

WSS Racking System

The WSS Elevated Racking System was developed in response to the need to maximize the amount of solar that can be put on commercial rooftops. This Elevated System provides the following major benefits:

- Eliminates shading of solar by AC Units and Walls
- Allows the array to extend to roof edge
- Minimizes roof penetrations
- Easy access for re-roofing and maintenance



Maximizes Usage of Roof – The biggest advantage of the WSS is its ability to squeeze more solar into limited roof space. It is elevated so it can clear the top of most AC units and still provide sufficient venting clearance. Unlike conventional systems it can extend all the way to the edge of the roof providing a fire safety access corridor underneath the array.

W Structural Advantages – The WSS Elevated Racking System ‘W’ structure provides stability with minimal stress on roof members. This rigid base W structure keeps the side reaction loads close to the roof to minimize twisting forces. Tilt angles can be provided up to 20 degrees with onsite tilt adjustment capability to accommodate roof slope variations. This stabilized structure coupled with its wide span capacity allows it to anchor to the strong girders or major purlins.

Reduced Roof Penetrations – The WSS long span racking system typically reduces the number of penetrations to one for every 6 modules. This saves roof sealing costs and leads to reduced maintenance. Any type of main beam including wood beams, steel beams, and open web joist beams can be accommodated by the variety of WSS 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.



Re-Roofing Access - One of the most valuable features of the WSS is its accessibility for re-roofing the building after the solar installation. The WSS is typically 5 to 8 feet above the roof to make it a simple task for re-roofing without the removal of any of the solar components. This means that the building owner no longer needs to wait until the roof needs to be replaced before installing a solar array.

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

Contact ISA so we can help you begin the proposal and project efforts:

Provide us with the following:

- Size of the array – number of modules and module size
- Roof geometry including equipment on roof – or provide address
- Roof framing drawings – if available - so we can provide structural guidance

ISA then provides the following for 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 Drawings shown on Building for Permitting
- Roof Mounting Detailed Drawings for Permitting
- Project Specific Installation Instructions

Materials	6000 Series USA Manufactured Aluminum with 300 Series stainless steel fasteners
Weight	350 Pounds for 24 module array (60 cell) 0.85 pound per square foot
Warranty	20 Years
Standard Array Sizes (Other sizes Available)	18, 20, & 24 Module Arrays

WSS 24 Racking System

