

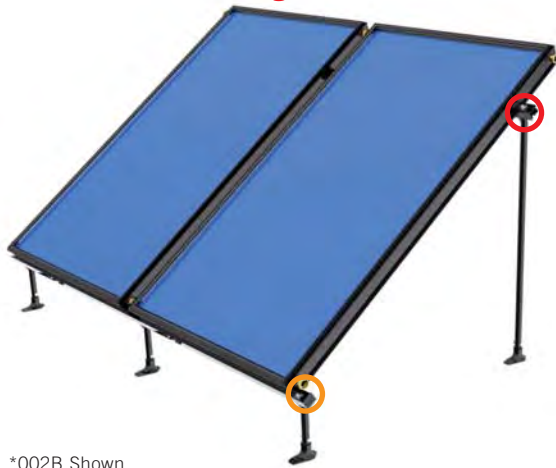
INSTALLATION GUIDE

RACK MOUNTING

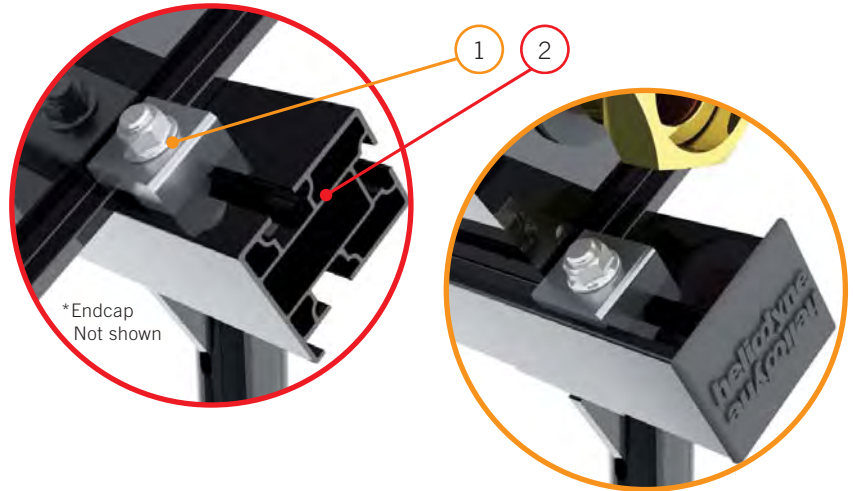


1. MOUNTING HARDWARE

1.0. Rack Mounting Overview

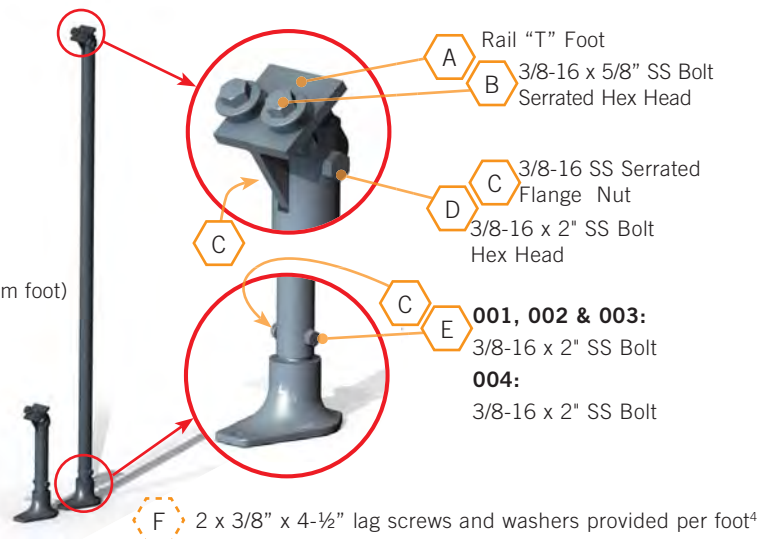
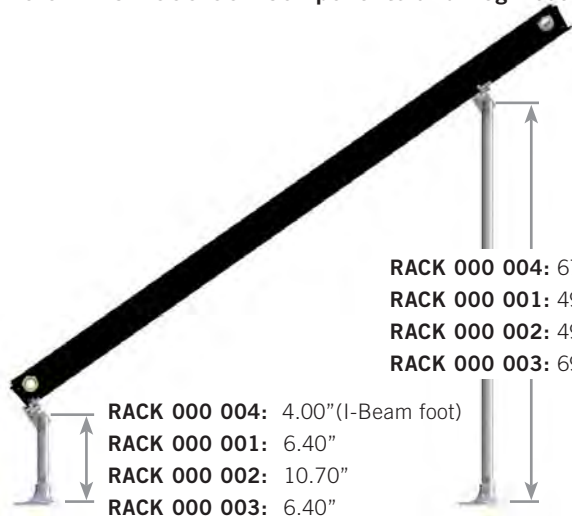


*002B Shown



*All fasteners are black oxide coated; they are shown in silver here for clarity

1.0.0. RACK 000 00X Components and Leg Assembly



1.0.1. RACK Replacement Parts

ITEM	CODE	PART NUMBER	DESCRIPTION	QUANTITY
1	CLIP 000 000B	40082-B	Gobi Rail Clamp, 3/8-16 x 1" SS Serrated Flange Bolt & Nut (set of 4)	1 / Gobi
2	RAIL 001 000B RAIL 002 000B	40092-B 40090-B	2x51" Gobi Mounting Rail with end caps, 1xCLIP 000 000B set 2x102" Gobi Mounting Rail with end caps, 2xCLIP 000 000B set	See Note 1
3	RACK 000 004B RACK 000 001B RACK 000 002B RACK 000 003B	40098-B 40081-B 40080-B 40093-B	Commercial Rack Mount, 4" Front Leg, 67" Rear Leg (I-Beam foot) Flat Roof Rack Mount, 4" Front Leg, 47" Rear Leg Flat Roof Rack Mount, 8" Front Leg, 47" Rear Leg Flat Roof Rack Mount, 4" Front Leg, 67" Rear Leg	# Gobi + 1 ⁴
4	RAIL 000 001	40089	Splice Kit for Joining Rails (Includes 2 for upper and 2 for lower rail)	1 Kit

¹. Order minimum quantity of rails that will accommodate number of collectors in array.

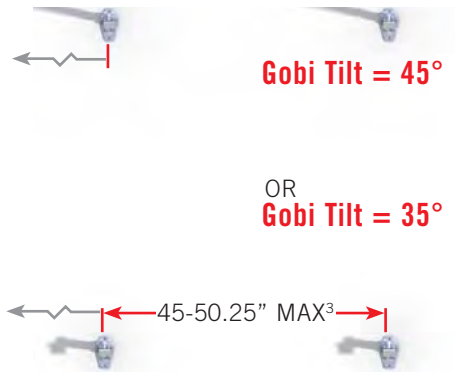
². RACK 000 00X Kits require field assembly.

³. Racks are not for tilts greater than 45°

⁴. May not be appropriate for site penetration and or loading conditions. Consult a structural engineer for advice on proper securing hardware for your installation.

1.1. Rack Installation

1.1.0. Rack Leg Spacing



Gobi Tilt = 45°

OR
Gobi Tilt = 35°

RACK 000 004: 63.0" (Gobi 410)

RACK 000 001: 43.3"

RACK 000 002: 38.7"

RACK 000 003: 63.0" (Gobi 410)

RACK 000 004: 90.4" (Gobi 410)

RACK 000 001: 61.4"

RACK 000 002: 55.3"

RACK 000 003: 90.4" (Gobi 410)

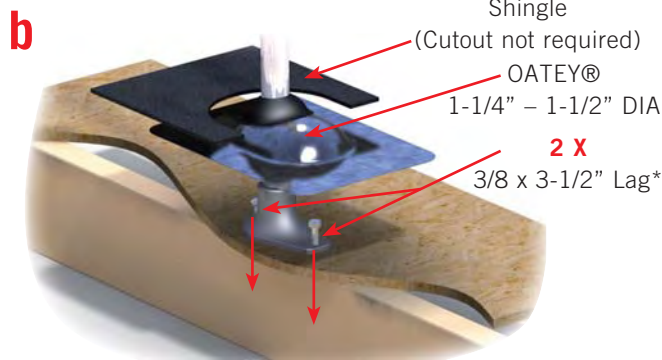
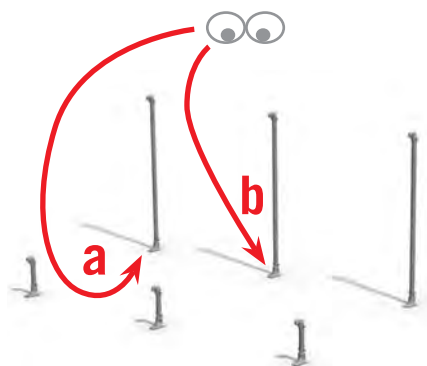
1. Spacing for tilt is independent of collector size.

2. For other tilts the distance between front and rear mounting points =

3. When using rail splices, space rack legs to ensure splices line up with legs (sec 1.1.4).

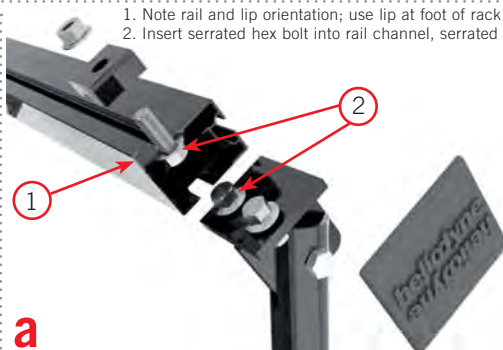
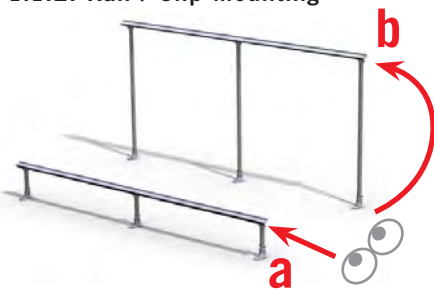
(Rear Leg Height - Front Leg Height)
Tan (Gobi Tilt Angle)

1.1.1. Rack Foot Mounting



*While lag screws are provided with most kits, consult the American Wood Council NDS 2005 for proper lag screw specifications, or verify with a certified structural engineer, for each specific roof site. Heliodyne is not responsible for mounting anchor integrity.

1.1.2. Rail / Clip Mounting

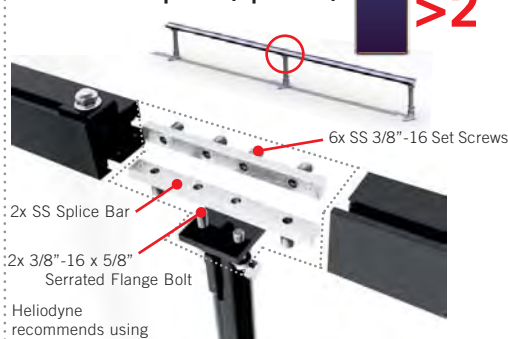


1. Note rail and lip orientation; use lip at foot of rack oriented upwards to hold GOBI.
2. Insert serrated hex bolt into rail channel, serrated hex nut compressing clip / rail foot.

1.1.3. Collector Mounting



2.1.4. Rail Splice (optional)



3. Brace rails for first collector

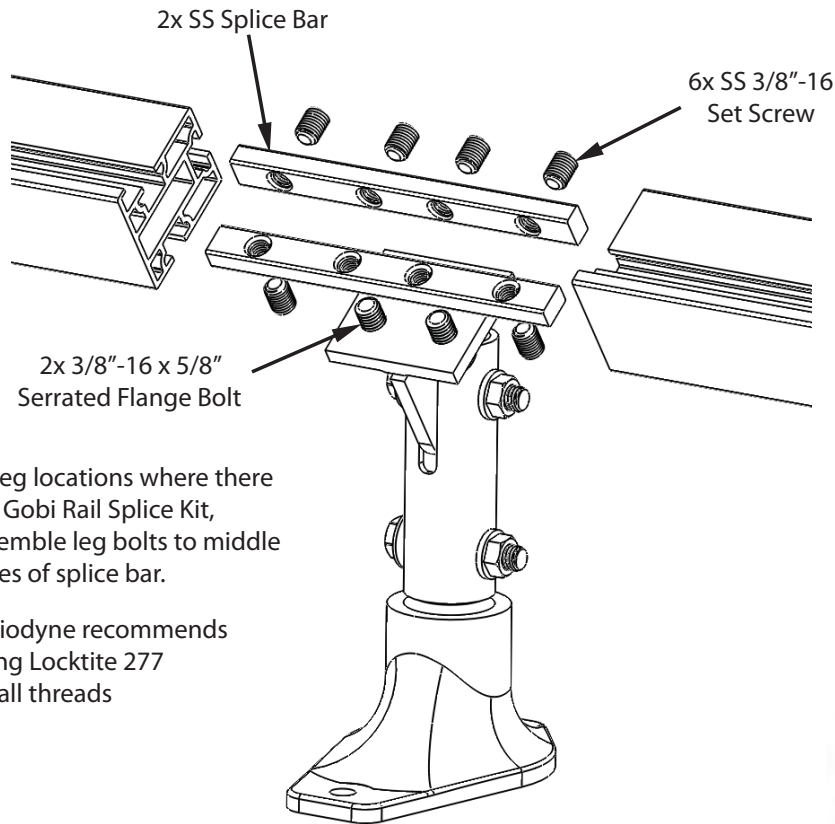
4. Place first collector and install all (4) Helioclips.

Tighten bolts on Helioclips to engage locking serrated flange nut.

5. Insert O-rings, tighten Unions. Take care not to crimp O-ring. Do not use thread lock or sealants

6x SS 3/8"-16 Set Screws
2x SS Splice Bar
2x 3/8"-16 x 5/8" Serrated Flange Bolt
Heliodyne recommends using a long lasting thread locker, such as Loctite 277, on rail splice kits.

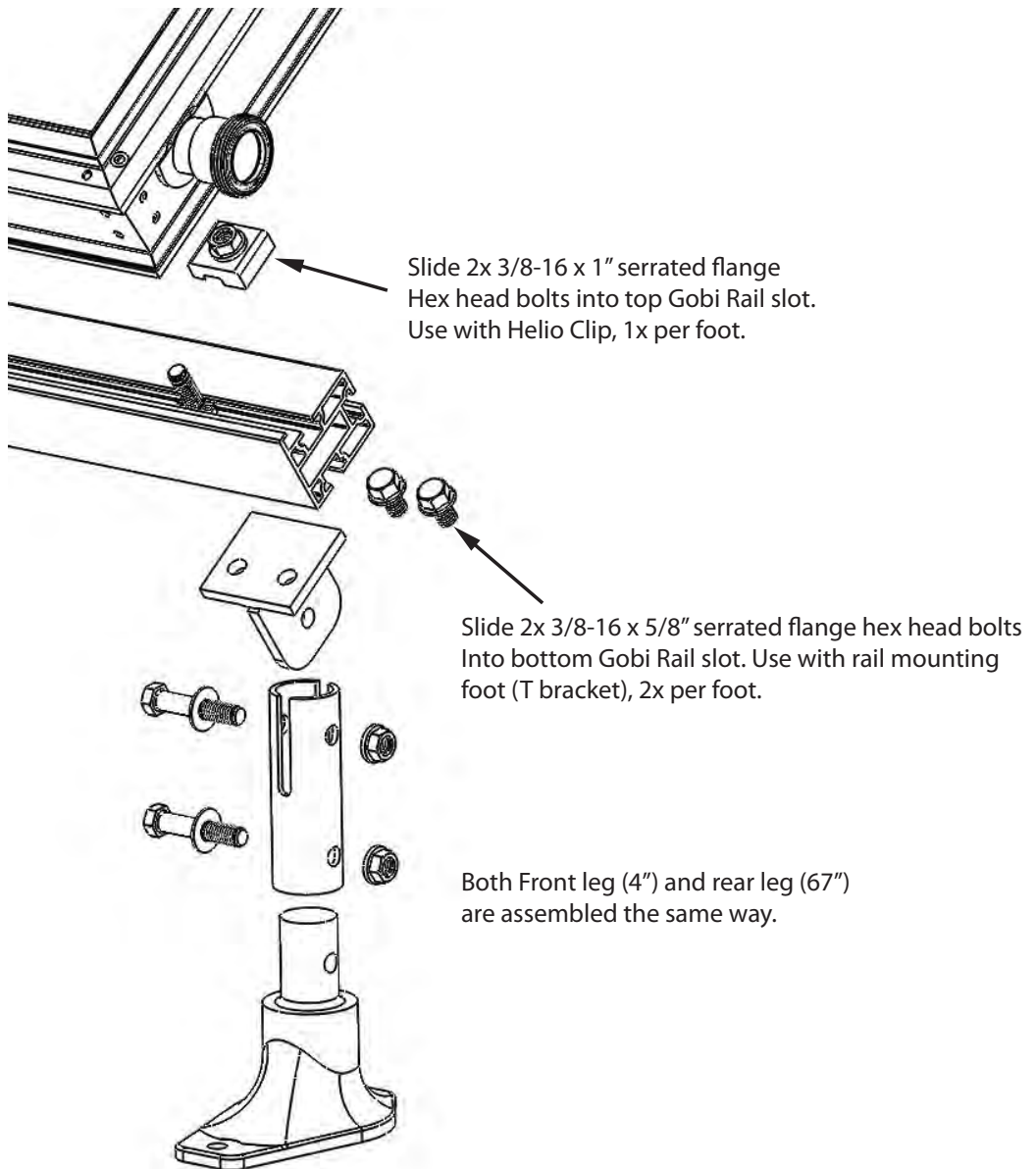
SPLICE KIT DETAIL



Mount top rail with flange facing down so collector can rest on rail while installing GOBI Clips.

Mount bottom rail with flange facing up holding the collector in place while installing GOBI Clips.

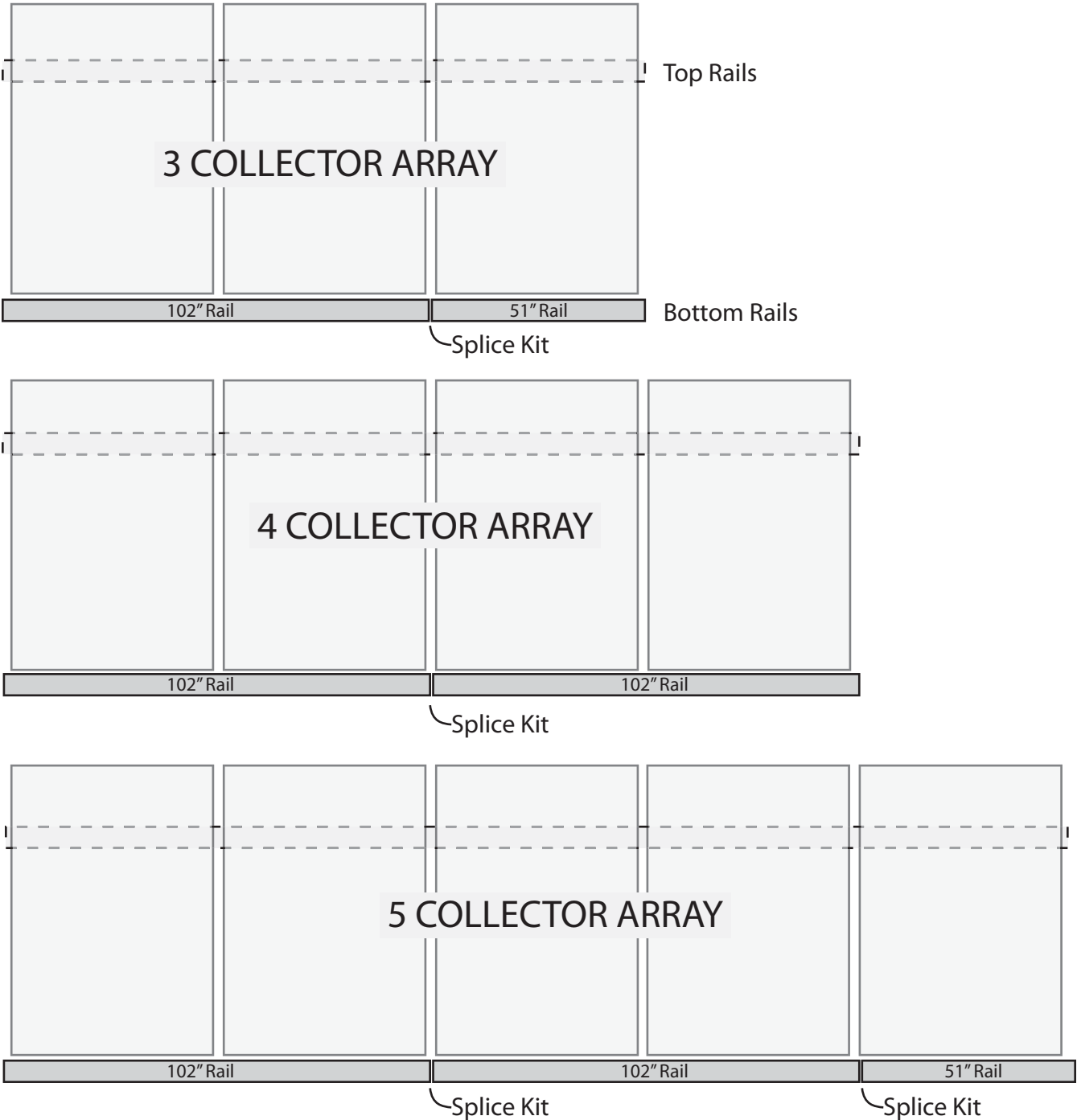
RAIL ORIENTATION

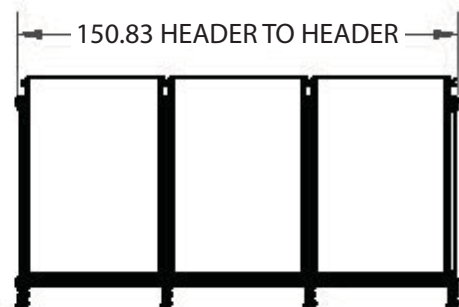


LEG ASSEMBLY

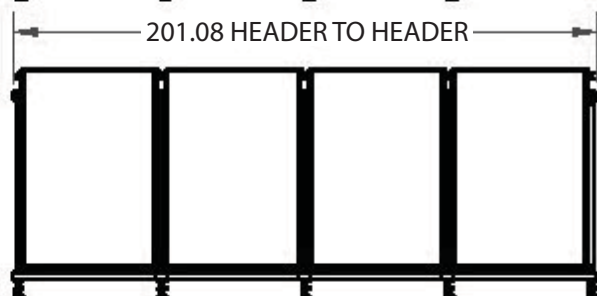
Horizontal mounting rails come in two lengths, 102" and 51".

The combination of rails vary dependent on amount of collectors in each Array configuration. For example a 3 Collector Array will consist of a 102" rail, 51" rail, and a Splice Kit. A 4 Collector Array will have 2 -102" rails, and a Splice Kit. A 5 Collector Array will consist of 2 -102" rails, 51" rail, and 2-Splice Kits. There are 2 rows of rails, top and bottom. Same rail assembly applies to both top and bottom.



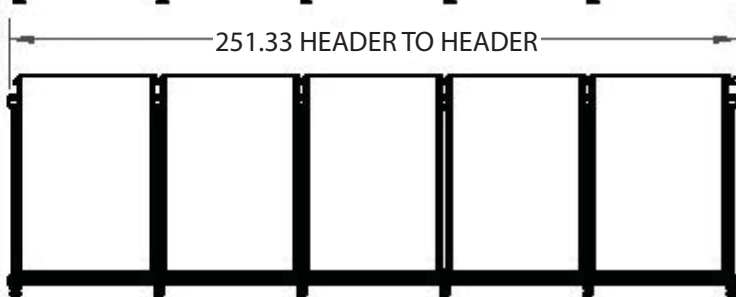


3 COLLECTOR ARRAY

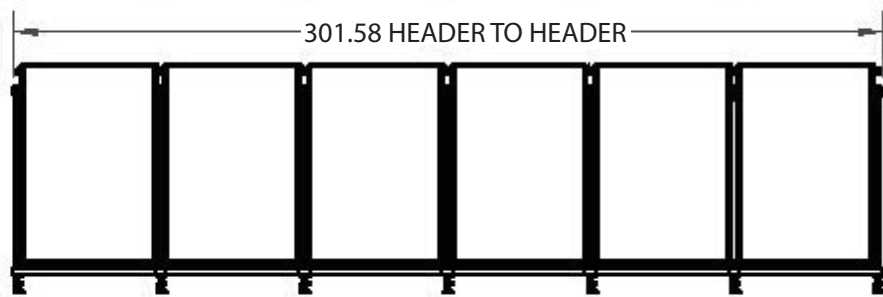


4 COLLECTOR ARRAY

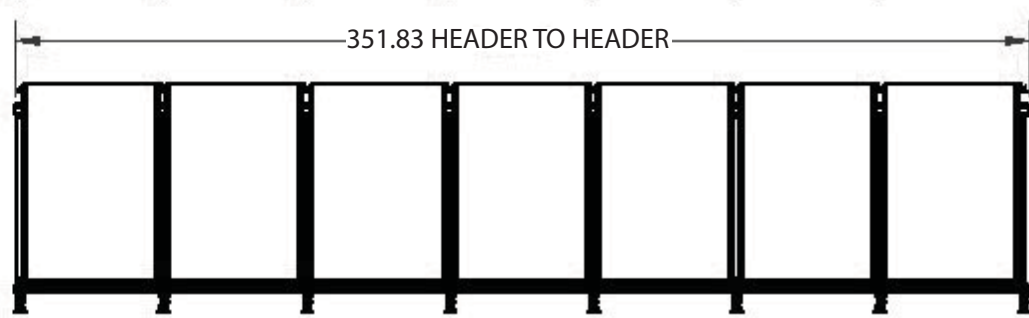
rail width: 204"
wide.



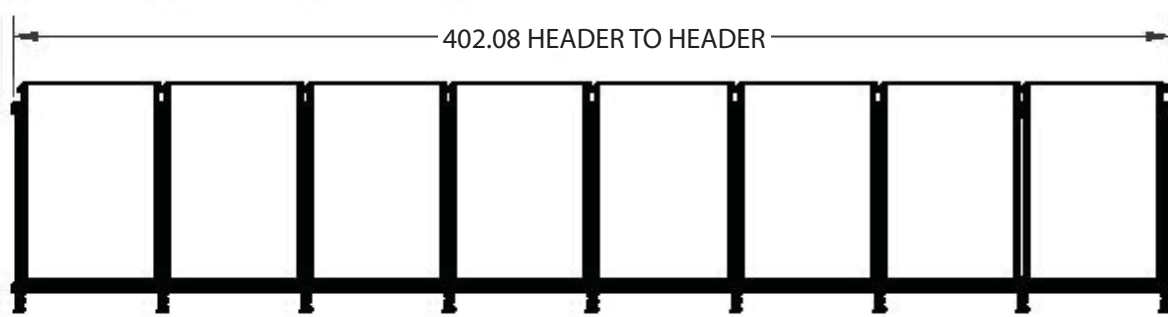
5 COLLECTOR ARRAY



6 COLLECTOR ARRAY



7 COLLECTOR ARRAY



8 COLLECTOR
ARRAY