

Series 100 UL

Installing and Leveling Rails

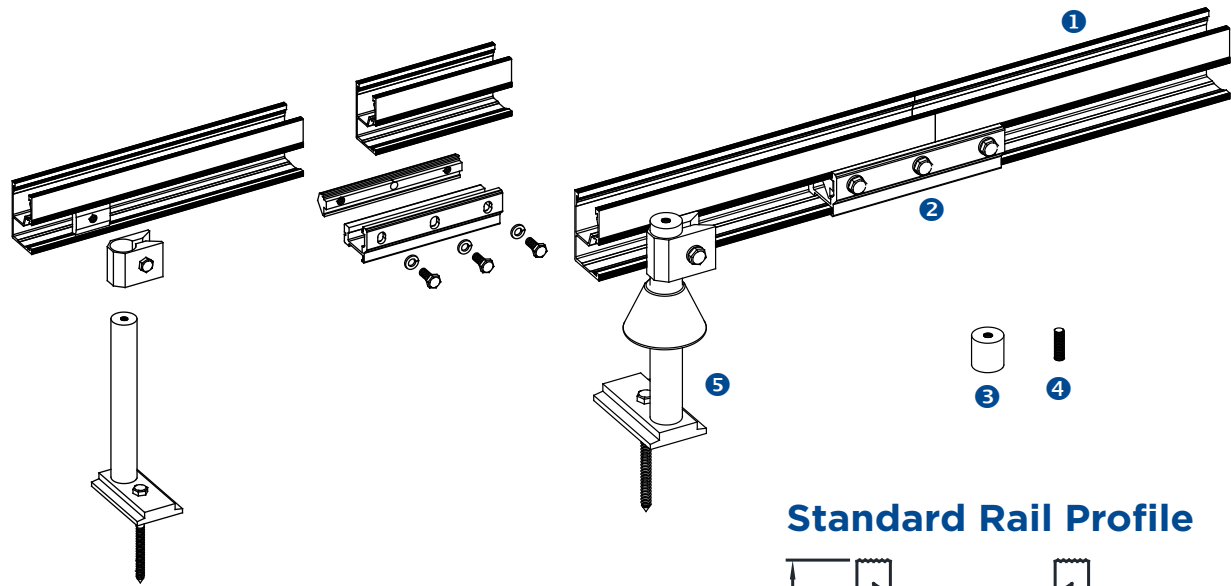
Required Tools:

- Level
- String Line or Spare Rail
- Pitch Meter
- 1/2in Socket Wrench
- 5/32in Allen Key
- Torque Wrench

Materials Needed to Install and Level Rails:

- 1 SnapNrack Standard Rail
- 2 SnapNrack Bonding Splices
- 3 1" SnapNrack Standoff Spacers
- 4 5/16" - 18 X 1" Fully Threaded Set Screw
- 5 Pre installed SnapNrack Roof Attachments (L-Foot Or Standoff)

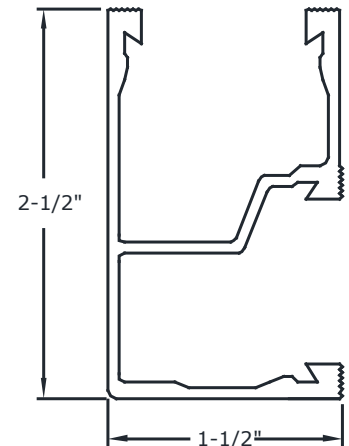
Use with:
Mill Finish
Standoff Parts



Technical Rail Data:

Material	6000 Series Heat Treated Aluminum
Finish	Class 2 Anodized Finish Clear and Black Finish Available Mill Finish Available
Weight	0.75 LBS/FT
Max Span	See Span Charts in Structural Engineering Letters

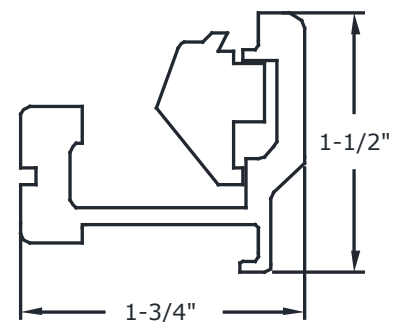
Standard Rail Profile



Technical Rail Splice Data:

Material	6000 Series Heat Treated Aluminum
Finish	Class 2 Anodized Finish Clear and Black Finish Available
Weight	0.64 LBS
Recomm.	1/8" Gap Between Rails

Rail Splice Profile



Step 3: Leveling Rails

1) Set rails into all attachments



2) Level bottom rail



3) Run string line and set pitch



4) Level top



5) Level remaining rails to pitch



6) Tighten hardware



Rail splice

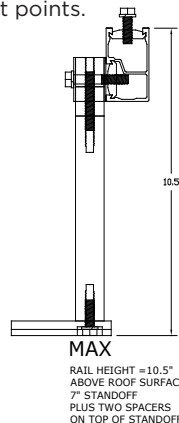
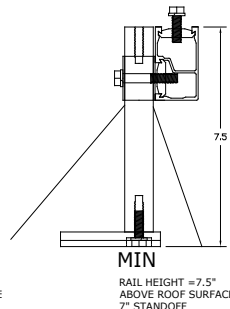
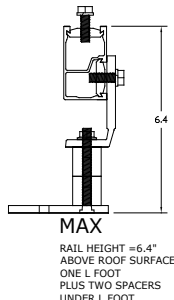
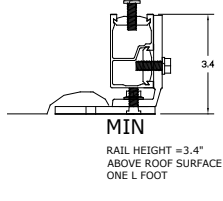


The rail splice is inserted into the channel where two rails butt together. Three bolts are used to tighten the splice.

Use a single level space on no more than 30% of attachment points.

Use a double level space on no more than 10% of attachment points.

***Up To 3" Leveling**



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Step-by-Step instructions

1) Set all of the rails into the attachments by snapping the channel nuts into the side channel of the standard rail. Connect multiple lengths of rail end to end with the SnapNrack splice.

2) Find the highest attachment point of the roof, and set that attachment point to the lowest adjustability. Level the bottom rail of the array to the roof by tightening attachment points. Torque silver hardware to 10-16 ft-lbs and black hardware to 7-9 ft-lbs.

3) Using a string line or spare rails run from the bottom rail to the top rail and raise the top rail, then set the desired pitch of the array by adjusting the top rail. Add leveling spacers if needed.

4) Level the top rail by moving the string line down the length of the rail, matching pitch over the entire length of the array.

5) Level the remaining rails to the string line, working out from the middle rail. Add leveling spacers if needed.

6) Tighten all racking hardware, torque silver hardware to 10-16 ft-lbs and all black hardware to 8-10 ft-lbs.

Notes

- SnapNrack engineered systems should only be used with SnapNrack components and hardware. Any alternate application may void the warranty and structural calculations could become invalid.
- The minimum standoff height between the modules and roof is as follows:
 - REC Solar, Yingli, and Suniva modules: 4.00 in
 - ReneSola modules: 3.93 in
 - Trina Solar modules: 4.53 in

Warning

- If a pilot hole is drilled and a rafter is not found, immediately seal pilot hole with roofing sealant to avoid water damage.
- Do not over tighten hardware.
- Always wear fall protection and safety gear.

Design Tools

- SnapNrack has a suite of design tools to help configure your PV installation to be an accurate and fast install. Please visit us at: www.SnapNrack.com