



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.

Rev E

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Kolo® Shelter

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

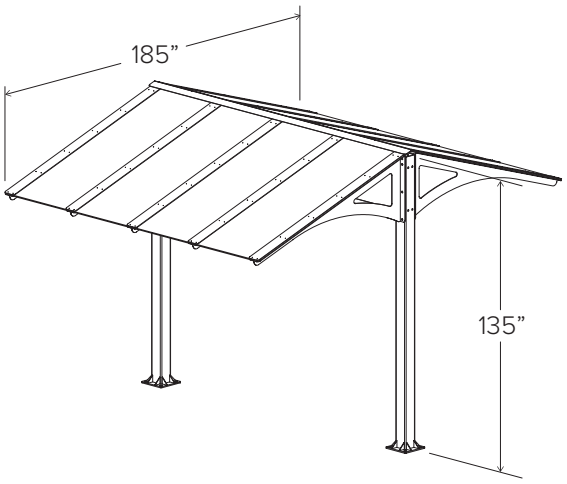
SOLAR POWERED LIGHTING AVAILABLE

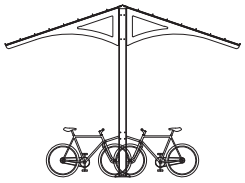


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Kolo® Shelter

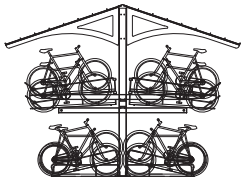
Submittal Sheet





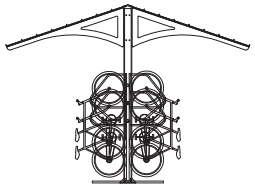
Campus Rack

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

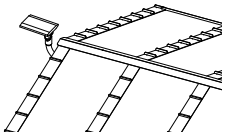
Consult local building codes for acceptable setbacks and placement.

LOAD DATA

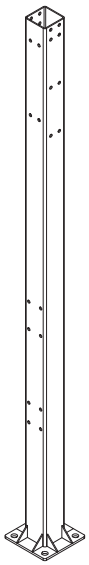
Dead Load: self weight of structure
Live Load: 40 psf
Wind Load: 90 mph exposure B
Seismic Load: moderate
Footing: see page 5
Anchors: 3/4” diameter x 14.625” Simpson Torq-Cut wedge anchor

LIGHTING

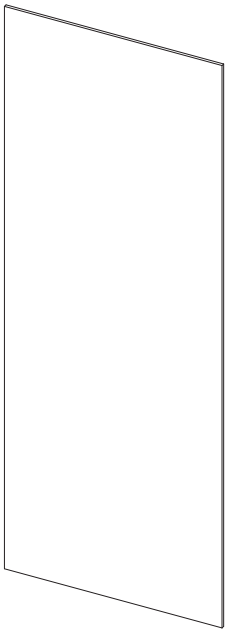
☐ Solar powered lights are available for an additional charge



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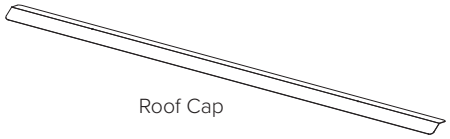
Upright



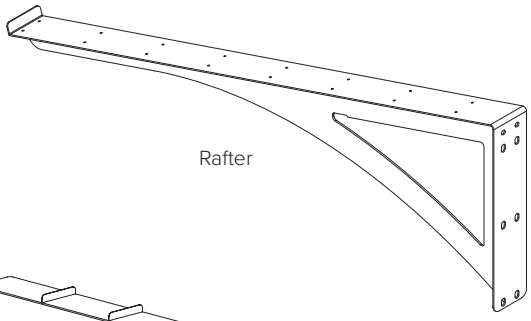
Polycarbonate



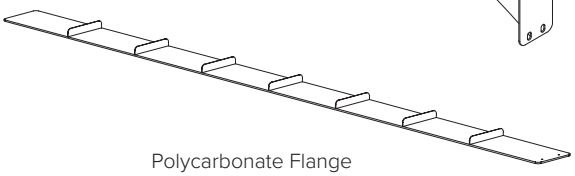
Polycarbonate Drop



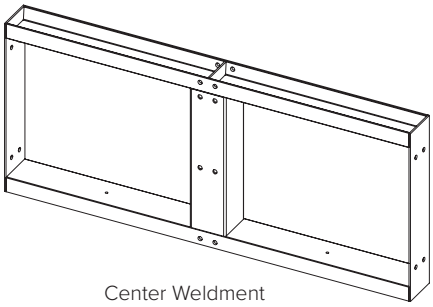
Roof Cap



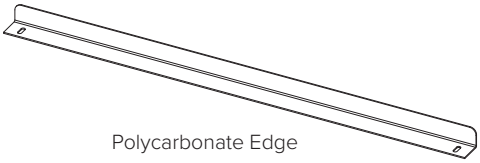
Rafter



Polycarbonate Flange



Center Weldment
(Short length shown above)



Polycarbonate Edge

Bolt
.25” x 6.5”



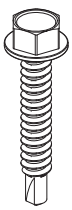
Bolt
.625” x 1.5”



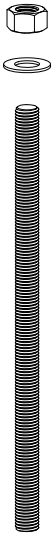
Bolt
.625” x 7.5”



Self Drilling Screw
.25” x 1.5”



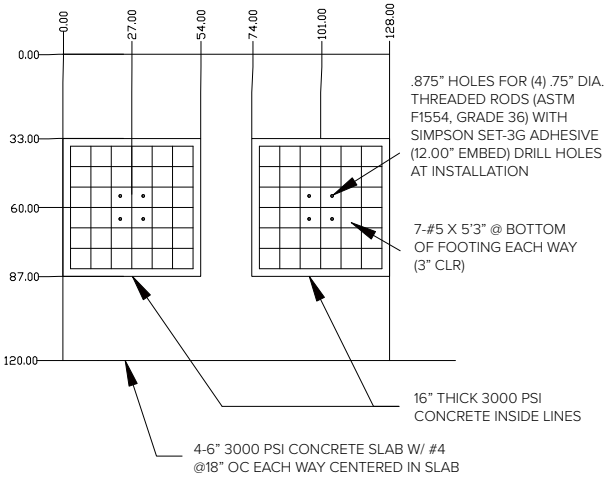
Threaded Rod
.75” x 14”



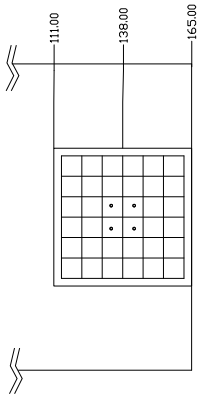
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GENERAL STRUCTURAL NOTES:
1. FOOTING CONCRETE STRENGTH = 3000 PSI
2. REBAR STRENGTH = 60 KSI (ASTM A615, GRADE 60)
3. THREADED RODS = 36 KSI (ASTM F1554, GRADE 36)
4. ADHESIVE = SIMPSON SET 3G. NOTE THAT SPECIAL INSPECTION OF BOLT INSTALLATION IS REQUIRED 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

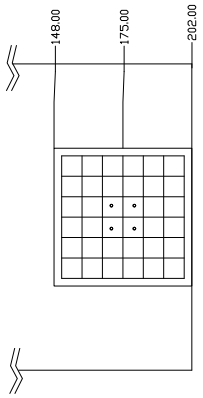
KOLO (SHORT)

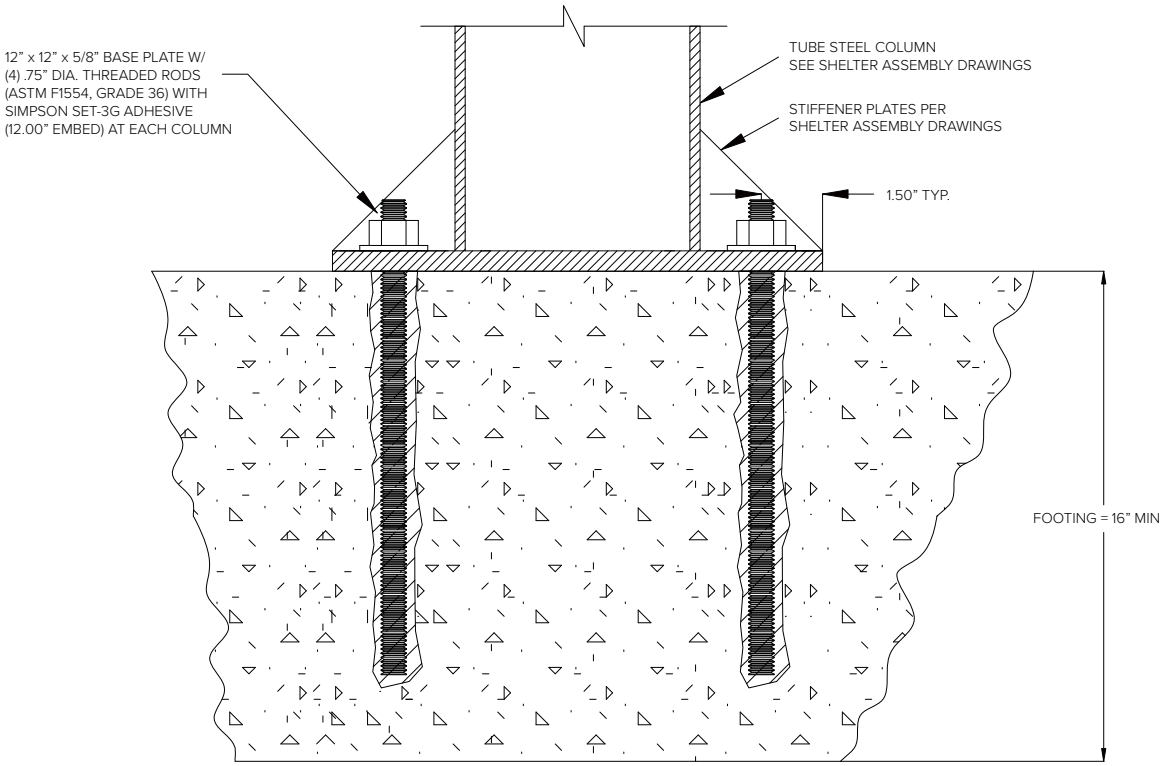


KOLO (MEDIUM)



KOLO (LONG)





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TOOLS NEEDED

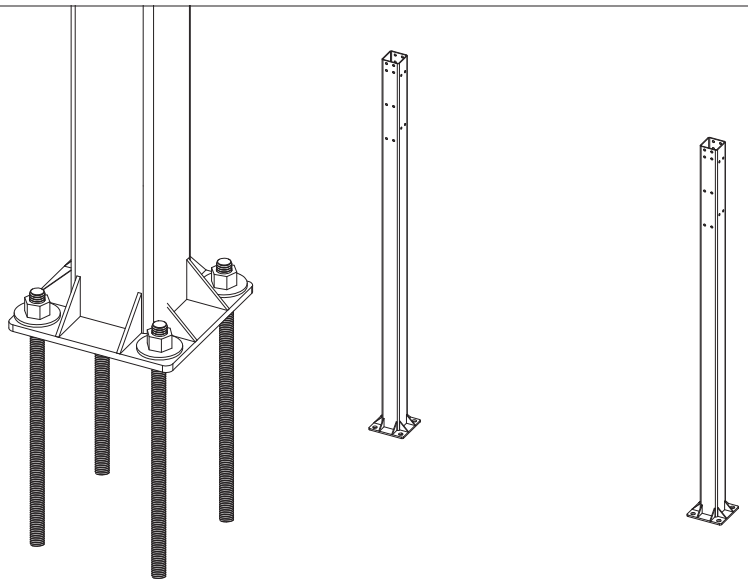
Tape Measure
Marker or chalk
Level
Sledge Hammer
Rubber Mallet
Large Hammer Drill
Standard Drill

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

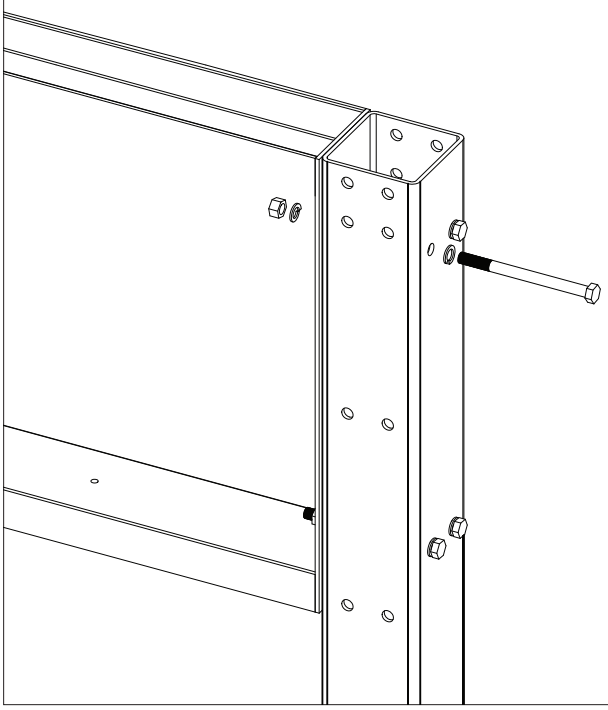
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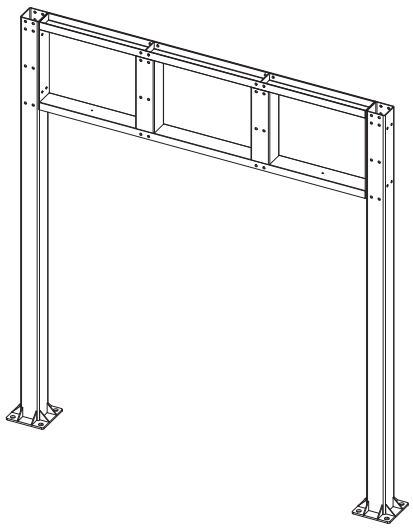
Place Uprights based on footing diagram and drill (4) 7/8” diameter holes in concrete 12” deep for each Upright. Arrange special inspection of anchor holes and anchor/ epoxy installation per IBC 2012. Consult Simpson Set 3G epoxy instructions for further detail.

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

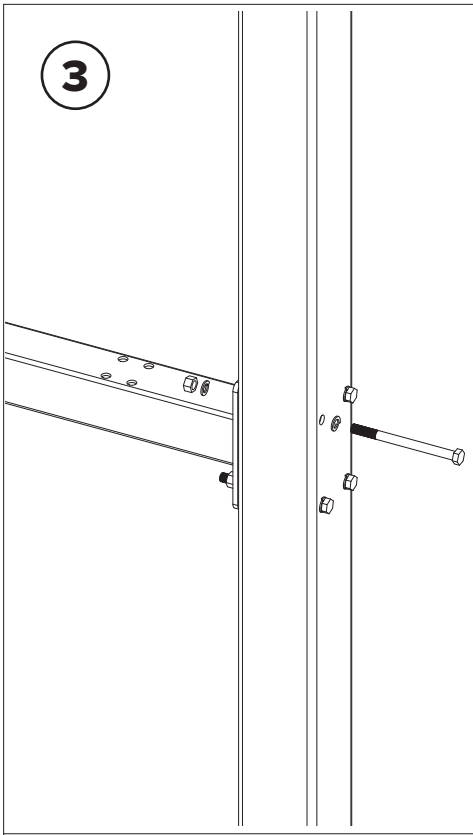


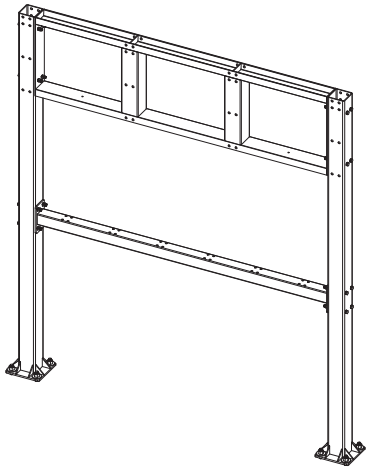


Lift the Center in place and fasten finger-tight with (8) 5/8” x 7.5” bolts, lock washers and nuts.

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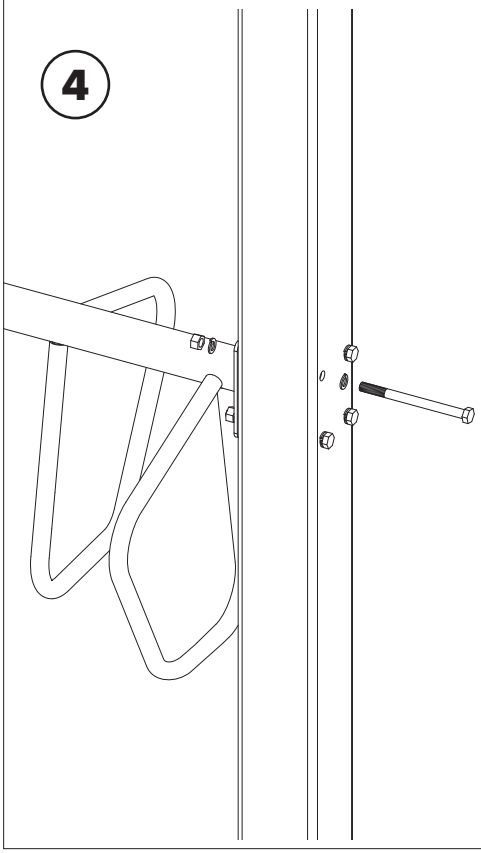
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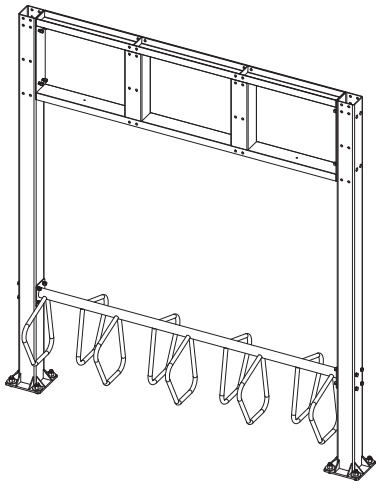




If building a Kolo shelter with Dero Decker racks, lift the Dero Decker Beam in place and fasten with (8) 5/8” x 7.5” bolts, lock washers and nuts.

4

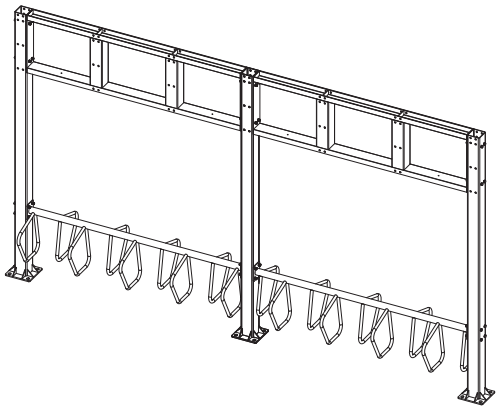




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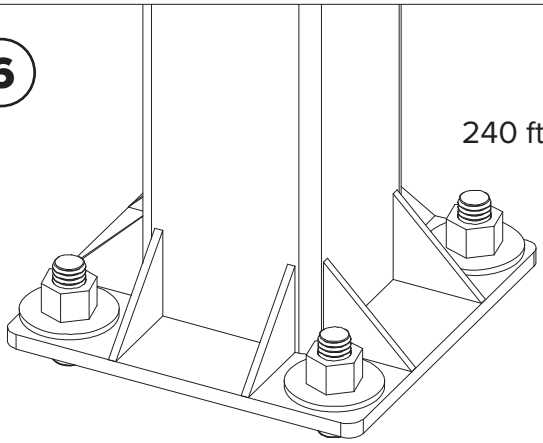
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5



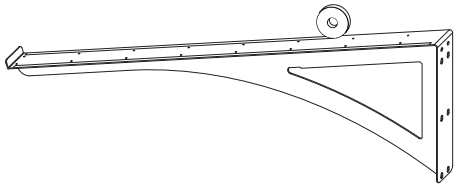
If building a modular system of Kolo shelters, continue to place and fasten Uprights, Center Weldments, and Dero Decker Beams/Campus Racks.

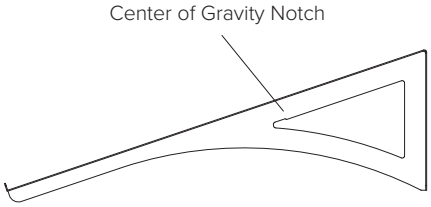
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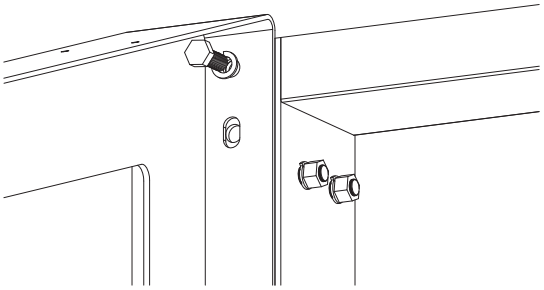


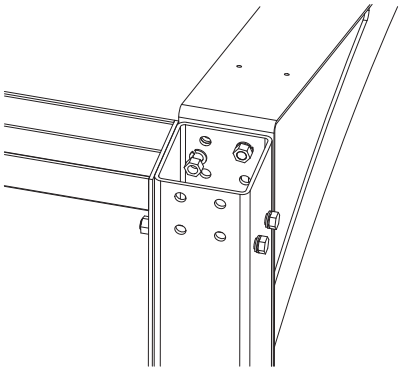
Fully tighten all bolts and nuts. Then tighten Simpson Torq-Cut anchor nuts to 240 ft-lbs.

7





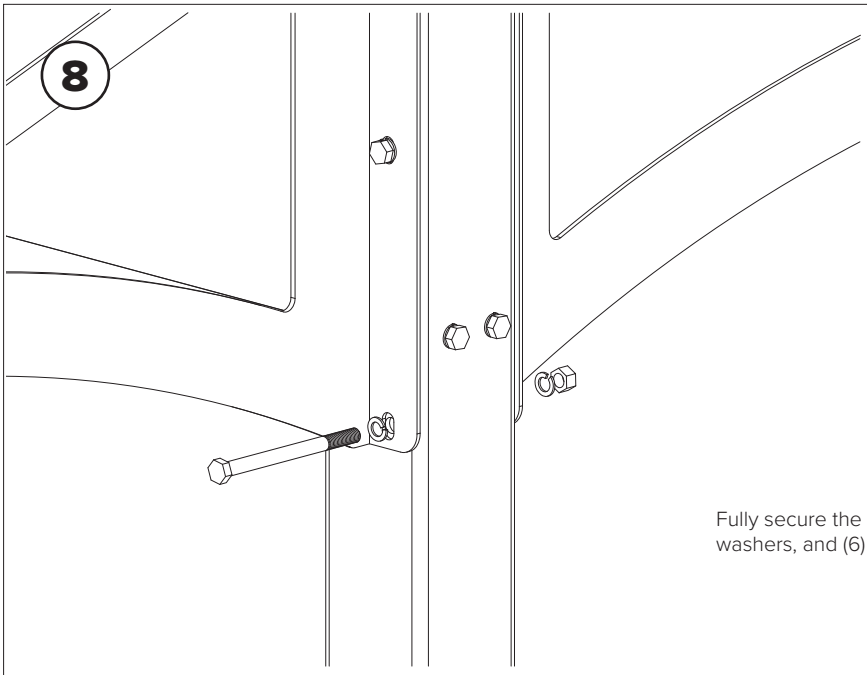


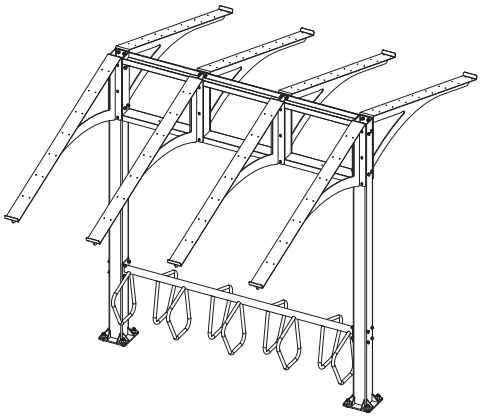


Apply foam rubber tape to the Rafter without covering .30” holes. Working from one end of the shelter to the other, lift a Rafter into place using a lifting strap. Secure the lifting strap at the rafter’s center of gravity which is indicated by a notch at the apex of the Rafter cut-out. Once the Rafter 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.

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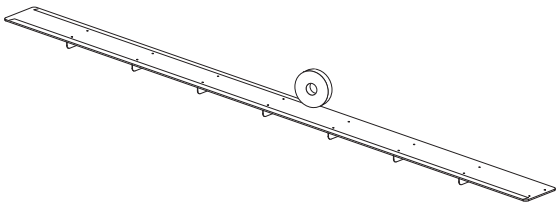
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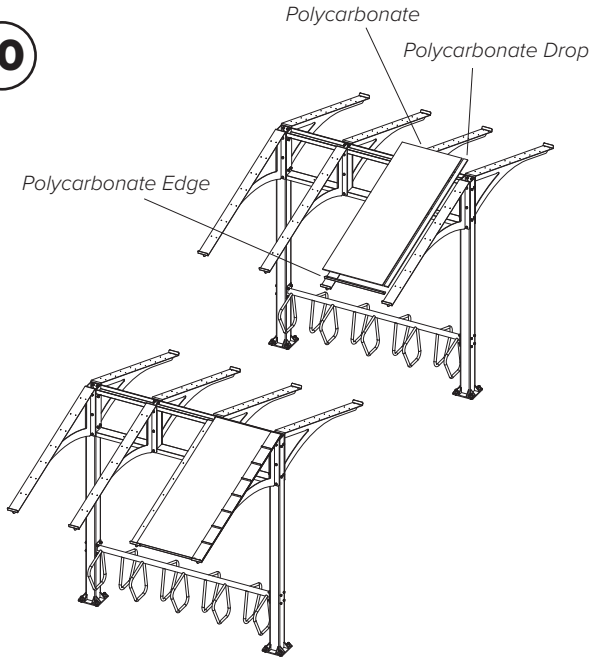
Fully secure the Rafters with (6) 5/8” x 7.5” bolts, (12) lock washers, and (6) nuts for each pair of Rafters

9



Apply foam rubber tape to the Polycarbonate Flange without covering .20” holes.

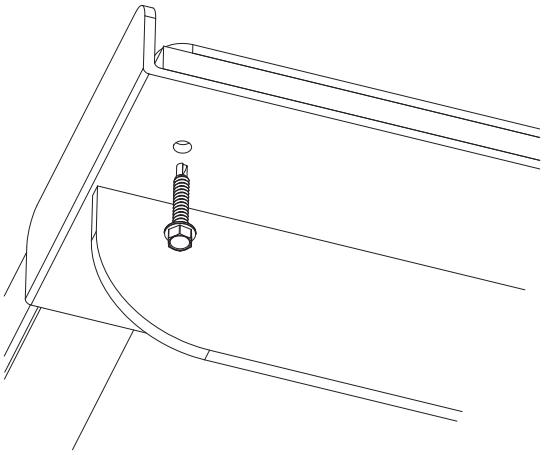
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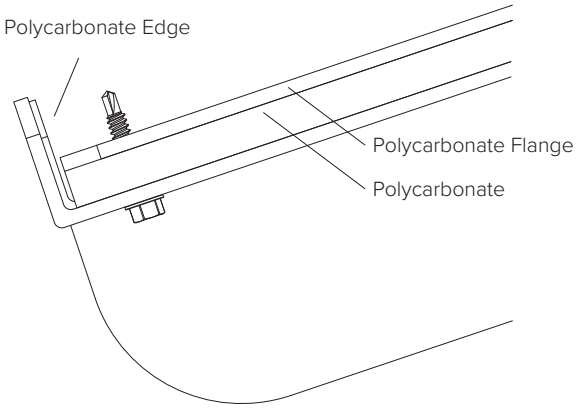


Place (1) Polycarbonate Drop, (1) Polycarbonate, (1) Polycarbonate Edge in place. Make sure the Polycarbonate Drop is flush with the outside edge of the Rafter and that the Polycarbonate is centered between both Rafters. Use care to not scratch the Polycarbonate. Using the 16 holes in the Polycarbonate Flange and 16 holes in the Rafter, align the Polycarbonate Flange over the Rafter so that the Polycarbonate and Polycarbonate Drop are sandwiched between them.

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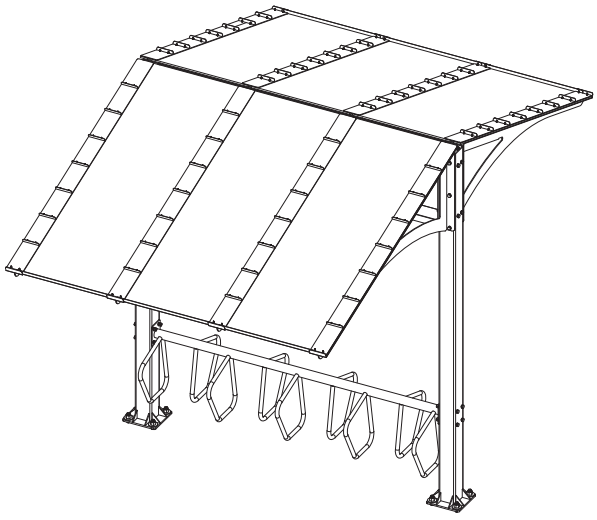
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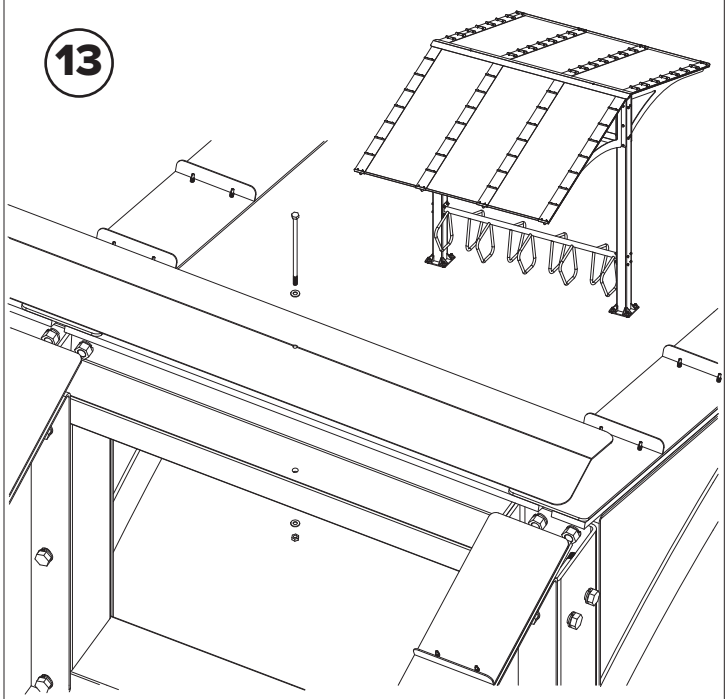
Starting at the holes furthest from the shelter center, secure the Polycarbonate Flange with (16) 1/4” x 1.5” self-drilling screws. It is recommended that the assembly be clamped together while fastening the first two screws. The self-drilling screws will pass through the Rafter, drill through the Polycarbonate,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

12



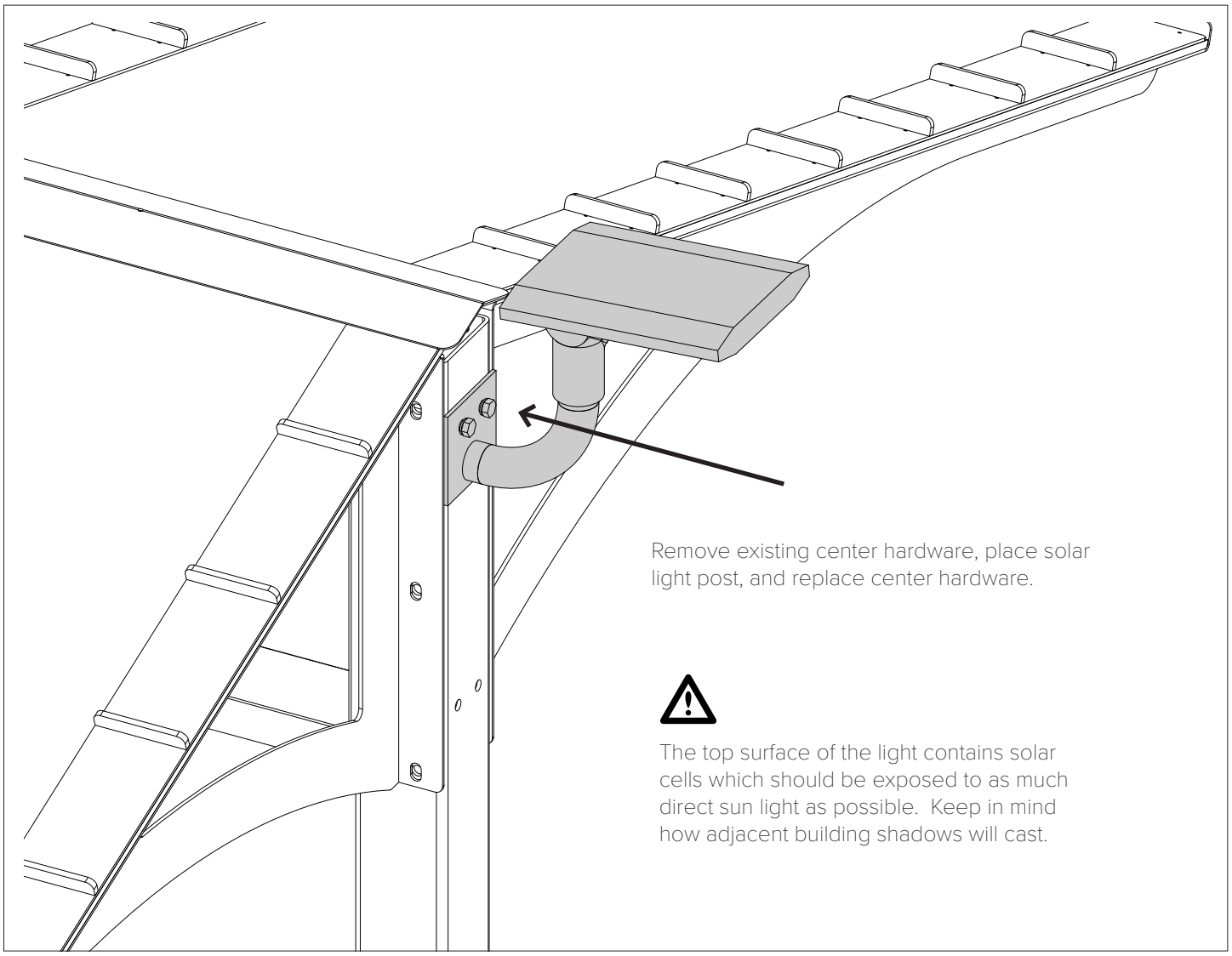
Continue installing the remaining Polycarbonates, Polycarbonate Drops, Polycarbonate Edges, and Polycarbonate Flanges.

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.

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Remove existing center hardware, place solar light post, and replace center hardware.

The top surface of the light contains solar cells which should be exposed to as much direct sun light as possible. Keep in mind how adjacent building shadows will cast.

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