

FSS Racking System

The FSS (Flush Support System) Racking System has been developed as a lower profile alternative to the CSS - specifically designed to attach to the main beams (girders) and major secondary supports (purlins). This provides the following major benefits:

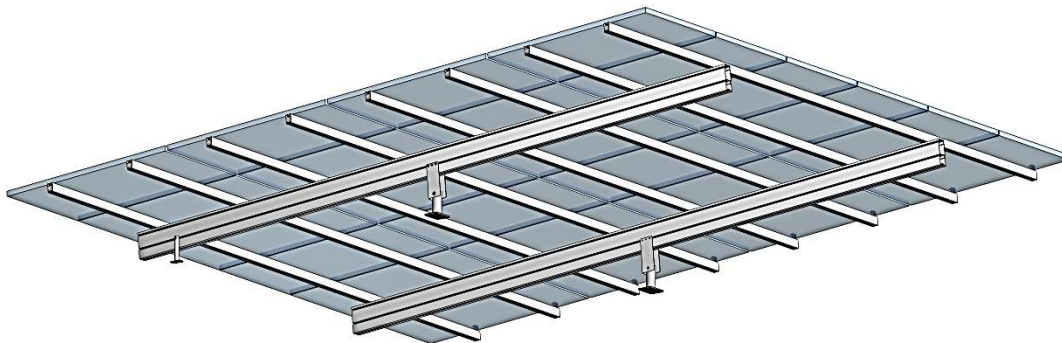
- **Low profile system for sloped roofs**
- **Alternative for metal roof buildings**
- **Flush mount solution for weak roofs**
- **Reduces roof penetrations up to 90%**



Low Profile Solution for Weak Roofs – The FSS

provides a low profile system with a deep main support that can span distances of 24 feet with a 12 foot cantilever capacity. Just like the CSS, the FSS anchors into the strongest roof beams. By anchoring into the roof girders the possibilities for roof mounted solar are open to many more commercial buildings – regardless of their age or construction. Even buildings that don't meet current load requirement standards can still incorporate solar. This strong structure eliminates the need for additional truss sections to make it one of the simplest mounting structures to assemble.

Low Visibility – The FSS is an excellent choice for metal buildings that are visibly exposed where the customer wants the array to follow the slope of the roof. It also works well on flat roofs that have low parapet walls and the customer wants the arrays to be hidden from view.



Reduced Roof Penetrations – The WSS long span racking system can reduce the number of roof penetrations to as little as one for every 12 modules. In addition to the cost savings of fewer penetrations, the owner will have a more trouble free roof life. Any type of main beam including wood beams, steel beams, and open web joist beams can be accommodated by the variety of CSS mounting options. The **SureGrip Claw** is an excellent choice for mounting to steel beams and requires no bolt holes – it just clamps to the steel beam by tightening a single bolt.

ISA Proposal Support – ISA provides plenty of proposal support to help move forward to a successful project. This includes a 3D design package showing the proposed array on the building. ISA can also provide structural guidance if the roof framing drawings are available. This provides confidence that the proposed system will work before beginning the project.

How to Move Forward

Customer Provides ISA with the following solar racking requirements and roof description:

- Size of the array – number of modules and module size
- Roof geometry including equipment on roof – or provide address
- Roof framing drawings - only required for preliminary structural review

ISA provides the following during the proposal:

- 3D Layout of solar array shown on specific roof
- Roof mounting details – if positions and sizes of roof beams are known
- Preliminary structural review

ISA provides the following for the project:

- Complete Racking Assembly Drawing for Permitting
- Roof Mounting Detailed Drawing for Permitting
- Project Specific Installation Instructions

Materials	6000 Series USA Manufactured Aluminum with 300 Series stainless steel fasteners
Weight	400 Pounds for 24 module array (60 cell) 0.95 pound per square foot
Warranty	20 Years
Standard Array Sizes (Other sizes Available)	18, 20, & 24 Module Arrays

