails. There are (4) four clamp connections per barrier. Turn the clamps so that the hinges all face the same direction.

Step 5: Attach the barriers to the posts. See **Detail B**. Select both barriers and the tamper resistant bolts. Place the barriers between the posts, and attach as shown.

Step 6: Attach the angle clips to the accessible platform. See **Detail C**. Select both angle clips, the tiered platform, and the appropriate hardware. Place the angle clips against the lower side of the platform with the front faces aligned. Attach as shown.

Step 7: Attach the tiered platform to the upper deck. See **Detail D**. Select the tiered platform and the appropriate hardware. A brace will be necessary to support the weight until the lower connections are made. Place the platform between the decks and align the upper riser with the upper holes in the deck. Attach as shown. The upper edge of the step should not protrude above the edge of the deck.

Step 8: Attach the tiered platform and angle clips to the lower deck. See **Detail E**. Select the appropriate hardware. Attach as shown. There are (6) six connections.

Final Details.

Step 9: Plumb and level the component. Tighten **all** fasteners. Fully tighten all fasteners according to tightening torque specifications.

Torque Specifications:

Bolts & Nuts - Snug tighten and tighten an additional one-half turn.

Step 10: Rivet the clamps to the posts. See **Detail F**. After the equipment assembly is complete, install a drive rivet in each clamp to permanently secure it to the support post. Using a 1/4" drill bit, drill through the clamp and support post. Insert the drive rivet into drilled hole until the head of the rivet is against the surface of the clamp. Using a hammer, drive the pin of the rivet until it is flush with the surface of the rivet head.

Note: This step should be executed after structure has been assembled and properly footed.



PM9168 - 12" (305 mm) DECK TO DECK ACCESSIBLE TIERED PLATFORM

PART NO.	DESCRIPTION	QTY.
AAU0551	CLAMP - 5" CENTERLINE DIE CAST	8
AEN0487	BARRIER - 16-3/32" x 43-9/32" x 8-3/8" PROTECTIVE (RT)	1
AEN0488	BARRIER - 16-3/32" x 43-9/32" x 8-3/8" PROTECTIVE (LT)	1
BAD0085	THREAD LOCKING ADHESIVE	1
BAE0020	RIVET - 1/4" x 11/16" DRIVE	8
BAE0595	WASHER - 3/8" SAE FLAT	8
BAE0600	WASHER - 1" O.D. FLAT	28
BAE0620	NUT - 3/8"-16 LOCK w/NYLON CAP	14
BAE0662	BOLT - 3/8"-16 x 1-1/4" TAMPER RESIST w/TORX DRIVE	8
BAE0664	BOLT - 3/8"-16 x 1" BUTTON HEAD - SS	22
BPM0296	STAIR - 12" ACCESSIBLE	1
BPM7370	FAB METAL - 2.63" x 8.63" w/4 SLOTS	2

PM9177 - 36" (610 mm) DECK TO DECK ACCESSIBLE TIERED PLATFORM

PART NO.	DESCRIPTION	QTY.
AAU0551	CLAMP - 5" CENTERLINE DIE CAST	8
AEN0491	BARRIER - 74-1/32" x 66-11/16" x 8-3/8" PROTECTIVE (RT)	1
AEN0492	BARRIER - 74-1/32" x 66-11/16" x 8-3/8" PROTECTIVE (LT)	1
BAD0085	THREAD LOCKING ADHESIVE	1
BAE0020	RIVET - 1/4" x 11/16" DRIVE	8
BAE0595	WASHER - 3/8" SAE FLAT	8
BAE0600	WASHER - 1" O.D. FLAT	28
BAE0620	NUT - 3/8"-16 LOCK w/NYLON CAP	14
BAE0662	BOLT - 3/8"-16 x 1-1/4" TAMPER RESIST w/TORX DRIVE	8
BAE0664	BOLT - 3/8"-16 x 1" BUTTON HEAD - SS	22
BPM0299	STAIR - 36" ACCESSIBLE	1
BPM7370	FAB METAL - 2.63" x 8.63" w/4 SLOTS	2

PM9170 - 24" (610 mm) DECK TO DECK ACCESSIBLE TIERED PLATFORM

PART NO.	DESCRIPTION	QTY.
AAU0551	CLAMP - 5" CENTERLINE DIE CAST	8
AEN0489	BARRIER - 45-1/16" x 55" x 8-3/8" PROTECTIVE (RT)	1
AEN0490	BARRIER - 45-1/16" x 55" x 8-3/8" PROTECTIVE (LT)	1
BAD0085	THREAD LOCKING ADHESIVE	1
BAE0020	RIVET - 1/4" x 11/16" DRIVE	8
BAE0595	WASHER - 3/8" SAE FLAT	8
BAE0600	WASHER - 1" O.D. FLAT	28
BAE0620	NUT - 3/8"-16 LOCK w/NYLON CAP	14
BAE0662	BOLT - 3/8"-16 x 1-1/4" TAMPER RESIST w/TORX DRIVE	8
BAE0664	BOLT - 3/8"-16 x 1" BUTTON HEAD - SS	22
BPM0298	STAIR - 24" ACCESSIBLE	1
BPM7370	FAB METAL - 2.63" x 8.63" w/4 SLOTS	2

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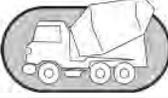
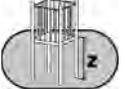
Assembly View

Refer to the Elevation View for the specific Critical Fall Height for the component.

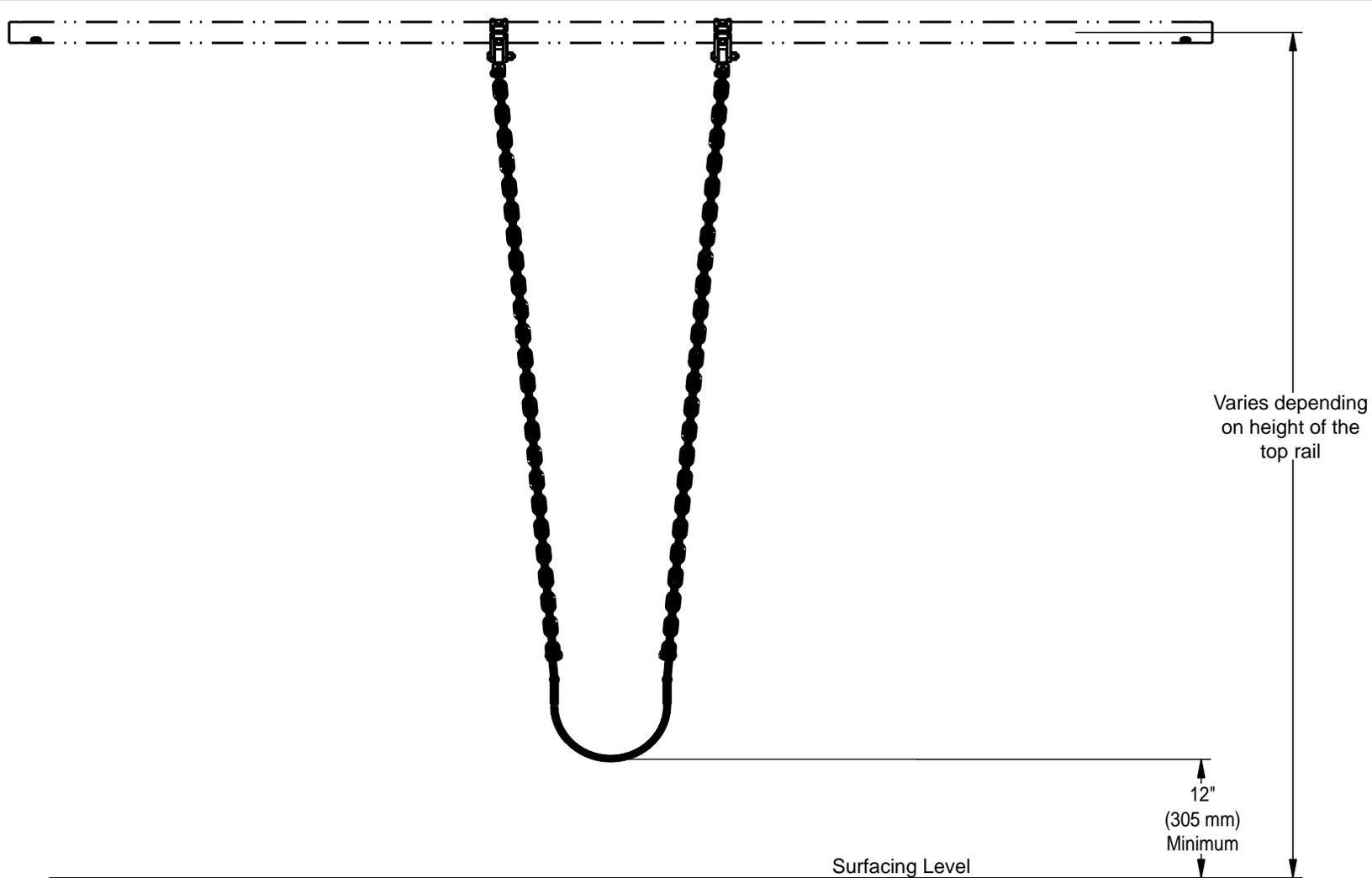
Installation Instructions
Playworld Systems®
Models XX0260, XX0261, & XX0324
Belt Seat with Galvanized Chain

Installation Preparation

Recommended Crew: One (1) adult
Installation Time: 0.25 hour
Use Zone: Refer to the swing frame instructions
User Group Age (years): ASTM/CSA: 2-12, EN: 2-14

ICON KEY	
	Fully Tighten Hardware
	Do Not Fully Tighten Hardware
	Drill
	Hammer
	Add 1 Drop of Thread Locking Adhesive
	Pour Concrete
	Dig Footing Holes
	Critical Fall Height

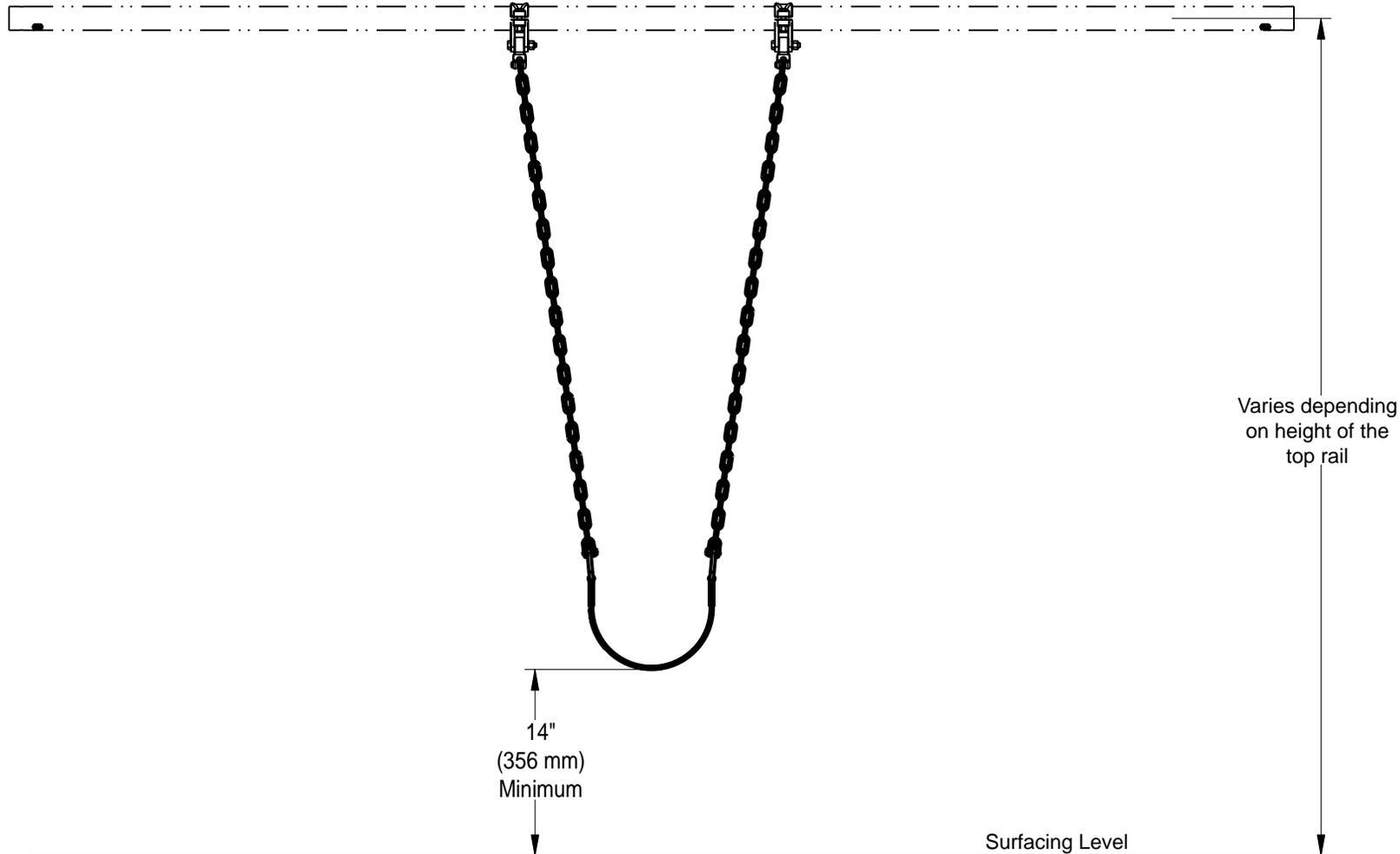
Installation Instructions



Elevation View
(ASTM/CSA)

Model Number	Critical Fall Height - ASTM/CSA	Top Rail Height
ZZXX0324	7 ft. (2134 mm)	7 ft. (2134 mm)
ZZXX0260	8 ft. (2440 mm)	8 ft. (2440 mm)
ZZXX0261	10 ft. (3050 mm)	10 ft. (3050 mm)

Installation Instructions

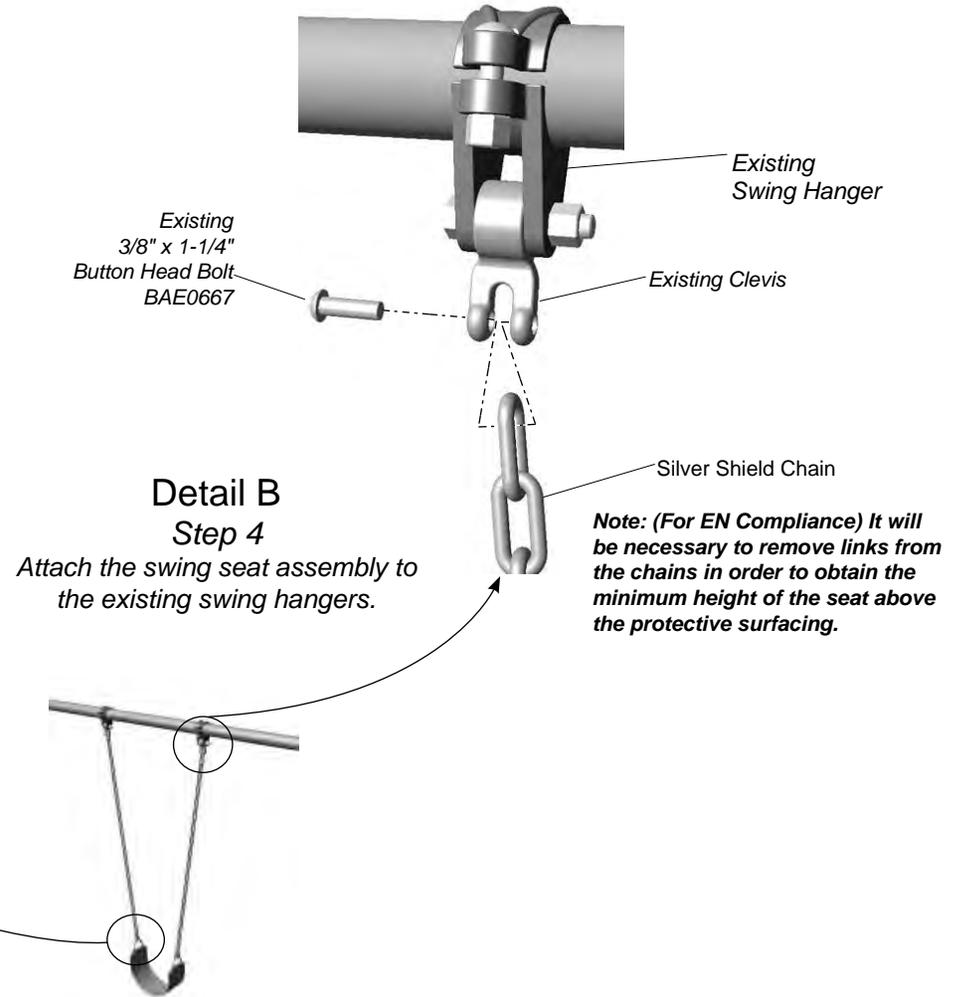
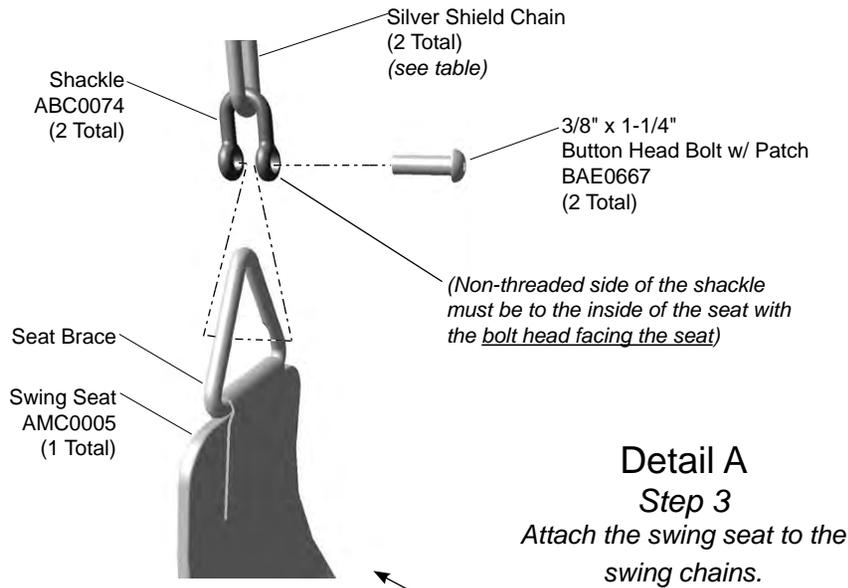


Elevation View
(EN)

Model Number	Critical Fall Height - EN	Top Rail Height
ZZXX0324	1220 mm	7 ft. (2134 mm)
ZZXX0260	1370 mm	8 ft. (2440 mm)
ZZXX0261	1675 mm	10 ft. (3050 mm)

Installation Instructions

Follow the details in alphabetical order. For clarification, each detail references the step description. The step descriptions start on page 5.



Model Number	Silver Shield Chain Part No.	Top Rail Height
ZZXX0324	ACN0090	7 ft. (2134 mm)
ZZXX0260	ACN0091	8 ft. (2440 mm)
ZZXX0261	ACN0092	10 ft. (3050 mm)

Installation Instructions

Notes Before You Begin: Do not over tighten bolts during assembly, only snug tighten them until assembly is complete.

Carefully read and understand these installation instructions before you begin.

Step 1: Before attempting to assemble your equipment, please review all installation information carefully. Should you experience any difficulty during the installation process, please call us at the phone number shown on the last page of these instructions.

Step 2: Separate and identify all components and hardware.

Step 3: Attach the swing seat to the swing chains. See **Detail A**. Attach the seats to the chains as shown. Ensure that the non-threaded side of the shackle is to the inside of the seat.

Step 4: Attach the swing seat assembly to the existing swing hangers. See **Detail B**. Remove the 1-1/4" bolt from the swing hanger clevis with the included wrench. Select the swing seat assembly and place last link of chain between the open end of the clevis and attach as shown. Ensure that the bolt is inserted through the non-threaded side of the clevis and threaded into the opposite side.

Note: (For EN Compliance) It will be necessary to remove links from the chains in order to obtain the minimum height of the seat above the protective surfacing.

Final Details.

Step 5: Fully tighten all fasteners according to tightening torque specifications.

Torque specifications - Nuts and Bolts: Snug tighten and tighten an additional one-half turn.

ZZXX0324 - BELT SEAT WITH GALVANIZED CHAIN
- 7 ft. (2134 mm) TOP RAIL HEIGHT

PART NO.	DESCRIPTION	QTY.
ABC0074	CNCTR - 5/16" CHAIN SHACKLE w/3/8"-16 THREAD	2
ACN0090	CHAIN - 53.71" 4/0 SILVER SHIELD	2
AMC0005	SEAT - SLASH PROOF BELT	1
BAE0667	BOLT - 3/8"-16 x 1-1/4" BUTTON HEAD w/NYLON PATCH	2
BAE0922	TOOL - TT 45 L WRENCH	1

ZZXX0260 - BELT SEAT WITH GALVANIZED CHAIN
- 8 ft. (2438 mm) TOP RAIL HEIGHT

PART NO.	DESCRIPTION	QTY.
ABC0074	CONNECTOR - 5/16" CHAIN SHACKLE w/3/8"-16 THREAD	2
ACN0091	CHAIN - 65.11" 4/0 SILVER SHIELD	2
AMC0005	SEAT - SLASH PROOF BELT	1
BAE0667	BOLT - 3/8"-16 x 1-1/4" BUTTON HEAD w/NYLON PATCH	2
BAE0922	TOOL - TT 45 L WRENCH	1

ZZXX0261 - BELT SEAT WITH GALVANIZED CHAIN
- 10 ft. (3048 mm) TOP RAIL HEIGHT

PART NO.	DESCRIPTION	QTY.
ABC0074	CONNECTOR - 5/16" CHAIN SHACKLE w/3/8"-16 THREAD	2
ACN0092	CHAIN - 89.01" 4/0 SILVER SHIELD	2
AMC0005	SEAT - SLASH PROOF BELT	1
BAE0667	BOLT - 3/8"-16 x 1-1/4" BUTTON HEAD w/NYLON PATCH	2
BAE0922	TOOL - TT 45 L WRENCH	1



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Swing Seat

- Inspect swing seat for sharp points, breaks, cracks or jagged edges. If any damage is detected and is determined to be unsafe, barricade equipment to prevent use until repair is completed.

Fasteners

- Inspect for loose fasteners.
Tightening torque specifications are:
Bolts and Nuts: Snug tighten and tighten an additional one-half turn.
- If during the maintenance process a bolt needs to be removed from a part or parts, it will be necessary to apply a drop of liquid thread lock to the bolt before reinstallation.
- Inspect for missing, worn or broken fasteners. If any missing, worn or broken fasteners are found, refer to the installation instructions for proper replacement fastener. If any damage is detected, barricade equipment to prevent use until repair is completed. Contact your sales representative immediately for a replacement part.

Finish

- Inspect metal parts for finish damage.
To repair painted surfaces, sand damaged area with sandpaper and wipe clean. Mask area and paint with primer and allow to dry. Paint primed area with color-matching paint and allow to dry. Recoat area with color-matching paint if required. Drying time is approximately 8 hours between coats.

Surfacing

- Refer to the specific surfacing maintenance detail sheet for additional information.

Replacement Parts

- Refer to your installation instructions to obtain replacement part number.
- Contact your sales representative or call Playworld Systems' Customer Service for a replacement part.

Equipment Maintenance Playworld Systems® Models XX0324, XX0260 & XX0261 Belt Seat with Galvanized Chain



Inspection Form

Preventive Maintenance

... for Safety's Sake!

- Be sure that you are using a copy of this Inspection Form and not your original.
- Use the Inspection Codes listed below and record condition of equipment at time of examination on the Inspection Checklist.
- Document any item from the Inspection Checklist that will require maintenance along with any corrective action on the Maintenance Schedule.
- Be sure to include appropriate dates and signatures on each section to properly document maintenance procedure.

INSPECTION CHECKLIST

	Frequency	Inspection Code	Date	Date Repairs Completed
Inspect chain and swing seat for damage.	Medium			
Inspect surfacing to insure proper depth and distribution.	High			
Inspect metal parts for structural and finish damage.	Medium			
Inspect for loose, missing, worn, or broken fasteners.	High			

Inspection Codes
P = Pass F = Fail
NA = Not Applicable

Inspector: Name (Please Print) _____ Signature: _____ Date: ___ / ___ / ___

MAINTENANCE SCHEDULE

Item in Question	Description of Problem	Corrective Action	Date

Repairer: Name (Please Print) _____ Signature: _____ Date: ___ / ___ / ___





Assembly View

Refer to the Elevation View for the specific Critical Fall Height for the component.

Installation Instructions
Playworld Systems®
Models XX0265, XX0266, & XX0325
Infant Swing Seat with Galvanized Chain

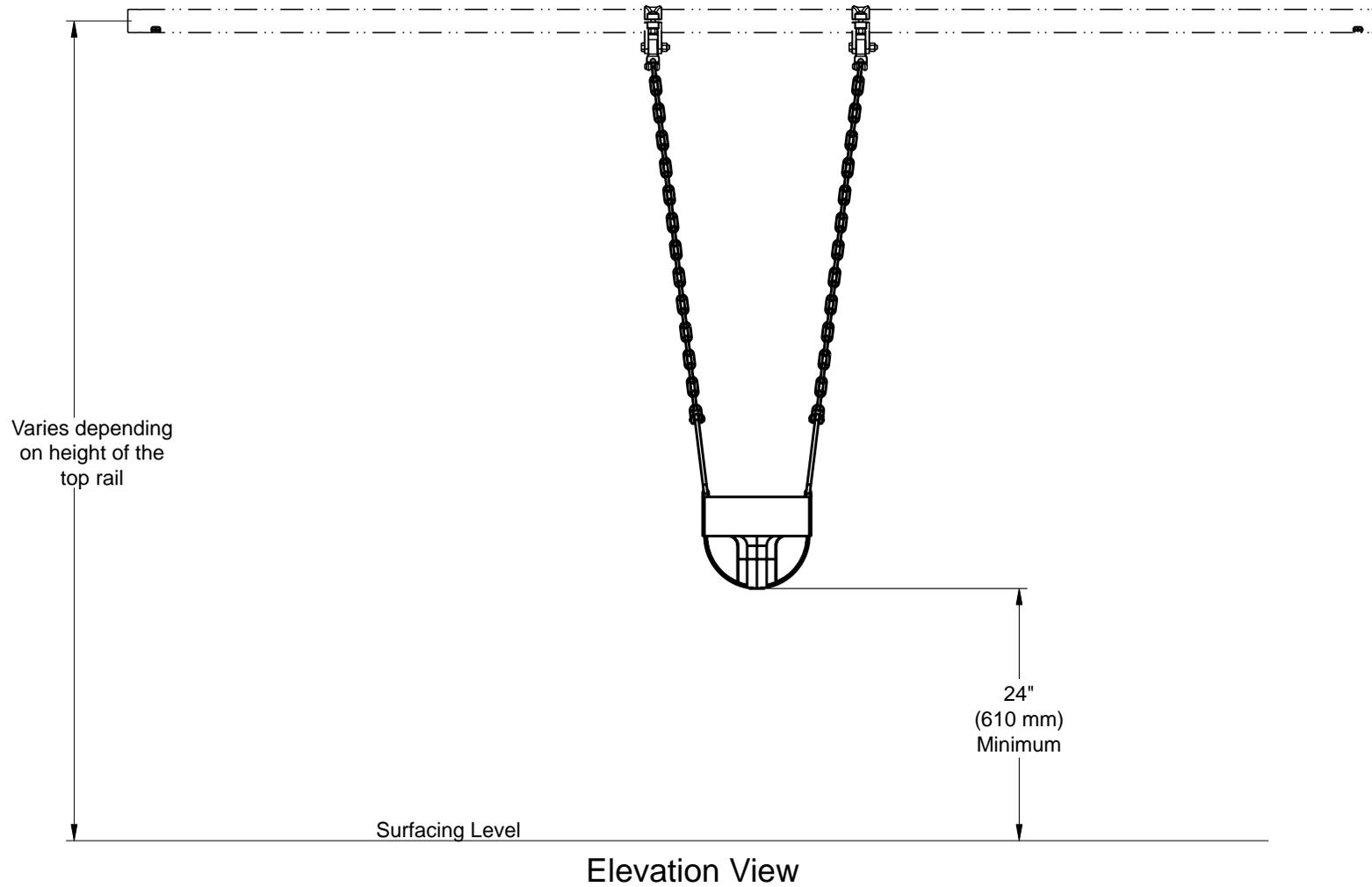
Installation Preparation

Recommended Crew: One (1) adult
Installation Time: 0.25 hour
Weight: See table below
Use Zone:..... Refer to the swing frame instructions
User Group:..... Ages 2 - 5 years

Model Number	Weight	Top Rail Height
ZZXX0325	12.8 Lbs. (5,8 Kilos)	7 ft. (2134 mm)
ZZXX0265	11 Lbs. (5 Kilos)	8 ft. (2440 mm)
ZZXX0266	12.6 Lbs. (5,7 Kilos)	10 ft. (3050 mm)

ICON KEY	
	Fully Tighten Hardware

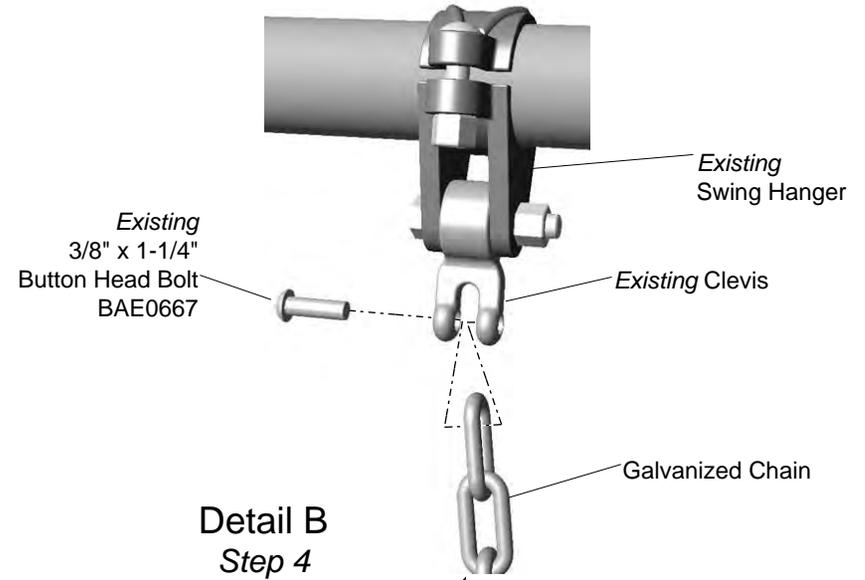
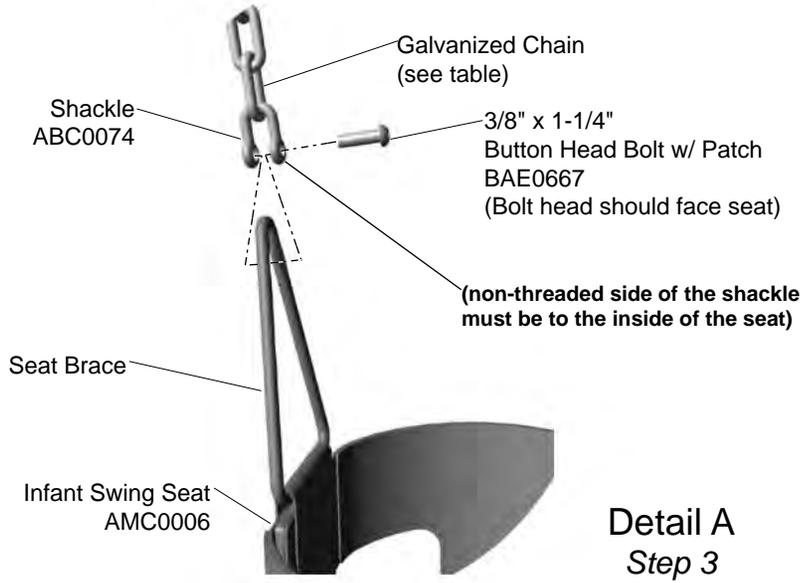
Installation Instructions



Model Number	Critical Fall Height - EN	Top Rail Height
ZZXX0325	1345 mm	7 ft. (2134 mm)
ZZXX0265	1525 mm	8 ft. (2440 mm)
ZZXX0266	1830 mm	10 ft. (3050 mm)

Installation Instructions

Follow the details in alphabetical order. For clarification, each detail references the step description. The step descriptions start on page 4.



Model Number	Galvanized Chain Part No.	Top Rail Height
ZZXX0325	ACN0050	7 ft. (2134 mm)
ZZXX0265	ACN0040	8 ft. (2440 mm)
ZZXX0266	ACN0041	10 ft. (3050 mm)



Installation Instructions

__Notes Before You Begin: Do not over tighten bolts during assembly, only snug tighten them until assembly is complete.

Carefully read and understand these installation instructions before you begin.

__Step 1: Before attempting to assemble your equipment, please review all installation information carefully. Should you experience any difficulty during the installation process, please call us at the phone number shown on the last page of these instructions.

__Step 2: Separate and identify all components and hardware.

Attach the swing seat to the swing chains.

__Step 3: Attach the swing seat to the swing chains. See **Detail A**. Select the swing seat, and (2) two of the following: bolts, chains, and shackles. Attach the seats to the chains as shown. Ensure that the non-threaded side of the shackle is to the inside of the seat.

Attach the swing seat assembly to the existing swing hangers.

__Step 4: Attach the swing seat assembly to the existing swing hangers. See **Detail B**. Remove the 1-1/4" bolt from the swing hanger clevis with the included hex key wrench. Select the swing seat assembly and place last link of chain between the open end of the clevis and attach as shown.

Ensure that the bolt is inserted through the non-threaded side of the clevis and threaded into the opposite side.

Important Note: The vertical distance between an occupied seat and the protective surface shall be no less than 24" (610 mm). Remove any excess chain.

Final Details.

__Step 5: Fully tighten all fasteners according to tightening torque specifications.

Torque specifications - Nuts and Bolts: Snug tighten and tighten an additional one-half turn.

ZZXX0325 - INFANT SWING SEAT WITH GALVANIZED CHAIN
- 7 ft. (2134 mm) TOP RAIL HEIGHT

PART NO.	DESCRIPTION	QTY.
ABC0074	CNECTR - 5/16" CHAIN SHACKLE w/3/8"-16 THREAD	2
ACN0050	CHAIN - 36" 4/0 GALVANIZED	2
AMC0006	SEAT - EXTRA TOUGH TOT	1
BAE0667	BOLT - 3/8"-16 x 1-1/4" BUTTON HEAD w/NYLON PATCH	2
BAE0902	TOOL - 7/32" SHORT HEX KEY WRENCH	1

ZZXX0265 - INFANT SWING SEAT WITH GALVANIZED CHAIN
- 8 ft. (2438 mm) TOP RAIL HEIGHT

PART NO.	DESCRIPTION	QTY.
ABC0074	CONNECTOR - 5/16" CHAIN SHACKLE w/3/8"-16 THREAD	2
ACN0040	CHAIN - 47" 4/0 GALVANIZED	2
AMC0006	SEAT - EXTRA TOUGH TOT	1
BAE0667	BOLT - 3/8"-16 x 1-1/4" BUTTON HEAD w/NYLON PATCH	2
BAE0902	TOOL - 7/32" SHORT HEX KEY WRENCH	1

ZZXX0266 - INFANT SWING SEAT WITH GALVANIZED CHAIN
- 10 ft. (3048 mm) TOP RAIL HEIGHT

PART NO.	DESCRIPTION	QTY.
ABC0074	CONNECTOR - 5/16" CHAIN SHACKLE w/3/8"-16 THREAD	2
ACN0041	CHAIN - 72" 4/0 GALVANIZED	2
AMC0006	SEAT - EXTRA TOUGH TOT	1
BAE0667	BOLT - 3/8"-16 x 1-1/4" BUTTON HEAD w/NYLON PATCH	2
BAE0902	TOOL - 7/32" SHORT HEX KEY WRENCH	1



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Swing Seat

- Inspect swing seat for sharp points, breaks, cracks or jagged edges. If any damage is detected and is determined to be unsafe, barricade equipment to prevent use until repair is completed.

Fasteners

- Inspect for loose fasteners.
Tightening torque specifications are:
Bolts and Nuts: Snug tighten and tighten an additional one-half turn.
- If during the maintenance process a bolt needs to be removed from a part or parts, it will be necessary to apply a drop of liquid thread lock / loctite to the bolt before reinstallation.
- Inspect for missing, worn or broken fasteners. If any missing, worn or broken fasteners are found, refer to the installation instructions for proper replacement fastener. If any damage is detected, barricade equipment to prevent use until repair is completed. Contact your sales representative immediately for a replacement part.

Finish

- Inspect metal parts for finish damage.
To repair painted surfaces, sand damaged area with sandpaper and wipe clean. Mask area and paint with primer and allow to dry. Paint primed area with color-matching paint and allow to dry. Recoat area with color-matching paint if required. Drying time is approximately 8 hours between coats.

Surfacing

- Refer to the specific surfacing maintenance detail sheet for additional information.

Replacement Parts

- Refer to your installation instructions to obtain replacement part number.
- Contact your sales representative or call Playworld Systems' Customer Service for a replacement part.

Equipment Maintenance Playworld Systems® Models XX0265, XX0266, & XX0325 Infant Swing Seat with Galvanized Chain



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570-522-9800 OUTSIDE U.S.
1000 Buffalo Road • Lewisburg, PA 17837
www.playworldsystems.com

Inspection Form

Preventive Maintenance

... for Safety's Sake!

- Be sure that you are using a copy of this Inspection Form and not your original.
- Use the Inspection Codes listed below and record condition of equipment at time of examination on the Inspection Checklist.
- Document any item from the Inspection Checklist that will require maintenance along with any corrective action on the Maintenance Schedule.
- Be sure to include appropriate dates and signatures on each section to properly document maintenance procedure.

INSPECTION CHECKLIST	Frequency	Inspection Code	Date	Date Repairs Completed
Inspect chain and swing seat for damage.	Medium			
Inspect surfacing to insure proper depth and distribution.	High			
Inspect metal parts for structural and finish damage.	Medium			
Inspect for loose, missing, worn, or broken fasteners.	High			

Inspection Codes P = Pass F = Fail NA = Not Applicable
--

Inspector: Name (Please Print) _____ Signature: _____ Date: ___ / ___ / ___

MAINTENANCE SCHEDULE

Item in Question	Description of Problem	Corrective Action	Date

Repairer: Name (Please Print) _____ Signature: _____ Date: ___ / ___ / ___



Important ! Please Read Completely Before Beginning Installation. According to a report published by the U. S. Consumer Product Safety Commission (C.P.S.C.) 72% of all playground injuries result from accidental falls. With this in mind, this equipment is designed to fill the need for safe yet challenging play. In conjunction with design efforts to reduce the possibilities of injuries, this equipment **must** be installed "Step by Step" per our installation instructions. As a new owner you are responsible for the correct installation, safe use, and maintenance of your equipment.

Installation Guidelines

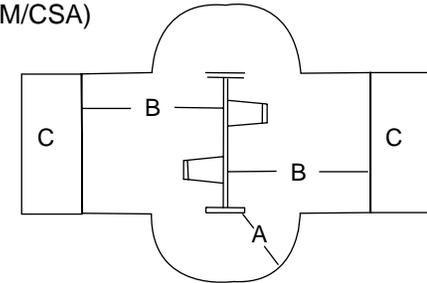
- Identify all parts and thoroughly read the assembly instructions before beginning construction.
- Refer to your playground equipment plan and footing diagram to assure the equipment purchased will fit into your selected site area. The use and no-encroachment zones around the play equipment shall be obstacle-free areas designated for unrestricted circulation.

(ASTM / CSA)

- For belt and rigid swing seats, the use zone for swing equipment should extend to the front and rear of a single axis swing a minimum distance of twice the height measured from the pivot point above the surfacing material measured from a point directly beneath the pivot on the supporting structure. The use zone on the sides of the swing should extend a minimum of 72 inches (1829 mm). A no-encroachment zone is also required for installations in areas overseen by the Canadian Standards Association (C.S.A.). In addition to the use zone measurement on both sides of the top rail, this zone will extend an additional 72 inches (1829 mm) and may **not** be overlapped by the use or no-encroachment zones of adjacent play equipment. See diagram.
- For enclosed infant swing seats, the use zone for swing equipment should extend to the front and rear of a single axis swing a minimum distance of twice the measurement from the pivot point to the swing seat surface measured from a point directly beneath the pivot on the supporting structure. The use zone on the ends of the swing (support structure) should extend a minimum of 72 inches (1829 mm). A no-encroachment zone is also required for installations in areas overseen by the Canadian Standards Association (C.S.A.). In addition to the use zone measurement on both sides of the top rail, this zone will extend an additional 72 inches (1829 mm) and may **not** be overlapped by the use or no-encroachment zones of adjacent play equipment. See diagram.

Belt/Rigid Seat Swing Zones (ASTM/CSA)

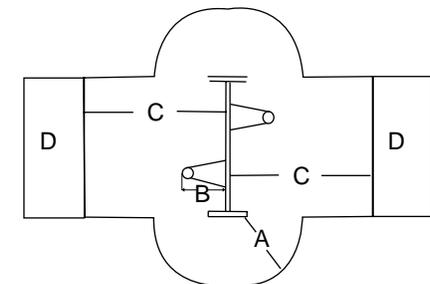
- A =** Side Use Zone
72 in. (1829 mm)
- B =** End Use Zone
Height of Pivot Point
from Surfacing x 2
Both Sides of Top Rail
- C =** No-encroachment Zone
72 in. (1829 mm)



- The use zone on either end of the swing (72 inches [1829 mm]) may be overlapped by the use zone on either end of another swing (72 inches [1829 mm]). Swing zones on either side of the top rail may **not** be overlapped by the use zones of other play equipment.

Infant Seat Swing Zones

- A =** Side Use Zone
72 in. (1829 mm)
- B =** Distance from Pivot Point
to Swing Seat Surface
- C =** End Use Zone: B x 2
Both Sides of Top Rail
- D =** No-encroachment Zone
72 in. (1829 mm)



Installation Instructions

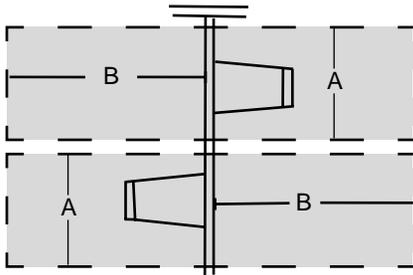
(EN)

• For areas conforming to the EN-1176 Standard, the impact area shall be determined by calculating the horizontal distance where the swing seat is at an 60° arc and adding the appropriate amount of distance based upon the type of protective surfacing. This distance shall be covered by protective surfacing on both sides of the top rail. The protective surfacing shall be appropriate for the maximum fall height of the swing. There is no difference in the calculation based on the type of swing seat.

The impact area on both sides of top rail = (0.867 x Distance from pivot point to seat) + *either* 1750 mm if unitary surfacing *or* 2250 mm if loose-fill surfacing is used. There shall be a minimum corridor of 1750 mm centered on each swing seat for the length of the impact area.

Use Zones - EN Compliance

- A =** Width of the corridor centered on the swing seat
1750 mm
- B =** Length of the use zone on both sides of the top rail (8ft)
Tot Seats: 3290 mm for unitary surfaced areas
or 3790 mm for areas covered with loose fill surfacing.
Belt / Rigid Seats: 3510 mm for unitary surfaced areas
or 4010 mm for areas covered with loose fill surfacing



- Site layout is a critical part of the overall installation. Footings must be measured and marked accurately according to the footing diagram. A level and clear installation site is ideal.
- Good drainage around the structure and its supports is important. Inquire with local contractors for appropriate recommendations.
- After laying out all footings and before digging holes, be sure to inquire about underground utilities that may exist.
- Do not leave the job site unattended without making sure that all fastening hardware on all components are tightened according to tightening torque specifications listed on every installation guide. We also recommend roping off construction area and covering all holes that do not contain a piece of equipment with plywood or other suitable material.
- Excavate holes as shown in the footing detail. If a level and clear site cannot be obtained, adjust the depth of footing to maintain a level footing base. If soil conditions are loose or unstable, a larger diameter footing may be required. Inquire with local contractors for appropriate recommendations. Be sure concrete that might have splashed onto the unit is washed off before it dries. Allow concrete to harden 72 hours before allowing your structure to be used. **Assemble the entire structure before pouring concrete unless specifically instructed to do so in the installation instructions.**
- Insure that hard surface warning/Playworld Systems identification labels are properly affixed to the play equipment. Labels are to be plainly visible according to current playground equipment guidelines.
- **IMPORTANT!** Because accidental falls around your playground equipment can occur, Playworld Systems recommends that the area under and around the structure be covered with a resilient material such as sand, bark mulch, or wood chips. If loose fill surfacing materials are used, Playworld Systems recommends a depth of 12 in. (305 mm). An approved rubber safety matting can also be used. **Many protective surfacing materials can become compacted due to weather and use, which reduces their shock absorbency. It is strongly recommended that the surfacing be checked weekly and material added or replaced as necessary. Hard surfaces, such as asphalt, concrete and packed earth are not acceptable for use under playground equipment.**

Installation Instructions

- The entire area, under and around the playground equipment, must be covered with protective surfacing material. The impact attenuation of the protective surfacing under and around playground equipment should be rated to have a critical height value of at least the height of the highest accessible part of the equipment. The critical height for surfacing is to be rated in accordance with A.S.T.M. standard, designated F1292, [A Standard Specification for Impact Attenuation of Surface Systems Under and Around Playground Equipment](#). Contact the manufacturer of unitary surfacing materials (rubber matting) for the critical height rating for their products.

Tools Required: Playworld Systems supplies a service kit that contains commonly used hex key wrenches required to assemble your equipment. You may also need: shovel, digging iron, post hole digger, steel rake, wheelbarrow, garden hoe, water hose, tape measure, level, alignment tool, 3/8" ratchet with 9/16" socket, and 9/16" combination wrench.

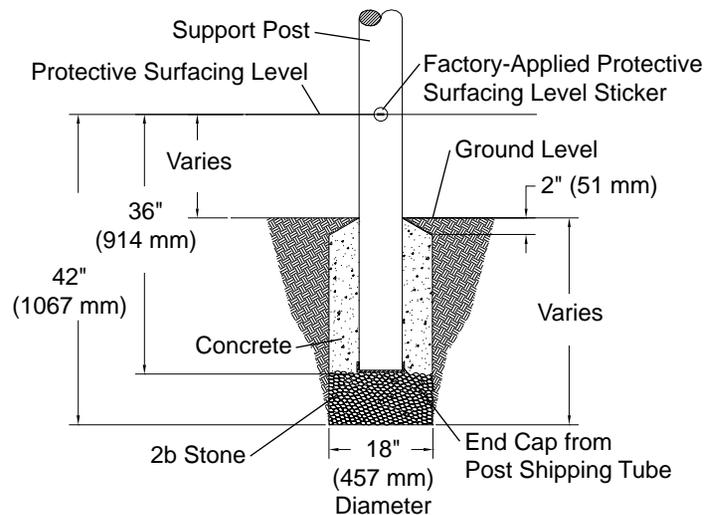
Maintenance

- Inadequate maintenance of equipment has resulted in injuries on the playground. Because the safety of playground equipment and its stability depends on good inspection and maintenance, **a comprehensive maintenance program must be developed for each playground and strictly followed.** All equipment must be inspected frequently for any potential hazards. Special attention must be given to moving parts and other components that can be expected to wear. Inspections must be carried out in a systematic manner by trained personnel. Any damaged or worn parts, or any other hazards identified during inspections must be repaired or replaced immediately. Complete documentation of all maintenance inspections and repairs must be retained.

Supervision Guidelines

- Playworld Systems strongly recommends close supervision of the children as they play as well as intensive classroom and home instruction about safe behavior on playground equipment.
- Playground supervisors should be aware that not all playground equipment is appropriate for all children who may use the playground. Signs should be posted near the equipment indicating the recommended age of the users. Supervisors should direct children to equipment appropriate for their age.
- It is important that playground supervisors recognize that preschool-age children require more attentive supervision on playgrounds than older children.
- Do not permit the use of wet playground equipment. Wet equipment will inhibit necessary traction and gripping capabilities. Slips or falls could occur.
- Do not permit too many children on the same piece of equipment at the same time. It is suggested that children take turns.
- Constantly observe play patterns to discover possible hazardous play and suggest changes in equipment use or play patterns.

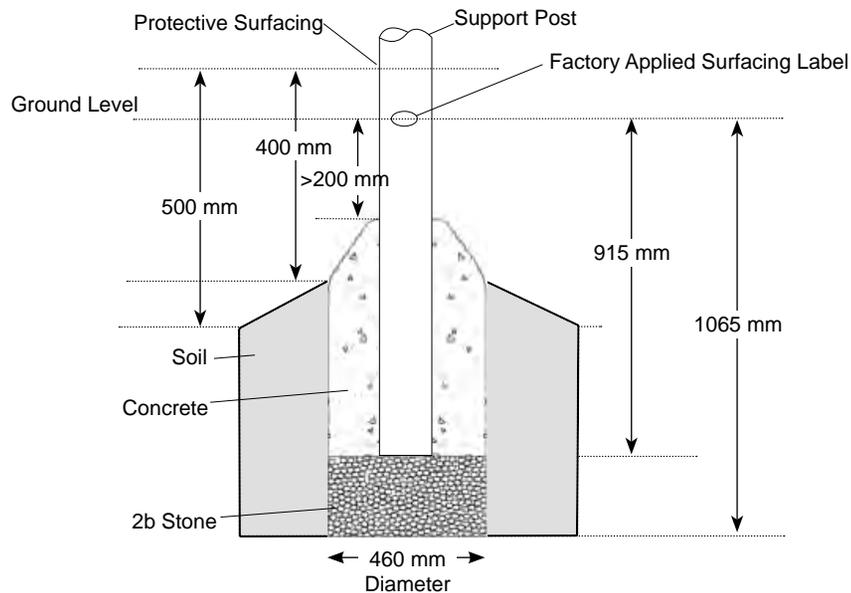
Installation Instructions



Support Post Footing Detail (ASTM/CSA)

FOOTING NOTES

- Support post footing depth equals 42 in. (1067 mm) less the depth of the protective surfacing material. The post is designed to have 24" (610 mm) in concrete.
Example: If 12 in. (305 mm) of wood mulch is used for surfacing, the footing depth would be 30 in. (762 mm).
- All support posts and component support legs shall have either a factory-applied sticker with line, or factory-applied mark designating protective surfacing level on a clear and level installation site.
- If play structure is installed on uneven terrain, maintain support post mark at protective surfacing level at lowest grade. Adjust other footings accordingly. Support posts and all attaching decks and play components must be plumb and level.
- Do not encase bottom of support post in concrete. Place post directly on packed stone.
- The footings shown on Playworld Systems' documentation are recommendations based on historical performance in average soil conditions. Footing dimensions may be modified by the owner based on actual soil conditions.
For example:
 - If local soil is loose or unstable, a larger footing may be required.
 - If local soil is considered stable, such as bedrock, clay or hard packed earth, a smaller footing may be used. Before changing footing dimensions, we strongly recommend that the footings be reviewed and approved by a registered engineer.
- Base of footing must be below frost line.
- Assemble the entire structure before pouring concrete unless specifically instructed to do so in the individual component installation instructions.



Footing Detail Support Post (EN)



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Assembly View (representative model)

Installation Instructions

Playworld Systems® Model XX0287
 5 in. (127 mm) O.D. 2-Unit Aluminum Arch Swing
 8 ft. (2438 mm) Top Rail

Installation Preparation

Recommended Crew: Four (4) adults
 Installation Time: 3 man-hours
 Weight: *214 lbs. (97,3 kg)
 Concrete Required: 0.48 cubic yard (0,37 cubic meters)
 Use Zone: Refer to Master Drawing
 User Group Age (years): ASTM/CSA: 2-12, EN: 2-14

**Weights are approximate for determining manpower.*

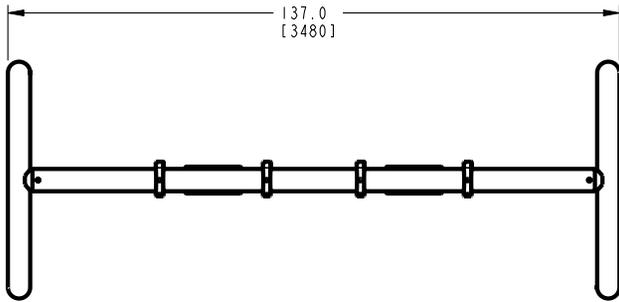
ICON KEY			
	Fully Tighten Hardware		Add 1 Drop of Thread Locking Adhesive
	Do Not Fully Tighten Hardware		Pour Concrete
	Drill		Dig Footing Holes
	Hammer		Critical Fall Height



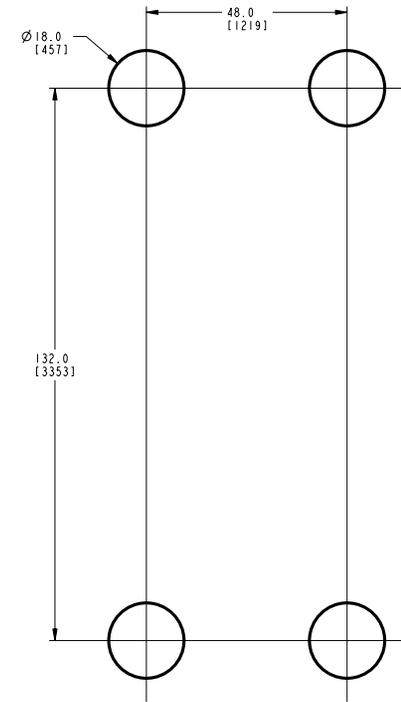
Installation Instructions

KEY	
Position	Unit of Measurement
Top #	Inches
Bottom #	[Millimeters]

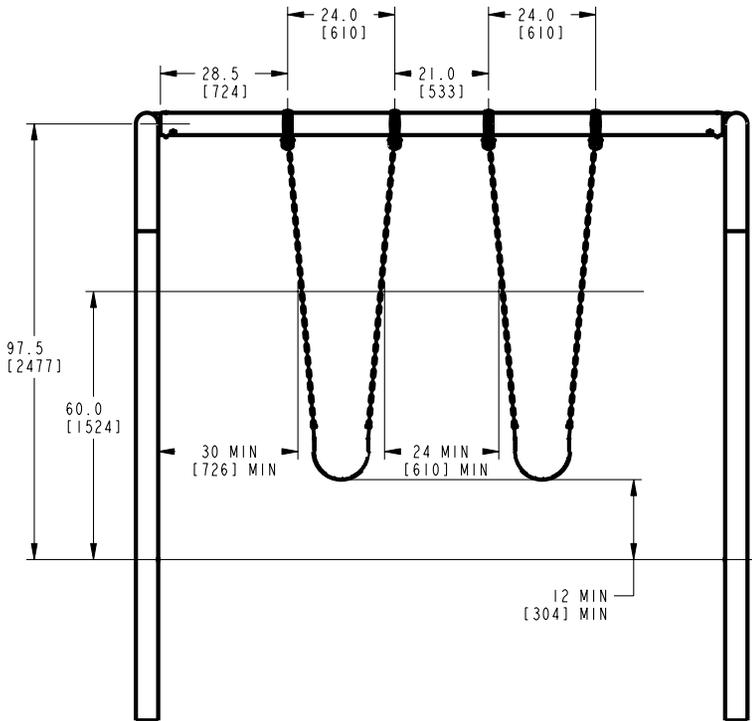
Top View



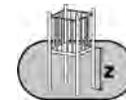
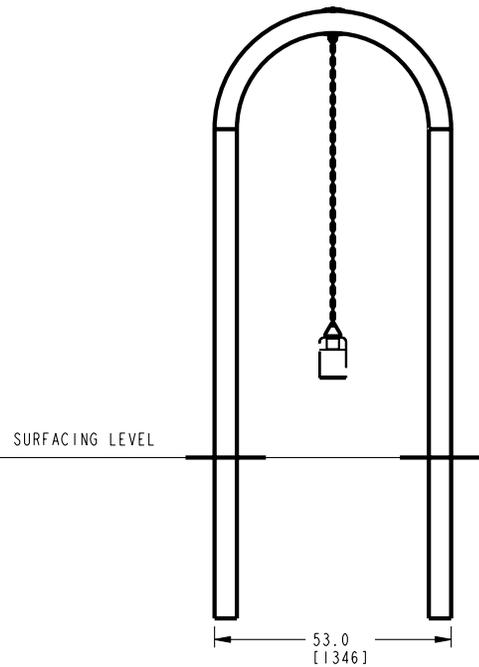
Note: Swing Hanger locations are dimensioned from end of the Top Rail to center of Swing Hanger.



Footing Diagram



Elevation Views



Critical Fall Height

EN: belt seat - 1390 mm (mounted as shown)
tot seat - 1545 mm (with seat at 610 above surfacing)



Installation Instructions

Follow the details in alphabetical order. For clarification, each detail references the step description. The step descriptions start on page 9.

Top Rail Beam
APT0432
(1 Total)

Arch Post
APT0144
(2 Total)

Arch Post

Top Rail Beam

3/8" x 1/2" Set Screw
BAE0630
(4 Total)

Underneath View

Detail B
Step 5
Secure the top rail to the arch posts.

3/8" x 5-1/2" Button Head Bolt
BAE06686
(2 Total)

3/8" Lock Nut
BAE0620
(2 Total)

Detail A
Step 4
Attach the top rail to the arch posts.

CAUTION
Swing hangers cannot be completely drawn together when attaching to the swing top rail. When properly installed, a gap of approximately 1/8" (3 mm) gap will exist between the swing hanger castings. Extreme care must be taken that nuts on swing hangers are drawn up evenly. Do **NOT** over tighten or exceed 25 ft lbs (33.9 Nm) of torque.

Warning!
Exceeding 25 ft lbs (33.9 Nm) of torque on the swing hanger bolts may cause damage to the swing band.

3/8" x 1-1/4" Tamper Resistant Bolt
BAE0662
(4 Total)

Swing Hanger
AAU0155
(4 Total)

Top Rail Beam

3/8" T Nut
BAE0670
(4 Total)

Detail C
Step 8
Attach swing hangers to the top rail.

When tightening the bolt ensure that the T nut does not protrude past the edge of the clamp.



Installation Instructions

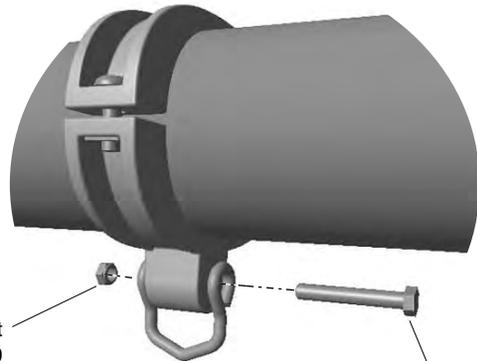
Swing Hanger



Swing Clevis Connector
ABC0704
(4 Total)



Swing Clevis Connector
ABC0704
(4 Total)



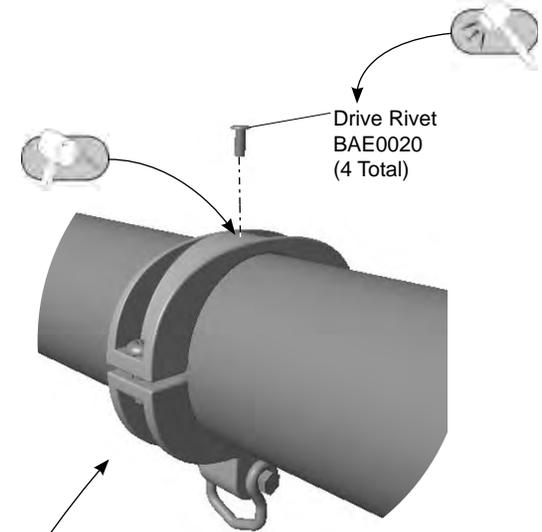
3/8" Thin Series Lock Nut
BAE0610
(4 Total)

3/8" x 2-1/2"
Hex Head Shoulder Bolt
BAE0412
(4 Total)



Detail D
Step 9

Attach each clevis to a swing hanger.



Drive Rivet
BAE0020
(4 Total)

Detail E
Step 12
*Secure the swing hangers
to the top rail.*



Installation Instructions

Notes Before You Begin: Do not over tighten bolts during assembly, only snug tighten them until assembly is complete.

Carefully read and understand these installation instructions before you begin.

Step 1: Before attempting to assemble your equipment, please review all installation information carefully. Should you experience any difficulty during the installation process, please call us at the phone number shown on the last page of these instructions.

Step 2: Separate and identify all components and hardware.

Step 3: Prepare footings as shown in the **Support Post Details** on **Page 4**.

Assemble the swing frame.

Step 4: Attach the top rail to the arch support posts. See **Detail A**. Slide each end of the top rail into a post stub and align holes. Insert each bolt through the *top* hole in the post stub, through the top rail, out the bottom side of the post stub, and thread into a lock nut.

Step 5: Secure the top rail to the arch posts. See **Detail B**. Apply a drop of loctite to the set screw threads and thread each screw into a hole on the underside of the post stub. Fully tighten connections according to tightening torque specifications.

Torque Specifications:

Bolts and nuts - Snug tighten and then tighten an additional one half turn.

Set Screws - Snug tighten and tighten an additional full turn.

Position the swing frame.

Step 6: Place the swing frame into the footings. Square and level the swing frame assembly at specified footing depth. Top rail height shall be 96 in. (2438 mm) as measured from top of the protective surfacing material level to the bottom of the top rail. Fully tighten all bolts in accordance with tightening torque installation instructions. Block and brace for concrete.

Step 7: Fill the footings with concrete to within 2 in. (51 mm) of ground level as shown in the **Footing Detail**. Plumb and level the component. Block and brace for concrete. Allow concrete to harden for 72 hours before proceeding with **Step 8**.

Attach swing hangers to the top rail.

Step 8: Attach swing hangers to the top rail. See **Detail C**. Close the swing hangers around the top rail and attach as shown. Ensure hangers are properly spaced and positioned on top rail (See **Elevation View**). There is a ridge on the underside of the bottom band to keep the T nut from rotating. **When tightening the bolt ensure that the T nut does not protrude past the edge of the clamp.**

Note: Please read **CAUTION** before fully tightening the connections.

Important Note: Swing hangers should be positioned a minimum of 20" (508 mm) apart. Additionally, the horizontal distance between the vertical support and the swing shall be no less than 30 in. (760 mm) when measured at 60 in. (1524 mm) from the level of protective surfacing. Please refer to the USCPSC Handbook for Public Playground Safety for proper placement.

Step 9: Attach each clevis to a swing hanger. See **Detail D**. Position each clevis over the bottom hanger bushing and align holes. Insert a hex head bolt through the clevis eye, through the hanger bushing, through the other clevis eye and secure with a thin series lock nut.

Important Note: Tighten the thin series lock nut on shoulder bolt until the clevis binds on the swing hanger casting. Then loosen the thin series lock nut approximately 1/4 turn until the swing clevis moves freely. Insure the bolt threads are fully engaged into the nut's locking device.

Note: Swing clevises will need to be removed from swing hangers to install selected swing seat.

Final Details

Step 10: See Swing Seat Installation Instruction sheet for swing seat attachment. Swing seats are ordered separately.

Step 11: Tighten **all** fasteners. Fully tighten all fasteners according to tightening torque specifications.

Torque Specifications:

Bolts and nuts - Snug tighten and then tighten an additional one half turn.

Set Screws - Snug tighten and tighten an additional full turn.

Installation Instructions

Step 12: Install drive rivets. See **Detail E**. After the equipment assembly is complete, install a drive rivet in each clamp to permanently secure it to the support post. Using a 1/4" drill bit, drill through the clamp and support post. Insert the drive rivet into drilled hole until the head of the rivet is against the surface of the clamp. Using a hammer, drive the pin of the rivet until it is flush with the surface of the rivet head.

Note: This step should be executed after structure has been assembled and properly footed.

Step 13: For areas complying with ASTM standard F1487 or the CSA Z-614, apply the age appropriate label to the equipment at eye level.



**XX0287 - 5 in. O.D. 2-UNIT ALUMINUM ARCH SWING
8 ft. (2438 mm) TOP RAIL**

PART NO.	DESCRIPTION	QTY.
AAU0155	HANGER - 5" SWING	4
ABC0704	CONNECTOR - SWING CLEVIS	4
APT0144	POST - 5" O.D. x 133 1/2" ALUMINUM ARCH SUPPORT	2
APT0432	BEAM - 5" x 126" ARCH SWING TOP RAIL	1
BAD0085	THREAD LOCKING ADHESIVE	1
BAE0020	RIVET - 1/4" x 11/16" DRIVE	4
BAE0412	BOLT - 3/8"-16 x 2 1/2" HEX HEAD SHOULDER	4
BAE0610	NUT - 3/8"-16 THIN LOCK	4
BAE0620	NUT - 3/8"-16 LOCK w/NYLON CAP	2
BAE0630	SCREW - 3/8"-16 x 1/2" SOCKET SET SS	4
BAE0662	BOLT - 3/8"-16 x 1-1/4" TAMP RESIST w/TORX DRIVE	4
BAE06686	BOLT - 3/8"-16 x 5.50" BUTTON HEAD - SS	2
BAE0670	T-NUT - 3/8"-16 x 7/16" - SS	4
BAE0905	WRENCH - 3/16" SHORT HEX KEY	1
BAE0915	BIT - 3/8" TAMPER RESISTANT	1
BAE0922	TOOL - TT 45 L WRENCH	1
ALB0025	LABEL - AGE APPROPRIATE	1



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Installation Instructions

FINAL INSPECTION

- Playworld Systems® insists on the installation of protective surfacing within the use zone of each play structure in accordance with the applicable standard for your area, appropriate for the fall height of each structure.
- Playworld Systems® strongly recommends close supervision of children as they play. The owners of playground equipment and the parents or guardians of children are responsible for this proper supervision.
- As the owner of playground equipment, you are responsible for the maintenance of the equipment and surrounding play area. A comprehensive maintenance and inspection schedule must be developed and all equipment inspected frequently. Refer to the inspection and maintenance schedule in the back of this booklet.
- Perform a thorough final check on the installed equipment to insure all equipment is installed as specified by manufacturer's installation instructions.
 - Review all Installation Instructions for specified dimensions. Make sure dimensions called for in instructions agree with actual installation.
 - Double check height dimensions. Height measurements are taken from the top of the protective surfacing material.
 - Insure all fasteners are tightened according to tightening torque specifications listed on your installation instructions.
 - Clean dried concrete off of components and any other affected surface.
 - Touch-up any scratches or installation damage to powder coated finish with color-matched spray paint.
 - Allow adequate time for proper curing, both for concrete and urethane cement if rubber safety surfacing tiles have been installed.
 - Insure that protective surfacing is properly installed according to recommendations. Footings must not be exposed. Refer to the florescent orange sheet included in the front of the installation instruction booklet titled "Owners Manual".
 - Insure that hard surface warning/Playworld Systems® identification labels (shown below) are properly affixed to the play equipment. Labels are to be plainly visible according to current playground equipment guidelines. For areas complying with ASTM F-1487 or CSA Z-614 an age appropriate label must be applied in a visible location.

- Dispose of all packaging material properly. These materials which include large plastic bags and sheets can be a suffocation hazard. Dispose of these materials out of reach or contact of small children.



Swing Hangers

- Inspect swing hangers to insure they are properly secured to the support posts.
- Use the supplied torx-style tamper-resistant bit to insure bolt connection is tight.
- Use the supplied 3/16" hex key wrench to insure the set screw connection is tight.
- Inspect drive rivets to insure they are intact and secure.
- Visually inspect swing hangers for cracks or breakage. If any damage is detected, barricade equipment to prevent use until repair is completed. Contact your sales representative immediately for a replacement part.

Fasteners

- Inspect for loose fasteners.
Tightening torque specifications are:
Bolts and Nuts: Snug tighten and tighten an additional one-half turn.
Set Screws: Snug tighten and tighten an additional full turn.
- Inspect drive rivets to insure they are intact and secure.
- If during the maintenance process a bolt needs to be removed from a part or parts, it will be necessary to apply a drop of liquid thread lock / loctite to the bolt before reinstallation.
- Inspect for missing, worn or broken fasteners. If any missing, worn or broken fasteners are found, refer to the installation instructions for proper replacement fastener. If any damage is detected, barricade equipment to prevent use until repair is completed. Contact your sales representative immediately for a replacement part.

Welds

- Inspect all welded joints. If any broken welds are detected, barricade equipment to prevent use until repair is completed. Contact your sales representative immediately for a replacement part.

Finish

- Inspect metal parts for finish damage.
To repair painted surfaces, sand damaged area with sandpaper and wipe clean. Mask area and paint with primer and allow to dry. Paint primed area with color-matching paint and allow to dry. Recoat area with color-matching paint if required. Drying time is approximately 8 hours between coats.

Footings

- Inspect component to be solid in footing and secure. If any damage is detected, barricade equipment to prevent use until repair is completed.

Surfacing

- Refer to the specific surfacing maintenance detail sheet for additional information.

Replacement Parts

- Refer to your installation instructions to obtain replacement part number.
- Contact your sales representative or call Playworld Systems' Customer Service for a replacement part.

Equipment Maintenance Playworld Systems® Model XX0287 5 in. (127 mm) O.D. 2-Unit Aluminum Arch Swing 8 ft. (2438 mm) Top Rail



Warning!
Exceeding 25 ft lbs (33.9 Nm) of torque
on the swing hanger bolts may
cause damage to the swing band.



Inspection Form

- Be sure that you are using a copy of this Inspection Form and not your original.
- Use the Inspection Codes listed below and record condition of equipment at time of examination on the Inspection Checklist.
- Document any item from the Inspection Checklist that will require maintenance along with any corrective action on the Maintenance Schedule.
- Be sure to include appropriate dates and signatures on each section to properly document maintenance procedure.

Preventive Maintenance ... for Safety's Sake!

INSPECTION CHECKLIST

	Frequency	Inspection Code	Date	Date Repairs Completed
Inspect surfacing to insure proper depth and distribution.	High			
Inspect swing hangers for tightness and damage.	High			
Inspect metal parts for structural and finish damage.	Medium			
Inspect for loose, missing, worn, or broken fasteners.	High			
Inspect footing to insure support is secure and footing is not damaged.	Low			

Inspection Codes
P = Pass F = Fail NA = Not Applicable

Inspector: Name (Please Print) _____ Signature: _____ Date: ___/___/___

MAINTENANCE SCHEDULE

Item in Question	Description of Problem	Corrective Action	Date

Repairer: Name (Please Print) _____ Signature: _____ Date: ___/___/___



Huegel Park Playground Installation Specifications





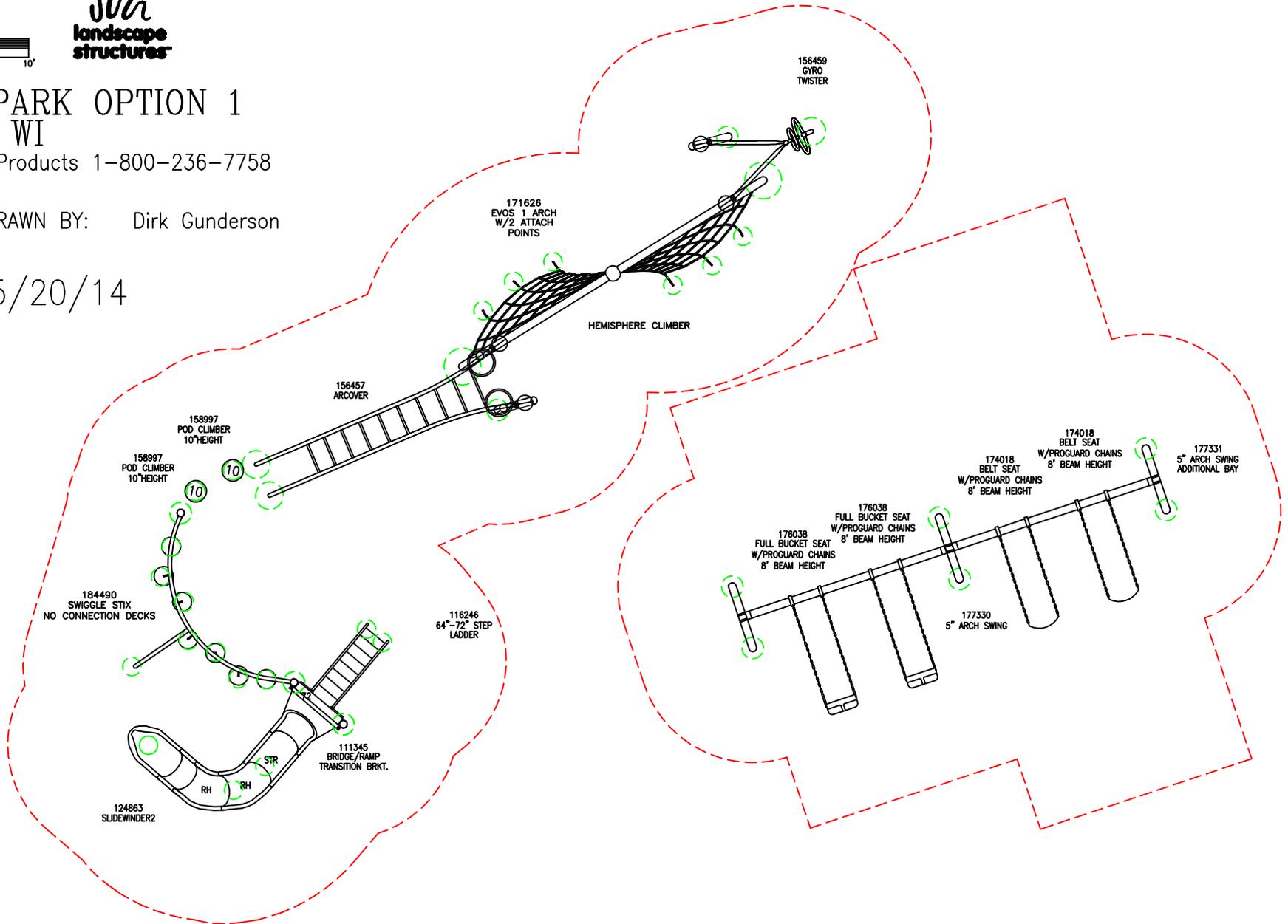
FOOTING LAYOUT



HUEGEL PARK OPTION 1
MADISON, WI
Gerber Leisure Products 1-800-236-7758

Evos
4/3/14 DRAWN BY: Dirk Gunderson

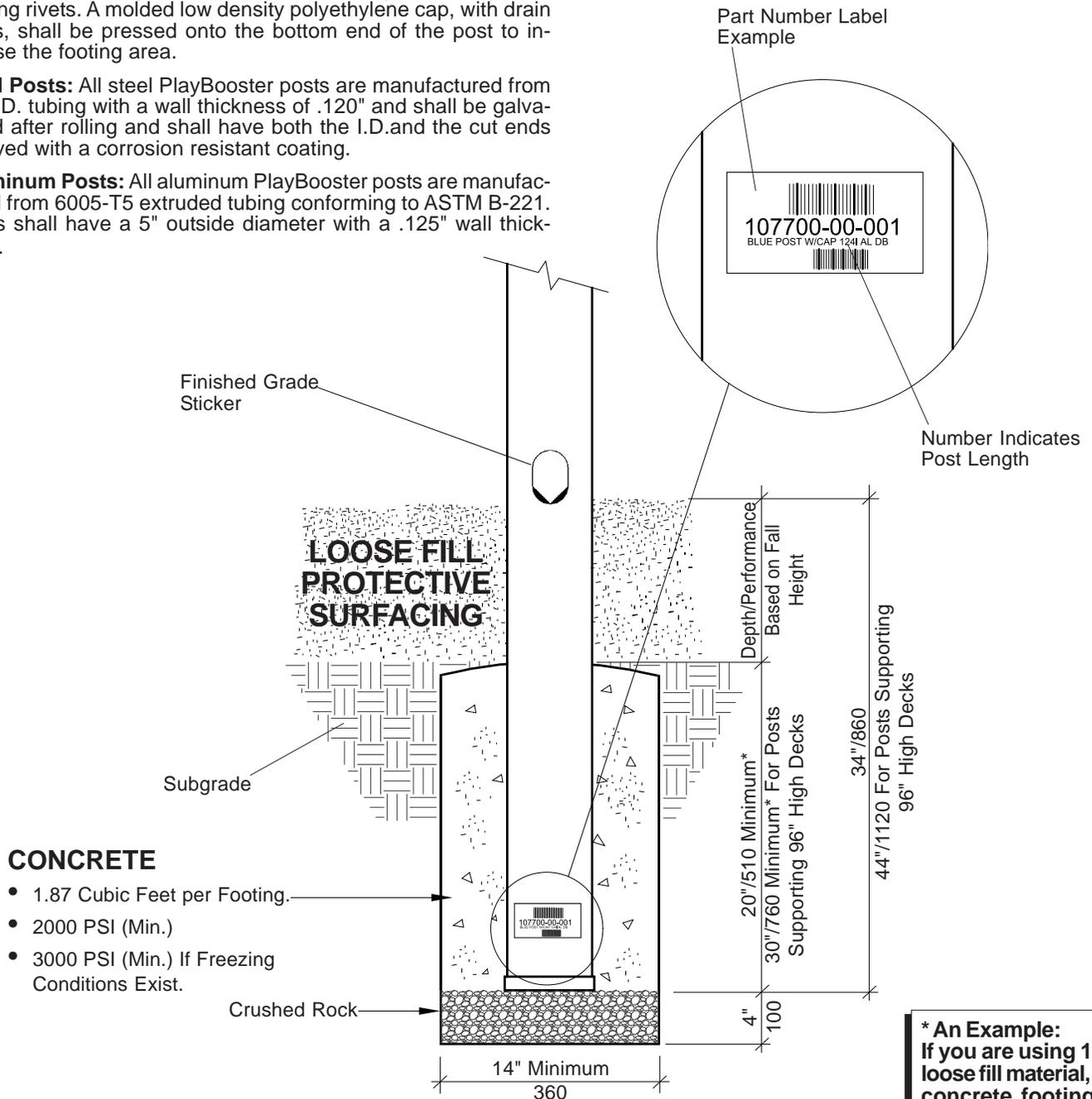
REVISED: 5/20/14



Post Specifications: Post length shall vary depending upon the intended use and shall be a minimum of 42" above the deck height. All posts shall be powdercoated to specified color. All posts shall have a "finished grade marker" positioned on the post identifying the 34" bury line (or 44" bury line for posts for 96" decks) required for correct installation and the top of the loose fill protective surfacing. Top caps for posts shall be aluminum die cast from 369.1 alloy and powdercoated to match the post color. All caps shall be factory installed and secured in place with (3) self sealing rivets. A molded low density polyethylene cap, with drain holes, shall be pressed onto the bottom end of the post to increase the footing area.

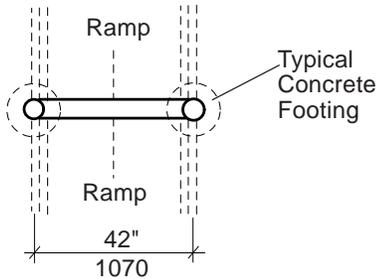
Steel Posts: All steel PlayBooster posts are manufactured from 5" O.D. tubing with a wall thickness of .120" and shall be galvanized after rolling and shall have both the I.D. and the cut ends sprayed with a corrosion resistant coating.

Aluminum Posts: All aluminum PlayBooster posts are manufactured from 6005-T5 extruded tubing conforming to ASTM B-221. Posts shall have a 5" outside diameter with a .125" wall thickness.

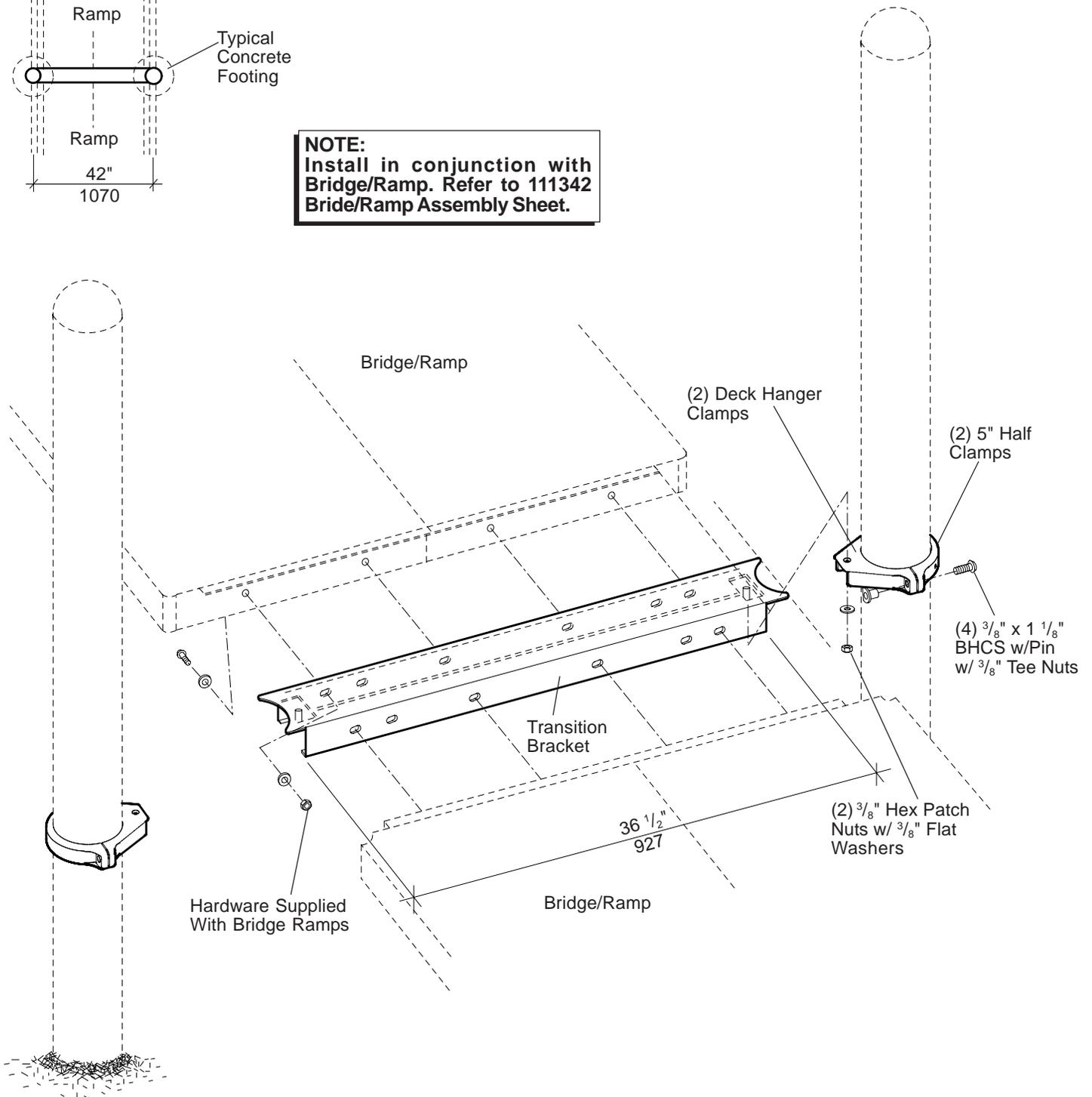


*** An Example:**
If you are using 12" of loose fill material, your concrete footing will be 22" deep.

PlayBooster® Concrete Footings, 5" Posts



NOTE:
Install in conjunction with Bridge/Ramp. Refer to 111342 Bridge/Ramp Assembly Sheet.





J:\SPECS\184\18427300.P65

PlayBooster® 111345 Transition Bracket

Parts List

Part#	Description	Qty
184259-00	Bridge/ Ramp Transition Bracket, Specify Color ..	1
105327-01	5" Half Clamp, Specify Color	2
106022-00	Deck Hanger Clamp, Specify Color	2
106676-00	Hardware Package	1
100198-00	3/8" x 1 1/8" BHCS w/Pin, SST	4
100321-00	3/8" Hex Patch Nut, SST	2
100351-00	3/8" Tee Nut, SST	4
100362-00	3/8" Flat Washer, SST	2
100610-00	1/4" x 5/8" Drive Rivet, AL/SST	2

Specifications

Transition Bracket: Fabricated and formed from 11 GA (.120") HRPO low carbon sheet steel. Finish: TenderTuff®, brown in color.

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

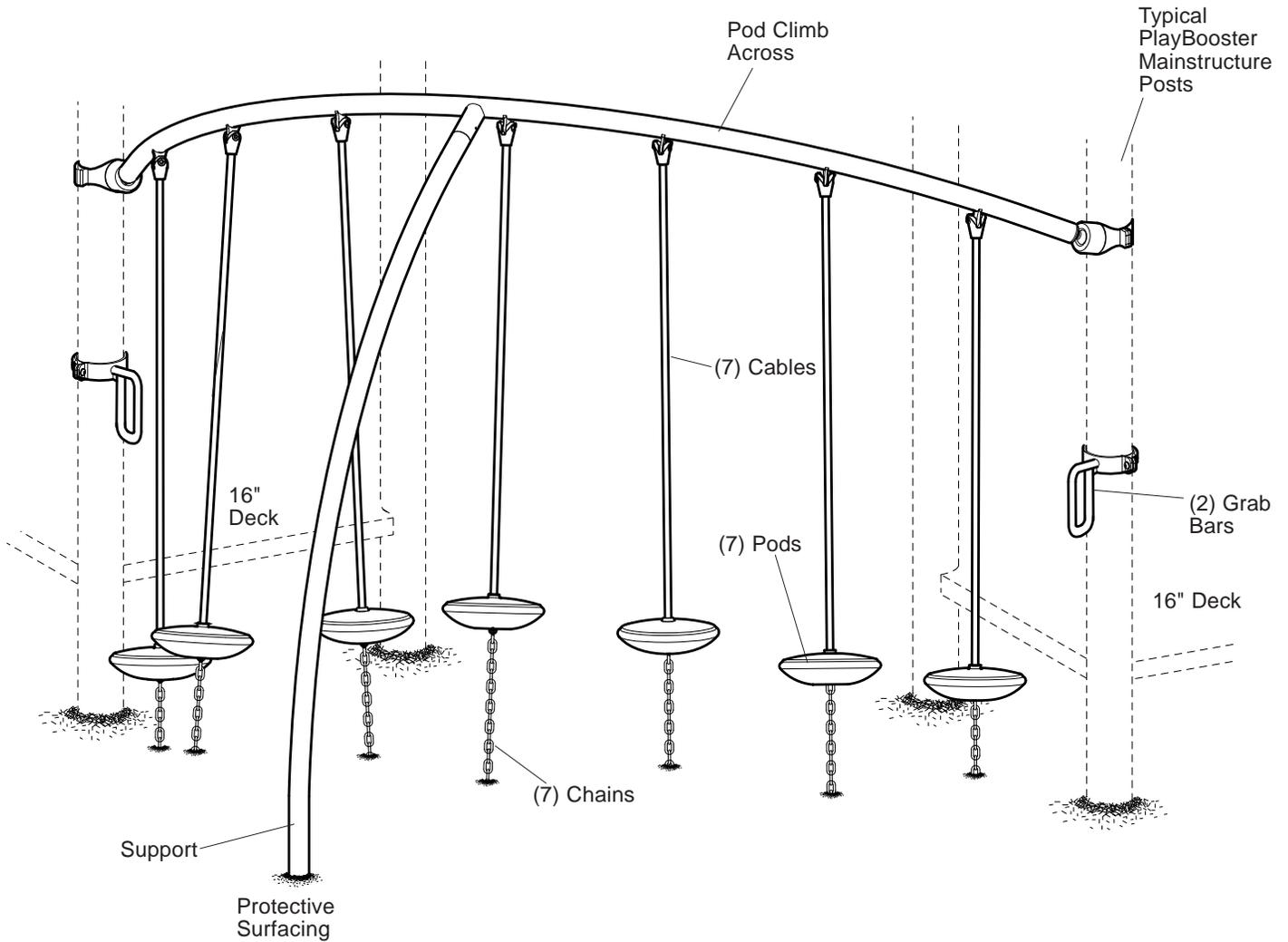
Deck Hanger Clamp Assembly: Cast aluminum. Finish: Powdercoat, color specified.

Installation Time: Approx. 1/2 man hour
Weight: 22 lbs.

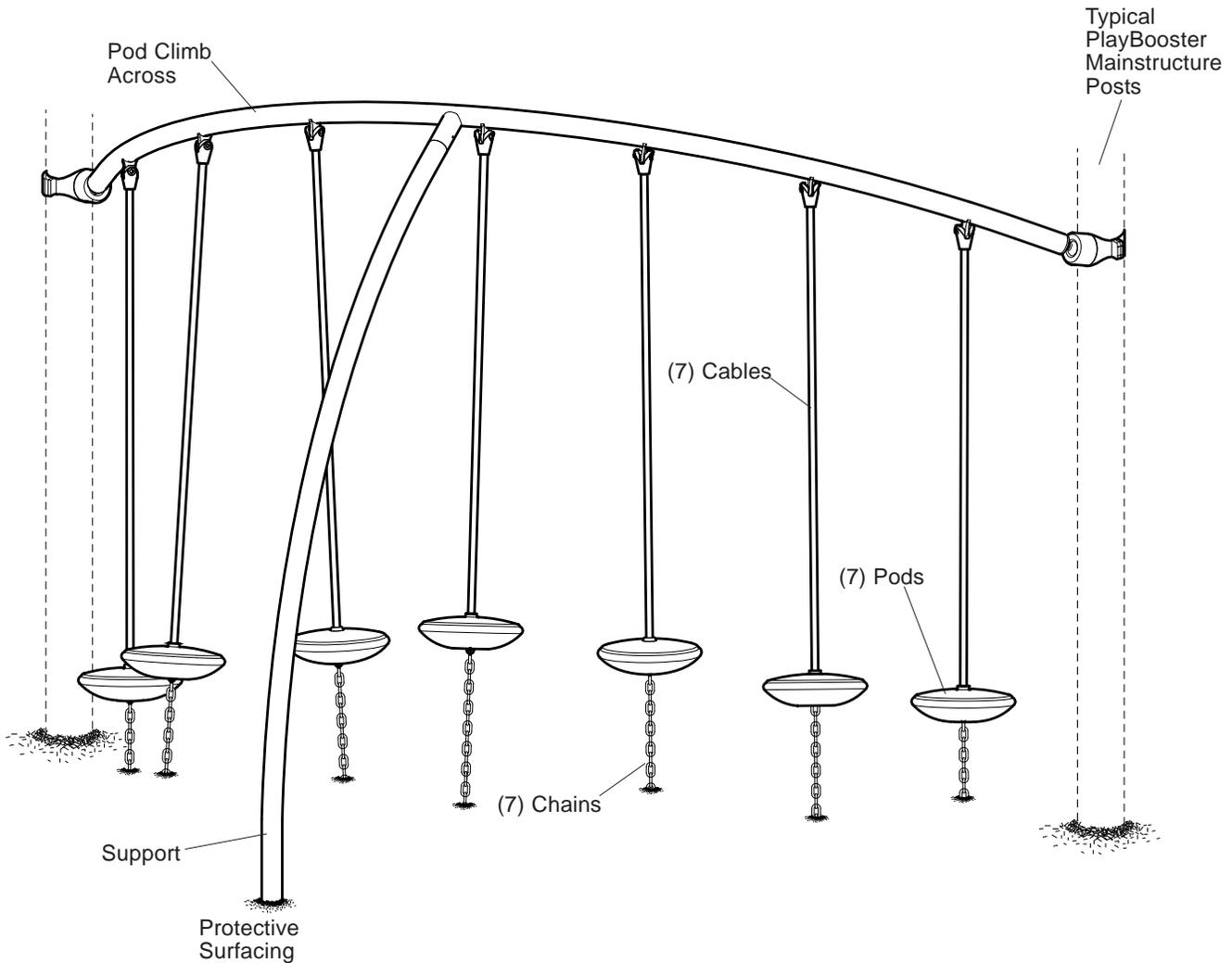
Installation Instructions

- 1) Install transition bracket in conjunction with ramp. Refer to the 111342 Bridge Ramp Spec Sheet.
- 2) Attach deck hanger clamp on post using 5" half clamp with 3/8" x 1 1/8" BHCS w/pin and 3/8" tee nuts. Position transition with studs through holes in clamps and fasten with 3/8" flat washer and 3/8" patch nut.
- 3) Position ramp on deck and transition bracket. Attach ramp to deck and transition bracket. Refer to 111342 Bridge Ramp Spec Sheet.
- 4) Final tighten hardware. Install 1/4" x 5/8" drive rivets in all 5" half clamps. Refer to the Typical Offset Hanger Clamp Spec Sheet.
- 5) Install protective surfacing before users are allowed to play on the structure.

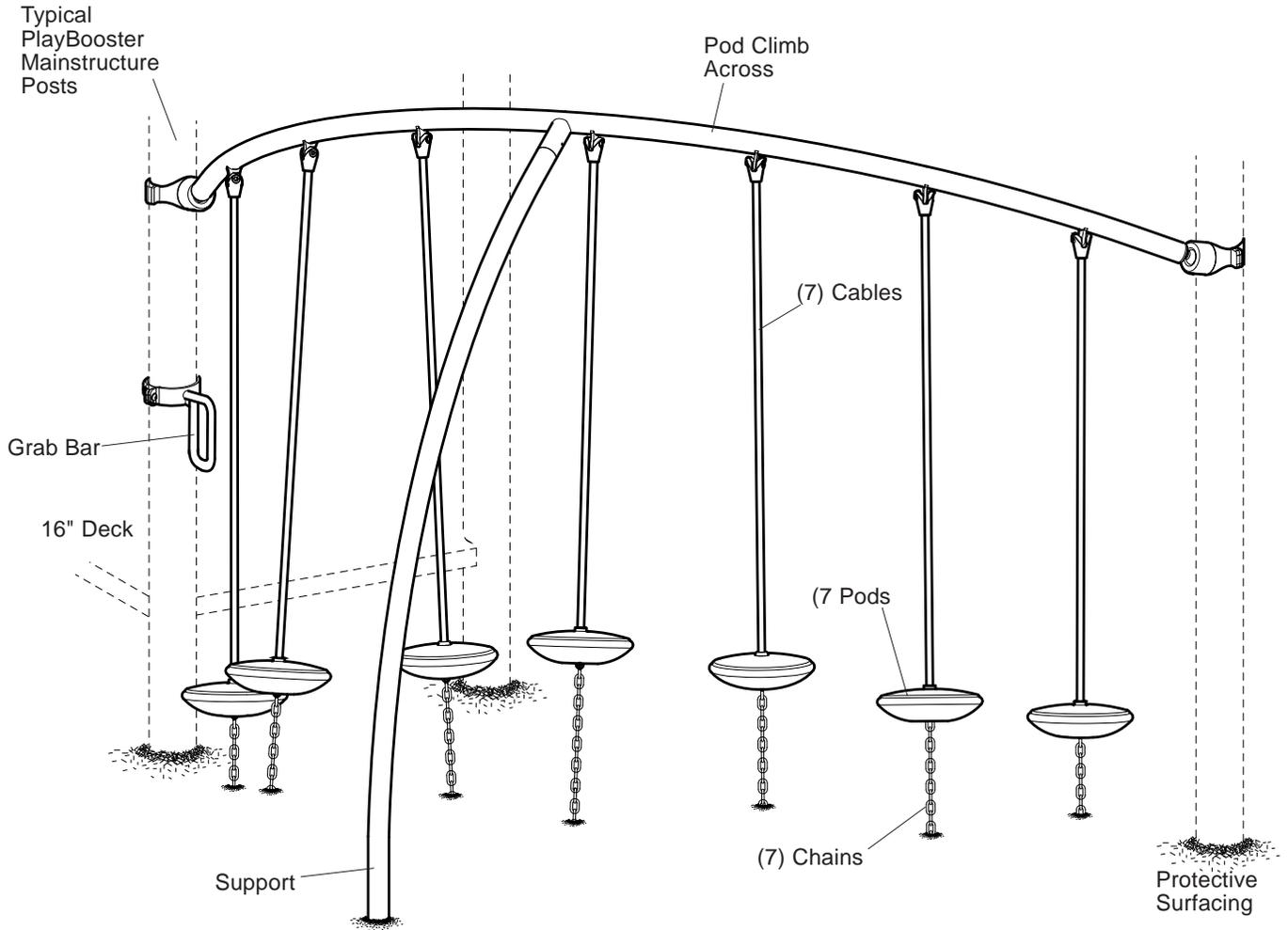
**DETAIL
SWIGGLE STIX BRIDGE - CONNECTING**



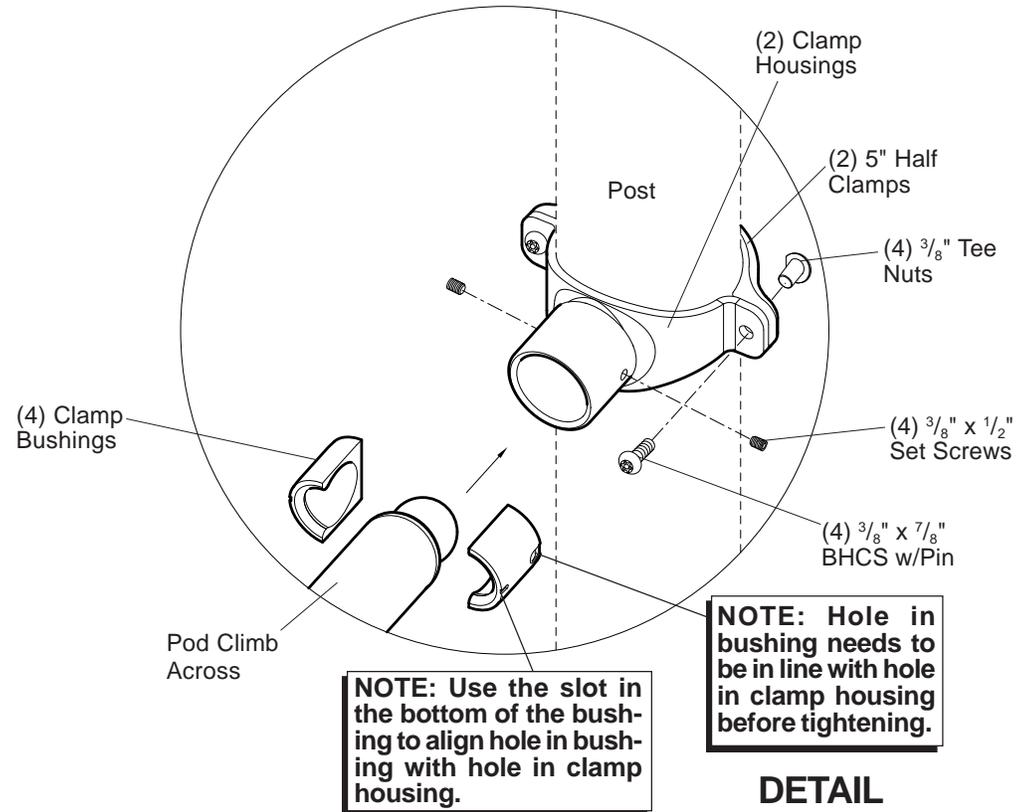
DETAIL
SWIGGLE STIX BRIDGE - NO DECK



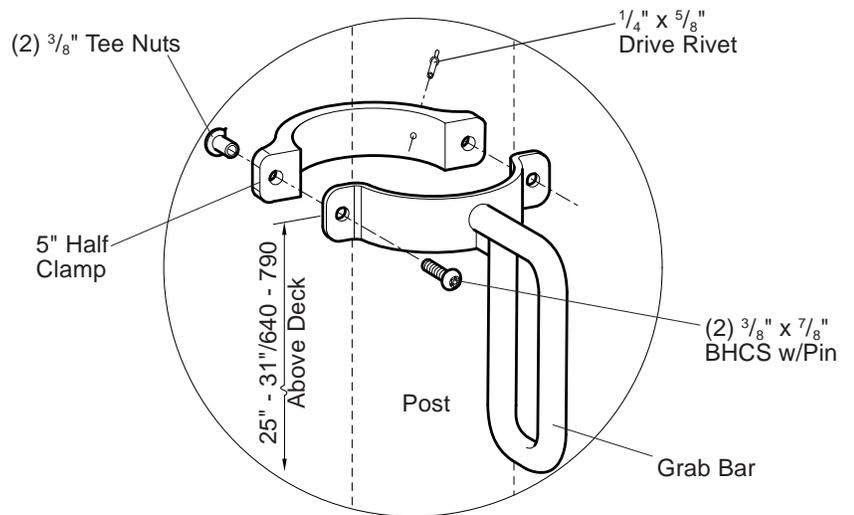
**DETAIL
 SWIGGLE STIX BRIDGE - ATTACHED**



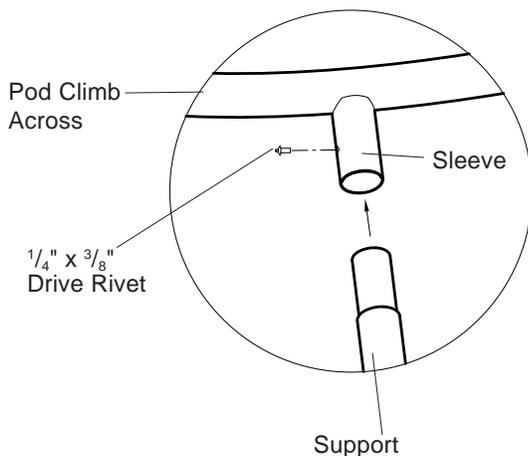
**DETAIL
POD CLIMB ACROSS
ATTACHMENT**



**DETAIL
GRAB BAR ATTACHMENT**

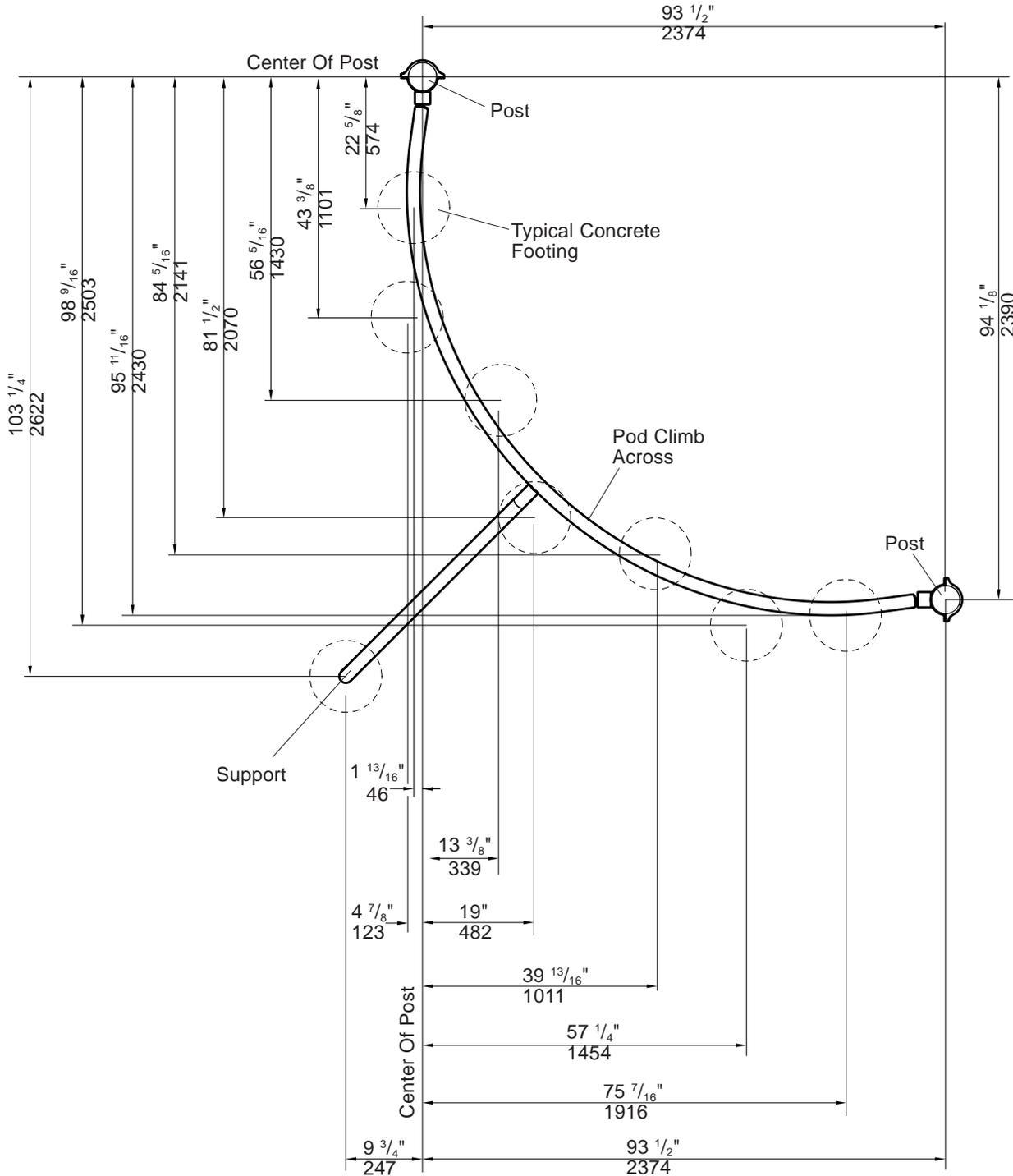


**DETAIL
SUPPORT ATTACHMENT**

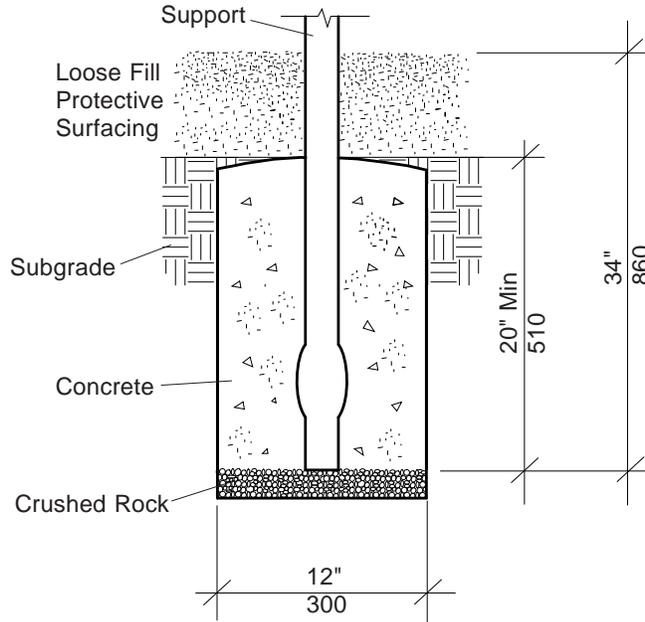


PLANVIEW FOOTING LAYOUT

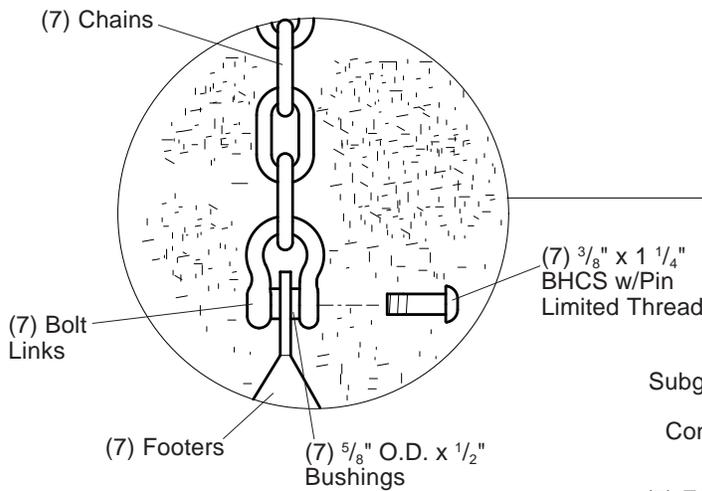
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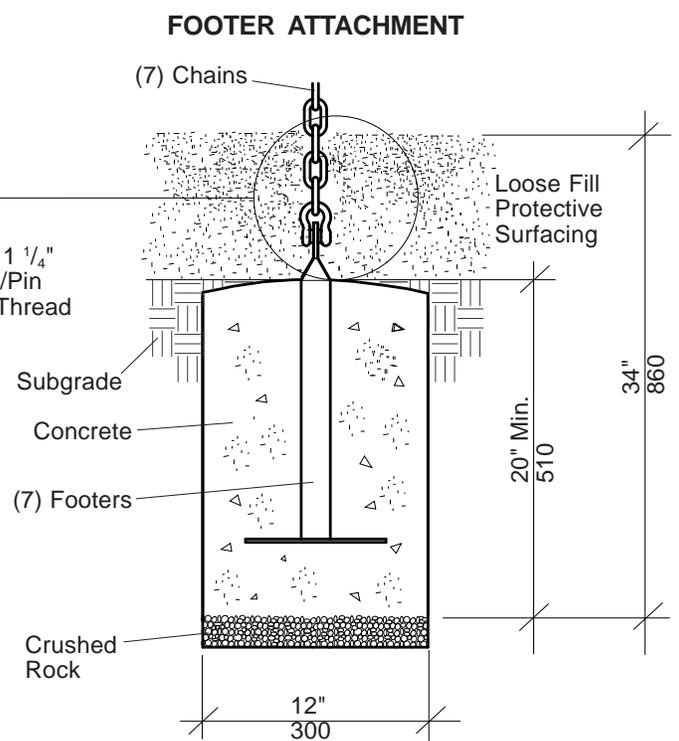
**DETAIL
DIRECT BURY**



DETAIL

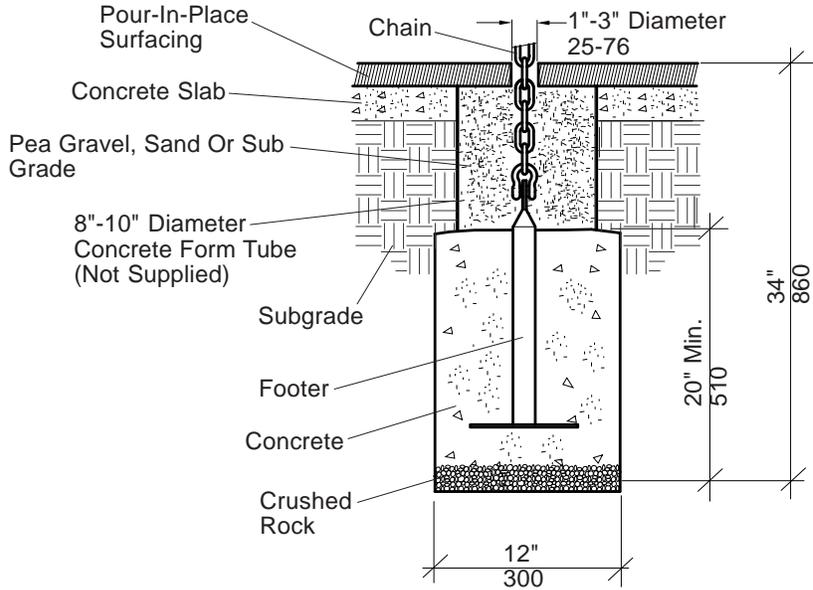


**DETAIL
FOOTER ATTACHMENT**

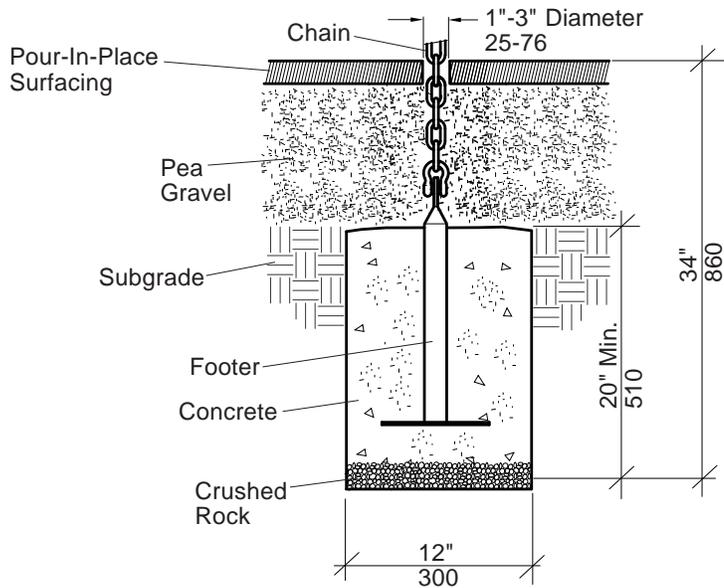


NOTE: The hole depth for the footer needs to be deep enough, so the footer plate doesn't contact the bottom of the hole. The weight of the concrete will force the footer plate down, tightening the cable.

DETAIL
DIRECT BURY WITH
POUR-IN-PLACE SURFACING



DETAIL
DIRECT BURY WITH
POUR-IN-PLACE SURFACING
(PEA GRAVEL)



Parts List

Part#	Description	Qty.
No Deck		
100610-00	1/4" x 5/8" Drive Rivet, AL/SST	2
105327-01	5" Half Clamp, Specify Color	2
154460-00	Pod, Specify Color	7
155157-00	Pod Climb Across	1
156203-00	Pod Climb Across Support, Specify Color	1
164367-00	Footer, Specify Color	7
177932-00	Pod Bolt Plate, Specify Color	7
177938-00	60 7/8" Long Pod Cable #1 Assembly	6
178586-00	1 5/16" O.D. x 1 5/8" Long AL. Spacer	7
178984-00	56 7/8" Long Pod Cable #2 Assembly	1
196886-00	18" Long (14 Links) Chain	2
196887-00	19 1/4" Long (15 Links) Chain	1
196888-00	21 3/4" Long (17 Links) Chain	1
196889-00	23" Long (18 Links) Chain	1
196890-00	24 1/4" Long (19 Links) Chain	1
196891-00	25 1/2" Long (20 Links) Chain	1
182631-00	Clamp Bushing, Aluminum	4
182632-00	Clamp Housing, Specify Color	2
184646-00 Swiggle Stix Hardware Package		
100196-00	3/8" x 7/8" BHCS w/Pin, SST	25
100198-00	3/8" x 1 1/8" BHCS w/Pin, SST	4
100290-00	3/8" x 7/8" BHCS w/Pin Limited Thread, SST	7
100292-00	3/8" x 1 1/4" BHCS w/Pin Limited Thread, SST	14
100351-00	3/8" Tee Nut, SST	4
100365-00	3/8" SAE Flat Washer, SST	21
100611-00	1/4" x 3/8" Drive Rivet, AL/SST	1
127179-00	5/8" O.D. x 3/8" Bushing, SST	14
138915-00	Bolt Link, SST	14
156962-00	5/8" O.D. x 1/2" Bushing, SST	7
157224-00	.439" I.D. x 1.156" Bushing, SST	7
157704-00	7/16" x 2" BHCS w/Pin Limited Thread, SST	7
162729-00	Connecting Plug	14
183100-00	3/8" x 1/2" Set Screw, SST	4
Attached		
100610-00	1/4" x 5/8" Drive Rivet, AL/SST	3
105327-01	5" Half Clamp, Specify Color	3
141541-00	Grab Bar, Specify Color	1
154460-00	Pod, Specify Color	7
155157-00	Pod Climb Across	1
156203-00	Pod Climb Across Support, Specify Color	1
164367-00	Footer, Specify Color	7
177932-00	Pod Bolt Plate, Specify Color	7
177938-00	60 7/8" Long Pod Cable #1 Assembly	6
178586-00	1 5/16" O.D. x 1 5/8" Long AL. Spacer	7
178984-00	56 7/8" Long Pod Cable #2 Assembly	1
196886-00	18" Long (14 Links) Chain	2
196887-00	19 1/4" Long (15 Links) Chain	1
196888-00	21 3/4" Long (17 Links) Chain	1
196889-00	23" Long (18 Links) Chain	1
196890-00	24 1/4" Long (19 Links) Chain	1
196891-00	25 1/2" Long (20 Links) Chain	1
182631-00	Clamp Bushing, Aluminum	4
182632-00	Clamp Housing, Specify Color	2
106518-00 Grab Bar Hardware Package		
100196-00	3/8" x 7/8" BHCS w/Pin, SST	2
100351-00	3/8" Tee Nut, SST	2
100610-00	1/4" x 5/8" Drive Rivet, AL/SST	1
184646-00 Swiggle Stix Hardware Package		
100196-00	3/8" x 7/8" BHCS w/Pin, SST	25
100198-00	3/8" x 1 1/8" BHCS w/Pin, SST	4
100290-00	3/8" x 7/8" BHCS w/Pin Limited Thread, SST	7
100292-00	3/8" x 1 1/4" BHCS w/Pin Limited Thread, SST	14
100351-00	3/8" Tee Nut, SST	4
100365-00	3/8" SAE Flat Washer, SST	21
100611-00	1/4" x 3/8" Drive Rivet, AL/SST	1
127179-00	5/8" O.D. x 3/8" Bushing, SST	14
138915-00	Bolt Link, SST	14
156962-00	5/8" O.D. x 1/2" Bushing, SST	7
157224-00	.439" I.D. x 1.156" Bushing, SST	7
157704-00	7/16" x 2" BHCS w/Pin Limited Thread, SST	7
162729-00	Connecting Plug	14
183100-00	3/8" x 1/2" Set Screw, SST	4

Cable Assembly: (Cable) Made of tightly woven polyester-wrapped, six-stranded galvanized-steel cable with a polypropylene core. (Cable Connectors) 6061-T6 aluminum.

Pod: Rotationally molded from U.V. stabilized linear low density polyethylene, color specified.

Chain: Steel 1/4" (6,35 mm) straight link chain, 3,150 lb (1428,82 kilograms) working load limit. Finish: ProGuard.

Pod Bolt Plate: Weldment consists of 3/16" (4,75 mm) HRPO steel plate and 3/8" (9,53 mm) thick HRPO steel plate. Finish: ProShield®, color specified.

Pod Climb Across: Weldment comprised of 2.375" (60,33 mm) O.D. RS20 (.095"-.105") (2,41 mm-2,67 mm) wall galvanized steel tubing, 3/8" (9,53 mm) thick HRPO steel plate, and 1 7/8" (47,63 mm) steel ball. Finish: ProShield, color specified.

Support: Fabricated from 2.375" (60,33 mm) O.D. RS20 (.095"-.105") (2,41 mm-2,67 mm) wall galvanized steel tubing. Finish: ProShield, color specified.

Footer: Weldment comprised of 1.660" (42,16 mm) O.D. RS20 (.120" - .130") (3,05 mm-3,30 mm) wall galvanized steel tubing and 3/16" (4,75 mm) HRPO sheet steel. ProShield, color specified.

Grab Bar: Weldment comprised of formed 7/8" O.D. 11 GA (.120") and 1/4" x 1 3/4" stainless steel half clamp. Finish: TenderTuff™, color specified.

Clamp Housing: Weldment comprised of 1/4" (6,35 mm) HRPO flat steel and 1018 steel. Finish: ProShield, color specified.

Half Clamp: Cast aluminum. Finish: ProShield, color specified.

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

Installation Time: Approx. 4 1/2 man hours

Concrete Req.: Approx. 10.25 cu. ft.

Area Req.: 6' (1,83 m) minimum use zone

Weight: No Decks 156 lbs.

Attached 161 lbs.

Connecting 166 lbs.

Fall Height: 36" (0,91 m)

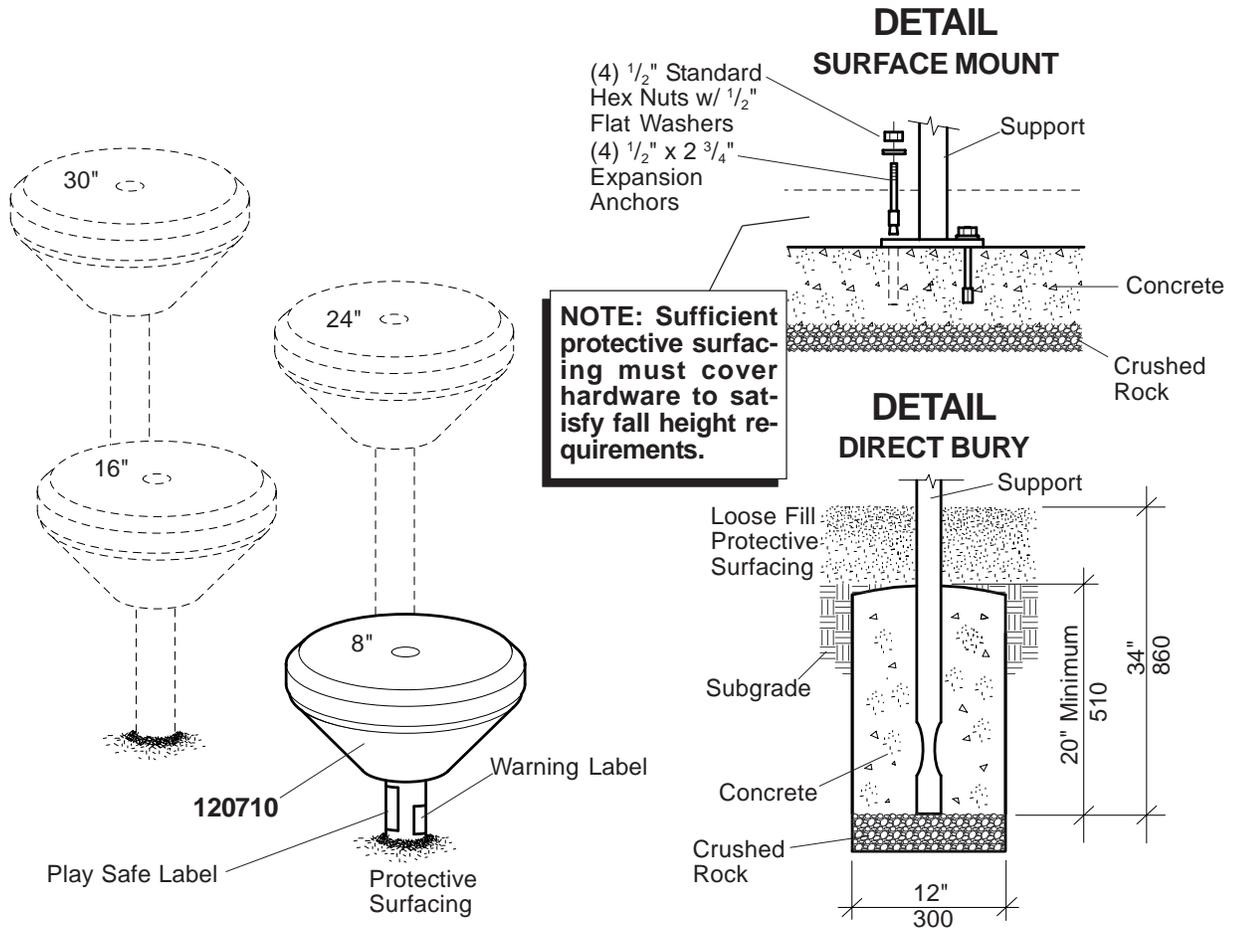
Installation Instructions

- 1) **(Direct Bury) Refer to the Plan View/ Footing Layout for footing locations.**
- 2) Attach clamp housings to posts at height shown, using 5" half clamps, 3/8" x 7/8" BHCS w/pin and 3/8" tee nuts. Refer to Pod Climb Across Attachment Detail.
- 3) Place a bushing on each side of the Pod Climb Across 1 7/8" steel balls, as shown. Insert Pod Climb Across with bushings into clamp housings. Align holes in bushings with holes in clamp housings. When holes are aligned, insert 3/8" x 1/2" set screws. Refer to the Pod Climb Across Attachment Detail. **NOTE:** Use the slot in the bottom of the bushing to align holes.

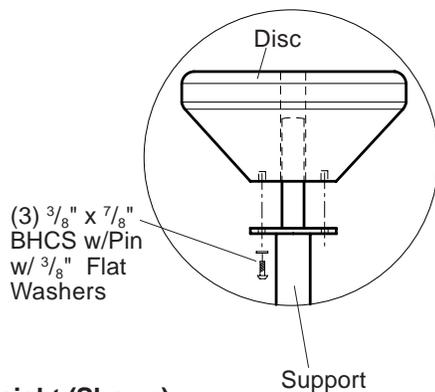
- 4) Slide support into Pod Climb Across sleeve. Drill through hole in sleeve and into support with a 1/4" or "F" (only) drill bit. Insert 1/4" x 3/8" rivet into hole and hammer rivet pin in until it is flush with head. Refer to the Support Attachment Detail.
- 5) Attach pod cable assemblies to pod climb across tabs using .439" I.D. x 1.156" bushings, connecting plugs and 7/16" x 2" BHCS w/pin limited thread bolts. Refer to the Pod Cable Attachment Detail. **NOTE:** Pod cable assemblies are numbered #1 and #2, and must be attached to pod climb across as shown.
- 6) Feed cables through 1 5/16" O.D. x 1 5/8" long spacers and holes in pods. Attach pod bolt plates to cables, using 3/8" x 7/8" BHCS w/pin limited thread bolts and 5/8" O.D. x 3/8" bushings. Refer to the Pod Attachment Detail.
- 7) Attach pod bolt plates to pods, using 3/8" x 7/8" BHCS w/pin with 3/8" SAE flat washers. Refer to the Pod Attachment Detail.
- 8) Attach chains to pod bolt plates, using bolt links, 3/8" x 1 1/4" BHCS w/pin limited thread bolts and 5/8" O.D. x 3/8" bushings. Refer to the Pod Attachment Detail. **NOTE:** Chains are different lengths, and must be attached to pod bolt plates as shown.
- 9) Attach footers to chains, using bolt links, 5/8" O.D. x 1/2" bushings, and 3/8" x 1 1/4" BHCS w/pin limited thread bolts, as shown. Refer to the Footer Attachment Detail.
- 10) **(Attached & Connecting)** Attach grab bars to posts at dimension shown, using 5" half clamps and 3/8" x 7/8" BHCS w/pin with 3/8" tee nuts. Refer to the Typical Offset Hanger Clamp Assembly Sheet.
- 11) Install drive rivets in half clamps per the Typical Offset Hanger Clamp Assembly Sheet.
- 12) With support plumb and pod cable assemblies positioned properly, pour concrete footings. Allow concrete footings to cure for a minimum of 72 hours before users are allowed to play on the structure.

(Direct Bury With Pour-In Place Surfacing) Cut 7 lengths of concrete form tubes (not supplied) long enough to set on top of concrete footings and be level with top of concrete slab. Concrete form tubes should be 8"-10" in diameter. Disconnect bolt links from pod bolt plates. Place concrete form tubes over chains and footers. Connect bolt links to pod bolt plates. Fill concrete form tubes with pea gravel, sand or subgrade. Pour concrete slab. After concrete slab has cured, pour surfacing. **NOTE:** When pouring surfacing leave a 1"-3" diameter opening around chains. Refer to the Direct Bury Pour-In-Place Surfacing Detail.

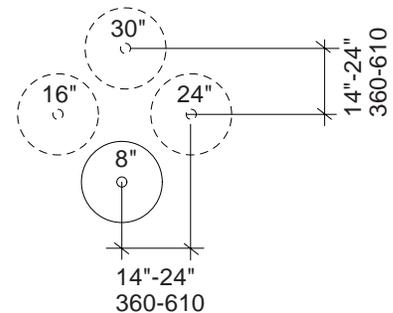
- 13) Install protective surfacing before users are allowed to play on the structure.



**DETAIL
DISC ATTACHMENT**



**PLAN VIEW/FOOTING LAYOUT
(Layout Varies - See Your Plan)**



- 120710 8" Height (Shown)
- 158997 10" Height
- 120711 16" Height
- 158998 20" Height
- 120712 24" Height
- 120713 30" Height

Climbers

Pod Climbers

Parts List

Part#	Description	Qty.
126956-00	Disc, Specify Color	*
169340-00	Support 8" (SM), Specify Color	*
169339-00	Support 8" (DB), Specify Color	*
169342-00	Support 10" (SM), Specify Color	*
169341-00	Support 10" (DB), Specify Color	*
169344-00	Support 16" (SM), Specify Color	*
169343-00	Support 16" (DB), Specify Color	*
156625-00	Support 20" (SM), Specify Color	*
156627-00	Support 20" (DB), Specify Color	*
120605-00	Support 24" (SM), Specify Color	*
120601-00	Support 24" (DB), Specify Color	*
153987-00	Support 30" (SM), Specify Color	*
153988-00	Support 30" (DB), Specify Color	*
183871-00	Disc Climber Hardware Package	1
100196-00	3/8" x 7/8" BHCS w/Pin, SST	3
100365-00	3/8" Flat Washer, SST	3
156847-00	Play Safe Label, 5-12 Yrs.	1
183064-00	Warning Label	1
121348-00	4 Hole (SM) Hardware Package	1
100266-00	1/2" x 2 3/4" Expansion Anchor	4
100322-00	1/2" Standard Hex Nut, SST	4
100363-00	1/2" Flat Washer, SST	4

DB = Direct Bury

SM = Surface Mount

* = Quantity Determined By Your Order

Specifications

Disc: Rotationally molded from U.V. stabilized linear low density polyethylene, disc measures 14" in diameter x 7" high, color specified.

Support: Weldment comprised of 1.900" O.D. RS20 (.090" - .100" Wall), 1.315" O.D. RS20 (.080" - .090" Wall) and 3/16" x 5" diameter plate. Finish: ProShield®, color specified.

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

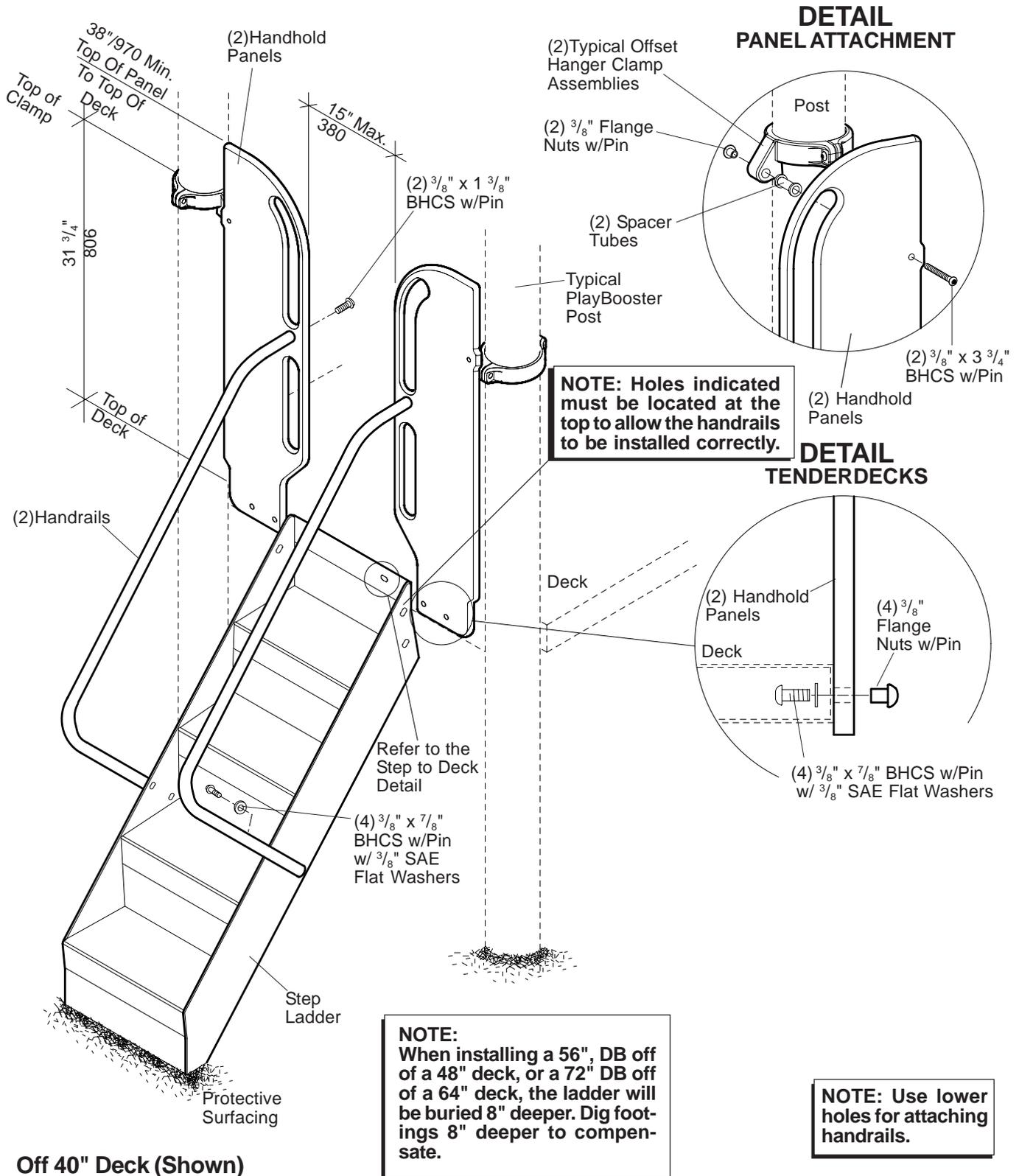
Installation Time: SM - Approx. 1/2 man hour each
DB - Approx. 3/4 man hour each

Concrete Req.: Approx. 1.31 cu. ft. each

Weight: 8" - 12 lbs.
10" - 13 lbs.
16" - 14 lbs.
20" - 15 lbs.
24" - 15 lbs.
30" - 16 lbs.

Installation Instructions

- 1) **(Direct Bury)** Dig footing as shown. See your Plan View/Footing Layout.
- 2) Attach disc to support using 3/8" x 7/8" BHCS w/pin with 3/8" flat washers, as shown.
- 3) **(Direct Bury)** Position support in footing hole and pour concrete footing. With support post plumb, prop support to hold in position.
(Surface Mount) Mark anchor bolt locations on concrete slab through holes in support plate. Remove disc climber. Drill 3" deep holes on marks into concrete slab using hammer drill and 1/2" masonry bit. Tap expansion anchors into holes and secure disc climber using 1/2" standard hex nuts with 1/2" flat washers.
- 4) Apply labels as shown.
- 5) Install protective surfacing before users are allowed to play on the structure.



Off 40" Deck (Shown)



J:\SPECS\181\18157800.P65

PlayBooster® 116246 Step Ladders, 32"-72" Decks

Parts List

Part#	Description	Qty.
108534-00	32" Step Ladder, Specify Color	1
108563-00	40" Step Ladder, Specify Color	1
108575-00	56" Step Ladder, Specify Color	1
108540-00	72" Step Ladder, Specify Color	1
126005-00	Handrail 32" Deck RH, Specify Color	1
126002-00	Handrail 32" Deck LH, Specify Color	1
125999-00	Handrail 40" Deck RH, Specify Color	1
125996-00	Handrail 40" Deck LH, Specify Color	1
125989-00	Handrail 56" Deck RH, Specify Color	1
125988-00	Handrail 56" Deck LH, Specify Color	1
125983-00	Handrail 72" Deck RH, Specify Color	1
125110-00	Handrail 72" Deck LH, Specify Color	1
139563-00	Handhold Panel, Specify Color	2
105327-01	5" Half Clamp, Specify Color	2
113729-00	Offset Hanger Clamp, Specify Color	2
113468-00	Spacer Tube, Specify Color	2
180688-00	Support (DB), Specify Color	1
180690-00	Support (SM), 72" Step Ladr. Only, Specify Color	1
123723-00	Clamp Hardware Package	1
100198-00	3/8" x 1 1/8" BHCS w/Pin, SST	4
100351-00	3/8" Tee Nut, SST	4
139608-00	32" - 56" Step Ladder Hdw. Pkg. (Tenderdeck)	1
124460-00	3/8" x 3 3/4" BHCS w/Pin, SST	2
100196-00	3/8" x 7/8" BHCS w/Pin, SST	12
100327-00	3/8" Standard Hex Nut, SST	4
100353-00	3/8" Flange Nut w/Pin, SST	6
100365-00	3/8" SAE Flat Washer, SST	14
113027-00	3/8" x 1 3/8" BHCS w/Pin, SST	2
139609-00	72" Step Ladder Hardware Pkg. (Tenderdeck)	1
124460-00	3/8" x 3 3/4" BHCS w/Pin, SST	2
100196-00	3/8" x 7/8" BHCS w/Pin, SST	16
100327-00	3/8" Standard Hex Nut, SST	4
100353-00	3/8" Flange Nut w/Pin, SST	6
100365-00	3/8" SAE Flat Washer, SST	18
113027-00	3/8" x 1 3/8" BHCS w/Pin, SST	2
121256-00	2 Hole (SM) Hardware Package	1
100263-00	3/8" x 2 3/4" Expansion Anchor	2
100327-00	3/8" Standard Hex Nut, SST	2
100365-00	3/8" SAE Flat Washer, SST	2

DB = Direct Bury
 SM = Surface Mount
 RH = Right Hand
 LH = Left Hand

Specifications

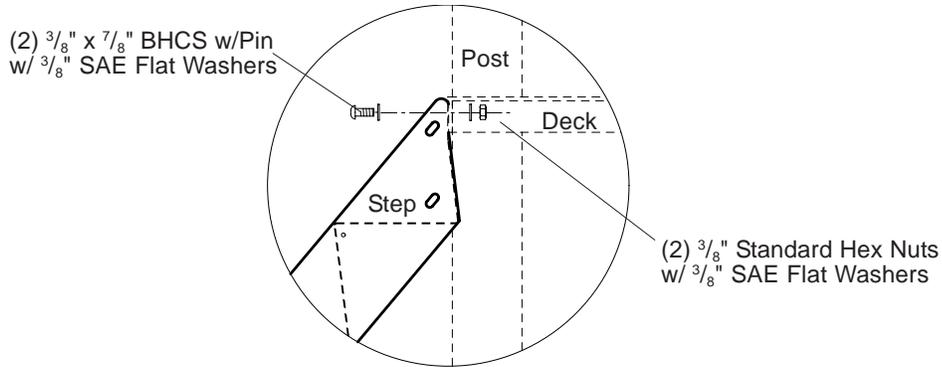
Ladder:	Fabricated and formed from 14 GA (.075") HRPO sheet steel with 5/16" perforated holes for steps and welded 12 GA (.105") HRPO sheet steel for sides. Finish: TenderTuff™, color specified.
Handhold Panel:	Solid color Permalene®, color specified.
Handrail:	Formed from 1.125" O.D. 11 GA (.120") galvanized steel tubing. Finish: TenderTuff, color specified.
Footer:	Weldment comprised of 1.660" O.D. RS-20 (.085" - .095") galvanized steel tubing and 1/4" x 2" zinc plated steel strap. Finish: ProShield®, color specified.
Spacer Tube:	Made from 6061-T6 aluminum 7/8" O.D. x 1 1/16". Finish: ProShield, color specified.
Offset Hanger Clamp Assembly:	Cast aluminum. Finish: ProShield, color specified.
Fasteners:	Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

Installation Time: SM - Approx. 1 1/4 man hours
 DB - Approx. 2 man hours
Concrete Req.: Approx. 1.4 cu. ft.
Weight: 32" Step Ladder (SM) - 90 lbs.
 32" Step Ladder (DB) - 100 lbs.
 40" Step Ladder (SM) - 106 lbs.
 40" Step Ladder (DB) - 116 lbs.
 56" Step Ladder (SM) - 142 lbs.
 56" Step Ladder (DB) - 152 lbs.
 72" Step Ladder (SM) - 185 lbs.
 72" Step Ladder (DB) - 195 lbs.
Fall Height: Deck Height

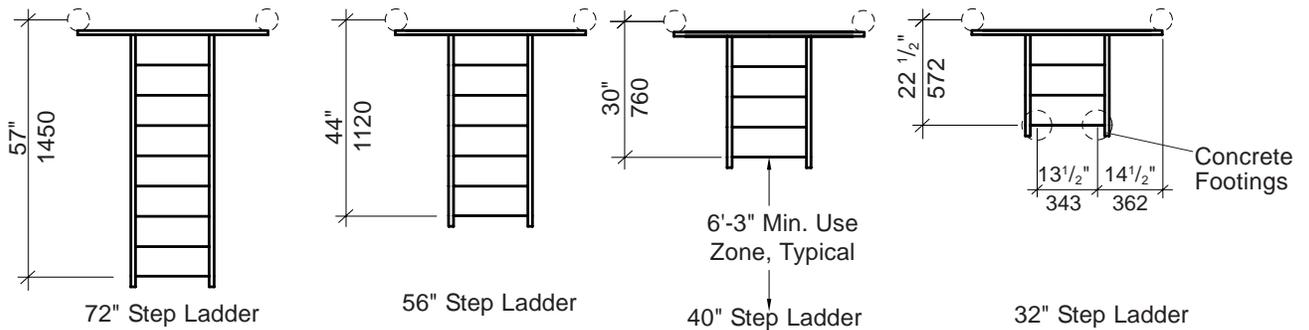
Installation Instructions

- (Direct Bury)** Dig footing holes spaced as shown. Attach support to step ladder using 3/8" x 7/8" BHCS w/pin and 3/8" standard hex nuts with 3/8" SAE flat washers.
(Surface Mount 72" Step Ladder Only) Attach support to step ladder using 3/8" x 7/8" BHCS w/pin and 3/8" standard hex nuts with 3/8" SAE flat washers.
- Attach offset hanger clamp assemblies to posts at height shown. Using 5" half clamps and 3/8" x 1 1/8" BHCS w/pin with 3/8" tee nuts. Refer To The Typical Offset Hanger Clamp Spec Sheet.
- Attach handhold panels to offset hanger clamp assemblies using 3/8" x 3 3/4" BHCS w/pin, spacer tubes and 3/8" flange nuts w/pin. See Panel Attachment Detail.
- Attach step ladder to deck using 3/8" x 7/8" BHCS w/pin with 3/8" SAE flat washers and 3/8" standard hex nuts with 3/8" SAE flat washers, as shown.
- Attach handhold panels to the face of the deck using 3/8" x 7/8" BHCS w/pin with 3/8" SAE flat washers and 3/8" flange nuts w/pin, as shown.
- Attach handrails to sides of step ladder using 3/8" x 7/8" BHCS w/pin with 3/8" SAE flat washers.
- Using a 7/16" drill bit, drill out the lower 1/8" pilot hole in each handhold panel for attaching handrails.
- Attach handrails to handhold panels using 3/8" x 1 3/8" BHCS w/pin, as shown.
- (Direct Bury)** With step ladder plumb, pour concrete footings. Allow concrete footings to cure a minimum of 72 hours before users are allowed to play on the structure.
(Surface Mount) Mark anchor bolt locations on concrete slab through holes in base of step ladder. Remove step ladder and drill 3/8" x 3" deep holes on marks into concrete using 3/8" masonry bit and hammer drill. Tap expansion anchors into drilled holes. Reposition step ladder and reattach to face of deck following step #4. Fasten base of step to expansion anchors using 3/8" standard hex nuts with 3/8" SAE flat washers.
- Install protective surfacing before users are allowed to play on the structure.

**DETAIL
STEP TO DECK**

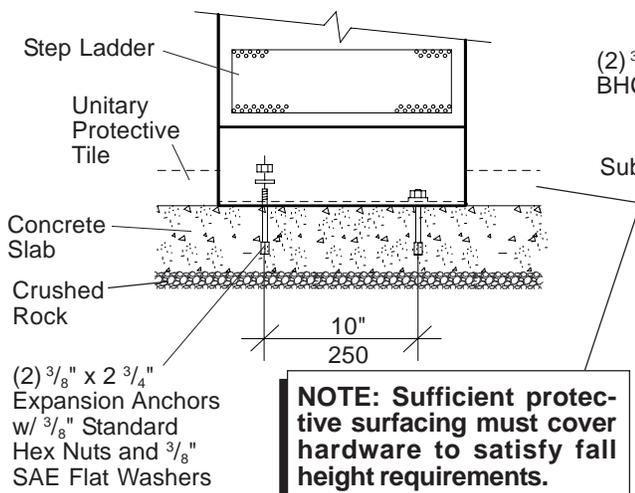


PLAN VIEW/FOOTING LAYOUTS



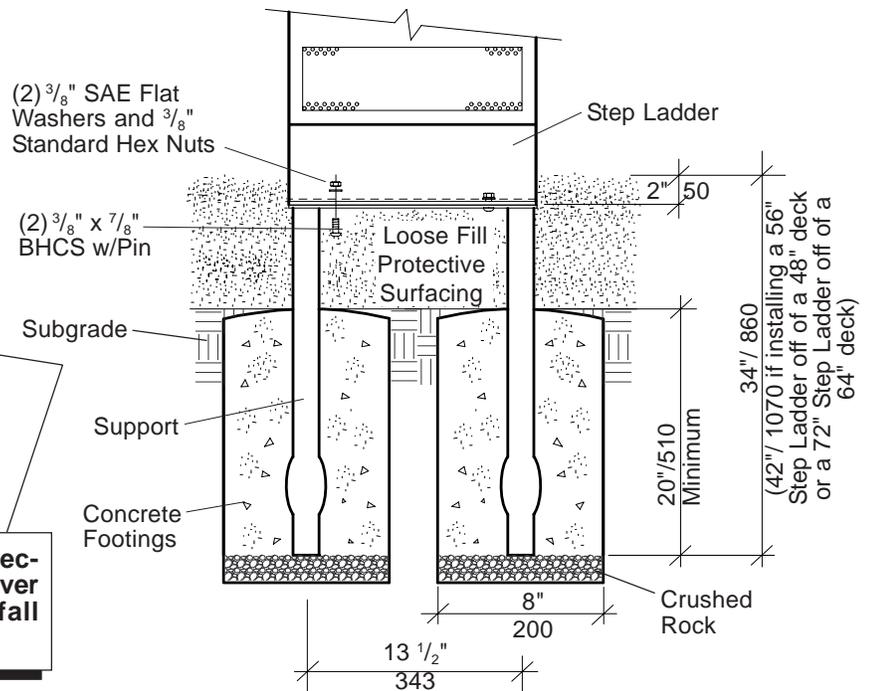
NOTE:
 Dimensions Are From Center Of Post To Center Of Footer

**DETAIL
SURFACE MOUNT**

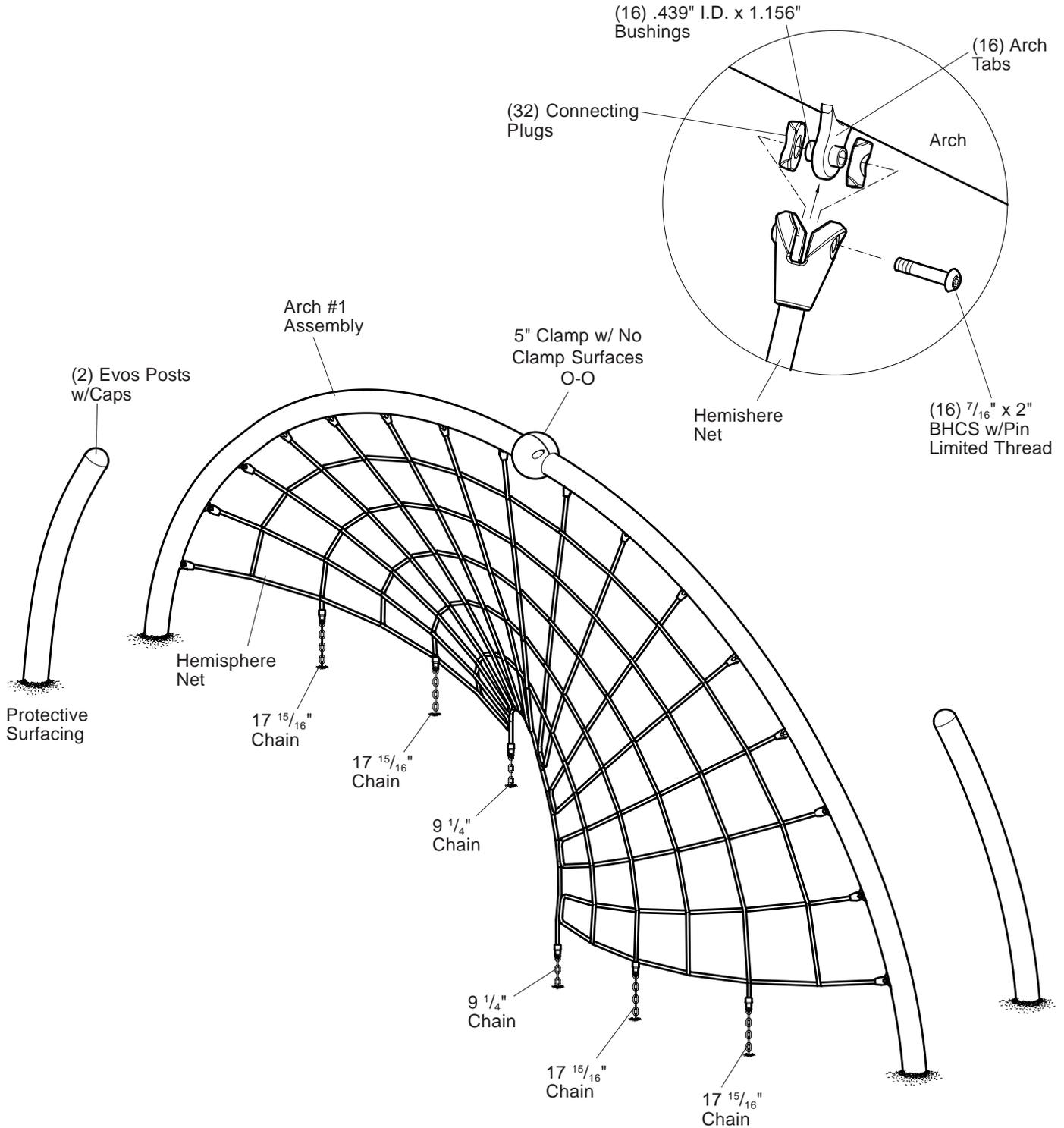


NOTE: Sufficient protective surfacing must cover hardware to satisfy fall height requirements.

**DETAIL
DIRECT BURY**



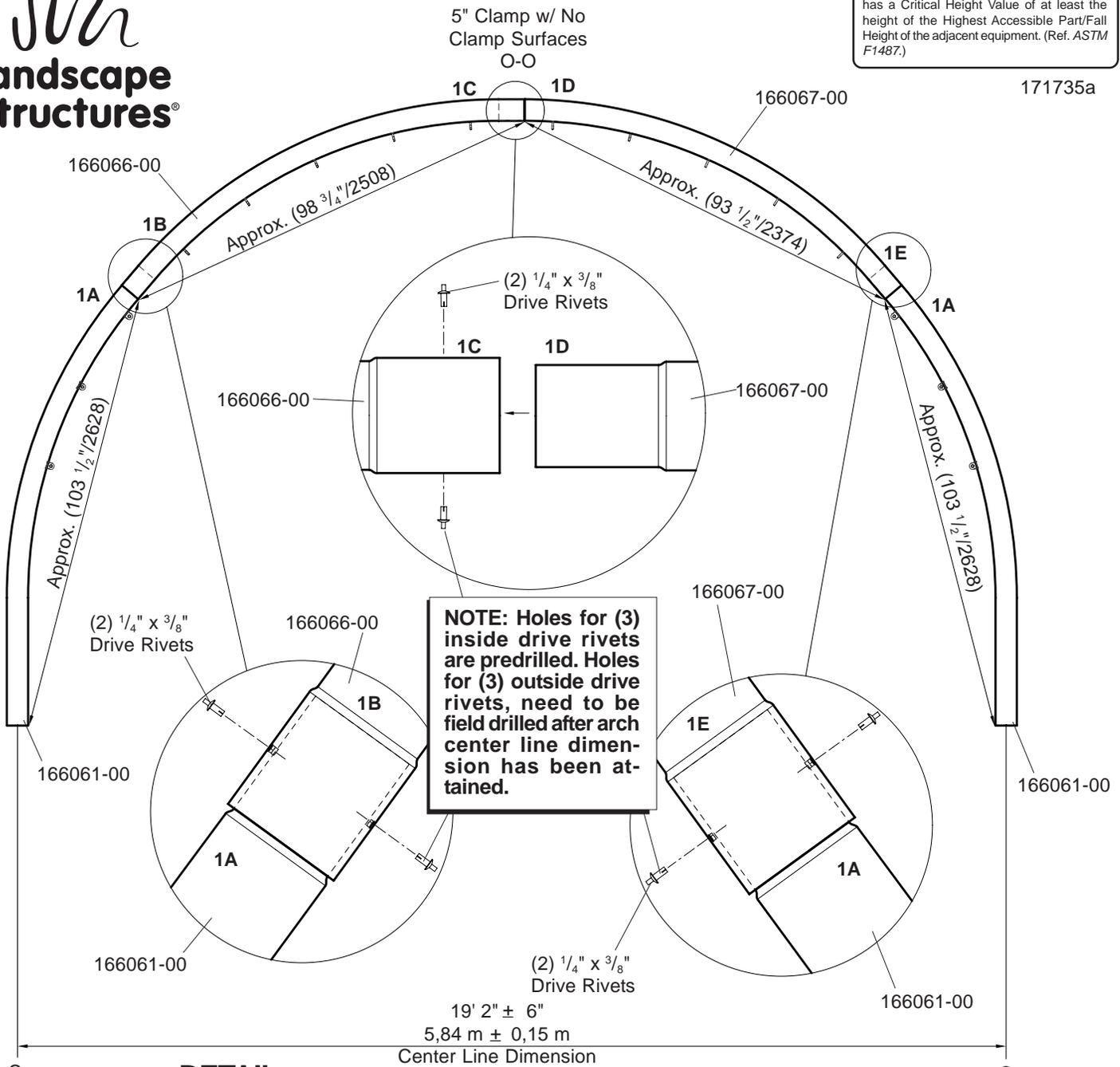
DETAIL
HEMISPHERE NET ATTACHMENT



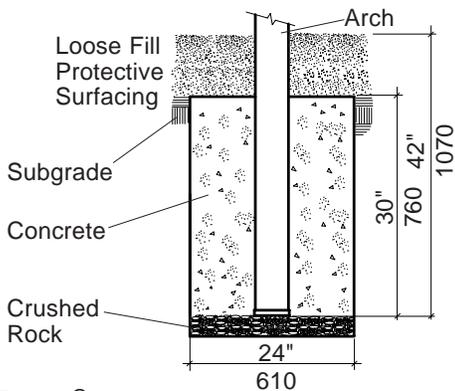
ARCH #1 ASSEMBLY

SAFETY NOTE
 Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. ASTM F1487.)

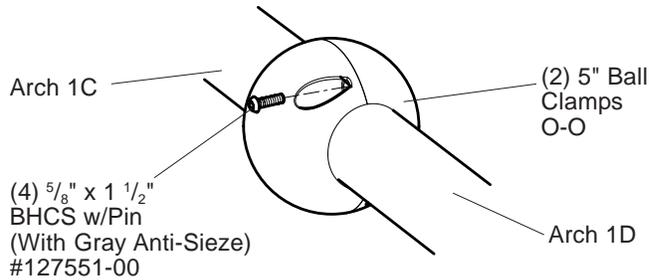
171735a



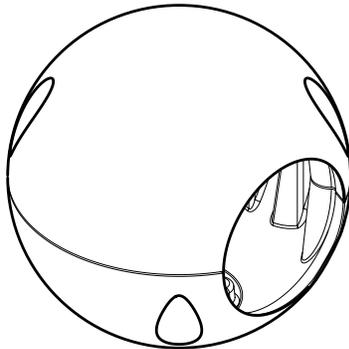
**DETAIL
 DIRECT BURY**



**DETAIL
 5" CLAMP O-O ATTACHMENT**

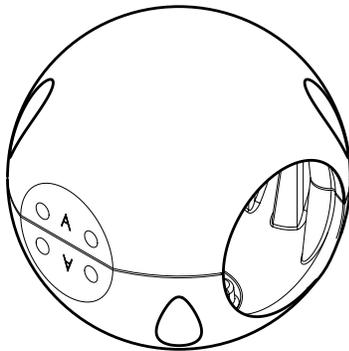
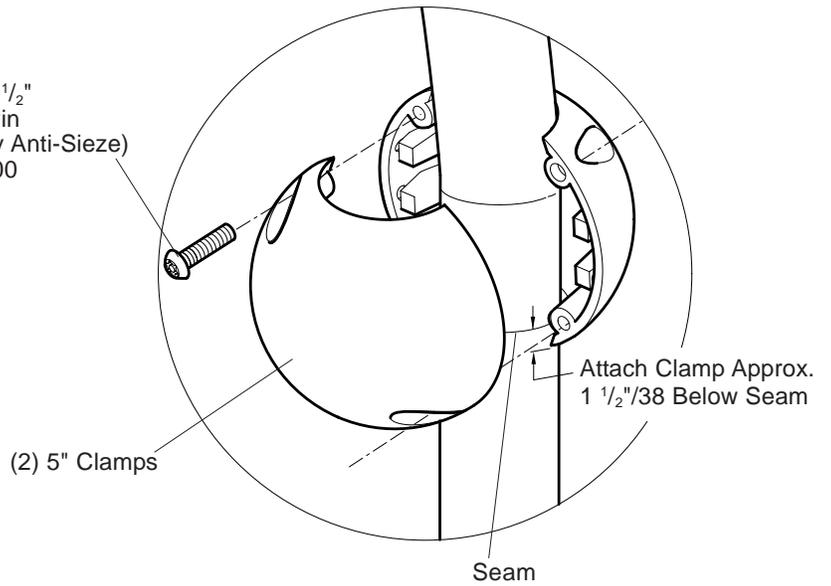


**DETAIL
 5" CLAMP ATTACHMENT**

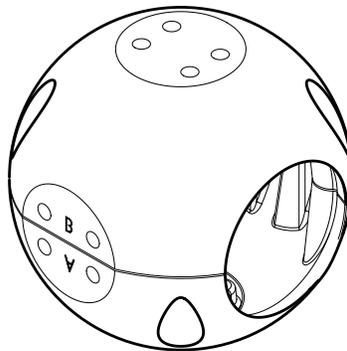


5" Clamp w/ No
 Clamp Surfaces
 O-O

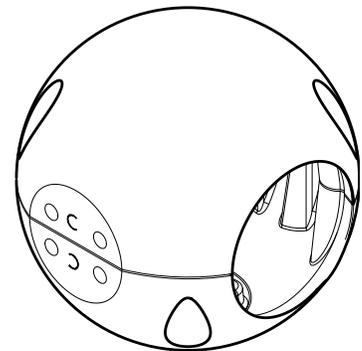
(4) $\frac{5}{8}$ " x $1\frac{1}{2}$ "
 BHCS w/Pin
 (With Gray Anti-Sieze)
 #127551-00



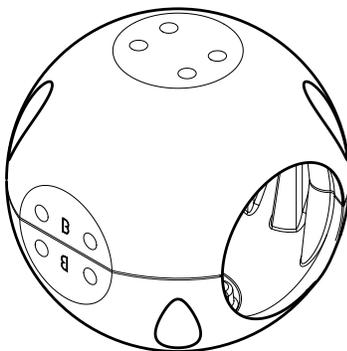
5" Clamp w/ 1
 Clamp Surface
 A-A



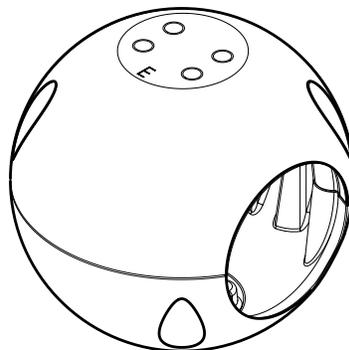
5" Clamp w/ 2 Clamp
 Surfaces @ 90°
 A-B



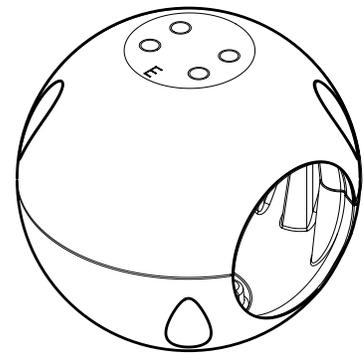
5" Clamp w/ 2 Clamp
 Surfaces @ 180°
 C-C



5" Clamp
 w/ 3 Clamp Surfaces
 B-B



5" Clamp
 w/ 1 Clamp Surface
 O-E



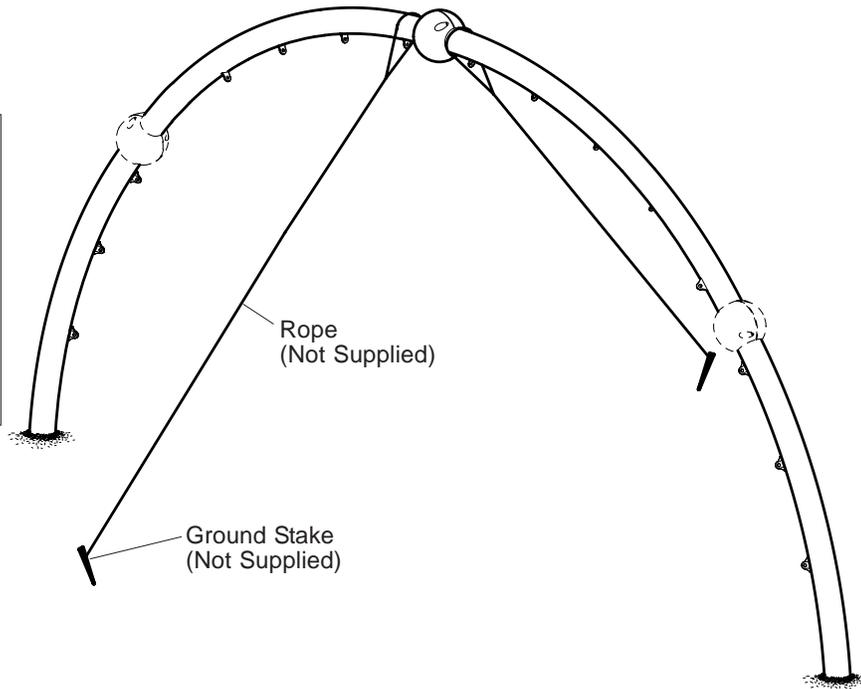
5" Clamp w/ 2 Clamp
 Surfaces @ 180°
 E-E

SAFETY NOTE
 Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. ASTM F1487.)

171735b

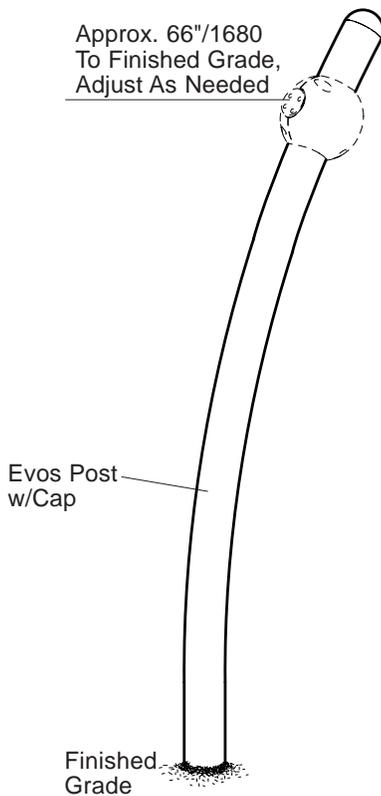
**DETAIL
 ROPE/GROUND STAKES**

NOTE: Rope may be used to tie off the arch. The use of rope will help keep the arch in plumb position, while attaching outriggers. Tie a rope (not supplied) on each side of the top 5" clamp. The rope should be long enough to attach to a ground stake (not supplied). When the arch is in plumb position, pull the ropes tight, and attach to ground stakes.

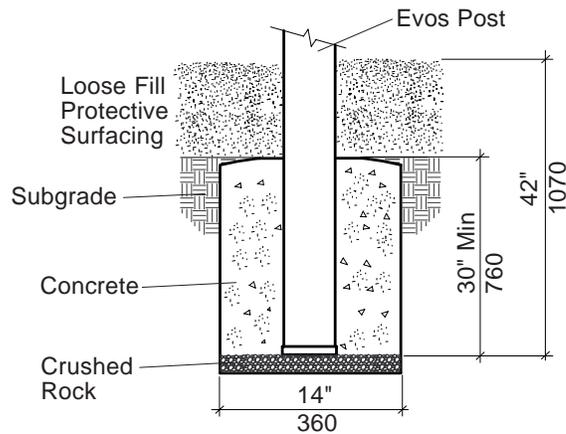


**DETAIL
 EVOS POST**

Approx. 66"/1680
 To Finished Grade,
 Adjust As Needed



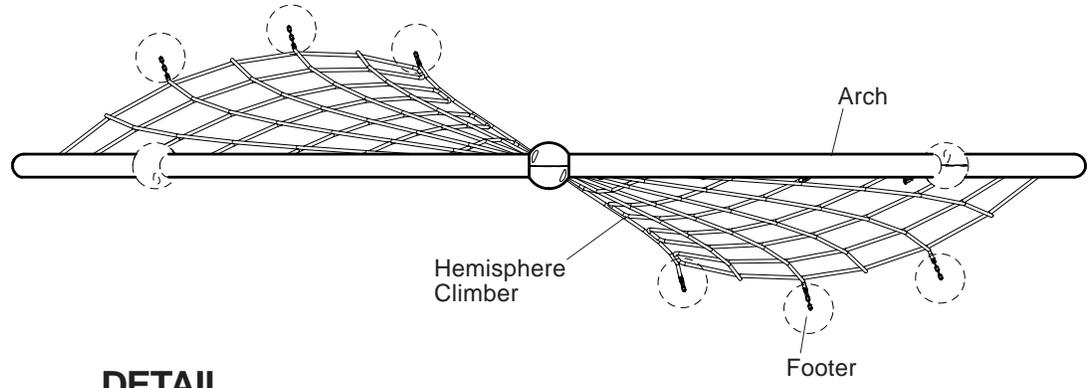
**DETAIL
 DIRECT BURY**



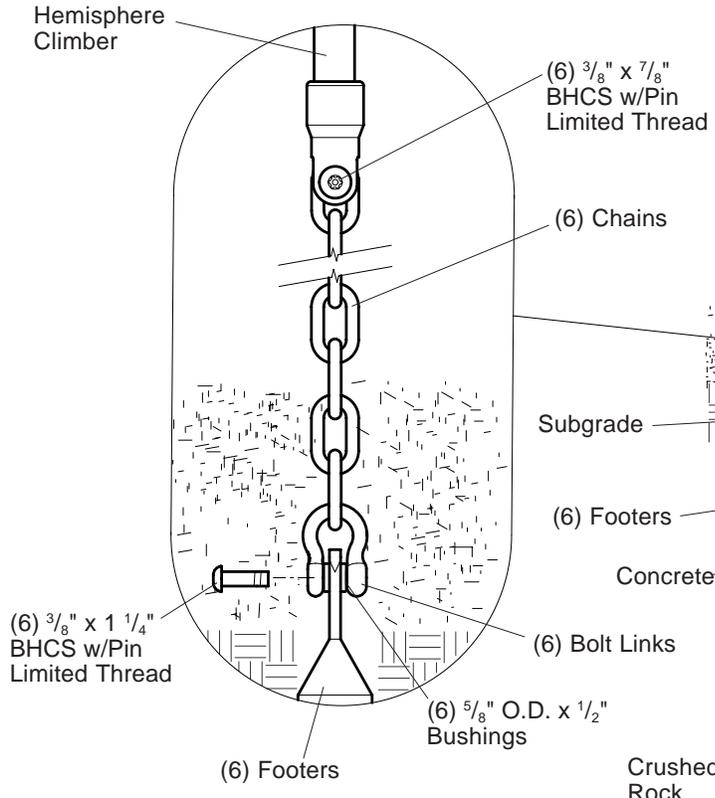
IMPORTANT! Do not pour concrete footings until all outriggers have been attached to 5" clamps with surfaces.

Evos® 171626 Single Arch, w/2 Attachment Points

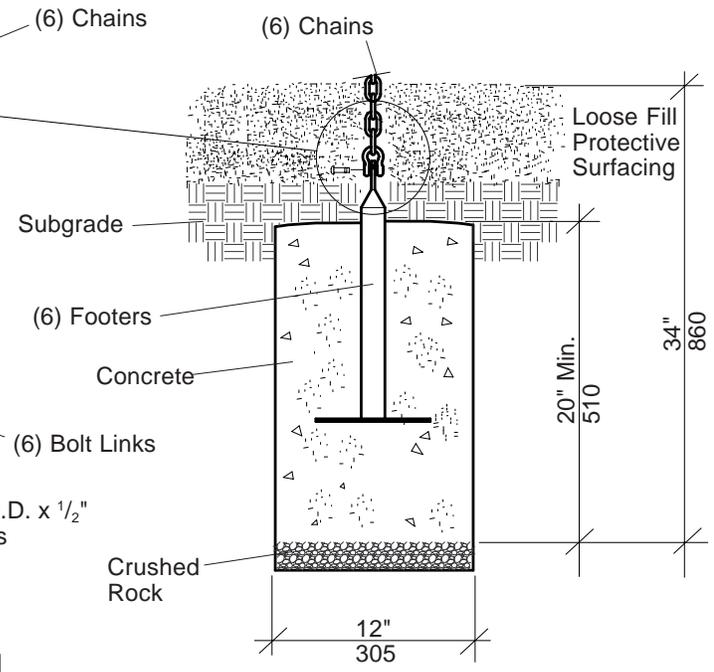
PLAN VIEW



DETAIL

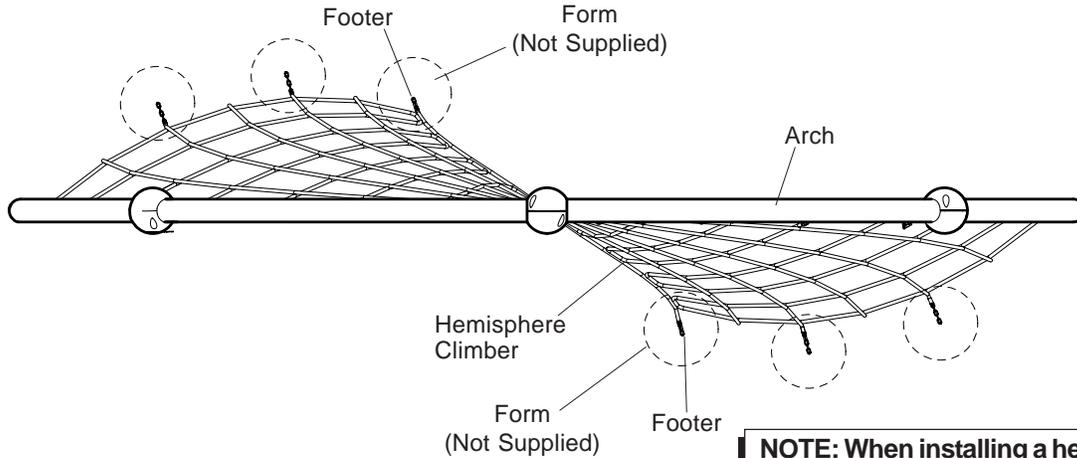


DETAIL FOOTER ATTACHMENT



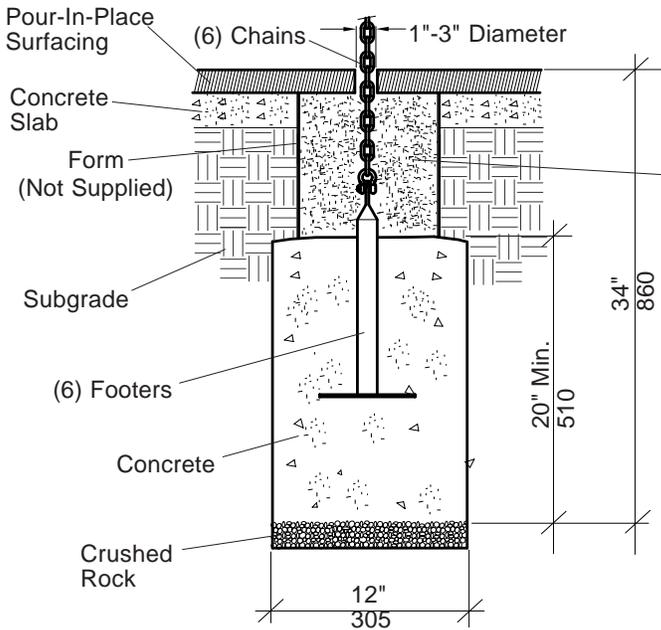
NOTE: The hole depth for the footer needs to be deep enough, so the footer plate doesn't contact the bottom of the hole. The weight of the concrete will force the footer plate down, tightening the cord.

PLAN VIEW

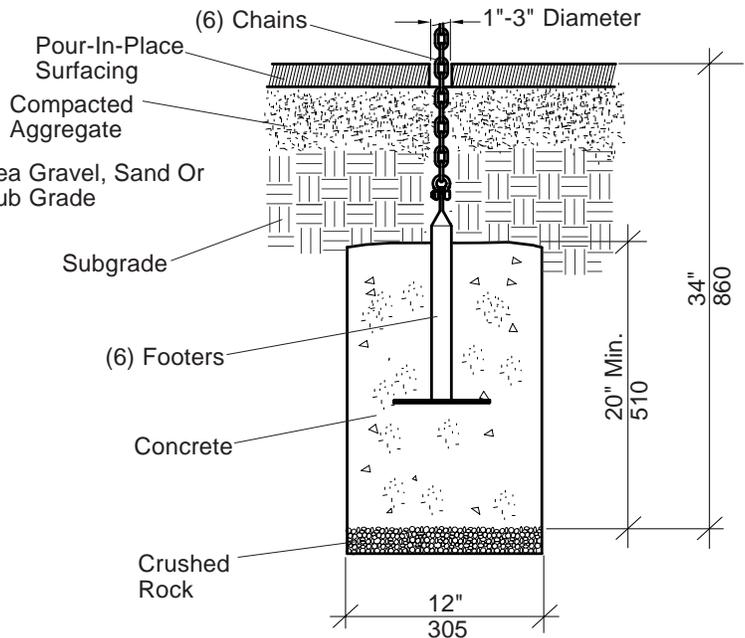


NOTE: When installing a hemisphere climber over a concrete slab with pour-in-place surfacing, a form needs to be placed around the footers, to prevent concrete from covering the bolt links and fasteners.

**DETAIL
DIRECT BURY WITH
POUR-IN-PLACE SURFACING**



**DETAIL
DIRECT BURY WITH
POUR-IN-PLACE SURFACING
(COMPACTED AGGREGATE)**



Parts List

Part#	Description	Qty.
100611-00	1/4" x 3/8" Drive Rivet, AL/SST	6
127551-00	5/8" x 1 1/2" BHCS w/Pin, SST	4
164367-00	Footer, Specify Color	6
171806-00	Evos Post w/Cap, Specify Color	2
190610-00	Net Assembly, Black	1
166061-00	Arch 1A With Net Tabs, Specify Color	2
166066-00	Arch 1B/1C Without Ring Tabs, Specify Color	1
166067-00	Arch 1D/1E Without Tabs, Specify Color	1
166276-00	5" Clamp O, Specify Color	2
136721-00	9 1/4" Long Chain	2
190780-00	17 15/16" Long Chain	4
190829-00	Hemisphere Climber Hardware Package	1
100290-00	3/8" x 7/8" BHCS w/Pin Limited Thread, SST	6
100292-00	3/8" x 1 1/4" BHCS w/Pin Limited Thread, SST	6
138915-00	Bolt Link, SST	6
156962-00	5/8" O.D. x 1/2" Long Bushing, SST	6
157224-00	.439" I.D. x 1.156" Bushing, SST	16
157704-00	7/16" x 2" BHCS w/Pin Limited Thread, SST	16
162729-00	Connecting Plug	32

Specifications

Net Assembly: (Net) Made of tightly woven polyester-wrapped, six-stranded galvanized-steel cable with a polypropylene core. (Swage) 3/4" schedule 40 6061-T6 aluminum pipe. (S-Hooks) Fabricated from 5/16" diameter 316-TI stainless steel. (Cable Connectors) Cast from 356-T6 aluminum. Finish: ProShield®, black in color. (Footings Connector) Fabricated from 1 5/16" O.D. 6061-T6 aluminum.

5" Clamps: Cast from 356-T6 aluminum. Finish: ProShield, color specified.

5" Arch: Steel arch is manufactured from 5" O.D. galvanized tubing with a wall thickness of .120". Finish: ProShield, color specified.

Post: Fabricated from 5.000" O.D. x 11 GA. (.120" wall) galvanized steel tube, top cap shall be die-cast 369.1 aluminum alloy. Finish: ProShield, color specified.

Chain: Steel 1/4" straight link chain, 3,150 lb. working load limit. Finish: Peer Gold.

Footer: Weldment comprised of 1.660" O.D. RS20 (.085" - .095") galvanized steel tubing, and 7 GA. (.179") HRPO sheet steel. Finish: ProShield, color specified.

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F879 unless otherwise indicated (see specific product installation/specifications).

Installation Time: Approx. 6 man hours

Concrete Req.: Approx. 28,914 cu. ft.

Area Req.: 6' (1,83 m) minimum use zone

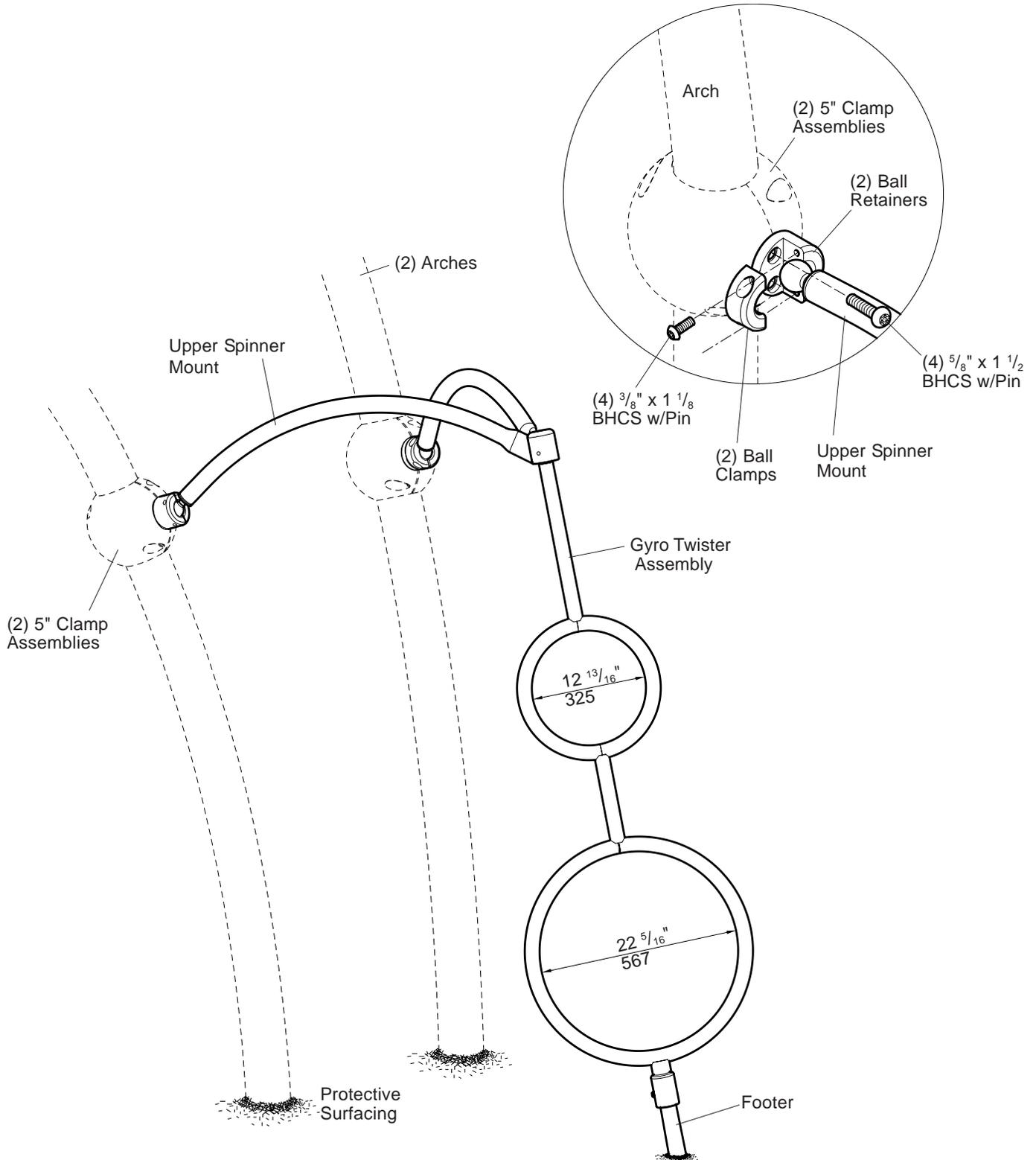
Weight: 590 lbs.

Fall Height: 87" (2,21 m)

Installation Instructions

- 1) **(Direct Bury) Refer to Site Plan for footing locations.**
IMPORTANT! Do not pour concrete footings until all outriggers have been attached to 5" clamps with surfaces.
- 2) Lay (4) arches on a flat surface. Using the part numbers shown on the detail as a guide, slide arches together as shown. Level arches.
NOTE: Lay arches on cardboard to prevent arches from being scratched during assembly.
- 3) Line up (3) holes on inside of arches. Insert 1/4" x 3/8" drive rivets into holes and hammer rivet pins in until it is flush with head.
- 4) Measure center line dimension of lower arches. Position lower arches as needed to attain center line dimension. Drill through (3) outer holes in arches with 1/4" of "F" (only) drill bit. Insert 1/4" x 3/8" drive rivets into holes and hammer rivet pins in until it is flush with head.
- 5) Using the arch assembly detail as a guide, attach (3) 5" clamps to each arch using 5/8" x 1 1/2" BHCS w/pin (with gray anti-sieze). **NOTE:** Refer to your 2-D Plan for clamp identification. The 5" clamps will be positioned on top of the drive rivets and arch ends. Refer to the arch assembly details for proper location of each clamp. **NOTE:** The 5" clamps with clamp surfaces, will need to be adjusted when outriggers are attached to the structure.
- 6) Place the fully assembled arch in footings holes. **NOTE:** Rope may be used to tie off the arch. The use of rope will help keep the arch in plumb position, while attaching outriggers. Tie a rope (not supplied) on each side of the top 5" clamp. The rope should be long enough to attach to a ground stake (not supplied). When the arch is in plumb position, pull the ropes tight, and attach to ground stakes.
- 7) Attach hemisphere net to arch tabs, using .439" I.D. x 1.156" bushings, connecting plugs and 7/16" x 2" BHCS w/pin limited thread bolts. Refer to the Hemisphere Net Attachment Detail.
- 8) Attach chains to hemisphere climber, using 3/8" x 7/8" BHCS w/pin limited thread bolts, as shown.
- 9) Attach footers to chains, using bolt links, 5/8" O.D. x 1/2" long bushings and 3/8" x 1 1/4" BHCS w/pin limited thread bolts, as shown. Place footers in footing holes. Refer to the Footer Attachment Details. **NOTE:** If footers are not fully suspended, a trench will need to be dug the full length of the footers. Refer to the Plan View.
- 10) Attach 5" round clamps to each Evos post, using 5/8" x 1 1/2" BHCS w/pin (with gray anti-sieze). Place Evos posts in footing holes.
- 11) After all outriggers have been attached to 5" clamps with surfaces and arches, posts and supports are plumb, pour concrete footings. Allow concrete footings to cure for a minimum of 72 hours before users are allowed to play on the structure.
- 12) Install protective surfacing before users are allowed to play on the structure.

DETAIL
UPPER SPINNER MOUNT ATTACHMENT





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Evos® 156459 Gyro Twister® Spinner

Parts List

Part#	Description	Qty.
158711-00	Upper Spinner Mount, Specify Color	1
171114-00	Gyro Twister Assembly, Specify Color	1
157092-00	Footer, Specify Color	1
156699-00	Ball Clamp, Specify Color	2
156700-00	Ball Retainer, Specify Color	2
159381-00	Evos Spinners Hardware Package	1
100198-00	3/8" x 1 1/8" BHCS w/Pin, SST	4
100201-00	5/8" x 1 1/2" BHCS w/Pin, SST	4
131849-00	5/16" x 1/2" BHCS w/Pin, SST	4
186027-00	Bushing	4

Specifications

Upper Spinner

Mount: Weldment comprised of 2.375" O.D. RS40 (.130"-.140" Wall) galvanized steel tube, 2.750" O.D. 1018 steel, and 1 7/8" steel ball. Finish: ProShield®, color specified.

Gyro Twister Assy.: Weldment comprised of 1.900" O.D. RS40 (.130"-.140" Wall) galvanized steel tube, 1.660" O.D. RS40 (.111"-.121" Wall) galvanized steel tube, 3/16" HRPO steel plate and 1 7/8" steel ball. Finish: ProShield, color specified.

Bushing: Oil-filled UHMW PE.

Footer: Weldment comprised of 2.375" O.D. RS40 (.130"-.140" Wall) galvanized steel tube, 12 Ga. (.105") HR flat steel and 1 7/8" steel ball. Finish: ProShield, color specified.

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

Installation Time: Approx. 1 1/2 man hours

Concrete Req.: Approx. 3 cu. ft.

Area Req.: 6' (1.83 m) minimum use zone

Weight: 83 lbs.

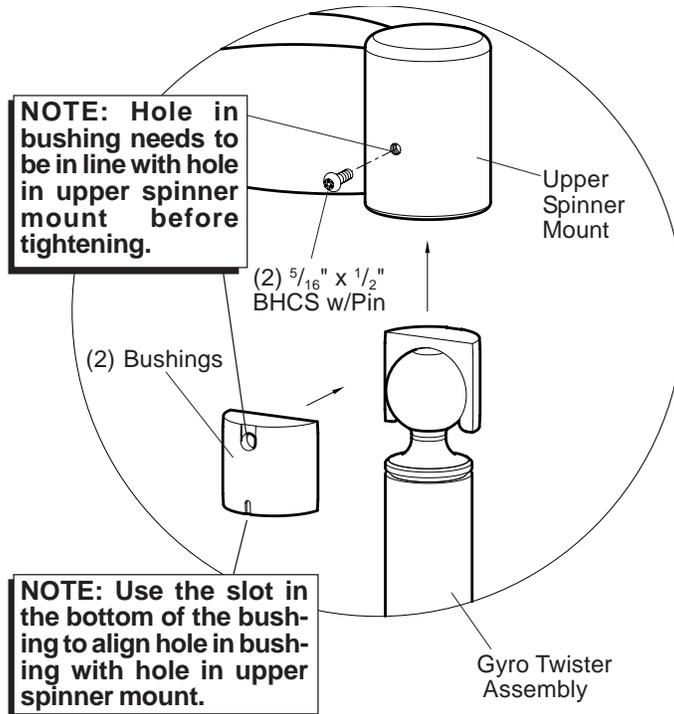
Fall Height: 50" (1.27 m)

Installation Instructions

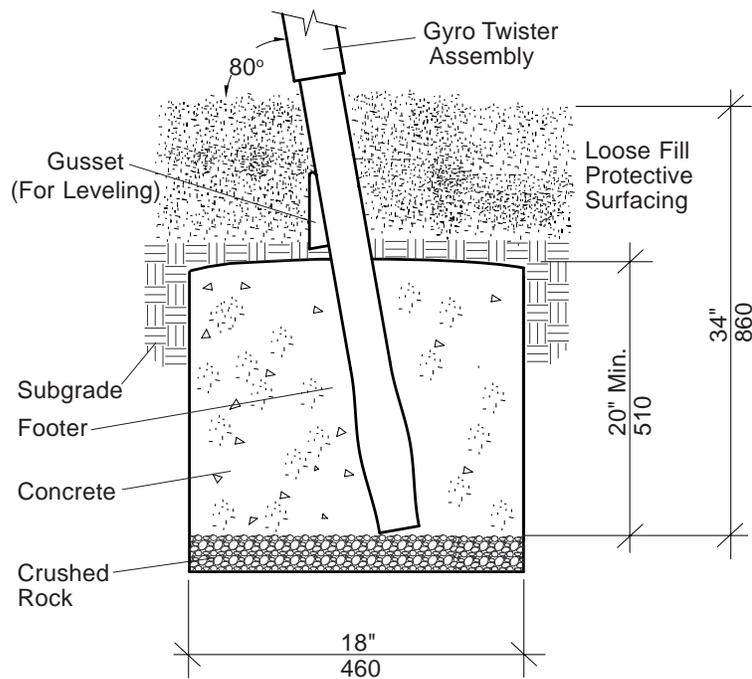
- 1) **(Direct Bury) Refer to the Site Plan for footing location.**
- 2) Place a bushing on each side of the footer's 1 7/8" ball, as shown. Insert footer with bushings into Gyro Twister assembly. Align holes in bushings with holes in housing. When holes are aligned, insert 5/16" x 1/2" BHCS w/pin. Refer to the Gyro Twister Assembly Detail. **NOTE:** Use the slot in the bottom of the bushing to align holes.
- 3) Place a bushing on each side of the Gyro Twister assembly's 1 7/8" ball, as shown. Insert Gyro Twister assembly with bushings into upper spinner mount. Align holes in bushings with holes in housing. When holes are aligned, insert 5/16" x 1/2" BHCS w/pin. Refer to the Gyro Twister Assembly Detail. **NOTE:** Use the slot in the bottom of the bushing to align holes.
- 4) Attach ball retainers to 5" clamps using 5/8" x 1 1/2" BHCS w/pin. Attach upper spinner mount to ball retainers using ball clamps and 3/8" x 1 1/8" BHCS w/pin. Refer to the Upper Spinner Mount Attachment Detail. **NOTE:** 5" Clamps may need to be turned, or moved up or down to connect the Gyro Twister Assembly and position properly. Check to make sure 5" clamps are at the same height, if not adjust 5" clamps.
- 5) Place a level on the footer gusset, when gusset is plumb pour concrete footing. Allow concrete footing to cure a minimum of 72 hours before users are allowed to play on structure. **NOTE:** Gyro Twister assembly will have to be propped in position, until concrete has cured.
- 6) Install protective surfacing before users are allowed to play on the structure.

SAFETY NOTE
 Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. ASTM F1487.)

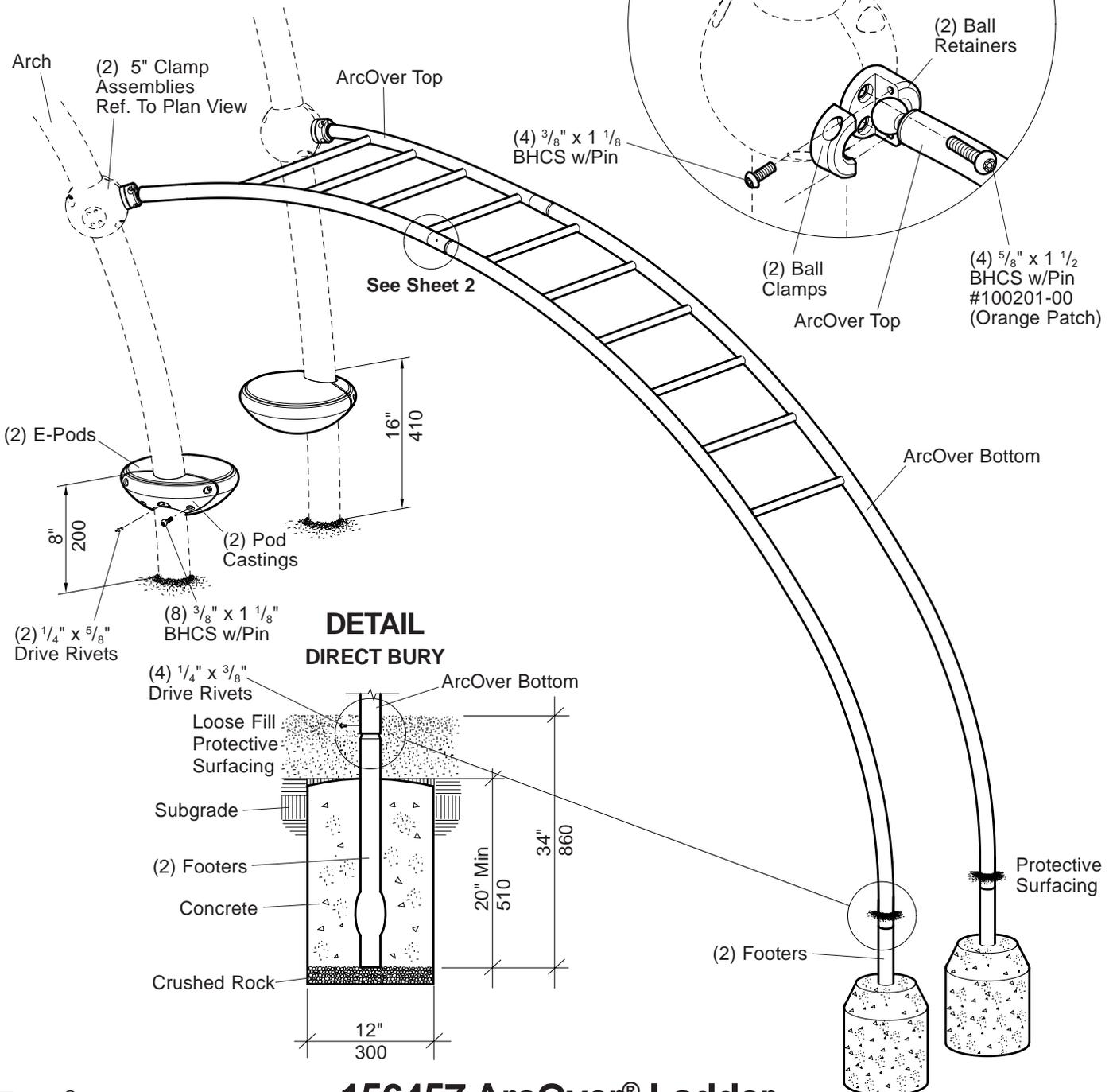
**DETAIL
 GYRO TWISTER ASSEMBLY**



**DETAIL
 FOOTER ATTACHMENT**



**DETAIL
ARC OVER ATTACHMENT**





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Evos® 156457 ArcOver® Ladder

Parts List

Part#	Description	Qty.
155302-00	ArcOver Top, Specify Color	1
155303-00	ArcOver Bottom, Specify Color	1
155729-00	Footer, Specify Color	2
156699-00	Ball Clamp, Specify Color	2
156700-00	Ball Retainer, Specify Color	2
154461-00	E-Pod, Specify Color	2
156806-00	Pod Casting, Specify Color	2
156968-00	Pod Hardware Package	2
100198-00	3/8" x 1 1/8" BHCS w/Pin, SST	8
100610-00	1/4" x 5/8" Drive Rivet, AL/SST	2
156971-00	ArcOver Hardware Package	1
100198-00	3/8" x 1 1/8" BHCS w/Pin, SST	4
100201-00	5/8" x 1 1/2" BHCS w/Pin, SST	4
100611-00	1/4" x 3/8" Drive Rivet, AL/SST	8

Specifications

ArcOver Top: Weldment comprised of 1.315 O.D. RS20 (.080-.090 Wall) galvanized steel tubing, 2.375 O.D. RS20 (.095-.105 Wall) galvanized steel tubing, and 1 7/8" steel ball. Finish: ProShield®, color specified.

ArcOver Bottom: Weldment comprised of 1.315 O.D. RS20 (.080-.090 Wall) galvanized steel tubing and 2.375 O.D. RS20 (.095-.105 Wall) galvanized steel tubing. Finish: ProShield, color specified.

**Ball Clamp/
Ball Retainer:** Cast from 535 almag. Finish: ProShield, color specified.

Footer: Fabricated from 2.375 O.D. RS20 (.095-.105 Wall) galvanized steel tubing. Finish: ProShield, color specified.

E-Pod: Rotationally molded from U.V. stabilized linear low density polyethylene, color specified.

Pod Casting: Fabricated from sand cast alloy 356 in accordance with ASTM B26. Finish: ProShield, color specified.

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

Installation Time: Approx. 2 man hours

Concrete Req.: Approx. 2.6 cu. ft.

Area Req.: 6' (1830 mm) minimum use zone

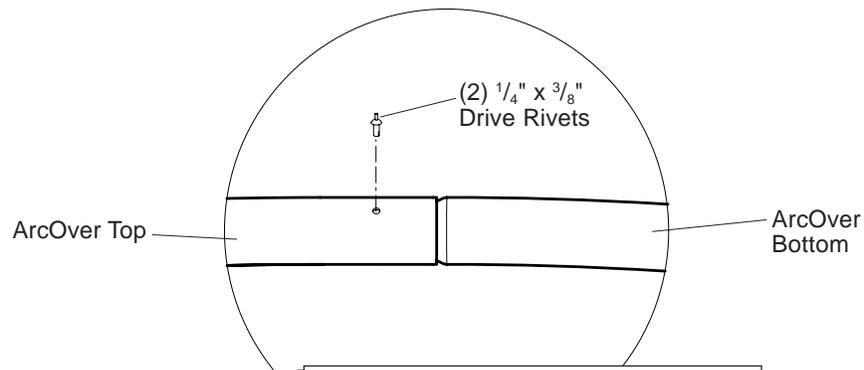
Weight: 150 lbs.

Fall Height: 80" (2030 mm)

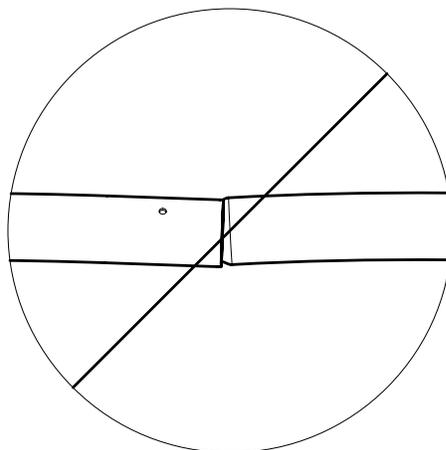
Installation Instructions

- 1) **(Direct Bury) Refer to the Site Plan for footing locations.**
- 2) Insert (2) footers into ArcOver bottom. Drill through holes in arc over bottom and into footers with a 1/4" or "F" (only) drill bit. Insert 1/4" x 3/8" rivets into holes and hammer rivet pins in until it is flush with head. Refer to the Direct Bury Detail.
- 3) Insert ArcOver bottom into ArcOver top. Drill through holes in ArcOver top and into ArcOver bottom with a 1/4" or "F" (only) drill bit. Insert 1/4" x 3/8" rivets into holes and hammer rivet pins in until it is flush with head. Refer to the Arch Connection Detail. **NOTE: Make sure ArcOver Top and ArcOver Bottom are in line as shown, before drive rivets are installed.**
- 4) Attach ArcOver ladder to ball retainers, using ball clamps and 3/8" x 1 1/8" BHCS w/pin. **NOTE: 5" Clamps may need to be turned to connect and position ArcOver ladder properly. Retighten 5" clamp fasteners when ArcOver ladder is in proper position.**
- 5) Attach e-pods and pod castings to arches at dimensions shown, using 3/8" x 1 1/8" BHCS w/pin.
- 6) Drill through hole in pod casting and into noodle post with a 1/4" or "F" (only) drill bit. Insert 1/4" x 5/8" rivet in hole and hammer rivet pin in until it is flush with head.
- 7) Pour concrete footings. Allow concrete footings to cure for a minimum of 72 hours before users are allowed to play on the structure.
- 8) Install protective surfacing before users are allowed to play on the structure.

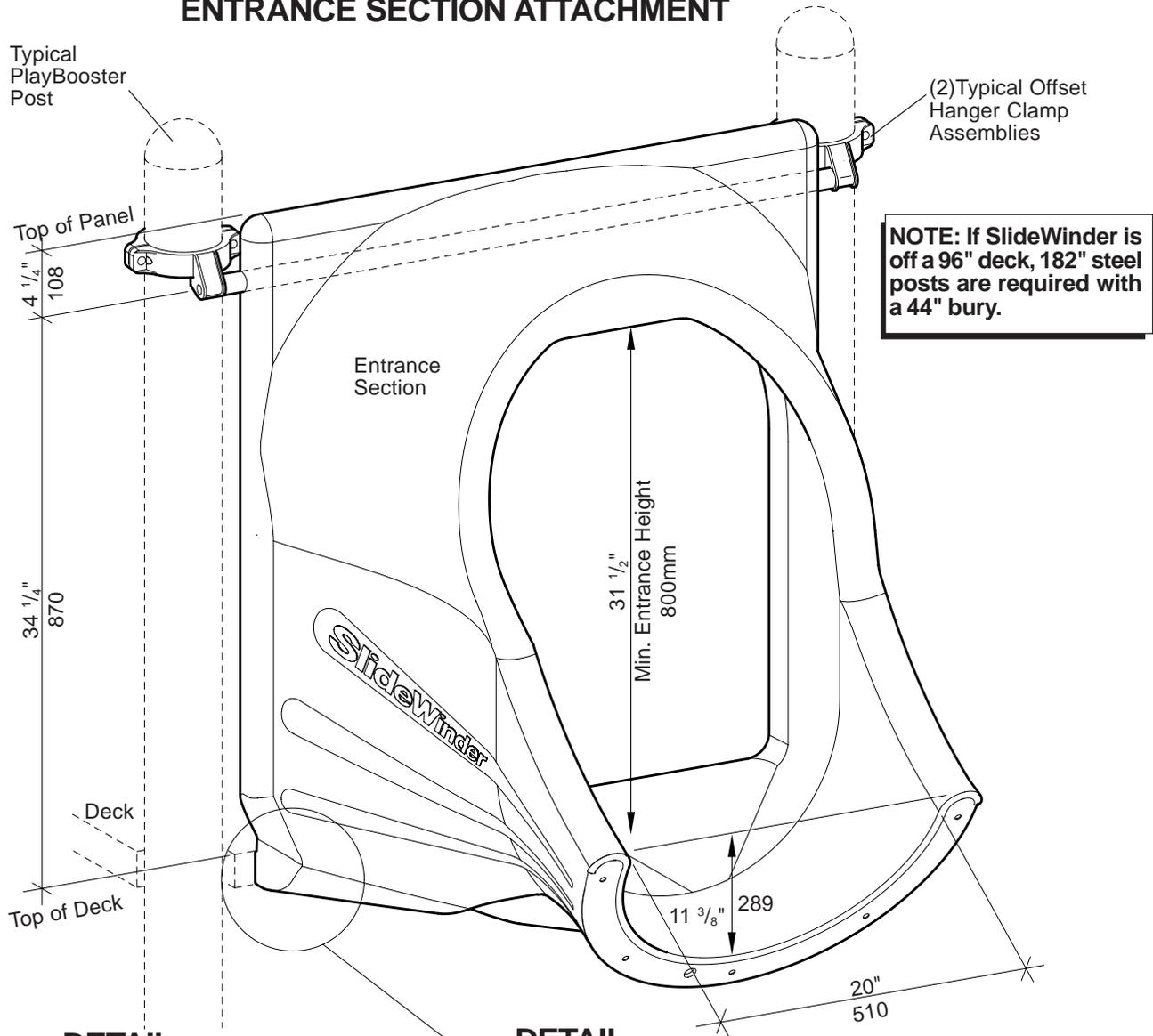
**DETAIL
ARCH CONNECTION**



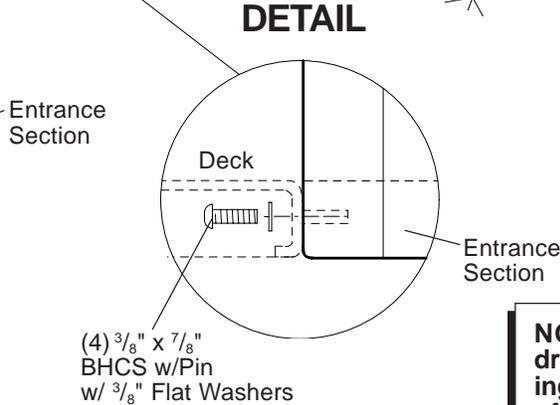
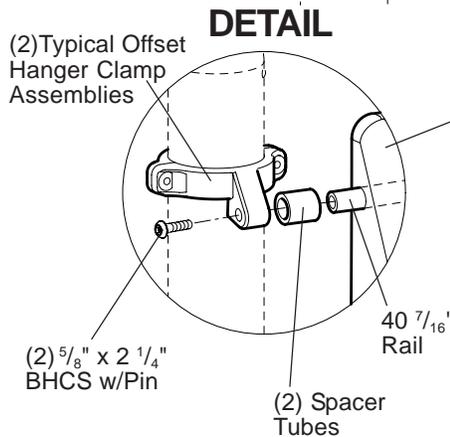
NOTE: Make sure ArcOver Top and ArcOver Bottom are in line as shown, before drive rivets are installed.



ENTRANCE SECTION ATTACHMENT



NOTE: If SlideWinder is off a 96\" deck, 182\" steel posts are required with a 44\" bury.

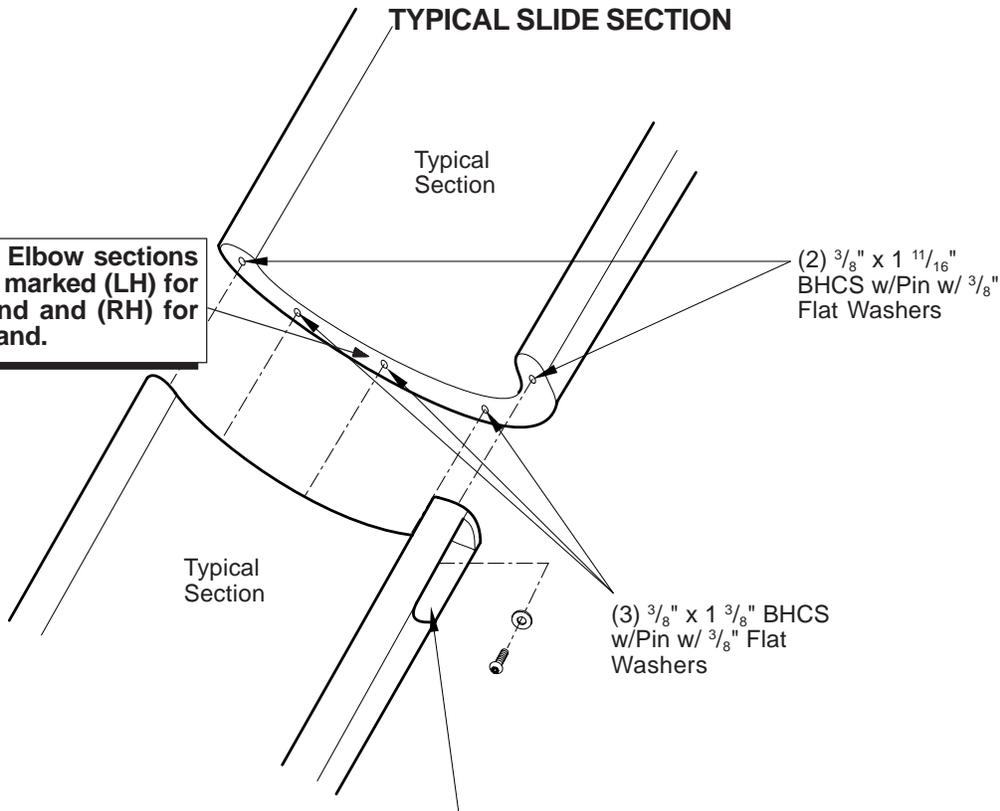


NOTE: Refer to your plan drawing for location of footings and layout and direction of SlideWinder sections.

DETAIL

TYPICAL SLIDE SECTION

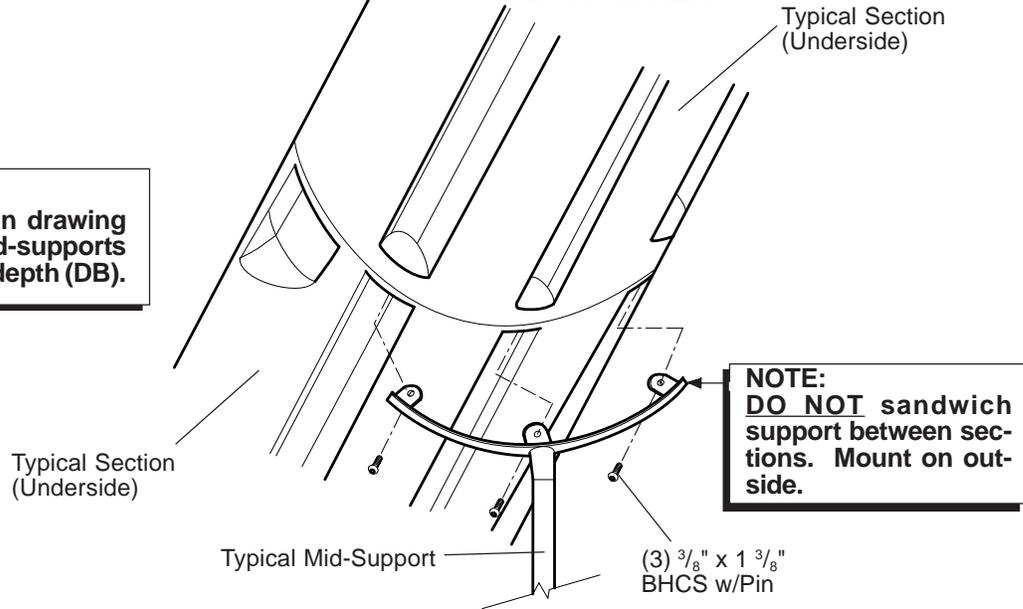
NOTE: Elbow sections will be marked (LH) for left hand and (RH) for right hand.



NOTE: Fasten top of slide section with pockets to bottom of slide section without pockets.

NOTE: Refer to your plan drawing for location of mid-supports and their footing depth (DB).

**DETAIL
 TYPICAL MID-SUPPORT
 (48" - 96" SLIDES ONLY)
 BOTTOM VIEW**

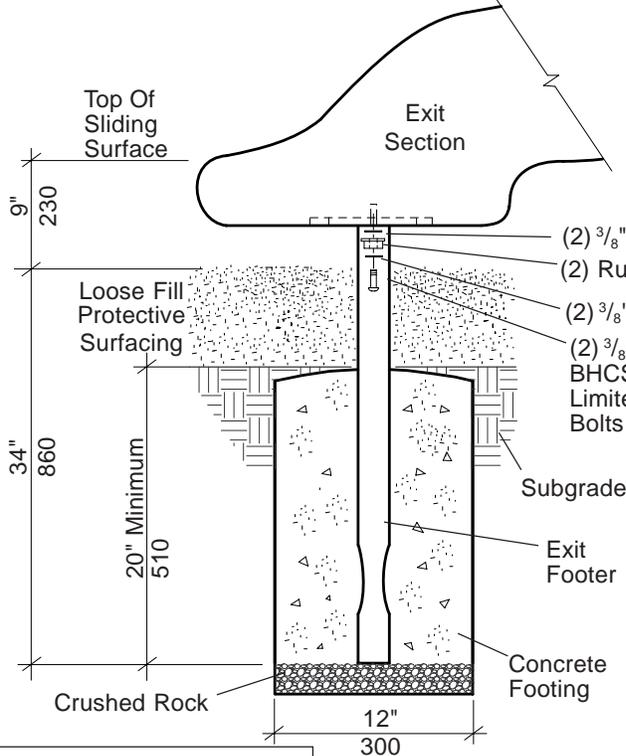


NOTE: DO NOT sandwich support between sections. Mount on outside.

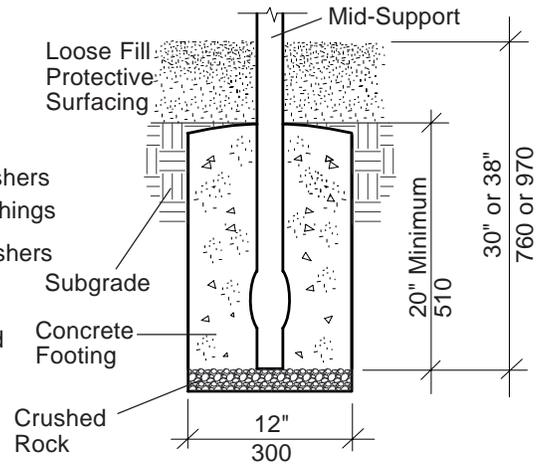
SAFETY NOTE
 Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. ASTM F1487.)

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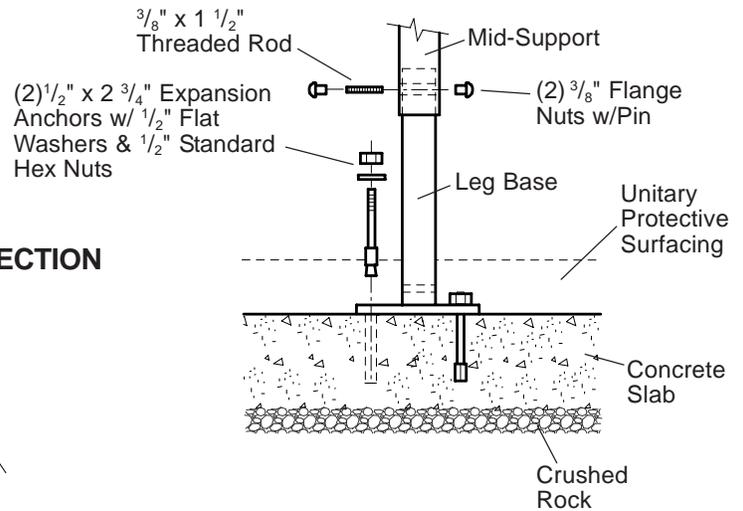
**DETAIL
 DIRECT BURY / EXIT SECTION**



**DETAIL
 DIRECT BURY / MID-SUPPORTS**

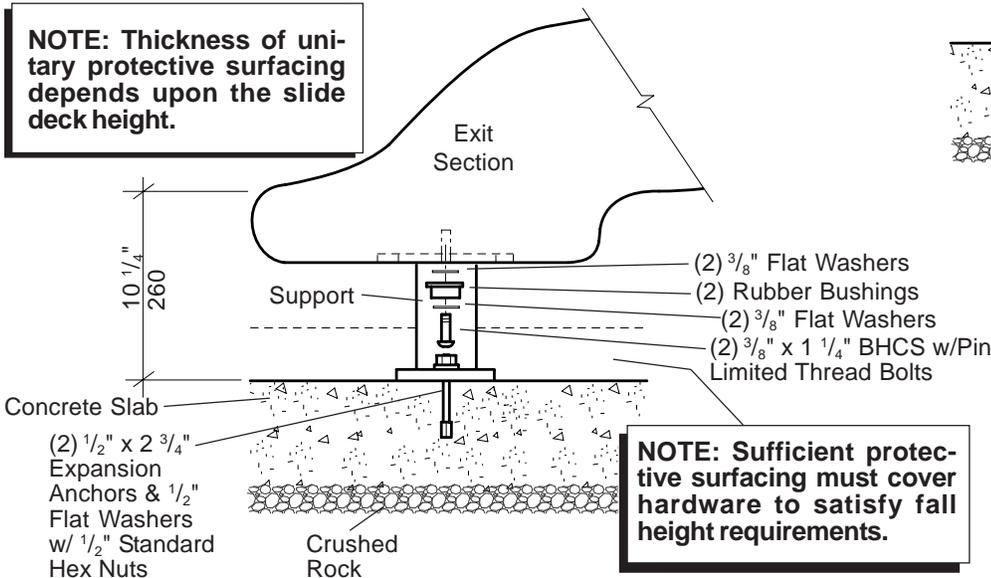


**DETAIL
 SURFACE MOUNT / MID-SUPPORTS**



NOTE:
 Attach bolts in the center of the footer slots to allow for expansion and contraction. Snug bolts down only, do not overtighten!

**DETAIL
 SURFACE MOUNT / EXIT SECTION**



NOTE: Thickness of unitary protective surfacing depends upon the slide deck height.

NOTE: Sufficient protective surfacing must cover hardware to satisfy fall height requirements.

NOTE: Exit Heights may vary if the protective surfacing is not level. Do not put pressure/tension on the entrance section when adjusting the exit height.



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Parts List

Part#	Description	Qty.
124867-00	Right Elbow Section, Specify Color	*
124868-00	Left Elbow Section, Specify Color	*
125655-00	Straight Section (15 1/4" Long), Specify Color	*
124864-00	Straight Section (30 1/2" Long), Specify Color	*
100583-00	40 7/16" Rail, Specify Color	1
105327-01	5" Half Clamp, Specify Color	2
113729-00	Offset Hanger Clamp, Specify Color	2
100610-00	1/4" x 3/8" Drive Rivet, AL/SST	2
125562-00	Support Base (SM), Specify Color	*
128434-00	66" Mid-Support (DB), Specify Color	*
128077-00	82" Mid-Support (DB), Specify Color	*
128078-00	106" Mid-Support (DB), Specify Color	*
128079-00	20 3/4" Mid-Support (SM), Specify Color	*
128080-00	29" Mid-Support (SM), Specify Color	*
128081-00	37 1/8" Mid-Support (SM), Specify Color	*
128082-00	45 1/4" Mid-Support (SM), Specify Color	*
128261-00	Exit Footer (DB), Specify Color	1
128262-00	Exit Footer (SM), Specify Color	1
124876-00	Entrance Section, Specify Color	1
124877-00	Exit Section, Specify Color	1
132443-00	Spacer Tube, Specify Color	2
121371-00	Entrance/Deck Mounting Hardware Package	1
100196-00	3/8" x 7/8" BHCS w/Pin, SST	4
100362-00	3/8" Flat Washer, SST	4
154942-00	SlideWinder Section Hardware Package	*
100362-00	3/8" Flat Washer, SST	*
113027-00	3/8" x 1 3/8" BHCS w/Pin, SST	*
123224-00	3/8" x 1 11/16" BHCS w/Pin, SST	*
124342-00	Rail Hardware Package	1
100198-00	3/8" x 1 1/8" BHCS w/Pin, SST	4
100203-00	5/8" x 2 1/4" BHCS w/Pin, SST	2
100351-00	3/8" Tee Nut, SST	4
125670-00	Mid-Support Hardware Package (SM)	*
100266-00	1/2" x 2 3/4" Expansion Anchor	*
100322-00	1/2" Standard Hex Nut, SST	*
100353-00	3/8" Flange Nut w/Pin, SST	*
100363-00	1/2" Flat Washer, SST	*
115813-00	3/8" x 1 1/2" Threaded Rod, SST	*
128373-00	Exit Support Hardware Package (DB)	1
100292-00	3/8" x 1 1/4" BHCS w/Pin Limited Thread Bolt, SST	2
100362-00	3/8" Flat Washer, SST	4
111442-00	Rubber Bushing	2
128343-00	Exit Support Hardware Package (SM)	1
100266-00	1/2" x 2 3/4" Expansion Anchor	2
100292-00	3/8" x 1 1/4" BHCS w/Pin Limited Thread Bolt, SST	2
100322-00	1/2" Standard Hex Nut, SST	2
100362-00	3/8" Flat Washer, SST	4
100363-00	1/2" Flat Washer, SST	2
111442-00	Rubber Bushing	2

DB = Direct Bury
 SM = Surface Mount
 * = Quantity Varies Per Deck Height

Specifications

Slide Sections:	Rotationally molded from U.V. stabilized linear low density polyethylene, color specified.
Rail:	1 1/8" O.D. 6005-T5 aluminum extrusion with 5/16" walls. Finish: ProShield®, color specified.
Mid-Support:	Weldment comprised of 1.900" O.D. RS-20 (.090" - .100") galvanized steel tubing and 3/16" x 1 1/4" zinc plated steel strap. Finish: ProShield, color specified.
Support Base (SM):	Weldment comprised of 1.660" O.D. RS-20 (.085" - .095") galvanized steel tubing and 1/4" x 3" x 8" mounting plate. Finish: ProShield, color specified.
Spacer Tube:	Fabricated from 1.3125 O.D. x 16 Ga. (.065) steel tubing. Finish: ProShield, color specified.
Exit Footer:	Weldment comprised of 2.375" O.D. RS-20 (.095" - .105") galvanized steel tubing and 1/4" x 3" x 7 1/2" mounting plate. Finish: ProShield, color specified.
Offset Hanger Clamp Assy.:	Cast aluminum. Finish: ProShield, color specified.

Specifications are subject to change without notice.

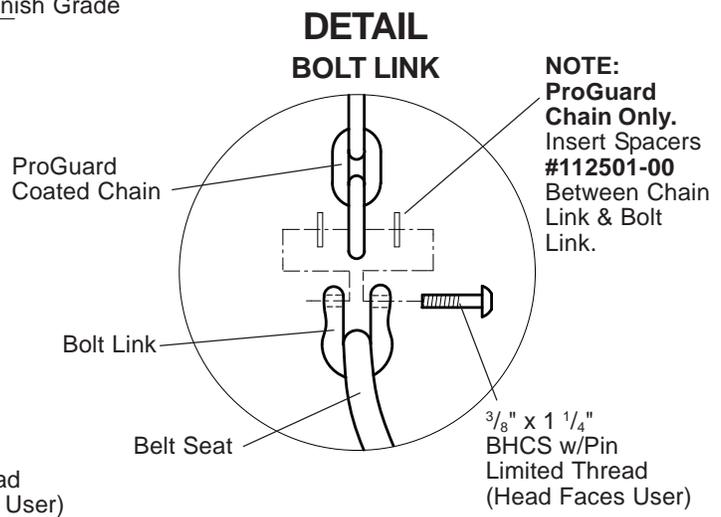
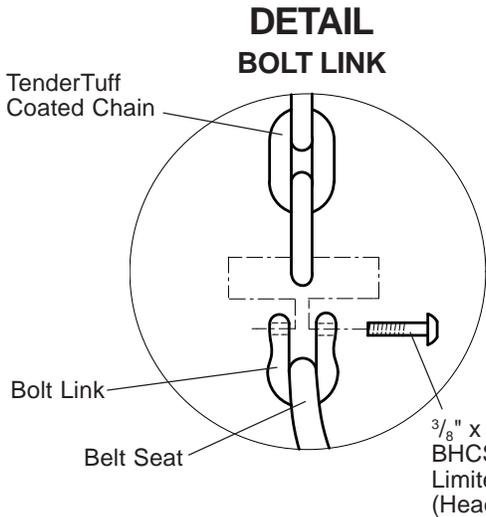
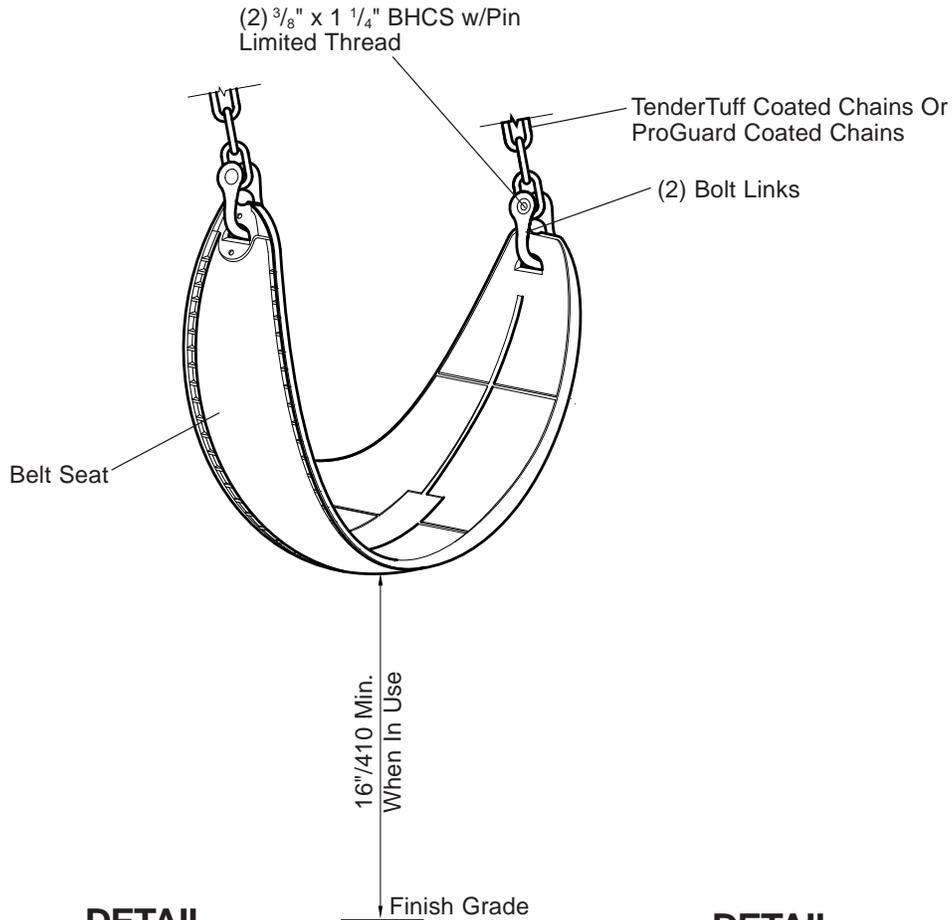
PlayBooster® 124863 SlideWinder2, 32"-96"

Fasteners:	Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).
Installation Time:	32" - 48" Approx. 3 man hours 56" - 72" Approx. 4 man hours 96" Approx. 5 man hours
Concrete Req.:	30" Depth - Approx. 1.3 cu. ft. 34" Depth - Approx. 1.5 cu. ft. 38" Depth - Approx. 1.8 cu. ft.
Weight:	32" - 134 lbs. 40" - 146 lbs. 48" - 172 lbs. 56" - 184 lbs. 64" - 197 lbs. 72" - 247 lbs. 96" - 265 lbs.
Fall Height:	Deck Height

Installation Instructions

- Refer to your plan drawing for location of footings and direction of SlideWinder sections.
- (Direct Bury)** Dig footing holes spaced as shown, depending upon slide. Refer to the Direct Bury Exit Section and Direct Bury Mid-Support Details.
- Place 40 7/16" rail in entrance section, place spacer tubes over each end of the 40 7/16" rail, attach offset hanger clamps using 5/8" x 2 1/4" BHCS w/Pin.
- Fasten SlideWinder sections together loosely starting in the middle and working your way to the outside of each section, using 3/8" x 1 3/8" BHCS w/Pin with 3/8" flat washers on the 3 inside holes and 3/8" x 1 11/16" BHCS w/pin with 3/8" flat washers on the 2 outside holes. When all bolts are started, pull the tops flush with each other and tighten. The left elbow section reads (LH) and the right elbow section reads (RH). Attach entrance and exit section last. Refer to the Typical Slide Section Detail.
- (Direct Bury)** If required attach mid-supports, refer to your plan drawing for locations. Attach mid-supports to slide using 3/8" x 1 3/8" BHCS w/Pin. Refer to the Typical Mid-Support Detail.
(Surface Mount) If required attach mid-supports, refer to your plan drawing for locations. Assemble mid-supports by placing support base inside mid-support and attach using 3/8" x 1 1/2" threaded rod and 3/8" flange nuts w/pin. Refer to the Surface Mount/Mid-Support Detail. Attach mid-supports to slide using 3/8" x 1 3/8" BHCS w/Pin. Refer to the Typical Mid-Support Detail.
- Attach exit footer to base of slide using 3/8" x 1 1/4" BHCS w/Pin limited thread bolts, 3/8" flat washers, rubber bushings and 3/8" flat washers. **NOTE: Attach bolts in the center of the slots to allow for expansion and contraction. Snug bolts down only, do not overtighten. See Direct Bury/Exit Section Detail.**
- With SlideWinder fully assembled, attach entrance section to the face of the deck using 3/8" x 7/8" BHCS w/Pin and 3/8" flat washers.
- Attach offset hanger clamps to posts using 5" half clamps, 3/8" x 1 1/8" BHCS w/Pin and 3/8" tee nuts. Refer to the Typical Offset Hanger Clamp Spec Sheet.
- (Direct Bury)** With supports plumb pour concrete footings. Allow concrete footings to cure for a minimum of 72 hours before users are allowed to play on the structure.
(Surface Mount) Mark anchor bolt locations on concrete slab through holes in anchor plates. Drill 1/2" x 3" deep holes on marks into concrete using a hammer drill and 1/2" masonry bit. Tap 1/2" x 2 3/4" expansion anchors into drilled holes and fasten using 1/2" standard hex nuts with 1/2" flat washers.
- Install protective surfacing before users are allowed to play on the structure.

Eco #54291 Document #17787300 replaces #15494700. Added spacer tubes to Parts List.



Parts List

Part #	Description	Qty.
8 Ft. High Beam		
128842-00	Belt Swing Seat, Black.....	1
152050-00	67 7/8" Chain, TenderTuff, Specify Color.....	2
174404-00	67 7/8" Chain, ProGuard.....	2
132672-00 Bolt Link w/Bolt & Spacers..... 1		
100292-00	3/8" x 1 1/4" BHCS w/Pin Ltd. Thread, SST.....	2
138915-00	Bolt Link, SST.....	2
112501-00	Chain Spacer.....	4
132635-00 Bolt Link w/Bolt Hardware Package..... 1		
100292-00	3/8" x 1 1/4" BHCS w/Pin Ltd. Thread, SST.....	2
138915-00	Bolt Link, SST.....	2
10 Ft. High Beam		
128842-00	Belt Swing Seat, Black.....	1
152052-00	90 11/16" Chain, TenderTuff, Specify Color.....	2
174884-00	90 11/16" Chain, ProGuard.....	2
132672-00 Bolt Link w/Bolt & Spacers..... 1		
100292-00	3/8" x 1 1/4" BHCS w/Pin Ltd. Thread, SST.....	2
138915-00	Bolt Link, SST.....	2
112501-00	Chain Spacer.....	4
132635-00 Bolt Link w/Bolt Hardware Package..... 1		
100292-00	3/8" x 1 1/4" BHCS w/Pin Ltd. Thread, SST.....	2
138915-00	Bolt Link, SST.....	2

Specifications

Chain Spacer:	Made from white nylon measuring .080" x .785" O.D.
Chain/ProGuard:	Steel 3/16" straight link chain, 800 lb. working load limit. Finish: ProGuard.
Chain/Coated:	Steel 3/16" straight link chain, 800 lb. working load limit. Finish: TenderTuff®, color specified.
Belt Seats:	Molded from U.V. stabilized black EPDM rubber encapsulating a weldment comprised of a 22 GA (.029") spring stainless steel sheet, and (4) .105" thick stainless steel washers. The belt seat elliptical shape measures 7" wide x 26" long x .700" thick.
Bolt Link:	Stainless Steel.
Fasteners:	Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).
Installation Time:	1/4 man hour per seat
Weight:	8 lbs. (8 Ft. Beam w/ProGuard Chains) 9 lbs. (8 Ft. Beam w/TenderTuff Chains) 10 lbs. (10 Ft. Beam w/ProGuard Chains) 11 lbs. (10 Ft. Beam w/TenderTuff Chains)

Installation

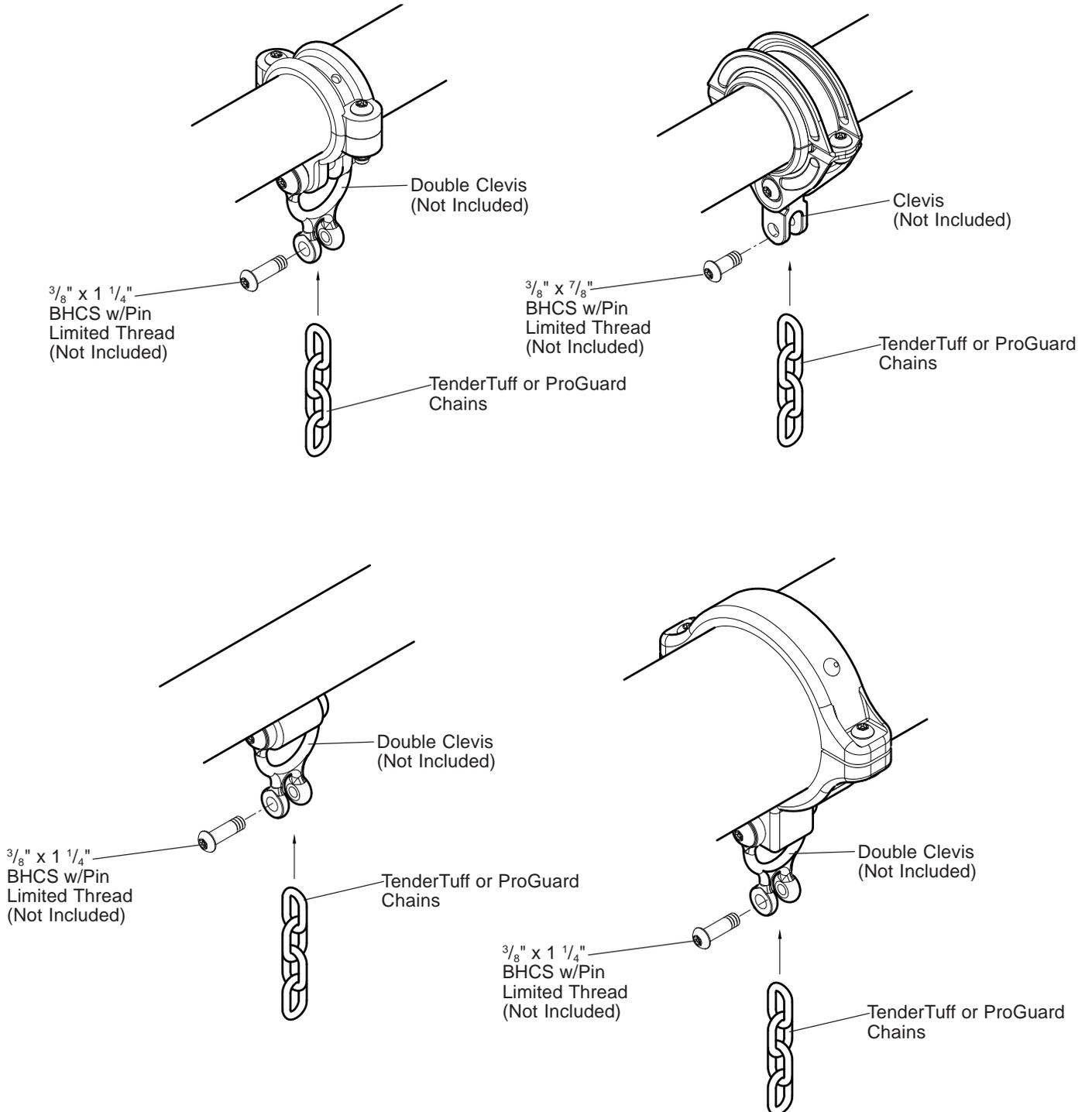
Swing Hangers With Double Clevis

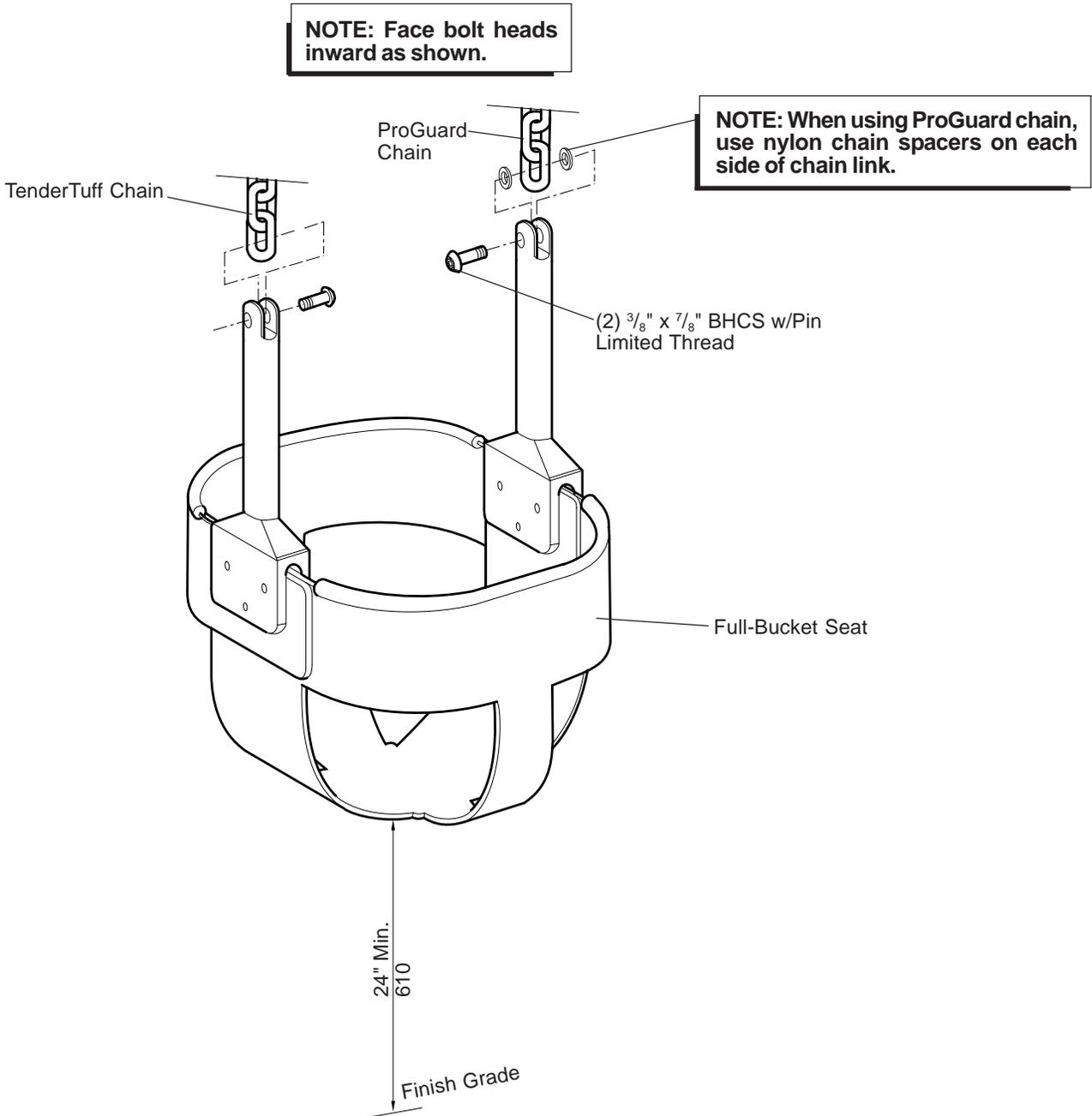
- 1) Attach chains to double clevis using 3/8" x 1 1/4" BHCS w/pin limited thread, as shown.
- 2) Attach chains to belt seat using bolt links with 3/8" x 1 1/4" BHCS w/pin limited thread. Be sure bolt heads face user. **NOTE: Use chain spacers as shown when installing ProGuard chains.**
- 3) Install protective surfacing before users are allowed to play on the structure.

Anti-wrap Swing Hangers

- 1) Attach chains to aluminum clevis using 3/8" x 7/8" BHCS w/pin limited thread, as shown.
- 2) Attach chains to belt seat using bolt links with 3/8" x 1 1/4" BHCS w/pin limited thread. Be sure bolt heads face user. **NOTE: Use chain spacers as shown when installing ProGuard chains.**
- 3) Install protective surfacing before users are allowed to play on the structure.

SWING HANGER OPTIONS





Swings

176038 Full-Bucket Seat, w/Chains



Swings 176038 Full-Bucket Seat, w/Chains

Parts List

Part#	Description	Qty.
8 Ft. High Beam		
186276-00	Full-Bucket Swing Seat, Black	1
160110-00	52 9/16" Chain, TenderTuff, Specify Color	2
174882-00	52 9/16" Chain, ProGuard	2
138414-00	Bucket Seat Hardware Package	1
100290-00	3/8" x 7/8" BHCS w/Pin Limited Thread, SST	2
112501-00	Chain Spacer (For ProGuard Chains Only)	4
10 Ft. High Beam		
186276-00	Full-Bucket Swing Seat, Black	1
152051-00	76 7/16" Chain, TenderTuff, Specify Color	2
174883-00	76 7/16" Chain, ProGuard	2
138414-00	Bucket Seat Hardware Package	1
100290-00	3/8" x 7/8" BHCS w/Pin Limited Thread, SST	2
112501-00	Chain Spacer (For ProGuard Chains Only)	4
7 Ft. High Beam (Tot)		
186276-00	Full-Bucket Swing Seat, Black	1
152053-00	37 1/2" Chain, TenderTuff, Specify Color	2
175247-00	37 1/2" Chain, ProGuard	2
138414-00	Bucket Seat Hardware Package	1
100290-00	3/8" x 7/8" BHCS w/Pin Limited Thread, SST	2
112501-00	Chain Spacer (For ProGuard Chains Only)	4
75" High Beam (Toddler)		
186276-00	Full-Bucket Swing Seat, Black	1
152016-00	29 7/8" Chain, TenderTuff, Specify Color	2
174881-00	29 7/8" Chain, ProGuard	2
138414-00	Bucket Seat Hardware Package	1
100290-00	3/8" x 7/8" BHCS w/Pin Limited Thread, SST	2
112501-00	Chain Spacer (For ProGuard Chains Only)	4

Specifications

- Full-Bucket Seat:** Seat shall be molded of U.V. stabilized, high quality, black rubber, encapsulating a 24 gauge stainless steel reinforcement plate. Handle cast from 356-T6 aluminum alloy with black polyarmor paint finish. Handle attaches to seat with (3) 1/4" x 1 5/16" long stainless steel rivets. The finished size of the full bucket shall be 9" deep x 10 1/2" wide.
- Chain/Coated:** Steel 3/16" straight link chain, 800 lb. working load limit. Finish: TenderTuff, color specified.
- Chain/ProGuard:** Steel 3/16" straight link chain, 800 lb. working load limit. Finish: ProGuard.
- Fasteners:** Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

- Installation Time:** 1/4 man hour per seat
- Weight:** 14 lbs. (8 FT. Beam w/TenderTuff Chain)
 14 lbs. (8 FT. Beam w/ProGuard Chain)
 17 lbs. (10 FT. Beam w/TenderTuff Chain)
 16 lbs. (10 FT. Beam w/ProGuard Chain)
 12 lbs. (7 FT. Beam w/TenderTuff Chain)
 12 lbs. (7 FT. Beam w/ProGuard Chain)
 11 lbs. (75" Beam w/TenderTuff Chain)
 11 lbs. (75" Beam w/ProGuard Chain)

Installation Instructions

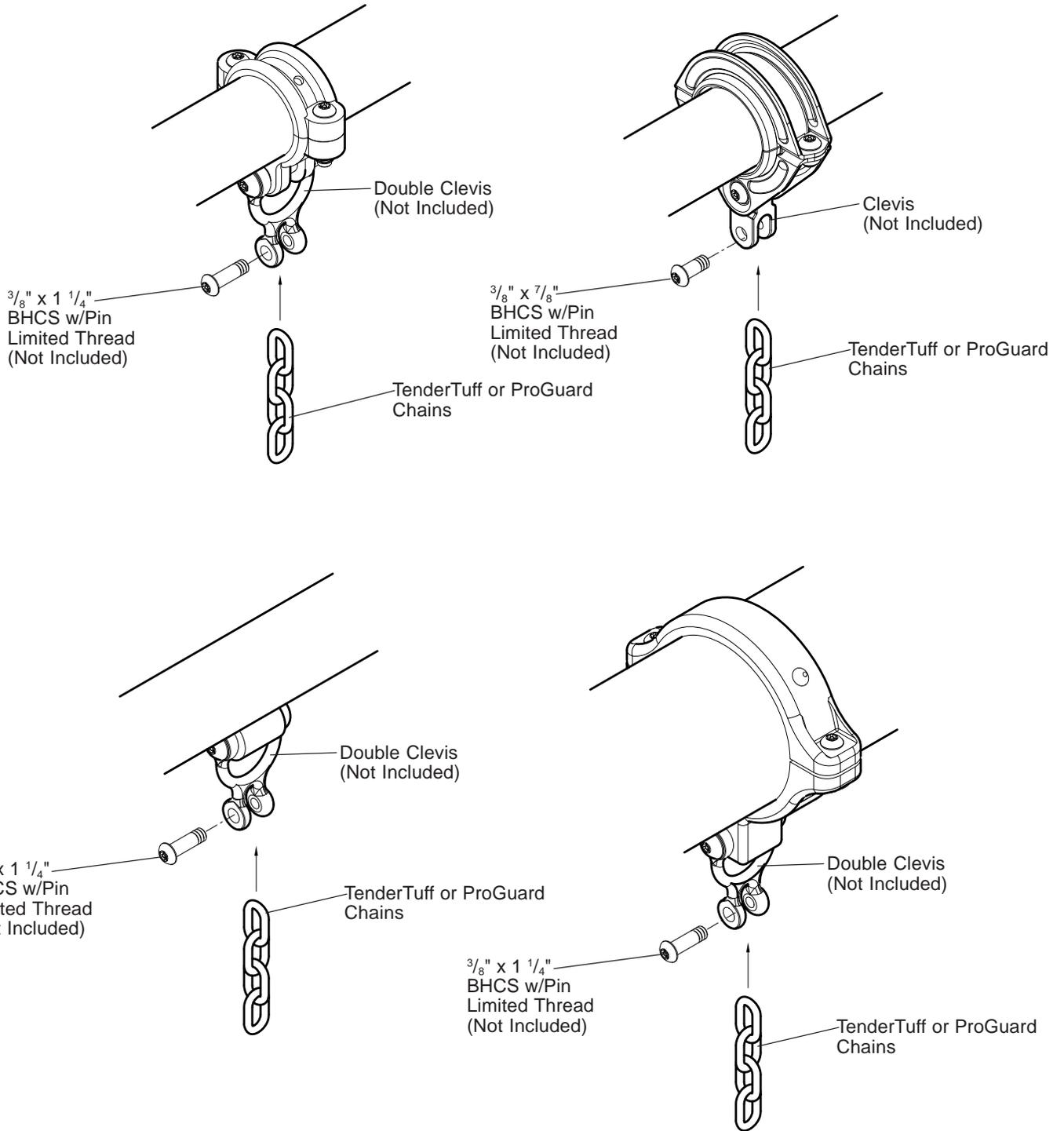
Swing Hangers with Double Clevis

- 1) Attach chains to double clevis using 3/8" x 1 1/4" BHCS w/pin limited thread bolts, as shown.
- 2) Attach chains to full-bucket seat using 3/8" x 7/8" BHCS w/pin limited thread bolts. Be sure bolt heads face user. **NOTE:** Use chain spacers as shown when installing ProGuard chains.
- 3) Install protective surfacing before users are allowed to play on the structure.

Anti-wrap Swing Hangers

- 1) Attach chains to aluminum clevis using 3/8" x 7/8" BHCS w/pin limited thread bolts, as shown.
- 2) Attach chains to full-bucket seat using 3/8" x 7/8" BHCS w/pin limited thread bolts. Be sure bolt heads face user. **NOTE:** Use chain spacers as shown when installing ProGuard chains.
- 3) Install protective surfacing before users are allowed to play on the structure.

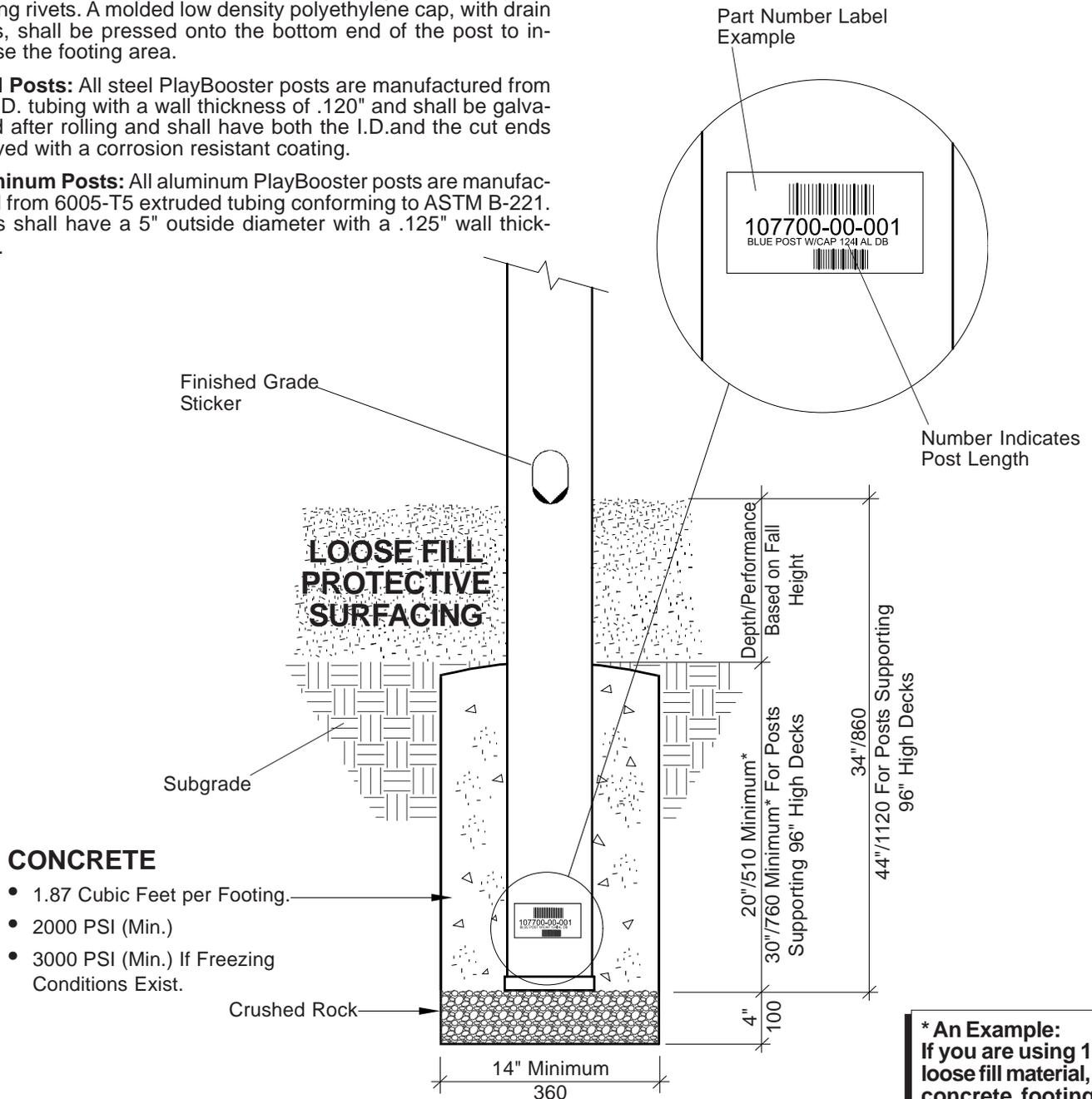
SWING HANGER OPTIONS



Post Specifications: Post length shall vary depending upon the intended use and shall be a minimum of 42" above the deck height. All posts shall be powdercoated to specified color. All posts shall have a "finished grade marker" positioned on the post identifying the 34" bury line (or 44" bury line for posts for 96" decks) required for correct installation and the top of the loose fill protective surfacing. Top caps for posts shall be aluminum die cast from 369.1 alloy and powdercoated to match the post color. All caps shall be factory installed and secured in place with (3) self sealing rivets. A molded low density polyethylene cap, with drain holes, shall be pressed onto the bottom end of the post to increase the footing area.

Steel Posts: All steel PlayBooster posts are manufactured from 5" O.D. tubing with a wall thickness of .120" and shall be galvanized after rolling and shall have both the I.D. and the cut ends sprayed with a corrosion resistant coating.

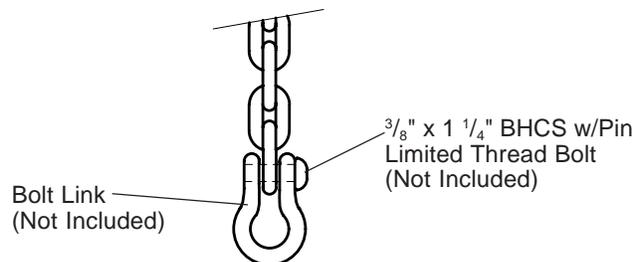
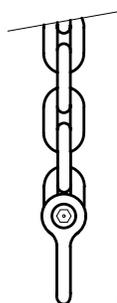
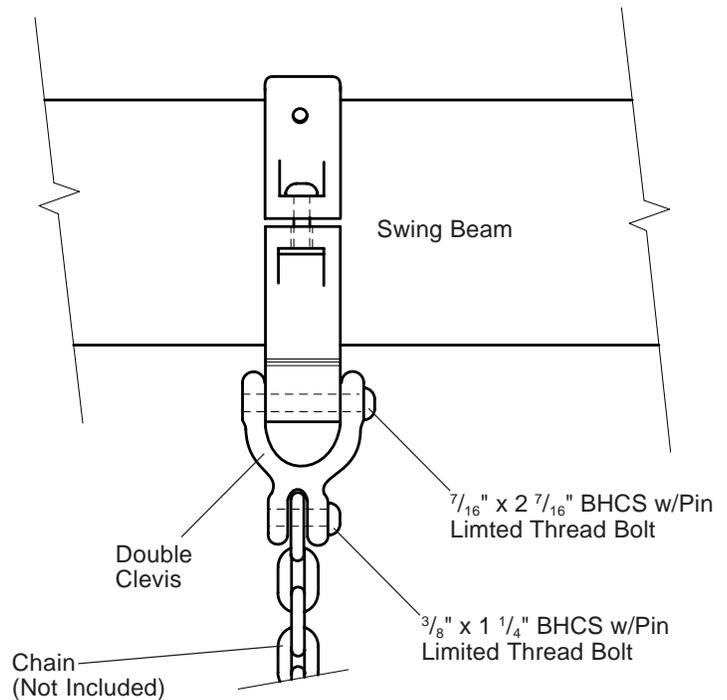
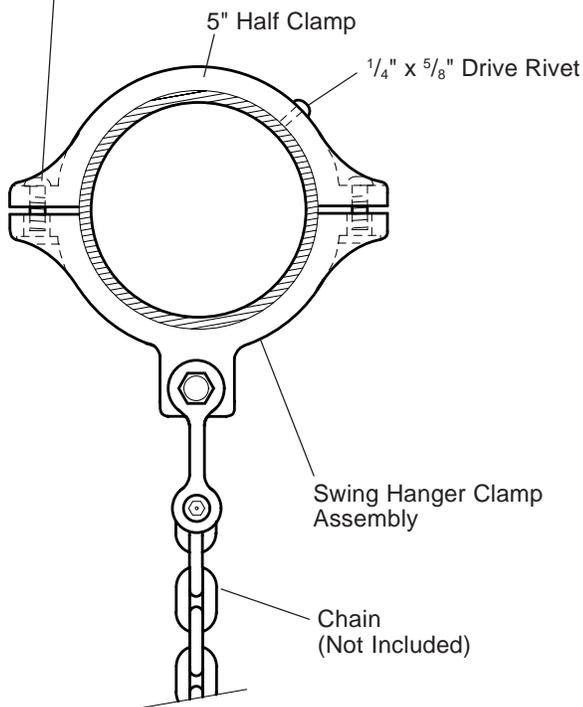
Aluminum Posts: All aluminum PlayBooster posts are manufactured from 6005-T5 extruded tubing conforming to ASTM B-221. Posts shall have a 5" outside diameter with a .125" wall thickness.



*** An Example:**
If you are using 12" of loose fill material, your concrete footing will be 22" deep.

PlayBooster® Concrete Footings, 5" Posts

(2) $\frac{3}{8}$ " x $1\frac{1}{8}$ " BHCS w/Pin
w/ $\frac{3}{8}$ " Tee Nuts



NOTE:
 Do Not Over-Tighten Limited Thread Bolt! Threads Should Not Protude Past Bolt Link.

NOTE:
 Position Bolt Head Inward Facing User.

Swings

111418 Swing Hanger, Belt Swing



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Swings 111418 Swing Hanger, Belt Swing

Parts List

Part#	Description	Qty.
105327-01	5" Half Clamp, Specify Color	1
100198-00	$\frac{3}{8}$ " x 1 $\frac{1}{8}$ " BHCS w/Pin, SST	2
100351-00	$\frac{3}{8}$ " Tee Nut, SST	2
100610-00	$\frac{1}{4}$ " x $\frac{5}{8}$ " Drive Rivet, AL/SST	1
100292-00	$\frac{3}{8}$ " x 1 $\frac{1}{4}$ " BHCS w/Pin Ltd. Thread Bolt, SST	1
121291-00	Swing Hanger Clamp Assy. Specify Color	1
121289-00	Swing Hanger Clamp, Specify Color	1
127068-00	$\frac{7}{16}$ " x 2 $\frac{7}{16}$ " BHCS w/Pin Ltd. Thread Bolt, SST ..	1
138917-00	Swing Hanger Double Clevis SST	1
100667-00	Oilite Bushing	1

Specifications

Hanger Clamp

Assembly: Cast aluminum. Finish: ProShield®, color specified.

Double Clevis: Stainless Steel.

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

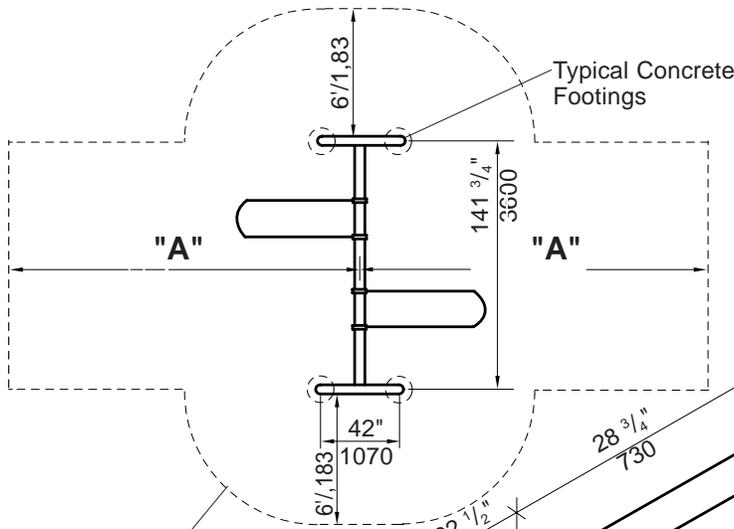
Installation Time: Approx. $\frac{1}{2}$ man hour

Weight: 6 lbs.

Installation Instructions

- 1) Locate and mark location of clamp on beam.
- 2) Attach 5" half clamp and swing hanger clamp to beam using $\frac{3}{8}$ " x 1 $\frac{1}{8}$ " BHCS w/pin and $\frac{3}{8}$ " tee nuts. *Tighten evenly.*
- 3) **IMPORTANT:** *Drill through holes in 5" half clamps and into 5" pipe with a $\frac{1}{4}$ " or "F" (only) drill bit, tap $\frac{1}{4}$ " x $\frac{5}{8}$ " drive rivets through 5" half clamps and into pipe, to ensure that clamps remain secure.*
- 4) Attach swing chain to double clevis using $\frac{3}{8}$ " x 1 $\frac{1}{4}$ " BHCS w/pin limited thread bolts.
- 5) Attach swing seat to chains using bolt links with $\frac{3}{8}$ " x 1 $\frac{1}{4}$ " BHCS w/pin limited thread bolts. **NOTE:** *Do not over-tighten limited thread bolt. Threads should not protrude past bolt link. Position bolt head inward facing user.*

PLAN VIEW/FOOTING LAYOUT



KEY	Dimension "A"
Seat Type	
Belt	16'-0" (4,88 m)
Flat	16'-0" (4,88 m)
Full Bucket	12'-0" (3,66 m)
Half Bucket	16'-0" (4,88 m)
Molded Bucket	16'-0" (4,88 m)
Molded Bucket/Harness	13'-0" (3,96 m)
Infant Full Bucket	N/A

Minimum Use Zone

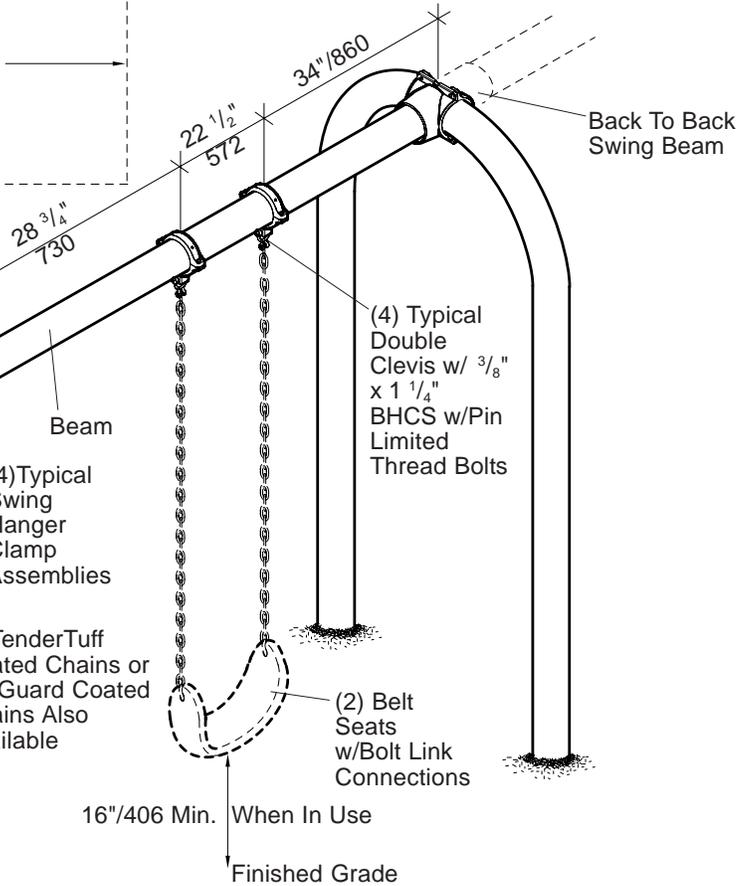
(2) Typical Tee Clamps-Center Beam In Middle Of Arch

99 3/4" / 2534
From Top of Surfacing to Center of Beam

(2) Arches

(4) Labels

Protective Surfacing



NOTE: Model numbers are for swing frames only, order swing seats with chains separately.

Model #177331 Additional Bay



Swings 177330/177331 Arch Belt Swing Frame

J:\SPECS\SPECS\1184\18448000.P65

Parts List

Part#	Description	Qty.	
		2 Pl	Add. Bay
126749-00	Swing Arch, Specify Color	2	1
100610-00	1/4" x 5/8" Drive Rivet, AL/SST	8	6
105327-01	5" Half Clamp, Specify Color	8	4*
146160-00	141 3/4" Swing Beam, Specify Color	1	1
121291-00	Swing Hanger Clamp Assy. Specify Color	4	4
121289-00	Swing Hanger Clamp, Specify Color	4	4
127068-00	7/16" x 2 7/16" BHCS w/Pin Ltd. Thread, SST	4	4
138917-00	Swing Hanger Double Clevis	4	4
100667-00	Oilite Bushing	4	4
184227-00	Arch Swing 5" O.D. Beam Hardware Pkg.	1	1
100198-00	3/8" x 1 1/8" BHCS w/Pin, SST	8	8
113027-00	3/8" x 1 3/8" BHCS w/Pin, SST	8	8
100292-00	3/8" x 1 1/4" BHCS w/Pin Ltd. Thread, SST	4	4
100351-00	3/8" Tee Nut, SST	16	16
156846-00	Play Safe Label, 2-12 Yrs.	1	1
128296-00	3/8" Hex Jam Nut, SST	8	8
182213-00	Hot Surface Warning Label	2	1
182212-00	Entanglement Warning Label	2	1
115176-00	Hard Surface Warning Label	2	1

* = 5" Half Clamps From 2 PL. End Of Beam Need To Be Used.

Specifications

Arch Posts: See PlayBooster® (PB) General Specifications.

Swing Beam: Weldment comprised of tee clamps and 5" O.D. extruded 6005-T5 aluminum alloy tube with a .125" W. Finish: ProShield®, color specified.

Hanger Clamp

Assembly: Cast aluminum. Finish: ProShield, color specified.

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

Installation Time: Approx. 8 man hours
Additional Bay 4 man hours

Concrete Req.: Approx. 7.5 cu. ft.
Additional Bay 3.75 cu. ft.

Area Req.: 24'-2 3/4" x 32' (7,39 m x 9,75 m)
Additional Bay 11'-9 3/4" x 32' (3,60 m x 9,75 m)

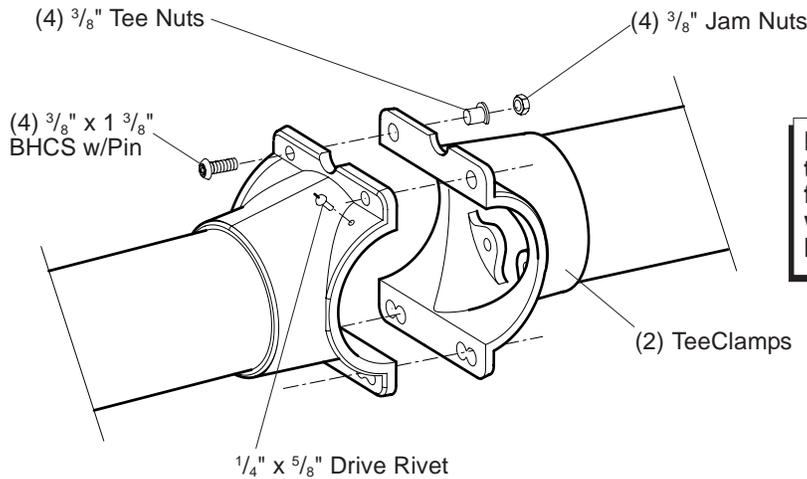
Weight: 204 lbs.
Additional Bay 124 lbs.

Fall Height: 96" (2,43 m)

Installation Instructions

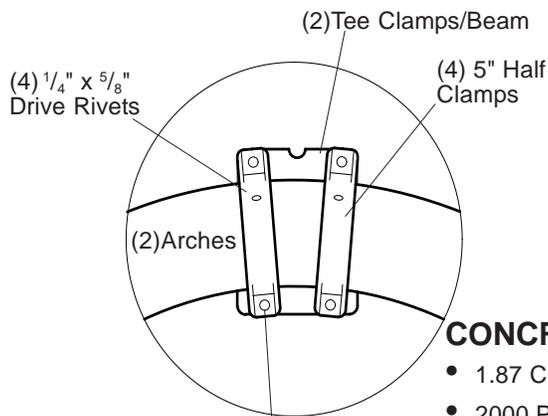
- 1) Dig footings, spaced as shown. Refer to the Concrete Footing Detail.
- 2) Set arches in footing holes and attach swing beam to center of arches using 5" half clamps with 3/8" x 1 3/8" BHCS w/pin and 3/8" tee nuts with 3/8" jam nuts. Refer to the Tee Clamp Position Detail. Center of beam should be 99 3/4" above finished grade. When installing back to back swing beams refer to the Back To Back Tee Clamps Detail.
- 3) Level beam and plumb arches and temporarily prop in position. Pour concrete footings and let cure for 72 hours before proceeding.
- 4) Locate, mark and attach swing hanger clamps to beam in locations shown. Refer to the Typical Swing Hanger Clamp Spec Sheet.
- 5) **NOTE:** Refer to specific swing seat installation document for attaching chains and seats.
- 6) Install 1/4" x 5/8" drive rivets in all 5" half clamps. Refer to the Typical Offset Hanger Clamp Spec Sheet. Refer to the Back To Back Tee Clamps Detail.
- 7) Apply Play Safe and Warning Labels, as shown.
- 8) Install protective surfacing before users are allowed to play on the swing.

**DETAIL
BACK TO BACK
TEE CLAMPS**



NOTE: Drill 1/4" hole through tee and arch for 1/4" x 5/8" drive rivet when installing back to back tee clamps.

**DETAIL
TEE CLAMP POSITION**

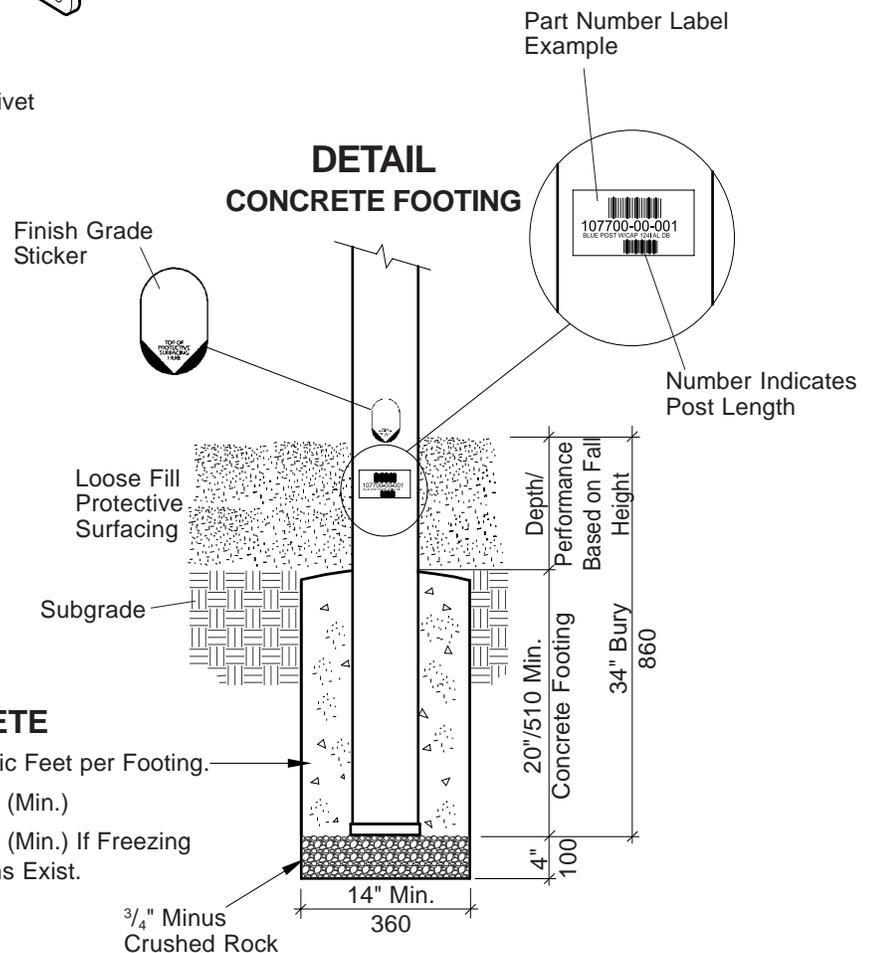


NOTE: Use Inside Holes For (4) 3/8" x 1 3/8" BHCS w/Pin & 3/8" Tee Nuts w/ 3/8" Jam Nuts

CONCRETE

- 1.87 Cubic Feet per Footing.
- 2000 PSI (Min.)
- 3000 PSI (Min.) If Freezing Conditions Exist.

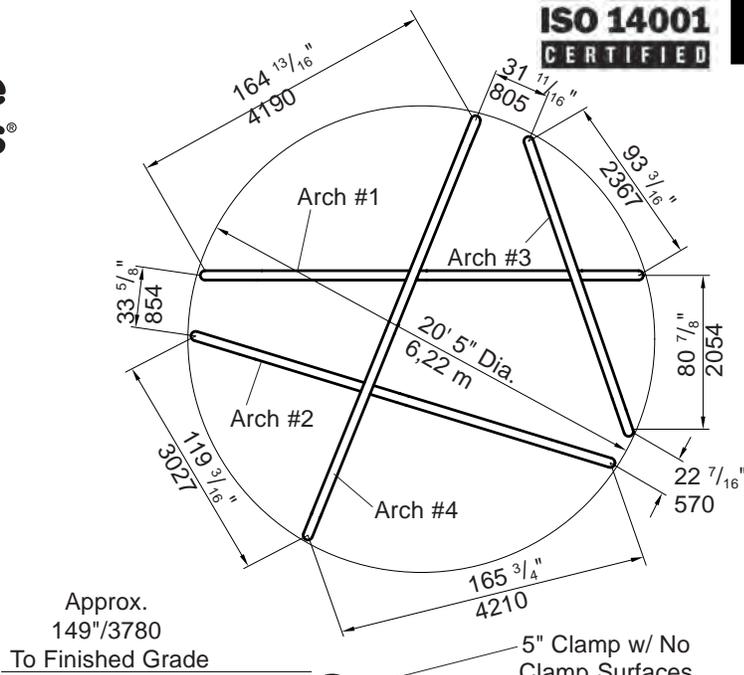
**DETAIL
CONCRETE FOOTING**



PLAN VIEW



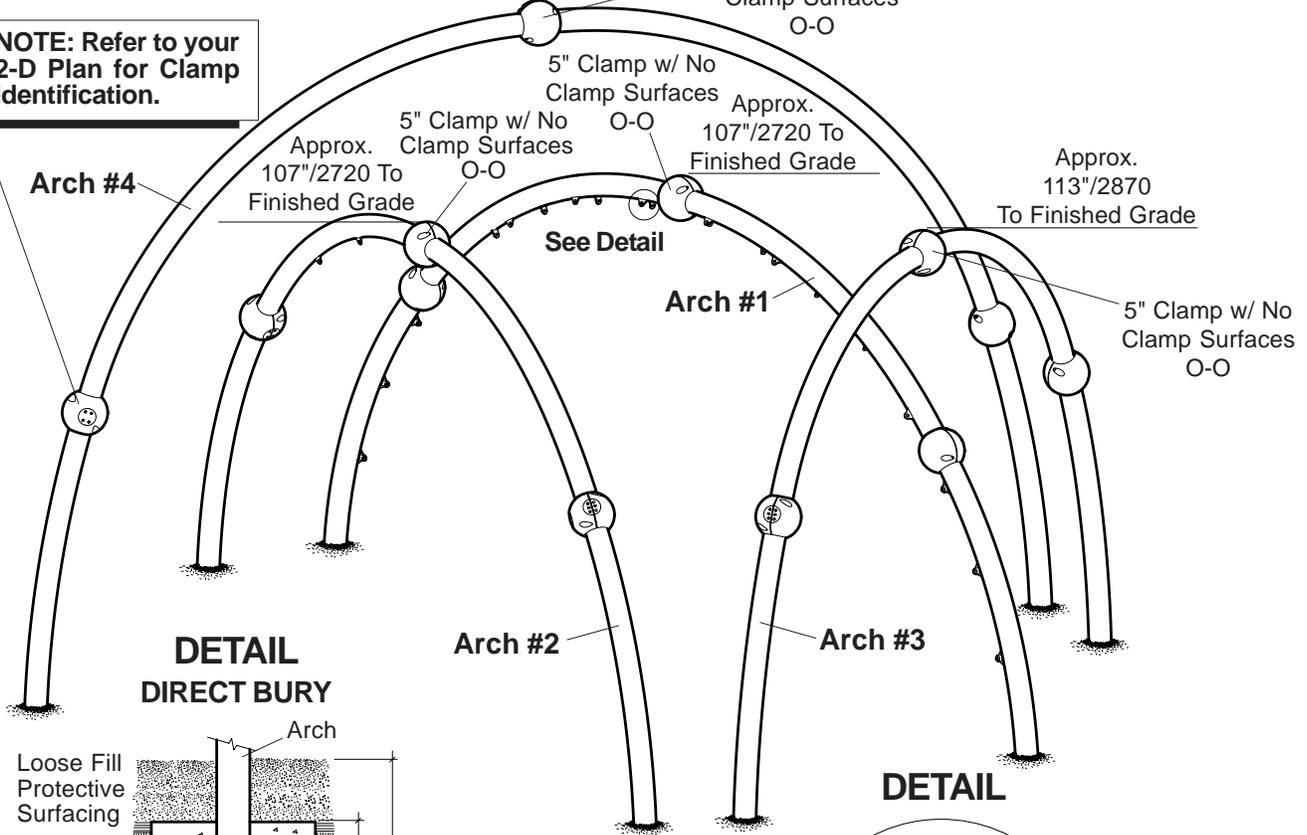
SAFETY NOTE
Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. ASTM F1487.)



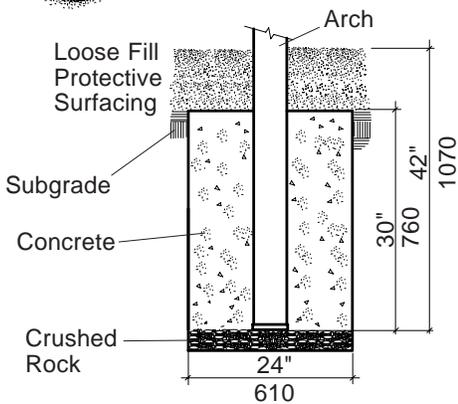
Approx. 149"/3780 To Finished Grade

5" Clamp w/ No Clamp Surfaces O-O

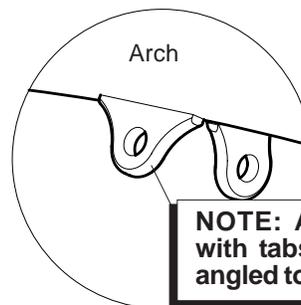
NOTE: Refer to your 2-D Plan for Clamp Identification.



DETAIL DIRECT BURY



DETAIL



NOTE: Assemble structure with tabs on arches #1 & #2 angled towards each other.

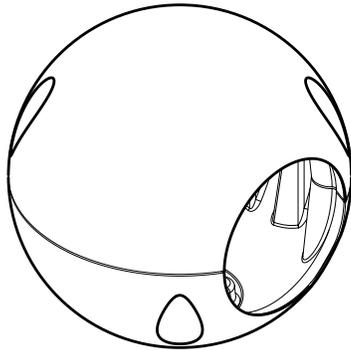
**DETAIL
 5" CLAMP ATTACHMENT**

(4) 5/8" x 1 1/2"
 BHCS w/Pin
 (With Gray Anti-Sieze)
 #127551-00

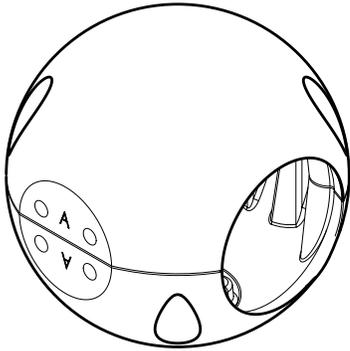
(2) 5" Clamps

Attach Clamp Approx.
 1 1/2"/38 Below Seam

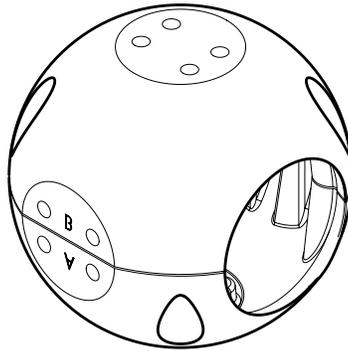
Seam



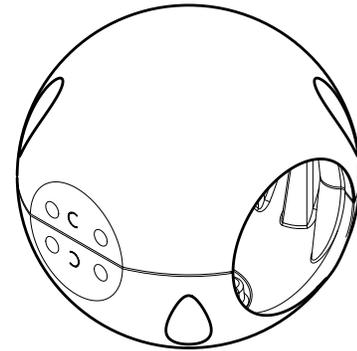
5" Clamp w/ No
 Clamp Surfaces
 O-O



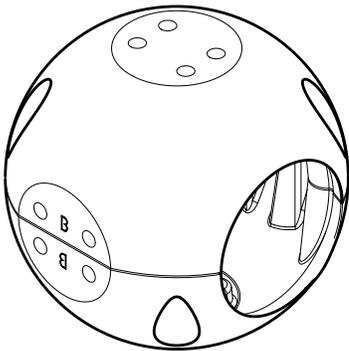
5" Clamp w/ 1
 Clamp Surface
 A-A



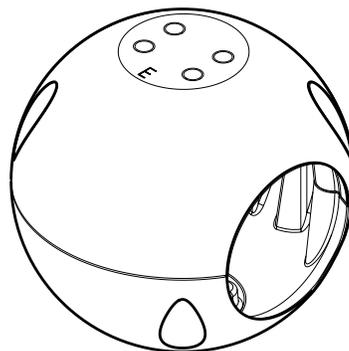
5" Clamp w/ 2 Clamp
 Surfaces @ 90°
 A-B



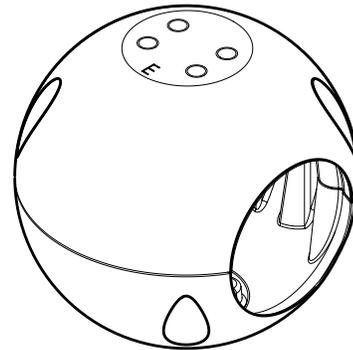
5" Clamp w/ 2 Clamp
 Surfaces @ 180°
 C-C



5" Clamp
 w/ 3 Clamp Surfaces
 B-B

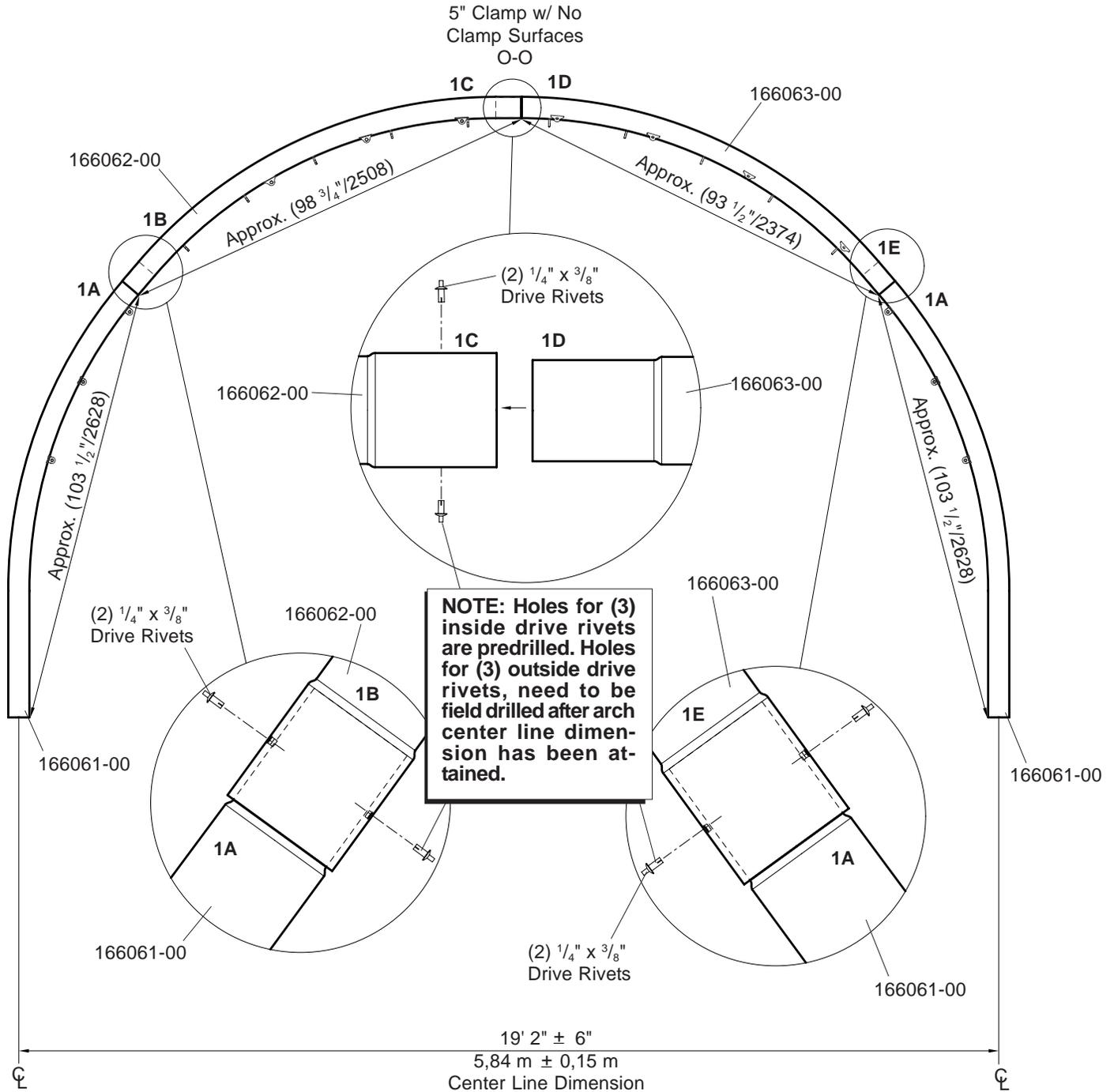


5" Clamp
 w/ 1 Clamp Surface
 O-E

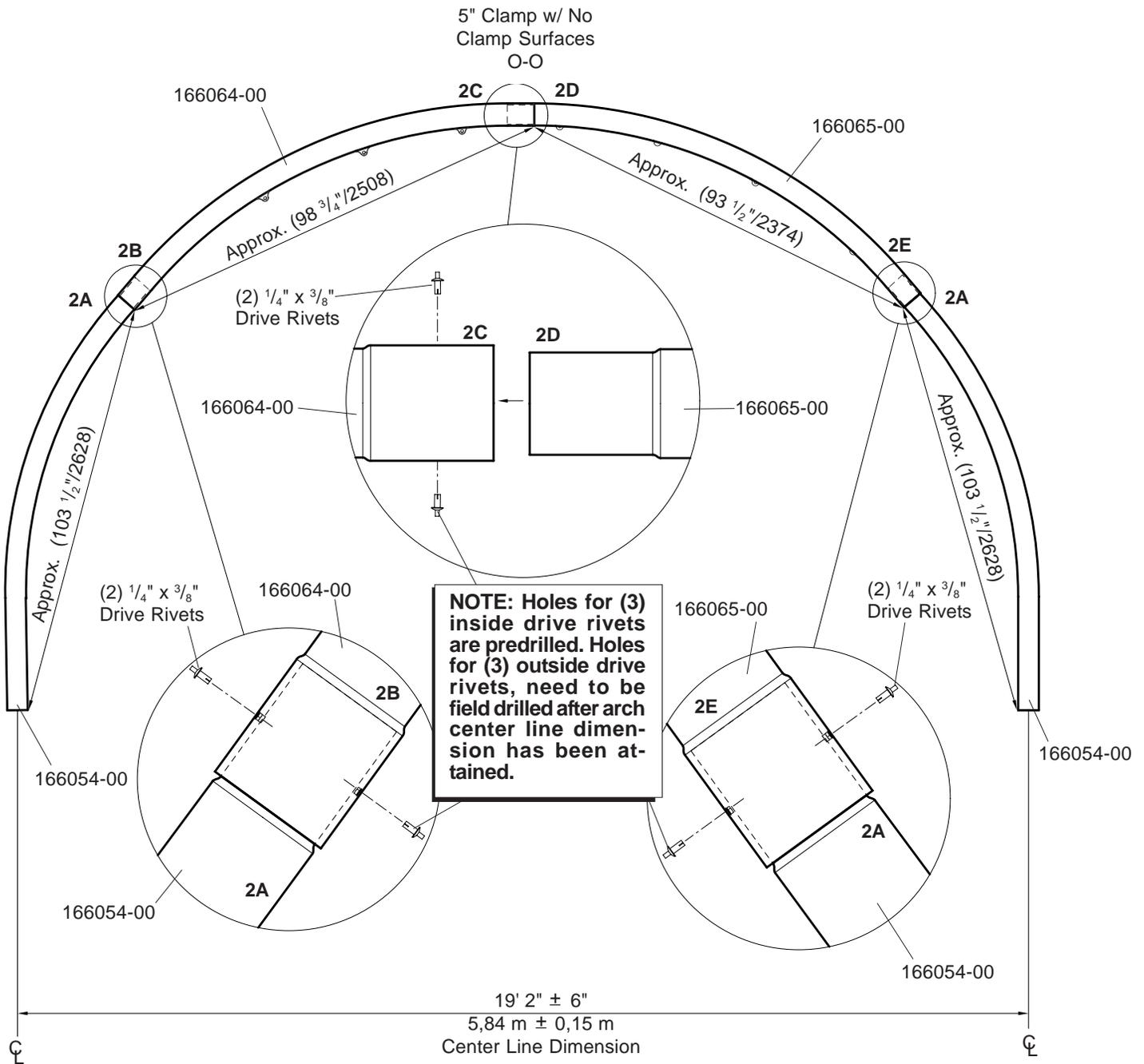


5" Clamp w/ 2 Clamp
 Surfaces @ 180°
 E-E

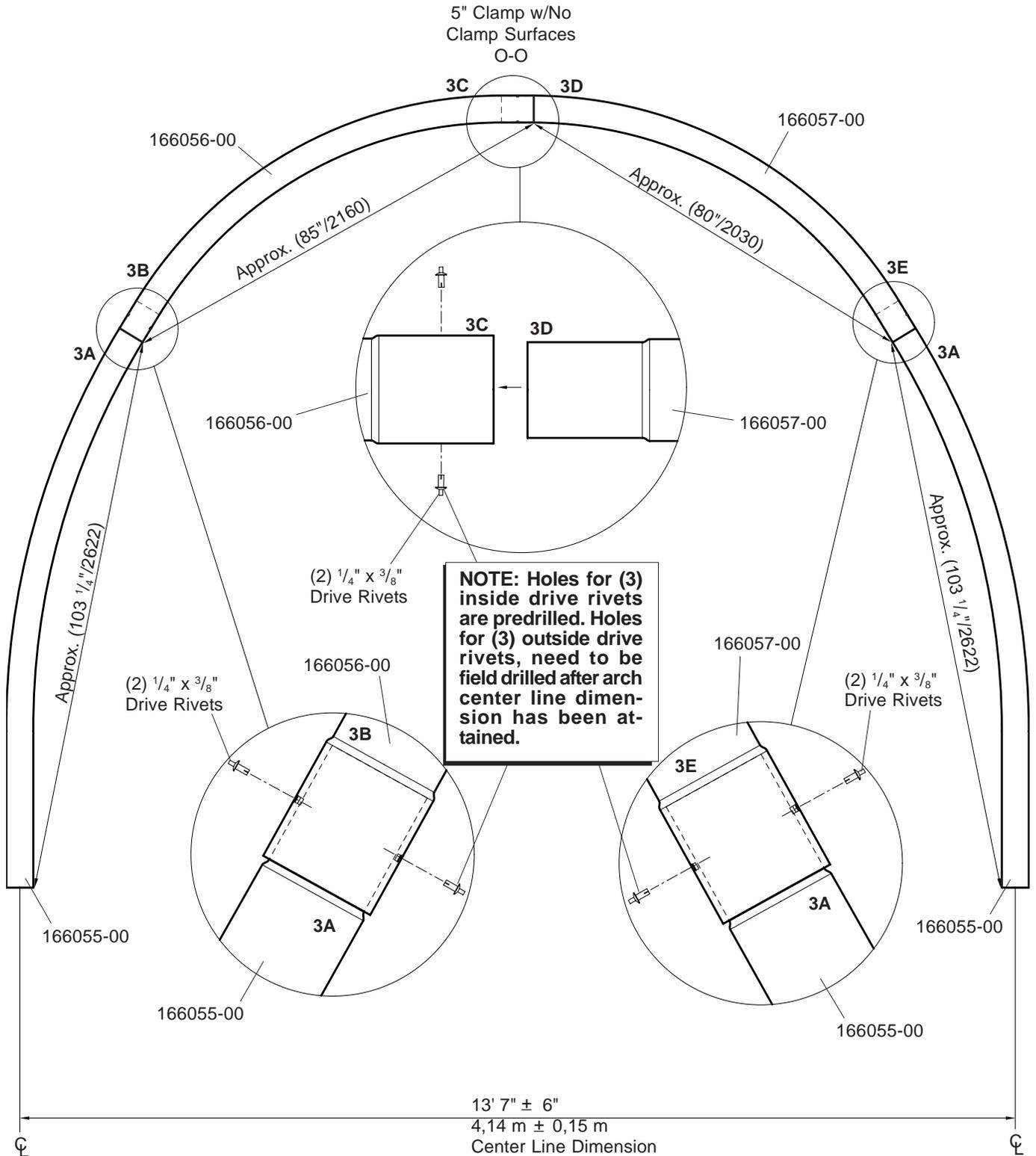
ARCH #1 ASSEMBLY



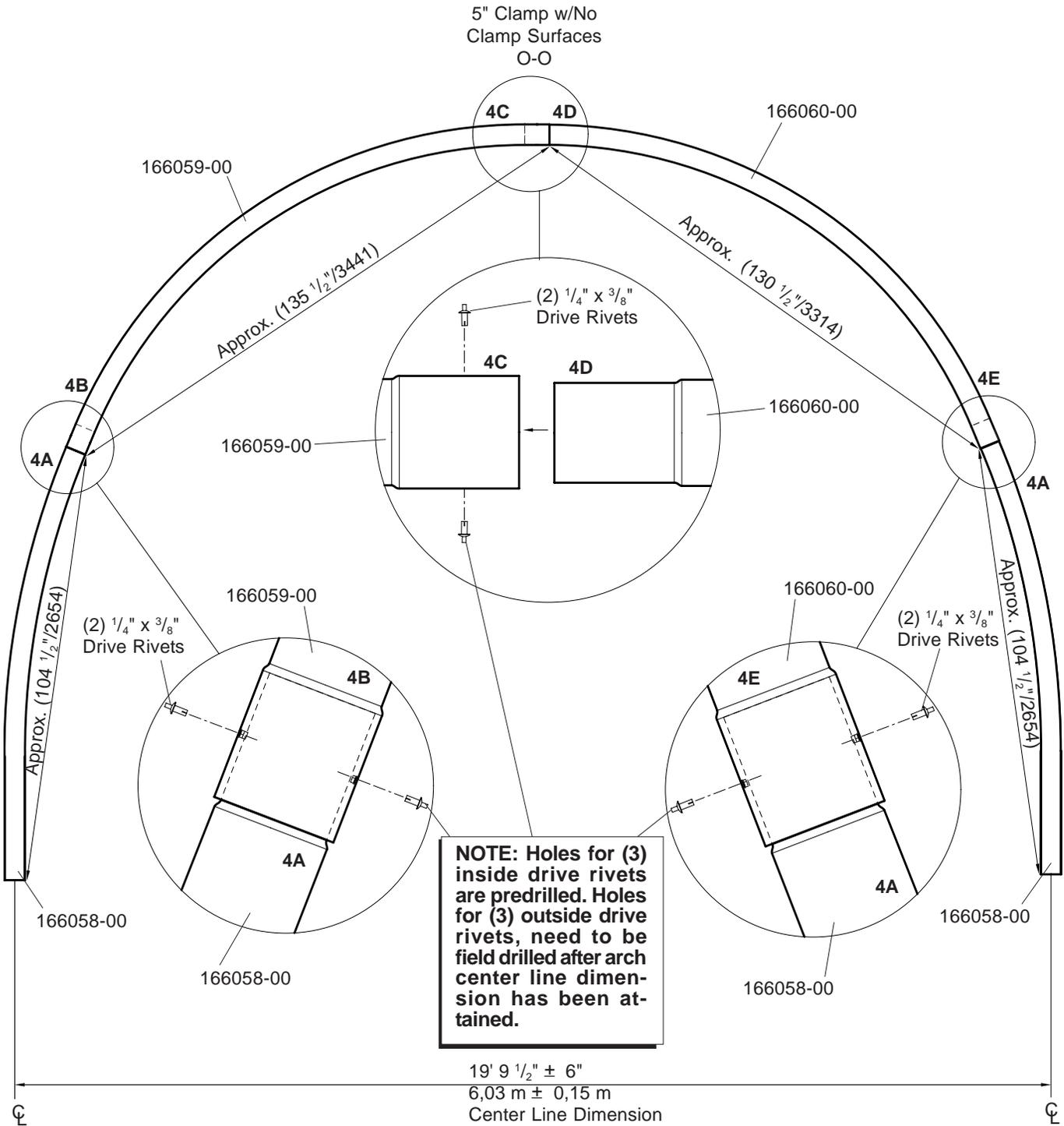
ARCH #2 ASSEMBLY



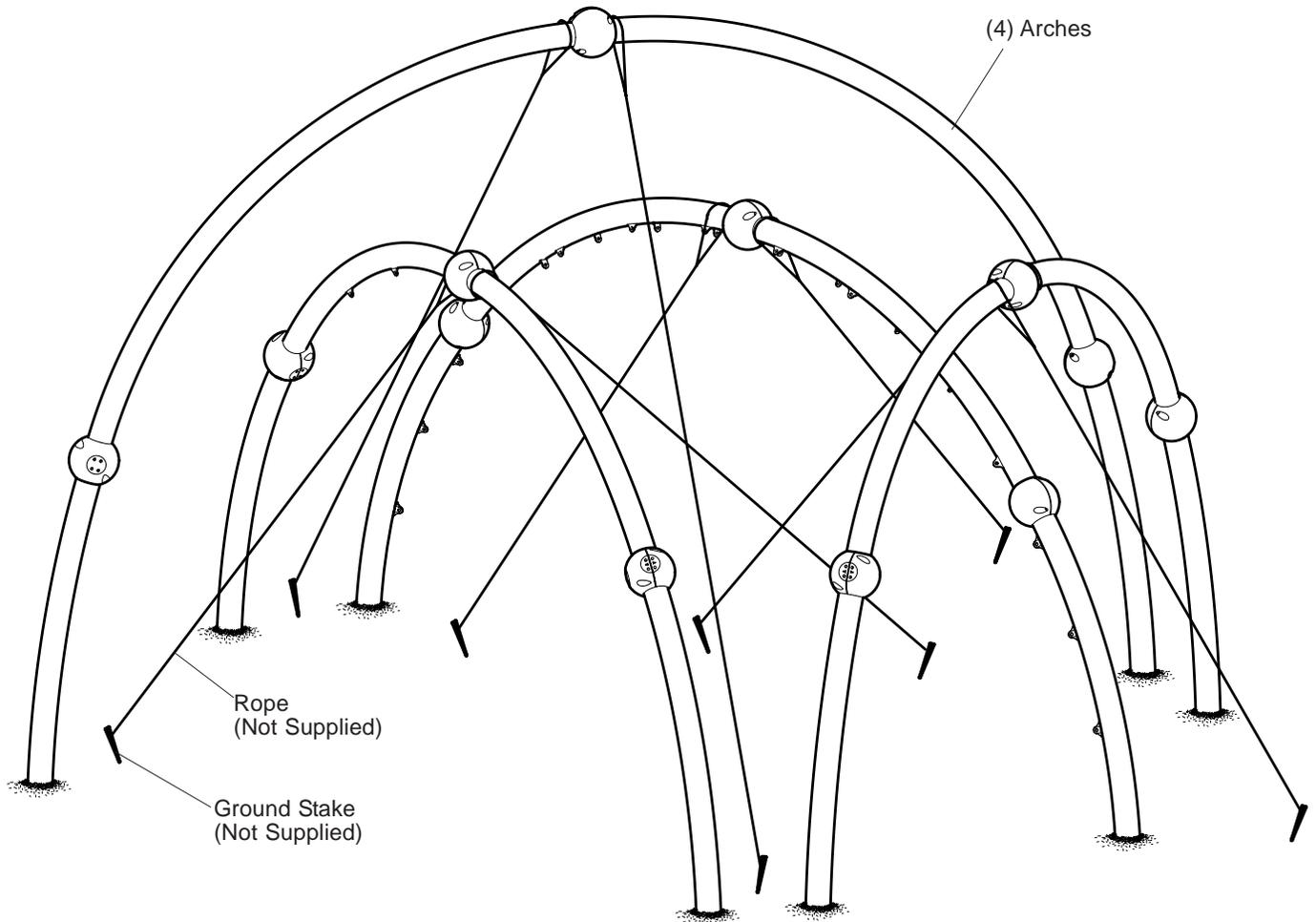
ARCH #3 ASSEMBLY



ARCH #4 ASSEMBLY



DETAIL
ROPE/GROUND STAKES



NOTE: *Rope may be used to tie off the arches. The use of rope will help keep the arches in plumb position, while attaching outriggers. Tie a rope (not supplied) on each side of the top 5" clamp. The rope should be long enough to attach to a ground stake (not supplied). When the arches are in plumb position, pull the ropes tight, and attach to ground stakes.*

Parts List

Part#	Description	Qty.
166061-00	Arch 1 A With Net Tabs, Specify Color	*
166054-00	Arch 2 A, Specify Color	*
166062-00	Arch 1B/1C With Tabs, Specify Color	*
166063-00	Arch 1D/1E With Tabs, Specify Color	*
166064-00	Arch 2B/2C With Tabs, Specify Color	*
166065-00	Arch 2D/2E With Tabs, Specify Color	*
166055-00	Arch 3A, Specify Color	*
166056-00	Arch 3B/3C, Specify Color	*
166057-00	Arch 3D/3E, Specify Color	*
166058-00	Arch 4A, Specify Color	*
166059-00	Arch 4B/4C, Specify Color	*
166060-00	Arch 4D/4E, Specify Color	*
166271-00	5" Clamp A, Specify Color	*
166272-00	5" Clamp B, Specify Color	*
166273-00	5" Clamp C, Specify Color	*
166275-00	5" Clamp E, Specify Color	*
166276-00	5" Clamp O, Specify Color	*
100611-00	1/4" x 3/8" Drive Rivet, AL/SST	*
127551-00	5/8" x 1 1/2" BHCS w/Pin, SST	*

* = Quantity Determined By Your Order

Specifications

5" Clamps: Cast from 356-T6 aluminum. Finish: ProShield®, color specified.

5" Arch: Steel arch is manufactured from 5" O.D. galvanized tubing with a wall thickness of .120". Finish: ProShield, color specified.

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

Installation Time: 4 People minimum approx. 6 man hours

Concrete Req.: Approx. 2.25 cu. yds.

Area Req.: 6' (1.83 m) minimum use zone

Weight: 98 lbs.

Fall Height: 75"

Installation Instructions

- 1) **(Direct Bury) Refer to the Site Plan for footing locations.**
IMPORTANT! Do not pour concrete footings until all outriggers have been attached to 5" clamps with surfaces.
- 2) An Evos structure consists of (2-4) arch assemblies, numbered #1 through #4. Each arch assembly consists of (4) arches with part numbers to ensure the arch is assembled correctly.
- 3) Lay (4) arches on a flat surface. Using the part numbers shown on the detail as a guide, slide arches together as shown. Level arches.
NOTE: Lay arches on cardboard to prevent arches from being scratched during assembly.
- 4) Line up (3) holes on inside of arches. Insert 1/4" x 3/8" drive rivets into holes and hammer rivet pins in until it is flush with head.
- 5) Measure center line dimension of lower arches. Position lower arches as needed to attain center line dimension. Drill through (3) outer holes in arches with 1/4" of "F" (only) drill bit. Insert 1/4" x 3/8" drive rivets into holes and hammer rivet pins in until it is flush with head.
- 6) Using the arch assembly detail as a guide, attach (3) 5" clamps to each arch using 5/8" x 1 1/2" BHCS w/pin (with gray anti-sieze). **NOTE:** Refer to your 2-D Plan for clamp identification. The 5" clamps will be positioned on top of the drive rivets and arch ends. Refer to the arch assembly details for proper location of each clamp. **NOTE:** The 5" clamps with clamp surfaces, will need to be adjusted when outriggers are attached to the structure.
- 7) Place the fully assembled arches in footing holes. Refer to the Site Plan for proper location of arches. **NOTE:** Rope may be used to tie off the arches. The use of rope will help keep the arches in plumb position, while attaching outriggers. Tie a rope (not supplied) on each side of the top 5" clamp. The rope should be long enough to attach to a ground stake (not supplied). When the arches are in plumb position, pull the ropes tight, and attach to ground stakes. Refer to sheet 4.

LUCY LINCOLN HIESTAND PARK
PLAYGROUND MANUFACTURERS' INSTALLATION INFORMATION

LUCY LINCOLN HIENSTAND PARK

MADISON, WI

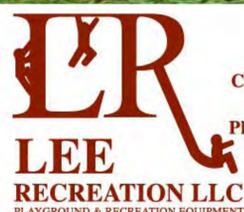
OPTION #1



VIEW A



VIEW B



P.O. Box 93
Cambridge, WI 53523

Phone: (800) 775-8937
Fax: (608) 423-7655

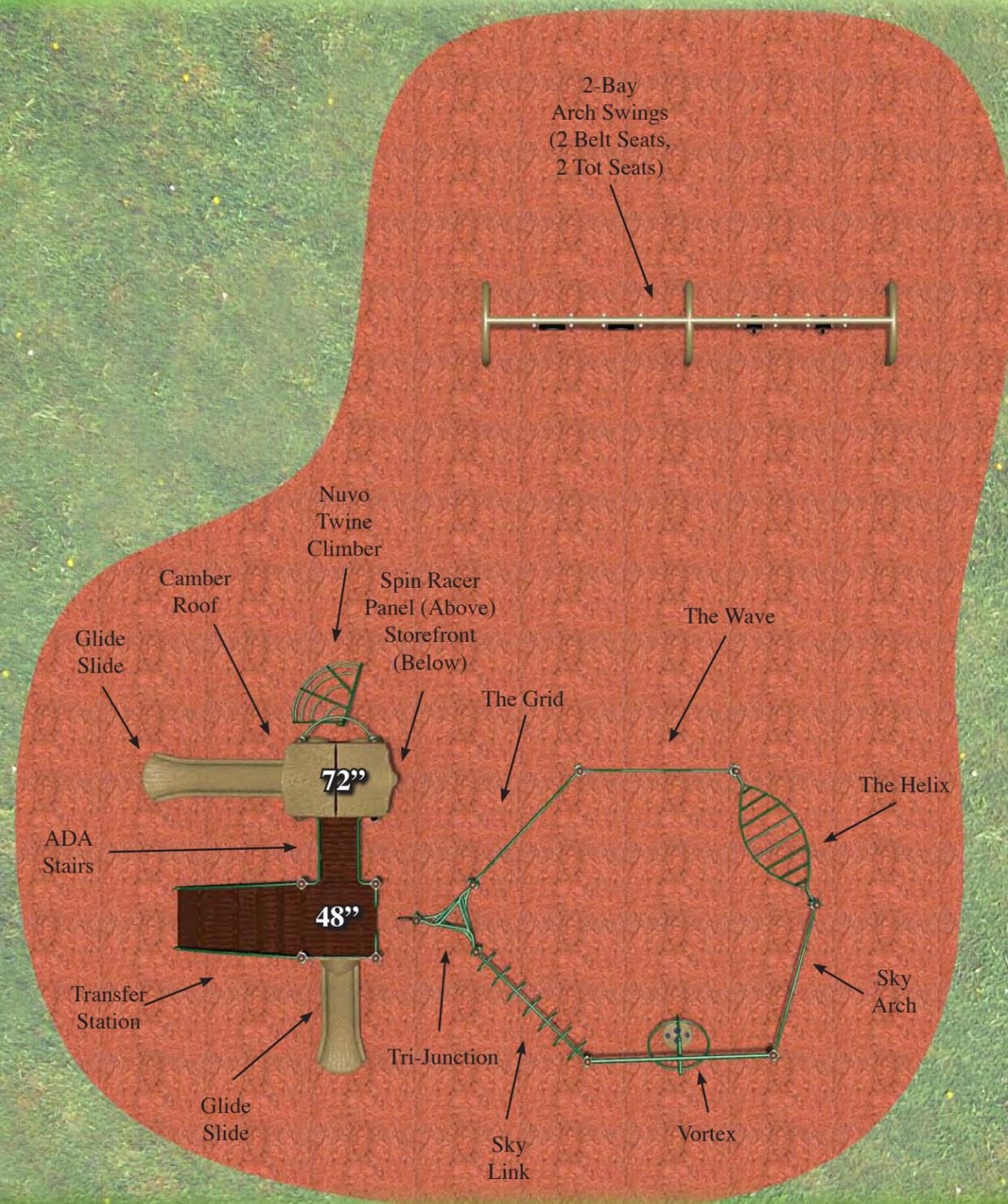
email:
info@leerecreation.com

www.leerecreation.com

LUCY LINCOLN HIESTAND PARK

MADISON, WI

OPTION #1



809 Bluebird Pass
Cambridge, WI 53523

TEL: 800-775-8937
FAX: 608-423-7655
www.leerecreation.com

Complies With:

- ASTM F1487-01
- ASTM F1487-98
- CPSC #325
- ADA-ADAAG

Design Number: PW030614

Use Zone:

of Users: 36

of Active Play Events: 16

Age: 5 to 12

Colors Shown:



Lucy

Design Number: 1 - Bill Of Material

Ref. No.	Part No.	Description	Quantity
		Posts	
1	ZZPM0026	5in OD X 132in STEEL POST W/ RIVETED CAP	4
2	ZZPM0036GZ	5in OD X 144in STEEL POST (GROUND ZERO)	7
3	ZZPM0129	5in OD x 192in STEEL POST W/O CAP	4
		Decks & Kick Plates	
4	ZZPM0616	SQUARE COATED DECK ASSEMBLY	2
		ADA Items	
5	ZZPM0678	NUVO- 48in TRANSFER STATION	1
		Slides	
6	ZZPM2696	GLIDE SLIDE (72in DECK)	1
7	ZZPM3126	GLIDE SLIDE (48in DECK)	1
		Activity Panels	
8	ZZPM4537	SPIN RACER PANEL (DECK LEVEL)	1
9	ZZPM4646	STOREFRONT PANEL	1
		Barriers	
10	ZZPM4288	ACCESS GATE	1
		Climbers	
11	ZZPM7039	72in TWINE CLIMBER	1
		Ground Zer0 Climbers	
12	ZZPM0297	POST W/ LADDER CLIMBER (36in OR 48in DECK)	1
13	ZZPM8398	THE HELIX	1
14	ZZPM8399	THE WAVE	1
15	ZZPM8408	THE GRID	1
16	ZZPM9079	TRI JUNCTION	1
		GroundZer0 Overhead Events	
17	ZZPM8450	THE SKY LINK	1
18	ZZPM8456	THE SKY ARCH	1
		GroundZer0 Balance	
19	ZZPM6810	VORTEX	1
		Roofs & Arches	
20	ZZPM9816	CAMBER 1/2 SQUARE ROOF	1
21	ZZPM9817	CAMBER 1/2 SQUARE ROOF ADD ON SECTION	1
		Stairs and Ladders	
22	ZZPM9170	24in ACCESSIBLE STEPPED PLATFORM (DECK TO DECK)	1



Lucy

Design Number: 1 - Compliance and Technical Data

Reference Document: ASTM F1487

Ref. No.	Part No.	Qty.	Description	Unit ASTM Status	Total Weight (lbs)	Pre-Consumer Recycled (lbs)	Post-Consumer Content (lbs)	CO2e Footprint (kgs)	Users	Install Hours	Concrete (Yds3)	Active Play Events
1	ZZXX0260	2	BELT SEAT W/SILVER SHIELD CHAIN FOR 8ft TOP RAIL	Certified	17.60			108	2	0.50	0.00	2
2	ZZXX0265	2	INFANT SEAT W/SILVER SHIELD FOR 8ft TOP RAIL	Certified	22.62			179	2	0.50	0.00	2
3	ZZXX0287	1	5in OD 2-UNIT ALUMINUM ARCH SWING W-8ft TOP RAIL	Certified	213.00			1,166	0	3.00	0.52	0
4	ZZXX0370	1	5in OD ALUMINUM ARCH SWING 2-UNIT ADD-A-BAY	Certified	145.40			773	0	3.00	0.26	0
5	ZZPM0026	4	5in OD X 132in STEEL POST W/ RIVETED CAP	Certified	296.84			434	0	4.00	0.48	0
6	ZZPM0036GZ	7	5in OD X 144in STEEL POST (GROUND ZERO)	Certified	562.87			822	0	10.50	1.26	0
7	ZZPM0129	4	5in OD x 192in STEEL POST W/O CAP	Certified	421.64			578	0	4.00	0.48	0
8	ZZPM0616	2	SQUARE COATED DECK ASSEMBLY	Certified	180.72			441	8	2.00	0.00	0
9	ZZPM0678	1	NUVO- 48in TRANSFER STATION	Certified	350.11			609	2	3.50	0.12	1
10	ZZPM2696	1	GLIDE SLIDE (72in DECK)	Certified	163.44			678	2	2.00	0.03	1
11	ZZPM3126	1	GLIDE SLIDE (48in DECK)	Certified	131.54			517	2	2.00	0.03	1
12	ZZPM4537	1	SPIN RACER PANEL (DECK LEVEL)	Certified	63.90			489	0	1.00	0.00	0
13	ZZPM4646	1	STOREFRONT PANEL	Certified	44.80			279	2	1.00	0.00	1
14	ZZPM4288	1	ACCESS GATE	Certified	34.38			92	0	0.50	0.00	0
15	ZZPM7039	1	72in TWINE CLIMBER	Certified	110.84			457	1	4.00	0.12	1
16	ZZPM0297	1	POST W/ LADDER CLIMBER (36in OR 48in DECK)	Certified	74.81			131	1	0.50	0.13	1
17	ZZPM8398	1	THE HELIX	Certified	85.74			202	2	0.75	0.00	1
18	ZZPM8399	1	THE WAVE	Certified	70.55			183	2	0.75	0.00	1
19	ZZPM8408	1	THE GRID	Certified	107.63			231	3	0.75	0.00	1
20	ZZPM9079	1	TRI JUNCTION	Certified	95.38			268	3	0.50	0.00	1
21	ZZPM8450	1	THE SKY LINK	Certified	55.09			129	2	0.50	0.00	1
22	ZZPM8456	1	THE SKY ARCH	Certified	45.74			111	0	0.50	0.00	0
23	ZZPM6810	1	VORTEX	Certified	162.23			619	1	3.00	0.13	1



Lucy

Design Number: 1 - Compliance and Technical Data

Reference Document: ASTM F1487

Ref. No.	Part No.	Qty.	Description	Unit ASTM Status	Total Weight (lbs)	Pre-Consumer Recycled Content (lbs)	Post-Consumer Content (lbs)	CO2e Footprint (kgs)	Users	Install Hours	Concrete (Yds3)	Active Play Events
24	ZZPM9816	1	CAMBER 1/2 SQUARE ROOF	Certified	51.67			380	0	1.00	0.00	0
25	ZZPM9817	1	CAMBER 1/2 SQUARE ROOF ADD ON SECTION	Certified	49.01			351	0	1.00	0.00	0
26	ZZPM9170	1	24in ACCESSIBLE STEPPED PLATFORM (DECK TO DECK)	Certified	174.86			374	1	2.00	0.00	0
Totals:					3,732.41	587	1,164	10,599	36	52.75	3.56	16
					1,679.58 Kg	264 Kg	524 Kg	11 Metric Tons			2.71 m3	



Lucy

Design Number: 1 - Compliance and Technical Data

Reference Document: ASTM F1487

Ref. No.	Part No.	Qty.	Description	Unit ASTM Status	Total Weight (lbs)	Pre-Consumer Recycled (lbs)	Post-Consumer Content (lbs)	CO2e Footprint (kgs)	Users	Install Hours	Concrete (Yds3)	Active Play Events
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ASTM F1487

The lay-out for this custom playscape, design number 1, has been configured to meet the requirements of the ASTM F1487 standard. In addition, each of the above components listed as "Certified" have been tested and are IPEMA certified. Components listed as "Not Applicable" do not fall within the scope of the ASTM F1487 standard and have not been tested. IPEMA certification can be verified on the IPEMA website, www.ipema.org. In the interest of playground safety, IPEMA provides a Third Party Certification Service which validates compliance.

2010 ADA Standards for Accessible Design

The lay-out was also designed to meet the 2010 Standards published 15-Sep-2010, by the Department of Justice when installed over a properly maintained surfacing material that is in compliance with ASTM F1951 "Accessibility of Surface Systems Under and Around Playground Equipment" as well as ASTM F1292, "Impact Attenuation of Surfacing Materials Within the Use Zone of Playground Equipment", appropriate for the fall height of the structure.

Installation Times

Installation times are based on one experienced installer. A crew of three experienced individuals can perform the installation within the given time, each member working 1/3 of the given hours. [Eg. Installation Time = 30 hours. For a crew of three, each member will work 10 hours on the installation for a total of 30 hours on the project.]

Carbon Footprint

The CO2e (carbon footprint given in Kilograms and Metric Tons) listed above is a measure of the environmental impact this play structure represents from harvesting raw materials to the time it leaves our shipping dock. Playworld Systems nurtures a total corporate culture that is focused on eliminating carbon producing processes and products, reducing our use of precious raw materials, reusing materials whenever possible and recycling materials at every opportunity. Playworld Systems elected to adopt the Publicly Available Specification; PAS 2050 as published by the British Standards Institute and sponsored by Defra and the Carbon Trust. The PAS 2050 has gained international acceptance as a specification that measures the greenhouse gas emissions in services and goods throughout their entire life cycle.

Pre-Consumer Recycle Content

A measurement, in pounds, that qualifies the amount of material that was captured as waste and diverted from landfill during an initial manufacturing process and is being redirected to a separate manufacturing process to become a different product. E.g. 100% of our Aluminum Tubing is made from captured waste material during the manufacturing process of extruded Aluminum products such as rods, flat bars and H-channels.

Post-Consumer Recycle Content

A measurement, in pounds, that qualifies the amount of material that was once another product that has completed its lifecycle and has been diverted from a landfill as a solid waste through recycling and is now being used in a Playworld Systems' product. E.g. **20% to 40% of the steel in our steel tubing and sheet steel have been diverted from landfills. Automobiles are scrapped and recyclable steel is purchased by the steel mill that produces our raw product.

** The amount of Post-Consumer recycled steel fluctuates daily based on the availability of the recycled steel.



Installation Instructions

Playmakers® Models PM0006A, PM0008A, PM0016A,
PM0026A, PM0036A, PM0046A, PM0056A, PM0066A,
PM0078A, PM0128A, PM0266A, PM0268A
Aluminum Support Post w/ Cap
96 in. (2438 mm) to 229 in. (5817 mm)



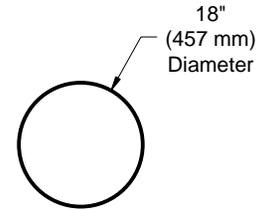
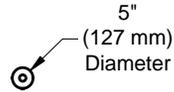
Assembly View (*representative model*)

Installation Preparation

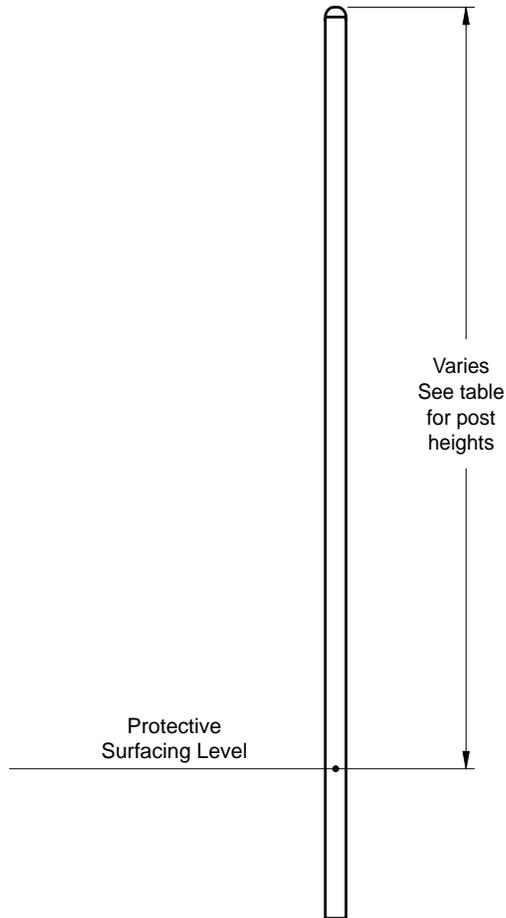
Recommended Crew: Two (2) adults
Installation Time: 1 man-hour
Weight: (refer to table on the next page)
Concrete Required: 0.12 cubic yard (0,09 cubic meters)

Installation Instructions

Top View



Footing Diagram



Elevation View

Model	Post Height	Weight
ZZPM0006A	96" (2438 mm)	25 lbs. (11,4 kg)
ZZPM0008A	108" (2743 mm)	27.4 lbs. (12,3 kg)
ZZPM0016A	120" (3048 mm)	29.4 lbs. (13,2 kg)
ZZPM0026A	132" (3353 mm)	34.2 lbs. (15,5 kg)
ZZPM0036A	144" (3658 mm)	35,4 lbs. (16,1 kg)
ZZPM0046A	156" (3962 mm)	37.3 lbs. (17 kg)
ZZPM0056A	168" (4267 mm)	40.4 lbs. (18,2 kg)
ZZPM0066A	180" (4623 mm)	43 lbs. (19,5 kg)
ZZPM0078A	205" (5207 mm)	49 lbs. (22,3 kg)
ZZPM0128A	192" (4877 mm)	45 lbs. (20,4 kg)
ZZPM0266A	217" (5512 mm)	42.5 lbs. (19,3 kg)
ZZPM0268A	229" (5817 mm)	45 lbs. (20,4 kg)

Installation Instructions

___ **Notes Before You Begin:** Do not over tighten bolts during assembly, only snug tighten them until assembly is complete.

Carefully read and understand these installation instructions before you begin.

___ **Step 1:** Before attempting to assemble your equipment, please review all installation information carefully. Should you experience any difficulty during the installation process, please call us at the phone number shown on the last page of these instructions.

___ **Step 2:** Separate and identify all components and hardware.

___ **Step 3:** Excavate footings as shown in the **Footing Details**.

___ **Step 4:** Set the support post into excavated footings in accordance with placement called out on the footing diagram. The post should be placed on a perforated shipping tube cap or on another porous flat surface to prevent any buildup of moisture in the base of the post. Block the support post at the specified depth.

Note: Heights of the decks and play components are measured from the top of protective surfacing.

Final Details.

___ **Step 5:** Plumb and level the support post. Block and brace for concrete. Pour concrete after all equipment has been assembled. Allow 72 hours for concrete to completely cure.



PM0006A - ALUMINUM SUPPORT POST w/ CAP 96 in. (2438 mm)

PART NO.	DESCRIPTION	QTY.
CAP5007	POST - 5" O.D. x 96" ALUMINUM w/ CAP & LBL AT 36"	1

PM0008A - ALUMINUM SUPPORT POST w/ CAP 108 in. (2743 mm)

PART NO.	DESCRIPTION	QTY.
CAP5009	POST - 5" O.D. x 108" ALUMINUM w/ CAP & LBL AT 36"	1

PM0016A - ALUMINUM SUPPORT POST w/ CAP 120 in. (3048 mm)

PART NO.	DESCRIPTION	QTY.
CAP5011	POST - 5" O.D. x 120" ALUMINUM w/ CAP & LBL AT 36"	1

PM0026A - ALUMINUM SUPPORT POST w/ CAP 132 in. (3353 mm)

PART NO.	DESCRIPTION	QTY.
CAP5013	POST - 5" O.D. x 132" ALUMINUM w/ CAP & LBL AT 36"	1

PM0036A - ALUMINUM SUPPORT POST w/ CAP 144 in. (3658 mm)

PART NO.	DESCRIPTION	QTY.
CAP5015	POST - 5" O.D. x 144" ALUMINUM w/ CAP & LBL AT 36"	1

PM0046A - ALUMINUM SUPPORT POST w/ CAP 156 in. (3962 mm)

PART NO.	DESCRIPTION	QTY.
CAP5017	POST - 5" O.D. x 156" ALUMINUM w/ CAP & LBL AT 36"	1

PM0056A - ALUMINUM SUPPORT POST w/ CAP 168 in. (4267 mm)

PART NO.	DESCRIPTION	QTY.
CAP5019	POST - 5" O.D. x 168" ALUMINUM w/ CAP & LBL AT 36"	1

PM0066A - ALUMINUM SUPPORT POST w/ CAP 180 in. (4623 mm)

PART NO.	DESCRIPTION	QTY.
CAP5021	POST - 5" O.D. x 180" ALUMINUM w/ CAP & LBL AT 36"	1

PM0078A - ALUMINUM SUPPORT POST w/ CAP 205 in. (5207 mm)

PART NO.	DESCRIPTION	QTY.
CAP5023	POST - 5" O.D. x 205" ALUMINUM w/ CAP & LBL AT 36"	1

PM0128A - ALUMINUM SUPPORT POST w/ CAP 192 in. (4877 mm)

PART NO.	DESCRIPTION	QTY.
CAP5063	POST - 5" O.D. x 205" ALUMINUM w/ CAP & LBL AT 36"	1

PM0266A - ALUMINUM SUPPORT POST w/ CAP 217 in. (5512 mm)

PART NO.	DESCRIPTION	QTY.
CAP0425	POST - 5" O.D. x 217" ALUMINUM w/ CAP & LBL AT 36"	1

PM0268A - ALUMINUM SUPPORT POST w/ CAP 229 in. (5817 mm)

PART NO.	DESCRIPTION	QTY.
CAP0427	POST - 5" O.D. x 229" ALUMINUM w/ CAP & LBL AT 36"	1

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Assembly View (representative model)

Installation Instructions

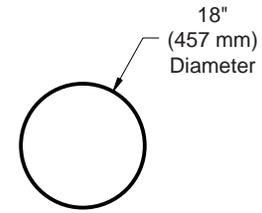
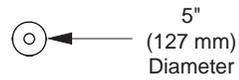
Playmakers® Models PM0008GZ,
PM0036GZ, PM0056GZ, & PM0066GZ
GroundZero® Steel Support Post w/ Cap
108 in. (2743 mm), 144 in. (3658 mm),
168 in. (4267 mm), & 180 in. (4623 mm)

Installation Preparation

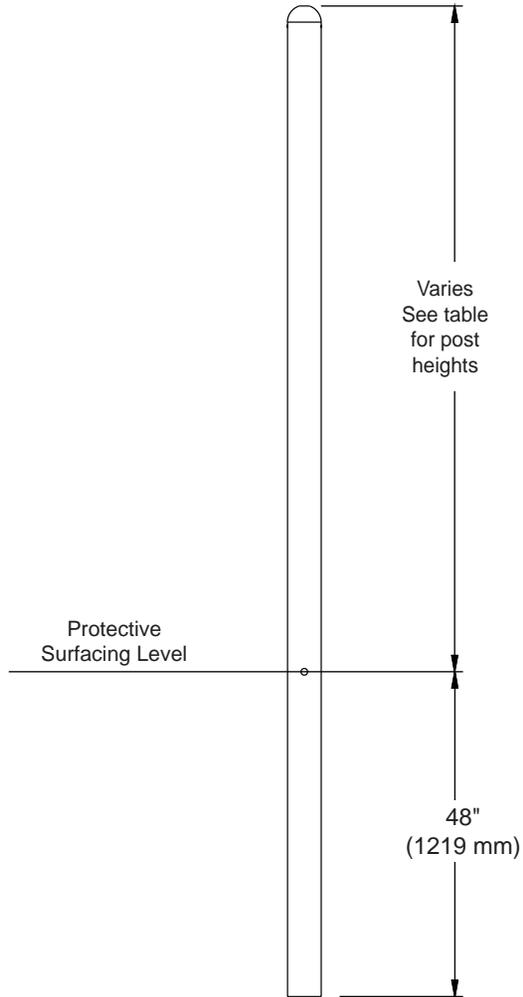
Recommended Crew: Two (2) adults
Installation Time: 1 man-hour
Weight: (refer to table on the next page)
Concrete Required: 0.18 cubic yard (0,14 cubic meters)

Installation Instructions

Top View



Footing Diagram



Elevation View

Model	Post Height	Weight
ZZPM0008GZ	108" (2743 mm)	60.6 lbs. (27,5 kg)
ZZPM0036GZ	144" (3658 mm)	80.4 lbs. (36,2 kg)
ZZPM0056GZ	168" (4267 mm)	97 lbs. (43,7 kg)
ZZPM0066GZ	180" (4623 mm)	104.2 lbs. (47,4 kg)

Installation Instructions

___ **Notes Before You Begin:** Do not over tighten bolts during assembly, only snug tighten them until assembly is complete.

Carefully read and understand these installation instructions before you begin.

___ **Step 1:** Before attempting to assemble your equipment, please review all installation information carefully. Should you experience any difficulty during the installation process, please call us at the phone number shown on the last page of these instructions.

___ **Step 2:** Separate and identify all components and hardware.

___ **Step 3:** Excavate footings as shown in the **Footing Details**. Ensure the hole is at GroundZero® depth.

___ **Step 4:** Set the support post into excavated footings in accordance with placement called out on the footing diagram. The post should be placed on a perforated shipping tube cap or on another porous flat surface to prevent any buildup of moisture in the base of the post. Block the support post at the specified depth.

Note: Heights of the decks and play components are measured from the top of protective surfacing.

Final Details.

___ **Step 5:** Plumb and level the support post. Block and brace for concrete. Pour concrete after all equipment has been assembled. Allow 72 hours for concrete to completely cure.

PM0008GZ - GROUNDZERO® STEEL SUPPORT POST w/ CAP 108 in. (2743 mm)

PART NO.	DESCRIPTION	QTY.
CAP5026	POST - 5" O.D. x 108" STEEL w/ CAP & LBL AT 48"	1

PM0036GZ - GROUNDZERO® STEEL SUPPORT POST w/ CAP 144 in. (3658 mm)

PART NO.	DESCRIPTION	QTY.
CAP5027	POST - 5" O.D. x 144" STEEL w/ CAP & LBL AT 48"	1

PM0056GZ - GROUNDZERO® STEEL SUPPORT POST w/ CAP 168 in. (4267 mm)

PART NO.	DESCRIPTION	QTY.
CAP0286	POST - 5" O.D. x 168" STEEL w/ CAP & LBL AT 48"	1

PM0066GZ - GROUNDZERO® STEEL SUPPORT POST w/ CAP 180 in. (4623 mm)

PART NO.	DESCRIPTION	QTY.
CAP5073	POST - 5.00" O.D. x 180.00" STEEL w/ CAP & LBL AT 48"	1

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Installation Instructions

Playmakers® Models PM0017A, PM0027A, PM0037A,
PM0047A, PM0057A, PM0067A, PM0079A, PM0129A,
PM0136A, PM0138A, PM0267A, PM0269A
Aluminum Support Post w/o Cap
96 in. (2438 mm) to 229 in. (5817 mm)



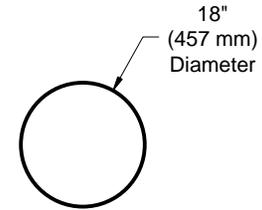
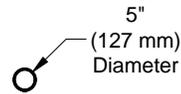
Assembly View *(representative model)*

Installation Preparation

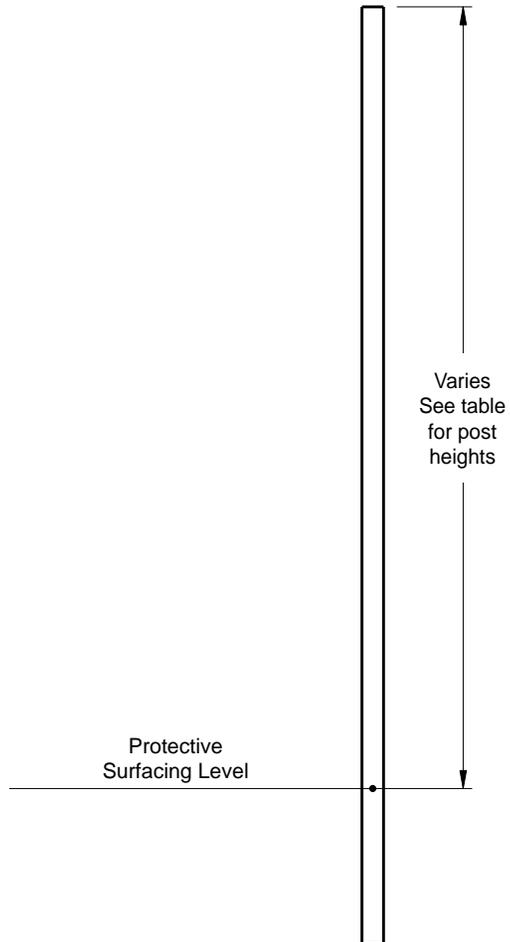
Recommended Crew: Two (2) adults
Installation Time: 1 man-hour
Weight: (refer to table on the next page)
Concrete Required: 0.12 cubic yard (0,09 cubic meters)

Installation Instructions

Top View



Footing Diagram



Elevation View

Model	Post Height	Weight
ZZPM0017A	120" (3048 mm)	28.5 lbs. (12,8 kg)
ZZPM0027A	132" (3353 mm)	33.3 lbs. (15 kg)
ZZPM0037A	144" (3658 mm)	34.6 lbs. (15,6 kg)
ZZPM0047A	156" (3962 mm)	36.4 lbs. (16,5 kg)
ZZPM0057A	168" (4267 mm)	39.4 lbs. (17,9 kg)
ZZPM0067A	180" (4572 mm)	44.4 lbs. (20.2 kg)
ZZPM0079A	205" (5207 mm)	48 lbs. (21,8 kg)
ZZPM0129A	192" (4877 mm)	44 lbs. (20 kg)
ZZPM0136A	96" (2438 mm)	24.1 lbs. (10,8 kg)
ZZPM0138A	108" (2743 mm)	26.5 lbs. (11,9 kg)
ZZPM0267A	217" (5512 mm)	41.5 lbs. (18,9 kg)
ZZPM0269A	229" (5817 mm)	44 lbs. (20 kg)

Installation Instructions

___ **Notes Before You Begin:** Do not over tighten bolts during assembly, only snug tighten them until assembly is complete.

Carefully read and understand these installation instructions before you begin.

___ **Step 1:** Before attempting to assemble your equipment, please review all installation information carefully. Should you experience any difficulty during the installation process, please call us at the phone number shown on the last page of these instructions.

___ **Step 2:** Separate and identify all components and hardware.

___ **Step 3:** Excavate footings as shown in the **Footing Details**.

___ **Step 4:** Set the support post into excavated footings in accordance with placement called out on the footing diagram. The post should be placed on a perforated shipping tube cap or on another porous flat surface to prevent any buildup of moisture in the base of the post. Block the support post at the specified depth.

Note: Heights of the decks and play components are measured from the top of protective surfacing.

Final Details.

___ **Step 5:** Plumb and level the support post. Block and brace for concrete. Pour concrete after all equipment has been assembled. Allow 72 hours for concrete to completely cure.



PM0017A - ALUMINUM SUPPORT POST w/o CAP 120 in. (3048 mm)

PART NO.	DESCRIPTION	QTY.
BAF5011	POST - 5" O.D. x 120" ALUM w/o CAP & w/ LBL AT 36"	1

PM0027A - ALUMINUM SUPPORT POST w/o CAP 132 in. (3353 mm)

PART NO.	DESCRIPTION	QTY.
BAF5013	POST - 5" O.D. x 132" ALUM w/o CAP & w/ LBL AT 36"	1

PM0037A - ALUMINUM SUPPORT POST w/o CAP 144 in. (3658 mm)

PART NO.	DESCRIPTION	QTY.
BAF5015	POST - 5" O.D. x 144" ALUM w/o CAP & w/ LBL AT 36"	1

PM0047A - ALUMINUM SUPPORT POST w/o CAP 156 in. (3962 mm)

PART NO.	DESCRIPTION	QTY.
BAF5017	POST - 5" O.D. x 156" ALUM w/o CAP & w/ LBL AT 36"	1

PM0057A - ALUMINUM SUPPORT POST w/o CAP 168 in. (4267 mm)

PART NO.	DESCRIPTION	QTY.
BAF5019	POST - 5" O.D. x 168" ALUM w/o CAP & w/ LBL AT 36"	1

PM0067A - ALUMINUM SUPPORT POST w/o CAP 180 in. (4572 mm)

PART NO.	DESCRIPTION	QTY.
BAF5021	POST - 5" O.D. x 180" ALUM w/o CAP & w/ LBL AT 36"	1

PM0079A - ALUMINUM SUPPORT POST w/o CAP 205 in. (5207 mm)

PART NO.	DESCRIPTION	QTY.
BAF5023	POST - 5" O.D. x 205" ALUM w/o CAP & w/ LBL AT 36"	1

PM0129A - ALUMINUM SUPPORT POST w/o CAP 192 in. (4877 mm)

PART NO.	DESCRIPTION	QTY.
BAF5063	POST - 5" O.D. x 192" ALUM w/o CAP & w/ LBL AT 36"	1

PM0136A - ALUMINUM SUPPORT POST w/o CAP 96 in. (2438 mm)

PART NO.	DESCRIPTION	QTY.
BAF5007	POST - 5" O.D. x 96" ALUM w/o CAP & w/ LBL AT 36"	1

PM0138A - ALUMINUM SUPPORT POST w/o CAP 108 in. (2743 mm)

PART NO.	DESCRIPTION	QTY.
BAF5009	POST - 5" O.D. x 108" ALUM w/o CAP & w/ LBL AT 36"	1

PM0267A - ALUMINUM SUPPORT POST w/o CAP 217 in. (5512 mm)

PART NO.	DESCRIPTION	QTY.
BAF0425	POST - 5" O.D. x 217" ALUM w/o CAP & w/ LBL AT 36"	1

PM0269A - ALUMINUM SUPPORT POST w/o CAP 229 in. (5817 mm)

PART NO.	DESCRIPTION	QTY.
BAF0427	POST - 5" O.D. x 229" ALUM w/o CAP & w/ LBL AT 36"	1

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Installation Instructions Playmakers® PM0616 and PM0629 Square and Long Coated Perforated Decks



ZZPM0616
Square Deck



ZZPM0629
Long Deck

Assembly View

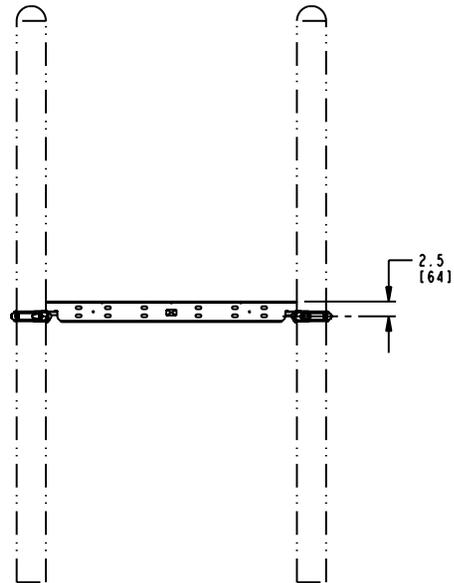
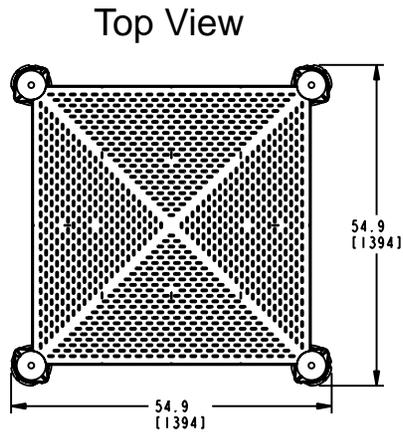
Installation Preparation

Recommended Crew (PM0616):..... Two (2) adults
 Recommended Crew (PM0629):..... Four (4) adults
 Installation Time (PM0616): 1 man-hour
 Installation Time (PM0629): 2 man-hours
 Use Zone:..... Refer to Master Drawing
 User Group Age (years): ASTM/CSA: 2-12, EN: 2-14

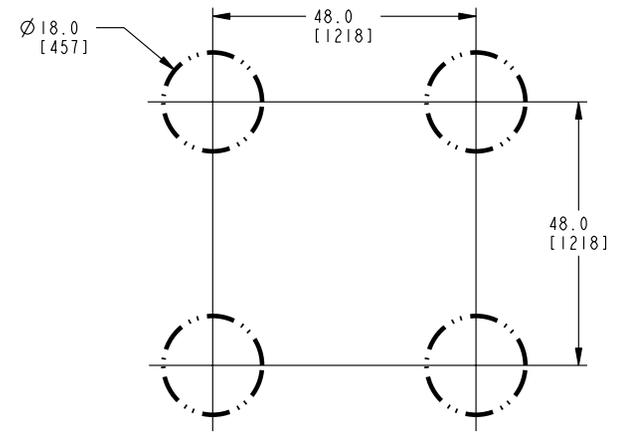
ICON KEY			
	Fully Tighten Hardware		Add 1 Drop of Thread Locking Adhesive
	Do Not Fully Tighten Hardware		Pour Concrete
	Drill		Dig Footing Holes
	Hammer		Critical Fall Height

Installation Instructions

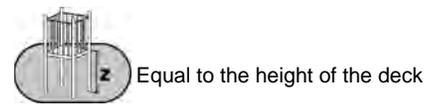
KEY	
Position #	Unit of Measurement
Top #	Inches
Bottom #	[Millimeters]



Elevation View
Model PM0616

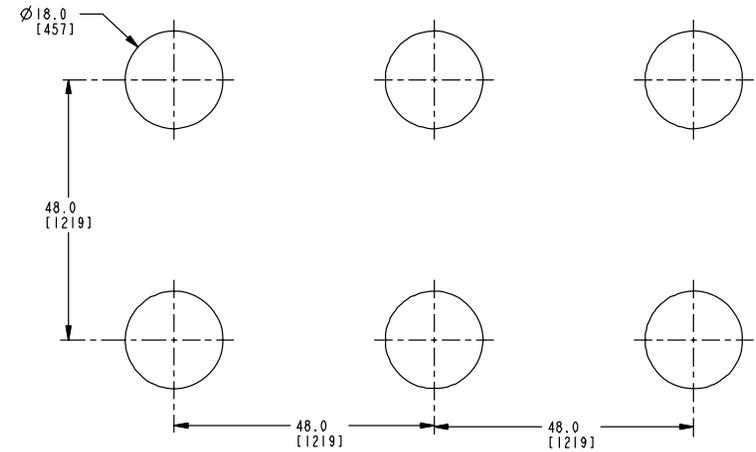
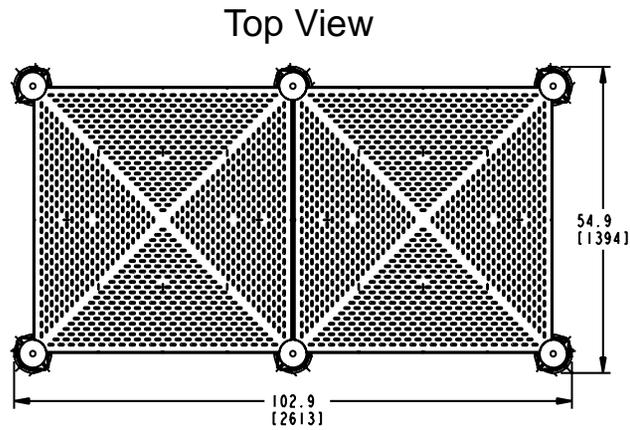


Footing Diagram

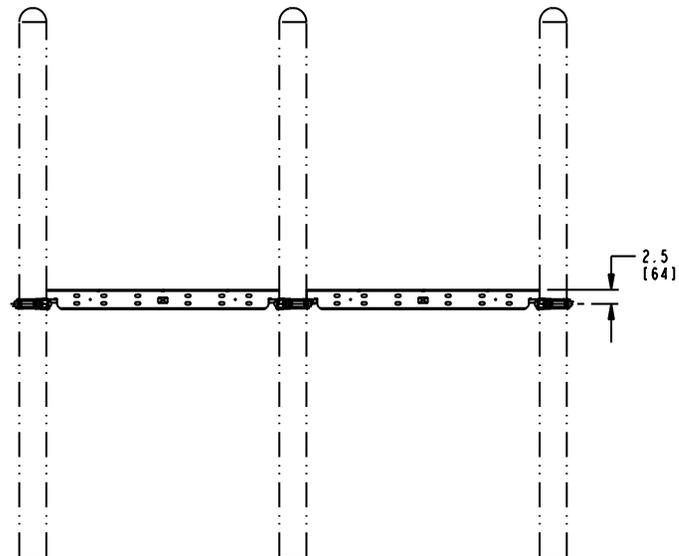


Installation Instructions

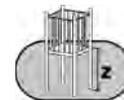
KEY	
Position	Unit of Measurement
Top #	Inches
Bottom #	[Millimeters]



Footing Diagram



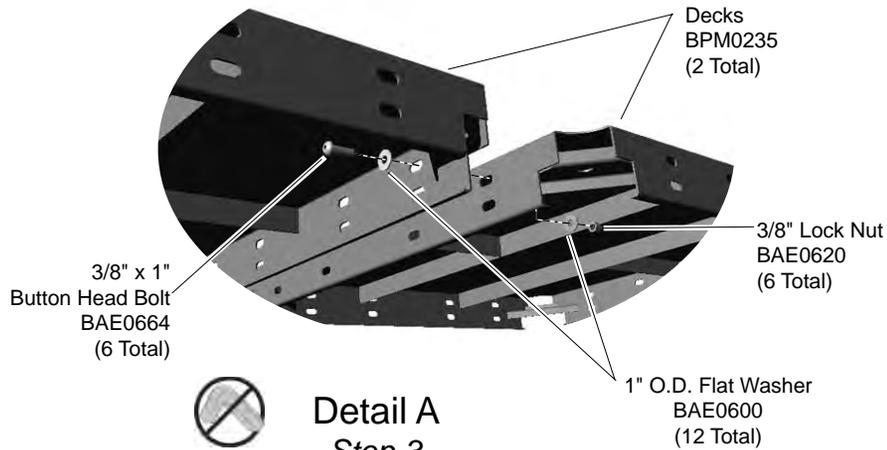
Elevation View
Model PM0629



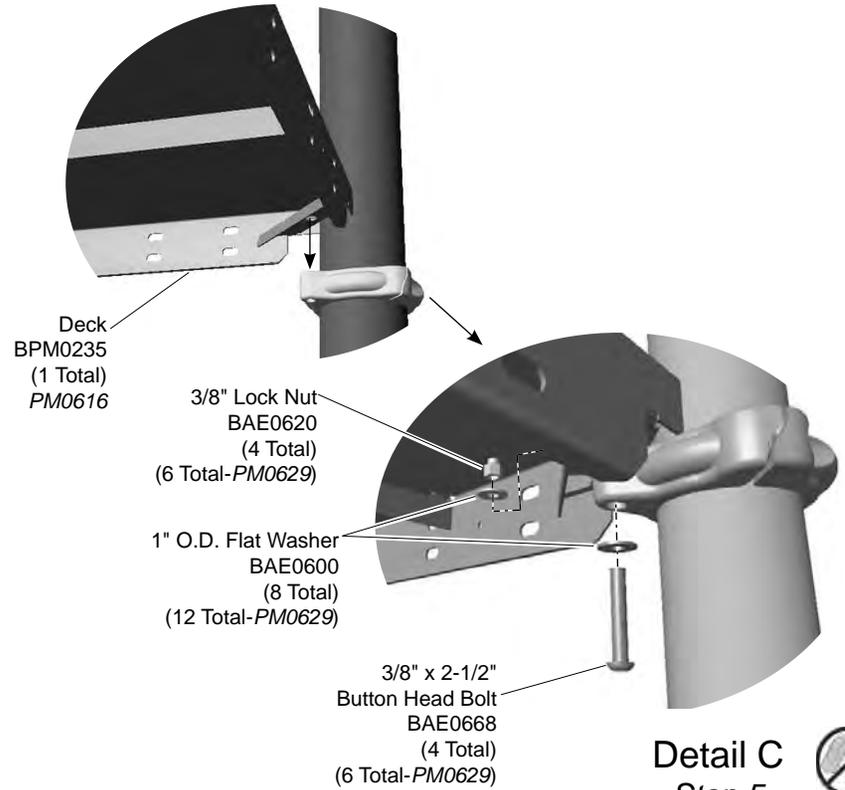
Equal to the height of the deck

Installation Instructions

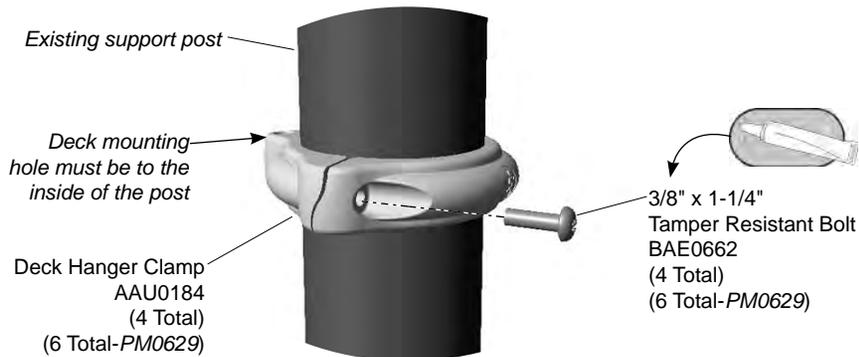
Follow the details in alphabetical order. For clarification, each detail references the step description. The step descriptions start on page 5.



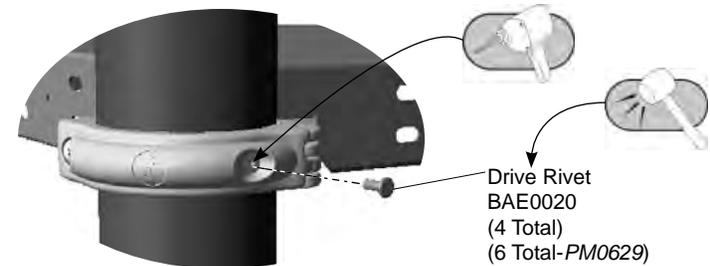
Detail A
Step 3
(Model PM0629 Only)
Attach the two decks together.



Detail C
Step 5
Attach the decks to the clamps.



Detail B
Step 4
Attach the deck clamps to the support posts.



Detail D
Step 7
Secure the clamps to the support posts.

Installation Instructions

Notes Before You Begin: Do not over tighten bolts during assembly, only snug tighten them until assembly is complete.

Carefully read and understand these installation instructions before you begin.

Step 1: Before attempting to assemble your equipment, please review all installation information carefully. Should you experience any difficulty during the installation process, please call us at the phone number shown on the last page of these instructions.

Step 2: Separate and identify all components and hardware. *Reference the master layout drawing at the beginning of the instruction booklet for location and heights of the decks.*

Step 3: *(Model PM0629 Only)* Attach the two decks together. **See Detail A.** Place both decks upside down on a flat surface. Match the long edges, align the holes, and attach as shown.

Step 4: Attach the deck clamps to the support posts. **See Detail B.** Position the clamps on the post at an appropriate height, apply a drop of thread locking adhesive to the bolt threads, and attach as shown. Ensure that all clamps are turned the same way, with deck connection inward.

Step 5: Attach the deck(s) to the clamps. **See Detail C.** Position the deck corners on top of the clamps and attach as shown.

Final Details.

Step 6: Plumb and level the component. Tighten **all** fasteners. Fully tighten all fasteners according to tightening torque specifications.

Torque Specifications:

Bolts and nuts - Snug tighten and then tighten an additional one half turn.

Step 7: Install drive rivets. **See Detail D.** After the equipment assembly is complete, install a drive rivet in each clamp to permanently secure it to the support post. Using a 1/4" drill bit, drill through the clamp and support post. Insert the drive rivet into drilled hole until the head of the rivet is against the surface of the clamp. Using a hammer, drive the pin of the rivet until it is flush with the surface of the rivet head.

Note: This step should be executed after structure has been assembled and properly footed.



PM0616 - SQUARE COATED PERFORATED DECK

PART NO.	DESCRIPTION	QTY.
AAU0184	CLAMP - 5" DECK HANGER DIE CAST	4
BAD0085	THREAD LOCKING ADHESIVE	1
BAE0020	RIVET - 1/4" x 11/16" DRIVE	4
BAE0600	WASHER - 1" O.D. FLAT	8
BAE0620	NUT - 3/8"-16 LOCK w/NYLON CAP	4
BAE0662	BOLT - 3/8"-16 x 1-1/4" TAMP RESIST w/TORX DRIVE	4
BAE0668	BOLT - 3/8"-16 x 2-1/2" BUTTON HEAD - SS	4
BPM0235	PLATFORM - PM SQUARE PERF	1

PM0629 - LONG COATED PERFORATED DECK

PART NO.	DESCRIPTION	QTY.
AAU0184	CLAMP - 5" DECK HANGER DIE CAST	6
BAD0085	THREAD LOCKING ADHESIVE	1
BAE0020	RIVET - 1/4" x 11/16" DRIVE	6
BAE0600	WASHER - 1" O.D. FLAT	24
BAE0620	NUT - 3/8"-16 LOCK w/NYLON CAP	12
BAE0662	BOLT - 3/8"-16 x 1-1/4" TAMP RESIST w/TORX DRIVE	6
BAE0664	BOLT - 3/8"-16 x 1" BUTTON HEAD - SS	6
BAE0668	BOLT - 3/8"-16 x 2-1/2" BUTTON HEAD - SS	6
BPM0235	PLATFORM - PM SQUARE PERF	2

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Assembly View (representative model)

Installation Instructions

Playmakers® Models PM0678, PM0678S, PM0679 and PM0679S

Nuvo™ Transfer Station

48 in. (1219 mm) and 36 in. (914 mm) Decks

In-Ground and Surface Mount

Installation Preparation

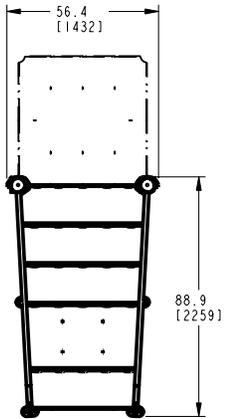
Recommended Crew: Two (2) adults
 Installation Time (In-ground): 3.5 man-hours
 Installation Time (Surface Mount): 1.5 man-hours
 Concrete Required: 0.12 cubic yard (0,08 cubic meters)
 Use Zone: Refer to the master layout drawing
 User Group Age (years): ASTM/CSA: 2-12, EN: 2-14

ICON KEY			
	Fully Tighten Hardware		Add 1 Drop of Thread Locking Adhesive
	Do Not Fully Tighten Hardware		Pour Concrete
	Drill		Dig Footing Holes
	Hammer		Critical Fall Height

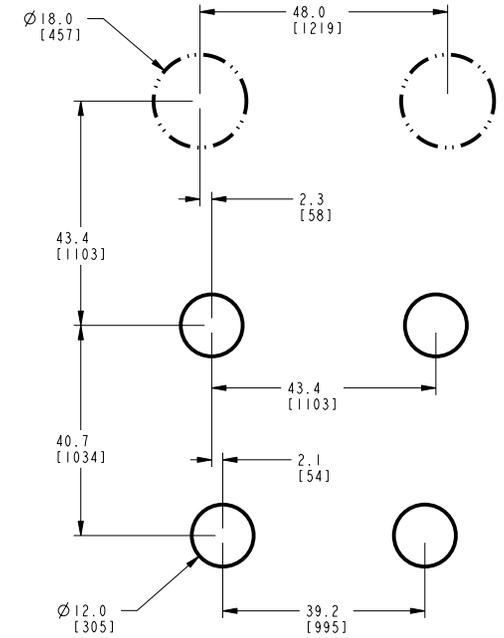
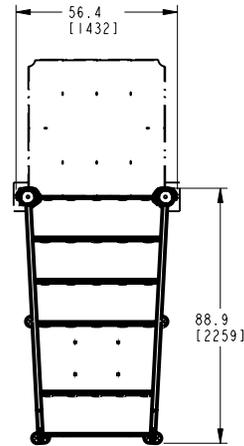
Installation Instructions

KEY	
Position	Unit of Measurement
Top #	Inches
Bottom #	[Millimeters]

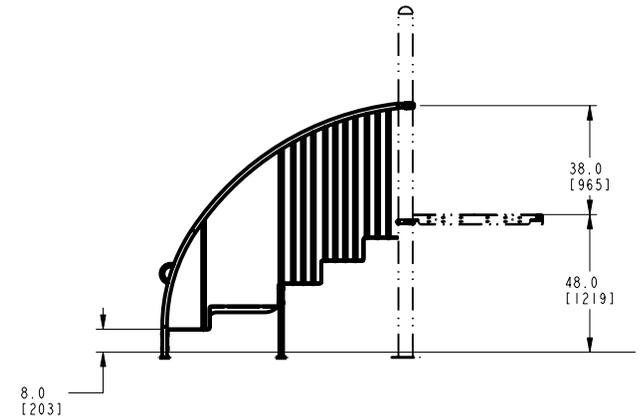
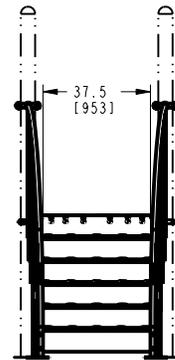
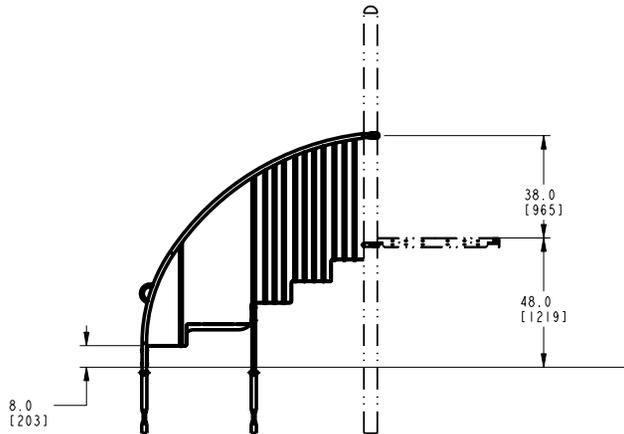
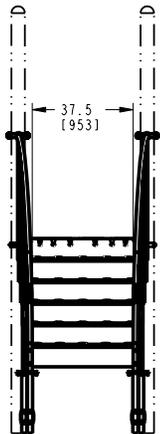
Top View



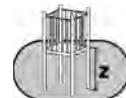
Top View



Footings Diagram
Both Models



Elevation Views
PM0678



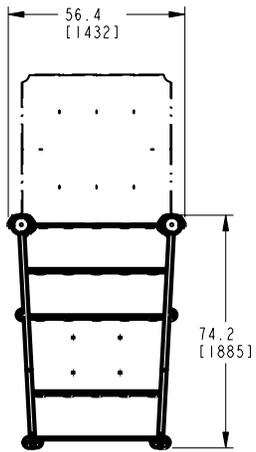
48" (1219 mm)

Elevation Views
PM0678S



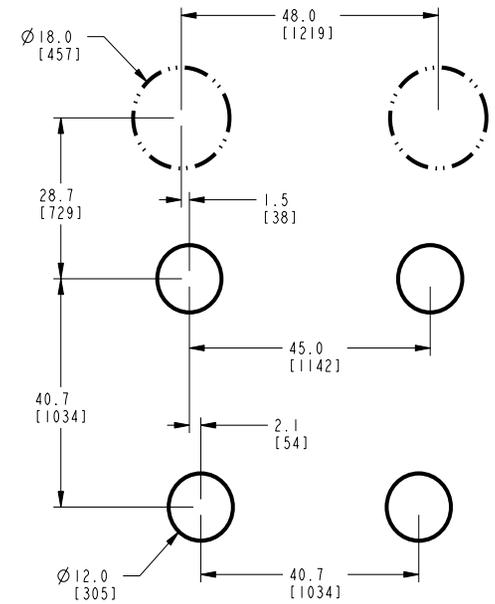
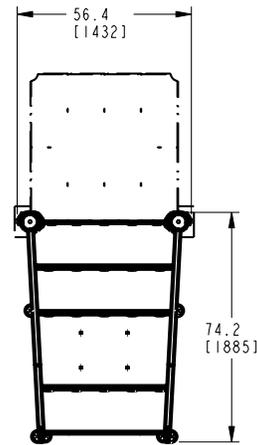
Installation Instructions

Top View

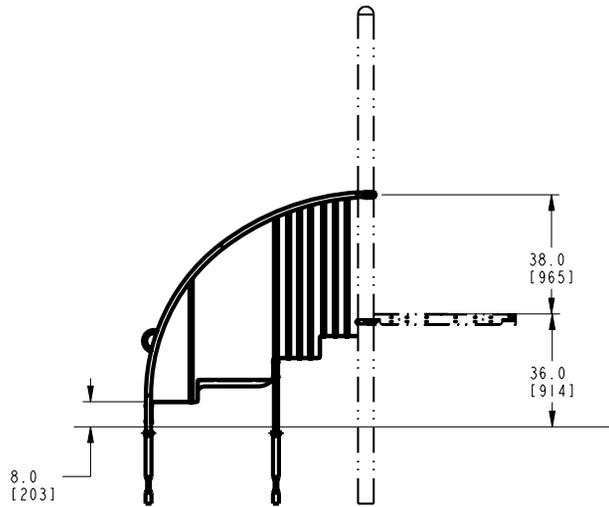
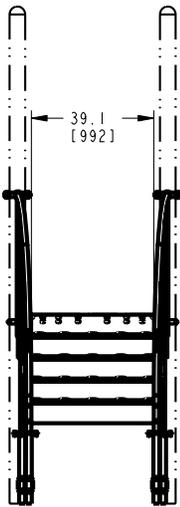


KEY	
Position	Unit of Measurement
Top #	Inches
Bottom #	[Millimeters]

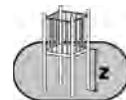
Top View



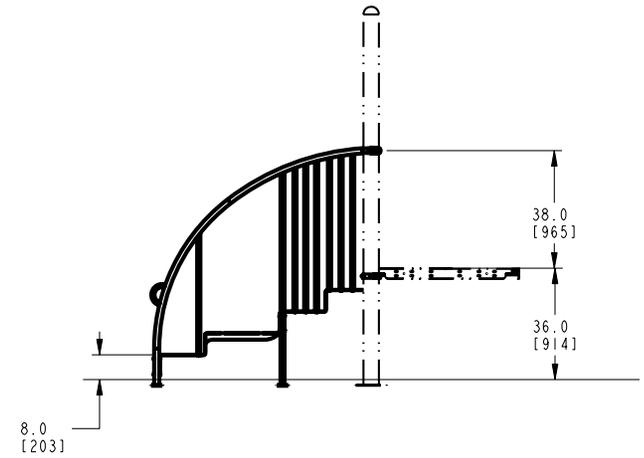
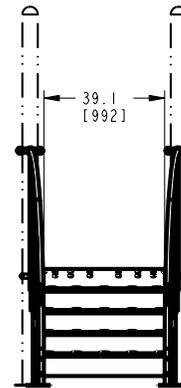
Footings Diagram
Both Models



Elevation Views
PM0679



36" (914 mm)

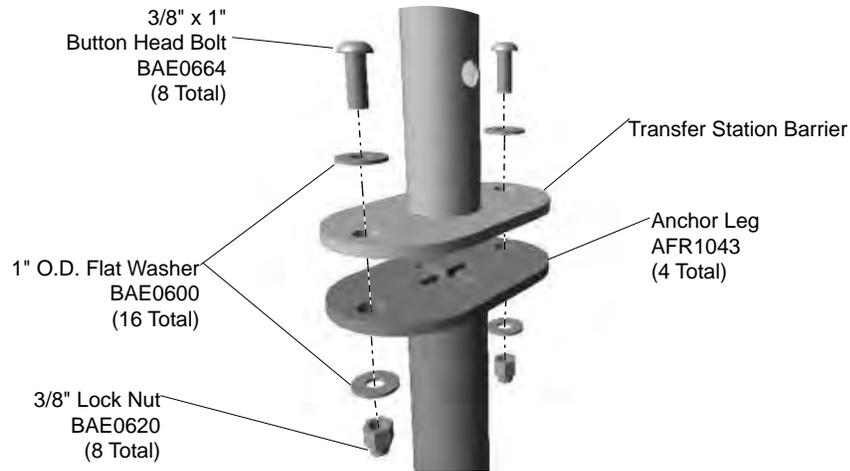


Elevation Views
PM0679S

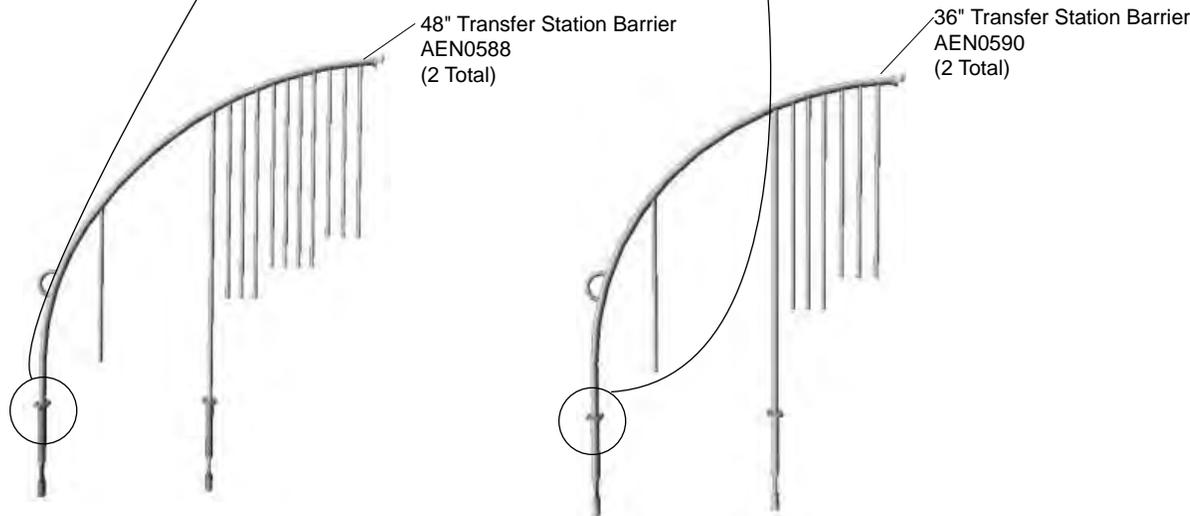


Installation Instructions

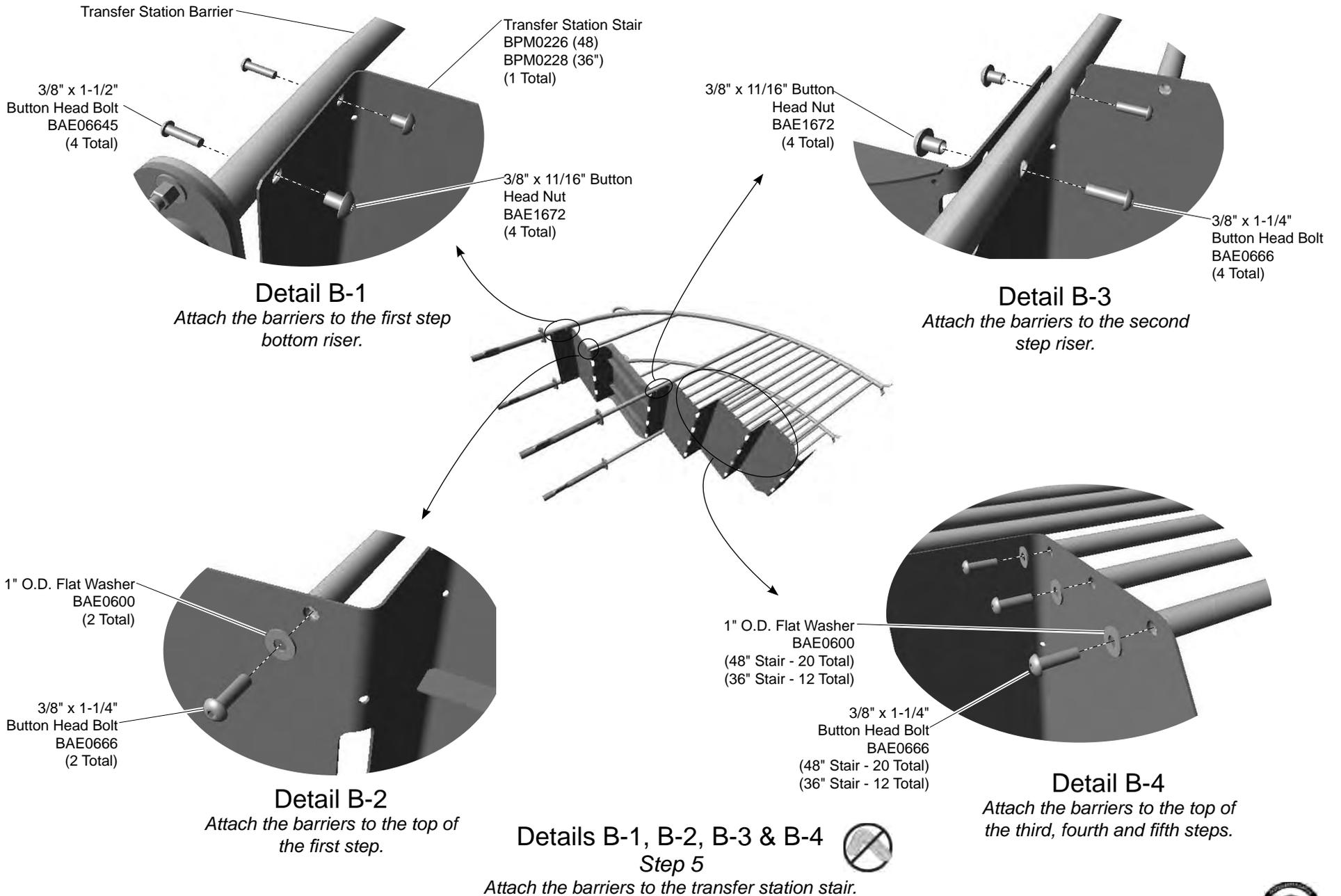
Follow the details in alphabetical order. For clarification, each detail references the step description. The step descriptions start on page 7.



Detail A
Step 4
(In-Ground Models Only)
Attach the anchor legs to the barriers.



Installation Instructions



Installation Instructions

3/8" Lock Nut
BAE0620
(4 Total)

3/8" x 1"
Button Head Bolt
BAE0664
(4 Total)

1" O.D. Flat Washer
BAE0600
(8 Total)

Detail C 
Step 6
Attach the stair assembly to the deck.

Make the connections to the outside hole on each side and the middle two holes.

Narrow Band Clamp
AAU0026
(2 Total)

3/8" Flat Washer
BAE0595
(4 Total)

3/8" x 1-1/4"
Tamper Resistant Bolt
BAE0662
(4 Total)

Detail D 
Step 7
Attach the barrier to the support posts.

Drive Rivet
BAE0020
(2 Total)

Detail E
Step 9
Secure the clamps to the support posts.

Installation Instructions

Notes Before You Begin: Do not over tighten bolts during assembly, only snug tighten them until assembly is complete.

Carefully read and understand these installation instructions before you begin.

Step 1: Before attempting to assemble your equipment, please review all installation information carefully. Should you experience any difficulty during the installation process, please call us at the phone number shown on the last page of these instructions.

Step 2: Separate and identify all components and hardware.

Step 3: Excavate, or prepare, the footings as shown in the **Component Footing Details (In-Ground Models) and Surface Mount Footing Detail** shown in the *Guidelines* at the beginning of this instruction booklet.

Step 4: (*In-Ground Models only*) Attach the anchor legs to the barriers. See **Detail A**. Position an anchor leg against the bottom of each barrier leg and attach as shown. Fully tighten all fasteners according to tightening torque specifications.

Torque Specifications:

Bolts and nuts - Snug tighten and then tighten an additional one half turn.

Step 5: Attach the barriers to the transfer station stair. See **Details B-1, B-2, B-3 and B-4**. Lay the transfer station stair on its side and attach the first barrier. Starting at the bottom of the stair, attach the barrier to the first step bottom riser. Then attach the barrier to the top of the first step. Attach the barrier to the second step riser as shown. And finally, attach the barrier to the top of the third, fourth and fifth steps. Turn the stair over and attach the second barrier in the same manner.

Step 6: Attach the stair assembly to the deck. See **Detail C**. With adequate manpower, place the stair assembly in, or on, its footing and against the deck. The step riser must be flush against and level with the deck. Align the holes and attach as shown. Make the connections to the outside hole on each side and the middle two holes.

Step 7: Attach the barrier to the support posts. See **Detail D**. Place each band clamp around a post and against a barrier, apply a drop of thread locking adhesive to the bolt threads, and attach as shown.

Final Details.

Step 8: Plumb and level the component. Tighten **all** fasteners. Fully tighten all fasteners according to tightening torque specifications.

Torque Specifications:

Bolts and nuts - Snug tighten and then tighten an additional one half turn.

Block and brace for concrete. Pour concrete after all equipment has been assembled. Allow 72 hours for concrete to completely cure.

Bolt down all surface mount supports in accordance with specifications provided by your registered structural engineer.

Important Note: Surface mount hardware is not supplied. Customer is responsible for concrete base and for providing surface mount hardware as specified by a registered structural engineer for each specific project application.

Step 9: Install drive rivets. See **Detail E**. After the equipment assembly is complete, install a drive rivet in each clamp to permanently secure it to the support post. Using a 1/4" drill bit, drill through the clamp and support post. Insert the drive rivet into drilled hole until the head of the rivet is against the surface of the clamp. Using a hammer, drive the pin of the rivet until it is flush with the surface of the rivet head.

Note: This step should be executed after structure has been assembled and properly footed.



PM0678 - NUVO™ TRANSFER STATION 48 in. (1219 mm) DECKS

PART NO.	DESCRIPTION	QTY.
AAU0026	CLAMP - 5" NARROW ALUMINUM BAND	2
AEN0588	BARRIER - 48" NUVO TRANSFER STATION (PM)	2
AFR1043	FRAME - PLAY SIMPLE LEG (ROUND)	4
BAD0085	THREAD LOCKING ADHESIVE	1
BAE0020	RIVET - 1/4" x 11/16" DRIVE	2
BAE0595	WASHER - 3/8" SAE FLAT	4
BAE0600	WASHER - 1" O.D. FLAT	46
BAE0620	NUT - 3/8"-16 LOCK w/NYLON CAP	12
BAE0662	BOLT - 3/8"-16 x 1-1/4" TAMP RESIST w/TORX DRIVE	4
BAE0664	BOLT - 3/8"-16 x 1" BUTTON HEAD - SS	12
BAE06645	BOLT - 3/8"-16 x 1-1/2" BUTTON HEAD - SS	4
BAE0666	BOLT - 3/8"-16 x 1-1/4" BUTTON HEAD - SS	26
BAE1672	NUT - 3/8"-16 x 11/16" BUTTON HEAD	8
BPM0226	FAB METAL - 83.35" x 48.67" x 47.61"	1

PM0678S - NUVO™ TRANSFER STATION 48 in. (1219 mm) DECKS SM

PART NO.	DESCRIPTION	QTY.
AAU0026	CLAMP - 5" NARROW ALUMINUM BAND	2
AEN0588	BARRIER - 48" NUVO TRANSFER STATION (PM)	2
BAD0085	THREAD LOCKING ADHESIVE	1
BAE0020	RIVET - 1/4" x 11/16" DRIVE	2
BAE0595	WASHER - 3/8" SAE FLAT	4
BAE0600	WASHER - 1" O.D. FLAT	30
BAE0620	NUT - 3/8"-16 LOCK w/NYLON CAP	4
BAE0662	BOLT - 3/8"-16 x 1-1/4" TAMP RESIST w/TORX DRIVE	4
BAE0664	BOLT - 3/8"-16 x 1" BUTTON HEAD - SS	4
BAE06645	BOLT - 3/8"-16 x 1-1/2" BUTTON HEAD - SS	4
BAE0666	BOLT - 3/8"-16 x 1-1/4" BUTTON HEAD - SS	26
BAE1672	NUT - 3/8"-16 x 11/16" BUTTON HEAD	8
BPM0226	FAB METAL - 83.35" x 48.67" x 47.61"	1

PM0679 - NUVO™ TRANSFER STATION 36 in. (914 mm) DECKS

PART NO.	DESCRIPTION	QTY.
AAU0026	CLAMP - 5" NARROW ALUMINUM BAND	2
AEN0590	BARRIER - 36" NUVO TRANSFER STATION (PM)	2
AFR1043	FRAME - PLAY SIMPLE LEG (ROUND)	4
BAD0085	THREAD LOCKING ADHESIVE	1
BAE0020	RIVET - 1/4" x 11/16" DRIVE	2
BAE0595	WASHER - 3/8" SAE FLAT	4
BAE0600	WASHER - 1" O.D. FLAT	38
BAE0620	NUT - 3/8"-16 LOCK w/NYLON CAP	12
BAE0662	BOLT - 3/8"-16 x 1-1/4" TAMP RESIST w/TORX DRIVE	4
BAE0664	BOLT - 3/8"-16 x 1" BUTTON HEAD - SS	12
BAE06645	BOLT - 3/8"-16 x 1-1/2" BUTTON HEAD - SS	4
BAE0666	BOLT - 3/8"-16 x 1-1/4" BUTTON HEAD - SS	18
BAE1672	NUT - 3/8"-16 x 11/16" BUTTON HEAD	8
BPM0228	FAB METAL - 68.61" x 48.67" X 34.61"	1

PM0679S - NUVO™ TRANSFER STATION 36 in. (914 mm) DECKS SM

PART NO.	DESCRIPTION	QTY.
AAU0026	CLAMP - 5" NARROW ALUMINUM BAND	2
AEN0590	BARRIER - 36" NUVO TRANSFER STATION (PM)	2
BAD0085	THREAD LOCKING ADHESIVE	1
BAE0020	RIVET - 1/4" x 11/16" DRIVE	2
BAE0595	WASHER - 3/8" SAE FLAT	4
BAE0600	WASHER - 1" O.D. FLAT	22
BAE0620	NUT - 3/8"-16 LOCK w/NYLON CAP	4
BAE0662	BOLT - 3/8"-16 x 1-1/4" TAMP RESIST w/TORX DRIVE	4
BAE0664	BOLT - 3/8"-16 x 1" BUTTON HEAD - SS	4
BAE06645	BOLT - 3/8"-16 x 1-1/2" BUTTON HEAD - SS	4
BAE0666	BOLT - 3/8"-16 x 1-1/4" BUTTON HEAD - SS	18
BAE1672	NUT - 3/8"-16 x 11/16" BUTTON HEAD	8
BPM0228	FAB METAL - 68.61" x 48.67" X 34.61"	1

PLAYWORLD™

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Assembly View (representative model)

Model	Deck Height	Weight
PM3128	24-30" (610-762 mm)	111 lbs. (50,5 kg)
PM3127	36" (915 mm)	110 lbs. (50 kg)
PM3126	48" (1220 mm)	131.4 lbs. (59,7 kg)
PM2658	60" (1525 mm)	145.7 lbs. (66,2 kg)
PM2696	72" (1830 mm)	161.9 lbs. (73,6 kg)

Installation Instructions

Playmakers®

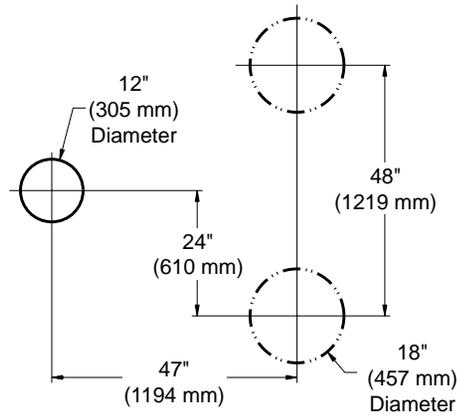
Models PM2658, PM2696, PM3126-PM3128
24"-72" (610-1829 mm) Glide Slides

Installation Preparation

Recommended Crew: Two (2) adults
 Installation Time: 1.5 man-hours
 Weight: refer to the table at left
 Concrete Required: 0.03 cubic yard (0,02 cubic meters)
 Use Zone: Refer to Master Drawing
 User Group Age (years): 24"-60": ASTM/CSA: 2-12, EN: 2-14
 72": ASTM/CSA: 5-12, EN: 6-14

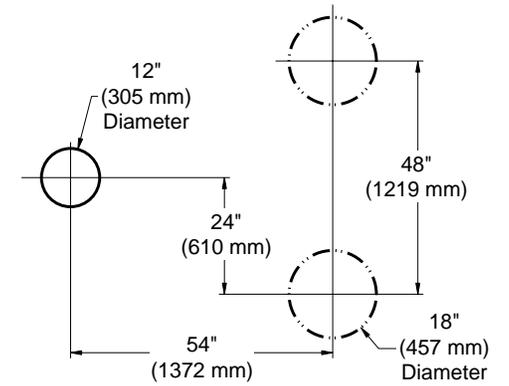
ICON KEY	
	Fully Tighten Hardware
	Do Not Fully Tighten Hardware
	Add 1 Drop of Thread Locking Adhesive
	Pour Concrete
	Drill
	Dig Footing Holes
	Hammer
	Critical Fall Height

Installation Instructions

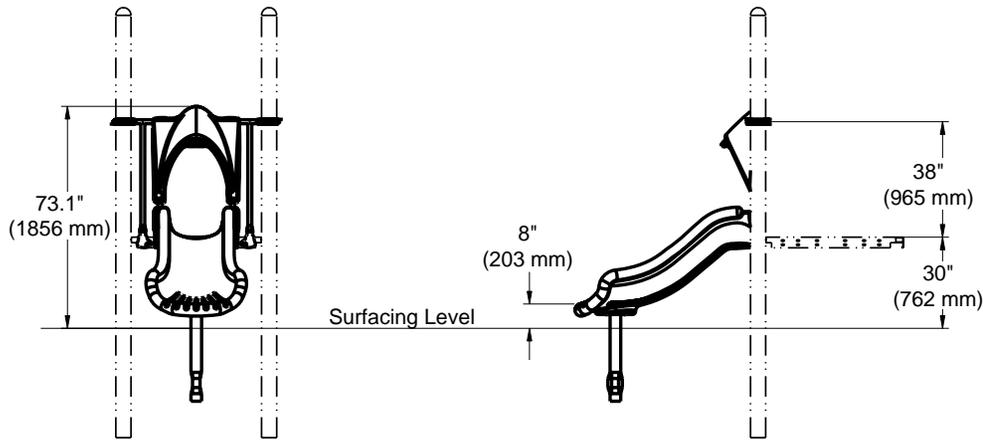
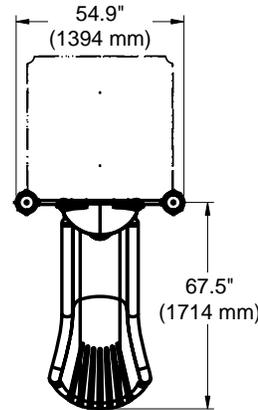
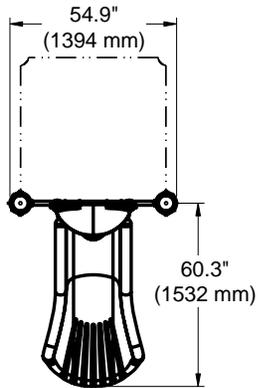


Footing Diagram

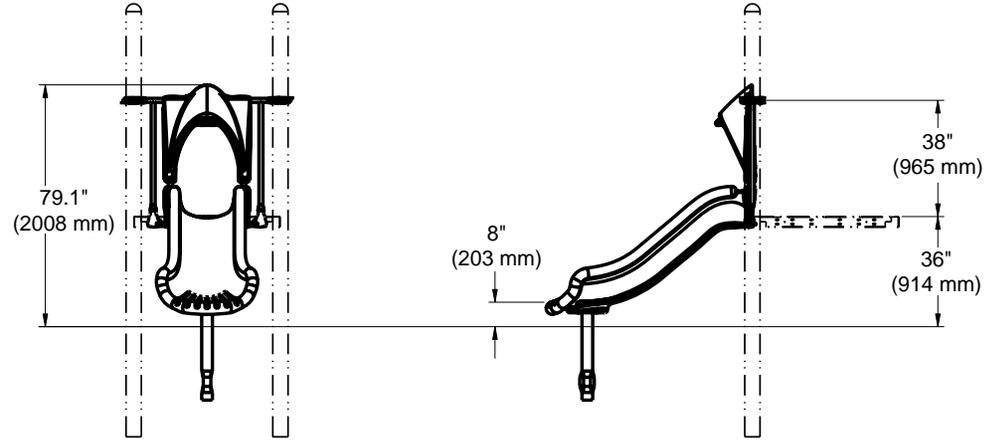
If the slide will be connected to a 24" (610 mm) deck, the exit post will need to be footed 6" (152 mm) deeper.



Footing Diagram

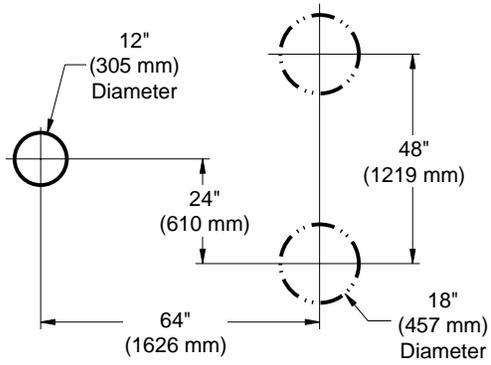


Elevation View PM3128 - 30" Glide Slide
(24" slide: exit will be 2" (50mm) above the surfacing level)

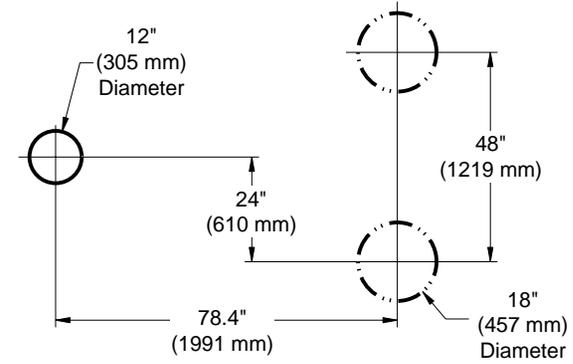


Elevation View PM3127 - 36" Glide Slide

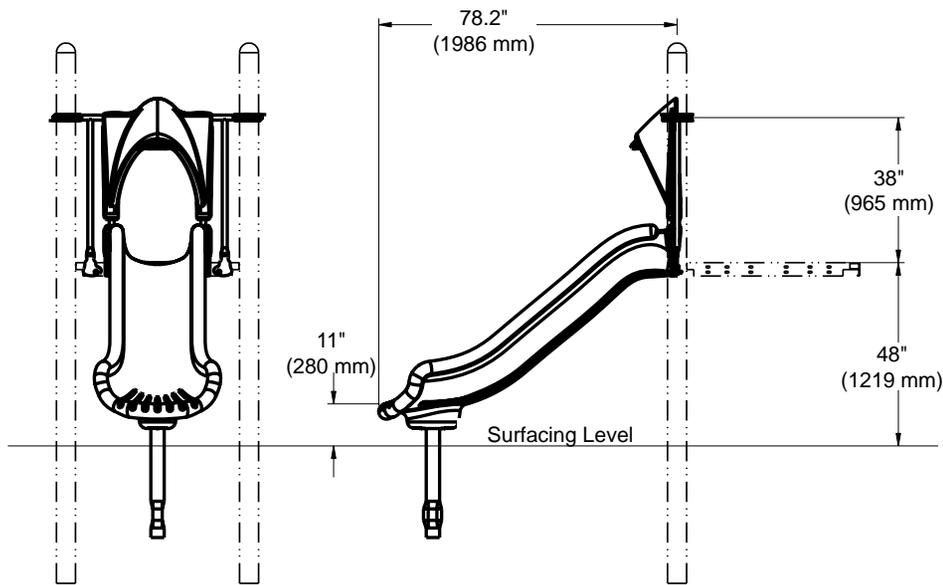
Installation Instructions



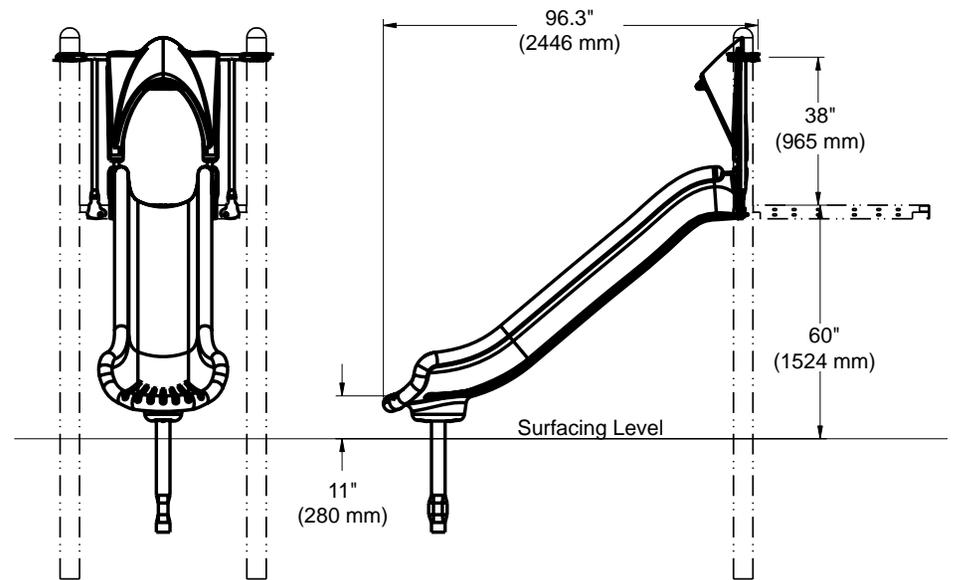
Footring Diagram



Footring Diagram

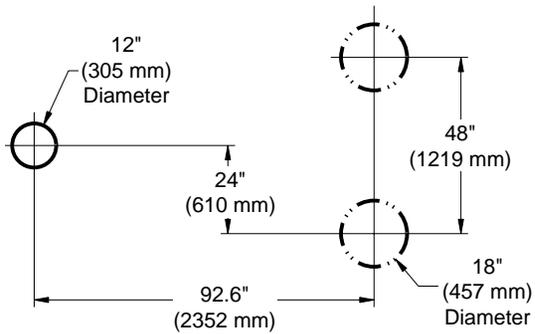


Elevation View PM3126 - 48" Glide Slide

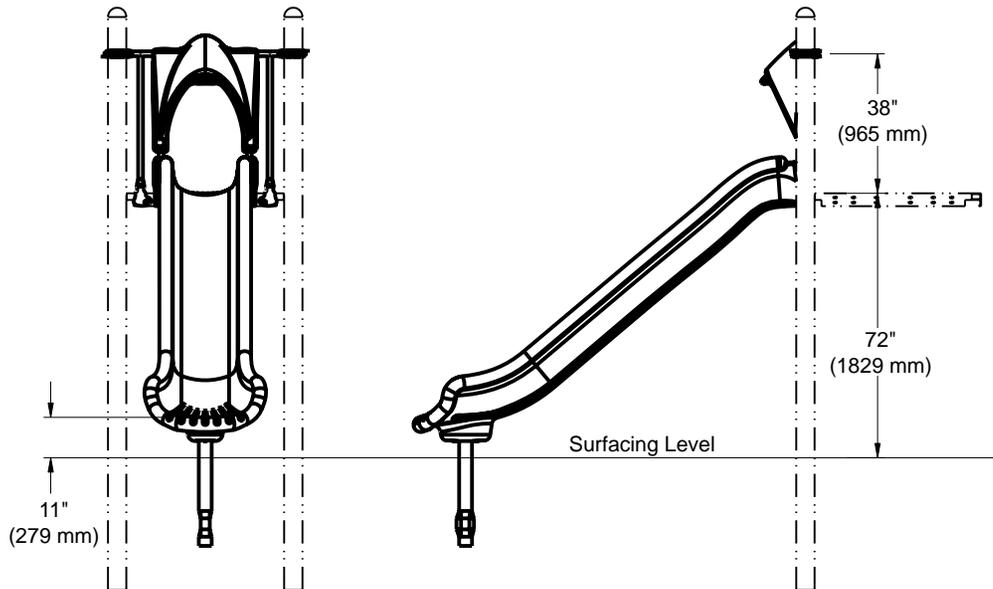
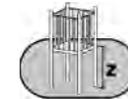


Elevation View PM2658 - 60" Glide Slide

Installation Instructions



Footings Diagram

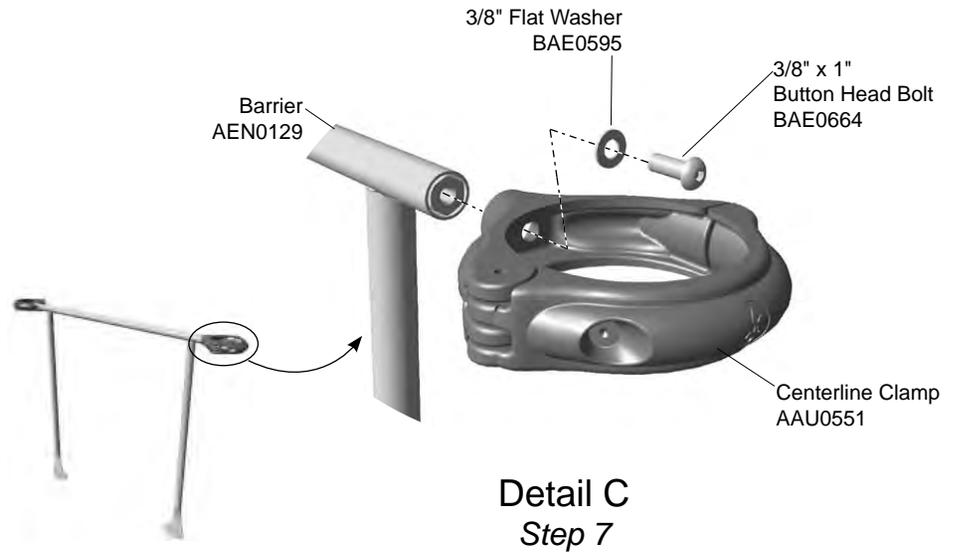
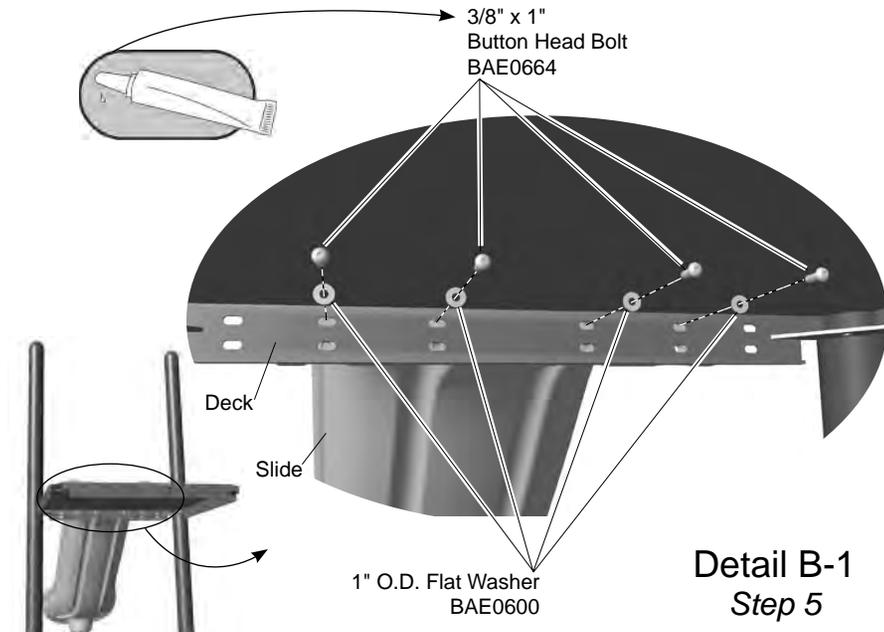
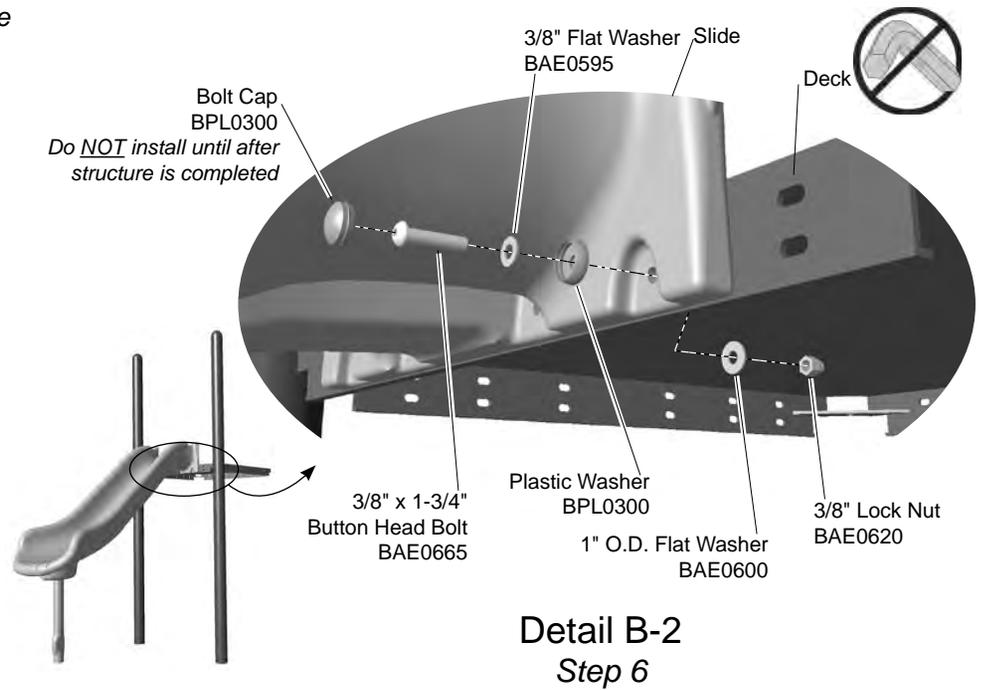
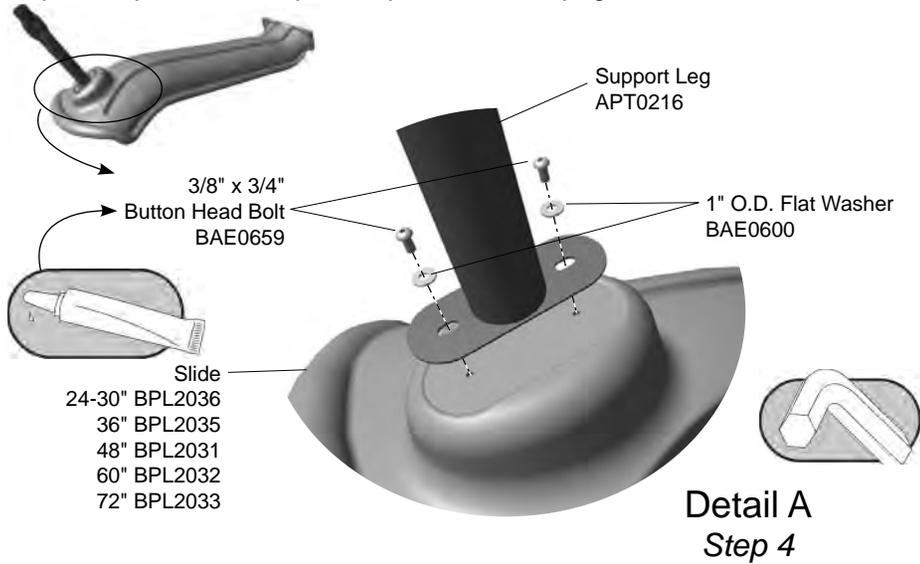


(A) Deck Height	Critical Fall Height (EN)
24-30" (610-762 mm)	610-760 mm
36" (914 mm)	915 mm
48" (1219 mm)	1220 mm
60" (1524 mm)	1525 mm
72" (1829 mm)	1830 mm

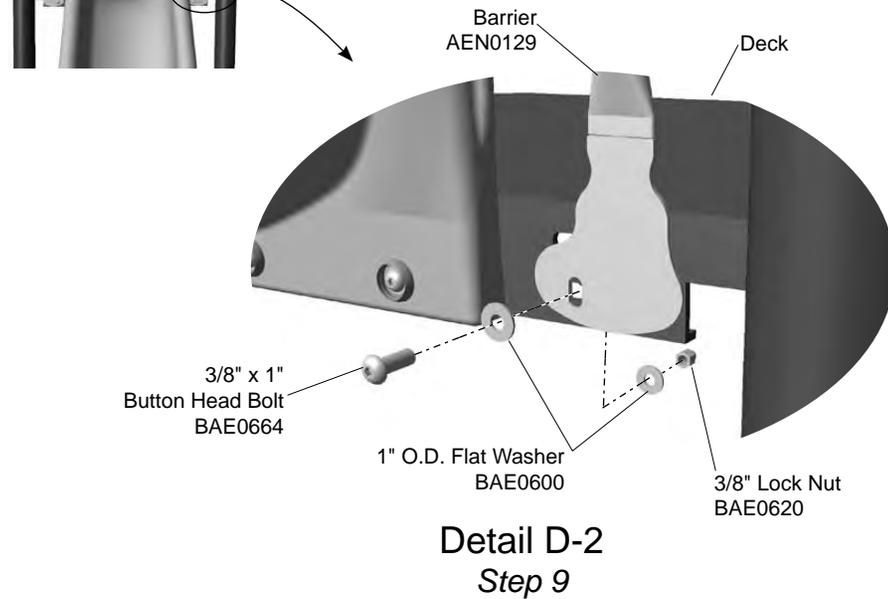
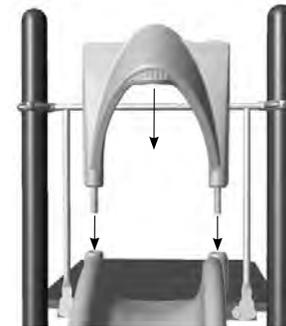
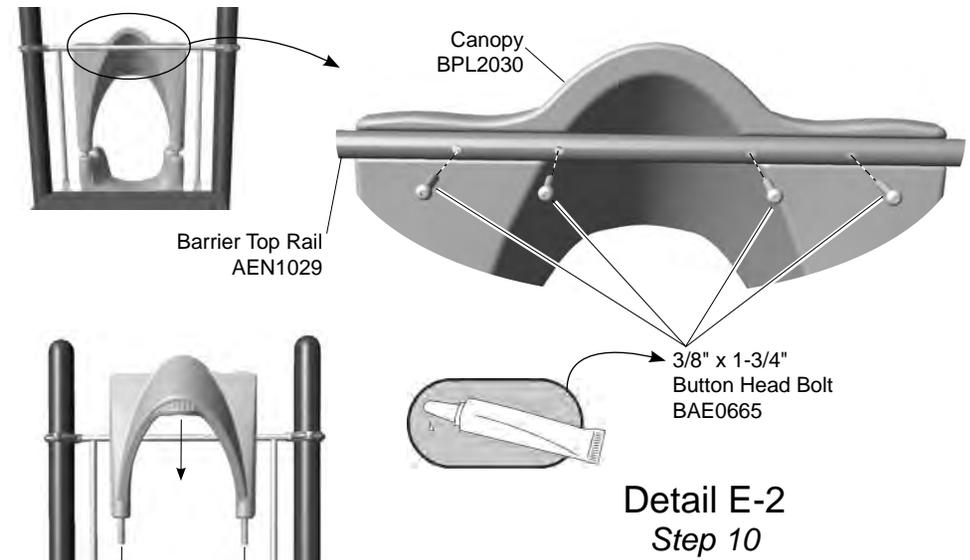
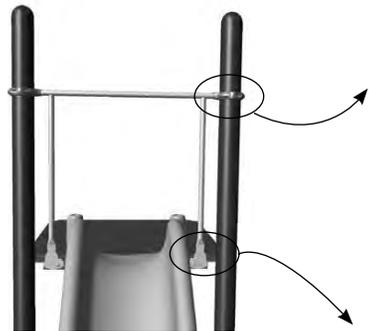
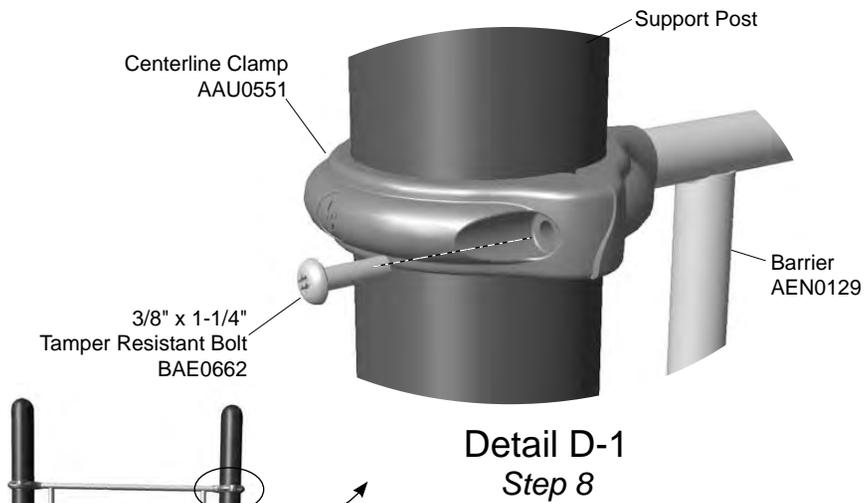
Elevation View PM2696 - 72" Glide Slide

Installation Instructions

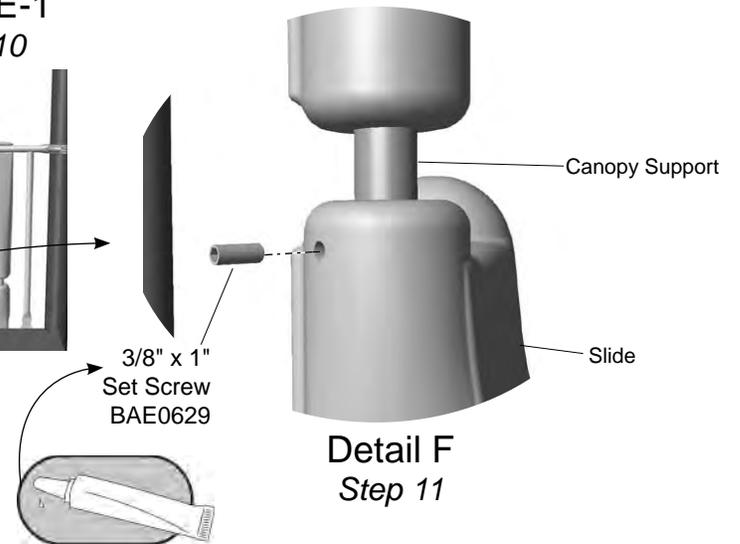
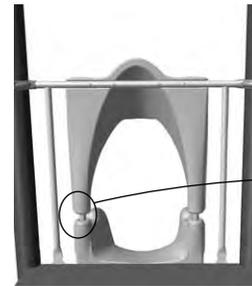
Follow the details in alphabetical order. For clarification, each detail references the step description. The step descriptions start on page 8.



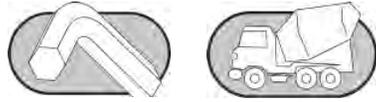
Installation Instructions



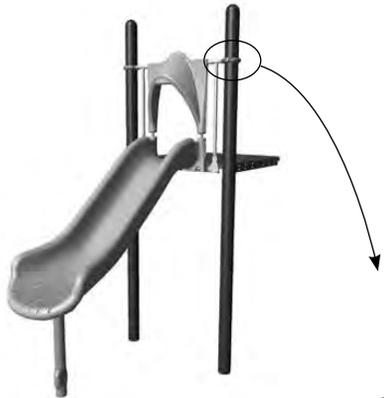
Detail E-1
Step 10



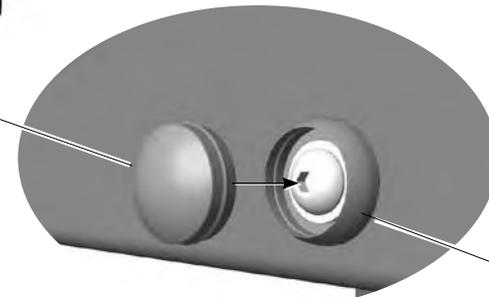
Installation Instructions



Step 12

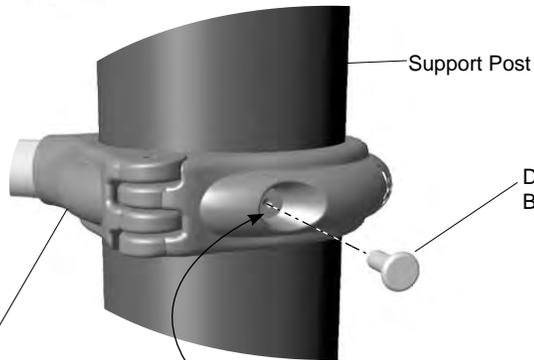


Bolt Cap
BPL0300



Plastic Washer
BPL0300

Detail H
Step 14
(refer to Detail B-2 also)



Support Post

Centerline Clamp
AAU0551

Drive Rivet
BAE0020

Detail G
Step 13



Installation Instructions

__Notes Before You Begin: Do not over tighten bolts during assembly, only snug tighten them until assembly is complete. Do not install bolt caps until the structure is completely assembled and properly footed.

Carefully read and understand these installation instructions before you begin.

__Step 1: Before attempting to assemble your equipment, please review all installation information carefully. Should you experience any difficulty during the installation process, please call us at the phone number shown on the last page of these instructions.

__Step 2: Separate and identify all components and hardware.

__Step 3: Lay out the footings as shown on the structure master footing diagram. Excavate the holes as shown in the **Component Footing Details** in the *Guidelines* at the beginning of this booklet.

Attach the exit support post to the slide.

__Step 4: Attach the exit support post to slide. See **Detail A**. Select the slide, the exit support post and the appropriate hardware. Place the exit support post into the indentation under the slide. Using a drop of loctite on the bolt threads, attach as shown. Fully tighten the connections.

Attach the slide to the deck.

__Step 5: Attach the slide to the deck. See **Detail B-1**. Select the slide and the appropriate hardware. Position the slide against the deck and align holes in the slide with those in the deck. Use an alignment tool through the lower outside holes to hold it in place. Make the *upper* attachments from underneath the deck and using loctite on the bolts. Attach as shown. *The middle of the slide bedway should be flush to, and level with the deck.* Leave connections loose for alignment adjustments.

__Step 6: Make the *lower* attachments to the slide and deck. See **Detail B-2**. Select the appropriate hardware. Make the lower attachments as shown. Leave the connections loose. Do not attach bolt caps until the structure is completely assembled and properly footed.

__Step 7: Connect the clamps to the barrier top rail. See **Detail C**. Select (2) two centerline clamps, the barrier and the appropriate hardware. Place a clamp against each end of the top rail and attach as shown. Turn the clamps so that the hinges are on the same side and fully tighten the connections.

__Step 8: Attach the barrier to the posts. See **Detail D-1**. Select the barrier and appropriate hardware. Position the barrier between the posts and close the clamps around the posts. Thread a bolt into each clamp as shown. Leave the connections loose.

__Step 9: Attach the bottom of the barrier to the deck. See **Detail D-2**. Select the appropriate hardware. Attach as shown using either set of holes in the deck. The lower holes are the preferred location, but use whichever suits the location of the adjacent clamps.

Secure the canopy to the slide.

__Step 10: Position and attach the canopy. See **Details E-1 and E-2**. Select the slide canopy and the appropriate hardware. Place the canopy above the slide and slide the canopy supports into the sockets in the slide until fully seated. The top rail should fit into the indentation in the back of the canopy. Using loctite on the bolts, attach the barrier to the canopy as shown. If there is a clamp conflict the barrier can be moved up to 40" (1016 mm).

__Step 11: Secure the lower canopy supports to the slide. See **Detail F**. Select (2) two 3/8" x 1" set screws. Apply a drop of loctite to the screw threads and thread each screw into the slide until the screw is tight against the canopy supports.

Note: It may be necessary to use a 3/8" -16 tap to clean excess plastic to allow the screw to contact the canopy support.

Final Details.

__Step 12: Plumb and level the entire slide. Tighten **all** fasteners keeping all the joints flush and even. Fully tighten all fasteners according to tightening torque specifications. Block and brace for concrete. Pour concrete after all equipment has been assembled. Allow 72 hours for concrete to completely cure. Adjust the exit height of the slide so it will not hold water. See **Elevation View**.

24" - 48" Slides: The slide height can be adjusted to avoid retaining water but can be no greater than 11 in. (279 mm) from the protective surfacing.

60" - 72" Slides: The slide height can be adjusted to avoid retaining water but can be no less than 7 in. (178 mm) and no greater than 15 in. (381 mm) from the protective surfacing.

Torque specifications :

Nuts and Bolts: Snug tighten and tighten an additional one-half turn.

Set Screws: Snug tighten and tighten an additional turn.

Installation Instructions

__ **Step 13:** Install drive rivets. See **Detail G**. After the equipment assembly is complete, install a drive rivet in each clamp to permanently secure it to the support post. Using a 1/4" drill bit, drill through the clamp and support post. Insert the drive rivet into drilled hole until the head of the rivet is against the surface of the clamp. Using a hammer, pound the pin of the rivet until it is flush with the surface of the rivet head.

Note: This step should be executed after structure has been assembled and properly footed.

__ **Step 14:** Select the plastic bolt caps and press into the plastic washers. See **Details B-2 and H**. The bolt caps install more easily when they are warm.

__ **Step 15:** Apply the hood string entanglement warning label to the equipment at eye level.

PM2658 - 60 in. (1524 mm) GLIDE SLIDE

PART NO.	DESCRIPTION	QTY.
AAU0551	CLAMP - 5" CENTERLINE DIE CAST	2
AEN0129	BARRIER - 1.315" O.D. x 41.00" x 42.10"	1
APT0216	POST - 3-1/2" O.D. x 28-3/4" EXIT SUPPORT	1
BAD0085	THREAD LOCKING ADHESIVE	1
BAE0020	RIVET - 1/4" x 11/16" DRIVE	2
BAE0595	WASHER - 3/8" SAE FLAT	6
BAE0600	WASHER - 1" O.D. FLAT	14
BAE0620	NUT - 3/8"-16 LOCK w/NYLON CAP	6
BAE0629	SCREW - 3/8"-16 x 1" SOCKET SET SS	2
BAE0659	BOLT - 3/8"-16 x 3/4" BUTTON HEAD - SS	2
BAE0662	BOLT - 3/8"-16 x 1-1/4" TMPR RESIST w/TORX DRIVE	2
BAE0664	BOLT - 3/8"-16 x 1" BUTTON HEAD - SS	8
BAE0665	BOLT - 3/8"-16 x 1-3/4" BUTTON HEAD - SS	8
BPL0300	CAP - 3/8" BOLT	4
BPL2030	CANOPY - SINGLE GLIDE SLIDE	1
BPL2032	SLIDE - 60" SINGLE GLIDE	1
ALB0030	LABEL-HOOD STRING ENTNGLMNT WRNG LABEL	1

PM2696 - 72 in. (1829 mm) GLIDE SLIDE

PART NO.	DESCRIPTION	QTY.
AAU0551	CLAMP - 5" CENTERLINE DIE CAST	2
AEN0129	BARRIER - 1.315" O.D. x 41.00" x 42.10"	1
APT0216	POST - 3-1/2" O.D. x 28-3/4" EXIT SUPPORT	1
BAD0085	THREAD LOCKING ADHESIVE	1
BAE0020	RIVET - 1/4" x 11/16" DRIVE	2
BAE0595	WASHER - 3/8" SAE FLAT	6
BAE0600	WASHER - 1" O.D. FLAT	14
BAE0620	NUT - 3/8"-16 LOCK w/NYLON CAP	6
BAE0629	SCREW - 3/8"-16 x 1" SOCKET SET SS	2
BAE0659	BOLT - 3/8"-16 x 3/4" BUTTON HEAD - SS	2
BAE0662	BOLT - 3/8"-16 x 1-1/4" TMPR RESIST w/TORX DRIVE	2
BAE0664	BOLT - 3/8"-16 x 1" BUTTON HEAD - SS	8
BAE0665	BOLT - 3/8"-16 x 1-3/4" BUTTON HEAD - SS	8
BPL0300	CAP - 3/8" BOLT	4
BPL2030	CANOPY - SINGLE GLIDE SLIDE	1
BPL2033	SLIDE - 72" SINGLE GLIDE	1
ALB0030	LABEL-HOOD STRING ENTNGLMNT WRNG LABEL	1

PM3126 - 48 in. (1219 mm) GLIDE SLIDE

PART NO.	DESCRIPTION	QTY.
AAU0551	CLAMP - 5" CENTERLINE DIE CAST	2
AEN0129	BARRIER - 1.315" O.D. x 41.00" x 42.10"	1
APT0216	POST - 3-1/2" O.D. x 28-3/4" EXIT SUPPORT	1
BAD0085	THREAD LOCKING ADHESIVE	1
BAE0020	RIVET - 1/4" x 11/16" DRIVE	2
BAE0595	WASHER - 3/8" SAE FLAT	6
BAE0600	WASHER - 1" O.D. FLAT	14
BAE0620	NUT - 3/8"-16 LOCK w/NYLON CAP	6
BAE0629	SCREW - 3/8"-16 x 1" SOCKET SET SS	2
BAE0659	BOLT - 3/8"-16 x 3/4" BUTTON HEAD - SS	2
BAE0662	BOLT - 3/8"-16 x 1-1/4" TMPR RESIST w/TORX DRIVE	2
BAE0664	BOLT - 3/8"-16 x 1" BUTTON HEAD - SS	8
BAE0665	BOLT - 3/8"-16 x 1-3/4" BUTTON HEAD - SS	8
BPL0300	CAP - 3/8" BOLT	4
BPL2030	CANOPY - SINGLE GLIDE SLIDE	1
BPL2031	SLIDE - 48" SINGLE GLIDE	1
ALB0030	LABEL-HOOD STRING ENTNGLMNT WRNG LABEL	1

PM3127 - 36 in. (914 mm) GLIDE SLIDE

PART NO.	DESCRIPTION	QTY.
AAU0551	CLAMP - 5" CENTERLINE DIE CAST	2
AEN0129	BARRIER - 1.315" O.D. x 41.00" x 42.10"	1
APT0216	POST - 3-1/2" O.D. x 28-3/4" EXIT SUPPORT	1
BAD0085	THREAD LOCKING ADHESIVE	1
BAE0020	RIVET - 1/4" x 11/16" DRIVE	2
BAE0595	WASHER - 3/8" SAE FLAT	6
BAE0600	WASHER - 1" O.D. FLAT	14
BAE0620	NUT - 3/8"-16 LOCK w/NYLON CAP	6
BAE0629	SCREW - 3/8"-16 x 1" SOCKET SET SS	2
BAE0659	BOLT - 3/8"-16 x 3/4" BUTTON HEAD - SS	2
BAE0662	BOLT - 3/8"-16 x 1-1/4" TMPR RESIST w/TORX DRIVE	2
BAE0664	BOLT - 3/8"-16 x 1" BUTTON HEAD - SS	8
BAE0665	BOLT - 3/8"-16 x 1-3/4" BUTTON HEAD - SS	8
BPL0300	CAP - 3/8" BOLT	4
BPL2030	CANOPY - SINGLE GLIDE SLIDE	1
BPL2035	SLIDE - 36" SINGLE GLIDE	1
ALB0030	LABEL-HOOD STRING ENTNGLMNT WRNG LABEL	1



PM3128 - 24-30 in. (610-762 mm) GLIDE SLIDE

PART NO.	DESCRIPTION	QTY.
AAU0551	CLAMP - 5" CENTERLINE DIE CAST	2
AEN0129	BARRIER - 1.315" O.D. x 41.00" x 42.10"	1
APT0216	POST - 3-1/2" O.D. x 28-3/4" EXIT SUPPORT	1
BAD0085	THREAD LOCKING ADHESIVE	1
BAE0020	RIVET - 1/4" x 11/16" DRIVE	2
BAE0595	WASHER - 3/8" SAE FLAT	6
BAE0600	WASHER - 1" O.D. FLAT	14
BAE0620	NUT - 3/8"-16 LOCK w/NYLON CAP	6
BAE0629	SCREW - 3/8"-16 x 1" SOCKET SET SS	2
BAE0659	BOLT - 3/8"-16 x 3/4" BUTTON HEAD - SS	2
BAE0662	BOLT - 3/8"-16 x 1-1/4" TPR RESIST w/TORX DRIVE	2
BAE0664	BOLT - 3/8"-16 x 1" BUTTON HEAD - SS	8
BAE0665	BOLT - 3/8"-16 x 1-3/4" BUTTON HEAD - SS	8
BPL0300	CAP - 3/8" BOLT	4
BPL2030	CANOPY - SINGLE GLIDE SLIDE	1
BPL2036	SLIDE - 30"/24" SINGLE GLIDE	1
ALB0030	LABEL-HOOD STRING ENTNGLMNT WRNG LABEL	1

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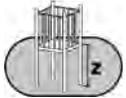
Installation Instructions Playmakers® Model PM4537 Spin Racer Panel Deck Level



Assembly View

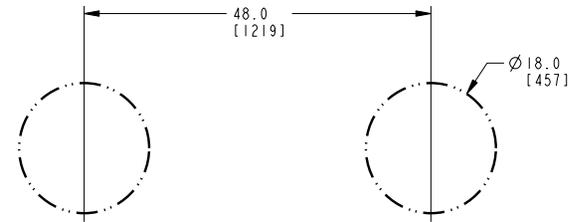
Installation Preparation

Recommended Crew: Two (2) adults
 Installation Time: 1 man-hour
 Use Zone:..... Refer to Master Drawing
 User Group Age (years): ASTM/CSA: 2-12, EN: 2-14

ICON KEY	
	Fully Tighten Hardware
	Do Not Fully Tighten Hardware
	Drill
	Hammer
	Add 1 Drop of Thread Locking Adhesive
	Pour Concrete
	Dig Footing Holes
	Critical Fall Height

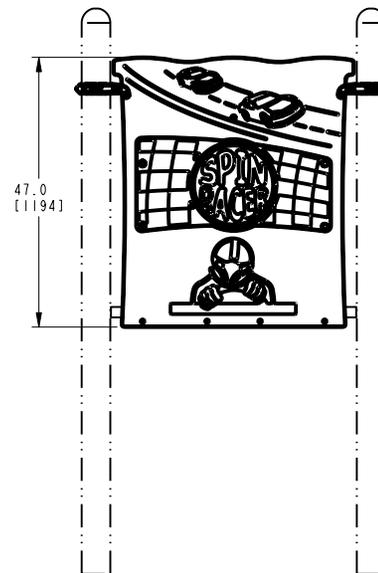
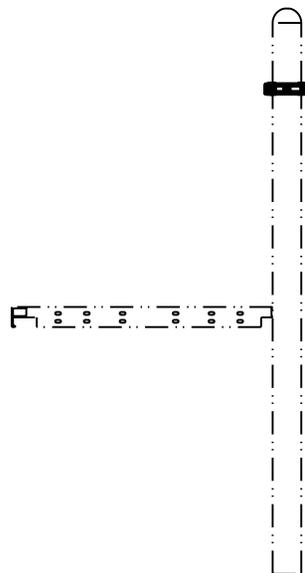
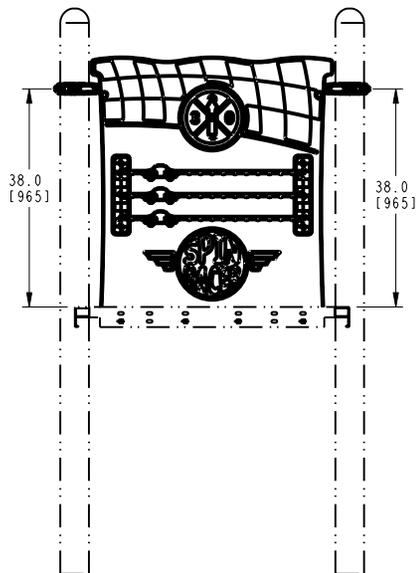
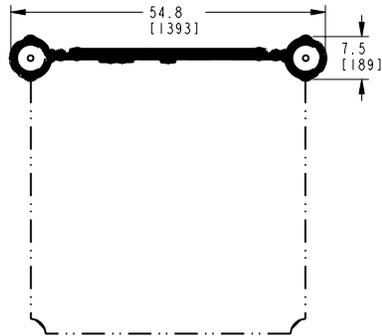
Installation Instructions

KEY	
Position	Unit of Measurement
Top #	Inches
Bottom #	[Millimeters]



Footing Diagram

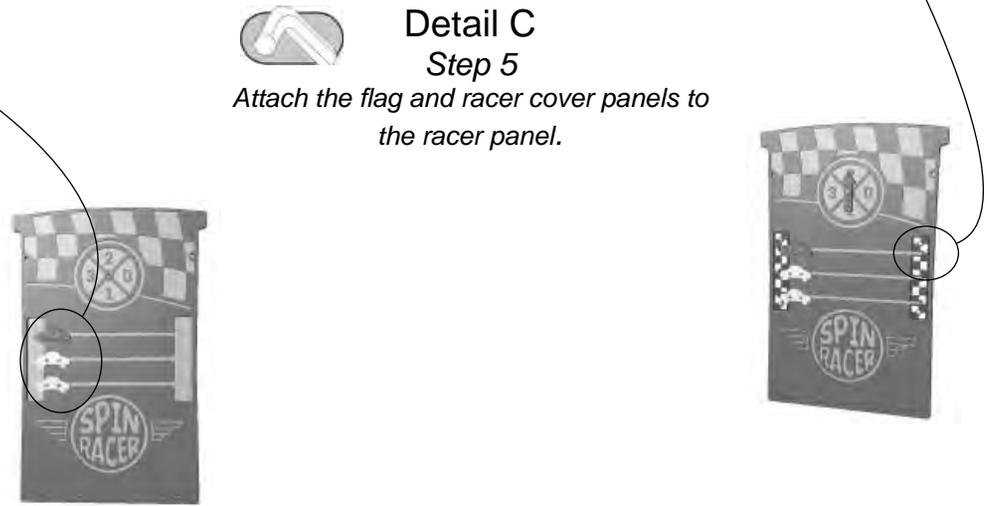
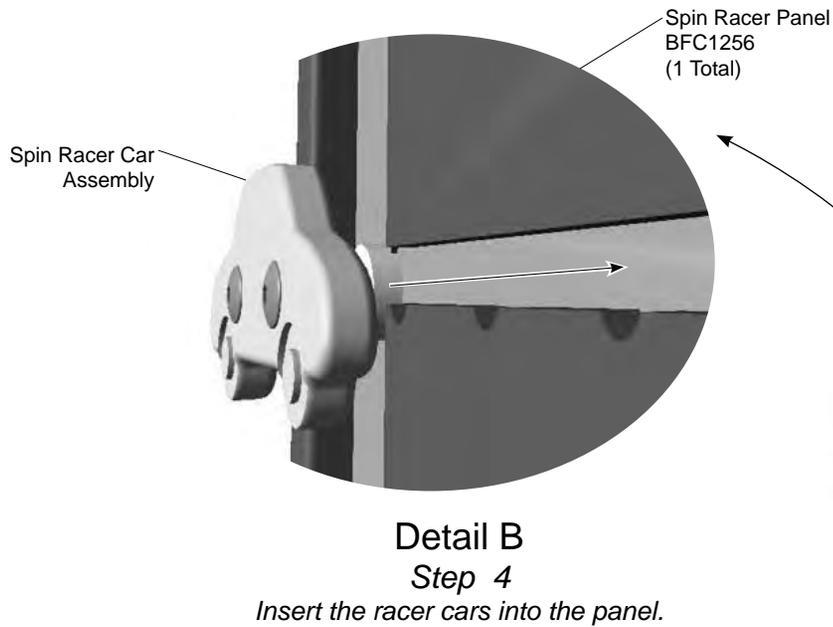
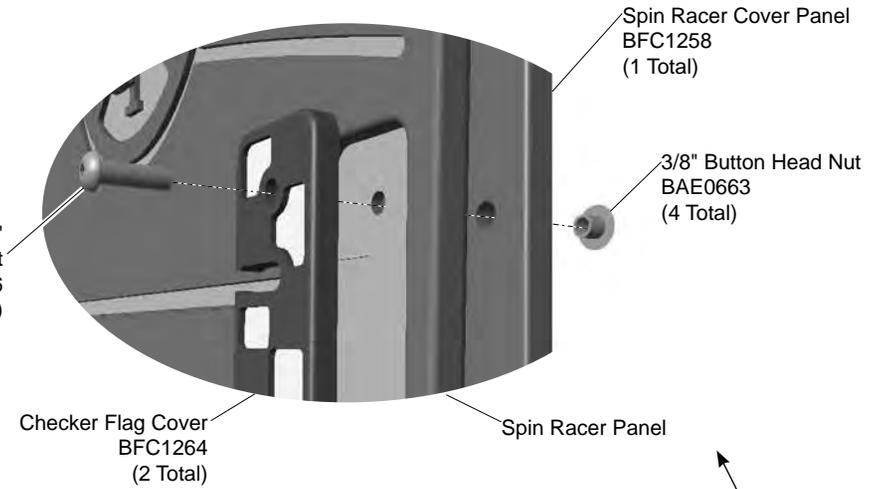
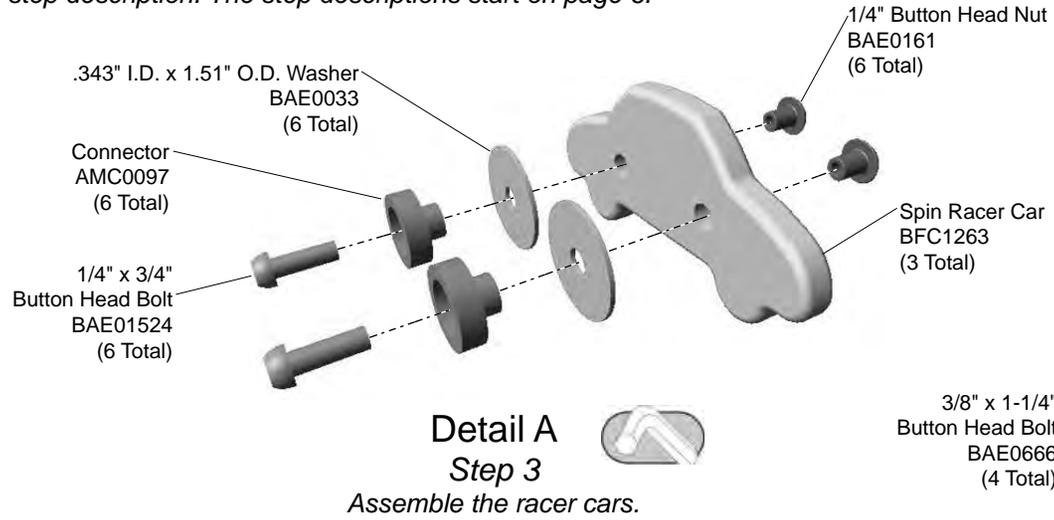
Top View



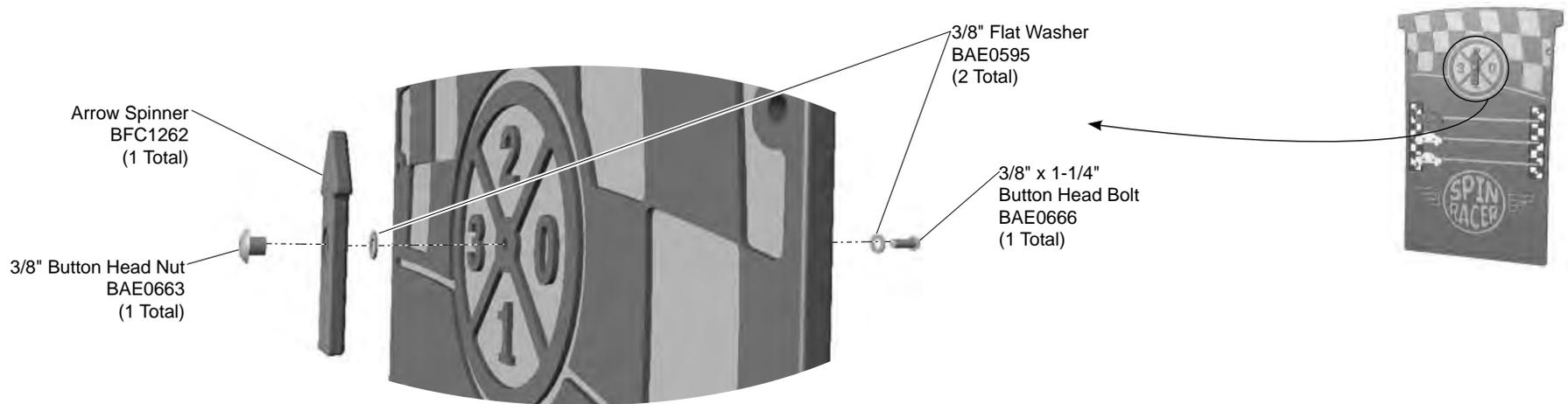
Elevation Views

Installation Instructions

Follow the details in alphabetical order. For clarification, each detail references the step description. The step descriptions start on page 6.



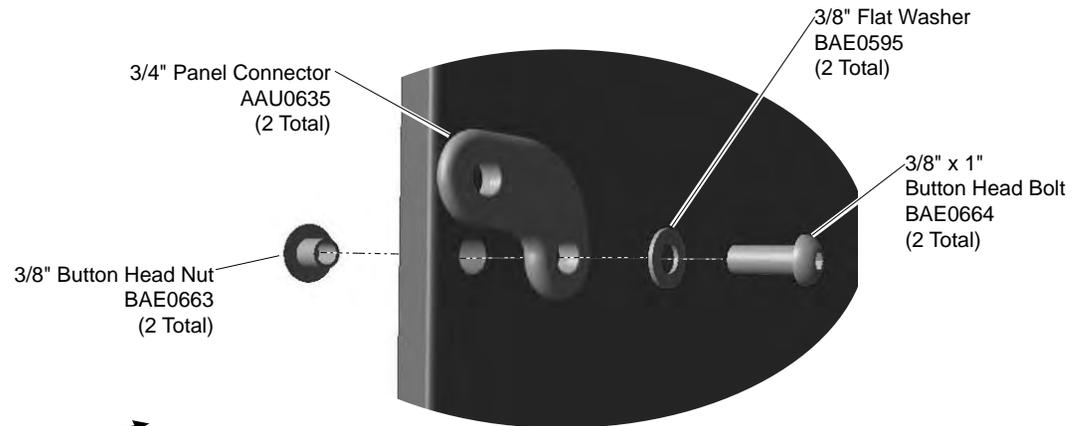
Installation Instructions



Detail D

Step 6

Attach the arrow spinner to the racer panel.



Detail E

Step 7

Attach the panel connectors to the top backside of the racer panel.

Installation Instructions

Centerline Clamp
AAU0620
(2 Total)

3/8" Flat Washer
BAE0595
(2 Total)

3/8" x 1" Button Head Bolt
BAE0664
(2 Total)

3/8" x 1-1/4" Tamper Resistant Bolt
BAE0662
(2 Total)

Support Post

Detail F
Step 8
Attach the centerline clamps to the panel connectors.

Detail H
Step 10
Attach the speed racer panel to the support posts.

Deck

3/8" x 1-1/2" Button Head Bolt
BAE06645
(4 Total)

3/8" Lock Nut
BAE0620
(4 Total)

1" O.D. Flat Washer
BAE0600
(4 Total)

Drive Rivet
BAE0020
(2 Total)

Detail G
Step 9
Attach the speed racer panel to the deck.

Detail I
Step 12
Secure the clamps to the support posts.

Note: The panel can be attached to the upper or lower deck holes depending on clamp conflict.

Installation Instructions

Notes Before You Begin: Do not over tighten bolts during assembly, only snug tighten them until assembly is complete.

Carefully read and understand these installation instructions before you begin.

Step 1: Before attempting to assemble your equipment, please review all installation information carefully. Should you experience any difficulty during the installation process, please call us at the phone number shown on the last page of these instructions.

Step 2: Separate and identify all components and hardware.

Step 3: Assemble the racer cars. See **Detail A**. Assemble the racer cars as shown. Fully tighten the connections according to tightening torque specifications (See **Final Details**).

Step 4: Insert the racer cars into the panel. See **Detail B**. Insert the racer cars into the tracks in the panel as shown. There is (1) one car per track.

Step 5: Attach the flag and racer cover panels to the racer panel. See **Detail C**. Insert the checker flag covers into the appropriate slots on the front of the racer panel. Position the racer cover panel against the back of the racer panel, align the holes and attach as shown. Fully tighten the connections according to tightening torque specifications (See **Final Details**).

Step 6: Attach the arrow spinner to the racer panel. See **Detail D**. Position the arrow spinner over the numeric cutout section on the front of the racer panel and attach as shown. Fully tighten the connection being careful not to over tighten the bolt.

Step 7: Attach the panel connectors to the top backside of the racer panel. See **Detail E**. Position each panel connector so that the hole in the short leg aligns with the hole in the top of the panel. Panel connectors must all attach to the side of the panel opposite the cars. Leave the connections loose for alignment adjustment. Attach as shown.

Step 8: Attach the clamps to the panel connectors. See **Detail F**. Place the flat side of each clamp against the activity side of a connector. Apply a drop of thread locking adhesive to the bolt threads and attach as shown.

Step 9: Attach the panel assembly to the deck. See **Detail G**. Position the panel against the deck and close the clamps around the support post and attach the panel to the lower holes in the deck as shown.

Note: The panel can be attached to the upper or lower deck holes depending on clamp conflict.

Step 10: Attach the racer panel to the support posts. See **Detail H**. Position the panel between the support posts at the height shown in the **Elevation View** and close the clamps around the support posts. Apply a drop of thread locking adhesive to the bolt threads and attach as shown.

Note: In the event of a clamp conflict with an adjacent component, the panel connector can be flipped upside down and reconnected to the panel. Remove the connector from both the panel and clamp before flipping and then reattach as shown in **Step 7** and **Step 8**. If possible, both the clamps should be mounted at the same height.

Final Details.

Step 11: Plumb and level the component. Tighten **all** fasteners. Fully tighten all fasteners according to tightening torque specifications.

Torque Specifications:

Bolts and nuts - Snug tighten and then tighten an additional one half turn.

Step 12: Install drive rivets. See **Detail I**. After the equipment assembly is complete, install a drive rivet in each clamp to permanently secure it to the support post. Using a 1/4" drill bit, drill through the clamp and support post. Insert the drive rivet into drilled hole until the head of the rivet is against the surface of the clamp. Using a hammer, drive the pin of the rivet until it is flush with the surface of the rivet head.

Note: This step should be executed after structure has been assembled and properly footed.



PM4537 - SPIN RACER PANEL DECK LEVEL

PART NO.	DESCRIPTION	QTY.
AAU0620	CLAMP - 5" OFFSET CENTERLINE DIE CAST	2
AAU0635	CONNECT - 3/4" PANEL	2
AMC0097	CONNECTOR - 1 DIA x .57 w/HOLE	6
BAD0085	THREAD LOCKING ADHESIVE	1
BAE0020	RIVET - 1/4" x 11/16" DRIVE	2
BAE0033	WASHER - .343" I.D. x 1.500" O.D.	6
BAE01524	BOLT - 1/4"-20 x 3/4" BUTTON HEAD - SS	6
BAE0161	NUT - 1/4"-20 x 7/16" BUTTON HEAD	6
BAE0595	WASHER - 3/8" SAE FLAT	6
BAE0600	WASHER - 1" O.D. FLAT	4
BAE0620	NUT - 3/8"-16 LOCK w/NYLON CAP	4
BAE0662	BOLT - 3/8"-16 x 1-1/4" TAMP RESIST w/TORX DRIVE	2
BAE0663	NUT - 3/8"-16 x 7/16" BUTTON HEAD	7
BAE0664	BOLT - 3/8"-16 x 1" BUTTON HEAD - SS	4
BAE06645	BOLT - 3/8"-16 x 1-1/2" BUTTON HEAD - SS	4
BAE0666	BOLT - 3/8"-16 x 1-1/4" BUTTON HEAD - SS	5
BFC1256	SHEET - 42.00" x 47.82" SPIN RACER PANEL	1
BFC1258	SHEET - 16.27" x 34.00" SPIN RACER COVER	1
BFC1262	SHEET - ARROW SPINNER	1
BFC1263	SHEET - SPIN RACER CAR	3
BFC1264	SHEET - CHECKER FLAG COVER	2

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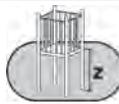


Assembly View

Installation Instructions Playmakers® Model PM4646 Storefront Panel

Installation Preparation

Recommended Crew: Two (2) adults
 Installation Time: 1 man-hour
 Weight: 44.8 lbs. (20.2 kg)
 Use Zone: Refer to Master Drawing
 User Group Age (years): ASTM/CSA: 2-5, EN: 1-6

ICON KEY	
	Fully Tighten Hardware
	Add 1 Drop of Thread Locking Adhesive
	Do Not Fully Tighten Hardware
	Drill
	Hammer
	Critical Fall Height

Installation Instructions

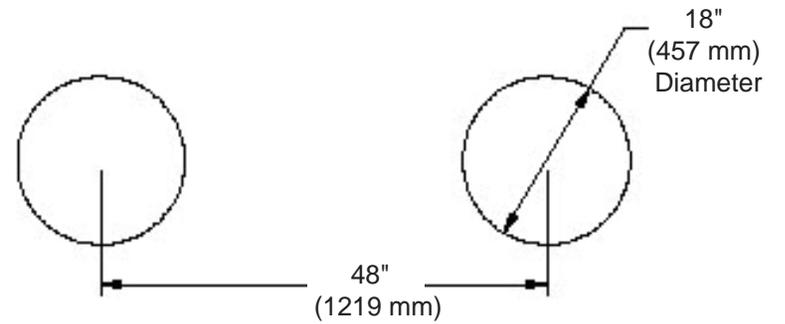
Top View



48"
(1219 mm)

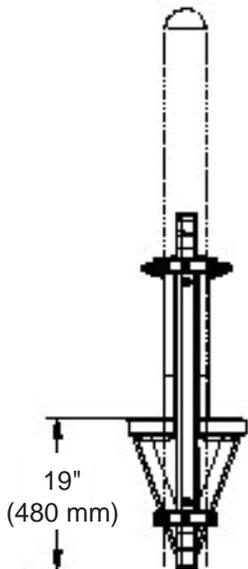
14.5"
(368 mm)

Footing Diagram



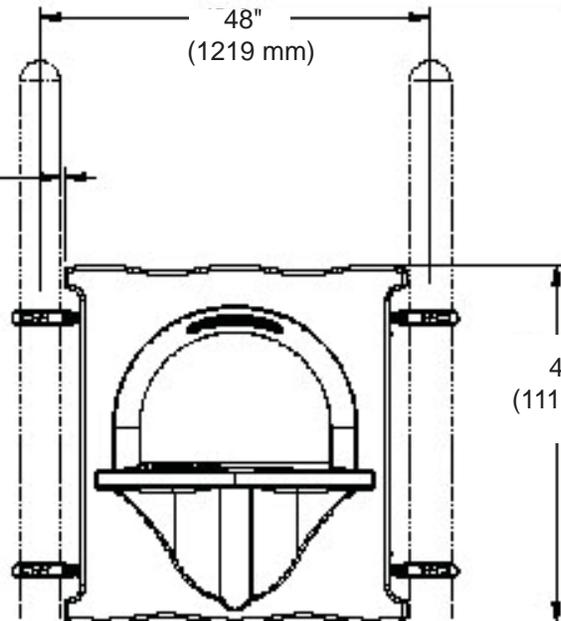
18"
(457 mm)
Diameter

48"
(1219 mm)



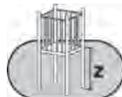
19"
(480 mm)

0.5"
(13 mm)



44"
(1118 mm)

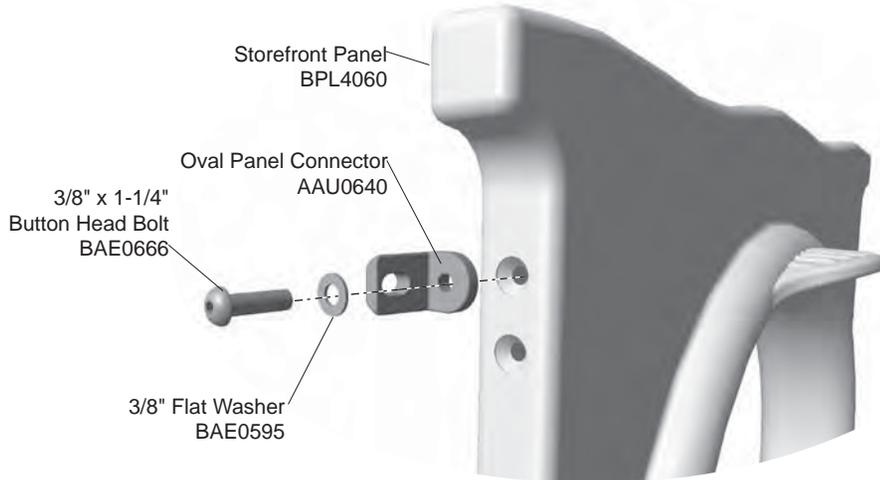
Elevation Views



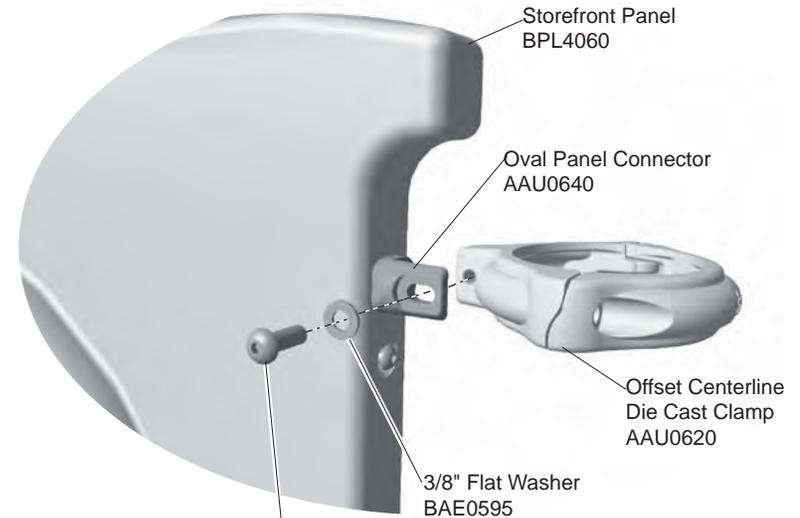
EN: 480 mm

Installation Instructions

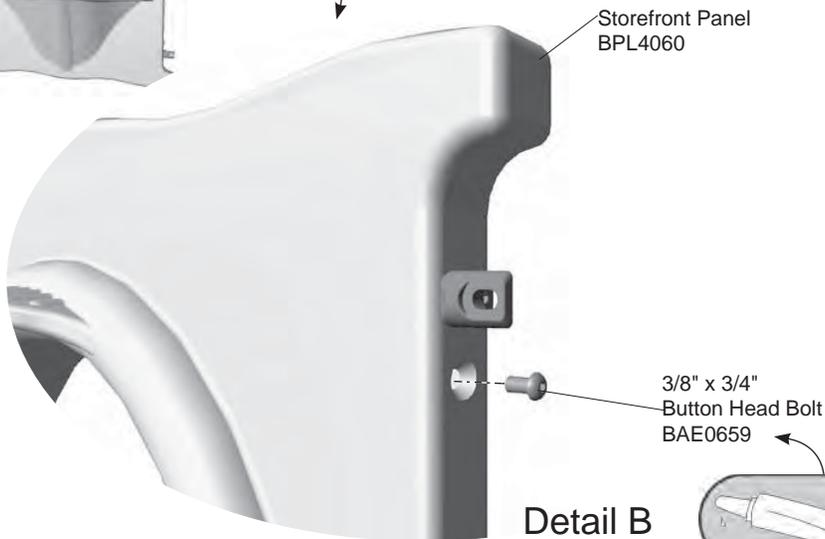
Follow the details in alphabetical order. For clarification, each detail references the step description. The step descriptions start on page 5.



Detail A
Step 3



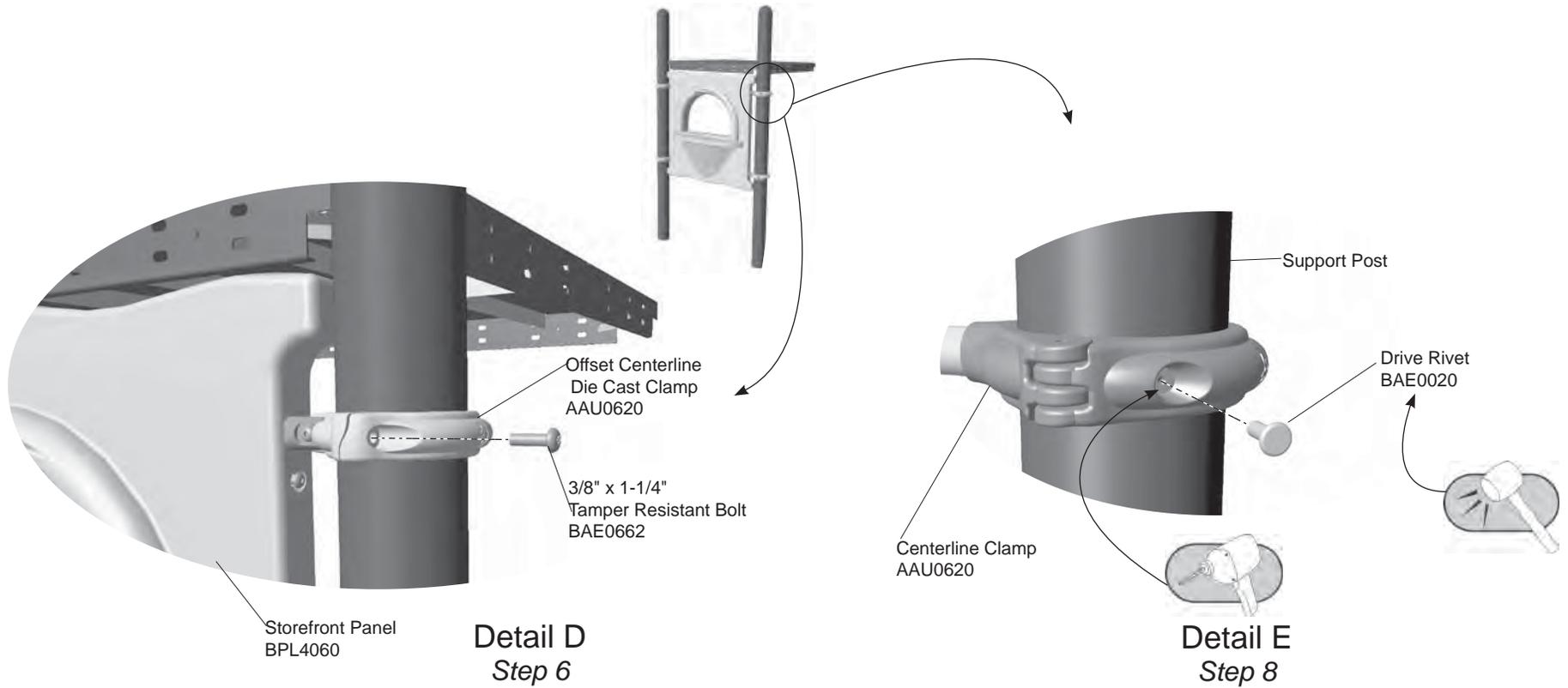
Detail C
Step 5



Detail B
Step 4



Installation Instructions



Installation Instructions

__Notes Before You Begin: Do not over tighten bolts during assembly, only snug tighten them until assembly is complete.

Carefully read and understand these installation instructions before you begin.

__Step 1: Before attempting to assemble your equipment, please review all installation information carefully. Should you experience any difficulty during the installation process, please call us at the phone number shown on the last page of these instructions.

__Step 2: Separate and identify all components and hardware.

Attach the oval panel connectors to the panel.

__Step 3: Attach the panel connectors to the storefront panel. See **Detail A**. Select the storefront panel, the oval panel connectors, and the appropriate hardware. There are (4) connections. Turn the connectors so that the flat sides are all on the same side. Attach as shown.

Note: The panel has two connection points to attach the panel connectors. The upper and lower connection points are provided if you experience a conflict with adjacent components. In the event of a clamp interference, select the location that best suits your condition.

__Step 4: Fill the unused panel holes. See **Detail B**. Select the appropriate hardware. There are (4) four connections. Apply a drop of loctite and attach as shown.

Attach the clamps to the panel.

__Step 5: Attach the clamps to the panel. See **Detail C**. Select the clamps and the appropriate hardware. There are (4) four connections. Place a clamp against the flat side of each connector and align the holes. Apply a drop of loctite to the bolt threads and attach as shown.

Note: Make sure that each clamp opens in the same direction.

Attach the panel to the support posts.

__Step 6: Attach the storefront panel to the support posts. See **Detail D**. Select the storefront panel and the appropriate hardware. There are (4) four connections. Position the storefront at the appropriate height and attach as shown.

Final Details.

__Step 7: Plumb and level the component. Tighten **all** fasteners. Fully tighten all fasteners according to tightening torque specifications.

Torque Specifications:

Bolts and nuts - Snug tighten and then tighten an additional one half turn.

__Step 8: Install drive rivets. See **Detail E**. After the equipment assembly is complete, install a drive rivet in each clamp to permanently secure it to the support post. Using a 1/4" drill bit, drill through the clamp and support post. Insert the drive rivet into drilled hole until the head of the rivet is against the surface of the clamp. Using a hammer, drive the pin of the rivet until it is flush with the surface of the rivet head.

Note: This step should be executed after structure has been assembled and properly footed.

PM4646 - STOREFRONT PANEL

PART NO.	DESCRIPTION	QTY.
AAU0620	CLAMP - 5" OFFSET CENTERLINE DIE CAST	4
AAU0640	CONNECT - OVAL PANEL	4
BAD0085	THREAD LOCKING ADHESIVE	1
BAE0020	RIVET - 1/4" x 11/16" DRIVE	4
BAE0595	WASHER - 3/8" SAE FLAT	8
BAE0659	BOLT - 3/8"-16 x 3/4" BUTTON HEAD - SS	4
BAE0662	BOLT - 3/8"-16 x 1-1/4" TAMPER RESISTANT	4
BAE0664	BOLT - 3/8"-16 x 1" BUTTON HEAD - SS	4
BAE0666	BOLT - 3/8"-16 x 1-1/4" BUTTON HEAD - SS	4
BPL4060	PANEL - 42" STOREFRONT	1

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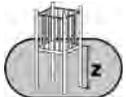


Assembly View

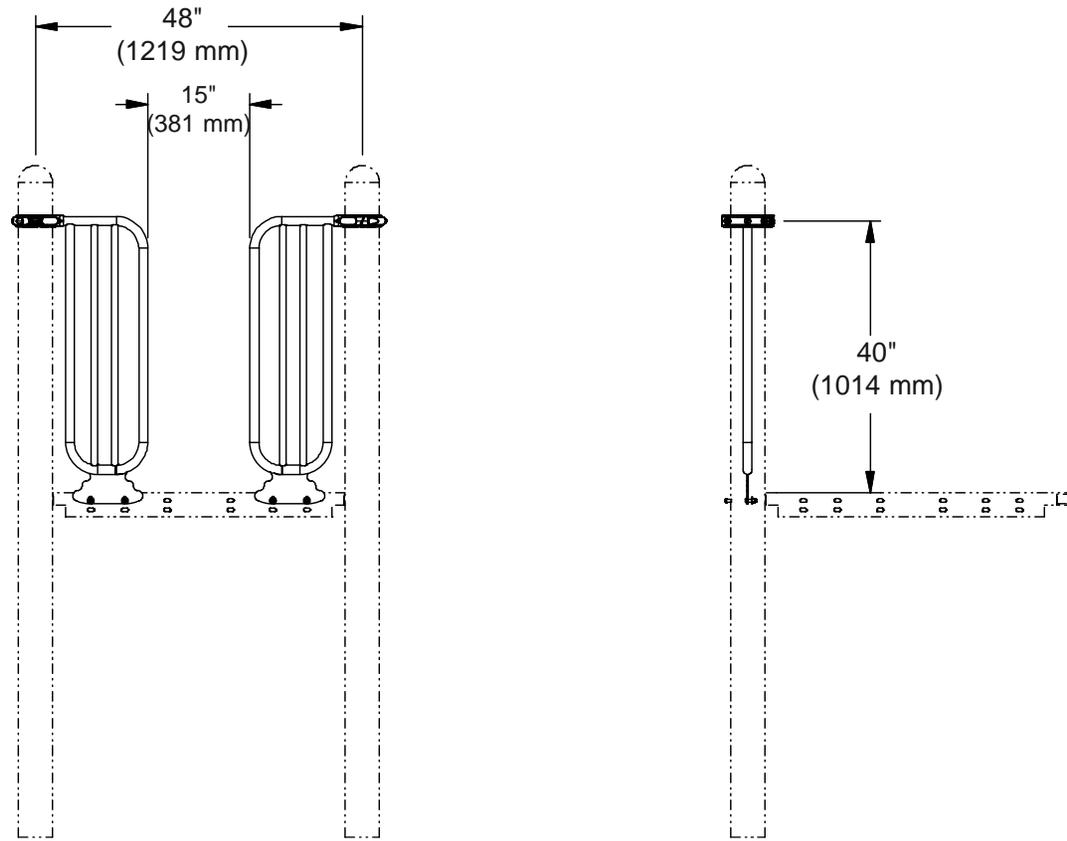
Installation Instructions Playmakers® Model PM4288 Compliance Access Gate

Installation Preparation

Recommended Crew: One (1) adult
 Installation Time: 0.5 man-hours
 Weight: 34 lbs. (15,4 kg)
 Use Zone: Refer to Master Drawing
 User Group Age (years): ASTM/CSA: 2-12, EN: 2-14

ICON KEY	
	Fully Tighten Hardware
	Do Not Fully Tighten Hardware
	Add 1 Drop of Thread Locking Adhesive
	Critical Fall Height
	Drill
	Hammer

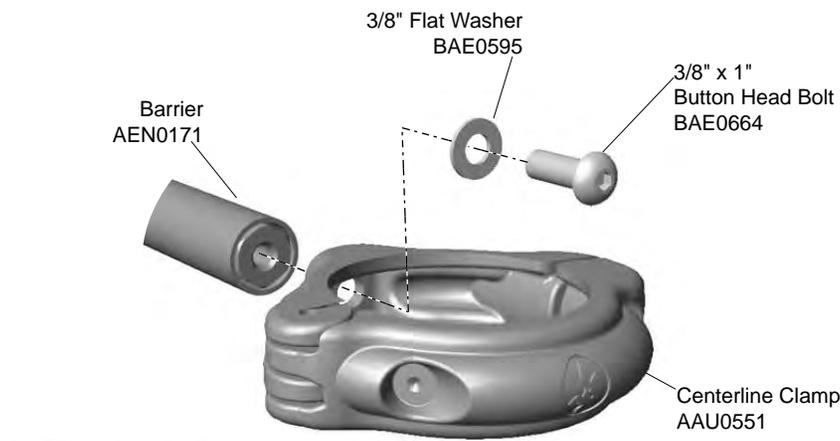
Installation Instructions



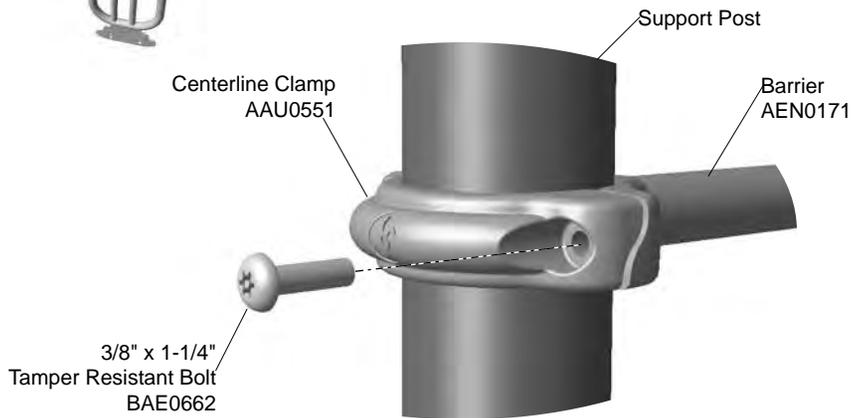
Elevation View

Installation Instructions

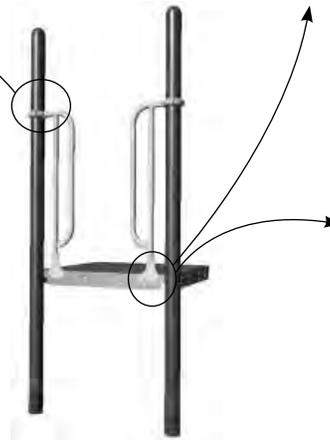
Follow the details in alphabetical order. For clarification, each detail references the step description. The step descriptions start on page 5.



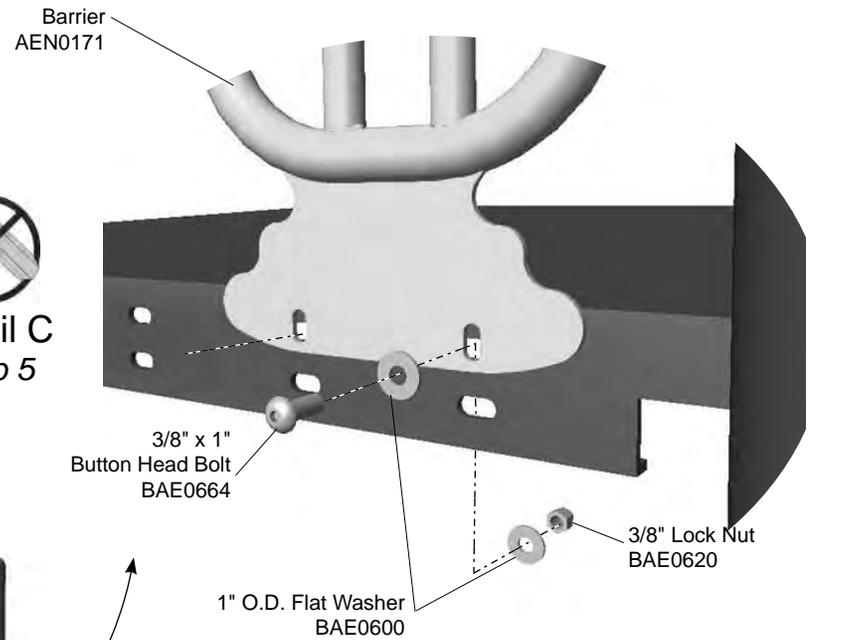
Detail A
Step 3



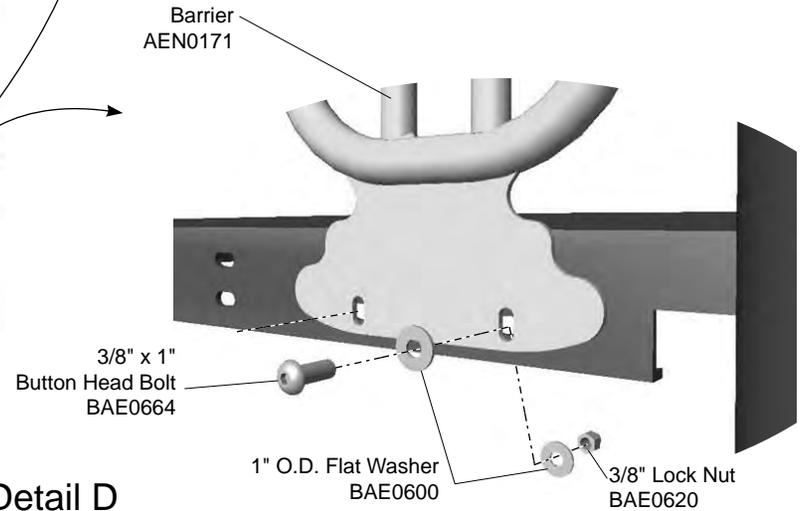
Detail B
Step 4



Detail D
Step 5



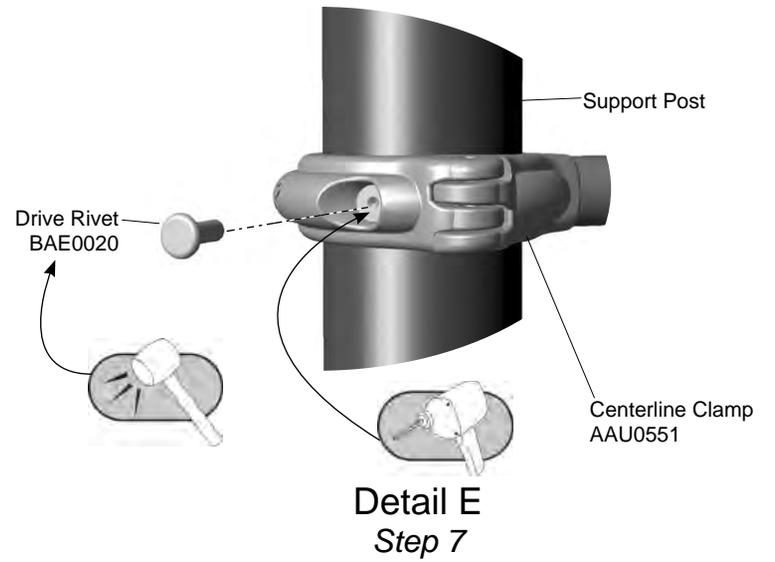
Detail C
Step 5



Installation Instructions



Step 6



Installation Instructions

___ **Notes Before You Begin:** Do not over tighten bolts during assembly, only snug tighten them until assembly is complete.

Carefully read and understand these installation instructions before you begin.

___ **Step 1:** Before attempting to assemble your equipment, please review all installation information carefully. Should you experience any difficulty during the installation process, please call us at the phone number shown on the last page of these instructions.

___ **Step 2:** Separate and identify all components and hardware.

Attach the clamps to the barrier.

___ **Step 3:** Attach the clamps to the barrier. See **Detail A**. Select both barriers, both clamps, and the appropriate hardware. There are (2) two total connections, (1) one connection per barrier. Position a clamp against the top of each barrier and attach as shown. Fully tighten the connection.

Attach the clamps to the support posts.

___ **Step 4:** Attach the centerline clamps to the support posts. See **Detail B**. Select the appropriate hardware. There are (2) two total connections, (1) one connection per clamp. Lift each barrier into position against the deck and close each clamp around a support post. Snug tighten connection only. The location of the clamp may need to be changed to align deck connection holes or resolve clamp position conflicts.

Attach the barrier to the deck.

___ **Step 5:** Attach the barrier to the deck. See **Detail C and D**. Select the appropriate hardware. There are (2) two total connections, (1) one connection per barrier. The gate can be connected to either set of deck holes depending on the position of adjacent clamps. Align each gate tab with either the top or bottom hole in the deck and attach as shown.

Note: Both gates should be mounted at the same height.

Final Details.

___ **Step 6:** Plumb and level the component. Tighten **all** fasteners. Fully tighten all fasteners according to tightening torque specifications.

Torque Specifications:

Bolts and nuts - Snug tighten and then tighten an additional one half turn.

___ **Step 7:** Install drive rivets. See **Detail E**. After the equipment assembly is complete, install a drive rivet in each clamp to permanently secure it to the support post. Using a 1/4" drill bit, drill through the clamp and support post. Insert the drive rivet into drilled hole until the head of the rivet is against the surface of the clamp. Using a hammer, drive the pin of the rivet until it is flush with the surface of the rivet head.

Note: This step should be executed after structure has been assembled and properly footed.

PM4288 - COMPLIANCE ACCESS GATE

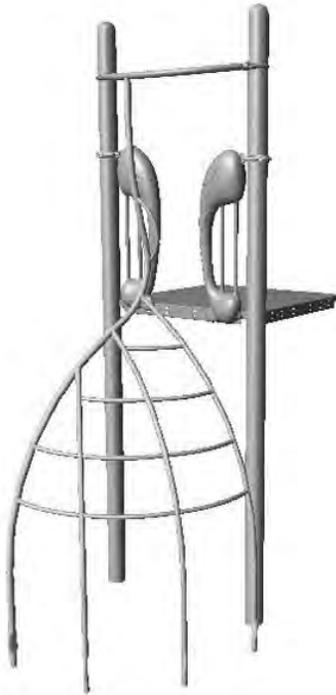
PART NO.	DESCRIPTION	QTY.
AAU0551	CLAMP - 5" CENTERLINE DIE CAST	2
AEN0171	BARRIER - 13" x 42-3/16" GATE w/ NO PLATE	2
BAD0085	THREAD LOCKING ADHESIVE	1
BAE0020	RIVET - 1/4" x 11/16" DRIVE	2
BAE0595	WASHER - 3/8" SAE FLAT	2
BAE0600	WASHER - 1" O.D. FLAT	8
BAE0620	NUT - 3/8"-16 LOCK w/ NYLON CAP	4
BAE0659	BOLT - 3/8"-16 x 3/4" BUTTON HEAD - SS	4
BAE0662	BOLT - 3/8"-16 x 1-1/4" TAMPER RESISTANT	2
BAE0664	BOLT - 3/8"-16 x 1" BUTTON HEAD - SS	6

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Assembly View (representative model)

Installation Instructions

Playmakers®

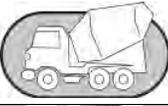
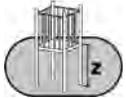
Models PM7036, PM7037, PM7038 and PM7039

Nuvo™ Twine Climber

36 in. (914 mm), 48 in. (1219 mm), 60 in. (1524 mm)
and 72 in. (1829 mm) Decks

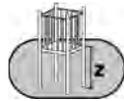
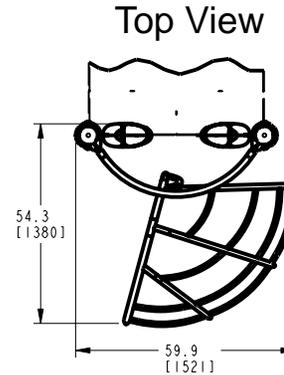
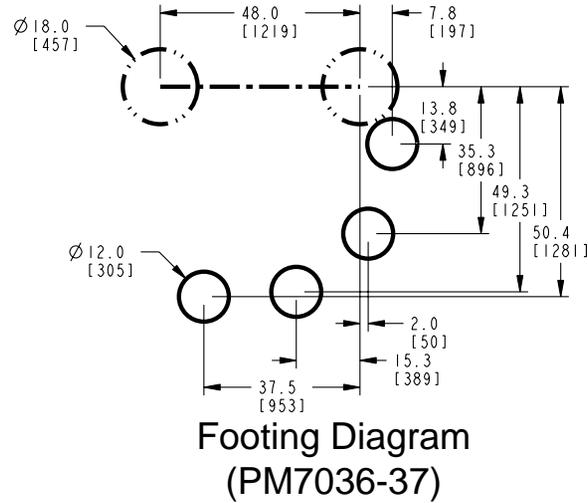
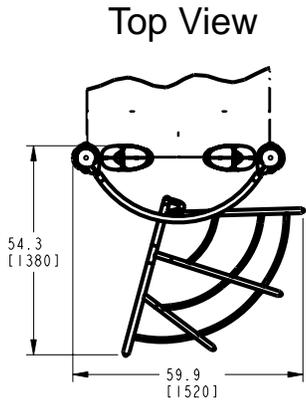
Installation Preparation

Recommended Crew: Two (2) adults
 Installation Time: 4 man-hours
 Concrete Required: 0.12 cubic yard (0,08 cubic meters)
 Use Zone: Refer to Master Drawing
 User Group Age (years): ASTM/CSA: 5-12, EN: 6-14

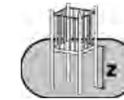
ICON KEY	
	Fully Tighten Hardware
	Do Not Fully Tighten Hardware
	Drill
	Hammer
	Add 1 Drop of Thread Locking Adhesive
	Pour Concrete
	Dig Footing Holes
	Critical Fall Height

Installation Instructions

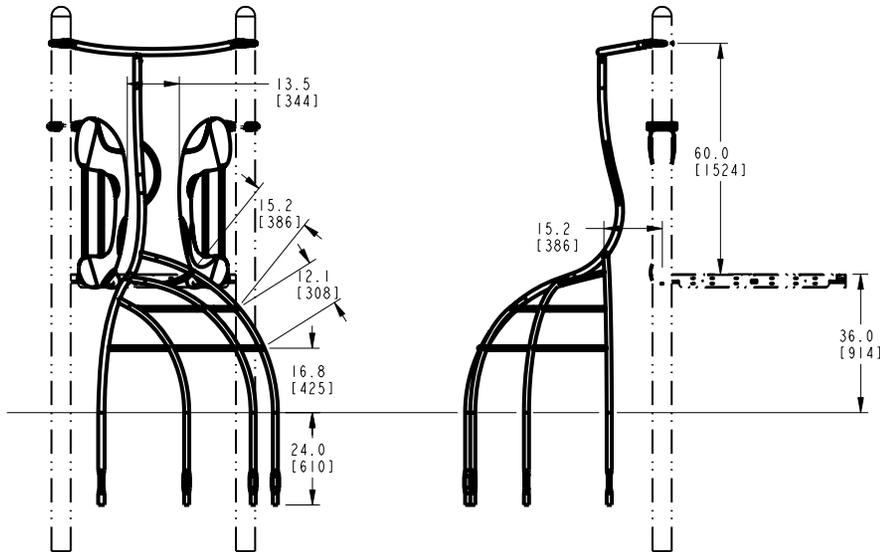
KEY	
Position	Unit of Measurement
Top #	Inches
Bottom #	[Millimeters]



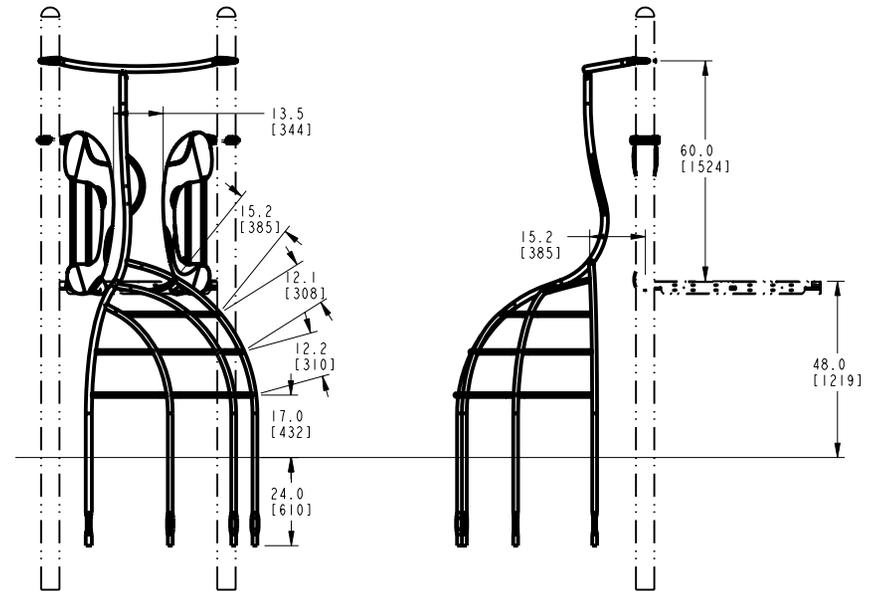
36" (914 mm)



48" (1219 mm)



**Elevation Views
PM7036**

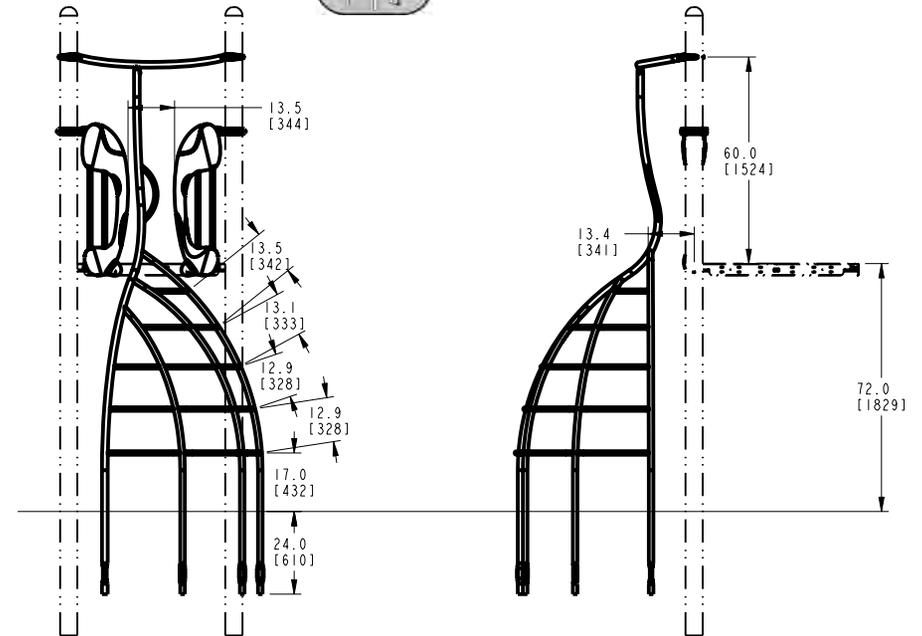
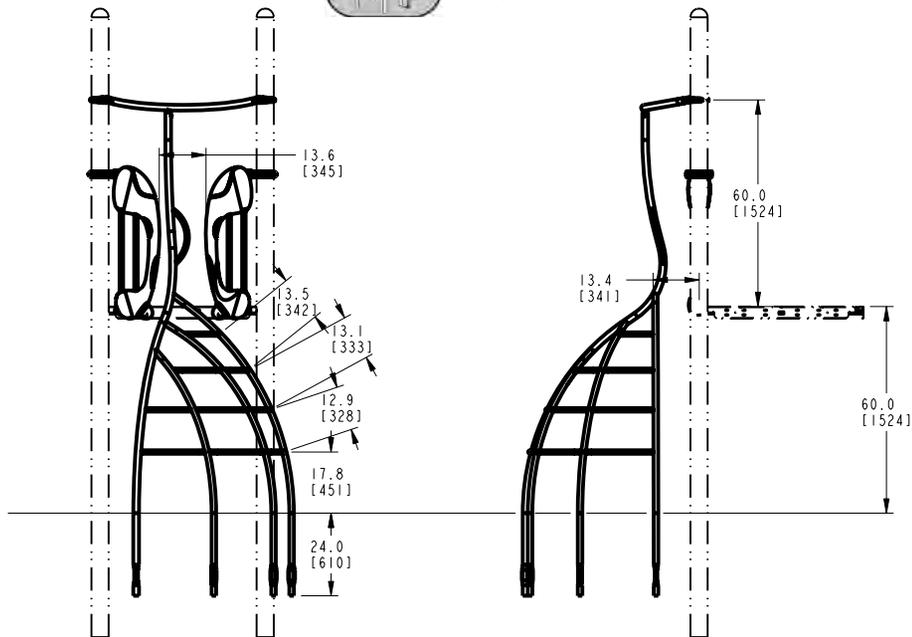
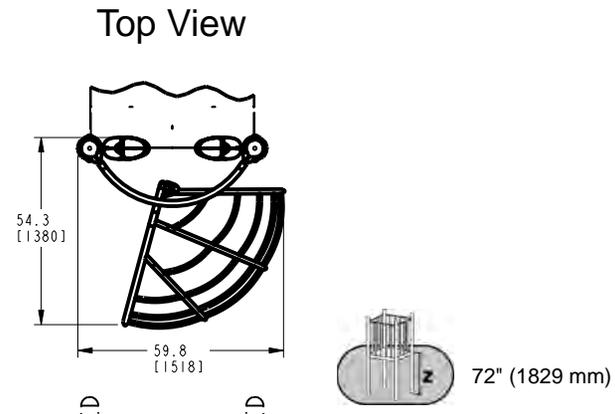
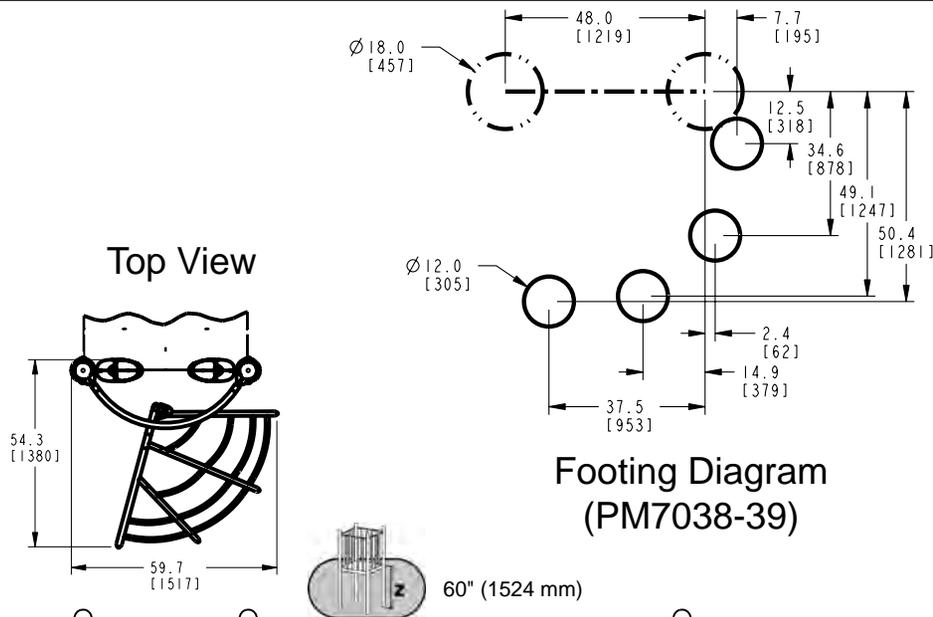


**Elevation Views
PM7037**



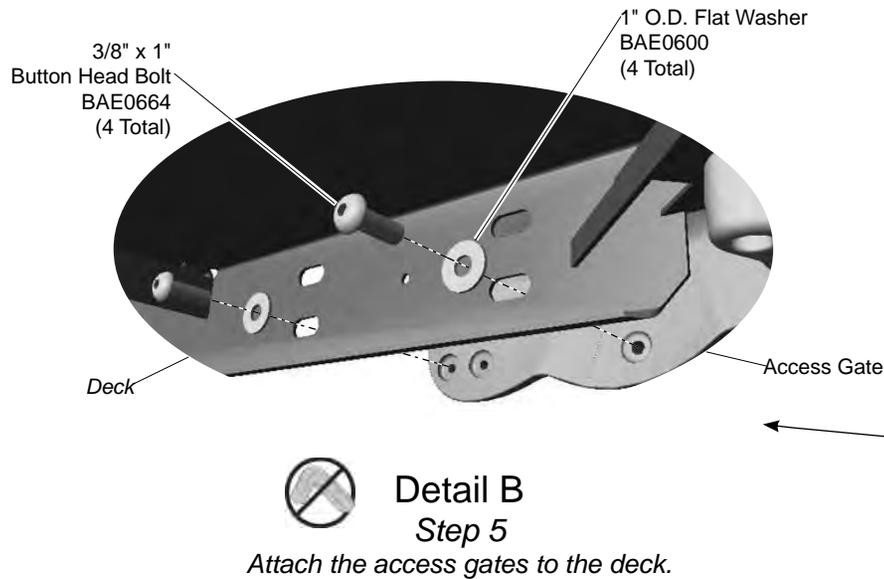
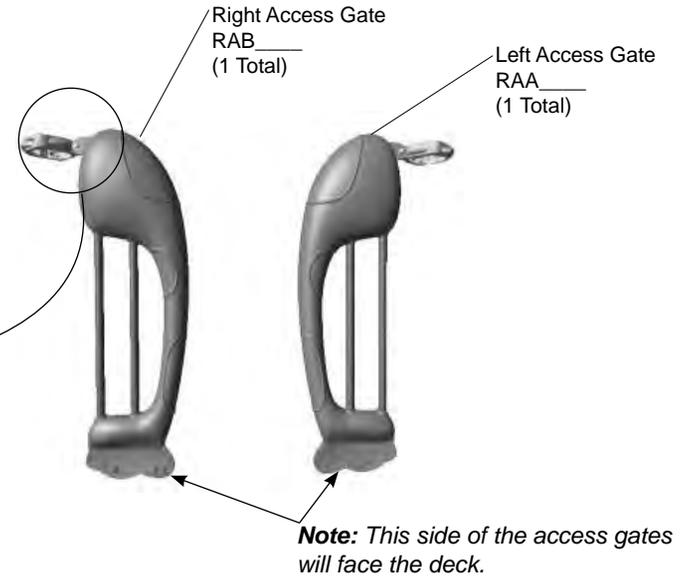
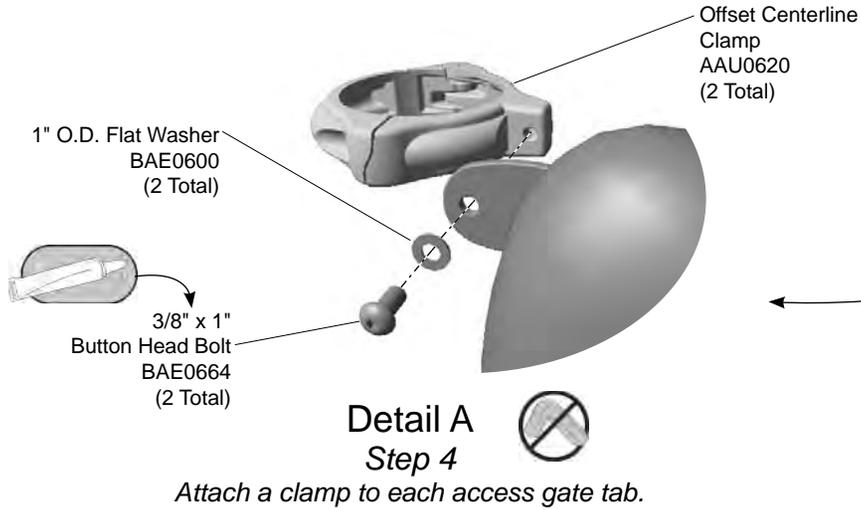
Installation Instructions

KEY	
Position	Unit of Measurement
Top #	Inches
Bottom #	[Millimeters]



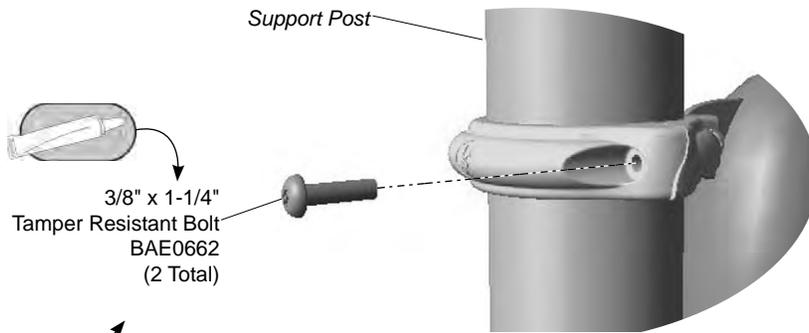
Installation Instructions

Follow the details in alphabetical order. For clarification, each detail references the step description. The step descriptions start on page 8.



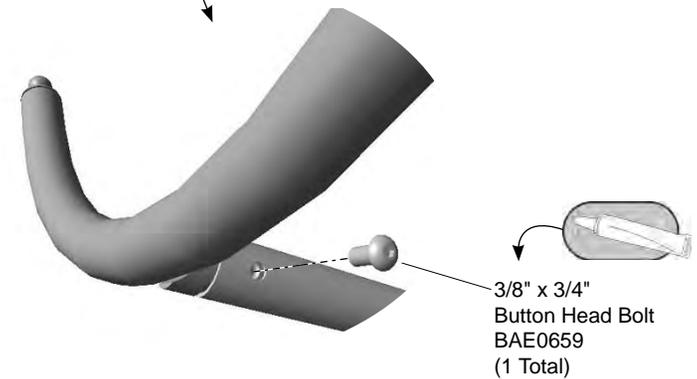
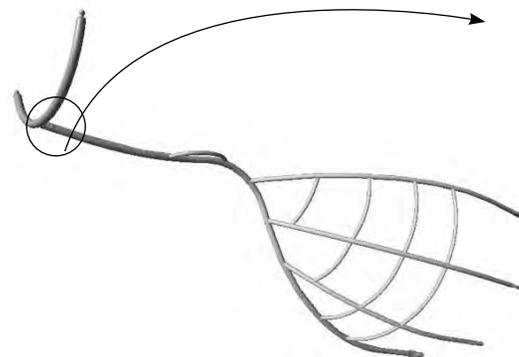
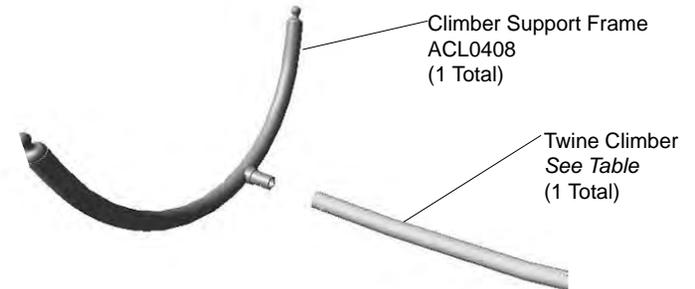
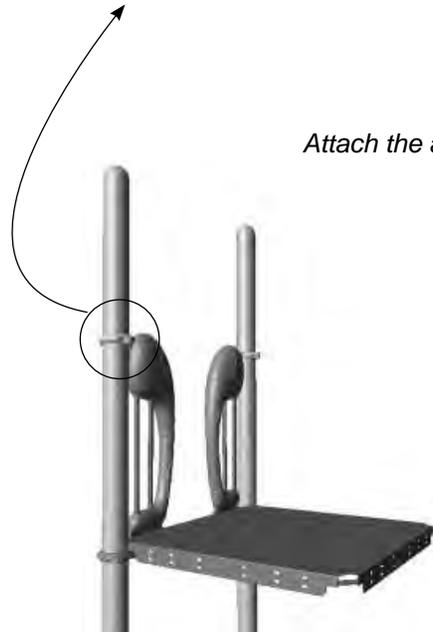
Installation Instructions

Model	Climber Frame Part No.
PM7036	ACL0413
PM7037	ACL0415
PM7038	ACL0417
PM7039	ACL0419



Detail C
Step 6

Attach the access gates to the support posts.

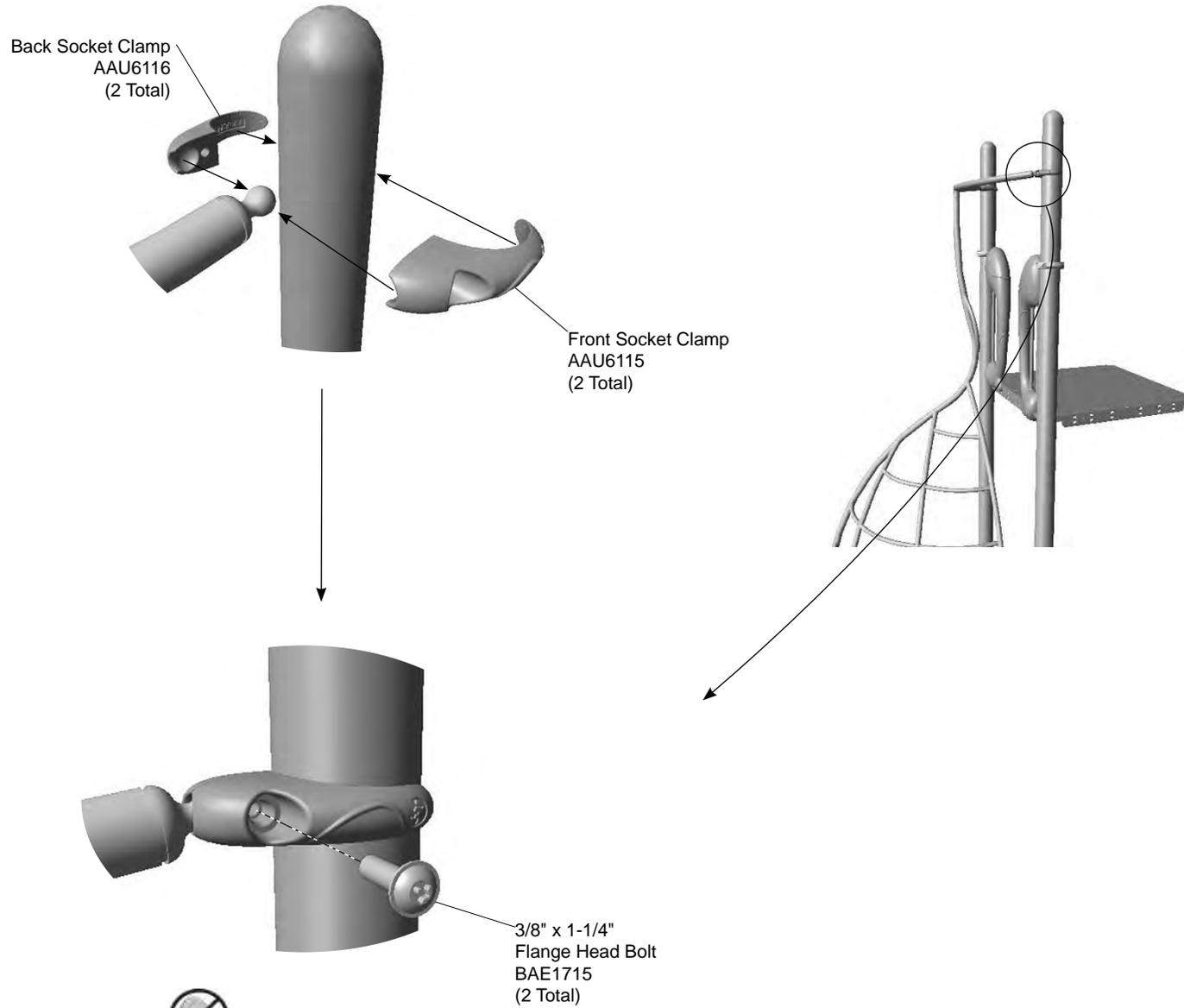


Detail D
Step 7

Attach the climber support frame to the climber frame.



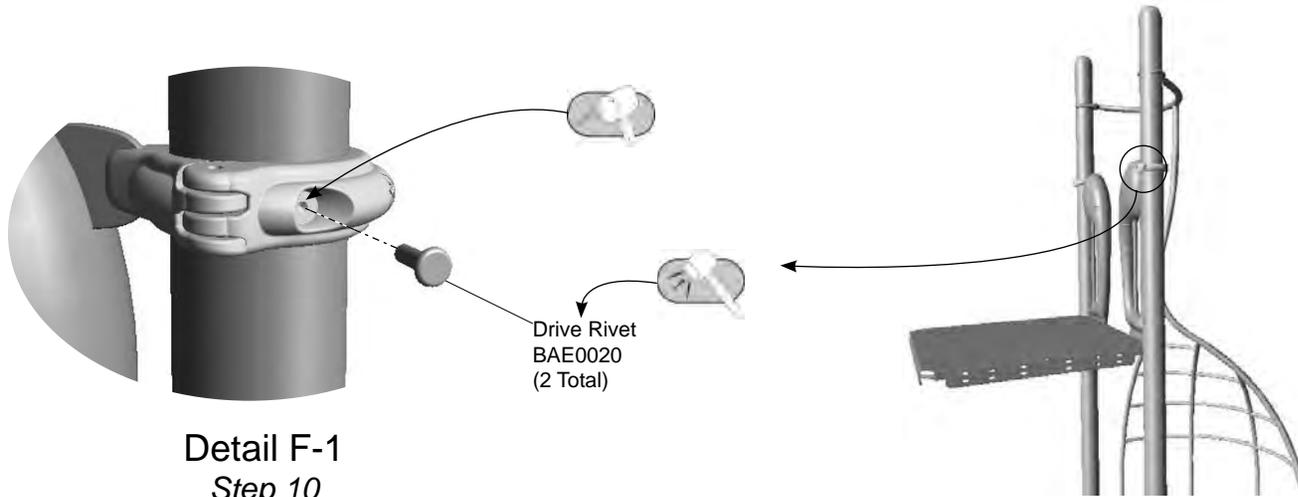
Installation Instructions



Detail E Step 8

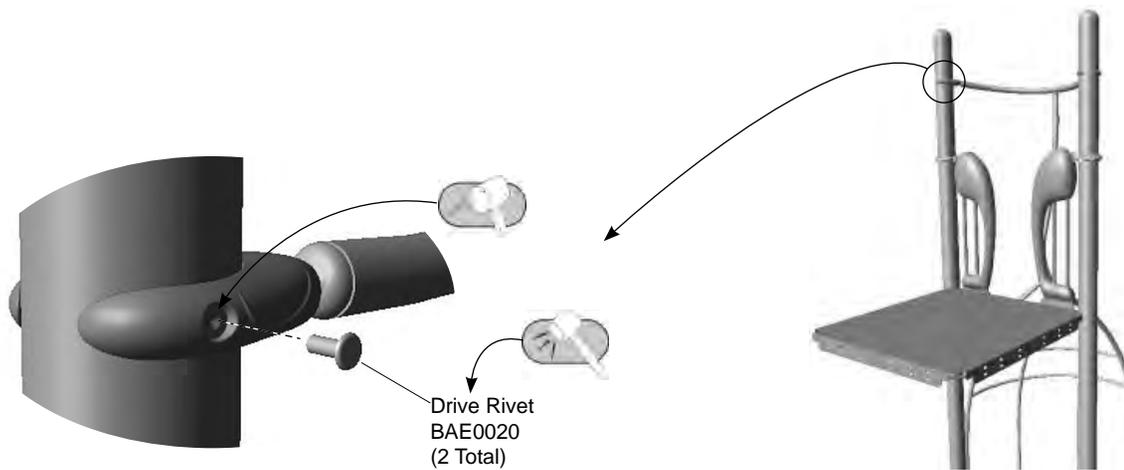
Attach the climber assembly to the support posts.

Installation Instructions



Detail F-1
Step 10

Secure the clamp to the support post.



Detail F-2
Step 10

Secure the front socket clamp to the support post.

Installation Instructions

Notes Before You Begin: Do not over tighten bolts during assembly, only snug tighten them until assembly is complete.

Carefully read and understand these installation instructions before you begin.

Step 1: Before attempting to assemble your equipment, please review all installation information carefully. Should you experience any difficulty during the installation process, please call us at the phone number shown on the last page of these instructions.

Step 2: Separate and identify all components and hardware.

Step 3: Excavate the footings as shown in the **Component Footing Detail** in the *Guidelines* at the beginning of this instruction booklet.

Step 4: Attach a clamp to each access gate tab. See **Detail A**. Position the flat side of each clamp against a gate tab, apply a drop of thread locking adhesive to the bolt threads, and attach as shown. Note the side of the gate that faces the deck.

Step 5: Attach the access gates to the deck. See **Detail B**. Position the access gates against the deck with the clamps closed around the support posts, and attach as shown. Gates may be attached to the upper holes or the lower holes in the deck.

Step 6: Attach the access gates to the support posts. See **Detail C**. Apply a drop of thread locking adhesive to the bolt threads and attach as shown.

Step 7: Attach the climber support frame to the climber frame. See **Detail D**. Slide the support frame into the top of the climber frame, align the holes, apply a drop of thread locking adhesive to the bolt thread and attach as shown.

Step 8: Attach the climber assembly to the support posts. See **Detail E**. Position each socket clamp against a support post and over the ball on the end of the climber support frame attach as shown.

Final Details.

Step 9: Plumb and level the component. Tighten **all** fasteners. Fully tighten all fasteners according to tightening torque specifications. Block and brace for concrete. Pour concrete after all equipment has been assembled. Allow 72 hours for concrete to completely cure.

Torque Specifications:

Bolts and nuts - Snug tighten and then tighten an additional one half turn.

Step 10: Install drive rivets. See **Details F-1 and F-2**. After the equipment assembly is complete, install a drive rivet in the centerline clamp and the front socket clamp to permanently secure them to the support posts. Using a 1/4" drill bit, drill through each clamp and the support post. Insert the drive rivet into drilled hole until the head of the rivet is against the surface of the clamp or handle. Using a hammer, drive the pin of the rivet until it is flush with the surface of the rivet head.

Note: This step should be executed after structure has been assembled and properly footed.



PM7036 - NUVO™ TWINE CLIMBER 36 in. (914 mm) DECK

PART NO.	DESCRIPTION	QTY.
AAU0620	CLAMP - 5" OFFSET CENTERLINE DIE CAST	2
AAU6115	CLAMP - 5.00" DIA FRONT SOCKET	2
AAU6116	CLAMP - 5.00" DIA BACK SOCKET	2
ACL0408	CLIMBER - 1.66" O.D. PM ARCH w/1 CNNCTR DOWN	1
ACL0413	CLIMBER - 36" TWINE	1
BAE0020	RIVET - 1/4" x 11/16" DRIVE	4
BAE0600	WASHER - 1" O.D. FLAT	6
BAE0659	BOLT - 3/8"-16 x 3/4" BUTTON HEAD - SS	1
BAE0662	BOLT - 3/8"-16 x 1-1/4" TAMP RESIST w/TORX DRIVE	2
BAE0664	BOLT - 3/8"-16 x 1" BUTTON HEAD - SS	6
BAE1715	BOLT - 3/8"-16 x 1-1/4" FLANGE HEAD w/LONG PATCH	2
RAA_____	GATE - ACCESS LEFT	1
RAB_____	GATE - ACCESS RIGHT	1

PM7037 - NUVO™ TWINE CLIMBER 48 in. (1219 mm) DECK

PART NO.	DESCRIPTION	QTY.
AAU0620	CLAMP - 5" OFFSET CENTERLINE DIE CAST	2
AAU6115	CLAMP - 5.00" DIA FRONT SOCKET	2
AAU6116	CLAMP - 5.00" DIA BACK SOCKET	2
ACL0408	CLIMBER - 1.66" O.D. PM ARCH w/1 CNNCTR DOWN	1
ACL0415	CLIMBER - 48" TWINE	1
BAE0020	RIVET - 1/4" x 11/16" DRIVE	4
BAE0600	WASHER - 1" O.D. FLAT	6
BAE0659	BOLT - 3/8"-16 x 3/4" BUTTON HEAD - SS	1
BAE0662	BOLT - 3/8"-16 x 1-1/4" TAMP RESIST w/TORX DRIVE	2
BAE0664	BOLT - 3/8"-16 x 1" BUTTON HEAD - SS	6
BAE1715	BOLT - 3/8"-16 x 1-1/4" FLANGE HEAD w/LONG PATCH	2
RAA_____	GATE - ACCESS LEFT	1
RAB_____	GATE - ACCESS RIGHT	1



PM7038 - NUVO™ TWINE CLIMBER 60 in. (1524 mm) DECK

PART NO.	DESCRIPTION	QTY.
AAU0620	CLAMP - 5" OFFSET CENTERLINE DIE CAST	2
AAU6115	CLAMP - 5.00" DIA FRONT SOCKET	2
AAU6116	CLAMP - 5.00" DIA BACK SOCKET	2
ACL0408	CLIMBER - 1.66" O.D. PM ARCH w/1 CNNCTR DOWN	1
ACL0417	CLIMBER - 60" TWINE	1
BAE0020	RIVET - 1/4" x 11/16" DRIVE	4
BAE0600	WASHER - 1" O.D. FLAT	6
BAE0659	BOLT - 3/8"-16 x 3/4" BUTTON HEAD - SS	1
BAE0662	BOLT - 3/8"-16 x 1-1/4" TAMP RESIST w/TORX DRIVE	2
BAE0664	BOLT - 3/8"-16 x 1" BUTTON HEAD - SS	6
BAE1715	BOLT - 3/8"-16 x 1-1/4" FLANGE HEAD w/LONG PATCH	2
RAA____	GATE - ACCESS LEFT	1
RAB____	GATE - ACCESS RIGHT	1

PM7039 - NUVO™ TWINE CLIMBER 72 in. (1829 mm) DECK

PART NO.	DESCRIPTION	QTY.
AAU0620	CLAMP - 5" OFFSET CENTERLINE DIE CAST	2
AAU6115	CLAMP - 5.00" DIA FRONT SOCKET	2
AAU6116	CLAMP - 5.00" DIA BACK SOCKET	2
ACL0408	CLIMBER - 1.66" O.D. PM ARCH w/1 CNNCTR DOWN	1
ACL0419	CLIMBER - 72" TWINE	1
BAE0020	RIVET - 1/4" x 11/16" DRIVE	4
BAE0600	WASHER - 1" O.D. FLAT	6
BAE0659	BOLT - 3/8"-16 x 3/4" BUTTON HEAD - SS	1
BAE0662	BOLT - 3/8"-16 x 1-1/4" TAMP RESIST w/TORX DRIVE	2
BAE0664	BOLT - 3/8"-16 x 1" BUTTON HEAD - SS	6
BAE1715	BOLT - 3/8"-16 x 1-1/4" FLANGE HEAD w/LONG PATCH	2
RAA____	GATE - ACCESS LEFT	1
RAB____	GATE - ACCESS RIGHT	1

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Assembly View (representative model)

Model	Deck Height	Weight
ZZPM0296	12" (305 mm) to 24" (610 mm)	66.01 lbs. (30 kg)
ZZPM0297	36" (915 mm) to 48" (1219 mm)	74.81 lbs. (34 kg)

Installation Instructions

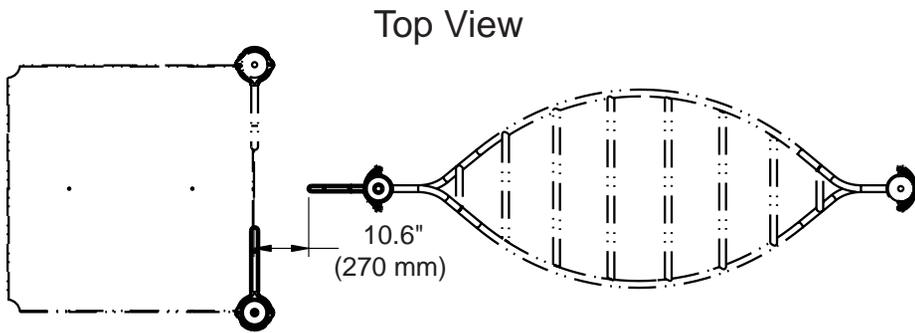
Playmakers® Model PM0296 and PM0297
 12" (305 mm) to 24" (610 mm) Deck Access
 and 36" (914 mm) to 48" (1219 mm) Deck Access
 GroundZero® Post w/ Ladder

Installation Preparation

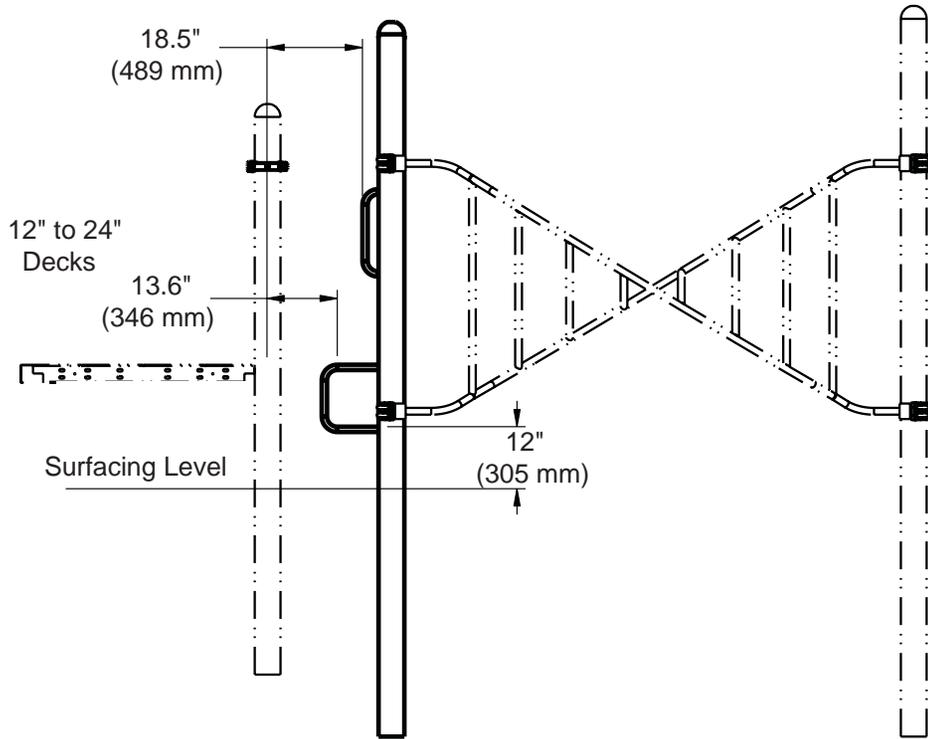
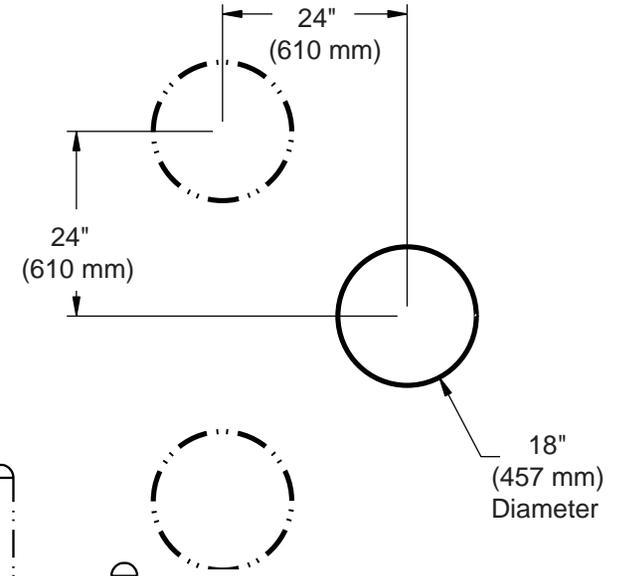
Recommended Crew: One (1) adult
 Installation Time: 0.5 man-hour
 Weight: (refer to table)
 Concrete Required: 0.13 cubic yard (0,10 cubic meters)
 Use Zone: Refer to Master Drawing
 User Group Age (years): ASTM/CSA: 5-12, EN: 6-14

ICON KEY	
	Fully Tighten Hardware
	Add 1 Drop of Thread Locking Adhesive
	Do Not Fully Tighten Hardware
	Pour Concrete
	Critical Fall Height
	Dig Footing Holes

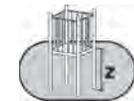
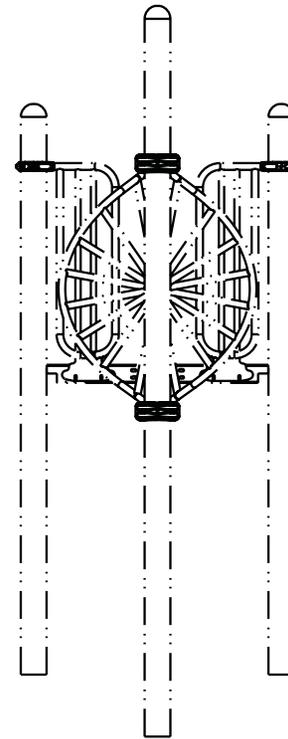
Installation Instructions



Footing Diagram



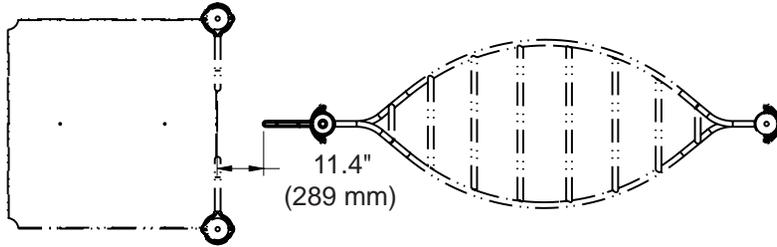
**Elevation Views
ZZPM0296**



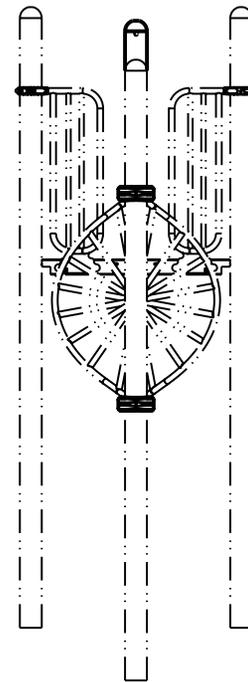
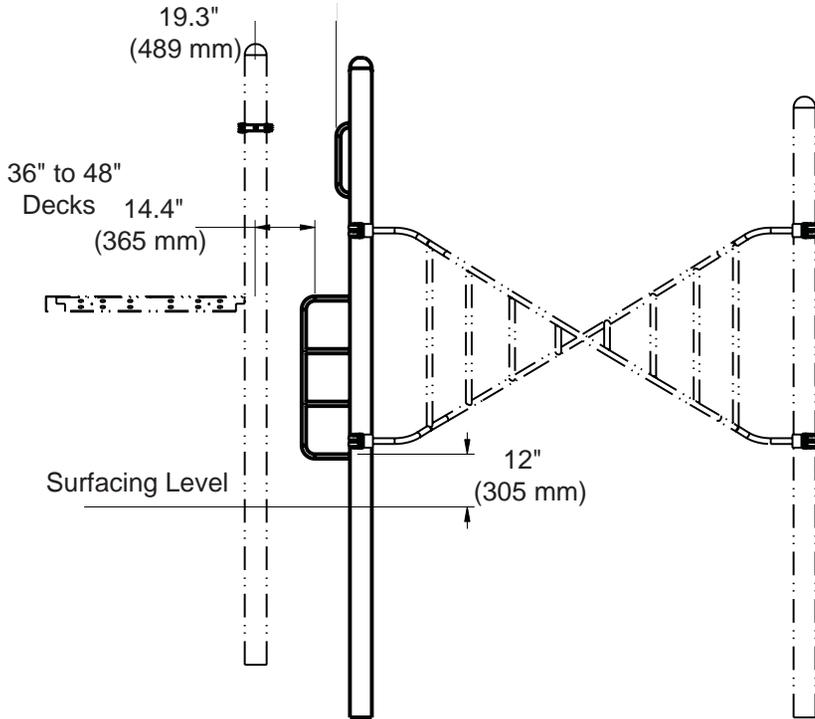
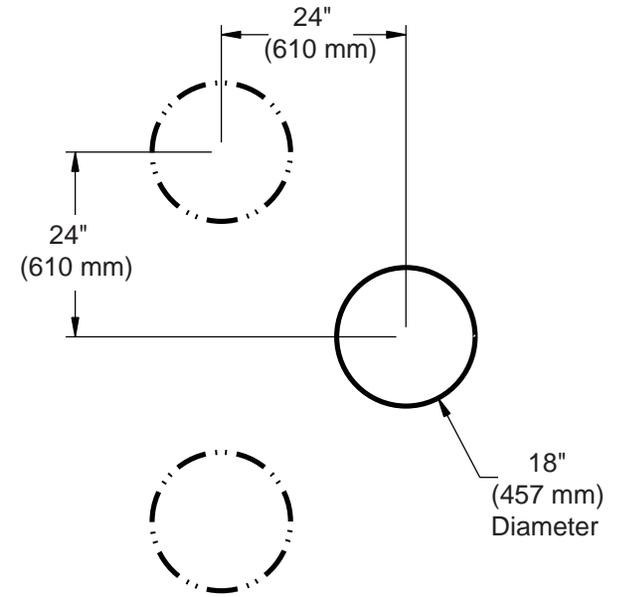
EN: 635 mm

Installation Instructions

Top View



Footing Diagram



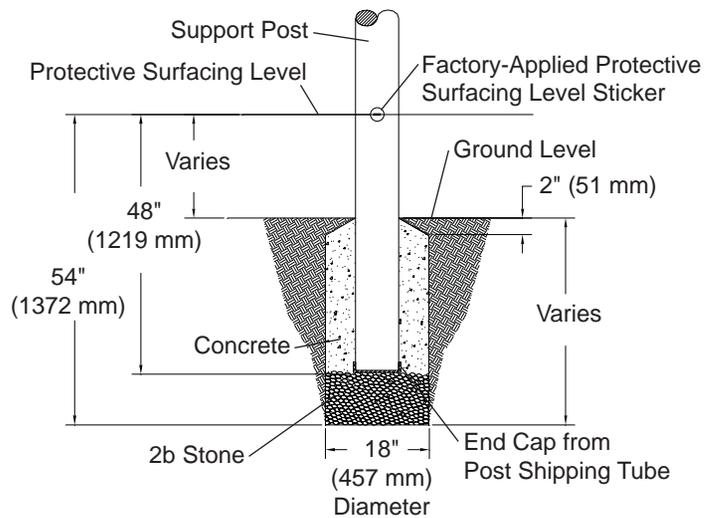
Elevation Views
ZZPM0297



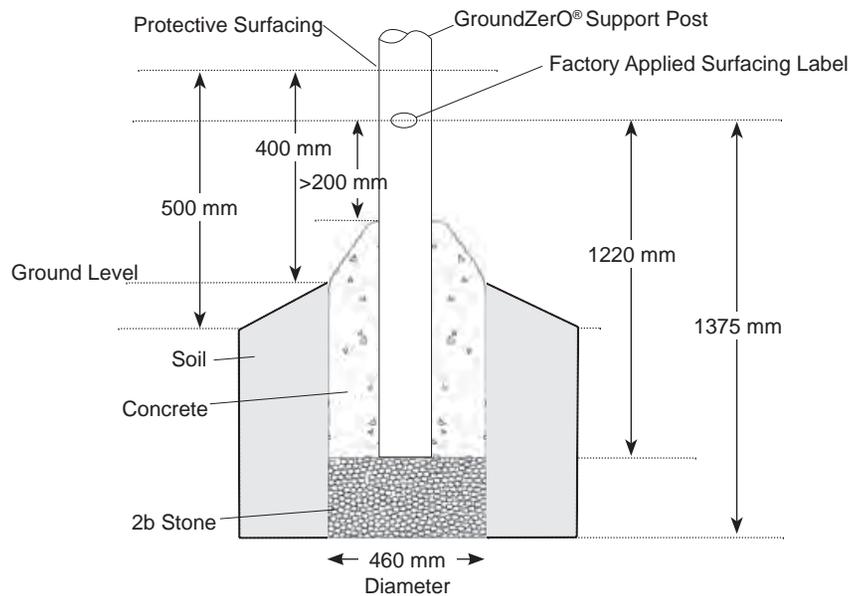
EN: 1219 mm



Installation Instructions



GroundZero® Support Post Footing Detail ASTM/CSA



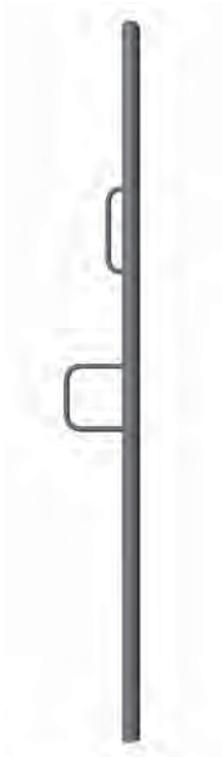
Footing Detail - GroundZero® Support Post (EN)

FOOTING NOTES

- Support post footing depth equals 54 in. (1372 mm) less the depth of the protective surfacing material. The post is designed to have 36" (914 mm) in concrete.
Example: If 12 in. (305 mm) of wood mulch is used for surfacing, the footing depth would be 42 in. (1067 mm).
- All support posts and component support legs shall have either a factory-applied sticker with line, or factory-applied mark designating protective surfacing level on a clear and level installation site.
- If play structure is installed on uneven terrain, maintain support post mark at protective surfacing level at lowest grade. Adjust other footings accordingly. Support posts and all attaching decks and play components must be plumb and level.
- Do not encase bottom of support post in concrete. Place post directly on packed stone.
- The footings shown on Playworld Systems' documentation are recommendations based on historical performance in average soil conditions. Footing dimensions may be modified by the owner based on actual soil conditions.
For example:
 - If local soil is loose or unstable, a larger footing may be required.
 - If local soil is considered stable, such as bedrock, clay or hard packed earth, a smaller footing may be used. Before changing footing dimensions, we strongly recommend that the footings be reviewed and approved by a registered engineer.
- Base of footing must be below frost line.
- Assemble the entire structure before pouring concrete unless specifically instructed to do so in the individual component installation instructions.

Installation Instructions

Follow the details in alphabetical order. For clarification, each detail references the step description.



Detail A
Step 4



Step 3



Step 5

Notes Before You Begin: Do not over tighten bolts during assembly, only snug tighten them until assembly is complete.

Carefully read and understand these installation instructions before you begin.

Step 1: Before attempting to assemble your equipment, please review all installation information carefully. Should you experience any difficulty during the installation process, please call us at the phone number shown on the last page of these instructions.

Step 2: Separate and identify all components and hardware.

Step 3: Excavate footings as shown in the **Footings Details**.

Place the support post in the prepared hole.

Step 4: Place the support post into the prepared hole. See **Detail A** and **Elevation View**. Select the support post. Place the post into the hole as shown in the **Elevation View**.

Important Note: Align the ladder to the deck as shown in the **Elevation View**.

Final Details.

Step 5: Plumb and level entire component. Block and brace for concrete. Pour concrete after all equipment has been assembled. Allow 72 hours for concrete to completely cure.

PM0296 - 12 IN (305 mm) TO 24 IN (610 mm) GROUND ZERO POST WITH LADDER

PART NO.	DESCRIPTION	QTY.
CAP0043	POST - 5.00" O.D. x 136.00" w/CAP & LADDER (GZ)	1

PM0297 - 36 IN (914 mm) TO 48 IN (1219 mm) GROUND ZERO POST WITH LADDER

PART NO.	DESCRIPTION	QTY.
CAP0044	POST - 5.00" O.D. x 148.00" w/CAP & LADDER (GZ)	1

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Installation Instructions

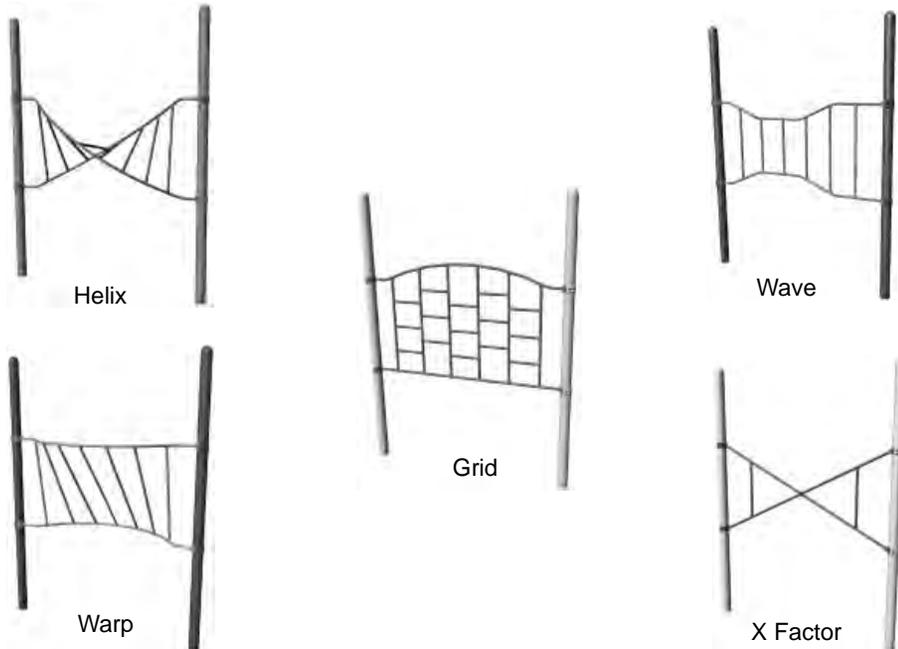
Playmakers®

Models PM8398-PM8400, PM8406 & PM8408

GroundZero® Adventure Climbers

Installation Preparation

Recommended Crew: Two (2) adults
 Installation Time: 1 man-hour
 Weight: (refer to table)
 Use Zone: Refer to Master Drawing
 User Group Age (years): ASTM/CSA: 5-12, EN: 6-14

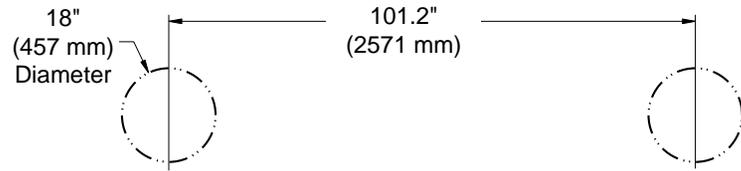


Assembly View

Models	Climber Name	Weight
ZZPM8398	Helix	85.7 lbs. (38,9 kg)
ZZPM8399	Wave	70.5 lbs. (32 kg)
ZZPM8400	Warp	94.8 lbs. (43,1 kg)
ZZPM8406	X Factor	52 lbs. (23,6 kg)
ZZPM8408	Grid	107.6 lbs. (48,9 kg)

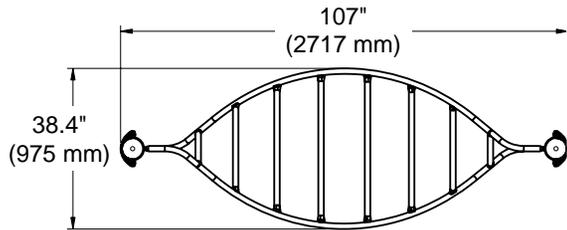
ICON KEY	
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	Do Not Fully Tighten Hardware
	Add 1 Drop of Thread Locking Adhesive
	Critical Fall Height
	Drill
	Hammer

Installation Instructions

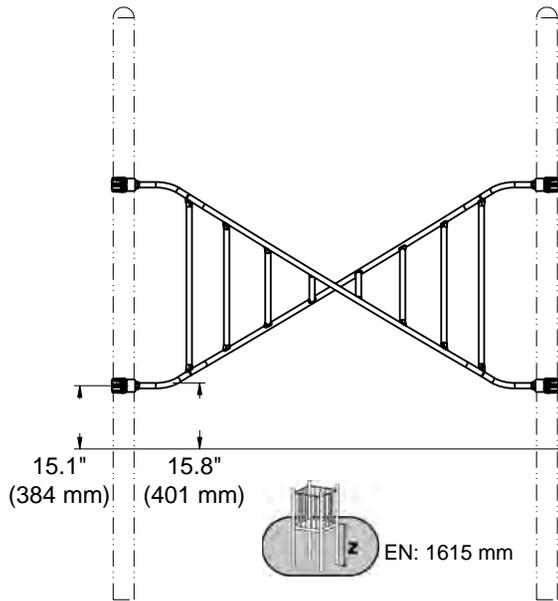
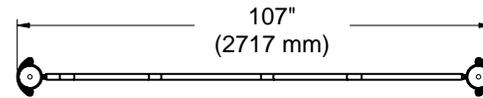


Footing Diagram
(All Models)

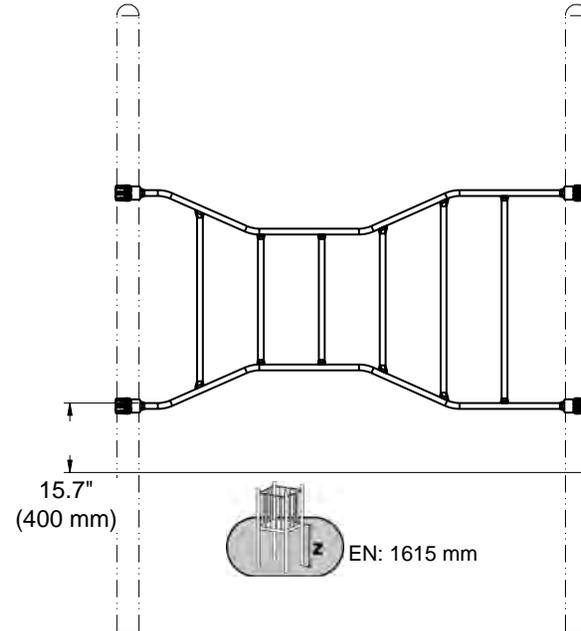
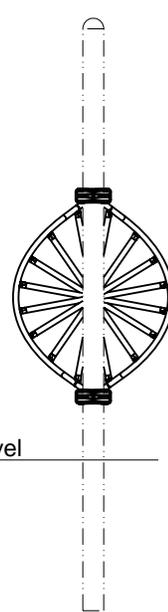
Top View



Top View



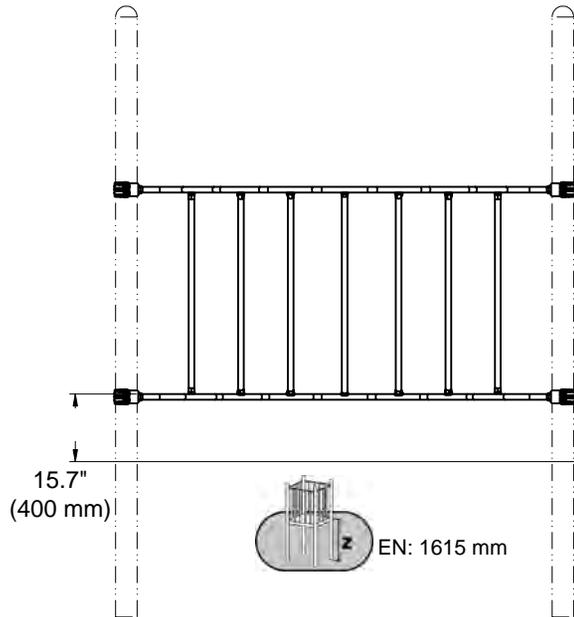
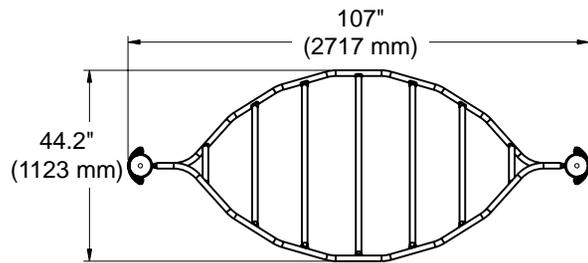
Elevation Views
ZZPM8398 - The Helix



Elevation Views
ZZPM8399 - The Wave

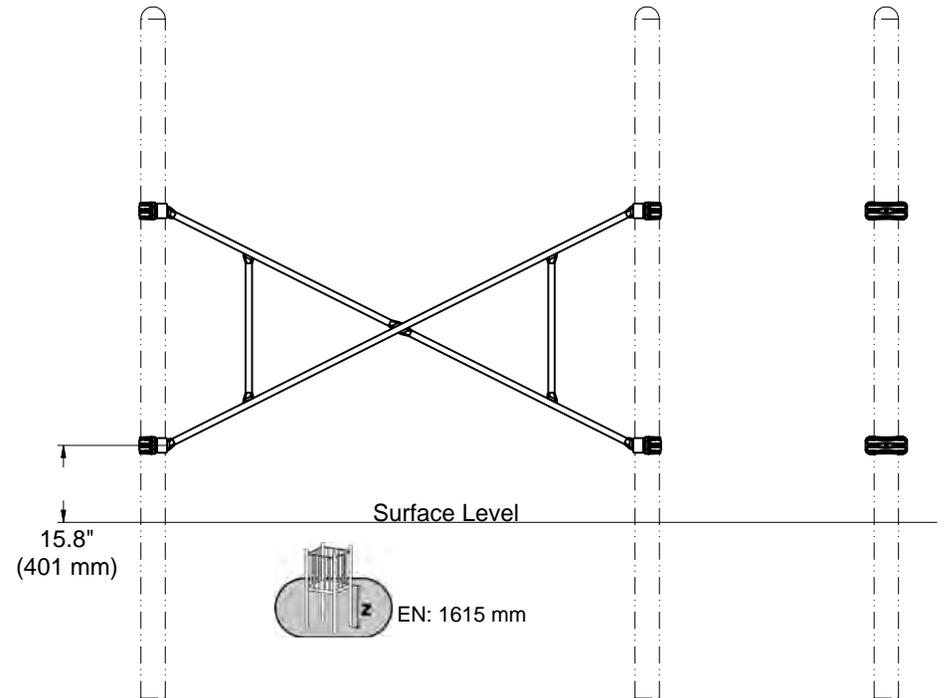
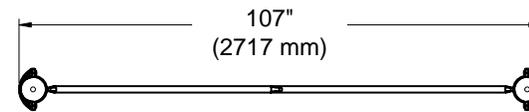
Installation Instructions

Top View



Elevation Views
ZZPM8400 - The Warp

Top View

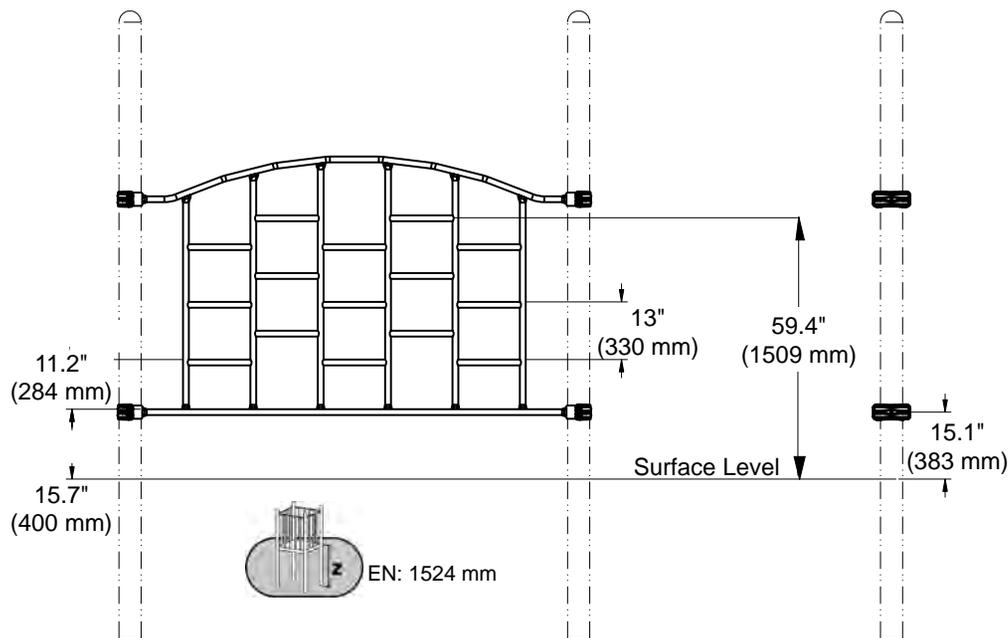
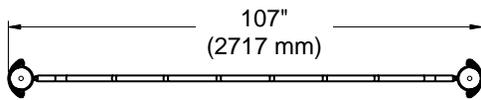


Elevation Views
ZZPM8406 - The X Factor



Installation Instructions

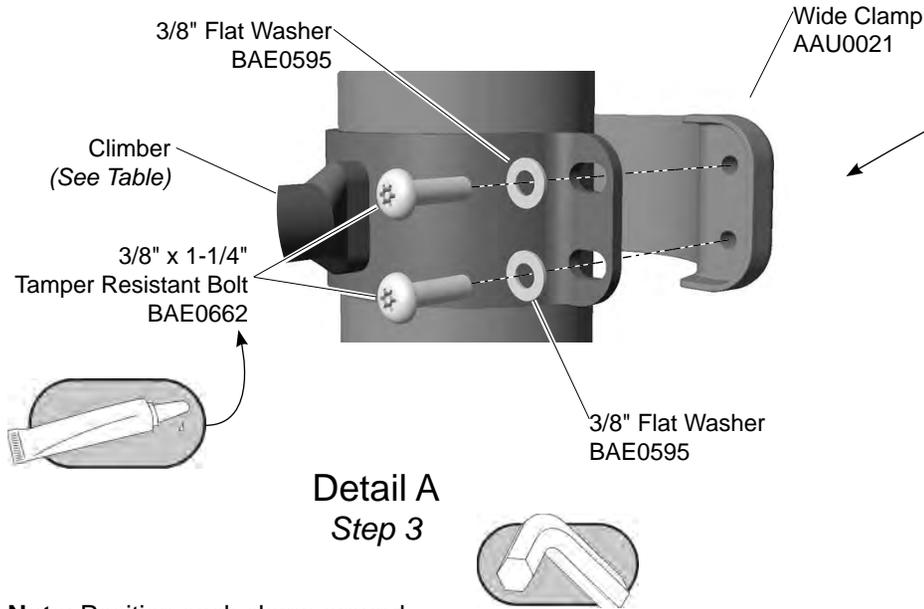
Top View



Elevation Views
ZZPM8408 - The Grid

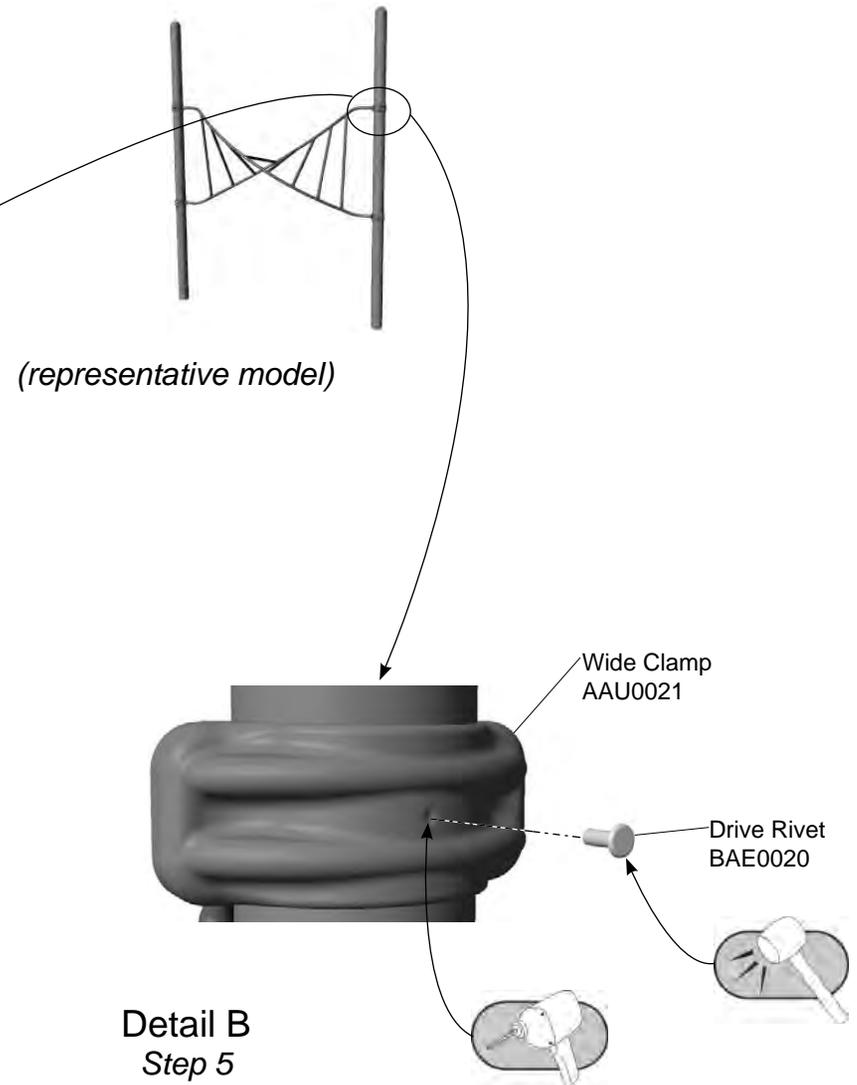
Installation Instructions

Follow the details in alphabetical order. For clarification, each detail references the step description. The step descriptions start on page 6.



Note: Position each clamp around a support post at the heights indicated in the **Elevation View**.

Models	Climber Name	Climber Part Number
ZZPM8398	Helix	ACL0205
ZZPM8399	Wave	ACL0207
ZZPM8400	Warp	ACL0209
ZZPM8406	X Factor	ACL0213
ZZPM8408	Grid	ACL0211



Installation Instructions

__ **Notes Before You Begin:** Do not over tighten bolts during assembly, only snug tighten them until assembly is complete.

Carefully read and understand these installation instructions before you begin.

__ **Step 1:** Before attempting to assemble your equipment, please review all installation information carefully. Should you experience any difficulty during the installation process, please call us at the phone number shown on the last page of these instructions.

__ **Step 2:** Separate and identify all components and hardware. Reference the master layout drawing for the component model and the location of the equipment.

Attach the climber to the support posts.

__ **Step 3:** Attach the climber to the support posts. See **Detail A** and the corresponding **Elevation View**. Select the appropriate climber, (4) four wide clamps, and the appropriate hardware. There are (8) eight connections. Position the climber between the post at the height indicated and attach as shown.

Final Details.

__ **Step 4:** Plumb and level the component. Ensure components are at the heights specified in the **Elevation Views**. Tighten **all** fasteners. Fully tighten all fasteners according to tightening torque specifications.

Torque specifications - Nuts and Bolts: Snug tighten and tighten an additional one-half turn.

__ **Step 5:** Install drive rivets. See **Detail B**. After the equipment assembly is complete, install a drive rivet in each clamp to permanently secure it to the support post. Using a 1/4" drill bit, drill through the clamp and support post. Insert the drive rivet into drilled hole until the head of the rivet is against the surface of the clamp. Using a hammer, pound the pin of the rivet until it is flush with the surface of the rivet head.

Note: This step should be executed after structure has been assembled and properly footed.

PM8398 - GROUNDZERO® ADVENTURE HELIX CLIMBER

PART NO.	DESCRIPTION	QTY.
AAU0021	CLAMP - 5" WIDE ALUMINUM	4
ACL0205	CLIMBER - THE HELIX (PM)	1
BAD0085	THREAD LOCKING ADHESIVE	1
BAE0020	RIVET - 1/4" x 11/16" DRIVE	4
BAE0595	WASHER - 3/8" SAE FLAT	16
BAE0662	BOLT - 3/8"-16 x 1-1/4" TMPR RESISTANT w/TORX DRV	16

PM8408 - GROUNDZERO® ADVENTURE GRID CLIMBER

PART NO.	DESCRIPTION	QTY.
AAU0021	CLAMP - 5" WIDE ALUMINUM	4
ACL0211	CLIMBER - THE GRID (PM)	1
BAD0085	THREAD LOCKING ADHESIVE	1
BAE0020	RIVET - 1/4" x 11/16" DRIVE	4
BAE0595	WASHER - 3/8" SAE FLAT	16
BAE0662	BOLT - 3/8"-16 x 1-1/4" TMPR RESISTANT w/TORX DRV	16

PM8399 - GROUNDZERO® ADVENTURE WAVE CLIMBER

PART NO.	DESCRIPTION	QTY.
AAU0021	CLAMP - 5" WIDE ALUMINUM	4
ACL0207	CLIMBER - THE WAVE (PM)	1
BAD0085	THREAD LOCKING ADHESIVE	1
BAE0020	RIVET - 1/4" x 11/16" DRIVE	4
BAE0595	WASHER - 3/8" SAE FLAT	16
BAE0662	BOLT - 3/8"-16 x 1-1/4" TMPR RESISTANT w/TORX DRV	16

PM8400 - GROUNDZERO® ADVENTURE WARP CLIMBER

PART NO.	DESCRIPTION	QTY.
AAU0021	CLAMP - 5" WIDE ALUMINUM	4
ACL0209	CLIMBER - THE WARP (PM)	1
BAD0085	THREAD LOCKING ADHESIVE	1
BAE0020	RIVET - 1/4" x 11/16" DRIVE	4
BAE0595	WASHER - 3/8" SAE FLAT	16
BAE0662	BOLT - 3/8"-16 x 1-1/4" TMPR RESISTANT w/TORX DRV	16

PM8406 - GROUNDZERO® ADVENTURE X FACTOR CLIMBER

PART NO.	DESCRIPTION	QTY.
AAU0021	CLAMP - 5" WIDE ALUMINUM	4
ACL0213	CLIMBER - THE X FACTOR (PM)	1
BAD0085	THREAD LOCKING ADHESIVE	1
BAE0020	RIVET - 1/4" x 11/16" DRIVE	4
BAE0595	WASHER - 3/8" SAE FLAT	16
BAE0662	BOLT - 3/8"-16 x 1-1/4" TMPR RESISTANT w/TORX DRV	16

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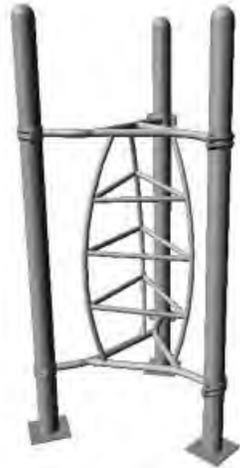
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PM9079
TRI-JUNCTION



PM9080
QUAD JUNCTION

Assembly View

Installation Instructions

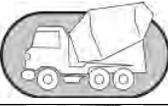
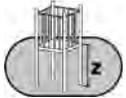
Playmakers® Models PM9079 and PM9080

Adventure Series

Tri-Junction and Quad Junction Climbers

Installation Preparation

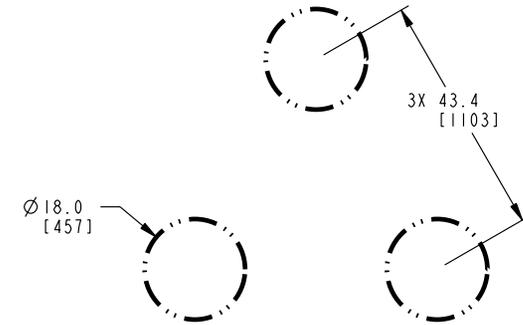
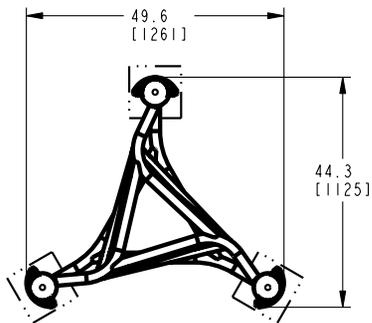
Recommended Crew: Two (2) adults
 Installation Time: 0.5 man-hour
 Use Zone:..... Refer to Master Drawing
 User Group Age (years): ASTM/CSA: 5-12, EN: 6-14

ICON KEY			
	Fully Tighten Hardware		Add 1 Drop of Thread Locking Adhesive
	Do Not Fully Tighten Hardware		Pour Concrete
	Drill		Dig Footing Holes
	Hammer		Critical Fall Height

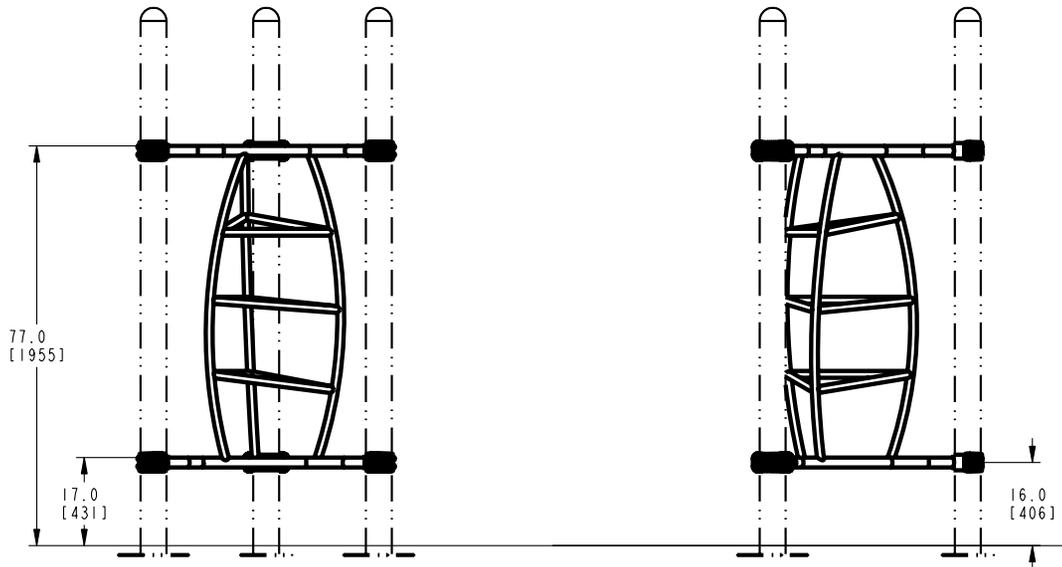
Installation Instructions

KEY	
Position	Unit of Measurement
Top #	Inches
Bottom #	[Millimeters]

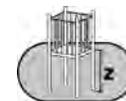
Top View



Footing Diagram



Elevation Views
PM9079



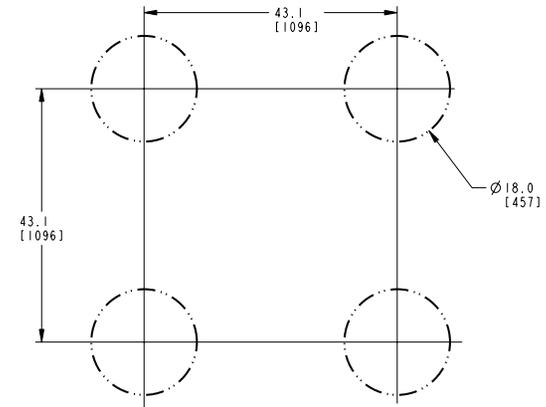
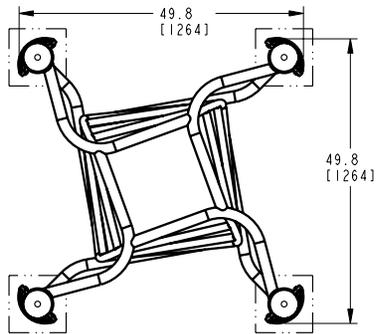
77" (1955 mm)



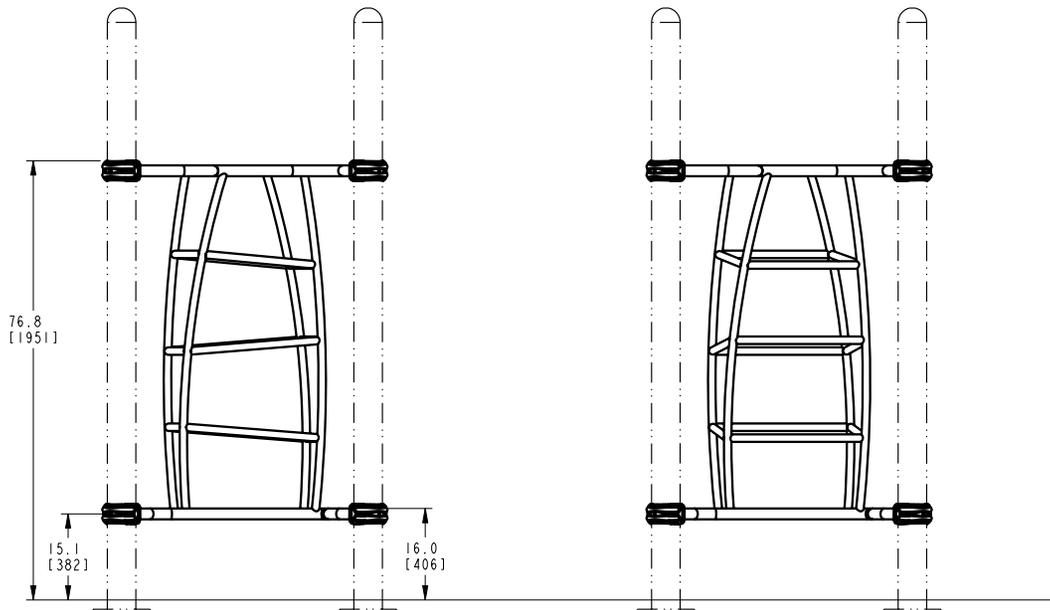
Installation Instructions

KEY	
Position	Unit of Measurement
Top #	Inches
Bottom #	[Millimeters]

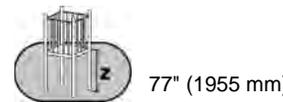
Top View



Footing Diagram

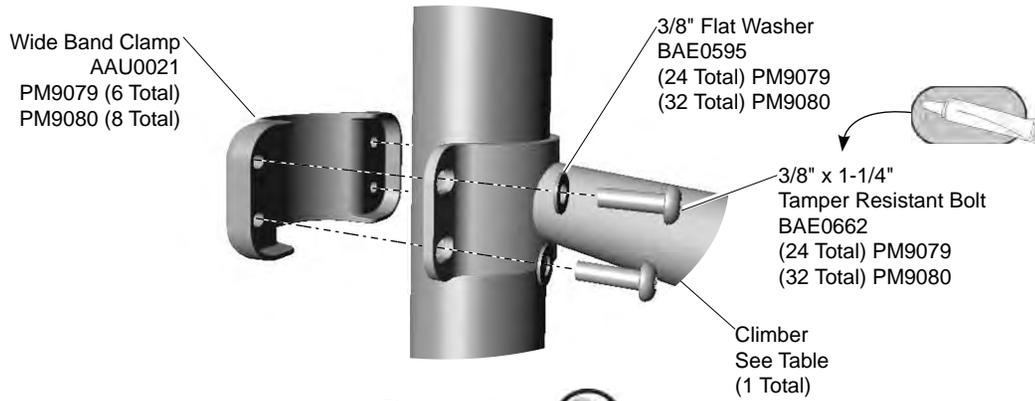


Elevation Views
PM9080



Installation Instructions

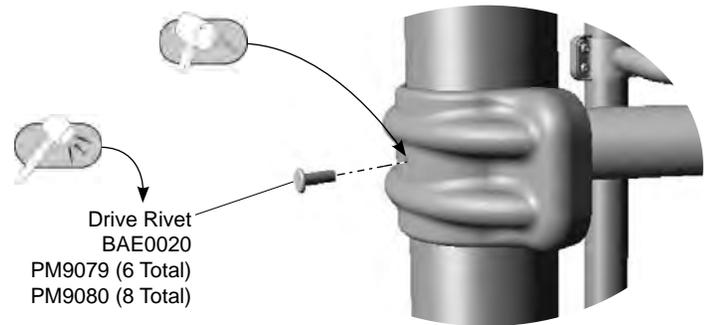
Follow the details in alphabetical order. For clarification, each detail references the step description. The step descriptions start on page 5.



Detail A
Step 4

Attach the climber to the support posts.

Model	Climber Number	Climber Name
PM9079	ACL0360	Tri-Junction
PM9080	ACL0362	Quad Junction



Detail B
Step 6

Secure the clamps to the support posts.



Installation Instructions

Notes Before You Begin: Do not over tighten bolts during assembly, only snug tighten them until assembly is complete.

Carefully read and understand these installation instructions before you begin.

Step 1: Before attempting to assemble your equipment, please review all installation information carefully. Should you experience any difficulty during the installation process, please call us at the phone number shown on the last page of these instructions.

Step 2: Separate and identify all components and hardware.

Step 3: Refer to the master plan top view for the location of your equipment.

Step 4: Attach the climber to the support posts. See **Detail A**. Position the climber between the support posts at the height shown in the **Elevation View**, apply a drop of thread locking adhesive to the bolt threads, and attach as shown.

Final Details.

Step 5: Plumb and level the component. Tighten **all** fasteners. Fully tighten all fasteners according to tightening torque specifications.

Torque Specifications:

Bolts and nuts - Snug tighten and then tighten an additional one half turn.

Step 6: Install drive rivets. See **Detail B**. After the equipment assembly is complete, install a drive rivet in each clamp to permanently secure it to the support post. Using a 1/4" drill bit, drill through the clamp and support post. Insert the drive rivet into drilled hole until the head of the rivet is against the surface of the clamp. Using a hammer, drive the pin of the rivet until it is flush with the surface of the rivet head.

Note: This step should be executed after structure has been assembled and properly footed.



PM9079 - ADVENTURE SERIES TRI-JUNCTION CLIMBER

PART NO.	DESCRIPTION	QTY.
AAU0021	CLAMP - 5" WIDE ALUMINUM	6
ACL0360	CLIMBER - TRI JUNCTION (PM)	1
BAD0085	THREAD LOCKING ADHESIVE	1
BAE0020	RIVET - 1/4" x 11/16" DRIVE	6
BAE0595	WASHER - 3/8" SAE FLAT	24
BAE0662	BOLT - 3/8"-16 x 1-1/4" TAMP RESIST w/TORX DRIVE	24

PM9080 - ADVENTURE SERIES QUAD JUNCTION CLIMBER

PART NO.	DESCRIPTION	QTY.
AAU0021	CLAMP - 5" WIDE ALUMINUM	8
ACL0362	CLIMBER - QUAD JUNCTION (PM)	1
BAD0085	THREAD LOCKING ADHESIVE	1
BAE0020	RIVET - 1/4" x 11/16" DRIVE	8
BAE0595	WASHER - 3/8" SAE FLAT	32
BAE0662	BOLT - 3/8"-16 x 1-1/4" TAMP RESIST w/TORX DRIVE	32

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**PLAYWORLD SYSTEMS®
THE SKY LINK & THE SKY ARCH**

 **WARNING**

Attention Owner

The Sky Link and The Sky Arch is designed for hand over hand movement across the top rungs to foster play activity which combines upper body development, body control, hand eye coordination, and gripping ability.

Improper play and behavior on the Sky Link and The Sky Arch can result in serious accidents. The following rules for the use of the Sky Link and The Sky Arch must be applied to reduce the possibility of debilitating injuries:

- Properly trained adult supervision is required at all times. Sky Link and The Sky Arch is designed to accommodate children 5 through 12 years of age. Supervisors and parents should be aware of appropriate age and physical capabilities of users.
- Do not crawl on, sit on, stand on or jump off of the top of the Sky Link or The Sky Arch assembly.
- Users must move in same direction across the length of the Sky Link and The Sky Arch assembly. Always use fingers and thumbs for "Lock Grip" on hand rungs. Do not begin movement across the top hand rungs from opposite ends of the structure.
- Adequate distance, such as half the length of the ladder, must be maintained between users proceeding across the hand rung assembly.

- Be alert to swinging feet generated by body movement of participants using the apparatus.
- Do not use when hand rungs are wet as gripping capability is impaired. Use only when rungs are dry.
- Avoid speed contests or trying to cover too large a distance in one move.
- Drop from hand rungs with knees slightly bent and land on both feet.
- Protective surfacing material must be installed and maintained within the use zone of the Sky Link and The Sky Arch in accordance with the applicable standard in your area, appropriate for the fall height of the Sky Link and The Sky Arch.
- Review and familiarize warning document supplied with each Sky Link and The Sky Arch shipment outlining owner's responsibilities on provided and maintaining required impact absorbing surfacing material.

As the owner of this playground equipment, you are responsible for communicating proper usage to those who may play on it. Playworld Systems accepts NO responsibility for improper use.

SUPERVISION INSTRUCTIONS



Movement Must Be In Same Direction With Adequate Distance Between Users



Do Not Begin Movement From Opposite Directions



Do Not Stand On Or Jump Off Top Of The Hand Over Hand Ladder

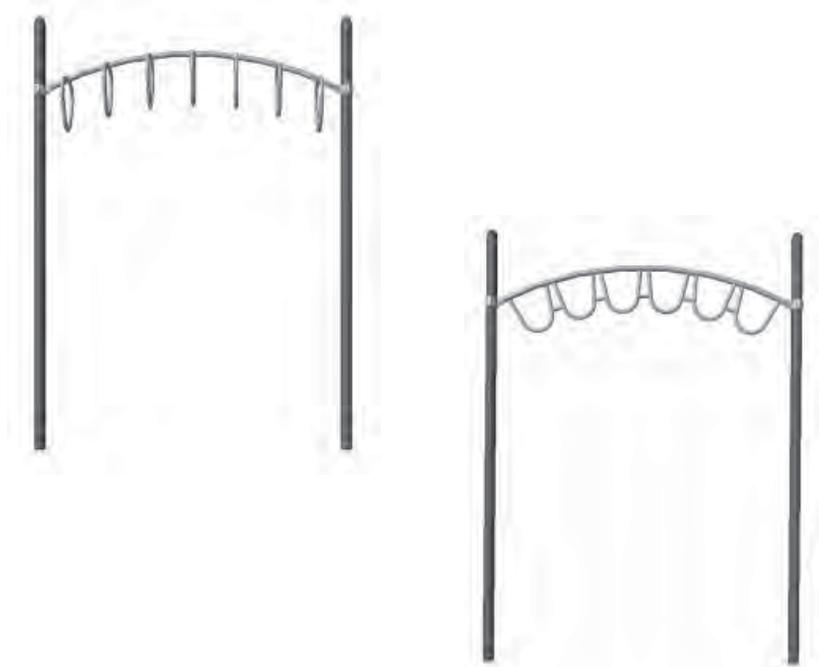


Do Not Crawl Or Sit On Top Of The Hand Over Hand Ladder



Do Not Use When Hand Rungs Are Wet

Installation Instructions Playmakers® Models PM8450 & PM8456 The Sky Link & The Sky Arch



Assembly View (representative model)

Model	Name	Weight
ZZPM8450	The Sky Link	55.1 lbs. (25 kg)
ZZPM8456	The Sky Arch	45.7 lbs. (20,8 kg)

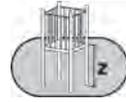
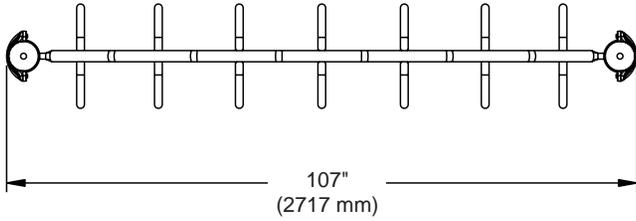
Installation Preparation

Recommended Crew: Two (2) adults
 Installation Time: 0.5 installation-hours
 Weight: (refer to table)
 Use Zone:..... Refer to Master Drawing
 User Group Age (years): ASTM/CSA: 5-12, EN: 6-14

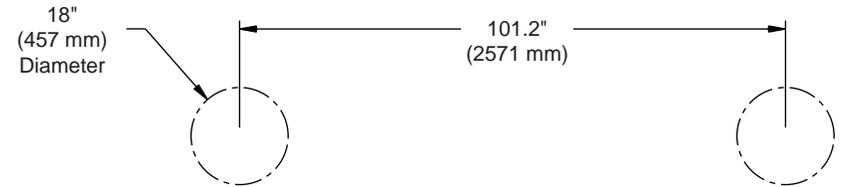
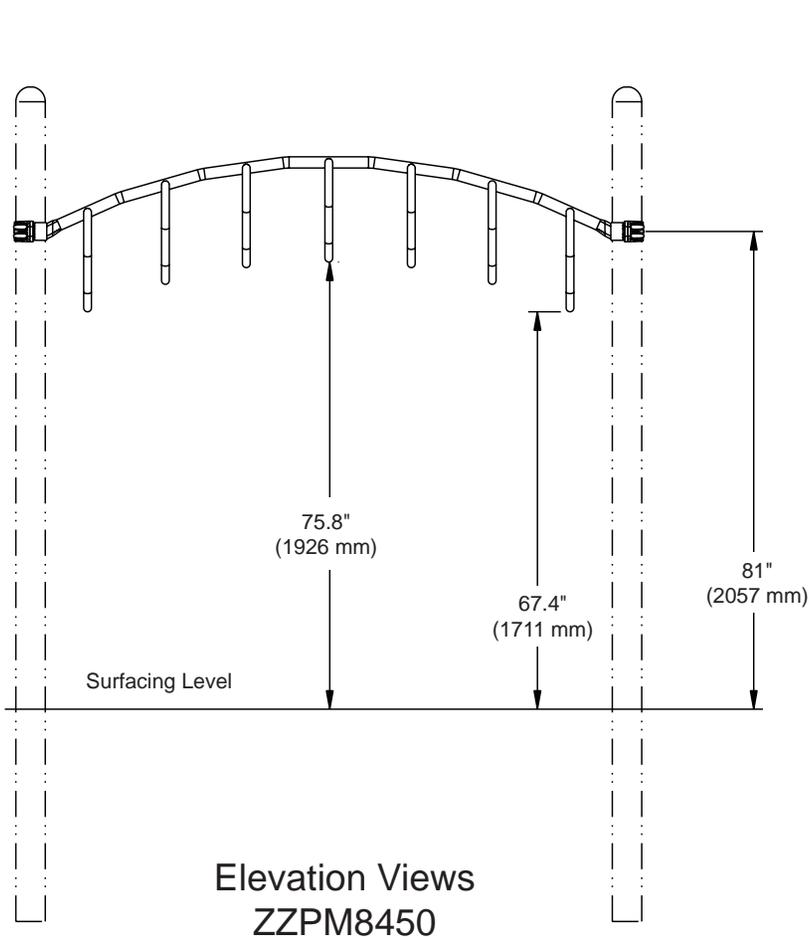
ICON KEY	
	Fully Tighten Hardware
	Add 1 Drop of Thread Locking Adhesive
	Do Not Fully Tighten Hardware
	Pour Concrete
	Drill
	Dig Footing Holes
	Hammer
	Critical Fall Height

Installation Instructions

Top View

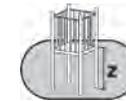
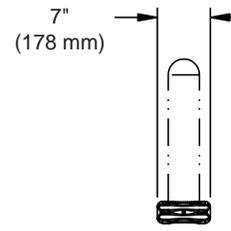
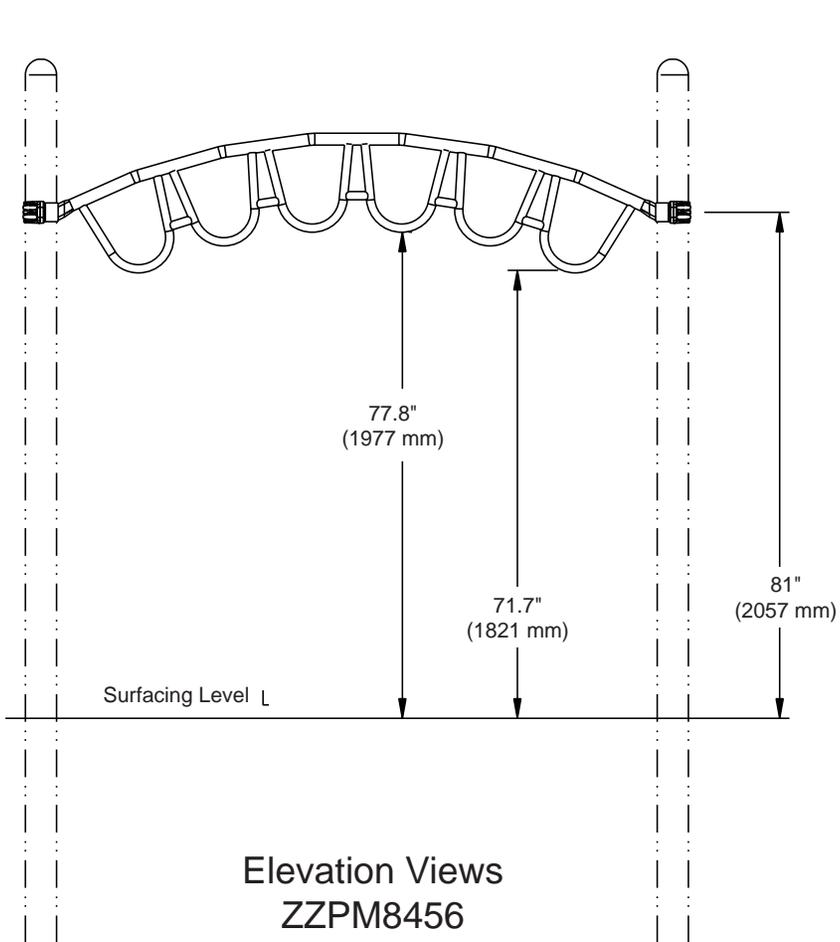
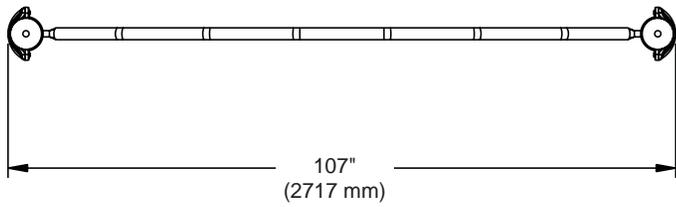


EN: 1926 mm



Installation Instructions

Top View

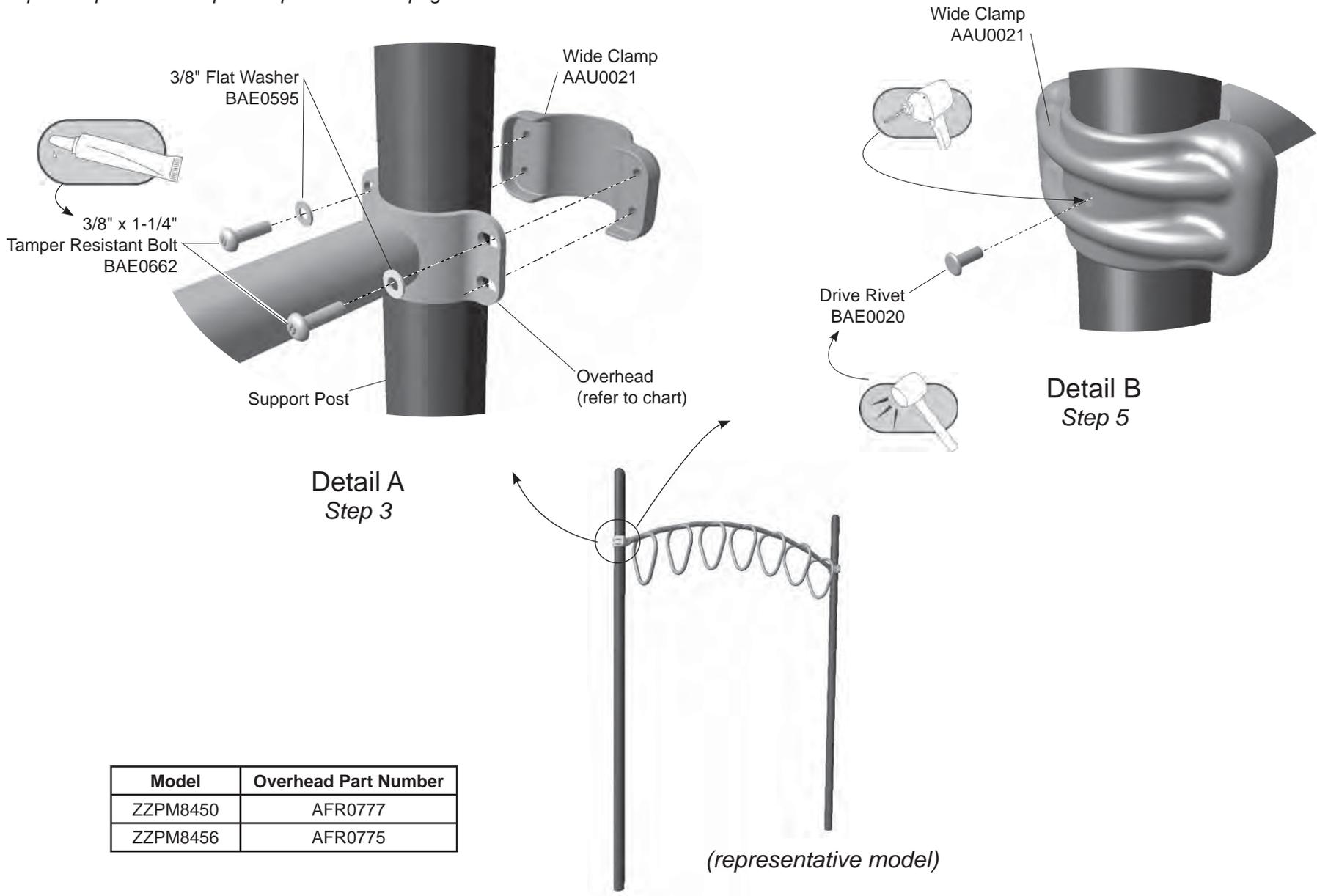


EN: 1977 mm



Installation Instructions

Follow the details in alphabetical order. For clarification, each detail references the step description. The step descriptions start on page 5.



Model	Overhead Part Number
ZZPM8450	AFR0777
ZZPM8456	AFR0775

Installation Instructions

Notes Before You Begin: Do not over tighten bolts during assembly, only snug tighten them until assembly is complete.

Carefully read and understand these installation instructions before you begin.

Step 1: Before attempting to assemble your equipment, please review all installation information carefully. Should you experience any difficulty during the installation process, please call us at the phone number shown on the last page of these instructions.

Step 2: Separate and identify all components and hardware.

Attach the overhead to the support posts.

Step 3: See **Detail A**. Select the overhead, the clamp, and the appropriate hardware. There are (8) eight connections. Lift the overhead to the appropriate height. Apply a drop of loctite to the bolt threads and attach as shown.

Final Details.

Step 4: Plumb and level the component. Tighten **all** fasteners. Fully tighten all fasteners according to tightening torque specifications. Block and brace for concrete. Pour concrete after all equipment has been assembled. Allow 72 hours for concrete to completely cure.

Torque Specifications:

Bolts and nuts - Snug tighten and then tighten an additional one half turn.

Step 5: Install drive rivets. See **Detail B**. After the equipment assembly is complete, install a drive rivet in each clamp to permanently secure it to the support post. Using a 1/4" drill bit, drill through the clamp and support post. Insert the drive rivet into drilled hole until the head of the rivet is against the surface of the clamp. Using a hammer, drive the pin of the rivet until it is flush with the surface of the rivet head.

Note: This step should be executed after structure has been assembled and properly footed.

PM8450 - THE SKY LINK

PART NO.	DESCRIPTION	QTY.
AAU0021	CLAMP - 5" WIDE ALUMINUM	2
AFR0777	OVERHEAD - ADVENTURE SERIES BACKBONE (PM)	1
BAD0085	THREAD LOCKING ADHESIVE	1
BAE0020	RIVET - 1/4" x 11/16" DRIVE	2
BAE0595	WASHER - 3/8" SAE FLAT	8
BAE0662	BOLT - 3/8"-16 x 1-1/4" TMPR RESISTANT w/TORX DRIVE	8

PM8456 - THE SKY ARCH

PART NO.	DESCRIPTION	QTY.
AAU0021	CLAMP - 5" WIDE ALUMINUM	2
AFR0775	OVERHEAD - ADVENTURE SERIES LOOP (PM)	1
BAD0085	THREAD LOCKING ADHESIVE	1
BAE0020	RIVET - 1/4" x 11/16" DRIVE	2
BAE0595	WASHER - 3/8" SAE FLAT	8
BAE0662	BOLT - 3/8"-16 x 1-1/4" TMPR RESISTANT w/TORX DRIVE	8

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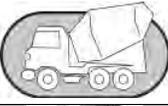
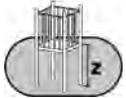
Assembly View

Installation Instructions Playmakers® Model PM6810 Vortex

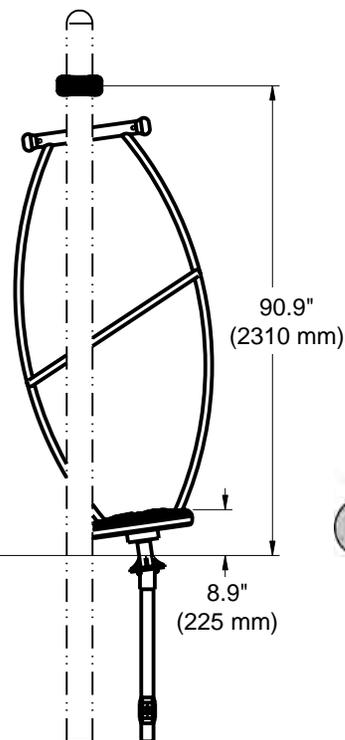
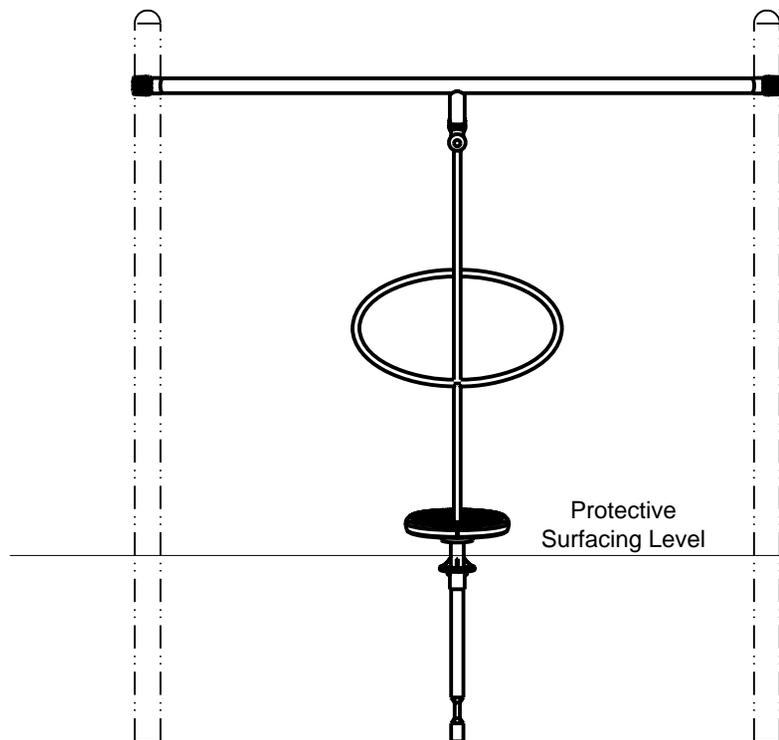
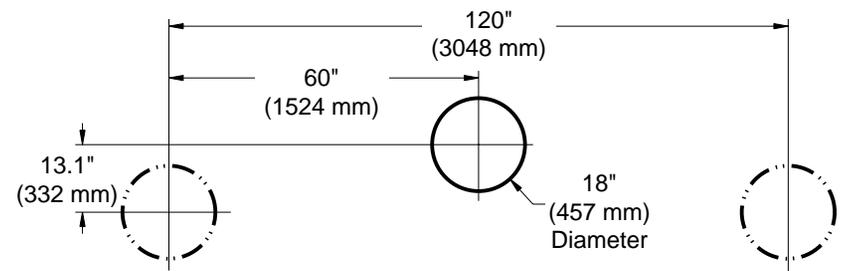
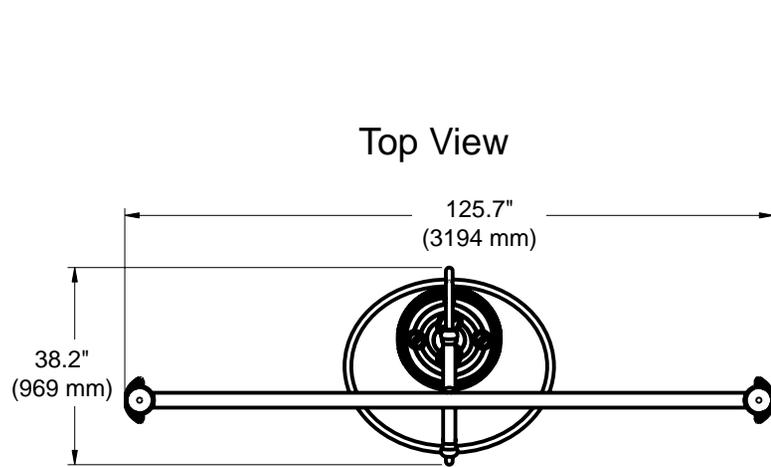
Installation Preparation

Recommended Crew: Two (2) adults
 Installation Time: 2 man-hours
 Weight: *162.2 lbs. (77,3 kg)
 Concrete Required: 0.13 cubic yard (0,10 cubic meters)
 Use Zone: Refer to Master Layout Drawing
 User Group Age (years): ASTM/CSA: 5-12, EN: 2-14

**Weight is approximate for determining manpower.*

ICON KEY			
	Fully Tighten Hardware		Add 1 Drop of Thread Locking Adhesive
	Do Not Fully Tighten Hardware		Pour Concrete
	Drill		Dig Footing Holes
	Hammer		Critical Fall Height

Installation Instructions



Step 3

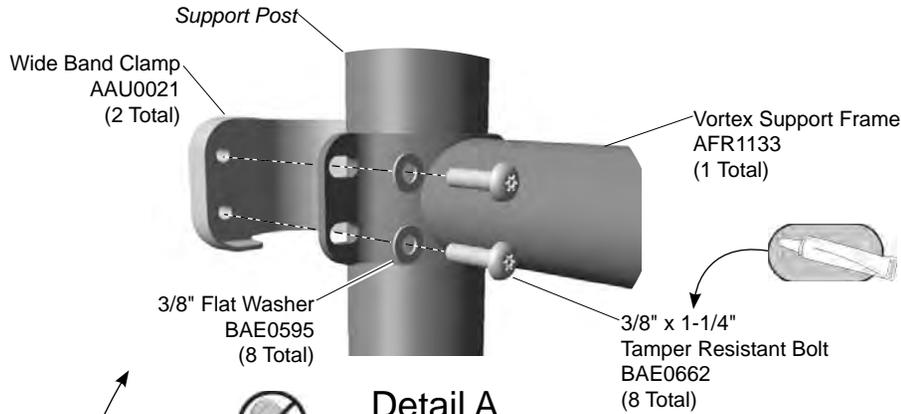


8.9"
225 mm

Elevation Views

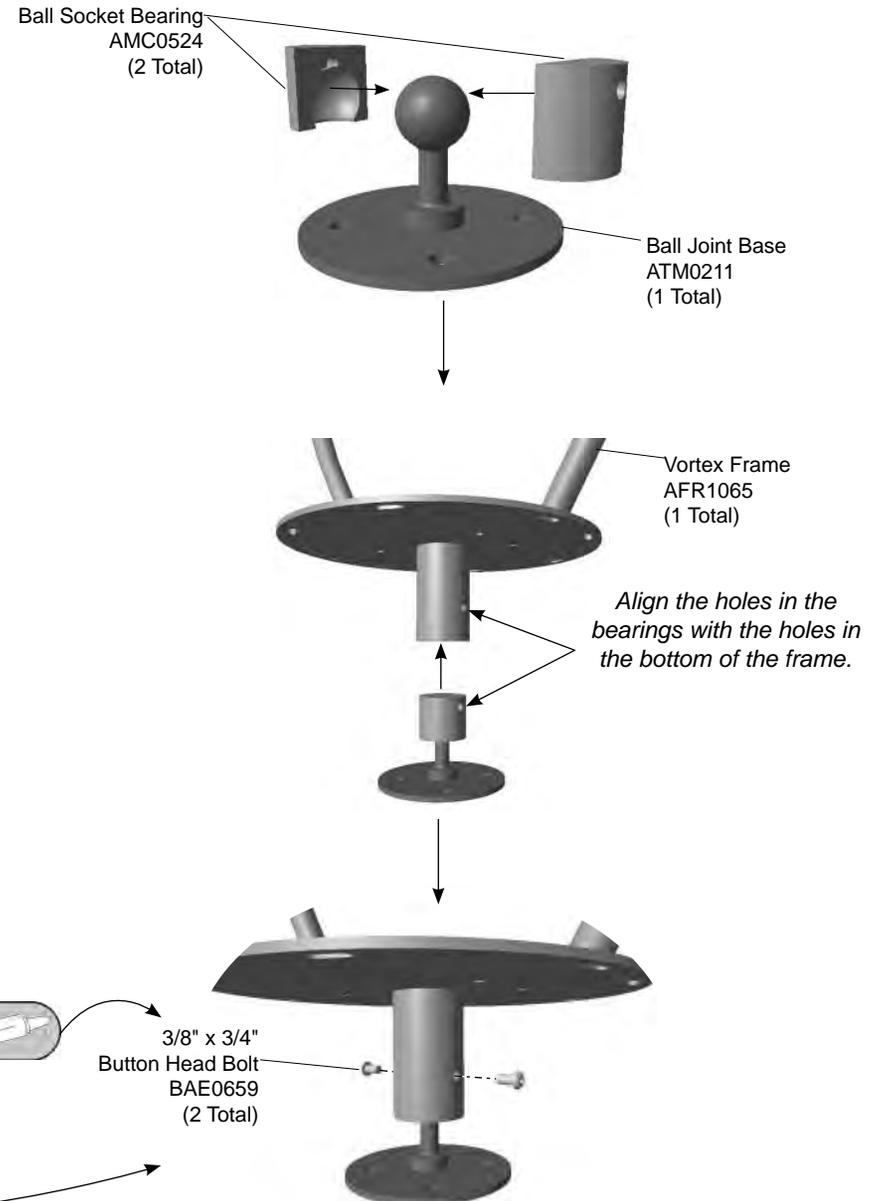
Installation Instructions

Follow the details in alphabetical order. For clarification, each detail references the step description. The step descriptions start on page 7.



Detail A Step 4

Attach the support frame
to the support posts.

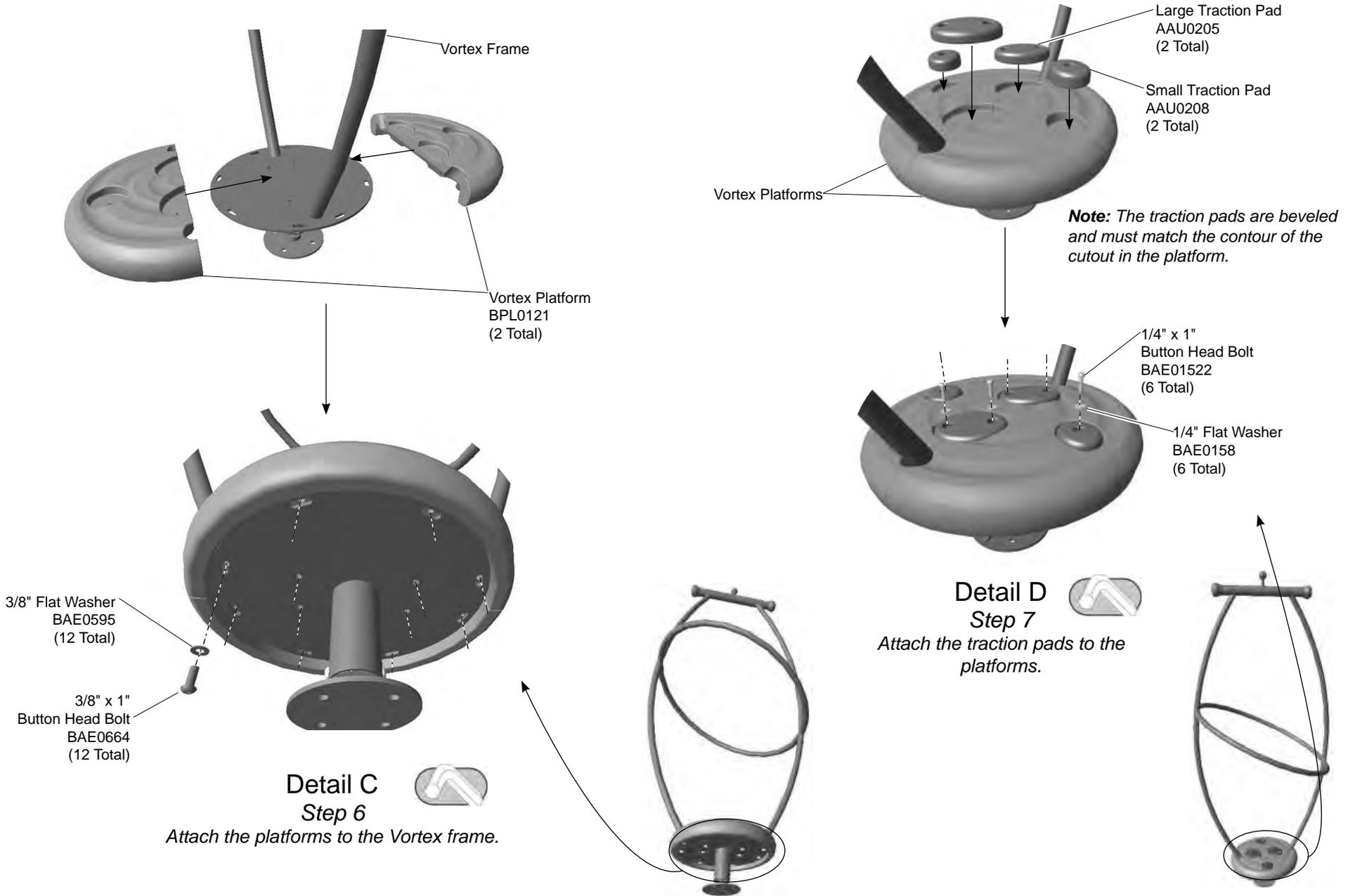


Detail B Step 5

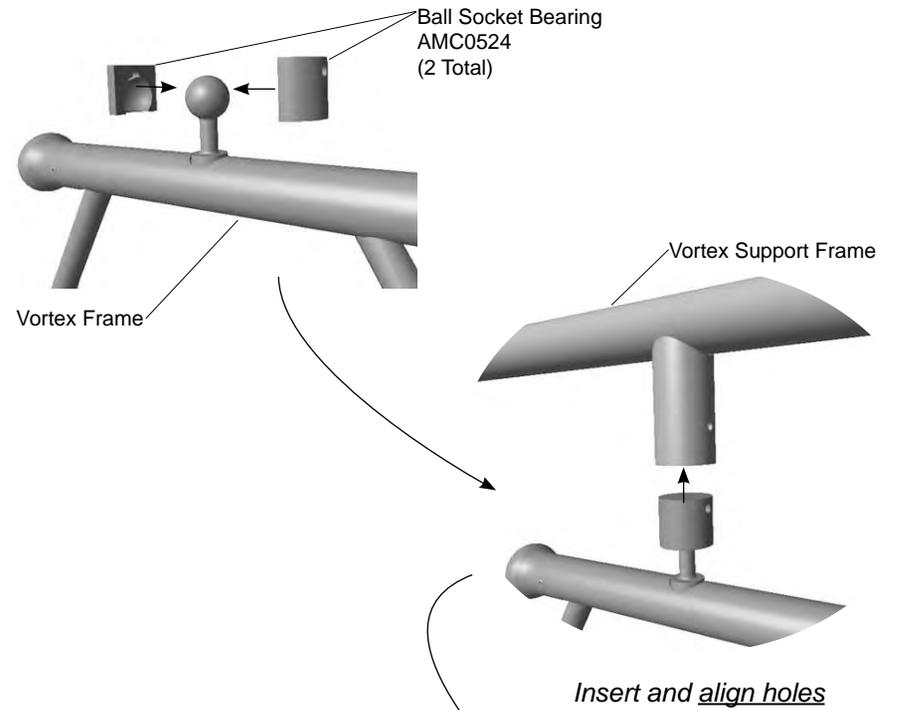
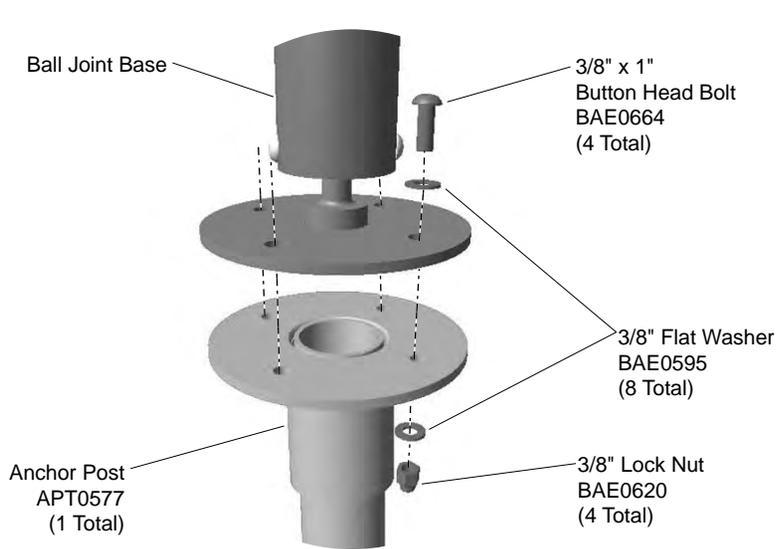
Attach the bearing assembly to the Vortex frame.



Installation Instructions

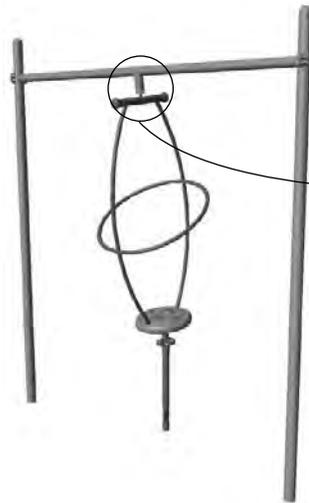
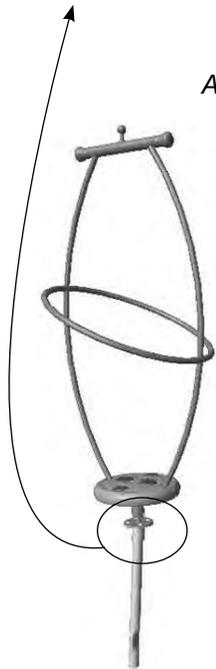


Installation Instructions

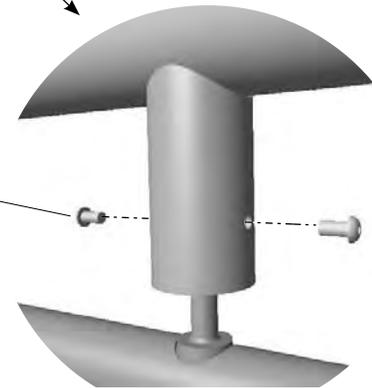


Detail E Step 8

Attach the anchor post to the ball joint base.



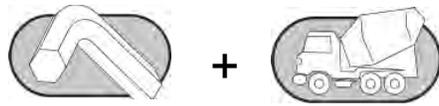
3/8" x 3/4"
Button Head Bolt
BAE0659
(2 Total)



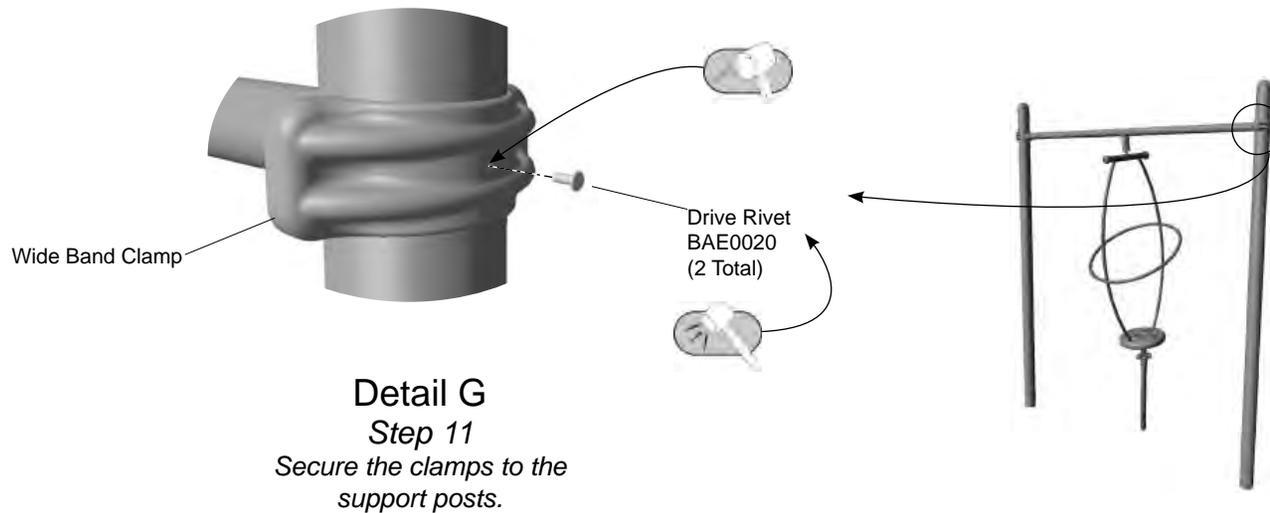
Detail F Step 9

Attach the Vortex frame to the support frame.

Installation Instructions



Step 10



Installation Instructions

Notes Before You Begin: Do not over tighten bolts during assembly, only snug tighten them until assembly is complete.

Carefully read and understand these installation instructions before you begin.

Step 1: Before attempting to assemble your equipment, please review all installation information carefully. Should you experience any difficulty during the installation process, please call us at the phone number shown on the last page of these instructions.

Step 2: Separate and identify all components and hardware.

Step 3: Excavate footings as shown in the **Support Post Footing Details**. Refer to the support post diagram and footings notes included in the Playmaker Guidelines at the beginning of the printed instruction booklet. *(If viewing on the CD refer to ZZPMGUID.)* When fully tightening the connections, follow the recommended **Torque Specifications:**

Bolts and nuts - Snug tighten and then tighten an additional one half turn.

Step 4: Attach the support frame to the support posts. See **Detail A**. Position the support frame between the support posts at the height indicated in the **Elevation View**, apply a drop of thread locking adhesive to the bolt threads, and attach as shown.

Step 5: Attach the bearing assembly to the Vortex frame. See **Detail B**. Close the ball socket bearings around the top of the ball joint base and insert the base into the bottom of the spinner frame and align the holes in the socket bearings with those in the frame. Apply a drop of thread locking adhesive to the bolt threads and attach as shown. Fully tighten the connections according to the tightening torque specifications.

Step 6: Attach the platforms to the Vortex frame. See **Detail C**. Position the platforms on the frame and attach as shown. Fully tighten the connections according to the tightening torque specifications.

Step 7: Attach the traction pads to the platforms. See **Detail D**. Insert each traction pad into its corresponding indentation in the platform and attach as shown. Fully tighten the connections according to the tightening torque specifications.

Note: *the traction pads are beveled and must match the contour of the cutout in the platform.*

Step 8: Attach the anchor post to the bearing unit. See **Detail E**. Position the top of the anchor post against the bottom of the bearing unit and attach as shown. Fully tighten the connections according to the tightening torque specifications.

Step 9: Attach the Vortex assembly to the support frame. See **Detail F**. Place the socket bearings around the ball on the top of the Vortex frame assembly. With adequate manpower, lift the assembly up and into the support frame and align the holes in the socket bearings with those in the frame. Apply a drop of thread locking adhesive to the bolt threads and attach as shown. Fully tighten the connections according to the tightening torque specifications.

Final Details.

Step 10: Plumb and level the component. Tighten **all** fasteners. Fully tighten all fasteners according to tightening torque specifications. Block and brace for concrete. Pour concrete after all equipment has been assembled. Allow 72 hours for concrete to completely cure.

Step 11: Install drive rivets. See **Detail G**. After the equipment assembly is complete, install a drive rivet in each clamp to permanently secure it to the support post. Using a 1/4" drill bit, drill through the clamp and support post. Insert the drive rivet into drilled hole until the head of the rivet is against the surface of the clamp. Using a hammer, pound the pin of the rivet until it is flush with the surface of the rivet head.

Note: This step should be executed after structure has been assembled and properly footed.

Step 12: For areas complying with ASTM standard F1487 or the CSA Z-614, apply the age appropriate label to the side panel at eye level.

PM6810 - VORTEX

PART NO.	DESCRIPTION	QTY.
AAU0021	CLAMP - 5" W.I.D.E ALUMINUM	2
AAU0205	4.88" TRACTION PAD	2
AAU0208	3.38" TRACTION PAD	2
AFR1065	FRAME - 87.27" x 37.16" x 40.59"	1
AFR1133	FRAME - VORTEX (PM)	1
AMC0524	BEARING - BALL SOCKET	4
APT0577	POST - VORTEX	1
ATM0211	BALL JOINT - SURFACE MOUNT	1
BAD0085	THREAD LOCKING ADHESIVE	1
BAE0020	RIVET - 1/4" x 11/16" DRIVE	2
BAE01522	BOLT - 1/4"-20 x 1" BUTTON HEAD - SS	6
BAE0158	WASHER - 1/4" SAE FLAT	6
BAE0595	WASHER - 3/8" SAE FLAT	28
BAE0620	NUT - 3/8"-16 LOCK w/NYLON CAP	4
BAE0659	BOLT - 3/8"-16 x 3/4" BUTTON HEAD - SS	4
BAE0662	BOLT - 3/8"-16 x 1-1/4" TMPR RESISTANT w/TORX DRV	8
BAE0664	BOLT - 3/8"-16 x 1" BUTTON HEAD - SS	16
BPL0121	VORTEX PLATFORM	2
ALB0025	LABEL - AGE APPROPRIATE SHEET	1

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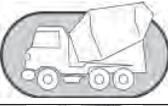
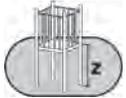


Assembly View

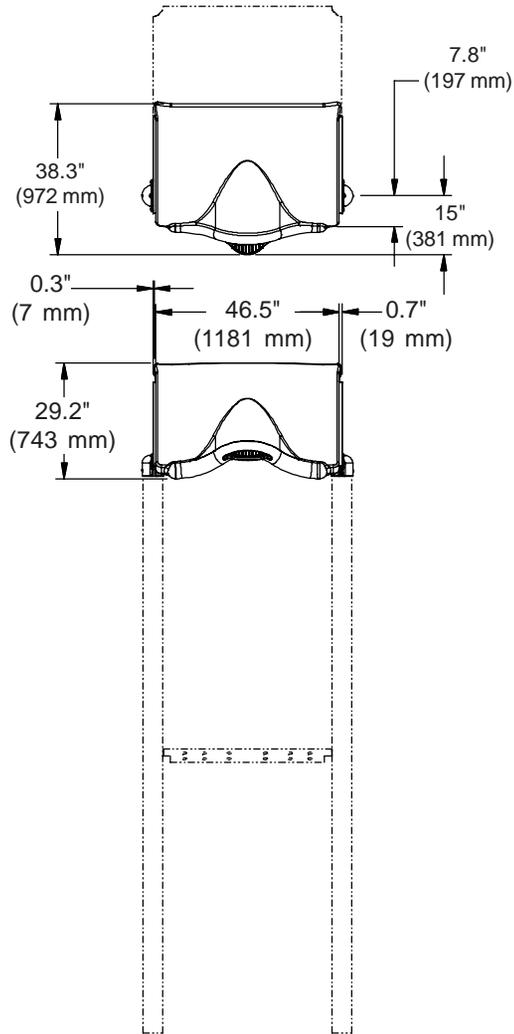
Installation Instructions Playmakers® Model PM9816 Camber Half Square Roof

Installation Preparation

Recommended Crew: Two (2) adults
 Installation Time: 1 man-hour
 Weight: 51.7 lbs. (23,5 kg)
 Use Zone:..... Refer to Master Drawing
 User Group Age (years): ASTM/CSA: 2-12, EN: 2-14

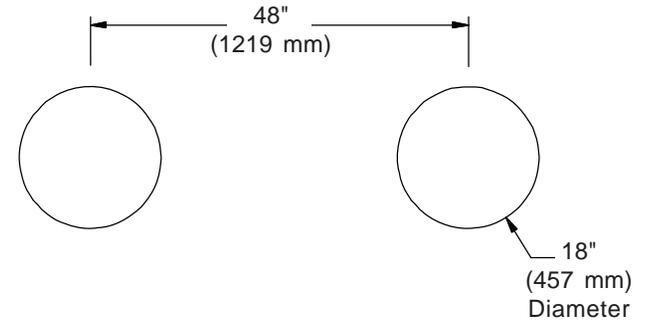
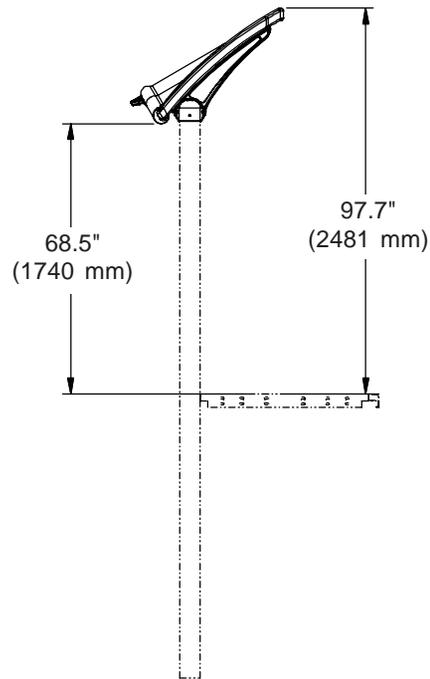
ICON KEY			
	Fully Tighten Hardware		Add 1 Drop of Thread Locking Adhesive
	Do Not Fully Tighten Hardware		Pour Concrete
	Drill		Dig Footing Holes
	Hammer		Critical Fall Height

Installation Instructions



Elevation Views

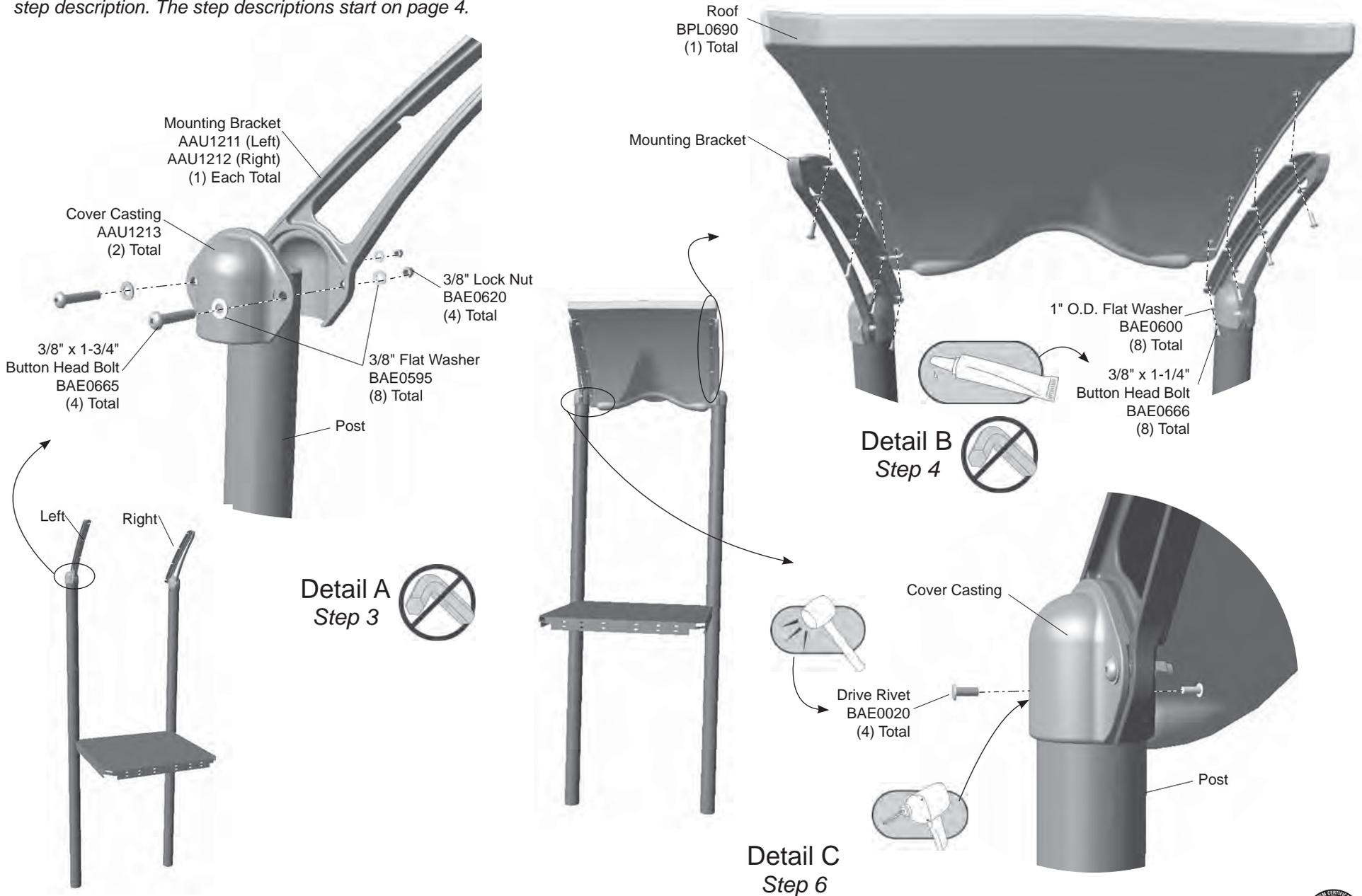
Top View



Footing Diagram

Installation Instructions

Follow the details in alphabetical order. For clarification, each detail references the step description. The step descriptions start on page 4.



Installation Instructions

Notes Before You Begin: Do not over tighten bolts during assembly, only snug tighten them until assembly is complete.

Carefully read and understand these installation instructions before you begin.

Step 1: Before attempting to assemble your equipment, please review all installation information carefully. Should you experience any difficulty during the installation process, please call us at the phone number shown on the last page of these instructions.

Step 2: Separate and identify all components and hardware.

Assemble and attach mounting brackets to posts.

Step 3: See **Detail A**. Attach as shown. Snug tighten the bolts. The bracket height may have to be adjusted to level the roof.

Note: Right and left are determined as if you were standing on the deck to be covered.

Attach the roof.

Step 4: See **Detail B**. Place the roof on the brackets and align the holes. Attach as shown. Do not tighten the bolts completely.

Final Details

Step 5: Square and level the roof at the desired height. Tighten the bracket bolts. Fully tighten all fasteners in accordance with the tightening torque specifications.

Torque Specifications:

Bolts and nuts - Snug tighten and then tighten an additional one half turn.

Step 6: Install drive rivets. See **Detail C**. A quantity of (4) four drive rivets are supplied for permanently securing brackets to the support posts. After the equipment assembly is complete, install a drive rivet in each clamp to permanently secure it to the support post. Using a 1/4" drill bit, drill through the clamp and support post. Insert the drive rivet into drilled hole until the head of the rivet is against the surface of the clamp. Using a hammer, drive the pin of the rivet until it is flush with the surface of the rivet head.

Note: This step should be executed after structure has been assembled and properly footed.

PM9816 - CAMBER HALF SQUARE ROOF

PART NO.	DESCRIPTION	QTY.
AAU1211	BRACKET - 5" SQUARE (LEFT)	1
AAU1212	BRACKET - 5" SQUARE (RIGHT)	1
AAU1213	BRACKET - 5" COVER CASTING	2
BAE0020	RIVET - 1/4" x 11/16" DRIVE	4
BAE0595	WASHER - 3/8" SAE FLAT	8
BAE0600	WASHER - 1" O.D. FLAT	8
BAE0620	NUT - 3/8"-16 LOCK W/ NYLON CAP	4
BAE0665	BOLT - 3/8"-16 x 1-3/4" BUTTON HEAD - SS	4
BAE0666	BOLT - 3/8"-16 x 1-1/4" BUTTON HEAD - SS	8
BPL0690	ROOF - SQUARE (PM)	1

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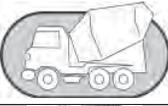
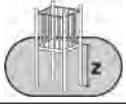


Assembly View

Installation Instructions Playmakers® Model PM9817 Camber Half Square Roof Add On

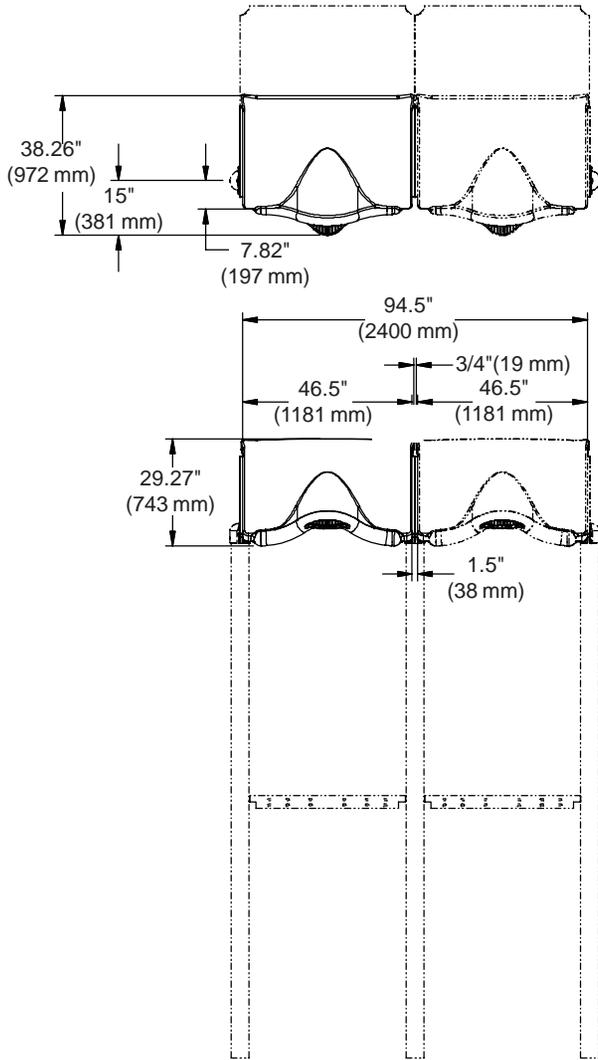
Installation Preparation

Recommended Crew: Two (2) adults
 Installation Time: 1 man-hour
 Weight: 49 lbs. (22 kg)
 Use Zone: Refer to Master Drawing
 User Group Age (years): ASTM/CSA: 2-12, EN: 2-14

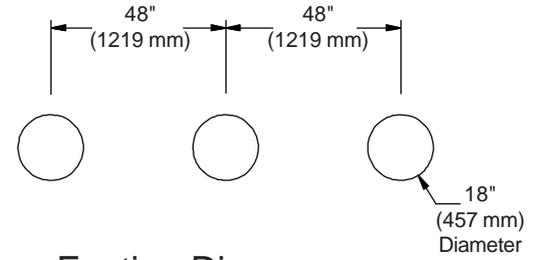
ICON KEY	
	Fully Tighten Hardware
	Do Not Fully Tighten Hardware
	Drill
	Hammer
	Add 1 Drop of Thread Locking Adhesive
	Pour Concrete
	Dig Footing Holes
	Critical Fall Height

Installation Instructions

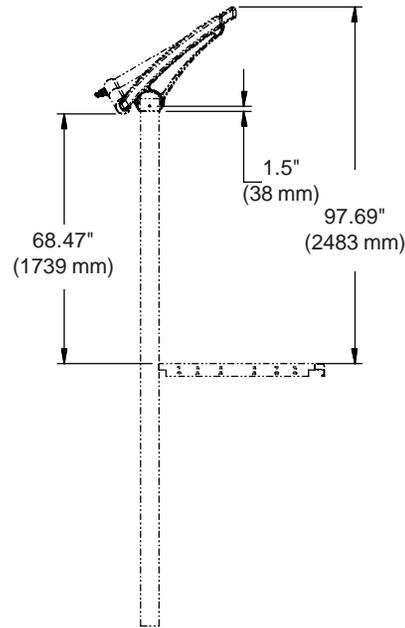
Top View



Elevation Views

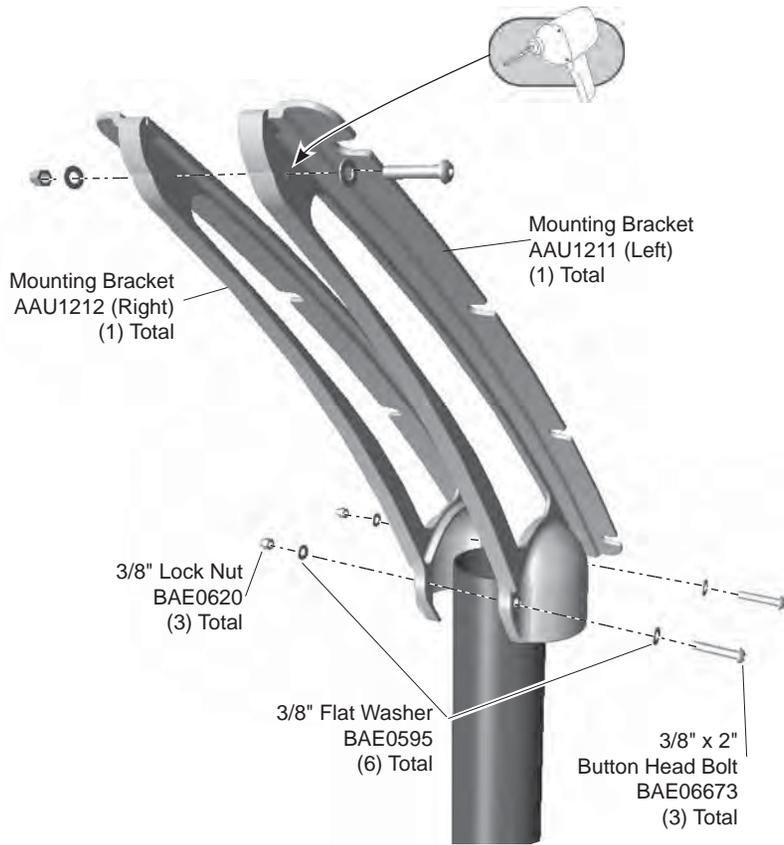


Footing Diagram



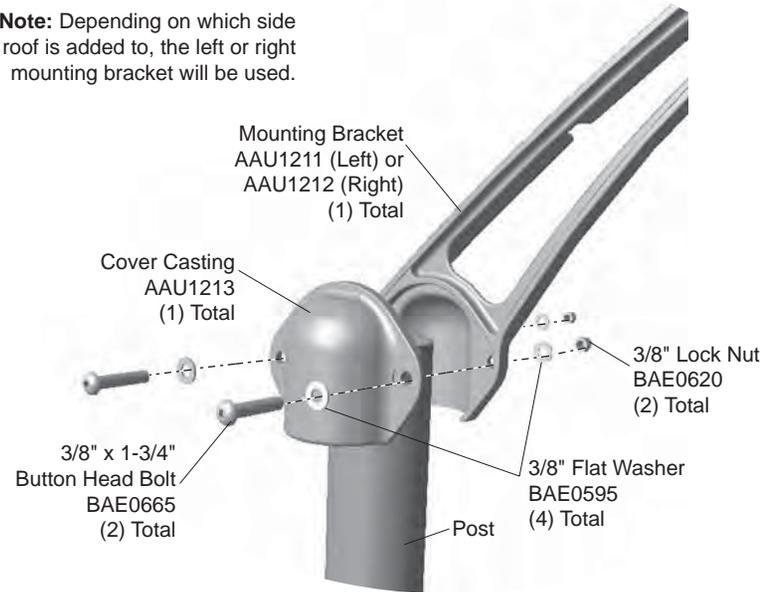
Installation Instructions

Follow the details in alphabetical order. For clarification, each detail references the step description. The step descriptions start on page 5.

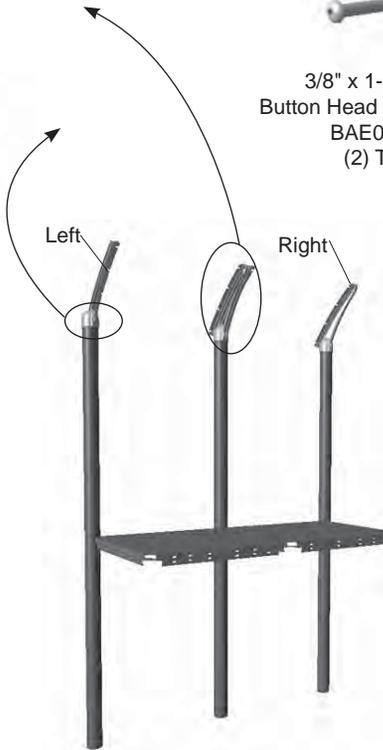


Detail A
Step 6

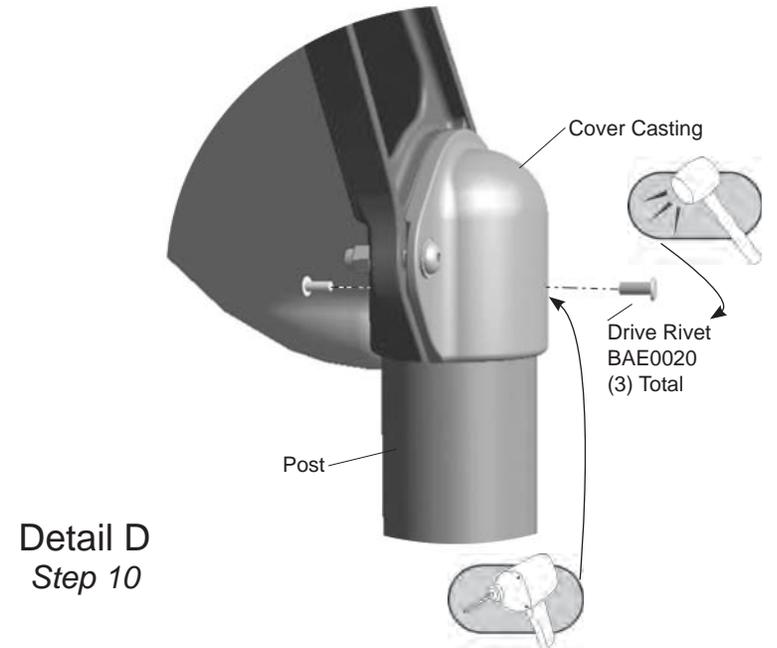
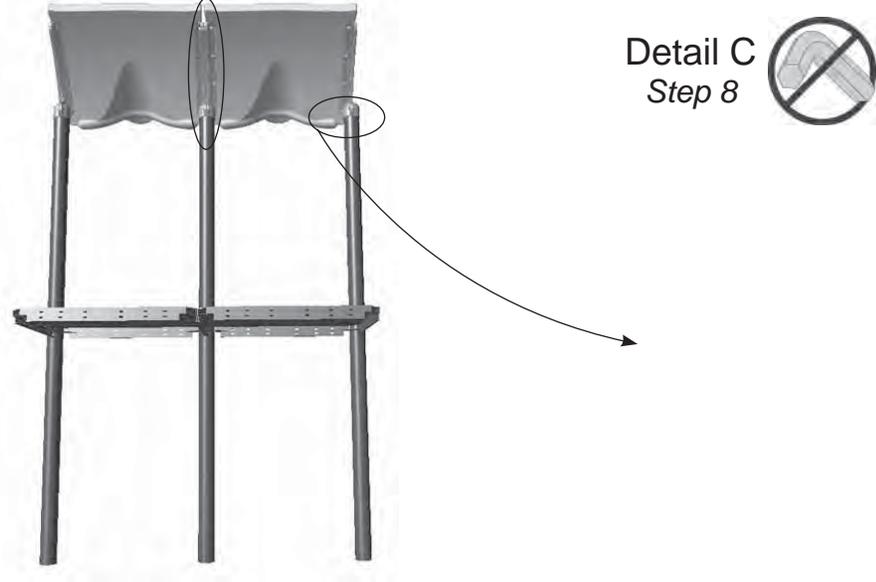
Note: Depending on which side the roof is added to, the left or right mounting bracket will be used.



Detail B
Step 7



Installation Instructions



Installation Instructions

Notes Before You Begin: Do not over tighten bolts during assembly, only snug tighten them until assembly is complete.

Carefully read and understand these installation instructions before you begin.

Step 1: Before attempting to assemble your equipment, please review all installation information carefully. Should you experience any difficulty during the installation process, please call us at the phone number shown on the last page of these instructions.

Step 2: Separate and identify all components and hardware.

Step 3: Determine where the add-on roof is to be placed. If this add-on roof is to be connected to a existing camber roof follow the instructions below. If this add-on roof was purchased with a stand alone camber roof, skip to Step 5. Assemble multiple adjacent camber roofs at the same time.

Prepare the existing camber roof to accept an adjacent add-on roof.

Step 4: Prepare the existing camber roof to accept an adjacent add-on roof. Drill out the drive rivet from the cover casting on the side that the new roof section will be placed.

Step 5: Remove the hardware from the side that the add-on roof will be placed and set it aside to be used in *Step 7*.

Connect the adjacent mounting brackets.

Step 6: See **Detail A**. Select the appropriate roof bracket (either left or right depending on which side the roof is being placed). Drill a 7/16" hole through the upper portion of the brackets. Attach as shown. Snug tighten only to allow for roof height adjustment.

Attach remaining the bracket to the support post.

Step 7: See **Detail B**. Select the remaining mounting bracket and the hardware previously set aside in *Step 5*. Position the bracket at the inside top of the remaining support post. Attach as shown. Snug tighten bolts. The bracket height may have to be adjusted to level the roof.

Attach the roof.

Step 8: See **Detail C**. Place the roof on the brackets and align the holes. Apply a drop of loctite to the bolt threads and attach as shown. Do not tighten the bolts completely.

Final Details

Step 9: Square and level the roof at the desired height. Tighten the bracket bolts. Fully tighten all fasteners in accordance with the tightening torque specifications.

Torque Specifications:

Bolts and nuts - Snug tighten and then tighten an additional one half turn.

Step 10: Install drive rivets. See **Detail D**. After the equipment assembly is complete, install a drive rivet in each clamp to permanently secure it to the support post. Using a 1/4" drill bit, drill through the clamp and support post. Insert the drive rivet into drilled hole until the head of the rivet is against the surface of the clamp. Using a hammer, drive the pin of the rivet until it is flush with the surface of the rivet head.

Note: This step should be executed after structure has been assembled and properly footed.

PM9817 - CAMBER 1/2 SQUARE ROOF ADD-ON

PART NO.	DESCRIPTION	QTY.
AAU1211	BRACKET - 5" SQUARE (LEFT)	1
AAU1212	BRACKET - 5" SQUARE (RIGHT)	1
BAE0020	RIVET - 1/4" x 11/16" DRIVE	3
BAE0595	WASHER - 3/8" SAE FLAT	6
BAE0600	WASHER - 1" O.D. FLAT	8
BAE0620	NUT - 3/8"-16 LOCK w/ NYLON CAP	3
BAE0666	BOLT - 3/8"-16 x 1-1/4" BUTTON HEAD - SS	8
BAE06673	BOLT - 3/8"-16 x 2" BUTTON HEAD - SS	3
BPL0690	ROOF - SQUARE (PM)	1

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Installation Instructions

Playmakers®

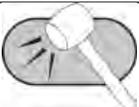
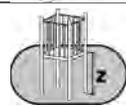
Models PM9168, PM9170 and PM9177
 Deck to Deck Accessible Tiered Platform
 12 in. (305 mm), 24 in. (610 mm) and
 36" (914 mm) Rise Height



Assembly View (representative model)

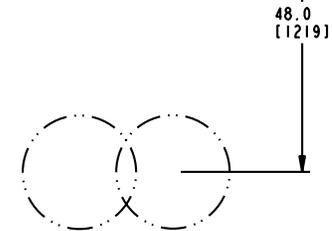
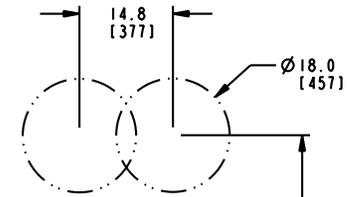
Installation Preparation

Recommended Crew: Two - Three (2-3) adults
 Installation Time: 2 man-hours
 Use Zone:..... Refer to Master Drawing
 User Group Age (years): ASTM/CSA: 2-12, EN: 2-14

ICON KEY			
	Fully Tighten Hardware		Add 1 Drop of Thread Locking Adhesive
	Do Not Fully Tighten Hardware		Pour Concrete
	Drill		Dig Footing Holes
	Hammer		Critical Fall Height

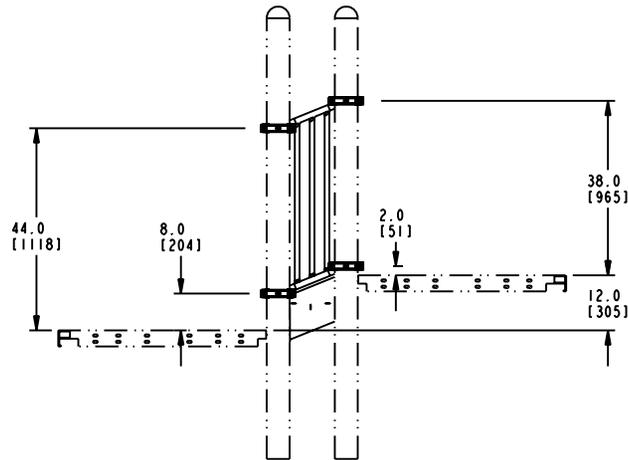
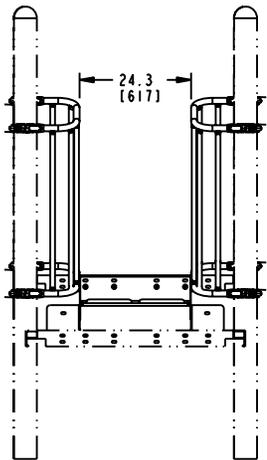
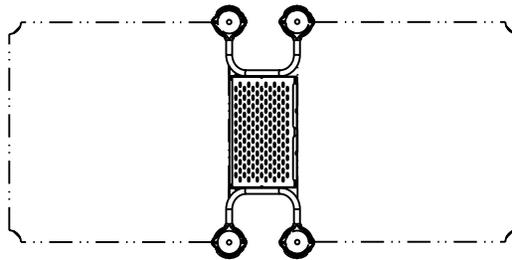
Installation Instructions

KEY	
Position	Unit of Measurement
Top #	Inches
Bottom #	[Millimeters]

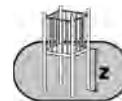


Footing Diagram

Top View



Elevation Views
PM9168

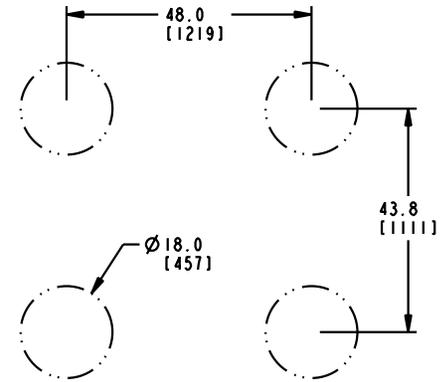


Height of the upper deck
minus 6" (152 mm)

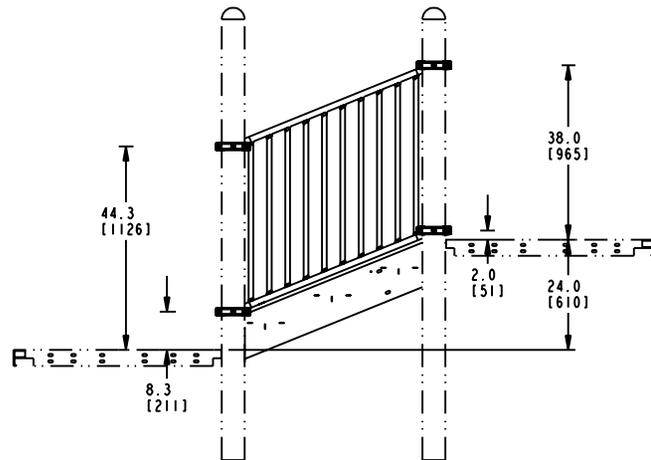
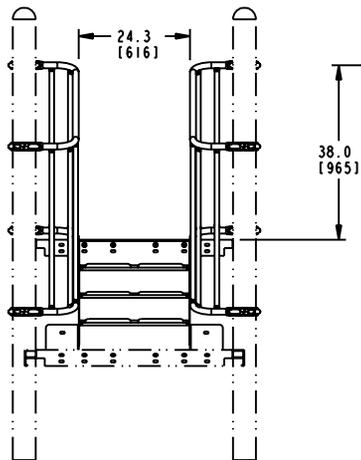
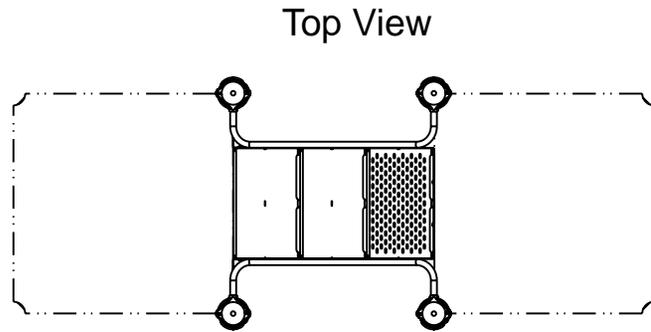


Installation Instructions

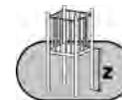
KEY	
Position	Unit of Measurement
Top #	Inches
Bottom #	[Millimeters]



Footing Diagram



Elevation Views
PM9170

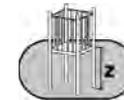
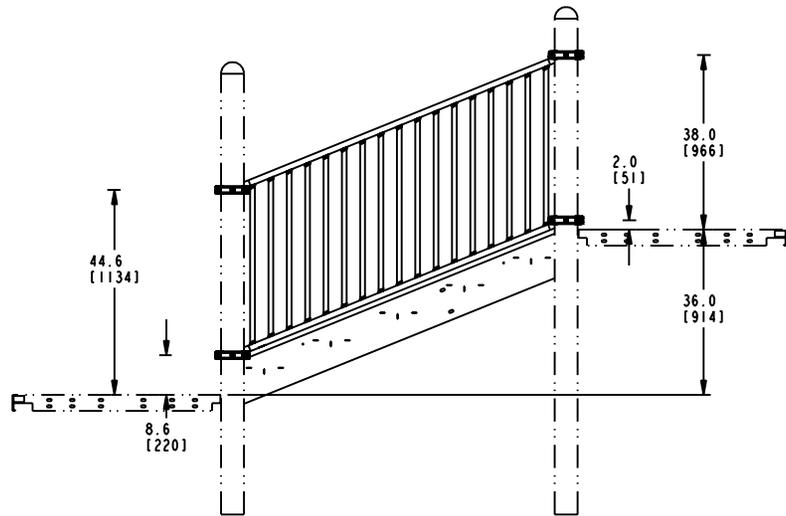
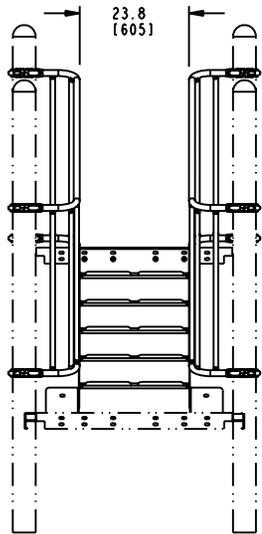
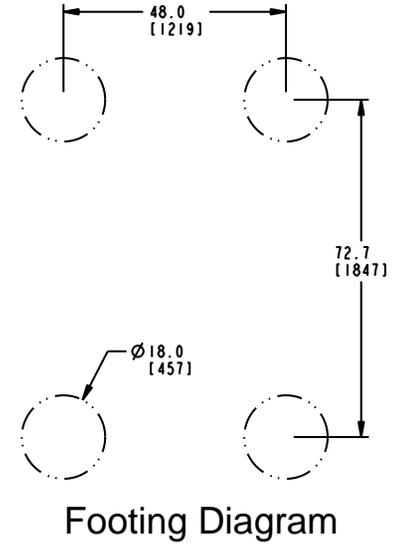
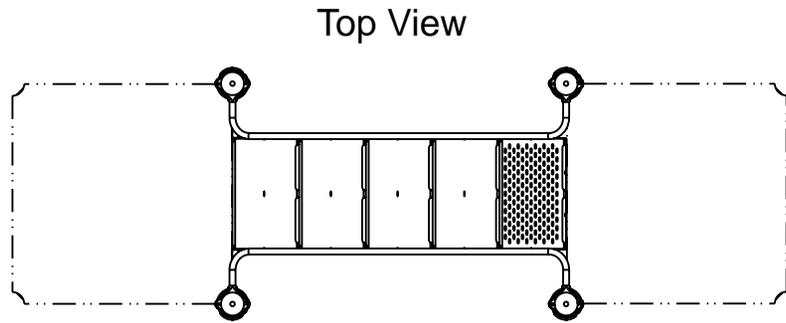


Height of the upper deck
minus 6" (152 mm)



Installation Instructions

KEY	
Position	Unit of Measurement
Top #	Inches
Bottom #	[Millimeters]



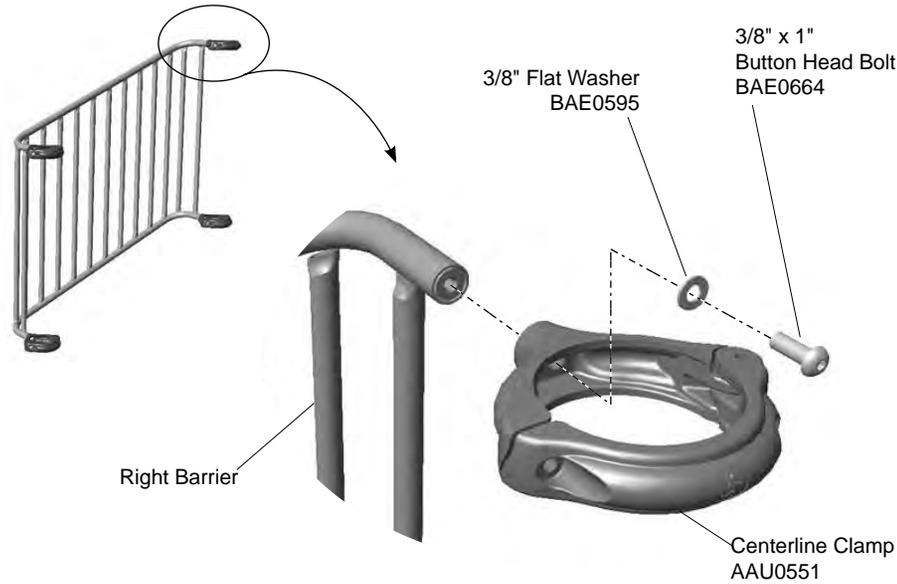
Height of the upper deck
minus 6" (152 mm)

Elevation Views
PM9177



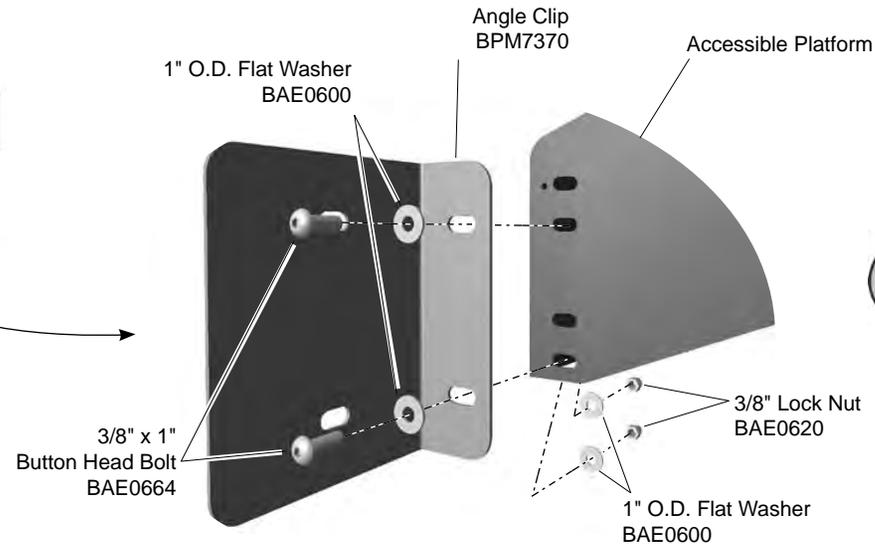
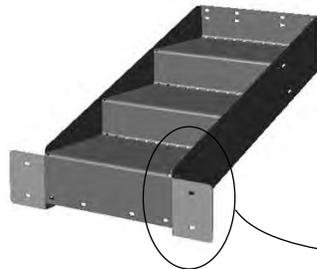
Installation Instructions

Follow the details in alphabetical order. For clarification, each detail references the step description. The step descriptions start on page 7.

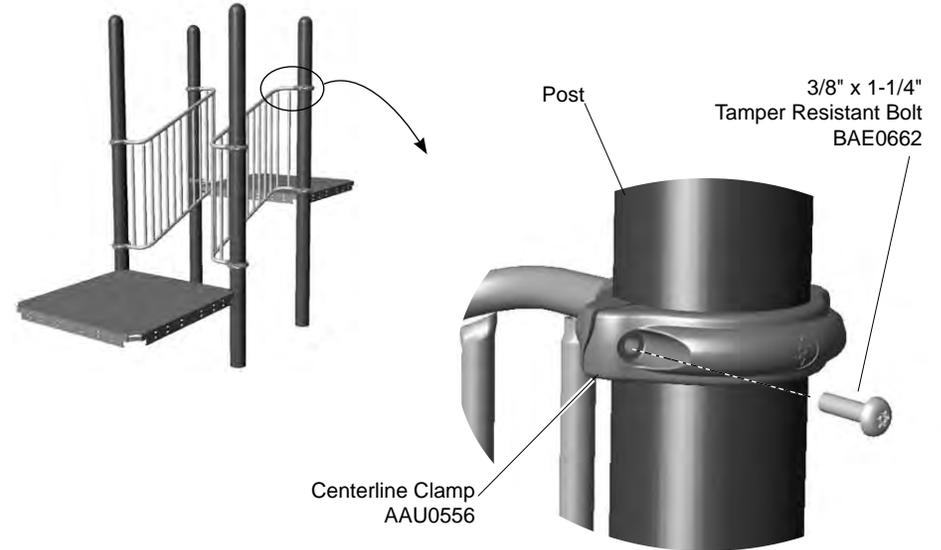


Detail A
Step 4

The front of angle clip should be even with the face of the platform



Detail C
Step 6



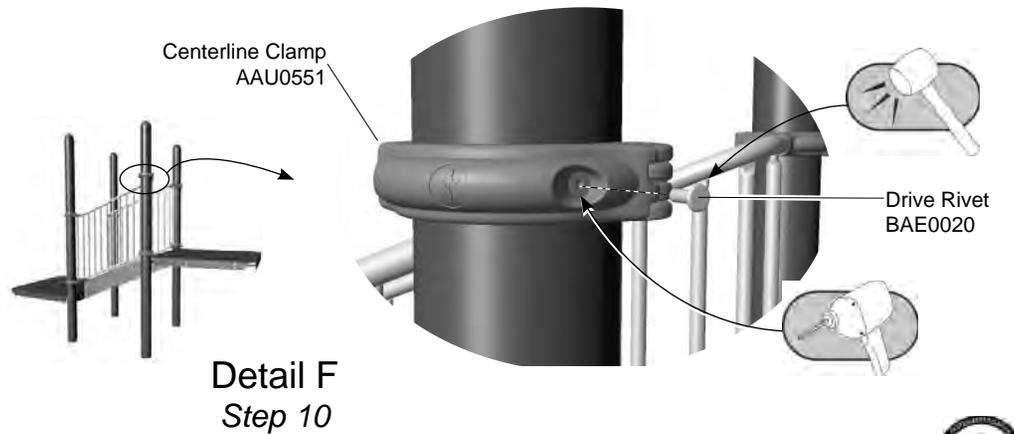
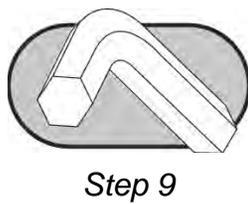
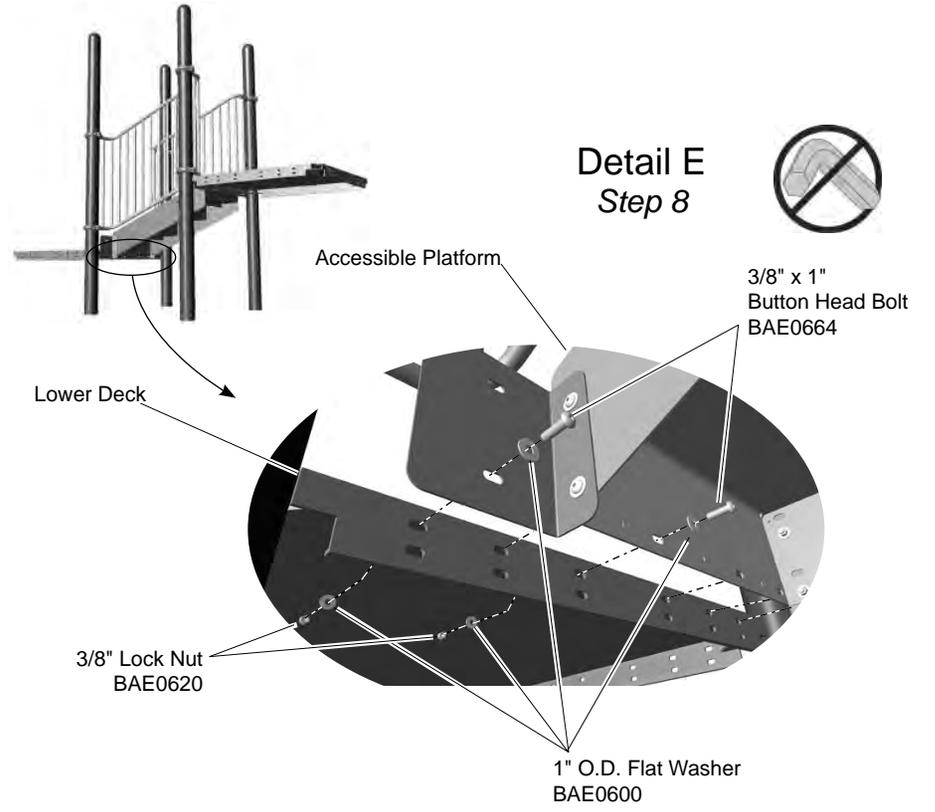
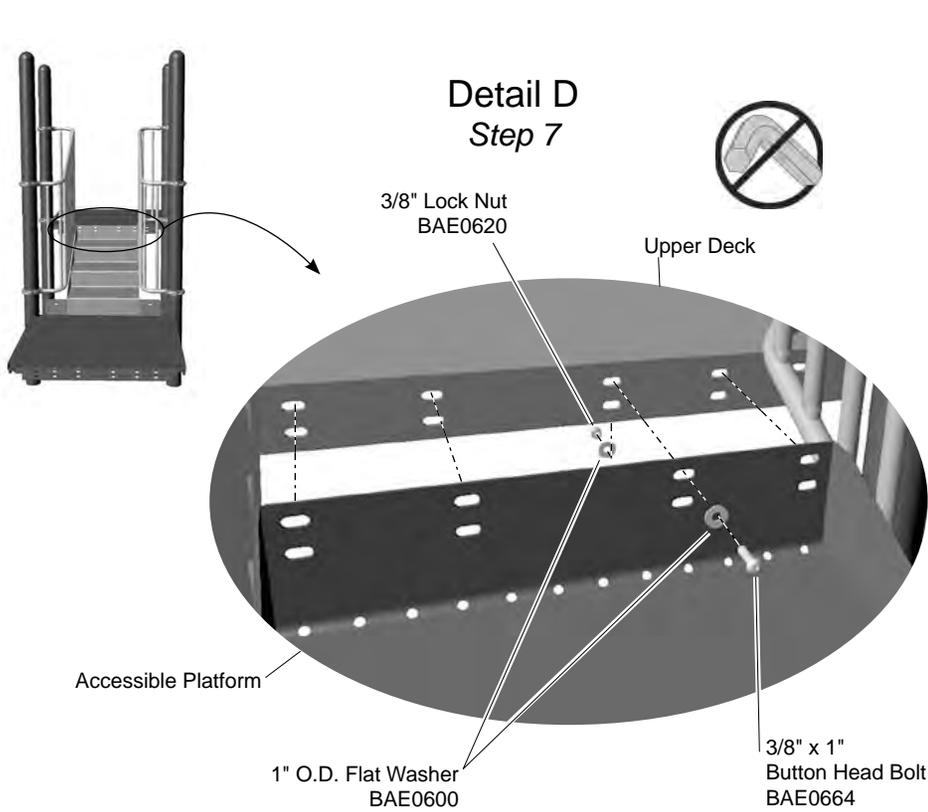
Detail B
Step 5



Model	Barriers (Right / Left)	Tiered Platform
ZZPM9168	AEN0487 / AEN0488	BPM0296
ZZPM9170	AEN0489 / AEN0490	BPM0298
ZZPM9177	AEN0491 / AEN0492	BPM0299



Installation Instructions



Installation Instructions

Notes Before You Begin: Do not over tighten bolts during assembly, only snug tighten them until assembly is complete.

Carefully read and understand these installation instructions before you begin.

Step 1: Before attempting to assemble your equipment, please review all installation information carefully. Should you experience any difficulty during the installation process, please call us at the phone number shown on the last page of these instructions.

Step 2: Separate and identify all components and hardware.

Step 3: Determine location of the platform by referring to the master layout drawing.

Step 4: Attach the clamps to the barriers. See **Detail A**. Select both barriers, the clamps, and the appropriate hardware. Attach a clamp to each of the ends of the barrier rails. There are (4) four clamp connections per barrier. Turn the clamps so that the hinges all face the same direction.

Step 5: Attach the barriers to the posts. See **Detail B**. Select both barriers and the tamper resistant bolts. Place the barriers between the posts, and attach as shown.

Step 6: Attach the angle clips to the accessible platform. See **Detail C**. Select both angle clips, the tiered platform, and the appropriate hardware. Place the angle clips against the lower side of the platform with the front faces aligned. Attach as shown.

Step 7: Attach the tiered platform to the upper deck. See **Detail D**. Select the tiered platform and the appropriate hardware. A brace will be necessary to support the weight until the lower connections are made. Place the platform between the decks and align the upper riser with the upper holes in the deck. Attach as shown. The upper edge of the step should not protrude above the edge of the deck.

Step 8: Attach the tiered platform and angle clips to the lower deck. See **Detail E**. Select the appropriate hardware. Attach as shown. There are (6) six connections.

Final Details.

Step 9: Plumb and level the component. Tighten **all** fasteners. Fully tighten all fasteners according to tightening torque specifications.

Torque Specifications:

Bolts & Nuts - Snug tighten and tighten an additional one-half turn.

Step 10: Rivet the clamps to the posts. See **Detail F**. After the equipment assembly is complete, install a drive rivet in each clamp to permanently secure it to the support post. Using a 1/4" drill bit, drill through the clamp and support post. Insert the drive rivet into drilled hole until the head of the rivet is against the surface of the clamp. Using a hammer, drive the pin of the rivet until it is flush with the surface of the rivet head.

Note: This step should be executed after structure has been assembled and properly footed.



PM9168 - 12" (305 mm) DECK TO DECK ACCESSIBLE TIERED PLATFORM

PART NO.	DESCRIPTION	QTY.
AAU0551	CLAMP - 5" CENTERLINE DIE CAST	8
AEN0487	BARRIER - 16-3/32" x 43-9/32" x 8-3/8" PROTECTIVE (RT)	1
AEN0488	BARRIER - 16-3/32" x 43-9/32" x 8-3/8" PROTECTIVE (LT)	1
BAD0085	THREAD LOCKING ADHESIVE	1
BAE0020	RIVET - 1/4" x 11/16" DRIVE	8
BAE0595	WASHER - 3/8" SAE FLAT	8
BAE0600	WASHER - 1" O.D. FLAT	28
BAE0620	NUT - 3/8"-16 LOCK w/NYLON CAP	14
BAE0662	BOLT - 3/8"-16 x 1-1/4" TAMPER RESIST w/TORX DRIVE	8
BAE0664	BOLT - 3/8"-16 x 1" BUTTON HEAD - SS	22
BPM0296	STAIR - 12" ACCESSIBLE	1
BPM7370	FAB METAL - 2.63" x 8.63" w/4 SLOTS	2

PM9177 - 36" (610 mm) DECK TO DECK ACCESSIBLE TIERED PLATFORM

PART NO.	DESCRIPTION	QTY.
AAU0551	CLAMP - 5" CENTERLINE DIE CAST	8
AEN0491	BARRIER - 74-1/32" x 66-11/16" x 8-3/8" PROTECTIVE (RT)	1
AEN0492	BARRIER - 74-1/32" x 66-11/16" x 8-3/8" PROTECTIVE (LT)	1
BAD0085	THREAD LOCKING ADHESIVE	1
BAE0020	RIVET - 1/4" x 11/16" DRIVE	8
BAE0595	WASHER - 3/8" SAE FLAT	8
BAE0600	WASHER - 1" O.D. FLAT	28
BAE0620	NUT - 3/8"-16 LOCK w/NYLON CAP	14
BAE0662	BOLT - 3/8"-16 x 1-1/4" TAMPER RESIST w/TORX DRIVE	8
BAE0664	BOLT - 3/8"-16 x 1" BUTTON HEAD - SS	22
BPM0299	STAIR - 36" ACCESSIBLE	1
BPM7370	FAB METAL - 2.63" x 8.63" w/4 SLOTS	2

PM9170 - 24" (610 mm) DECK TO DECK ACCESSIBLE TIERED PLATFORM

PART NO.	DESCRIPTION	QTY.
AAU0551	CLAMP - 5" CENTERLINE DIE CAST	8
AEN0489	BARRIER - 45-1/16" x 55" x 8-3/8" PROTECTIVE (RT)	1
AEN0490	BARRIER - 45-1/16" x 55" x 8-3/8" PROTECTIVE (LT)	1
BAD0085	THREAD LOCKING ADHESIVE	1
BAE0020	RIVET - 1/4" x 11/16" DRIVE	8
BAE0595	WASHER - 3/8" SAE FLAT	8
BAE0600	WASHER - 1" O.D. FLAT	28
BAE0620	NUT - 3/8"-16 LOCK w/NYLON CAP	14
BAE0662	BOLT - 3/8"-16 x 1-1/4" TAMPER RESIST w/TORX DRIVE	8
BAE0664	BOLT - 3/8"-16 x 1" BUTTON HEAD - SS	22
BPM0298	STAIR - 24" ACCESSIBLE	1
BPM7370	FAB METAL - 2.63" x 8.63" w/4 SLOTS	2

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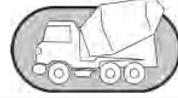
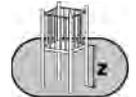
Assembly View

Refer to the Elevation View for the specific Critical Fall Height for the component.

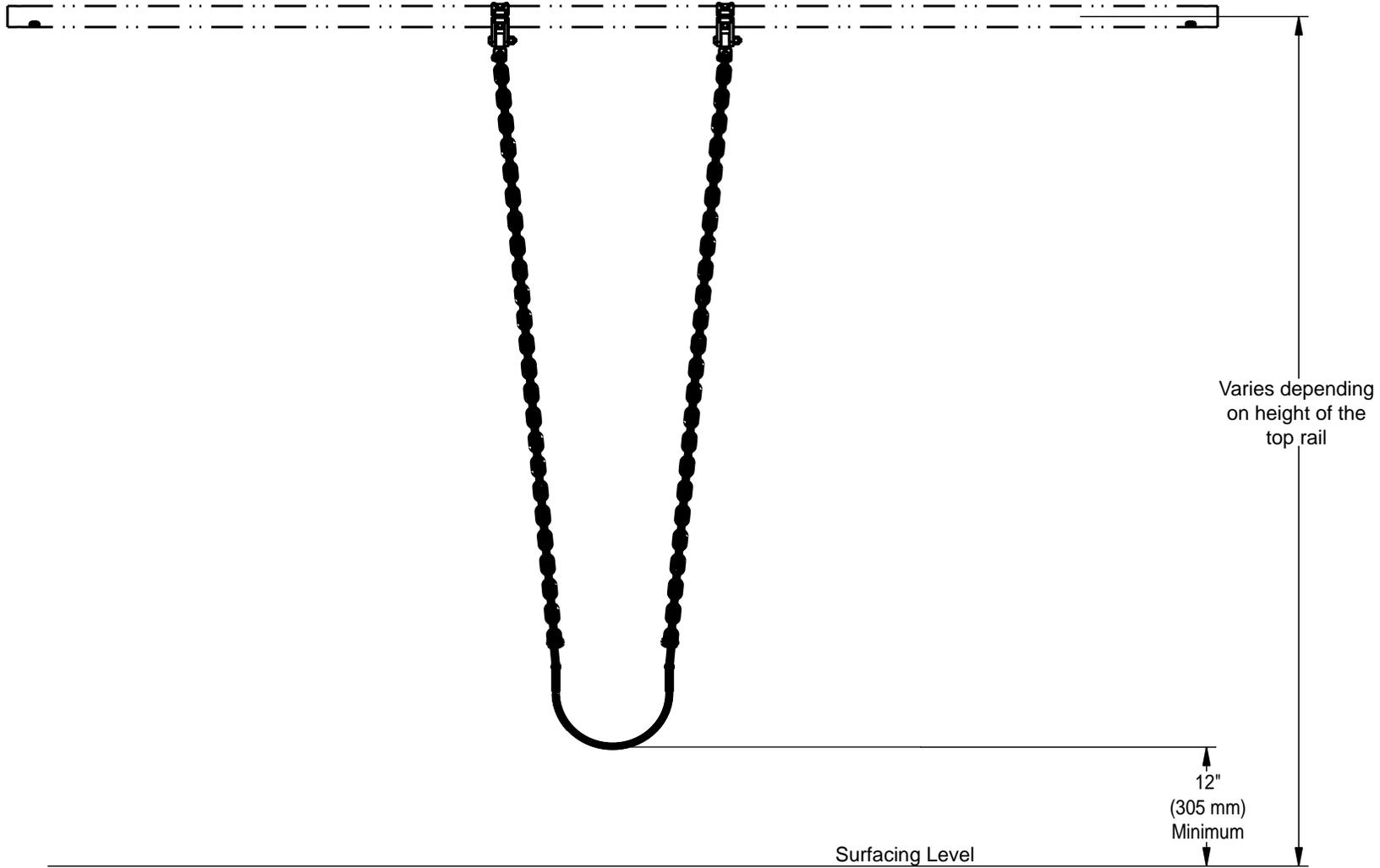
Installation Instructions
Playworld Systems®
Models XX0260, XX0261, & XX0324
Belt Seat with Galvanized Chain

Installation Preparation

Recommended Crew: One (1) adult
 Installation Time: 0.25 hour
 Use Zone: Refer to the swing frame instructions
 User Group Age (years): ASTM/CSA: 2-12, EN: 2-14

ICON KEY	
	Fully Tighten Hardware
	Do Not Fully Tighten Hardware
	Drill
	Hammer
	Add 1 Drop of Thread Locking Adhesive
	Pour Concrete
	Dig Footing Holes
	Critical Fall Height

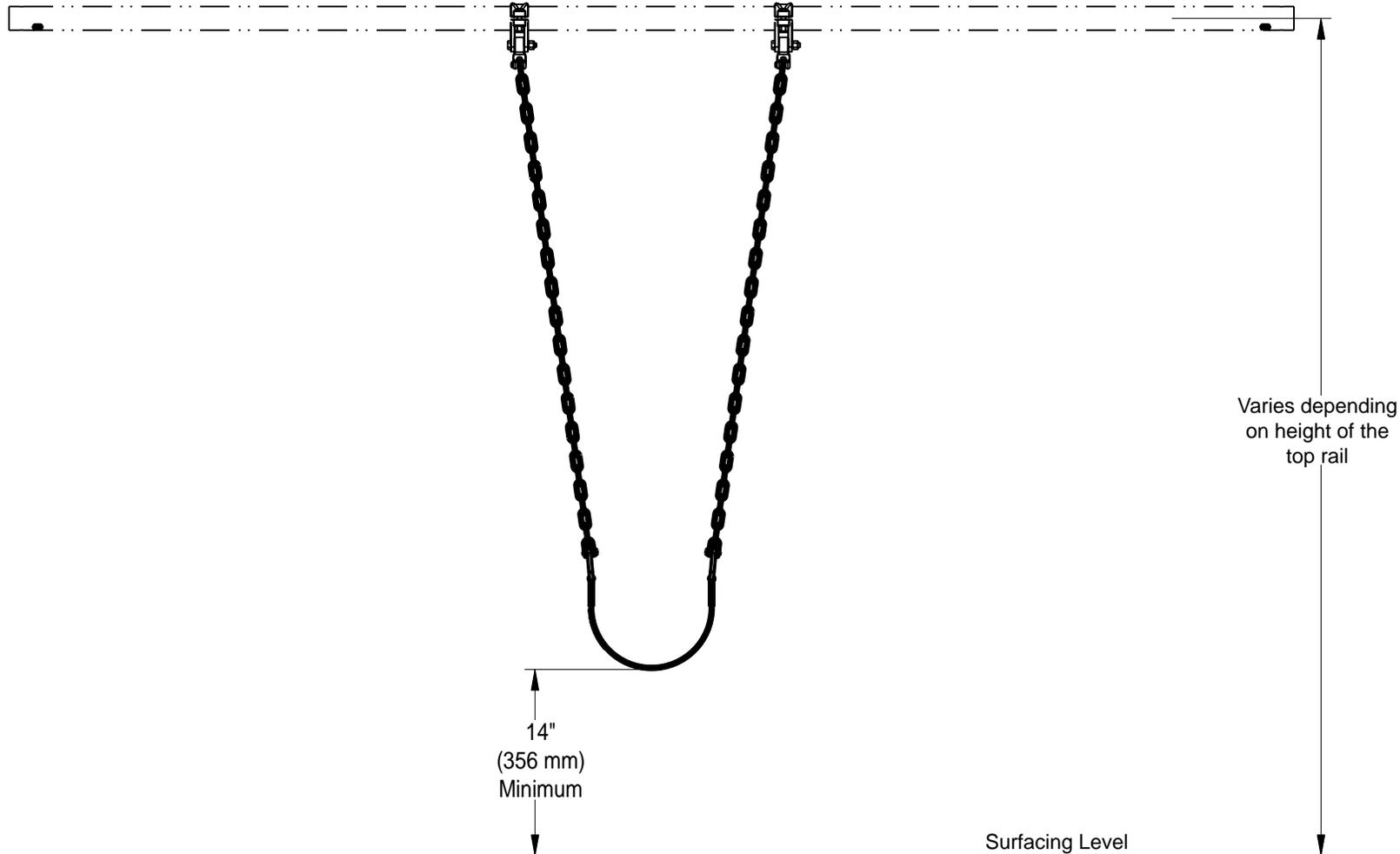
Installation Instructions



Elevation View
(ASTM/CSA)

Model Number	Critical Fall Height - ASTM/CSA	Top Rail Height
ZZXX0324	7 ft. (2134 mm)	7 ft. (2134 mm)
ZZXX0260	8 ft. (2440 mm)	8 ft. (2440 mm)
ZZXX0261	10 ft. (3050 mm)	10 ft. (3050 mm)

Installation Instructions

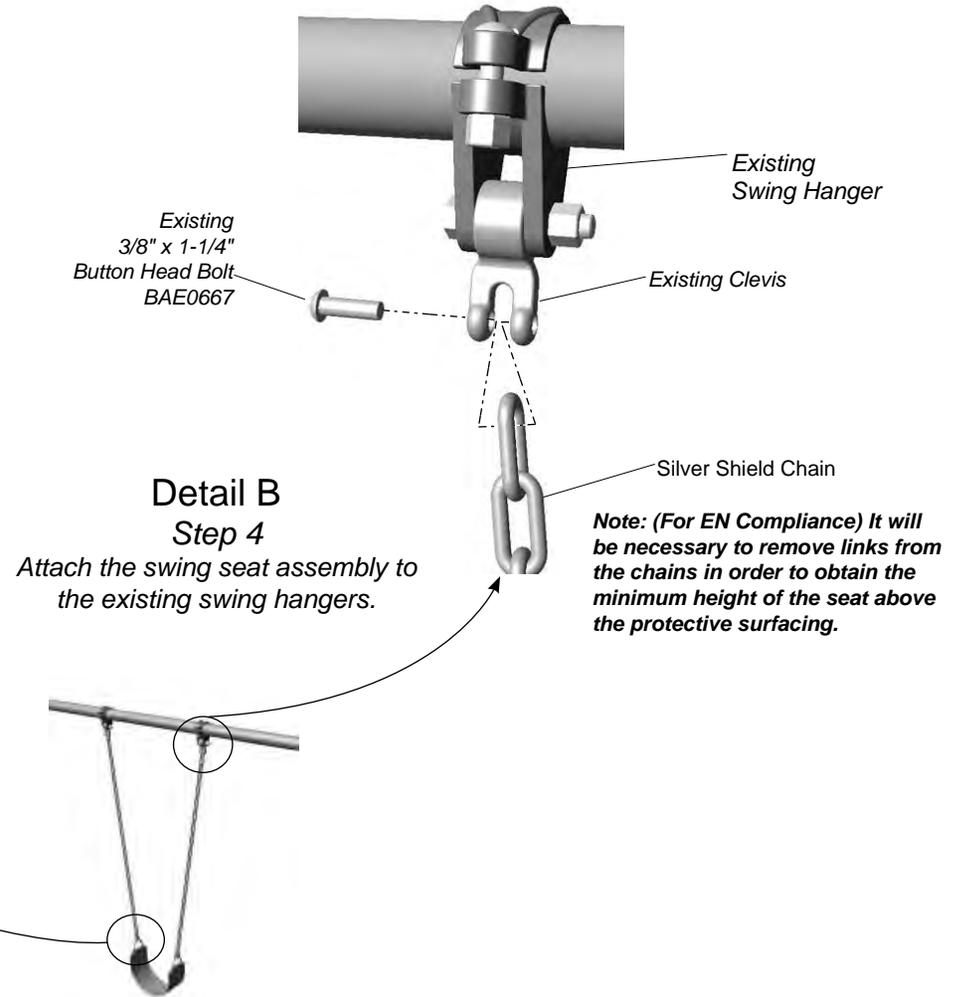
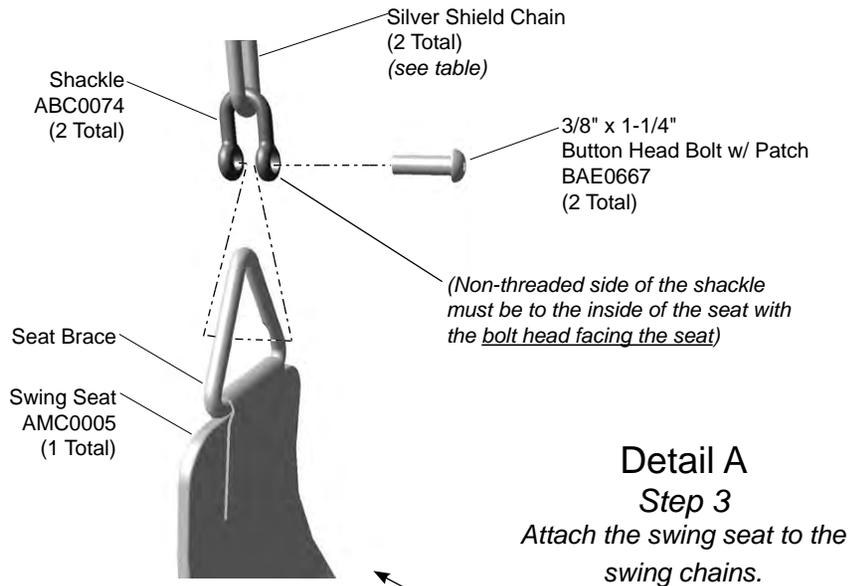


Elevation View
(EN)

Model Number	Critical Fall Height - EN	Top Rail Height
ZZXX0324	1220 mm	7 ft. (2134 mm)
ZZXX0260	1370 mm	8 ft. (2440 mm)
ZZXX0261	1675 mm	10 ft. (3050 mm)

Installation Instructions

Follow the details in alphabetical order. For clarification, each detail references the step description. The step descriptions start on page 5.



Model Number	Silver Shield Chain Part No.	Top Rail Height
ZZXX0324	ACN0090	7 ft. (2134 mm)
ZZXX0260	ACN0091	8 ft. (2440 mm)
ZZXX0261	ACN0092	10 ft. (3050 mm)

Installation Instructions

Notes Before You Begin: Do not over tighten bolts during assembly, only snug tighten them until assembly is complete.

Carefully read and understand these installation instructions before you begin.

Step 1: Before attempting to assemble your equipment, please review all installation information carefully. Should you experience any difficulty during the installation process, please call us at the phone number shown on the last page of these instructions.

Step 2: Separate and identify all components and hardware.

Step 3: Attach the swing seat to the swing chains. See **Detail A**. Attach the seats to the chains as shown. Ensure that the non-threaded side of the shackle is to the inside of the seat.

Step 4: Attach the swing seat assembly to the existing swing hangers. See **Detail B**. Remove the 1-1/4" bolt from the swing hanger clevis with the included wrench. Select the swing seat assembly and place last link of chain between the open end of the clevis and attach as shown. Ensure that the bolt is inserted through the non-threaded side of the clevis and threaded into the opposite side.

Note: (For EN Compliance) It will be necessary to remove links from the chains in order to obtain the minimum height of the seat above the protective surfacing.

Final Details.

Step 5: Fully tighten all fasteners according to tightening torque specifications.

Torque specifications - Nuts and Bolts: Snug tighten and tighten an additional one-half turn.

ZZXX0324 - BELT SEAT WITH GALVANIZED CHAIN
- 7 ft. (2134 mm) TOP RAIL HEIGHT

PART NO.	DESCRIPTION	QTY.
ABC0074	CNCTR - 5/16" CHAIN SHACKLE w/3/8"-16 THREAD	2
ACN0090	CHAIN - 53.71" 4/0 SILVER SHIELD	2
AMC0005	SEAT - SLASH PROOF BELT	1
BAE0667	BOLT - 3/8"-16 x 1-1/4" BUTTON HEAD w/NYLON PATCH	2
BAE0922	TOOL - TT 45 L WRENCH	1

ZZXX0260 - BELT SEAT WITH GALVANIZED CHAIN
- 8 ft. (2438 mm) TOP RAIL HEIGHT

PART NO.	DESCRIPTION	QTY.
ABC0074	CONNECTOR - 5/16" CHAIN SHACKLE w/3/8"-16 THREAD	2
ACN0091	CHAIN - 65.11" 4/0 SILVER SHIELD	2
AMC0005	SEAT - SLASH PROOF BELT	1
BAE0667	BOLT - 3/8"-16 x 1-1/4" BUTTON HEAD w/NYLON PATCH	2
BAE0922	TOOL - TT 45 L WRENCH	1

ZZXX0261 - BELT SEAT WITH GALVANIZED CHAIN
- 10 ft. (3048 mm) TOP RAIL HEIGHT

PART NO.	DESCRIPTION	QTY.
ABC0074	CONNECTOR - 5/16" CHAIN SHACKLE w/3/8"-16 THREAD	2
ACN0092	CHAIN - 89.01" 4/0 SILVER SHIELD	2
AMC0005	SEAT - SLASH PROOF BELT	1
BAE0667	BOLT - 3/8"-16 x 1-1/4" BUTTON HEAD w/NYLON PATCH	2
BAE0922	TOOL - TT 45 L WRENCH	1



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Swing Seat

- Inspect swing seat for sharp points, breaks, cracks or jagged edges. If any damage is detected and is determined to be unsafe, barricade equipment to prevent use until repair is completed.

Fasteners

- Inspect for loose fasteners.
Tightening torque specifications are:
Bolts and Nuts: Snug tighten and tighten an additional one-half turn.
- If during the maintenance process a bolt needs to be removed from a part or parts, it will be necessary to apply a drop of liquid thread lock to the bolt before reinstallation.
- Inspect for missing, worn or broken fasteners. If any missing, worn or broken fasteners are found, refer to the installation instructions for proper replacement fastener. If any damage is detected, barricade equipment to prevent use until repair is completed. Contact your sales representative immediately for a replacement part.

Finish

- Inspect metal parts for finish damage.
To repair painted surfaces, sand damaged area with sandpaper and wipe clean. Mask area and paint with primer and allow to dry. Paint primed area with color-matching paint and allow to dry. Recoat area with color-matching paint if required. Drying time is approximately 8 hours between coats.

Surfacing

- Refer to the specific surfacing maintenance detail sheet for additional information.

Replacement Parts

- Refer to your installation instructions to obtain replacement part number.
- Contact your sales representative or call Playworld Systems' Customer Service for a replacement part.

Equipment Maintenance Playworld Systems® Models XX0324, XX0260 & XX0261 Belt Seat with Galvanized Chain



Inspection Form

Preventive Maintenance

... for Safety's Sake!

- Be sure that you are using a copy of this Inspection Form and not your original.
- Use the Inspection Codes listed below and record condition of equipment at time of examination on the Inspection Checklist.
- Document any item from the Inspection Checklist that will require maintenance along with any corrective action on the Maintenance Schedule.
- Be sure to include appropriate dates and signatures on each section to properly document maintenance procedure.

INSPECTION CHECKLIST

	Frequency	Inspection Code	Date	Date Repairs Completed
Inspect chain and swing seat for damage.	Medium			
Inspect surfacing to insure proper depth and distribution.	High			
Inspect metal parts for structural and finish damage.	Medium			
Inspect for loose, missing, worn, or broken fasteners.	High			

Inspection Codes
P = Pass F = Fail
NA = Not Applicable

Inspector: Name (Please Print) _____ Signature: _____ Date: ___ / ___ / ___

MAINTENANCE SCHEDULE

Item in Question	Description of Problem	Corrective Action	Date

Repairer: Name (Please Print) _____ Signature: _____ Date: ___ / ___ / ___





Assembly View

Refer to the Elevation View for the specific Critical Fall Height for the component.

Installation Instructions
Playworld Systems®
Models XX0265, XX0266, & XX0325
Infant Swing Seat with Galvanized Chain

Installation Preparation

Recommended Crew: One (1) adult
Installation Time: 0.25 hour
Weight: See table below
Use Zone: Refer to the swing frame instructions
User Group: Ages 2 - 5 years

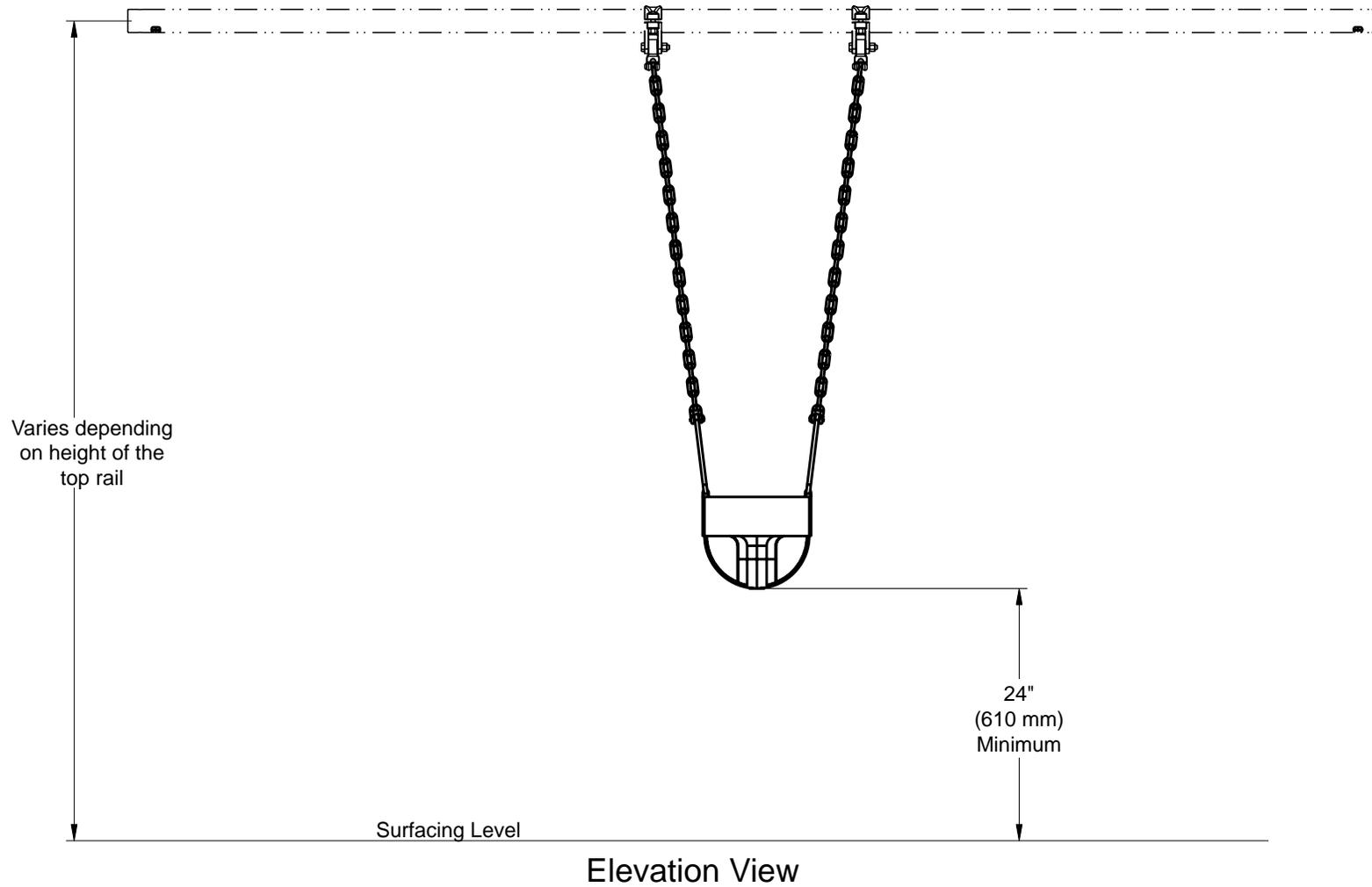
Model Number	Weight	Top Rail Height
ZZXX0325	12.8 Lbs. (5,8 Kilos)	7 ft. (2134 mm)
ZZXX0265	11 Lbs. (5 Kilos)	8 ft. (2440 mm)
ZZXX0266	12.6 Lbs. (5,7 Kilos)	10 ft. (3050 mm)

ICON KEY



Fully Tighten
Hardware

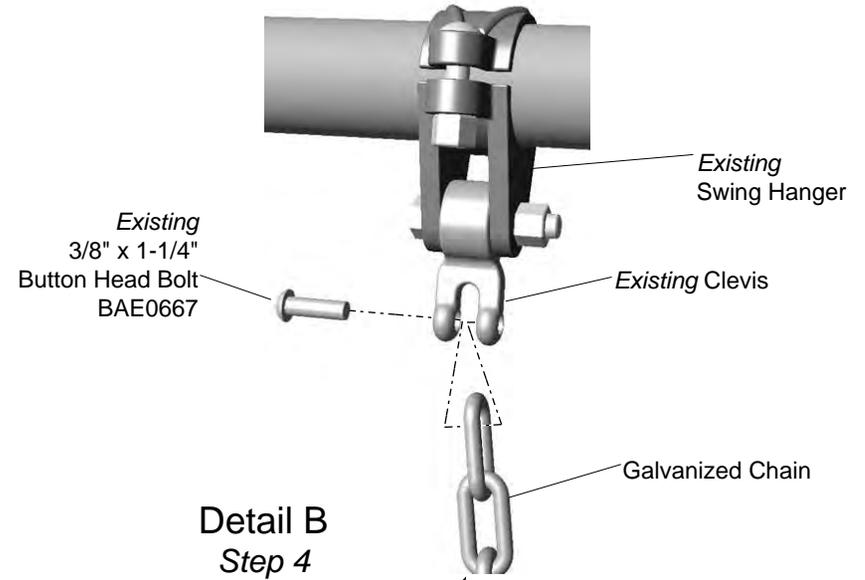
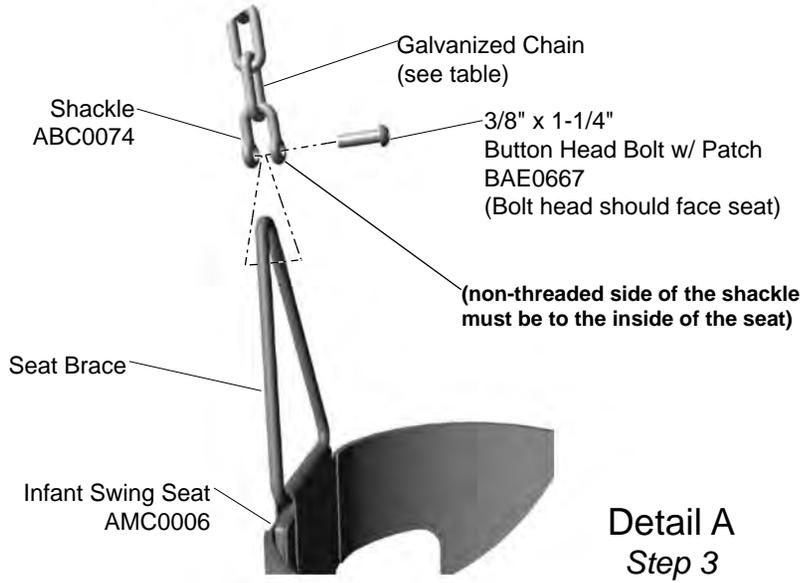
Installation Instructions



Model Number	Critical Fall Height - EN	Top Rail Height
ZZXX0325	1345 mm	7 ft. (2134 mm)
ZZXX0265	1525 mm	8 ft. (2440 mm)
ZZXX0266	1830 mm	10 ft. (3050 mm)

Installation Instructions

Follow the details in alphabetical order. For clarification, each detail references the step description. The step descriptions start on page 4.



Model Number	Galvanized Chain Part No.	Top Rail Height
ZZXX0325	ACN0050	7 ft. (2134 mm)
ZZXX0265	ACN0040	8 ft. (2440 mm)
ZZXX0266	ACN0041	10 ft. (3050 mm)

Installation Instructions

__Notes Before You Begin: Do not over tighten bolts during assembly, only snug tighten them until assembly is complete.

Carefully read and understand these installation instructions before you begin.

__Step 1: Before attempting to assemble your equipment, please review all installation information carefully. Should you experience any difficulty during the installation process, please call us at the phone number shown on the last page of these instructions.

__Step 2: Separate and identify all components and hardware.

Attach the swing seat to the swing chains.

__Step 3: Attach the swing seat to the swing chains. See **Detail A**. Select the swing seat, and (2) two of the following: bolts, chains, and shackles. Attach the seats to the chains as shown. Ensure that the non-threaded side of the shackle is to the inside of the seat.

Attach the swing seat assembly to the existing swing hangers.

__Step 4: Attach the swing seat assembly to the existing swing hangers. See **Detail B**. Remove the 1-1/4" bolt from the swing hanger clevis with the included hex key wrench. Select the swing seat assembly and place last link of chain between the open end of the clevis and attach as shown.

Ensure that the bolt is inserted through the non-threaded side of the clevis and threaded into the opposite side.

Important Note: The vertical distance between an occupied seat and the protective surface shall be no less than 24" (610 mm). Remove any excess chain.

Final Details.

__Step 5: Fully tighten all fasteners according to tightening torque specifications.

Torque specifications - Nuts and Bolts: Snug tighten and tighten an additional one-half turn.

ZZXX0325 - INFANT SWING SEAT WITH GALVANIZED CHAIN
- 7 ft. (2134 mm) TOP RAIL HEIGHT

PART NO.	DESCRIPTION	QTY.
ABC0074	CNECTR - 5/16" CHAIN SHACKLE w/3/8"-16 THREAD	2
ACN0050	CHAIN - 36" 4/0 GALVANIZED	2
AMC0006	SEAT - EXTRA TOUGH TOT	1
BAE0667	BOLT - 3/8"-16 x 1-1/4" BUTTON HEAD w/NYLON PATCH	2
BAE0902	TOOL - 7/32" SHORT HEX KEY WRENCH	1

ZZXX0265 - INFANT SWING SEAT WITH GALVANIZED CHAIN
- 8 ft. (2438 mm) TOP RAIL HEIGHT

PART NO.	DESCRIPTION	QTY.
ABC0074	CONNECTOR - 5/16" CHAIN SHACKLE w/3/8"-16 THREAD	2
ACN0040	CHAIN - 47" 4/0 GALVANIZED	2
AMC0006	SEAT - EXTRA TOUGH TOT	1
BAE0667	BOLT - 3/8"-16 x 1-1/4" BUTTON HEAD w/NYLON PATCH	2
BAE0902	TOOL - 7/32" SHORT HEX KEY WRENCH	1

ZZXX0266 - INFANT SWING SEAT WITH GALVANIZED CHAIN
- 10 ft. (3048 mm) TOP RAIL HEIGHT

PART NO.	DESCRIPTION	QTY.
ABC0074	CONNECTOR - 5/16" CHAIN SHACKLE w/3/8"-16 THREAD	2
ACN0041	CHAIN - 72" 4/0 GALVANIZED	2
AMC0006	SEAT - EXTRA TOUGH TOT	1
BAE0667	BOLT - 3/8"-16 x 1-1/4" BUTTON HEAD w/NYLON PATCH	2
BAE0902	TOOL - 7/32" SHORT HEX KEY WRENCH	1



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Swing Seat

- Inspect swing seat for sharp points, breaks, cracks or jagged edges. If any damage is detected and is determined to be unsafe, barricade equipment to prevent use until repair is completed.

Fasteners

- Inspect for loose fasteners.
Tightening torque specifications are:
Bolts and Nuts: Snug tighten and tighten an additional one-half turn.
- If during the maintenance process a bolt needs to be removed from a part or parts, it will be necessary to apply a drop of liquid thread lock / loctite to the bolt before reinstallation.
- Inspect for missing, worn or broken fasteners. If any missing, worn or broken fasteners are found, refer to the installation instructions for proper replacement fastener. If any damage is detected, barricade equipment to prevent use until repair is completed. Contact your sales representative immediately for a replacement part.

Finish

- Inspect metal parts for finish damage.
To repair painted surfaces, sand damaged area with sandpaper and wipe clean. Mask area and paint with primer and allow to dry. Paint primed area with color-matching paint and allow to dry. Recoat area with color-matching paint if required. Drying time is approximately 8 hours between coats.

Surfacing

- Refer to the specific surfacing maintenance detail sheet for additional information.

Replacement Parts

- Refer to your installation instructions to obtain replacement part number.
- Contact your sales representative or call Playworld Systems' Customer Service for a replacement part.

Equipment Maintenance Playworld Systems® Models XX0265, XX0266, & XX0325 Infant Swing Seat with Galvanized Chain



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Inspection Form

Preventive Maintenance

... for Safety's Sake!

- Be sure that you are using a copy of this Inspection Form and not your original.
- Use the Inspection Codes listed below and record condition of equipment at time of examination on the Inspection Checklist.
- Document any item from the Inspection Checklist that will require maintenance along with any corrective action on the Maintenance Schedule.
- Be sure to include appropriate dates and signatures on each section to properly document maintenance procedure.

INSPECTION CHECKLIST	Frequency	Inspection Code	Date	Date Repairs Completed
Inspect chain and swing seat for damage.	Medium			
Inspect surfacing to insure proper depth and distribution.	High			
Inspect metal parts for structural and finish damage.	Medium			
Inspect for loose, missing, worn, or broken fasteners.	High			

Inspection Codes P = Pass F = Fail NA = Not Applicable
--

Inspector: Name (Please Print) _____ Signature: _____ Date: ___ / ___ / ___

MAINTENANCE SCHEDULE

Item in Question	Description of Problem	Corrective Action	Date

Repairer: Name (Please Print) _____ Signature: _____ Date: ___ / ___ / ___



Important ! Please Read Completely Before Beginning Installation. According to a report published by the U. S. Consumer Product Safety Commission (C.P.S.C.) 72% of all playground injuries result from accidental falls. With this in mind, this equipment is designed to fill the need for safe yet challenging play. In conjunction with design efforts to reduce the possibilities of injuries, this equipment **must** be installed "Step by Step" per our installation instructions. As a new owner you are responsible for the correct installation, safe use, and maintenance of your equipment.

Installation Guidelines

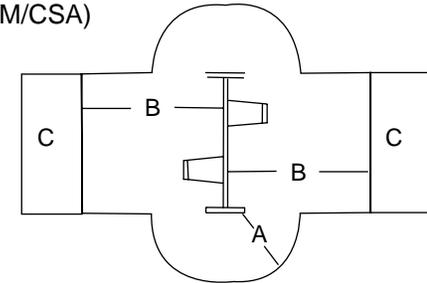
- Identify all parts and thoroughly read the assembly instructions before beginning construction.
- Refer to your playground equipment plan and footing diagram to assure the equipment purchased will fit into your selected site area. The use and no-encroachment zones around the play equipment shall be obstacle-free areas designated for unrestricted circulation.

(ASTM / CSA)

- For belt and rigid swing seats, the use zone for swing equipment should extend to the front and rear of a single axis swing a minimum distance of twice the height measured from the pivot point above the surfacing material measured from a point directly beneath the pivot on the supporting structure. The use zone on the sides of the swing should extend a minimum of 72 inches (1829 mm). A no-encroachment zone is also required for installations in areas overseen by the Canadian Standards Association (C.S.A.). In addition to the use zone measurement on both sides of the top rail, this zone will extend an additional 72 inches (1829 mm) and may **not** be overlapped by the use or no-encroachment zones of adjacent play equipment. See diagram.
- For enclosed infant swing seats, the use zone for swing equipment should extend to the front and rear of a single axis swing a minimum distance of twice the measurement from the pivot point to the swing seat surface measured from a point directly beneath the pivot on the supporting structure. The use zone on the ends of the swing (support structure) should extend a minimum of 72 inches (1829 mm). A no-encroachment zone is also required for installations in areas overseen by the Canadian Standards Association (C.S.A.). In addition to the use zone measurement on both sides of the top rail, this zone will extend an additional 72 inches (1829 mm) and may **not** be overlapped by the use or no-encroachment zones of adjacent play equipment. See diagram.

Belt/Rigid Seat Swing Zones (ASTM/CSA)

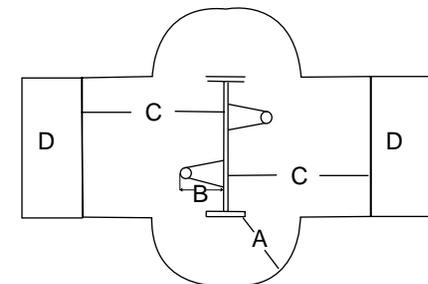
- A =** Side Use Zone
72 in. (1829 mm)
- B =** End Use Zone
Height of Pivot Point
from Surfacing x 2
Both Sides of Top Rail
- C =** No-encroachment Zone
72 in. (1829 mm)



- The use zone on either end of the swing (72 inches [1829 mm]) may be overlapped by the use zone on either end of another swing (72 inches [1829 mm]). Swing zones on either side of the top rail may **not** be overlapped by the use zones of other play equipment.

Infant Seat Swing Zones

- A =** Side Use Zone
72 in. (1829 mm)
- B =** Distance from Pivot Point
to Swing Seat Surface
- C =** End Use Zone: B x 2
Both Sides of Top Rail
- D =** No-encroachment Zone
72 in. (1829 mm)



Installation Instructions

(EN)

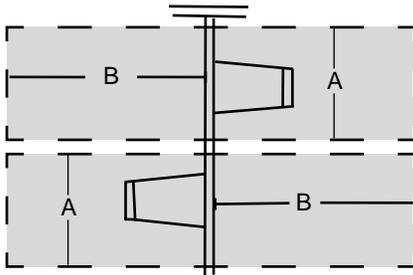
• For areas conforming to the EN-1176 Standard, the impact area shall be determined by calculating the horizontal distance where the swing seat is at an 60° arc and adding the appropriate amount of distance based upon the type of protective surfacing. This distance shall be covered by protective surfacing on both sides of the top rail. The protective surfacing shall be appropriate for the maximum fall height of the swing. There is no difference in the calculation based on the type of swing seat.

The impact area on both sides of top rail = $(0.867 \times \text{Distance from pivot point to seat}) + \text{either } 1750 \text{ mm if unitary surfacing or } 2250 \text{ mm if loose-fill surfacing is used. There shall be a minimum corridor of } 1750 \text{ mm centered on each swing seat for the length of the impact area.}$

Use Zones - EN Compliance

A = Width of the corridor centered on the swing seat
1750 mm

B = Length of the use zone on both sides of the top rail (8ft)
Tot Seats: 3290 mm for unitary surfaced areas
or 3790 mm for areas covered with loose fill surfacing.
Belt / Rigid Seats: 3510 mm for unitary surfaced areas
or 4010 mm for areas covered with loose fill surfacing



- Site layout is a critical part of the overall installation. Footings must be measured and marked accurately according to the footing diagram. A level and clear installation site is ideal.
- Good drainage around the structure and its supports is important. Inquire with local contractors for appropriate recommendations.
- After laying out all footings and before digging holes, be sure to inquire about underground utilities that may exist.
- Do not leave the job site unattended without making sure that all fastening hardware on all components are tightened according to tightening torque specifications listed on every installation guide. We also recommend roping off construction area and covering all holes that do not contain a piece of equipment with plywood or other suitable material.
- Excavate holes as shown in the footing detail. If a level and clear site cannot be obtained, adjust the depth of footing to maintain a level footing base. If soil conditions are loose or unstable, a larger diameter footing may be required. Inquire with local contractors for appropriate recommendations. Be sure concrete that might have splashed onto the unit is washed off before it dries. Allow concrete to harden 72 hours before allowing your structure to be used. **Assemble the entire structure before pouring concrete unless specifically instructed to do so in the installation instructions.**
- Insure that hard surface warning/Playworld Systems identification labels are properly affixed to the play equipment. Labels are to be plainly visible according to current playground equipment guidelines.
- **IMPORTANT!** Because accidental falls around your playground equipment can occur, Playworld Systems recommends that the area under and around the structure be covered with a resilient material such as sand, bark mulch, or wood chips. If loose fill surfacing materials are used, Playworld Systems recommends a depth of 12 in. (305 mm). An approved rubber safety matting can also be used. **Many protective surfacing materials can become compacted due to weather and use, which reduces their shock absorbency. It is strongly recommended that the surfacing be checked weekly and material added or replaced as necessary. Hard surfaces, such as asphalt, concrete and packed earth are not acceptable for use under playground equipment.**

Installation Instructions

- The entire area, under and around the playground equipment, must be covered with protective surfacing material. The impact attenuation of the protective surfacing under and around playground equipment should be rated to have a critical height value of at least the height of the highest accessible part of the equipment. The critical height for surfacing is to be rated in accordance with A.S.T.M. standard, designated F1292, [A Standard Specification for Impact Attenuation of Surface Systems Under and Around Playground Equipment](#). Contact the manufacturer of unitary surfacing materials (rubber matting) for the critical height rating for their products.

Tools Required: Playworld Systems supplies a service kit that contains commonly used hex key wrenches required to assemble your equipment. You may also need: shovel, digging iron, post hole digger, steel rake, wheelbarrow, garden hoe, water hose, tape measure, level, alignment tool, 3/8" ratchet with 9/16" socket, and 9/16" combination wrench.

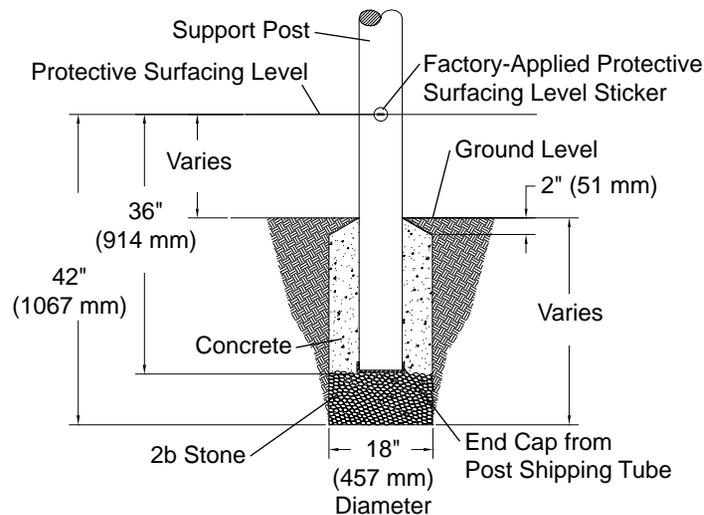
Maintenance

- Inadequate maintenance of equipment has resulted in injuries on the playground. Because the safety of playground equipment and its stability depends on good inspection and maintenance, **a comprehensive maintenance program must be developed for each playground and strictly followed.** All equipment must be inspected frequently for any potential hazards. Special attention must be given to moving parts and other components that can be expected to wear. Inspections must be carried out in a systematic manner by trained personnel. Any damaged or worn parts, or any other hazards identified during inspections must be repaired or replaced immediately. Complete documentation of all maintenance inspections and repairs must be retained.

Supervision Guidelines

- Playworld Systems strongly recommends close supervision of the children as they play as well as intensive classroom and home instruction about safe behavior on playground equipment.
- Playground supervisors should be aware that not all playground equipment is appropriate for all children who may use the playground. Signs should be posted near the equipment indicating the recommended age of the users. Supervisors should direct children to equipment appropriate for their age.
- It is important that playground supervisors recognize that preschool-age children require more attentive supervision on playgrounds than older children.
- Do not permit the use of wet playground equipment. Wet equipment will inhibit necessary traction and gripping capabilities. Slips or falls could occur.
- Do not permit too many children on the same piece of equipment at the same time. It is suggested that children take turns.
- Constantly observe play patterns to discover possible hazardous play and suggest changes in equipment use or play patterns.

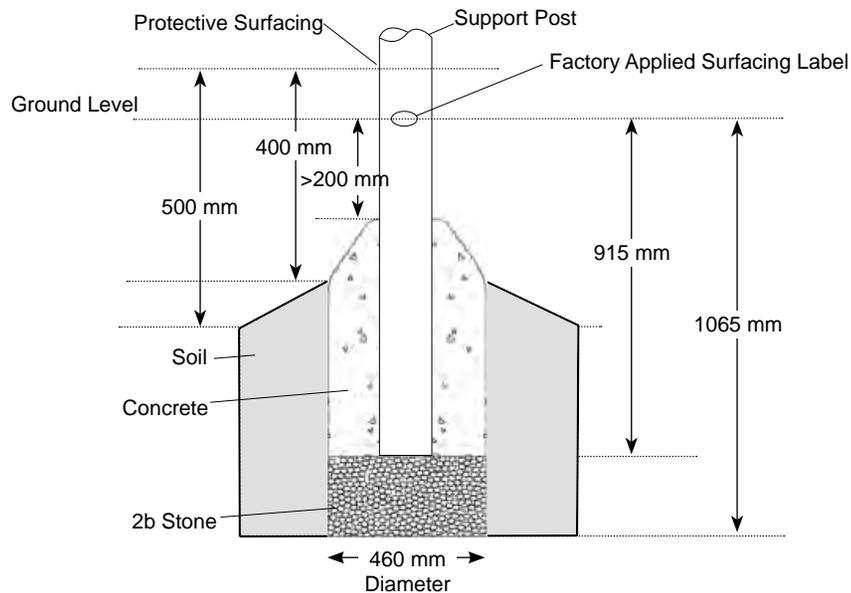
Installation Instructions



Support Post Footing Detail (ASTM/CSA)

FOOTING NOTES

- Support post footing depth equals 42 in. (1067 mm) less the depth of the protective surfacing material. The post is designed to have 24" (610 mm) in concrete.
Example: If 12 in. (305 mm) of wood mulch is used for surfacing, the footing depth would be 30 in. (762 mm).
- All support posts and component support legs shall have either a factory-applied sticker with line, or factory-applied mark designating protective surfacing level on a clear and level installation site.
- If play structure is installed on uneven terrain, maintain support post mark at protective surfacing level at lowest grade. Adjust other footings accordingly. Support posts and all attaching decks and play components must be plumb and level.
- Do not encase bottom of support post in concrete. Place post directly on packed stone.
- The footings shown on Playworld Systems' documentation are recommendations based on historical performance in average soil conditions. Footing dimensions may be modified by the owner based on actual soil conditions.
For example:
 - If local soil is loose or unstable, a larger footing may be required.
 - If local soil is considered stable, such as bedrock, clay or hard packed earth, a smaller footing may be used. Before changing footing dimensions, we strongly recommend that the footings be reviewed and approved by a registered engineer.
- Base of footing must be below frost line.
- Assemble the entire structure before pouring concrete unless specifically instructed to do so in the individual component installation instructions.



Footing Detail Support Post (EN)



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Assembly View (representative model)

Installation Instructions

Playworld Systems® Model XX0287
 5 in. (127 mm) O.D. 2-Unit Aluminum Arch Swing
 8 ft. (2438 mm) Top Rail

Installation Preparation

Recommended Crew: Four (4) adults
 Installation Time: 3 man-hours
 Weight: *214 lbs. (97,3 kg)
 Concrete Required: 0.48 cubic yard (0,37 cubic meters)
 Use Zone: Refer to Master Drawing
 User Group Age (years): ASTM/CSA: 2-12, EN: 2-14

**Weights are approximate for determining manpower.*

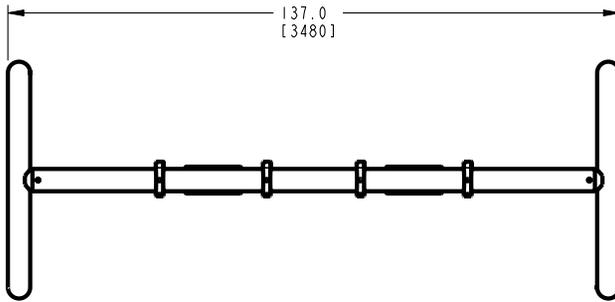
ICON KEY	
	Fully Tighten Hardware
	Do Not Fully Tighten Hardware
	Drill
	Hammer
	Add 1 Drop of Thread Locking Adhesive
	Pour Concrete
	Dig Footing Holes
	Critical Fall Height



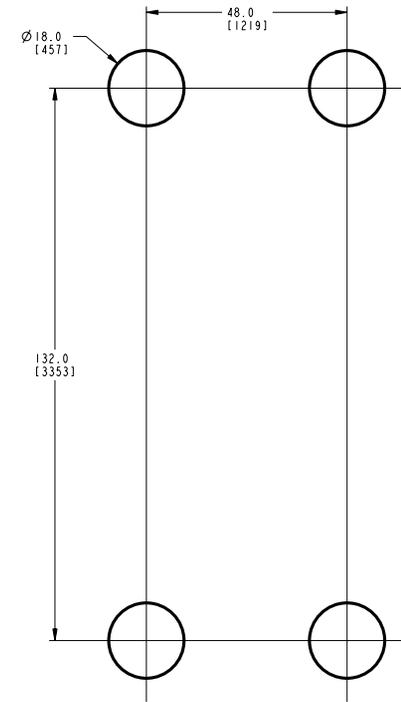
Installation Instructions

KEY	
Position	Unit of Measurement
Top #	Inches
Bottom #	[Millimeters]

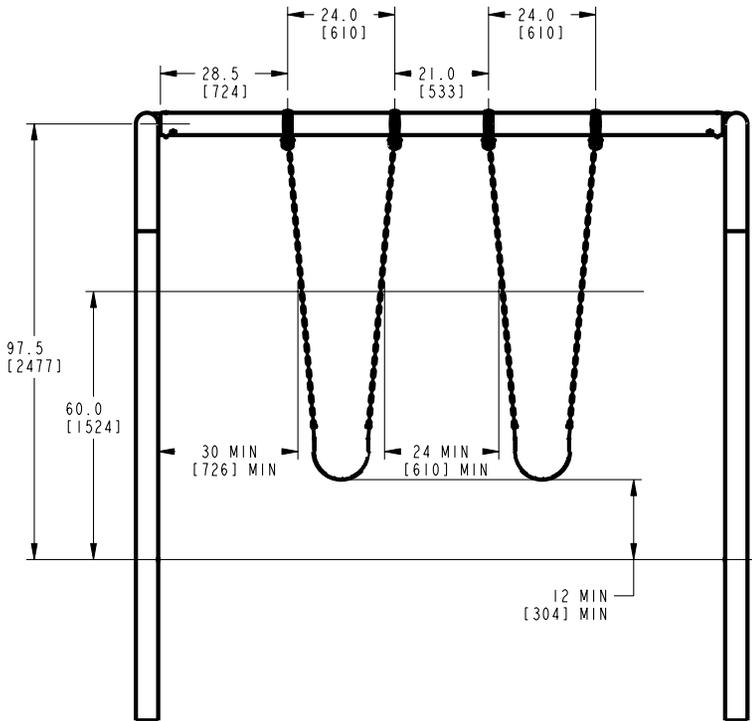
Top View



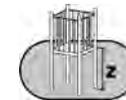
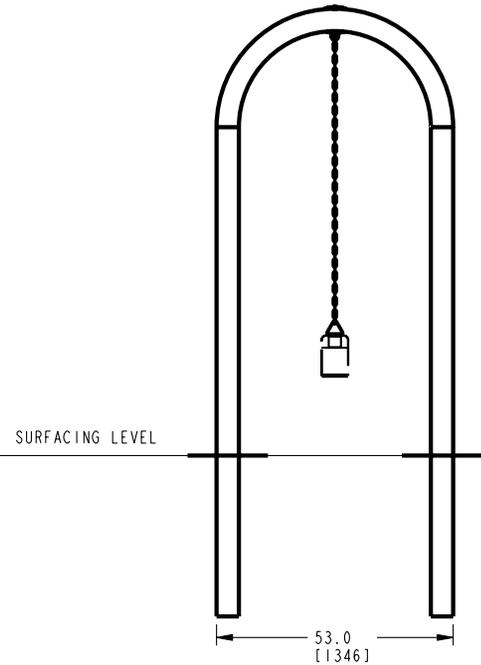
Note: Swing Hanger locations are dimensioned from end of the Top Rail to center of Swing Hanger.



Footing Diagram



Elevation Views



Critical Fall Height

EN: belt seat - 1390 mm (mounted as shown)
tot seat - 1545 mm (with seat at 610 above surfacing)



Installation Instructions

Follow the details in alphabetical order. For clarification, each detail references the step description. The step descriptions start on page 9.

Top Rail Beam
APT0432
(1 Total)

Arch Post
APT0144
(2 Total)

Arch Post

Top Rail Beam

3/8" x 1/2" Set Screw
BAE0630
(4 Total)

Underneath View

Detail B
Step 5
Secure the top rail to the arch posts.

3/8" x 5-1/2" Button Head Bolt
BAE06686
(2 Total)

3/8" Lock Nut
BAE0620
(2 Total)

Detail A
Step 4
Attach the top rail to the arch posts.

3/8" x 1-1/4" Tamper Resistant Bolt
BAE0662
(4 Total)

Swing Hanger
AAU0155
(4 Total)

Top Rail Beam

3/8" T Nut
BAE0670
(4 Total)

When tightening the bolt ensure that the T nut does not protrude past the edge of the clamp.

Detail C
Step 8
Attach swing hangers to the top rail.

CAUTION

Swing hangers cannot be completely drawn together when attaching to the swing top rail. When properly installed, a gap of approximately 1/8" (3 mm) gap will exist between the swing hanger castings. Extreme care must be taken that nuts on swing hangers are drawn up evenly. Do **NOT** over tighten or exceed 25 ft lbs (33.9 Nm) of torque.

Warning!

Exceeding 25 ft lbs (33.9 Nm) of torque on the swing hanger bolts may cause damage to the swing band.

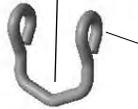


Installation Instructions

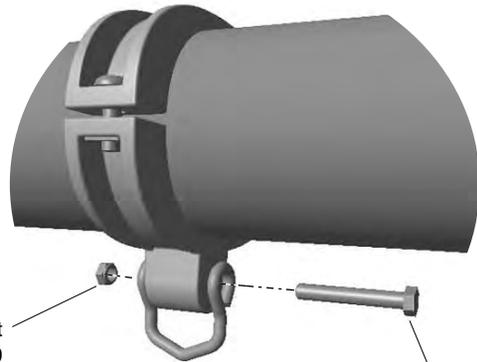
Swing Hanger



Swing Clevis Connector
ABC0704
(4 Total)



Swing Clevis Connector
ABC0704
(4 Total)



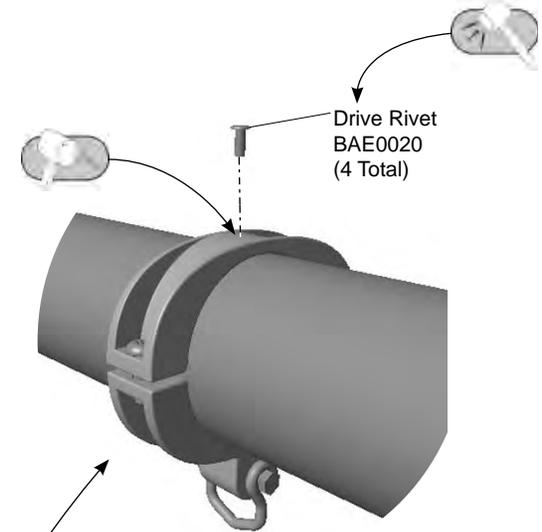
3/8" Thin Series Lock Nut
BAE0610
(4 Total)

3/8" x 2-1/2"
Hex Head Shoulder Bolt
BAE0412
(4 Total)



Detail D
Step 9

Attach each clevis to a swing hanger.



Drive Rivet
BAE0020
(4 Total)



Detail E
Step 12

*Secure the swing hangers
to the top rail.*

Installation Instructions

Notes Before You Begin: Do not over tighten bolts during assembly, only snug tighten them until assembly is complete.

Carefully read and understand these installation instructions before you begin.

Step 1: Before attempting to assemble your equipment, please review all installation information carefully. Should you experience any difficulty during the installation process, please call us at the phone number shown on the last page of these instructions.

Step 2: Separate and identify all components and hardware.

Step 3: Prepare footings as shown in the **Support Post Details** on **Page 4**.

Assemble the swing frame.

Step 4: Attach the top rail to the arch support posts. See **Detail A**. Slide each end of the top rail into a post stub and align holes. Insert each bolt through the *top* hole in the post stub, through the top rail, out the bottom side of the post stub, and thread into a lock nut.

Step 5: Secure the top rail to the arch posts. See **Detail B**. Apply a drop of loctite to the set screw threads and thread each screw into a hole on the underside of the post stub. Fully tighten connections according to tightening torque specifications.

Torque Specifications:

Bolts and nuts - Snug tighten and then tighten an additional one half turn.

Set Screws - Snug tighten and tighten an additional full turn.

Position the swing frame.

Step 6: Place the swing frame into the footings. Square and level the swing frame assembly at specified footing depth. Top rail height shall be 96 in. (2438 mm) as measured from top of the protective surfacing material level to the bottom of the top rail. Fully tighten all bolts in accordance with tightening torque installation instructions. Block and brace for concrete.

Step 7: Fill the footings with concrete to within 2 in. (51 mm) of ground level as shown in the **Footing Detail**. Plumb and level the component. Block and brace for concrete. Allow concrete to harden for 72 hours before proceeding with **Step 8**.

Attach swing hangers to the top rail.

Step 8: Attach swing hangers to the top rail. See **Detail C**. Close the swing hangers around the top rail and attach as shown. Ensure hangers are properly spaced and positioned on top rail (See **Elevation View**). There is a ridge on the underside of the bottom band to keep the T nut from rotating. **When tightening the bolt ensure that the T nut does not protrude past the edge of the clamp.**

Note: Please read **CAUTION** before fully tightening the connections.

Important Note: Swing hangers should be positioned a minimum of 20" (508 mm) apart. Additionally, the horizontal distance between the vertical support and the swing shall be no less than 30 in. (760 mm) when measured at 60 in. (1524 mm) from the level of protective surfacing. Please refer to the USCPSC Handbook for Public Playground Safety for proper placement.

Step 9: Attach each clevis to a swing hanger. See **Detail D**. Position each clevis over the bottom hanger bushing and align holes. Insert a hex head bolt through the clevis eye, through the hanger bushing, through the other clevis eye and secure with a thin series lock nut.

Important Note: Tighten the thin series lock nut on shoulder bolt until the clevis binds on the swing hanger casting. Then loosen the thin series lock nut approximately 1/4 turn until the swing clevis moves freely. Insure the bolt threads are fully engaged into the nut's locking device.

Note: Swing clevises will need to be removed from swing hangers to install selected swing seat.

Final Details

Step 10: See Swing Seat Installation Instruction sheet for swing seat attachment. Swing seats are ordered separately.

Step 11: Tighten **all** fasteners. Fully tighten all fasteners according to tightening torque specifications.

Torque Specifications:

Bolts and nuts - Snug tighten and then tighten an additional one half turn.

Set Screws - Snug tighten and tighten an additional full turn.

Installation Instructions

Step 12: Install drive rivets. See **Detail E**. After the equipment assembly is complete, install a drive rivet in each clamp to permanently secure it to the support post. Using a 1/4" drill bit, drill through the clamp and support post. Insert the drive rivet into drilled hole until the head of the rivet is against the surface of the clamp. Using a hammer, drive the pin of the rivet until it is flush with the surface of the rivet head.

Note: This step should be executed after structure has been assembled and properly footed.

Step 13: For areas complying with ASTM standard F1487 or the CSA Z-614, apply the age appropriate label to the equipment at eye level.



**XX0287 - 5 in. O.D. 2-UNIT ALUMINUM ARCH SWING
8 ft. (2438 mm) TOP RAIL**

PART NO.	DESCRIPTION	QTY.
AAU0155	HANGER - 5" SWING	4
ABC0704	CONNECTOR - SWING CLEVIS	4
APT0144	POST - 5" O.D. x 133 1/2" ALUMINUM ARCH SUPPORT	2
APT0432	BEAM - 5" x 126" ARCH SWING TOP RAIL	1
BAD0085	THREAD LOCKING ADHESIVE	1
BAE0020	RIVET - 1/4" x 11/16" DRIVE	4
BAE0412	BOLT - 3/8"-16 x 2 1/2" HEX HEAD SHOULDER	4
BAE0610	NUT - 3/8"-16 THIN LOCK	4
BAE0620	NUT - 3/8"-16 LOCK w/NYLON CAP	2
BAE0630	SCREW - 3/8"-16 x 1/2" SOCKET SET SS	4
BAE0662	BOLT - 3/8"-16 x 1-1/4" TAMP RESIST w/TORX DRIVE	4
BAE06686	BOLT - 3/8"-16 x 5.50" BUTTON HEAD - SS	2
BAE0670	T-NUT - 3/8"-16 x 7/16" - SS	4
BAE0905	WRENCH - 3/16" SHORT HEX KEY	1
BAE0915	BIT - 3/8" TAMPER RESISTANT	1
BAE0922	TOOL - TT 45 L WRENCH	1
ALB0025	LABEL - AGE APPROPRIATE	1



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www.playworldsystems.com



Installation Instructions

FINAL INSPECTION

- Playworld Systems® insists on the installation of protective surfacing within the use zone of each play structure in accordance with the applicable standard for your area, appropriate for the fall height of each structure.
- Playworld Systems® strongly recommends close supervision of children as they play. The owners of playground equipment and the parents or guardians of children are responsible for this proper supervision.
- As the owner of playground equipment, you are responsible for the maintenance of the equipment and surrounding play area. A comprehensive maintenance and inspection schedule must be developed and all equipment inspected frequently. Refer to the inspection and maintenance schedule in the back of this booklet.
- Perform a thorough final check on the installed equipment to insure all equipment is installed as specified by manufacturer's installation instructions.
 - Review all Installation Instructions for specified dimensions. Make sure dimensions called for in instructions agree with actual installation.
 - Double check height dimensions. Height measurements are taken from the top of the protective surfacing material.
 - Insure all fasteners are tightened according to tightening torque specifications listed on your installation instructions.
 - Clean dried concrete off of components and any other affected surface.
 - Touch-up any scratches or installation damage to powder coated finish with color-matched spray paint.
 - Allow adequate time for proper curing, both for concrete and urethane cement if rubber safety surfacing tiles have been installed.
 - Insure that protective surfacing is properly installed according to recommendations. Footings must not be exposed. Refer to the florescent orange sheet included in the front of the installation instruction booklet titled "Owners Manual".
 - Insure that hard surface warning/Playworld Systems® identification labels (shown below) are properly affixed to the play equipment. Labels are to be plainly visible according to current playground equipment guidelines. For areas complying with ASTM F-1487 or CSA Z-614 an age appropriate label must be applied in a visible location.

- Dispose of all packaging material properly. These materials which include large plastic bags and sheets can be a suffocation hazard. Dispose of these materials out of reach or contact of small children.



Swing Hangers

- Inspect swing hangers to insure they are properly secured to the support posts.
- Use the supplied torx-style tamper-resistant bit to insure bolt connection is tight.
- Use the supplied 3/16" hex key wrench to insure the set screw connection is tight.
- Inspect drive rivets to insure they are intact and secure.
- Visually inspect swing hangers for cracks or breakage. If any damage is detected, barricade equipment to prevent use until repair is completed. Contact your sales representative immediately for a replacement part.

Fasteners

- Inspect for loose fasteners.
Tightening torque specifications are:
Bolts and Nuts: Snug tighten and tighten an additional one-half turn.
Set Screws: Snug tighten and tighten an additional full turn.
- Inspect drive rivets to insure they are intact and secure.
- If during the maintenance process a bolt needs to be removed from a part or parts, it will be necessary to apply a drop of liquid thread lock / loctite to the bolt before reinstallation.
- Inspect for missing, worn or broken fasteners. If any missing, worn or broken fasteners are found, refer to the installation instructions for proper replacement fastener. If any damage is detected, barricade equipment to prevent use until repair is completed. Contact your sales representative immediately for a replacement part.

Welds

- Inspect all welded joints. If any broken welds are detected, barricade equipment to prevent use until repair is completed. Contact your sales representative immediately for a replacement part.

Finish

- Inspect metal parts for finish damage.
To repair painted surfaces, sand damaged area with sandpaper and wipe clean. Mask area and paint with primer and allow to dry. Paint primed area with color-matching paint and allow to dry. Recoat area with color-matching paint if required. Drying time is approximately 8 hours between coats.

Footings

- Inspect component to be solid in footing and secure. If any damage is detected, barricade equipment to prevent use until repair is completed.

Surfacing

- Refer to the specific surfacing maintenance detail sheet for additional information.

Replacement Parts

- Refer to your installation instructions to obtain replacement part number.
- Contact your sales representative or call Playworld Systems' Customer Service for a replacement part.

Equipment Maintenance Playworld Systems® Model XX0287 5 in. (127 mm) O.D. 2-Unit Aluminum Arch Swing 8 ft. (2438 mm) Top Rail



Warning!
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- Be sure to include appropriate dates and signatures on each section to properly document maintenance procedure.

Preventive Maintenance ... for Safety's Sake!

INSPECTION CHECKLIST	Frequency	Inspection Code	Date	Date Repairs Completed
Inspect surfacing to insure proper depth and distribution.	High			
Inspect swing hangers for tightness and damage.	High			
Inspect metal parts for structural and finish damage.	Medium			
Inspect for loose, missing, worn, or broken fasteners.	High			
Inspect footing to insure support is secure and footing is not damaged.	Low			

Inspection Codes
P = Pass F = Fail NA = Not Applicable

Inspector: Name (Please Print) _____ Signature: _____ Date: ___/___/___

MAINTENANCE SCHEDULE

Item in Question	Description of Problem	Corrective Action	Date

Repairer: Name (Please Print) _____ Signature: _____ Date: ___/___/___



Important ! Please Read Completely Before Beginning Installation. According to a report published by the U. S. Consumer Product Safety Commission (C.P.S.C.) 72% of all playground injuries result from accidental falls. With this in mind, this equipment is designed to fill the need for safe yet challenging play. In conjunction with design efforts to reduce the possibilities of injuries, this equipment **must** be installed "Step by Step" per our installation instructions. As a new owner you are responsible for the correct installation, safe use, and maintenance of your equipment.

Installation Guidelines

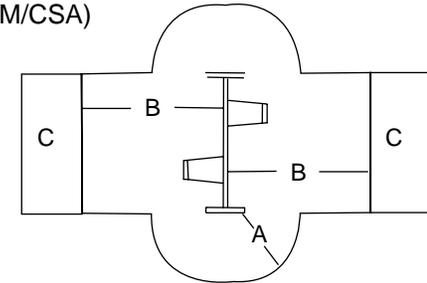
- Identify all parts and thoroughly read the assembly instructions before beginning construction.
- Refer to your playground equipment plan and footing diagram to assure the equipment purchased will fit into your selected site area. The use and no-encroachment zones around the play equipment shall be obstacle-free areas designated for unrestricted circulation.

(ASTM / CSA)

- For belt and rigid swing seats, the use zone for swing equipment should extend to the front and rear of a single axis swing a minimum distance of twice the height measured from the pivot point above the surfacing material measured from a point directly beneath the pivot on the supporting structure. The use zone on the sides of the swing should extend a minimum of 72 inches (1829 mm). A no-encroachment zone is also required for installations in areas overseen by the Canadian Standards Association (C.S.A.). In addition to the use zone measurement on both sides of the top rail, this zone will extend an additional 72 inches (1829 mm) and may **not** be overlapped by the use or no-encroachment zones of adjacent play equipment. See diagram.
- For enclosed infant swing seats, the use zone for swing equipment should extend to the front and rear of a single axis swing a minimum distance of twice the measurement from the pivot point to the swing seat surface measured from a point directly beneath the pivot on the supporting structure. The use zone on the ends of the swing (support structure) should extend a minimum of 72 inches (1829 mm). A no-encroachment zone is also required for installations in areas overseen by the Canadian Standards Association (C.S.A.). In addition to the use zone measurement on both sides of the top rail, this zone will extend an additional 72 inches (1829 mm) and may **not** be overlapped by the use or no-encroachment zones of adjacent play equipment. See diagram.

Belt/Rigid Seat Swing Zones (ASTM/CSA)

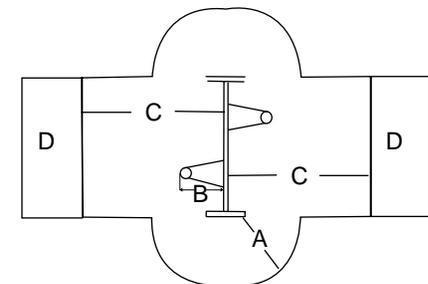
- A =** Side Use Zone
72 in. (1829 mm)
- B =** End Use Zone
Height of Pivot Point
from Surfacing x 2
Both Sides of Top Rail
- C =** No-encroachment Zone
72 in. (1829 mm)



- The use zone on either end of the swing (72 inches [1829 mm]) may be overlapped by the use zone on either end of another swing (72 inches [1829 mm]). Swing zones on either side of the top rail may **not** be overlapped by the use zones of other play equipment.

Infant Seat Swing Zones

- A =** Side Use Zone
72 in. (1829 mm)
- B =** Distance from Pivot Point
to Swing Seat Surface
- C =** End Use Zone: B x 2
Both Sides of Top Rail
- D =** No-encroachment Zone
72 in. (1829 mm)



Installation Instructions

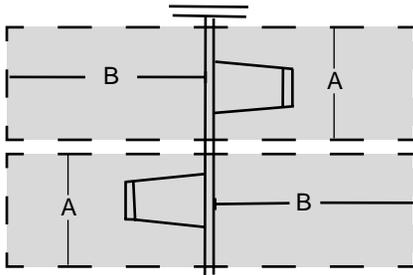
(EN)

For areas conforming to the EN-1176 Standard, the impact area shall be determined by calculating the horizontal distance where the swing seat is at an 60° arc and adding the appropriate amount of distance based upon the type of protective surfacing. This distance shall be covered by protective surfacing on both sides of the top rail. The protective surfacing shall be appropriate for the maximum fall height of the swing. There is no difference in the calculation based on the type of swing seat.

The impact area on both sides of top rail = $(0.867 \times \text{Distance from pivot point to seat}) + \text{either } 1750 \text{ mm if unitary surfacing or } 2250 \text{ mm if loose-fill surfacing is used. There shall be a minimum corridor of } 1750 \text{ mm centered on each swing seat for the length of the impact area.}$

Use Zones - EN Compliance

- A =** Width of the corridor centered on the swing seat
1750 mm
- B =** Length of the use zone on both sides of the top rail (8ft)
Tot Seats: 3290 mm for unitary surfaced areas
or 3790 mm for areas covered with loose fill surfacing.
Belt / Rigid Seats: 3510 mm for unitary surfaced areas
or 4010 mm for areas covered with loose fill surfacing



- Site layout is a critical part of the overall installation. Footings must be measured and marked accurately according to the footing diagram. A level and clear installation site is ideal.
- Good drainage around the structure and its supports is important. Inquire with local contractors for appropriate recommendations.
- After laying out all footings and before digging holes, be sure to inquire about underground utilities that may exist.
- Do not leave the job site unattended without making sure that all fastening hardware on all components are tightened according to tightening torque specifications listed on every installation guide. We also recommend roping off construction area and covering all holes that do not contain a piece of equipment with plywood or other suitable material.
- Excavate holes as shown in the footing detail. If a level and clear site cannot be obtained, adjust the depth of footing to maintain a level footing base. If soil conditions are loose or unstable, a larger diameter footing may be required. Inquire with local contractors for appropriate recommendations. Be sure concrete that might have splashed onto the unit is washed off before it dries. Allow concrete to harden 72 hours before allowing your structure to be used. **Assemble the entire structure before pouring concrete unless specifically instructed to do so in the installation instructions.**
- Insure that hard surface warning/Playworld Systems identification labels are properly affixed to the play equipment. Labels are to be plainly visible according to current playground equipment guidelines.
- **IMPORTANT!** Because accidental falls around your playground equipment can occur, Playworld Systems recommends that the area under and around the structure be covered with a resilient material such as sand, bark mulch, or wood chips. If loose fill surfacing materials are used, Playworld Systems recommends a depth of 12 in. (305 mm). An approved rubber safety matting can also be used. **Many protective surfacing materials can become compacted due to weather and use, which reduces their shock absorbency. It is strongly recommended that the surfacing be checked weekly and material added or replaced as necessary. Hard surfaces, such as asphalt, concrete and packed earth are not acceptable for use under playground equipment.**

Installation Instructions

- The entire area, under and around the playground equipment, must be covered with protective surfacing material. The impact attenuation of the protective surfacing under and around playground equipment should be rated to have a critical height value of at least the height of the highest accessible part of the equipment. The critical height for surfacing is to be rated in accordance with A.S.T.M. standard, designated F1292, [A Standard Specification for Impact Attenuation of Surface Systems Under and Around Playground Equipment](#). Contact the manufacturer of unitary surfacing materials (rubber matting) for the critical height rating for their products.

Tools Required: Playworld Systems supplies a service kit that contains commonly used hex key wrenches required to assemble your equipment. You may also need: shovel, digging iron, post hole digger, steel rake, wheelbarrow, garden hoe, water hose, tape measure, level, alignment tool, 3/8" ratchet with 9/16" socket, and 9/16" combination wrench.

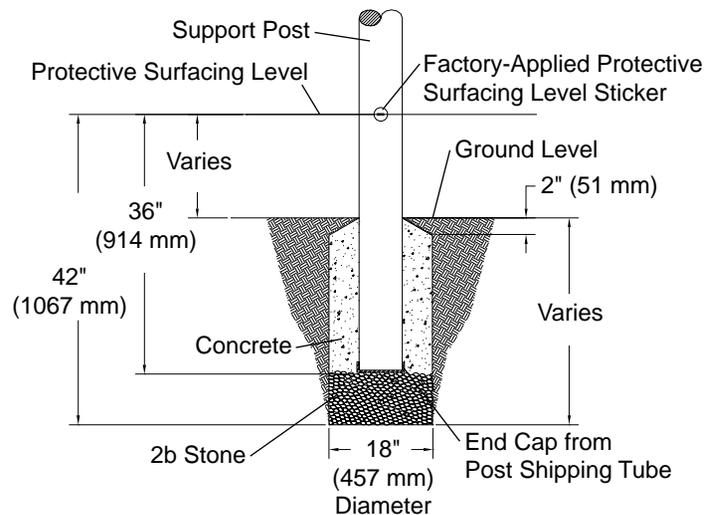
Maintenance

- Inadequate maintenance of equipment has resulted in injuries on the playground. Because the safety of playground equipment and its stability depends on good inspection and maintenance, **a comprehensive maintenance program must be developed for each playground and strictly followed.** All equipment must be inspected frequently for any potential hazards. Special attention must be given to moving parts and other components that can be expected to wear. Inspections must be carried out in a systematic manner by trained personnel. Any damaged or worn parts, or any other hazards identified during inspections must be repaired or replaced immediately. Complete documentation of all maintenance inspections and repairs must be retained.

Supervision Guidelines

- Playworld Systems strongly recommends close supervision of the children as they play as well as intensive classroom and home instruction about safe behavior on playground equipment.
- Playground supervisors should be aware that not all playground equipment is appropriate for all children who may use the playground. Signs should be posted near the equipment indicating the recommended age of the users. Supervisors should direct children to equipment appropriate for their age.
- It is important that playground supervisors recognize that preschool-age children require more attentive supervision on playgrounds than older children.
- Do not permit the use of wet playground equipment. Wet equipment will inhibit necessary traction and gripping capabilities. Slips or falls could occur.
- Do not permit too many children on the same piece of equipment at the same time. It is suggested that children take turns.
- Constantly observe play patterns to discover possible hazardous play and suggest changes in equipment use or play patterns.

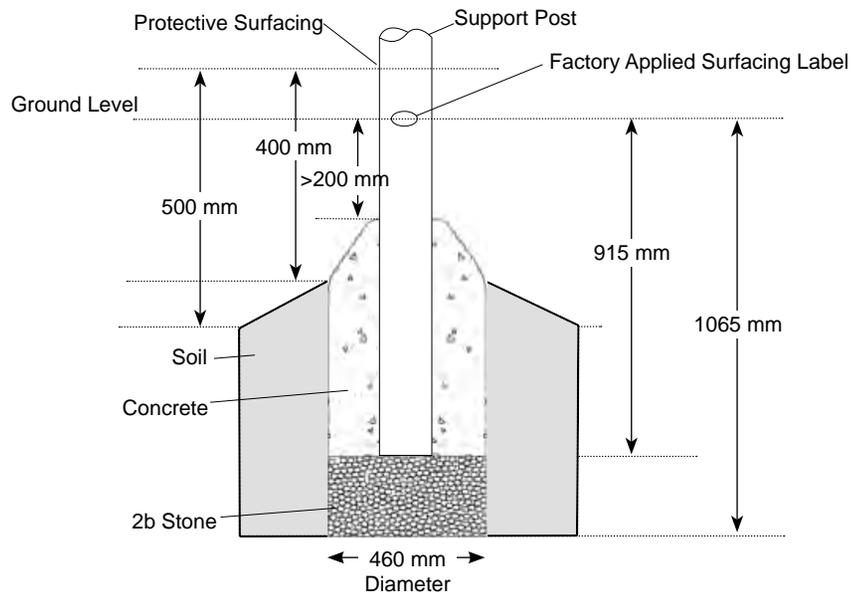
Installation Instructions



Support Post Footing Detail (ASTM/CSA)

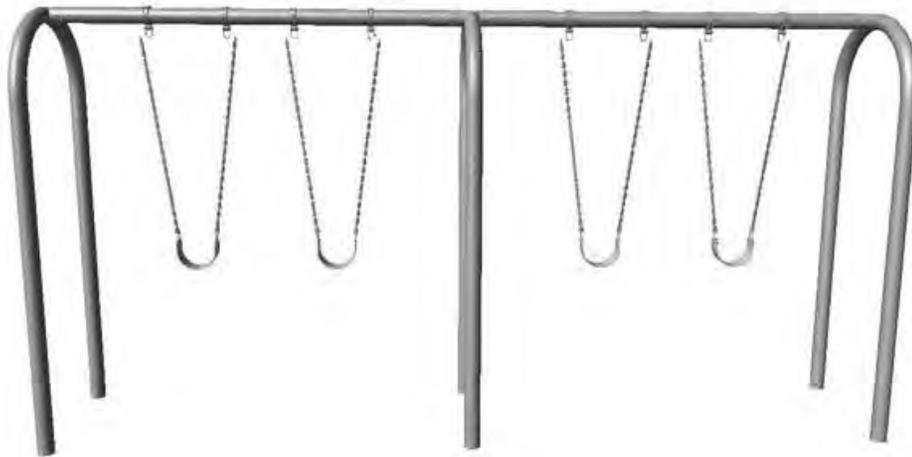
FOOTING NOTES

- Support post footing depth equals 42 in. (1067 mm) less the depth of the protective surfacing material. The post is designed to have 24" (610 mm) in concrete.
Example: If 12 in. (305 mm) of wood mulch is used for surfacing, the footing depth would be 30 in. (762 mm).
- All support posts and component support legs shall have either a factory-applied sticker with line, or factory-applied mark designating protective surfacing level on a clear and level installation site.
- If play structure is installed on uneven terrain, maintain support post mark at protective surfacing level at lowest grade. Adjust other footings accordingly. Support posts and all attaching decks and play components must be plumb and level.
- Do not encase bottom of support post in concrete. Place post directly on packed stone.
- The footings shown on Playworld Systems' documentation are recommendations based on historical performance in average soil conditions. Footing dimensions may be modified by the owner based on actual soil conditions.
For example:
 - If local soil is loose or unstable, a larger footing may be required.
 - If local soil is considered stable, such as bedrock, clay or hard packed earth, a smaller footing may be used. Before changing footing dimensions, we strongly recommend that the footings be reviewed and approved by a registered engineer.
- Base of footing must be below frost line.
- Assemble the entire structure before pouring concrete unless specifically instructed to do so in the individual component installation instructions.



Footing Detail Support Post (EN)

Installation Instructions
 Playworld Systems® Model XX0370
 5 in. (127 mm) O.D. Aluminum Arch Swing
 2-Unit Add-A-Bay

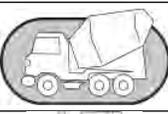
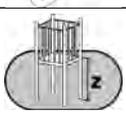


Assembly View

Installation Preparation

- Recommended Crew: Three (3) adults
 Installation Time: 2 man-hours
 Weight: *156.2 lbs. (70,3 kg)
 Concrete Required: 0.24 cubic yard (0,18 cubic meters)
 Use Zone: Refer to Master Drawing
 User Group Age (years): ASTM/CSA: 2-12, EN: 2-14

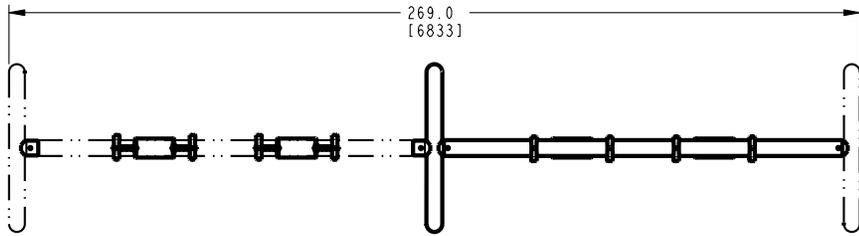
**Weights are approximate for determining manpower.*

ICON KEY			
	Fully Tighten Hardware		Add 1 Drop of Thread Locking Adhesive
	Do Not Fully Tighten Hardware		Pour Concrete
	Drill		Dig Footing Holes
	Hammer		Critical Fall Height

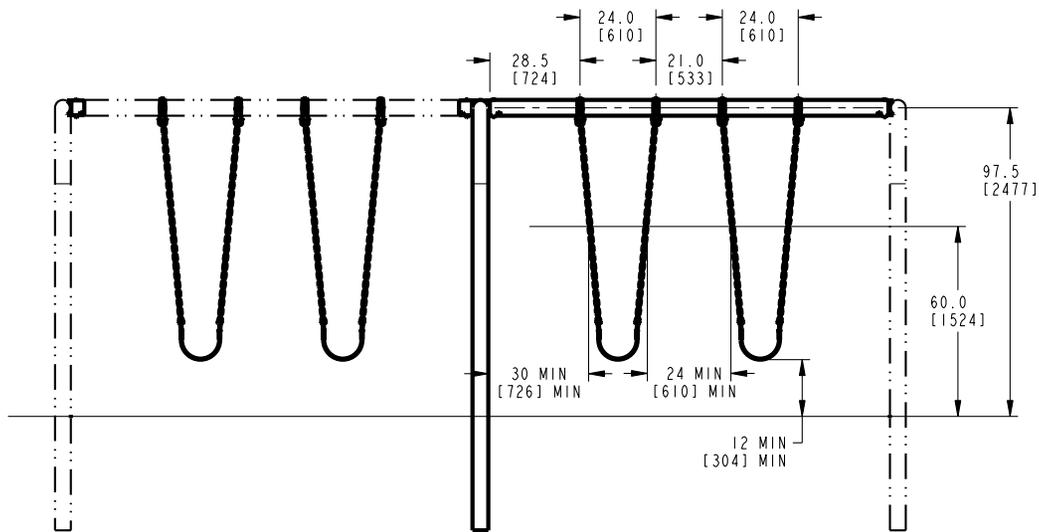
Installation Instructions

KEY	
Position	Unit of Measurement
Top #	Inches
Bottom #	[Millimeters]

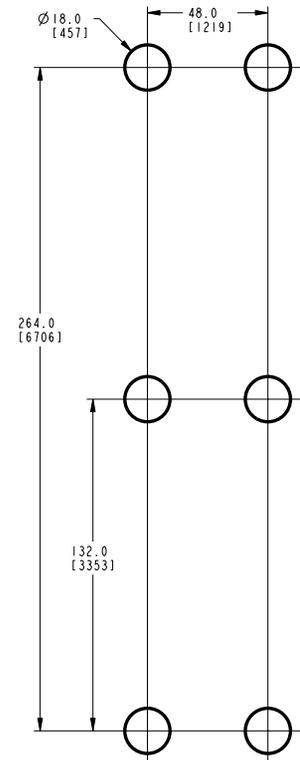
Top View



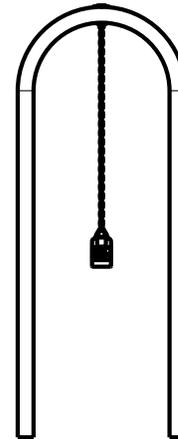
Note: Swing Hanger locations are dimensioned from end of the Top Rail to center of Swing Hanger.



Elevation Views

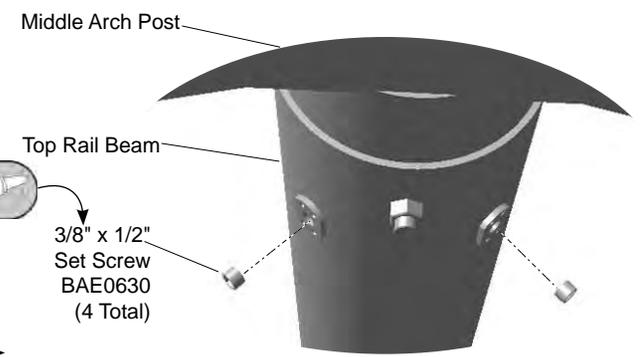
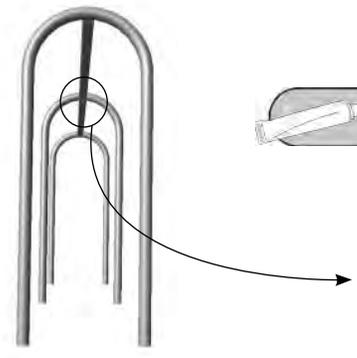
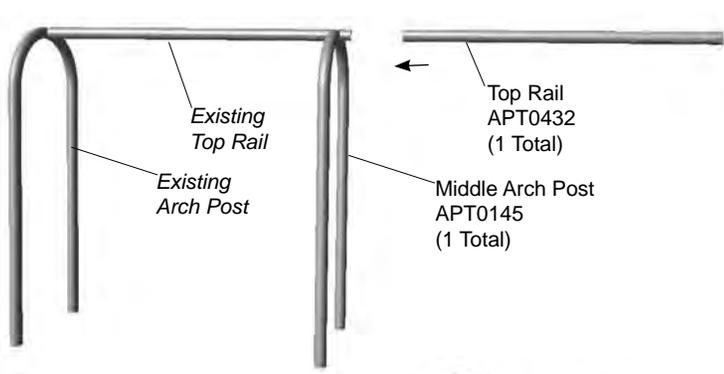


Footing Diagram

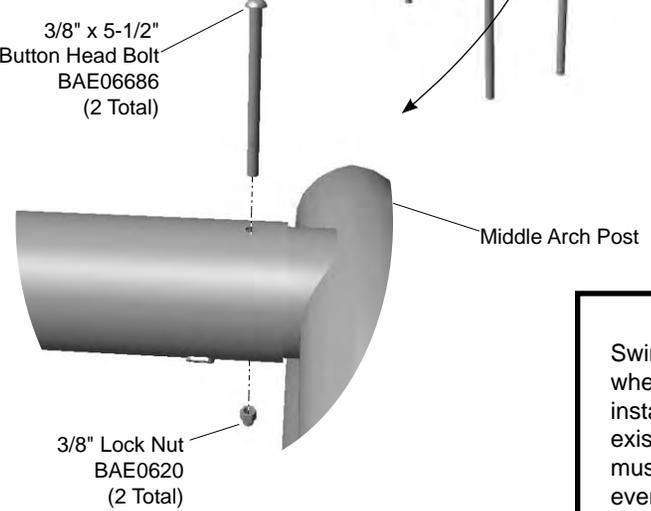
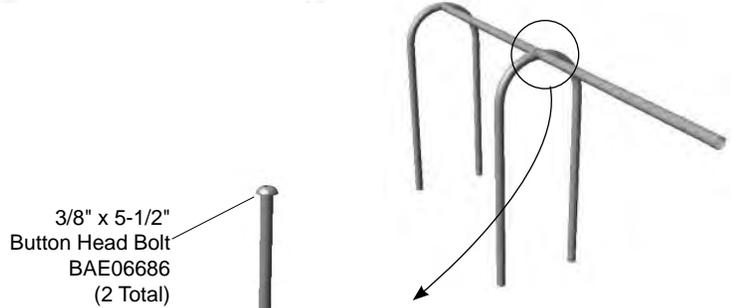


Installation Instructions

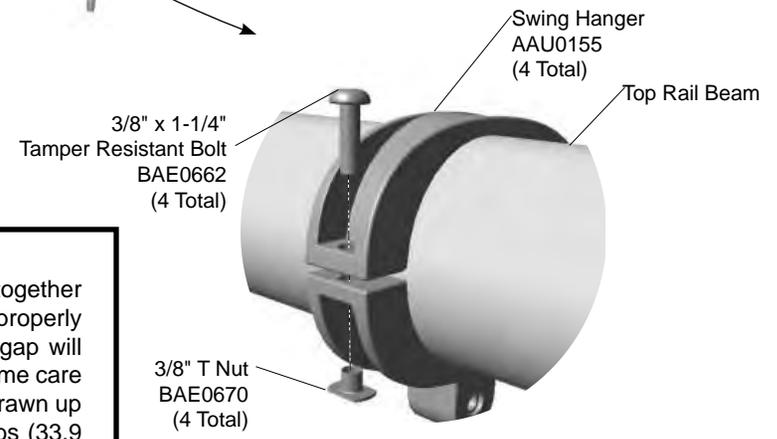
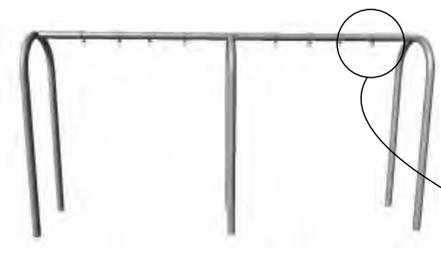
Follow the details in alphabetical order. For clarification, each detail references the step description. The step descriptions start on page 9.



Detail B
Step 7
Secure the top rails to the middle arch post.



Detail A
Step 5
Attach both top rails (new and existing) to the middle arch support.



When tightening the bolt ensure that the T nut does not protrude past the edge of the clamp.
Detail C
Step 10
Attach swing hangers to the top rail.

CAUTION
Swing hangers cannot be completely drawn together when attaching to the swing top rail. When properly installed, a gap of approximately 1/8" (3 mm) gap will exist between the swing hanger castings. Extreme care must be taken that nuts on swing hangers are drawn up evenly. Do **NOT** over tighten or exceed 25 ft lbs (33.9 Nm) of torque.

Warning!
Exceeding 25 ft lbs (33.9 Nm) of torque on the swing hanger bolts may cause damage to the swing band.

Installation Instructions

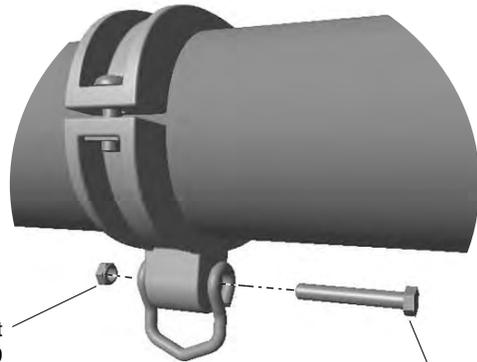
Swing Hanger



Swing Clevis Connector
ABC0704
(4 Total)



Swing Clevis Connector
ABC0704
(4 Total)



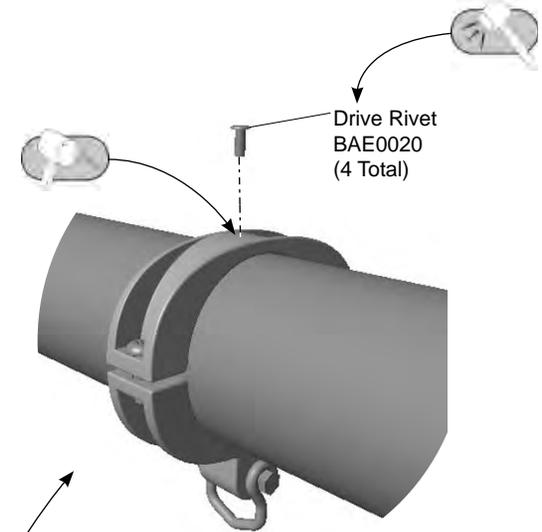
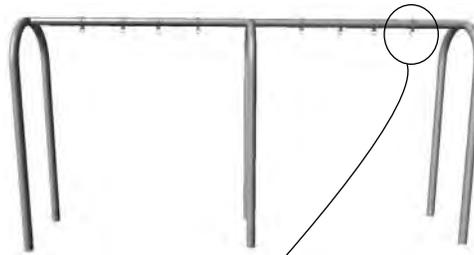
3/8" Thin Series Lock Nut
BAE0610
(4 Total)

3/8" x 2-1/2"
Hex Head Shoulder Bolt
BAE0412
(4 Total)



Detail D
Step 11

Attach each clevis to a swing hanger.



Drive Rivet
BAE0020
(4 Total)

Detail E
Step 14

*Secure the swing hangers
to the top rail.*



Installation Instructions

Notes Before You Begin: Do not over tighten bolts during assembly, only snug tighten them until assembly is complete.

Carefully read and understand these installation instructions before you begin.

Step 1: Before attempting to assemble your equipment, please review all installation information carefully. Should you experience any difficulty during the installation process, please call us at the phone number shown on the last page of these instructions.

Step 2: Separate and identify all components and hardware.

Step 3: Prepare footings as shown in the **Support Post Details** on **Page 4**.

Existing Swing

Step 4: Applies to adding an additional bay to a pre-existing product, remove (1) one of the existing arch supports by unscrewing and removing the connection to the top rail. Dig around the footing of the support post and transplant it to the opposing end of the bay addition as shown in the **Footing Diagram**. After completing, proceed to **Step 5**.

New Installation

Assemble the swing frame.

Step 5: Attach both top rails (new and existing) to the middle arch support. See **Detail A**. Select the top rail, the middle arch support, and the appropriate hardware. There are (2) two connections. Place the middle arch support in the excavated footings and brace. Place the top rail onto the arch stub and align holes. Attach as shown.

Re-Connect opposite end of frame.

Step 6: Re-attach arch support to opposite end of frame using existing hardware. Refer to the documentation that came with your original swing frame.

Step 7: Secure the top rails to the arch posts. See **Detail B**. Apply a drop of loctite to the set screw threads and thread each screw into a hole on the underside of the post stub. Fully tighten connections according to tightening torque specifications.

Torque Specifications:

Bolts and nuts - Snug tighten and then tighten an additional one half turn.

Set Screws - Snug tighten and tighten an additional full turn.

Position the swing frame.

Step 8: Place the swing frame into the footings. Square and level the swing frame assembly at specified footing depth. Top rail height shall be 96 in. (2438 mm) as measured from top of the protective surfacing material level to the bottom of the top rail. Fully tighten all bolts in accordance with tightening torque installation instructions. Block and brace for concrete.

Step 9: Fill the footings with concrete to within 2 in. (51 mm) of ground level as shown in the **Footing Detail**. Plumb and level the component. Block and brace for concrete. Allow concrete to harden for 72 hours before proceeding with **Step 10**.

Attach swing hangers to the top rail.

Step 10: Attach swing hangers to the top rail. See **Detail C**. Close the clamps around the top rail and attach as shown. Ensure hangers are properly spaced and positioned on top rail (See **Elevation View**). There is a ridge on the underside of the bottom band to keep the T nut from rotating. **When tightening the bolt ensure that the T nut does not protrude past the edge of the clamp.**

Note: Please read **CAUTION** before fully tightening the connections.

Important Note: Swing hangers should be positioned a minimum of 20" (508 mm) apart. Additionally, the horizontal distance between the vertical support and the swing shall be no less than 30 in. (760 mm) when measured at 60 in. (1524 mm) from the level of protective surfacing. Please refer to the USCPSC Handbook for Public Playground Safety for proper placement.

Step 11: Attach each clevis to a swing hanger. See **Detail D**. Position each clevis over the bottom hanger bushing and align holes. Insert a hex head bolt through the clevis eye, through the hanger bushing, through the other clevis eye and secure with a thin series lock nut.

Important Note: Tighten the thin series lock nut on shoulder bolt until the clevis binds on the swing hanger casting. Then loosen the thin series lock nut approximately 1/4 turn until the swing clevis moves freely. Insure the bolt threads are fully engaged into the nut's locking device.

Note: Swing clevises will need to be removed from swing hangers to install selected swing seat.

Final Details

Step 12: See Swing Seat Installation Instruction sheet for swing seat attachment. Swing seats are ordered separately.

Step 13: Tighten **all** fasteners. Fully tighten all fasteners according to tightening torque specifications.

Torque Specifications:

Bolts and nuts - Snug tighten and then tighten an additional one half turn.

Set Screws - Snug tighten and tighten an additional full turn.

Step 14: Install drive rivets. See **Detail E**. After the equipment assembly is complete, install a drive rivet in each clamp to permanently secure it to the support post. Using a 1/4" drill bit, drill through the clamp and support post. Insert the drive rivet into drilled hole until the head of the rivet is against the surface of the clamp. Using a hammer, drive the pin of the rivet until it is flush with the surface of the rivet head.

Note: This step should be executed after structure has been assembled and properly footed.

Step 15: For areas complying with ASTM standard F1487 or the CSA Z-614, apply the age appropriate label to the equipment at eye level.

XX0370 - 5 in. O.D.(127 mm) 2-UNIT ALUMINUM ARCH SWING ADD-A-BAY

PART NO.	DESCRIPTION	QTY.
AAU0155	HANGER - 5" SWING	4
ABC0704	CONNECTOR - SWING CLEVIS	4
APT0145	POST - 5" O.D. x 133-1/2" DUAL ALUM ARCH SUPPORT	1
APT0432	BEAM - 5" x 126" ARCH SWING TOP RAIL	1
BAD0085	THREAD LOCKING ADHESIVE	1
BAE0020	RIVET - 1/4" x 11/16" DRIVE	4
BAE0412	BOLT - 3/8"-16 x 2 1/2" HEX HEAD SHOULDER	4
BAE0610	NUT - 3/8"-16 THIN LOCK	4
BAE0620	NUT - 3/8"-16 LOCK w/NYLON CAP	2
BAE0630	SCREW - 3/8"-16 x 1/2" SOCKET SET SS	4
BAE0662	BOLT - 3/8"-16 x 1-1/4" TAMP RESIST w/TORX DRIVE	4
BAE06686	BOLT - 3/8"-16 x 5.50" BUTTON HEAD - SS	2
BAE0670	T-NUT - 3/8"-16 x 7/16" - SS	4
BAE0905	WRENCH - 3/16" SHORT HEX KEY	1
BAE0915	BIT - 3/8" TAMPER RESISTANT	1
BAE0922	TOOL - TT 45 L WRENCH	1
ALB0025	LABEL - ASTM AGE APPROPRIATE	1



Installation Instructions

FINAL INSPECTION

- Playworld Systems® insists on the installation of protective surfacing within the use zone of each play structure in accordance with the applicable standard for your area, appropriate for the fall height of each structure.
- Playworld Systems® strongly recommends close supervision of children as they play. The owners of playground equipment and the parents or guardians of children are responsible for this proper supervision.
- As the owner of playground equipment, you are responsible for the maintenance of the equipment and surrounding play area. A comprehensive maintenance and inspection schedule must be developed and all equipment inspected frequently. Refer to the inspection and maintenance schedule in the back of this booklet.
- Perform a thorough final check on the installed equipment to insure all equipment is installed as specified by manufacturer's installation instructions.
 - Review all Installation Instructions for specified dimensions. Make sure dimensions called for in instructions agree with actual installation.
 - Double check height dimensions. Height measurements are taken from the top of the protective surfacing material.
 - Insure all fasteners are tightened according to tightening torque specifications listed on your installation instructions.
 - Clean dried concrete off of components and any other affected surface.
 - Touch-up any scratches or installation damage to powder coated finish with color-matched spray paint.
 - Allow adequate time for proper curing, both for concrete and urethane cement if rubber safety surfacing tiles have been installed.
 - Insure that protective surfacing is properly installed according to recommendations. Footings must not be exposed. Refer to the florescent orange sheet included in the front of the installation instruction booklet titled "Owners Manual".
 - Insure that hard surface warning/Playworld Systems® identification labels (shown below) are properly affixed to the play equipment. Labels are to be plainly visible according to current playground equipment guidelines. For areas complying with ASTM F-1487 or CSA Z-614 an age appropriate label must be applied in a visible location.

- Dispose of all packaging material properly. These materials which include large plastic bags and sheets can be a suffocation hazard. Dispose of these materials out of reach or contact of small children.



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intentionally left blank.



Swing Hangers

- Inspect swing hangers to insure they are properly secured to the support posts.
- Use the supplied torx-style tamper-resistant bit to insure bolt connection is tight.
- Use the supplied 3/16" hex key wrench to insure the set screw connection is tight.
- Inspect drive rivets to insure they are intact and secure.
- Visually inspect swing hangers for cracks or breakage. If any damage is detected, barricade equipment to prevent use until repair is completed. Contact your sales representative immediately for a replacement part.

Fasteners

- Inspect for loose fasteners.
Tightening torque specifications are:
Bolts and Nuts: Snug tighten and tighten an additional one-half turn.
Set Screws: Snug tighten and tighten an additional full turn.
- If during the maintenance process a bolt needs to be removed from a part or parts, it will be necessary to apply a drop of liquid thread lock / loctite to the bolt before reinstallation.
- Inspect for missing, worn or broken fasteners. If any missing, worn or broken fasteners are found, refer to the installation instructions for proper replacement fastener. If any damage is detected, barricade equipment to prevent use until repair is completed. Contact your sales representative immediately for a replacement part.

Welds

- Inspect all welded joints. If any broken welds are detected, barricade equipment to prevent use until repair is completed. Contact your sales representative immediately for a replacement part.

Finish

- Inspect metal parts for finish damage.
To repair painted surfaces, sand damaged area with sandpaper and wipe clean. Mask area and paint with primer and allow to dry. Paint primed area with color-matching paint and allow to dry. Recoat area with color-matching paint if required. Drying time is approximately 8 hours between coats.

Footings

- Inspect component to be solid in footing and secure. If any damage is detected, barricade equipment to prevent use until repair is completed.

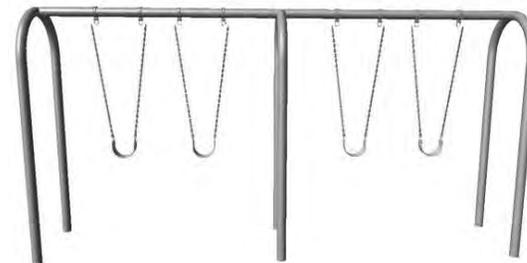
Surfacing

- Refer to the specific surfacing maintenance detail sheet for additional information.

Replacement Parts

- Refer to your installation instructions to obtain replacement part number.
- Contact your sales representative or call Playworld Systems' Customer Service for a replacement part.

Equipment Maintenance Playworld Systems® Model XX0370 5 in. (127 mm) O.D. 2-Unit Aluminum Arch Swing Add-A-Bay



Warning!
Exceeding 25 ft lbs (33.9 Nm) of torque
on the swing hanger bolts may
cause damage to the swing band.

PLAYWORLD SYSTEMS
The world needs play.™
For Customer Service, Call
800-233-8404 or
570-522-9800 OUTSIDE U.S.
1000 Buffalo Road • Lewisburg, PA 17837
www.playworldsystems.com

Inspection Form

- Be sure that you are using a copy of this Inspection Form and not your original.
- Use the Inspection Codes listed below and record condition of equipment at time of examination on the Inspection Checklist.
- Document any item from the Inspection Checklist that will require maintenance along with any corrective action on the Maintenance Schedule.
- Be sure to include appropriate dates and signatures on each section to properly document maintenance procedure.

Preventive Maintenance ... for Safety's Sake!

INSPECTION CHECKLIST	Frequency	Inspection Code	Date	Date Repairs Completed
Inspect surfacing to insure proper depth and distribution.	High			
Inspect swing hangers for tightness and damage.	High			
Inspect metal parts for structural and finish damage.	Medium			
Inspect for loose, missing, worn, or broken fasteners.	High			
Inspect footing to insure support is secure and footing is not damaged.	Low			

Inspection Codes
P = Pass F = Fail NA = Not Applicable

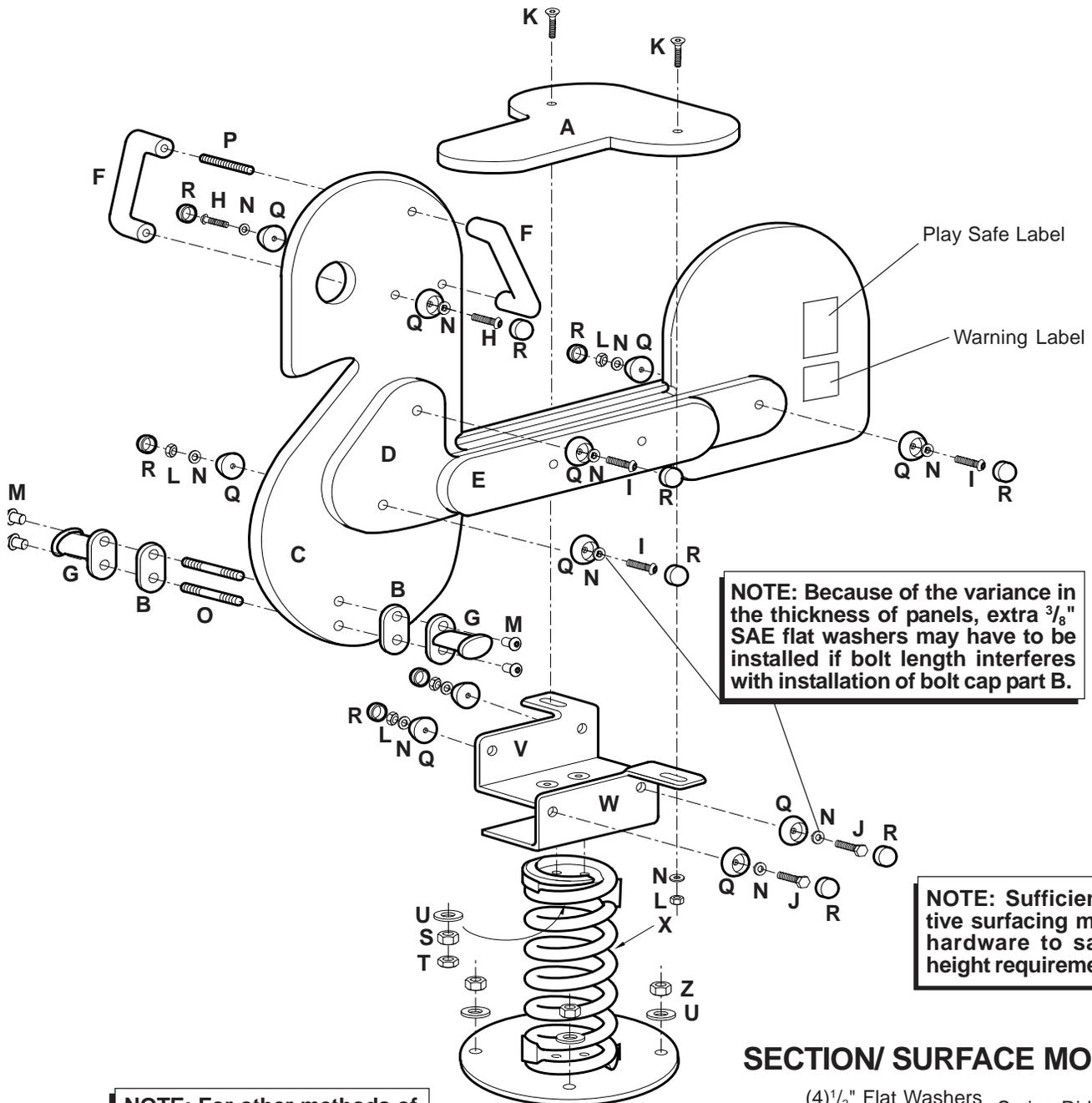
Inspector: Name (Please Print) _____ Signature: _____ Date: ___/___/___

MAINTENANCE SCHEDULE

Item in Question	Description of Problem	Corrective Action	Date

Repairer: Name (Please Print) _____ Signature: _____ Date: ___/___/___



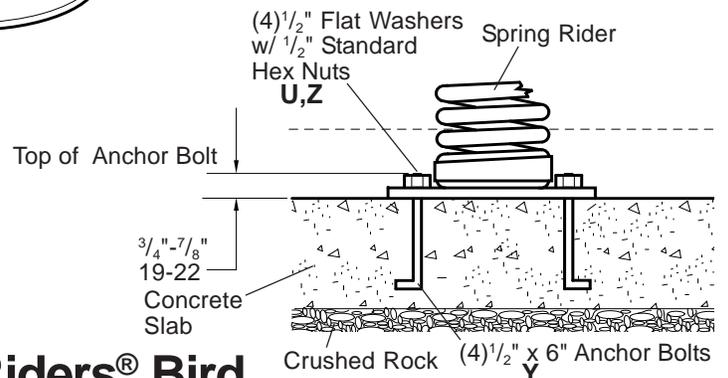


NOTE: For other methods of mounting Spring Riders, refer to 111307 & 115381 Direct Bury Legs and 122869 TuffTurf tile for Spring Riders.

NOTE: Because of the variance in the thickness of panels, extra $\frac{3}{8}$ " SAE flat washers may have to be installed if bolt length interferes with installation of bolt cap part B.

NOTE: Sufficient protective surfacing must cover hardware to satisfy fall height requirements.

SECTION/ SURFACE MOUNTING



Parts List

Part#	Description	Qty.
137788-00	Boxed Bird (Standard)	1
A 109447-00	Seat Panel, Red	1
B 109497-00	Foot Rest Spacer, Yellow	2
C 109482-00	Body Panel, Yellow	1
D 109449-00	Long Brace, Red	2
E 109450-00	Short Brace, Red	2
170326-00	Boxed Bird (Recycled)	1
A 109447-00	Seat Panel, Red/Black	1
B 109497-00	Foot Rest Spacer, Yellow/Black	2
C 109482-00	Body Panel, Yellow/Black	1
D 109449-00	Long Brace, Red/Black	2
E 109450-00	Short Brace, Red/Black	2
F 105752-00	Aluminum Handle, White	2
G 136479-00	Foot Rest, Brown	2
183855-00	Bird Hardware Package	1
H 100171-00	$\frac{3}{8}$ " x $1\frac{1}{2}$ " BHCS, SST	2
I 100176-00	$\frac{3}{8}$ " x 3" BHCS, SST	3
J 100214-00	$\frac{3}{8}$ " x 5" Hex Cap Screw	2
K 100252-00	$\frac{3}{8}$ " x $1\frac{1}{4}$ " Flat Head Cap Screw, SST	2
L 100327-00	$\frac{3}{8}$ " Standard Hex Nut, SST	7
M 100353-00	$\frac{3}{8}$ " Flange Nut w/Pin, SST	4
N 100365-00	$\frac{3}{8}$ " SAE Flat Washer, SST	30
O 100642-00	$\frac{3}{8}$ " x 2 $\frac{1}{2}$ " Threaded Rod, SST	2
P 100643-00	$\frac{3}{8}$ " x 2 $\frac{7}{8}$ " Threaded Rod	1
Q 108184-01	Bolt Cap Part A	12
R 108185-01	Bolt Cap Part B	12
S 129692-00	$\frac{1}{2}$ " Standard Patch Nut, SST	2
T 129693-00	$\frac{1}{2}$ " Hex Jam Nut, SST	2
U 100363-00	$\frac{1}{2}$ " Flat Washer, SST	2
156845-00	Play Safe Label, 2-5 Yrs.	1
183064-00	Warning Label	1
V 130839-00	Right Bracket, Brown	1
W 104570-00	Left Bracket, Brown	1
X 132276-00	Spring Assembly, Brown	1
120202-00	Spring Animal Anchor Hardware Package	1
Y 100262-00	$\frac{1}{2}$ " x 6" Anchor Bolt	4
Z 100322-00	$\frac{1}{2}$ " Standard Hex Nut, SST	4
U 100363-00	$\frac{1}{2}$ " Flat Washer, SST	4

Specifications

Standard Panels:	Permalene® seat panel, long brace and short brace red in color and body panel and foot rest spacer yellow in color.
Recycled Panels:	Permalene seat panel, long brace and short brace red/black in color and body panel and foot rest spacer yellow/black in color.
Spring:	Weldment comprised of 5 $\frac{5}{8}$ " diameter $\frac{13}{16}$ " tempered alloy steel coil. Finish: ProShield®, brown in color.
Brackets:	Fabricated from formed 7 GA (.179") HRS. Finish: ProShield, brown in color.
Base Plate:	Fabricated from $\frac{1}{4}$ " x 10" HRPO formed plate. Finish: ProShield, brown in color.
Footrest:	Cast from 356-T6 aluminum alloy. Finish: ProShield, brown in color.

Specifications are subject to change without notice.

Bolt Caps: Made from injection molded polypropylene, U.V. stabilized, white in color.

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications)

Installation Time: Approx. 3 man hours

Concrete Req.: Approx. 10 cu. ft.

Area Req.: 13'-0" x 15'-0" (3,96 m x 4,57 m) minimum use zone

Weight: 65 lbs.

Seat Height: 16 $\frac{3}{4}$ " (0,43 m)

Installation Instructions

NOTE: For other methods of mounting Spring Riders, refer to 111307 & 115381 Direct Bury Legs and 122869 TuffTurf tile for Spring Riders.

Surface Mounting On Concrete Slab

- Using the spring base plate as a pattern, make a plywood template for anchor bolt placement.
- Attach $\frac{1}{2}$ " x 6" anchor bolts (**Y**) with $\frac{1}{2}$ " flat washers and $\frac{1}{2}$ " standard hex nuts (**U,Z**) to holes in template. Allow $\frac{3}{4}$ " to $\frac{7}{8}$ " of thread to protrude from concrete.
- Pour concrete slab and lay template on surface in level position. Push anchor bolts into concrete, allowing 72 hours before template removal.
- Attach spring assembly (**X**) to anchor bolts in concrete with $\frac{1}{2}$ " standard hex nuts (**Z**) and $\frac{1}{2}$ " flat washers (**U**).
- Attach left bracket (**W**) and right bracket (**V**) to spring assembly (**X**), with $\frac{1}{2}$ " flat washers (**U**), $\frac{1}{2}$ " patch nuts (**S**) and $\frac{1}{2}$ " hex jam nuts (**T**). Do not tighten.
- Fasten the long braces (**D**) to body (**C**) with $\frac{3}{8}$ " x 3" BHCS (**I**), bolt caps part A (**Q**) and $\frac{3}{8}$ " standard hex nuts (**L**) with $\frac{3}{8}$ " SAE flat washers (**N**).
- Add short braces (**E**) to body (**C**) and set in bracket assembly. Fasten with $\frac{3}{8}$ " x 5" hex cap screws (**J**), bolt caps part A (**Q**) and $\frac{3}{8}$ " standard hex nuts (**L**) with $\frac{3}{8}$ " SAE flat washers (**N**).
- Attach seat (**A**) to flanges on brackets with $\frac{3}{8}$ " x $1\frac{1}{4}$ " flat head cap screws (**K**) $\frac{3}{8}$ " SAE flat washers (**N**) and $\frac{3}{8}$ " standard hex nuts (**L**).
- Attach foot rests (**G**) to body (**C**) placing foot rest spacers (**B**) in place as shown on the front of this sheet. Attach using $\frac{3}{8}$ " x 2 $\frac{1}{2}$ " threaded rod (**O**) and $\frac{3}{8}$ " flange nuts w/pin (**M**).
- Thread $\frac{3}{8}$ " x 2 $\frac{7}{8}$ " threaded rod (**P**) through body and into handbars (**F**) until snug, then turn handbars to match up to holes, as shown. Fasten other ends of handbars with $\frac{3}{8}$ " x $1\frac{1}{2}$ " BHCS (**H**), bolt caps part A (**Q**) and $\frac{3}{8}$ " SAE flat washers (**N**).
- Final tighten all fasteners. Snap on bolt caps part B (**R**) to bolt caps part A (**Q**) by hand or with rubber mallet.
- Apply labels as shown.
- Install protective surfacing before users are allowed to play on the component. A minimum of 2" of protective surfacing should cover base plate and anchor bolts.