



mounting
systems



Alpha+

The Alpha+ system is a robust mounting system designed and optimized for exceptionally fast and easy installation of PV modules on pitched roofs. Mounting Systems' patented Clickstone technology, internal and external splices, multiple rail options, and extensive pre-assembly speed installation while enhancing system safety and reliability.

Unlimited flexibility

Multiple rail options meet the demands for any project with the 5/40, 10/48, and 13/52 rails. Depending on project specifications, the 10/48 and 13/52 rails are compatible in either Shared Rail or Standard Rail configurations for ultimate design flexibility whereas the lightweight 5/40 rail allows for easy transportation and installation onto the roof. Bond rails using the traditional external splice or the new tool-free, internal structural splice for easy bonding and a simplified installation.

Significant savings

Alpha+ has been specifically designed to minimize installation times. Labor is decreased by click, set, and done Clickstone technology on all module clamps. Shared rail configurations can drastically increase savings by reducing roof penetrations and material use.

Aesthetically Pleasing

The Alpha+'s improved design provides vertical adjustability to help compensate for roof irregularities and to make leveling the PV array easier. Black painted rails as well as an optional wind skirt are also available for enhanced aesthetic appeal. Mounting Systems' Flashing provides discrete and watertight connection to the roof structure.

Structural reliability

Alpha+ is ETL listed as a Class A Fire Rated system with Type 1 and 2 modules. Fully integrated, ETL listed UL 2703 system bonding eliminates third-party components and further speeds installation. For a PE-stamped, project-specific structural analysis, Mounting Systems' Design Tool can calculate any specific configuration within minutes, along with verification to the appropriate building codes and national standards.

Maximum service life

All components are made of extruded aluminum and stainless steel. This guarantees both full recyclability and maximum service life due to high resistance to corrosion.



On-roof



Framed module



Frameless module



Orientation portrait



Orientation landscape



Double Roman Tiles



Slate



Plain Tiles



Corrugated metal



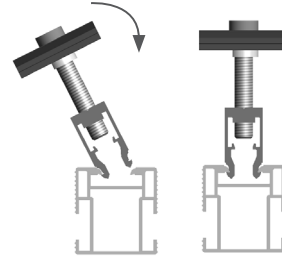
Comp shingle



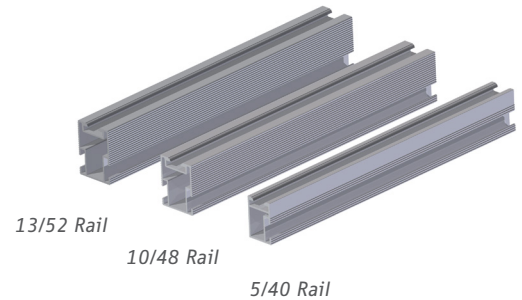
Shared rail



Application	<i>Pitched roof – on-roof</i>
Roof types	<i>Suitable for most types of roof cladding</i>
Roof slope	<i>Up to 60° ¹</i>
Building height	<i>Up to 65 ft • 20 m ¹</i>
PV modules	<i>Framed or frameless</i>
Module orientation	<i>Landscape, portrait</i>
Size of module array	<i>Any size possible ²</i>
Position of the module array	<i>No special requirements</i>
Distance between roof attachment points	<i>Up to 10 ft / 3 m ¹</i>
Standards	<i>IBC 2009 IBC 2012 ASCE 7-05 ASCE/SEI 7-10 CBC 2013 UL 2703 ULC ORD C1703 ANSI/AISC 360-05 ACI 318-08 Aluminum Design Manual 2010 Eurocode 1-DIN EN 191-1-1 – Actions on structures Eurocode 9 – Design of aluminum structures</i>
Supporting profiles	<i>Extruded Aluminum (EN AW 6063 T66)</i>
Rail Options	<i>13/52 Rail 10/48 Rail 5/40 Rail</i>
Hooks, small parts	<i>Stainless steel (V2A)</i>
Color	<i>Mill finish or black paint</i>
Warranty	<i>10 years ³</i>



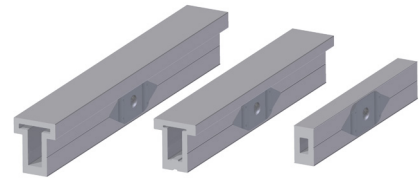
Clickstone clamp installation



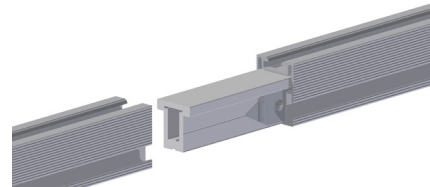
13/52 Rail

10/48 Rail

5/40 Rail



Internal Splice



Internal Splice and Rail Installation



¹ Different maximum values may apply, depending on site, building, choice of roof attachments and module type.
² The Mounting Systems QuickConfigurator can be used to verify the structural adequacy of each specific project quickly and easily.
³ For details, please consult Mounting Systems, Inc. full warranty document, available upon request.