



**DERO**  
A PLAYCORE Company



## **Kolo**® Shelter

The unique styling of our redesigned Dero Kolo® Shelter will help beautify your facility and provide secure, covered bike parking for cyclists. The Kolo is designed to accommodate a variety of bike parking options, including vertical and two-tiered arrangements, to best suit your needs.

**We can expand on that.**



The modular design of the Kolo® Shelter allows you to expand as necessary to meet your bike parking capacity needs



## FINISH OPTIONS

### Galvanized

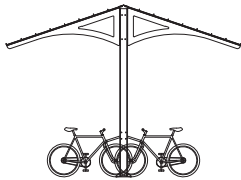
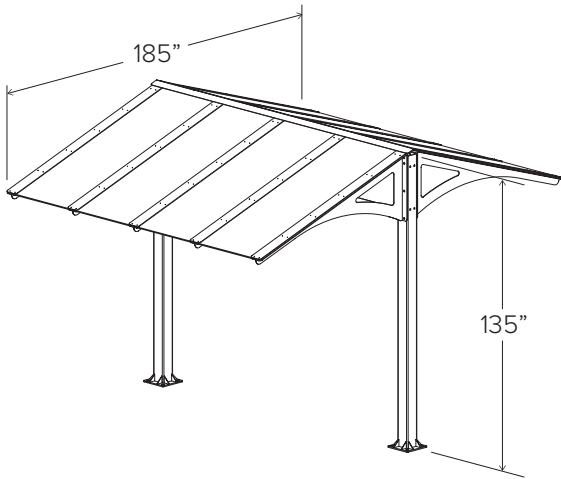


### Powder Coat

 White	 Black	 Deep Red RAL 3003	 Yellow RAL 1023
 CNH Bright Yellow	 Orange RAL 2004	 Beige RAL 1001	 Hunter Green RAL 6005
 Light Green RAL 6018	 Green RAL 6016	 Sky Blue RAL 5015	 Blue RAL 5005
 Dark Purple	 Flat Black	 Wine Red RAL 3005	 Iron Gray RAL 7011
 Light Gray RAL 7042	 Silver RAL 9007	 Sepia Brown RAL 8014	 Bronze

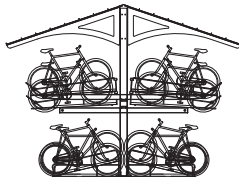
## SOLAR POWERED LIGHTING AVAILABLE





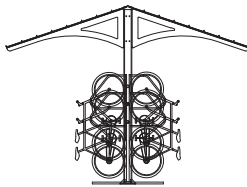
**Campus Rack**

Capacity by shelter length  
Short: 5 Bikes  
Medium: 9 Bikes  
Long: 11 Bikes



**Dero Decker**

Capacity by shelter length  
Short: 18 Bikes  
Medium: 26 Bikes  
Long: 34 Bikes



**Ultra Space Saver Squared**

Capacity by shelter length  
Short: 6-9 Bikes  
Medium: 12-18 Bikes  
Long: 16-24 Bikes

Dero shelters can be used in a modular fashion (shared uprights) however, when used in this manner, please consult a Dero Bike Rack sales associate for layout, as the rack spacing and bike capacity can change!

**CAPACITY** Varies per configuration

**MATERIALS**  
**Uprights:** 6" x 1/4" square tube  
**Center member:** 6" x 1/4" square tube, C6 channel  
**Feet:** 1/2" plate  
**Rafter:** 3/16" plate  
**Roof Panels:** 1/2" UV resistant polycarbonate

**FINISHES**

- Galvanized**  
An after fabrication hot dipped galvanized finish is our standard option.
- Powder Coat**  
Our powder coat finish assures a high level of adhesion and durability by following these steps:  
 1. Sandblast  
 2. Epoxy primer electrostatically applied  
 3. Final thick TGIC polyester powder coat

**SECTION LENGTHS**

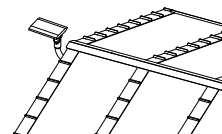
- Short**  
74" on-center between uprights
- Medium**  
111" on-center between uprights
- Long**  
148" on-center between uprights

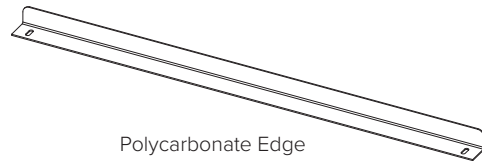
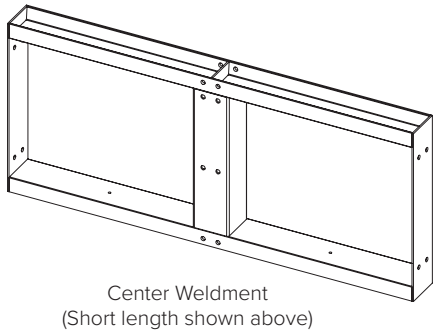
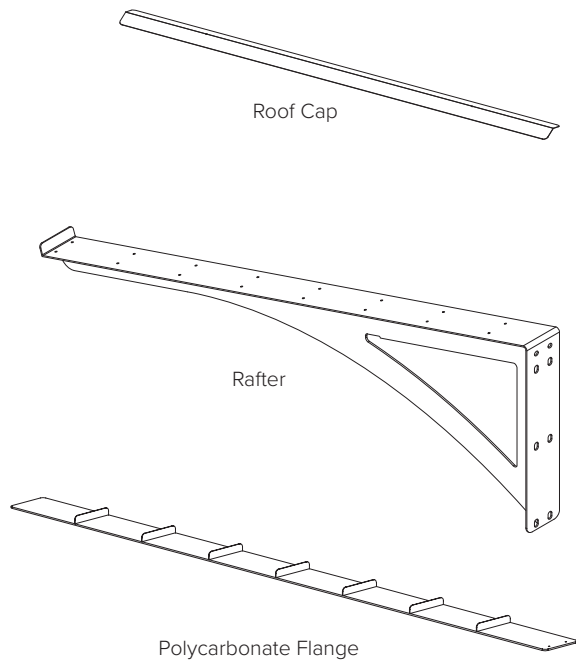
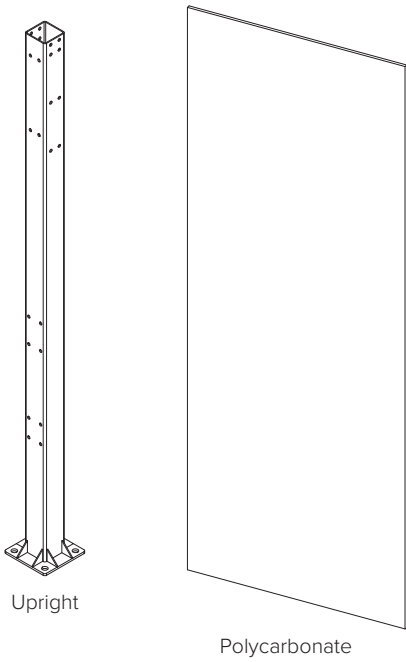
**MOUNT OPTIONS** **Surface Only**  
It is the responsibility of the installer to ensure that all base materials into which the shelter will be installed can support the rack and will not be damaged by any required installation procedures. See structural drawings for details.

**SETBACKS** Consult local building codes for acceptable setbacks and placement.

**LOAD DATA**  
**Dead Load:** self weight of structure  
**Live Load:** 40 psf  
**Wind Load:** 90 mph exposure B  
**Seismic Load:** moderate  
**Footing:** see page 5  
**Anchors:** 3/4" diameter x 14.625" Simpson Torq-Cut wedge anchor

**LIGHTING**  Solar powered lights are available for an additional charge





Bolt  
.25" x 6.5"



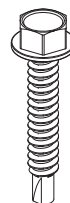
Bolt  
.625" x 1.5"



Bolt  
.625" x 7.5"



Self Drilling Screw  
.25" x 1.5"

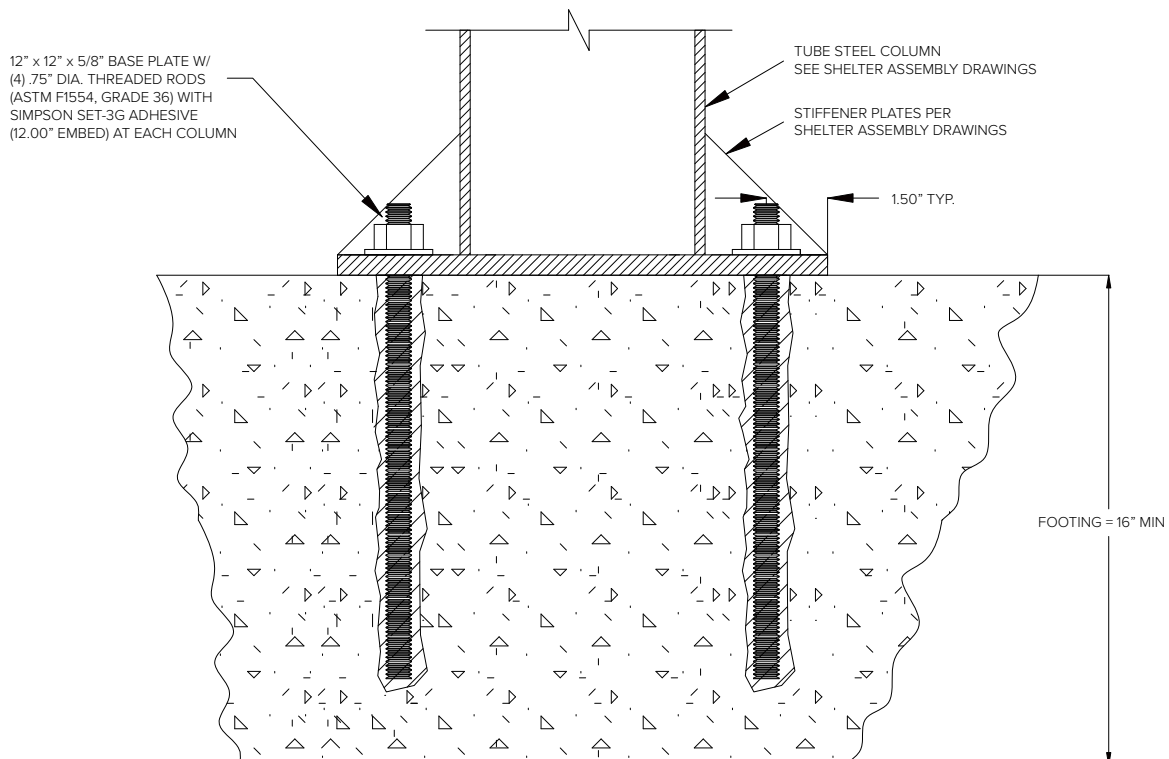
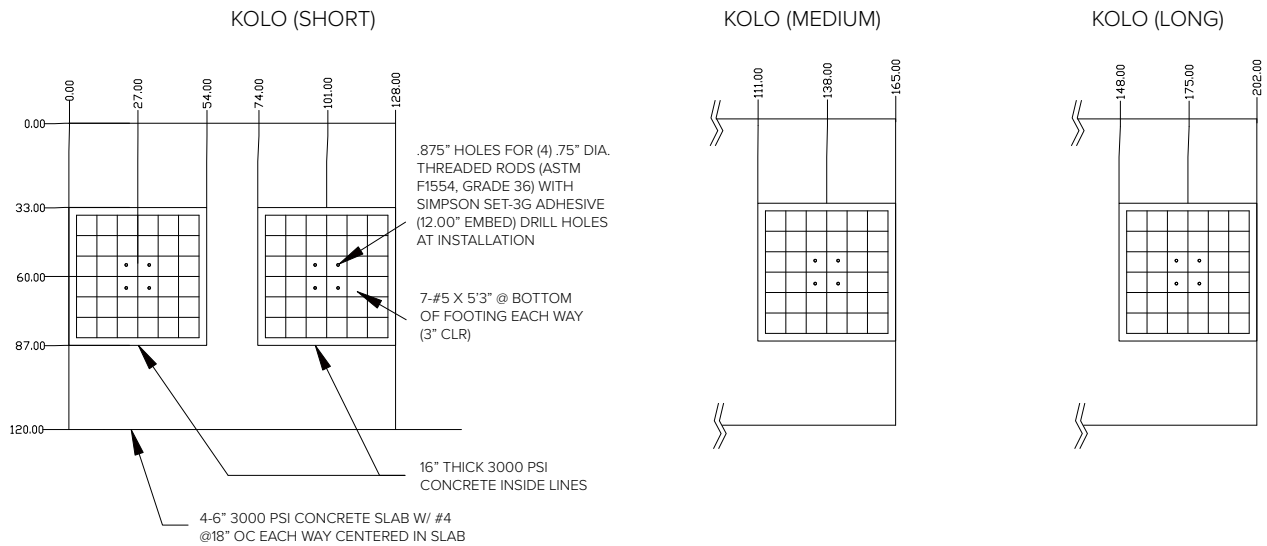


Threaded Rod  
.75" x 14"



**GENERAL STRUCTURAL NOTES:**

1. FOOTING CONCRETE STRENGTH = 3000 PSI
  2. REBAR STRENGTH = 60 KSI (ASTM A615, GRADE 60)
  3. THREADED RODS = 36 KSI (ASTM F1554, GRADE 36)
  4. ADHESIVE = SIMPSON SET 3G. NOTE THAT SPECIAL INSPECTION OF BOLT INSTALLATION IS REQUIRED PER IBC 2015.
  5. FOOTING SHALL BE PLACE ON WELL COMPACTED AND FREE DRAINING SOIL.
  6. DESIGN PER IBC 2015, RISK CATEGORY 1
- SNOW: 60 PSF GROUND SNOW  
WIND: 105 MPH, EXP. B  
SEISMIC: DESIGN CATEGORY A-C




**TOOLS NEEDED**

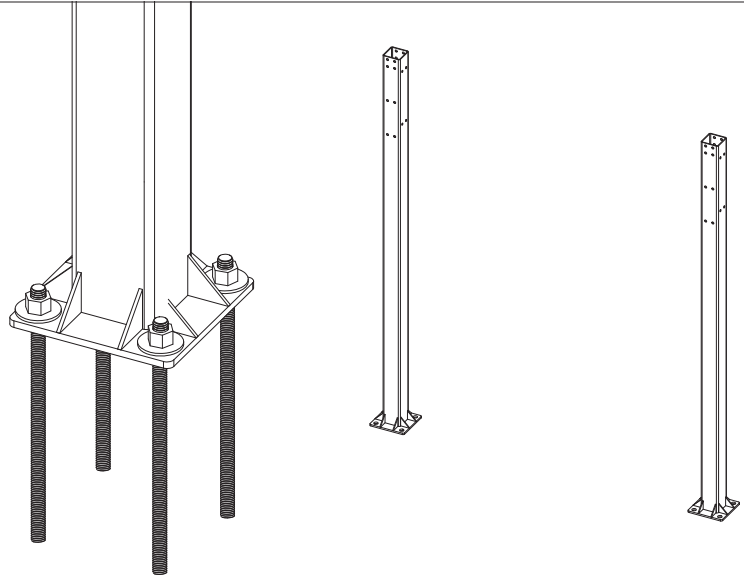
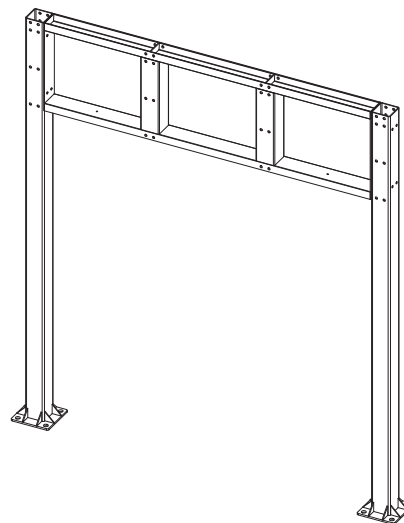
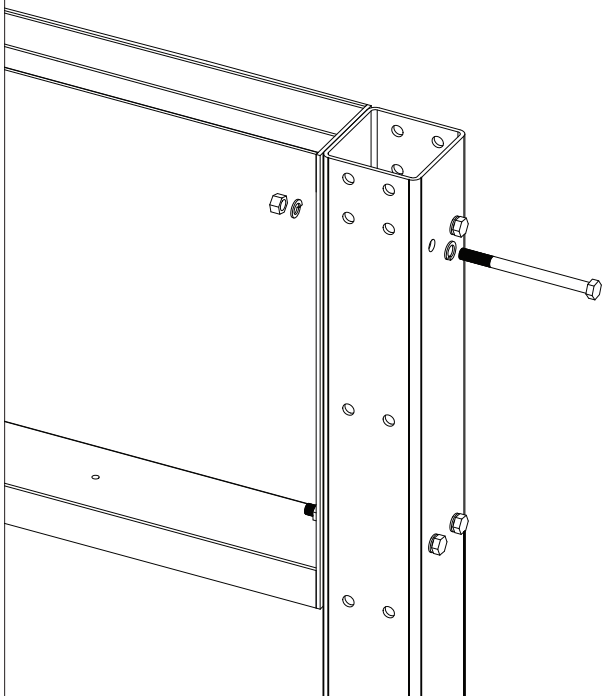
Tape Measure  
 Marker or chalk  
 Level  
 Sledge Hammer  
 Rubber Mallet  
 Large Hammer Drill  
 Standard Drill

3/8" Socket with drill attachment  
 7/8" Diameter Masonry Bit  
 3/4" Wrench/Socket  
 15/16" Wrench/Socket (2)  
 1 1/8" Wrench/Socket  
 1 1/4" Wrench  
 Spud Wrench

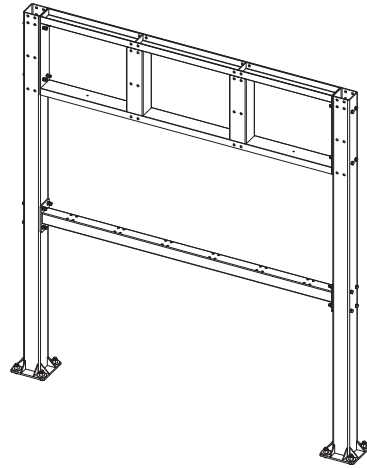
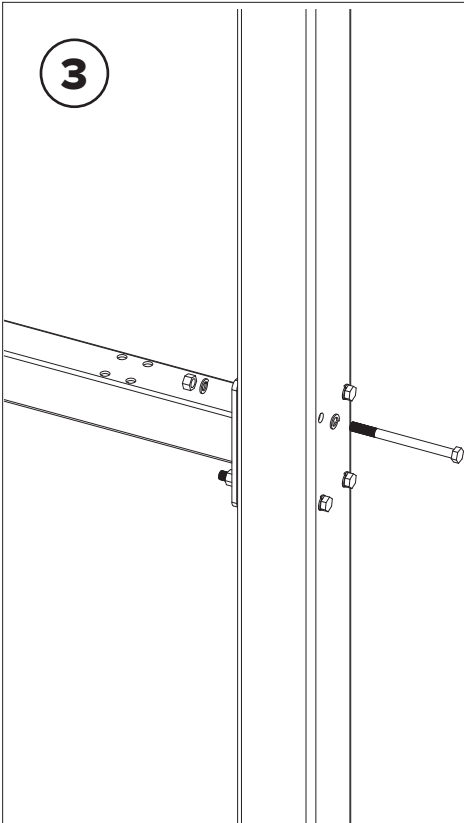
**1**

Place Uprights based on footing diagram and drill (4) 7/8" diameter holes in concrete 12" deep for each Upright. Arrange special inspection of anchor holes and anchor/epoxy installation per IBC 2012. Consult Simpson Set 3G epoxy instructions for further detail.

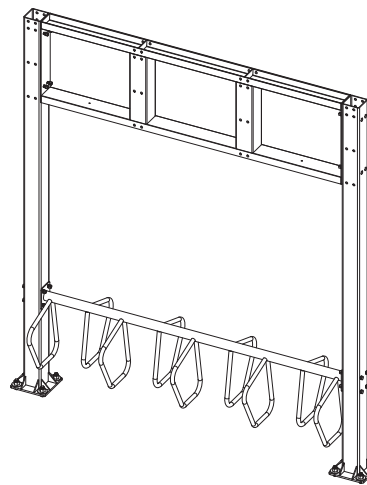
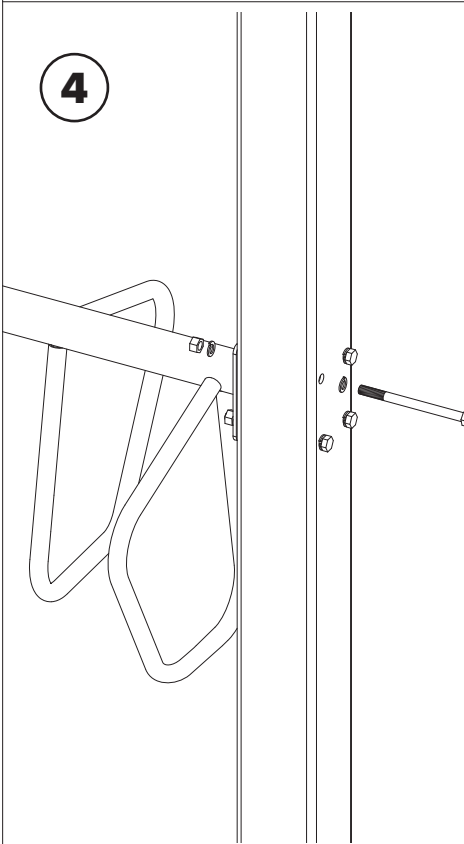
After inspection a sufficient epoxy cure time, the Uprights may be placed over the threaded rod and secured with washers and nuts finger-tight.


**2**


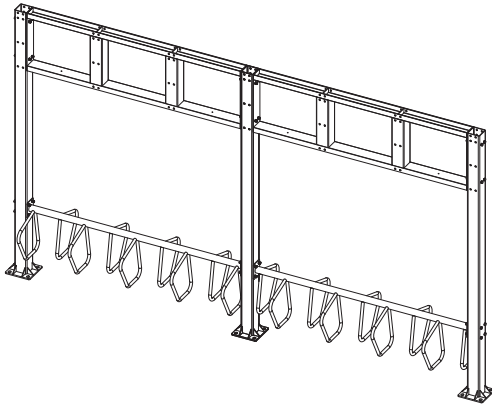
Lift the Center in place and fasten finger-tight with (8) 5/8" x 7.5" bolts, lock washers and nuts.

**3**

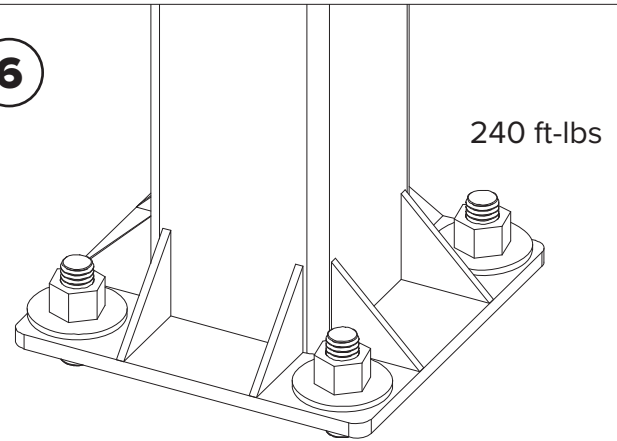
If building a Kolo shelter with Dero Decker racks, lift the Dero Decker Beam in place and fasten with (8) 5/8" x 7.5" bolts, lock washers and nuts.

**4**

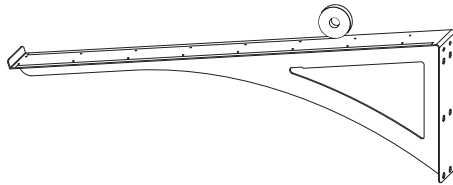
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**5**


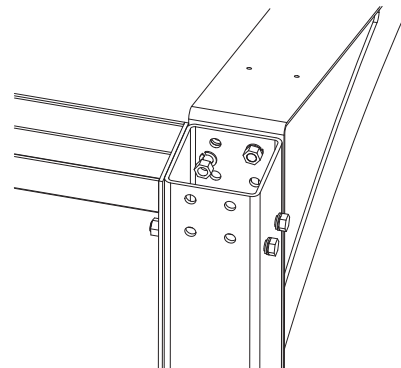
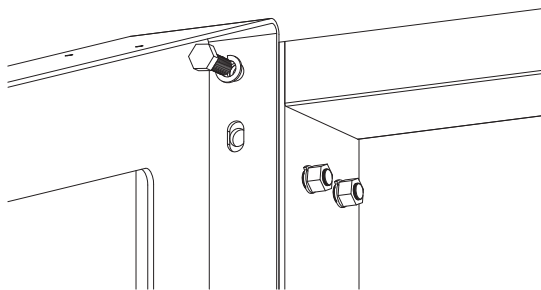
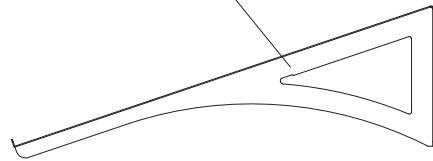
If building a modular system of Kolo shelters, continue to place and fasten Uprights, Center Weldments, and Dero Decker Beams/Campus Racks.

**6**


Fully tighten all bolts and nuts. Then tighten Simpson Torq-Cut anchor nuts to 240 ft-lbs.

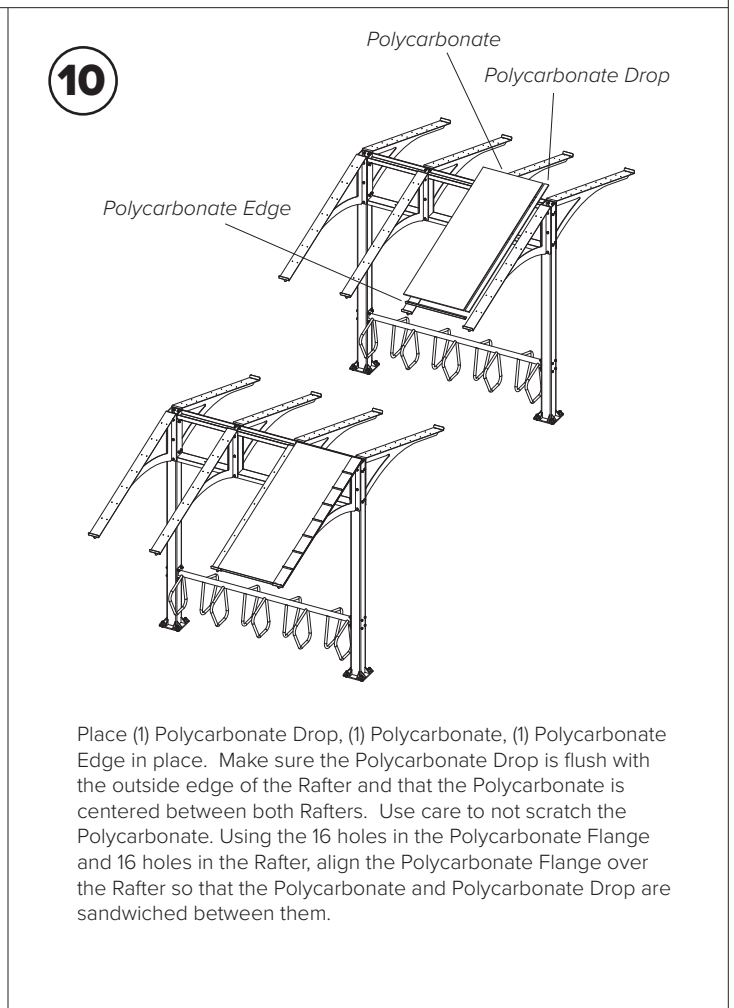
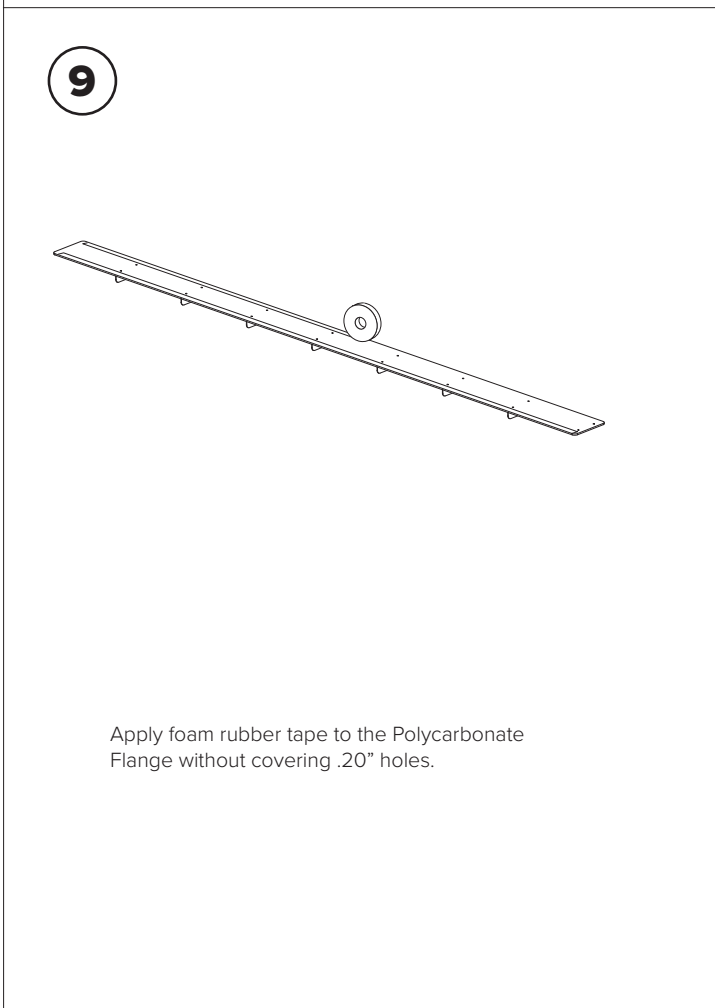
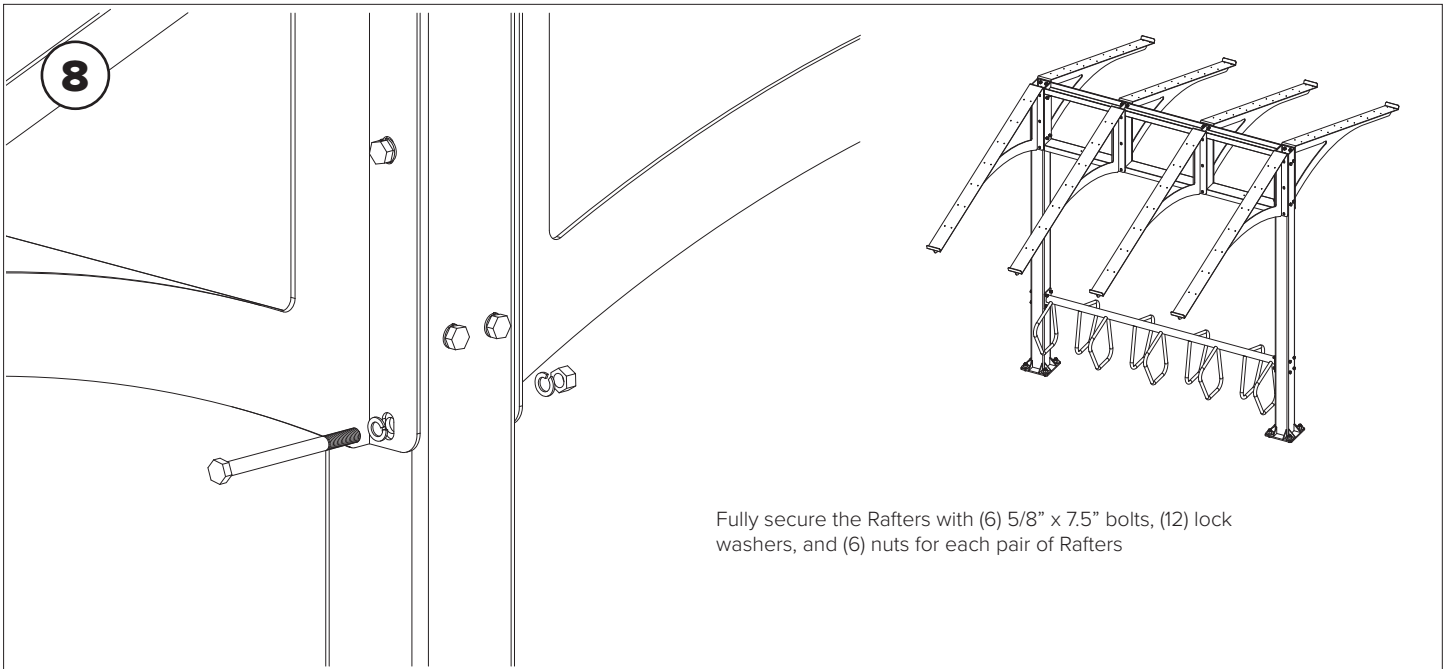
**7**


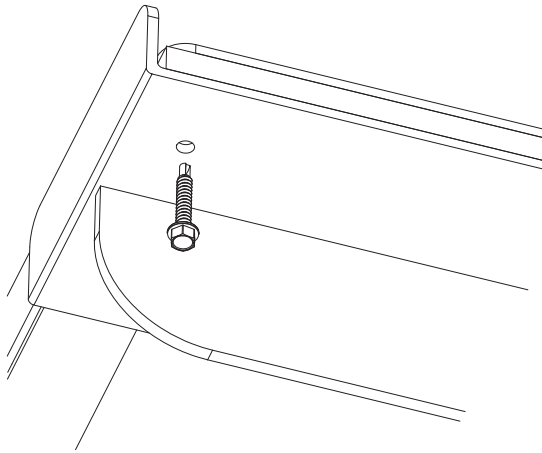
Center of Gravity Notch



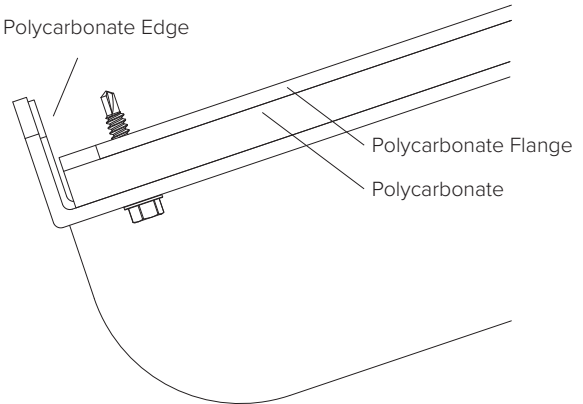
Apply foam rubber tape to the Rafter without covering .30" holes. Working from one end of the shelter to the other, lift a Rafter into place using a lifting strap. Secure the lifting strap at the rafter's center of gravity which is indicated by a notch at the apex of the Rafter cut-out. Once the Rafter is in place, fasten the rafter to the Upright with (2) 5/8" x 1.5" bolts, (4) lock washers, and (2) nuts using the two upper-most holes. Continue to fasten all remaining Rafters with the above method.



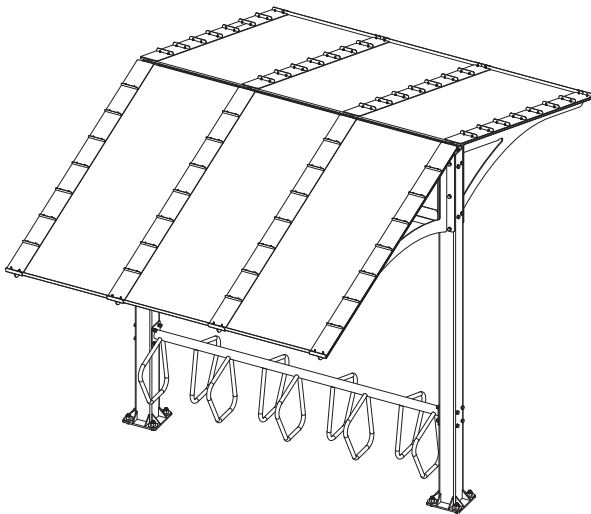


**11**


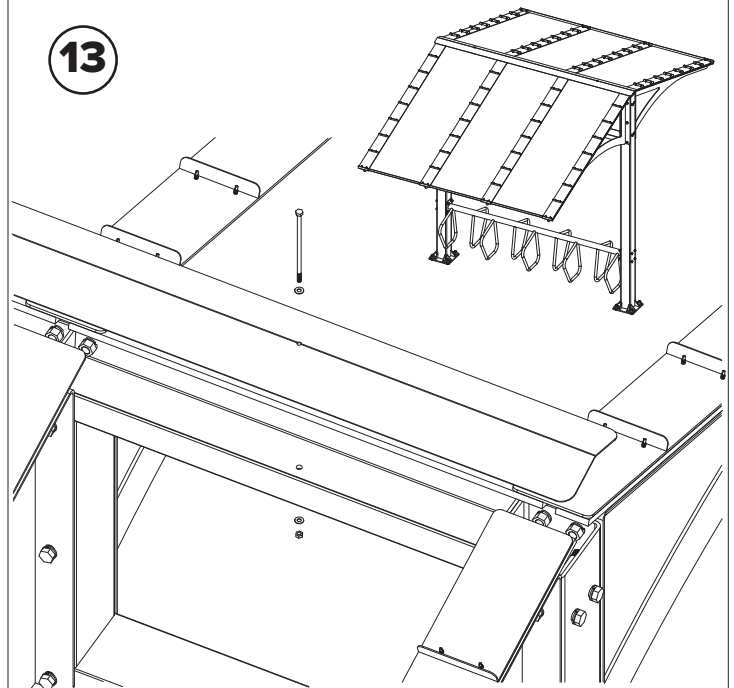
Polycarbonate Edge



Starting at the holes furthest from the shelter center, secure the Polycarbonate Flange with (16) 1/4" x 1.5" self-drilling screws. It is recommended that the assembly be clamped together while fastening the first two screws. The self-drilling screws will pass through the Rafter, drill through the Polycarbonate, and tap through the Polycarbonate Flange.

**12**


Continue installing the remaining Polycarbonates, Polycarbonate Drops, Polycarbonate Edges, and Polycarbonate Flanges.

**13**


Place the Roof Cap on top of the shelter and secure with (2) 1/4" x 6.5" bolts, (4) washers, and (2) lock nuts. Do not over-tighten to avoid bowing of the Roof Cap.