City of Madison Bike Rack Requirements

1) Bicycle Parking Space Size, Access Aisles, and Vertical Clearance
   • Bicycle parking spaces shall be a minimum of two (2) feet by six (6) feet.
   • There shall be an access aisle a minimum of five (5) feet in width.
   • Have a vertical clearance of at least 6 feet.

2) Bicycle Rack Design
   • Shall permit the locking of the bicycle frame and one (1) wheel to the rack
   • Shall support a bicycle in a stable position.
   • All racks shall accommodate cable locks and “U” locks including removing the front wheel and locking it to the rear fork and frame.
   • Each required bicycle parking space must be accessible without moving another bicycle
   • Placement shall not result in a bicycle obstructing a required walkway.
   • Shall be located on paved or pervious, dust-free surface with a slope no greater than three percent (3%).
   • Surfaces shall not be gravel, landscape stone, or wood chips.

3) Bicycle Rack Location on Site
   • Required short-term bicycle parking spaces shall be located in a convenient and visible area at least as close as the closest non-accessible automobile parking and within one hundred (100) feet of a principal entrance
   • Required long-term bicycle parking spaces shall be located in enclosed and secured or supervised areas providing protection from theft, vandalism and weather and shall be accessible to intended users
   • Required long-term bicycle parking for residential uses shall not be located within dwelling units or within deck, patio areas, or private storage areas accessory to dwelling units.

Examples of Bicycle racks that do not meet the design requirements above:

| Grid or Fence Style Racks | Wave or Ribbon Style Racks | Racks that hold the bike by the wheel with no way to lock the frame and wheel to the rack with a U-lock |

Examples of Bicycle racks that do meet the design requirements above:

| Dero Campus Rack | Saris City Rack | Madrax Spartan Rack | Madrax Sentry Rack | Madrax Shark Rack |

Examples of Inverted-U and Post & Ring Type Racks

See attached sheets for proper installation instructions for Inverted-U and Post & Ring type racks

If you have questions about whether a particular bicycle parking rack you are considering using meets these requirements, please contact Arthur Ross, Pedestrian-Bicycle Coordinator, 608/266-6225

Updated August 1, 2014
Inverted-U, Post & Ring, and other similar type racks for use in the City of Madison need to be installed per the following instructions.

A) Horizontal Spacing (width) and Space Length (or depth) for a Single Row of Racks

Overall width needed is 2 feet per bicycle, same as for any well designed rack. In the example below, for 4 bikes the minimum width needed is 96”, the same as for a rack with 4 individual spaces. There is no space savings with this rack design since you still need room to get bikes in and out without handlebar interference.

The space length, or depth, when using inverted-U type racks will be longer than for other types of racks due to the variety of ways people may use these racks. Instead of 6 ft. you will need between 90” and 108” (7.5 - 9 ft.).

The diagram below explains both the width and length/depth requirements if you decide to use inverted-U type racks.
Inverted-U, Post & Ring, and other similar type racks for use in the City of Madison need to be installed per the following instructions.

B) Layout for a Multiple Row Installation

(See Sheet A for general width and depth spacing information)

Overall depth of space when using inverted-U, Post & Ring, etc., type racks. For two rows of racks including a 5 foot access aisle between the rows is 17 feet (204") plus 2 times the length of the rack.

Common Rack Lengths & Overall Length for 2 Rows

<table>
<thead>
<tr>
<th>Rack Length</th>
<th>Overall Length</th>
</tr>
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<tbody>
<tr>
<td>18&quot;</td>
<td>240&quot; (20')</td>
</tr>
<tr>
<td>24&quot;</td>
<td>252&quot; (21')</td>
</tr>
<tr>
<td>30&quot;</td>
<td>264&quot; (22')</td>
</tr>
<tr>
<td>36&quot;</td>
<td>276&quot; (23')</td>
</tr>
</tbody>
</table>
Installation of Post & Ring or Inverted-U type Racks when installed in a line.  
For example in a narrow space such as a street terrace. *

Length of Rack varies, depends on type and manufacturer.

2.5’ (30”) Typical distance between front edge of Post & Ring or Inverted-U Racks and front of bicycle tire when locked to the front part of the ring or the front leg of an inverted-U rack.

7’ (84”) Recommended distance between Post & Ring or Inverted-U Racks installed in line. Distance is from outside edge to outside edge of racks, not center-to-center.

6’ (72”) Typical Length of Standard Bicycle

2’ (24”) Typical Width of Standard Bicycle Handlebars

4’ (48”) Typical distance between rear edge of Post & Ring or Inverted-U Racks and rear of bicycle tire when locked to the back part of the ring or the front leg of an inverted-U rack.

* Post & Ring Racks preferred as opposed to Inverted-U racks. People often park perpendicular to the Inverted-U rack, blocking the walkway next to the terrace. This type of common misuse is less likely with Post & Ring racks. The cut-off circular Inverted-U rack would be okay.