CycleSafe, Inc. Doc # QS4.2.010-B (U/2) Rev: 06-05-13



3-PART SPECIFICATION

BICYCLE PARKING RACKS

DIVISION 12 - FURNISHINGS 12 93 00 Site Furnishings 12 93 13 Bicycle Racks

INVERTED "U/2" U-STYLE RACKS

These specifications were current at the time of publication, but are subject to change at any time without notice. Pleaser confirm the accuracy of these specifications with the manufacturer and/or distributor prior to installation.

Part 1 General

1.1 SECTION INCLUDES

- A. U/2 Round and Square Tubular Steel or Stainless Steel Inverted U-Shaped bicycle racks for surface, ground or rail mounting.
 - 1. Parking per unit: Two (2) Bicycles

1.2 SUBMITTALS FOR REVIEW

- A. Product Data: For each type of product indicated.
- B. Samples: For each type of finish indicated
- C. Product Layout Drawings: For layout options and site dimensions.

1.3 SUBMITTALS FOR INFORMATION

- A. Manufacturer information: "Installation Guide and Owner's Manual U/2 Racks".
- B. Maintenance Data: Included in Owner's Manual
- C. Samples for Verification: Cross Sections of finished rack.
- D. LEED Qualified Credits:

| CATEGORY | SUB CATEGORY | CREDIT | |
|-------------------|---|---------------|--|
| Sustainable Sites | Alternative Transportation - Bicycle Commuting | SS Credit 4 | |
| Sustainable Sites | Alternative Transportation - Bicycle Storage | SS Credit 4.2 | |

| Materials & Resources | Sustainable Purchasing - Durable Goods & Furniture | MR Credit 2.2 |
|----------------------------------|---|---------------|
| Materials & Resources | Sustainably Sourced Materials & Products | MR Credit 3 |
| Materials & Resources | Recycled Content | MR Credit 4 |
| Materials & Resources | Regional Materials | MR Credit 5 |
| Innovation in Design | Innovation in Design Process | ID Credit 1 |
| Neighborhood Pattern & Design | Walkable Streets | NPD Credit 1 |
| Neighborhood Pattern & Design | Reduced Parking Footprint | NPD Credit 5 |
| Neighborhood Pattern & Design | Transit facilities | NPD Credit 7 |
| Neighborhood Pattern & Design | Transportation Demand Management | NPD Credit 8 |

1.4 QUALITY ASSURANCE

- A. Products: Manufactured to ISO 9000 or ISO 14000 requirements.
- B. Manufacturer Qualifications A company specialized in the manufacture rolled steel tubing and welding.
- C. Conformance: Conform to Class III Bicycle Parking Facilities requirements.

1.5 DELIVERY, STORAGE AND HANDLING

A. Inspect bicycle racks on delivery for carrier damage. Store bicycle racks in original undamaged packaging in an area sheltered from weather until ready for installation. Inspect bicycle racks prior to setup and installation.

1.6 WARRANTY

- A. Warranty covers materials and workmanship
- B. Warranty Period:
 - 1. One (1) year from date of invoice for all manufacturer's components.
- C. Warranty does not cover improper installation, neglect, misuse, accidents, vandalism, natural disasters, fire, or acts of war or terrorism.

Part 2 Products

2.1 DESIGN CRITERIA & CONSTRUCTION

- A. Class III Bicycle Parking Light security for short-term visitor parking. Class III, when used alone, is the least secure method of storing bicycles. The rack must be constructed of steel pipe or tubing, round or square, and securely anchored to an immoveable level surface. The rack must provide support for the bicycle frame by holding it upright and allowing at least two points of contact for locating a cable or U-shaped lock. Racks that locate the bicycle solely by one wheel may cause damage to the rim and are not recommended.
- B. U/2 Round: 1.90" OD Round Steel or Stainless Steel Pipe
 - 1. Material: 1.5" ASTM A53 Type F Schedule 40 Black Pipe or ASTM A312 Schedule 40 Type 304 Stainless Steel Pipe.
 - 2. Construction: Rolled 180 degree 10.1 inch IR bend x 35-3/4 inches high.
 - 3. Mounts: Surface, Ground and Rail mountings
 - a. Surface Mounting is accomplished with 3/8 inch x 2-1/2 inch x 6-1/2 inch welded base plates.
 - b. Ground Mounting is accomplished by extending the pipe legs by 12 inches for 47-3/4 inch height and seep holes at bottom of legs.
 - c. Rail Mounting is accomplished with two (2) C3 x 4.1# structural steel punched channels .
- C. U/2 Square: 2.00" OD Square Steel or Stainless Steel Tubing
 - Material: 2.0" Square x .120 Wall ASTM A513 Welded Steel Tubing or 2" Square x .120 Wall ASTM A554 Type 304 Stainless Steel Tubing.
 - 2. Construction: Rolled 180 degree 10.1 inch IR bend x 35-3/4 inches high.
 - 3. Mounts: Surface, Ground and Rail mountings
 - a. Surface Mounting is accomplished with 3/8 inch x 2-1/2 inch x 6-1/2 inch welded base plates.
 - b. Ground Mounting is accomplished by extending the pipe legs by 12 inches for 47-3/4 inch height.
 and seep holes at bottom of legs.
 - c. Rail Mounting is accomplished with two (2) C3 x 4.1# structural steel punched channels.

2.2 BICYCLE U/2 RACKS DESCRIPTION

- A. Series: CycleSafe U/2 Racks
- B. Models:

| U-RACK DESCRIPTIONS | | STANDARD STEEL | | STAINLESS STEEL | | RAIL MOUNTS | |
|---------------------|--------------------|----------------|---------|-----------------|---------|-------------|-------|
| STYLE | NAME | GROUND | SURFACE | GROUND | SURFACE | CHANNEL | STRUT |
| CLASSIC | STANDARD | 12706 | 12729 | 12714 | 12715 | 12775 | |
| | STANDARD - BRACED | 12708 | 12705 | 12718 | 12719 | 12779 | |
| | PLASTISOL | 12707 | 12700 | N/A | N/A | 12751 | 12748 |
| | PLASTISOL - BRACED | 12727 | 12728 | N/A | N/A | 12760 | 12747 |
| | BELTWAY | 12116 | 12145 | | | | |
| | BOARDWALK | 12113 | 12138 | | | | |
| | CENTERLINE | 12115 | 12143 | | | | |
| | METROLINE | 12117 | 12146 | | | | |
| MODERN | PATHWAY | 12709 | 12144 | | | | |
| | RAILWAY | 12114 | 12139 | | | | |
| | SUBWAY | 12118 | 12147 | | | | |
| | TRAILWAY | 12710 | 12136 | | | | |
| | TRICYCLE | 12112 | 12137 | | | | |
| 1 | BRETON | 12119 | 12133 | | | | |
| | BRIDGE | 12104 | 12142 | | | | |
| | CASCADE | 12106 | 12160 | | | | |
| | FULTON | 12109 | 12190 | | | | |
| | GREENWICH | 12103 | 12141 | | | | |
| | LAFAYETTE | 12105 | 12150 | | | | |
| VINTAGE | MADISON | 12711 | 12130 | | | | |
| | MONROE | 12110 | 12192 | | | | |
| 1 | PARIS | 12111 | 12193 | | | | |
| | PEARL | 12108 | 12180 | | | | |
| 1 | PLYMOUTH | 12713 | 12140 | | | | |
| | RAPID | 12175 | 12170 | | - | | |
| | WEALTHY | 12231 | 12131 | | | | |
| | INSIGNIA | 12712 | 12132 | | | | |
| | RAPIDS | 12107 | 12121 | | | | |
| CUSTOM | | | | | | | |
| | | | 1 | | | | |
| | | | | | | | |

U-Rack Drawing Number Breakdown

Page 1 of 1

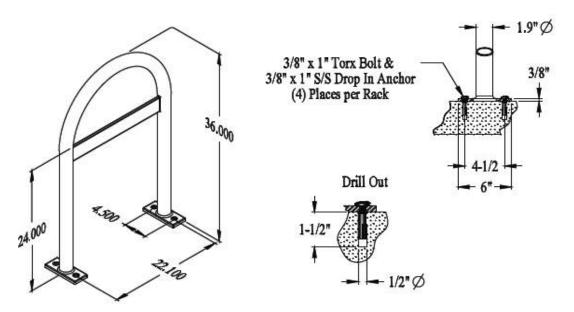
2.3 FINISHES

- A. TGIC 6 mils thick Powder Coating over zinc primer coating.
- B. Plastisol 100 mils+ thick over zinc primer coated steel tubing.
- C. Satin #4 finish for Stainless Steel.
- D. Rack Color: ["Traffic Black"; manufacturer standard locker color.] [_______ optional color.] and custom colors also available.

Part 3 Execution

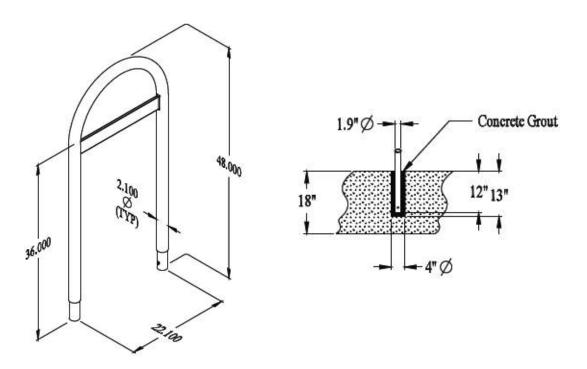
3.1 INSTALLATION

- A. Where installation on concrete is specified, install racks on minimum 4 inch thick concrete slabs, sloped to provide drainage (maximum 2 degrees). For other improved surfaces, such as pavers or asphalt, contact the Manufacturer for alternate installation procedures.
- B. Surface Mount:
 - 1. Determine desired placement of all bike racks before drilling any holes, avoiding concrete expansion joints. (Recommended spacing is 36-inch centers).
 - 2. Using predetermined center lines from previous step, mark (4) hole locations for drilling using rack flange as template. Using the 1/2 inch drill bit, drill holes in the concrete minimum of 1-1/2 inches deep. Do not damage the rack pipe surface or flange with the hammer drill or drill bit. Clean out the hole using a blow-out bulb, vacuum, or compressed air. Do not use water. It is very important to clean out the hole to ensure correct holding of the anchor.
 - 3. Insert concrete adhesive into the hole. Drop the anchor in the hole. Insert the set tool (Part #12723) into each anchor. Using a hammer, pound the set tool until the shoulder reaches the lip of the anchor. This will assure proper anchor expansion. Let the concrete adhesive cure according to manufacturer instructions before mounting the U-Rack.
 - 4. Place rack over anchors. Place flat washer on security screw and thread into the anchor using the Torx bit (Part #12721 provided). Wrench until flush with the flange plate. Check the installation to make sure it is tight to the concrete.
 - 5. Dispose of packaging.



C. In-Ground Mount:

- 1. Determine desired placement of all bike racks before drilling any holes, avoiding concrete expansion joints. (Recommended spacing is 36-inch centers). Using the predetermined center lines mark (4) hole locations.
- 2. Existing concrete surface may be core drilled with a 3 inch or 4 inch hole saw and filled with Quikcrete or a construction adhesive.
- 3. If installing on existing concrete, CycleSafe® U/2 Bike Racks can also be anchored with a non-shrink grout poured into a 4 inch or 6 inch diameter by 12 inch deep core drilled holes.
- 4. New improved concrete surfaces 9 inch Sonotube forms can be put in place to create 18 inch footings. This is the standard for new construction and the most secure type for inverted U-Racks.



- D. Rail Mount:
 - 1. The CycleSafe Rail-Mount inverted-U modular design can be placed in areas where permanent anchoring is not desired such as asphalt and gravel.
 - 2. Simply use the (2) 6 foot C-Rails and place racks on top,
 - 3. Secure with supplied tamper resistant hardware, 1/2-13NC" x 1 inch" full thread stainless steel carriage bolts and zinc plated whiz-nuts.

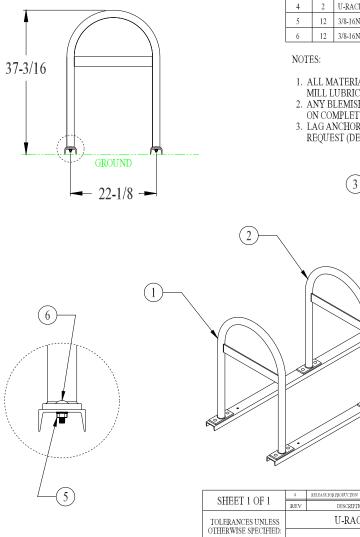
END OF SECTION

| | | | | 2 1 ANCHOR BOLT "G" KIT {SEE NOTE #3} 12710 |
|---|---------------------|---------|-----------------|---|
| | U-RACK DESCRIPTIONS | | 0.1/0 | NOTES: |
| STYLE | NAME | SURFACE | - 2-1/2 | 1. ALL MATERIALS MUST BE CLEAN AND FREE OF |
| - <u>*</u> | STANDARD | 12729 | | MILL LUBRICATION |
| | STANDARD - BRACED | 12705 | | 2. ANY BLEMISHES OR RUST WILL NOT BE ALLOW ON COMPLETED PRODUCTS |
| CLASSIC | PLASTISOL | 12700 | ¢ 4-1/2 | 3. ITEM #2 - ANCHOR BOLTS USED IN {SURFACE} |
| | PLASTISOL - BRACED | 12728 | Ŷ Ŷ | MOUNT TO CONCRETE ONLY (NOT USED |
| , in the second s | BELTWAY | 12145 | 22.1/9 | IN RAIL MOUNT) |
| | BOARDWALK | 12138 | 22-1/8 | |
| | CENTERLINE | 12143 | | \frown |
| | METROLINE | 12146 | | (1) |
| MODERN | PATHWAY | 12144 | | \sim |
| | RAILWAY | 12139 | | |
| | SUBWAY | 12147 | | |
| | TRAILWAY | 12136 | | |
| | TRICYCLE | 12137 | | |
| | BRETON | 12133 | | |
| | BRIDGE | 12142 | | |
| | CASCADE | 12160 | | |
| | FULTON | 12190 | | |
| | GREENWICH | 12141 | 35-3/4 | |
| | LAFAYETTE | 12150 | | |
| VINTAGE | MADISON | 12130 | | |
| | MONROE | 12192 | | |
| | PARIS | 12193 | | |
| | PEARL | 12180 | | |
| | PLYMOUTH | 12140 | | \mathbf{V} |
| | RAPID | 12170 | | (2) |
| | WEALTHY | 12131 | {RAPIDS} #12121 | |
| | INSIGNIA | 12132 | {SHOWN} | |
| | RAPIDS | 12121 | | B REVISED (TABLE & NOTES 0 A BELEASE R08 PRODUCTION 0 |
| CUSTOM | | | | SHEET 1 OF 1 REV DESCRIPTION ECN # D |
| | | | | TOLERANCES UNLESS U-RACK {SURFACE} MOUNT |
| | | | | OTHERWISE SPECIFIED: +/- Cycle Safe |
| | | | | X .030 BOB SLYH 01/09/12 5211 CASCADE ROAD - SUITE 210 XX 010 BOB SLYH 01/09/12 GRAND RAPIDS, MI 49546 |

| | | | 1 1 U-RACK {SURFACE} MOUNT WELDMENT SEE CH |
|---------|---------------------|--------|---|
| | U-RACK DESCRIPTIONS | | NOTES: |
| STYLE | NAME | GROUND | 1. ALL MATERIALS MUST BE CLEAN AND FREE OF |
| | STANDARD | 12706 | MILL LUBRICATION 2. ANY BLEMISHES OR RUST WILL NOT BE ALLOWED |
| | STANDARD - BRACED | 12708 | ON COMPLETED PRODUCTS |
| CLASSIC | PLASTISOL | 12707 | |
| | PLASTISOL - BRACED | 12727 | |
| | BELTWAY | 12116 | |
| | BOARDWALK | 12113 | |
| | CENTERLINE | 12115 | |
| | METROLINE | 12117 | |
| MODERN | PATHWAY | 12709 | |
| | RAILWAY | 12114 | |
| | SUBWAY | 12118 | |
| | TRAILWAY | 12710 | 35-3/8 |
| | TRICYCLE | 12112 | |
| | BRETON | 12119 | |
| | BRIDGE | 12104 | |
| | CASCADE | 12106 | |
| | FULTON | 12109 | |
| | GREENWICH | 12103 | |
| | LAFAYETTE | 12105 | • GROUND |
| VINTAGE | MADISON | 12711 | 12" |
| | MONROE | 12110 | |
| | PARIS | 12111 | |
| | PEARL | 12108 | |
| | PLYMOUTH | 12713 | |
| | RAPID | 12175 | 22-1/8 |
| | WEALTHY | 12231 | |
| | INSIGNIA | 12712 | |
| | RAPIDS | 12107 | |
| CUSTOM | | | SHEET 1 OF 1 A RELEASE FOR PRODUCTION 69 |
| | | | TOLERANCES UNLESS U-RACK {GROUND} MOUNT |
| | | | OTHERWISE SPECIFIED: |
| | | | BOB SLYH 05/22/13 5211 CASCADE ROAD - SUITE 210 |
| | | | XX 0.00 CHECKED DATE S211 CASCADE KOAD - S011 E 210 XXX 0.00 APPROVED DATE GRAND RAPIDS, MI 49546 XXX 0.005 APPROVED DATE www.cyclesafe.com |

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| STYLE | NAME | SURFACE |
|----------|--------------------|---------|
| <u>.</u> | STANDARD | 12729 |
| CLASSIC | STANDARD - BRACED | 12705 |
| CLASSIC | PLASTISOL | 12700 |
| | PLASTISOL - BRACED | 12728 |
| | BELTWAY | 12145 |
| | BOARDWALK | 12138 |
| | CENTERLINE | 12143 |
| | METROLINE | 12146 |
| MODERN | PATHWAY | 12144 |
| | RAILWAY | 12139 |
| | SUBWAY | 12147 |
| | TRAILWAY | 12136 |
| | TRICYCLE | 12137 |
| | BRETON | 12133 |
| | BRIDGE | 12142 |
| | CASCADE | 12160 |
| | FULTON | 12190 |
| | GREENWICH | 12141 |
| | LAFAYETTE | 12150 |
| VINTAGE | MADISON | 12130 |
| | MONROE | 12192 |
| | PARIS | 12193 |
| | PEARL | 12180 |
| | PLYMOUTH | 12140 |
| | RAPID | 12170 |
| | WEALTHY | 12131 |
| | INSIGNIA | 12132 |
| | RAPIDS | 12121 |
| CUSTOM | | |
| | | |
| | | |



| QTY | DESCRIPTION | REFERENCE |
|-----|---|---|
| 1 | U-RACK {SURFACE} MOUNT WELDMENT | SEE CHART |
| 1 | U-RACK {SURFACE} MOUNT WELDMENT | SEE CHART |
| 1 | U-RACK {SURFACE} MOUNT WELDMENT | SEE CHART |
| 2 | U-RACK {RAIL} C3 STRUCTURAL CHANNEL | 12752 |
| 12 | 3/8-16NC x 1-1/2" LG. S/S CARRIAGE BOLT | 12695 |
| 12 | 3/8-16NC S/S WHIZ-NUT | 12688 |
| | 1 1 1 2 12 | 1 U-RACK (SURFACE) MOUNT WELDMENT 1 U-RACK (SURFACE) MOUNT WELDMENT 1 U-RACK (SURFACE) MOUNT WELDMENT 2 U-RACK (RAIL) C3 STRUCTURAL CHANNEL 12 3/8-16NC x 1-1/2" LG. S/S CARRIAGE BOLT |

NOTES:

- ALL MATERIALS MUST BE CLEAN AND FREE OF MILL LUBRICATION
 ANY BLEMISHES OR RUST WILL NOT BE ALLOWED ON COMPLETED PRODUCTS
 LAG ANCHORS AVAILABLE PER CUSTOMER REQUEST (DEPENDS ON MOUNTING SURFACE)

4

Cycle Safe 5211 CASCADE ROAD - SUITE 210 GRAND RAPIDS, MI 49546

www.cyclesafe.com

12690

05/20/13 DATE

3

DESCRIPTION

05/20/13

DATE

DATE

BOB SLYH

CHECKED

APPROVED

+/-

.X .030 .XX .010 .XXX .005 ANGLE 1/2°

U-RACK {RAIL} MOUNT

CORRAL ASSEMBLY