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

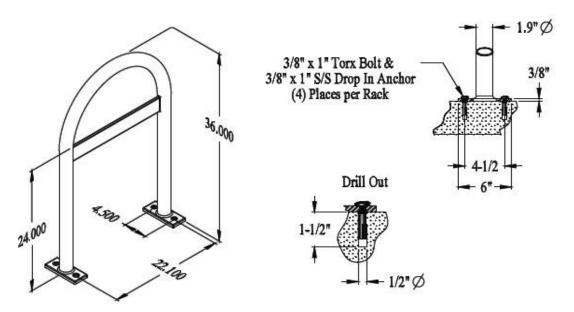
2.3 FINISHES

- 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

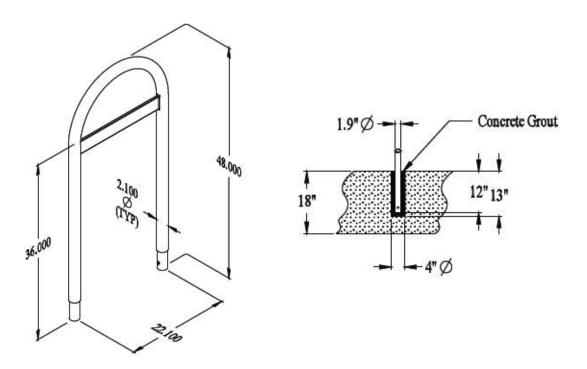
3.1 INSTALLATION

- 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.

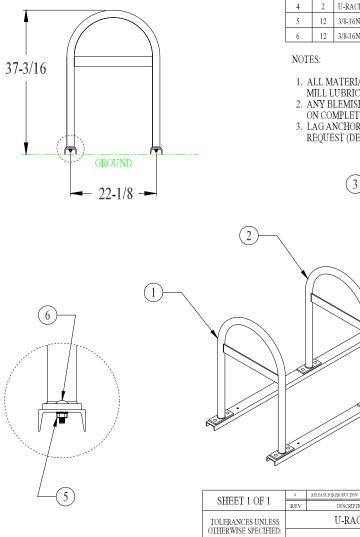
END OF SECTION

				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)

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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