

Ultra Rail and Splice Installation Training Guide

Overview

- This training guide is intended to provide installers new to the SnapNrack Ultra Rail product with a detailed step-by-step installation process for the rails and splices of this racking system.

Component Details



Ultra Rail Roof Attachments
Pre-installed roof attachments
with Ultra Rail mount hardware



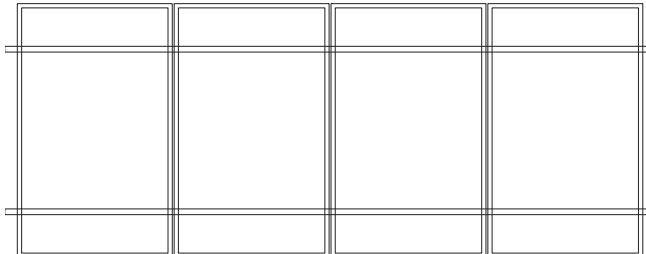
UR-40 Rail
40mm tall rail profile used in
Ultra Rail racking system



Ultra Rail Splice
Component used to connect
multiple sections of Ultra Rail

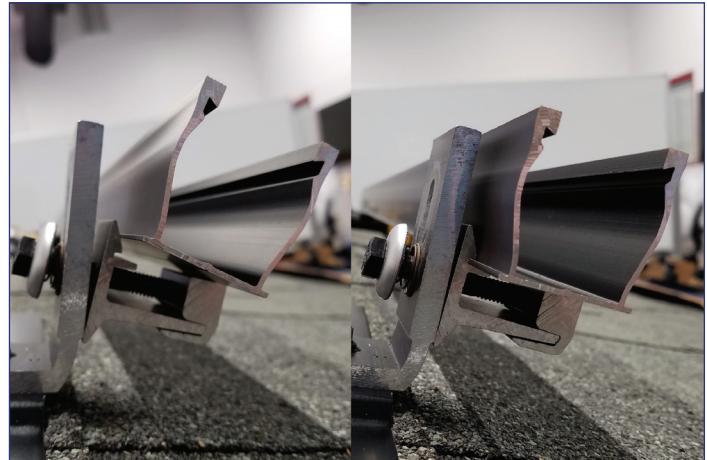
Rail & Splice Installation

- 1** Plan out rail placement based on rail lengths to minimize waste.
Rail is only available in 168" lengths and corresponds with 4 modules in portrait. Optionally, cut and preassemble rail lengths on ground using module width, mid & end clamp width calculations if desired. Rail can also be cut at the end of installation.



- 2** Lift rails to roof and snap into Ultra Rail mounts.

Slightly rocking rail into mounts will ease installation, leading first with side of rail furthest from mount.



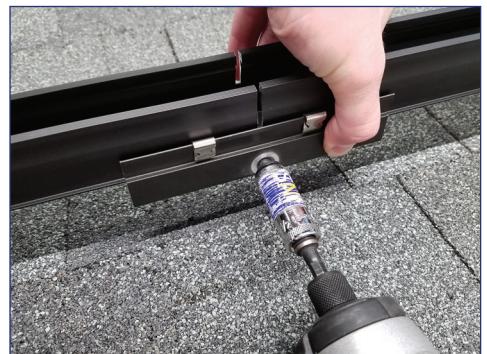
Splice Installation

- 3** Install splices before or after attaching rail to the roof attachments.

Splices can be installed anywhere along rail except where rail is cantilevered. Leave a gap of 1/8-1/4" or use a base plate as spacing tool for consistency.

- 4** Make sure splice halves are completely capturing flanges of both rails when tightening splice.

A good way to do this is to squeeze splice halves together with one hand when tightening with the other. The final torque value should be 12 ft-lbs.



Rail & Splice Installation

Leveling & Squaring Rails

- 5** Level the bottom rail of the array to the roof.
Bubble levels can be used, but a second set of eyes at ground level can also be very helpful. If possible, set mounts in the middle of available leveling range to start.



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- 6** Run a string line or spare rail from the bottom rail to the top rail and set desired pitch of the array by adjusting the top rail.
Add Leveling Extension or spacer if needed (no more than 1 on 30% and 2 on 10% of attachments).

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- 7** Level the top rail of the array.
Bubble levels can be used again, or a string line or extra rail can be moved down the length of the rails to match pitch.

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- 8** Align one side of array by setting top & bottom rails first, then lining up inner rails.
This will decrease the number of cuts required if rails were not cut on the ground.



Rail & Splice Installation

- 9 Level the remaining rails to a string line or extra rail by working out from the middle rail.

If the roof surface is very uneven, work backwards from any high points in the roof and set these at the lowest possible depth. Add Leveling Extension or spacer if needed.



- 10 Tighten mount hardware as rail height and position are set at each roof attachment.

The final torque value should be 12 ft-lbs.

Notes: