IronRidge Roof Mounts

PRODUCT DATA SHEET

KEY FEATURES

- Extruded aluminum components are lightweight for easy handling yet strong enough for most roof mount applications
- Choice of XRL (lightweight) and XRS (standard) rails
- Both XRL and XRS rails come with slots for attaching L-feet and top slots for attaching panel clamps
- XRS rails has slot for bottom mounting clamps
- Hidden internal splice bars are aesthetically pleasing
- Internal splices provide superior strength and flexibility with L-feet placement
- Adjustable L-feet have vertical extension slots for easy adjustability of up to 1-3/8”
- Standoffs provide increased airflow and ventilation and enable precise placement of flashings
- Standoffs come in four standard heights: 3”, 4”, 6”, and 7”
- XR platform compatible with popular flashings including QuickMount and Oatey
- Panel clamps for both top and bottom mounting
- Panel clamps for most popular photovoltaic modules
- Mid-clamp design maximizes panel density
- Ground clips eliminate the need for copper wire between modules
- The IronRidge Roof Mount components are covered with an industry-leading 10 year limited product warranty and a 3 year limited finish warranty
- All IronRidge Roof Mount components are PE certified

IronRidge Roof Mounts is a reliable, comprehensive, and feature rich photovoltaic mounting solution. Anchored by the XRS (Standard) and XRL (Light) rails, the IronRidge Roof Mounts platform includes all of the components necessary for supporting virtually any commercial or residential roof mount installation, regardless of surface material or roof grade.

The XRS and XRL rails are manufactured from extruded aluminum to maximize spans while minimizing weight for improved handling. The graceful curves of the XRS rail will please even the most aesthetically demanding customers. Rails can be extended with the IronRidge patent-pending internal splice bars, providing a strong support connection and ultimate flexibility in footing attachment locations. Installers have a variety of options in attaching IronRidge rails to the roof, including adjustable L-feet, aluminum standoffs, and tilt legs for optimizing power. In addition, IronRidge accommodates modules from most major manufacturers. Top-down panel clamps securely grip the outside frame of the module, freeing the installer from the constraints of panel mounting holes. The XRS rail has an additional side slot to enable the option of bottom mounting. Lastly, grounding clips pierce the anodized rails, creating a ground path through the equipment and eliminating the need to run copper wire between every module.

IronRidge provides a complete technical support system that includes step-by-step installation guides, engineering certification documentation, easy-to-read span charts, and on-line configurator software.

See reverse for additional product specifications. Please contact your local distributor for configuration assistance.

SPECIFICATIONS

- XRL/XRS Rail: 6105-T5 extruded aluminum (anodized)
- XRL/XRS Splice Bars: 6105-T5 extruded aluminum
- Standoffs: 6105-T5 extruded aluminum
- Adjustable L-feet: 6105-T5 extruded aluminum
- Panel Clamps: 5052-H32 aluminum
- Hardware: 18-8 Stainless Steel

XRS PROPERTIES

- Area = .807136 inches^2
- Centroid relative to output coordinate system origin
  - X = 0.5556
  - Y = 1.4097
  - Z = 120.000
- Moments of Inertia of the area (at the centroid)
  - Lxx = 0.8430
  - Lxy = 0.1117
  - Lxz = 0.0000
  - Lyx = 0.1117
  - Lyy = 0.1822
  - Lyz = 0.0000
  - Lzx = 0.0000
  - Lzy = 0.0000
  - Lzz = 1.0252
- Polar Moment of Inertia
  - At Centroid = 1.0252^4
- Principal Moments of Inertia
  - Ix = 0.1638
  - Iy = 0.8614
- Angle between Principal and Part Axes
  - Angle = 99.343 degrees
- Moments of Inertia
  - LXX = 11625.205
  - LXY = 0.5204
  - LXZ = 53.8153
  - LYX = 0.5204
  - LYY = 11623.1909
  - LYZ = 136.5369
  - LZX = 53.8153
  - LZY = 136.5369
  - LZZ = 2.8784

MAX SPAN CHARTS

XRS Rail

	Snow Load (psf)				
Wind Speed (mph)	0 psf	10 psf	20 psf	30 psf	40 psf
90 mph	13.5	12.5	10.5	10.0	9.0
100 mph	13.5	12.5	10.5	10.0	9.0
110 mph	13.5	12.5	10.5	10.0	9.0
120 mph	12.5	12.5	10.5	10.0	9.0
130 mph	11.5	11.5	10.5	10.0	9.0
140 mph	10.5	10.5	10.5	9.5	9.0
150 mph	10.0	10.0	10.0	9.5	9.0

XRL Rail

	Snow Load (psf)				
Wind Speed (mph)	0 psf	10 psf	20 psf	30 psf	40 psf
90 mph	8.5	7.5	6.0	6.0	5.6
100 mph	8.5	7.5	6.0	6.0	5.6
110 mph	8.0	7.5	6.0	6.0	5.6
120 mph	7.5	7.5	6.0	6.0	5.6
130 mph	6.5	6.5	6.0	6.0	5.6
140 mph	6.0	6.0	6.0	5.6	5.0
150 mph	5.5	5.5	5.5	5.5	5.0

LOAD CONDITION ASSUMPTIONS

- Flush roof mounting installations only
- Roof zone 1
- Roof slope = 6 inches per foot
- Module length = 67.5”
- Exposure Category B
- Building mean roof height = 30 feet
- Clearance between roof and rail = 2 inches
- End cantilever span = 40% * adjacent interior span
- No rail splice permitted within the middle ½ of the span

For installations that do not conform to the load condition assumptions above, please refer to www.ironridge.com for a more complete engineering analysis.

L-FOOT DIMENSIONS