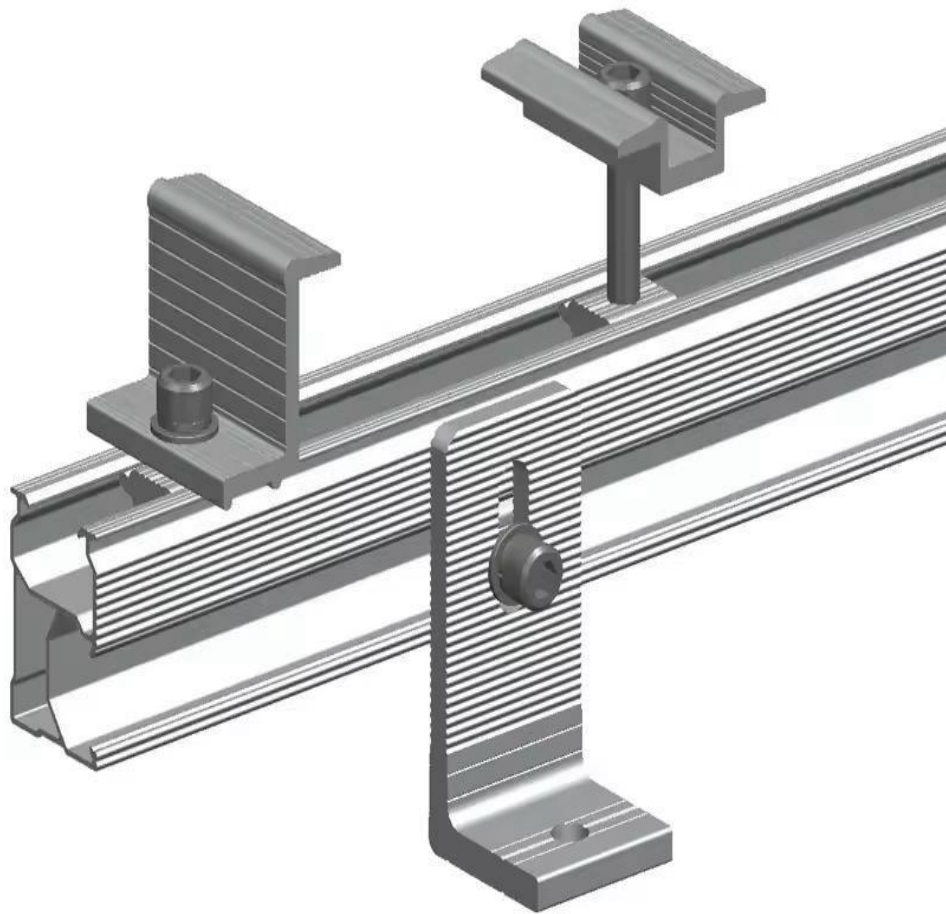


Complete Roof Mount Package for Shingle Roof



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Introduction: -

The ROCKSOLAR Complete Roof Mount Package for Shingled Roofs is engineered for professional solar installations, combining structural strength and weatherproofing. It includes premium rails, L-brackets, and RoofTech RT-MINI II mounts with pre-applied butyl flashing for superior waterproofing. Designed for ease of assembly and code compliance, this system ensures secure, long-lasting solar panel mounting on residential and light commercial roofs.

Package Content: -

- KJS2-MM Joiners (If needed)
- Kinetic Solar Rapid Rail KRAPID1 (140, 185, 256 Inch.) Mill Finish
- Roof Tech - RT-MINI II (Base, 2x Screws and 1x RT 5/16-1" Hex Bolt & Flange Nut)
- Kinetic Solar KMWC3046-MM Mid Clamp
- Kinetic Solar KMWC3046-MM End Clamp
- KLB3-M 3 INCH L -BRACKET KITS (4/5 inches)
- Grounding Lugs

Work on a dry roof:

Always perform installation during dry weather to prevent slipping and ensure proper adhesion of flashing materials.

Use proper fall protection:

Wear a safety harness and use roof anchors when working at heights.

Wear protective equipment:

Gloves, safety glasses, and non-slip footwear are recommended during installation.

Check structural integrity:

Ensure the roof and rafters are in good condition and capable of supporting the solar array load.

Handle tools carefully:

Use insulated tools for electrical connections and follow manufacturer torque specifications to avoid damage.

Avoid over-tightening:

Do not over-tighten screws or bolts, as this may deform components or compromise waterproofing.

Follow local codes:

Comply with local building and electrical codes for all roof penetrations and solar system installations.

1) RoofTech RT-MINI

Mark rafter locations with chalk lines. Place the RT-MINI II base, peel the butyl tape backing, and press firmly onto shingles for a watertight seal. Insert the 5/16" flanged bolt, then secure with two M5.0 × 60 mm screws into the rafter. Apply roof sealant around edges for UV protection before attaching L-foot adapters and rails.



2) 3" L Bracket Kit

Insert the 5/16" flanged bolt into the channel of the installed RoofTech RT-MINI II bracket. Place the L-Bracket onto the bolt and adjust it to the correct height and alignment.

Secure the L-Bracket by tightening the flange nut to the recommended torque. Ensure the L-Bracket is vertical and ready for rail attachment in the next step.



3) Install rail (140 Inch)

Align the top edge of the rail directly over the upright portion of the L-Bracket. Slide a T-head bolt or carriage bolt through the L-Bracket slot into the rail's channel, ensuring the bolt head fits securely.

Horizontally align the rail across all brackets for a level installation. Once properly aligned, tighten the nut to the manufacturer's specified torque to lock the rail firmly in place.



4) Install End clamp and Middle clamp: -

Mid-Clamp:

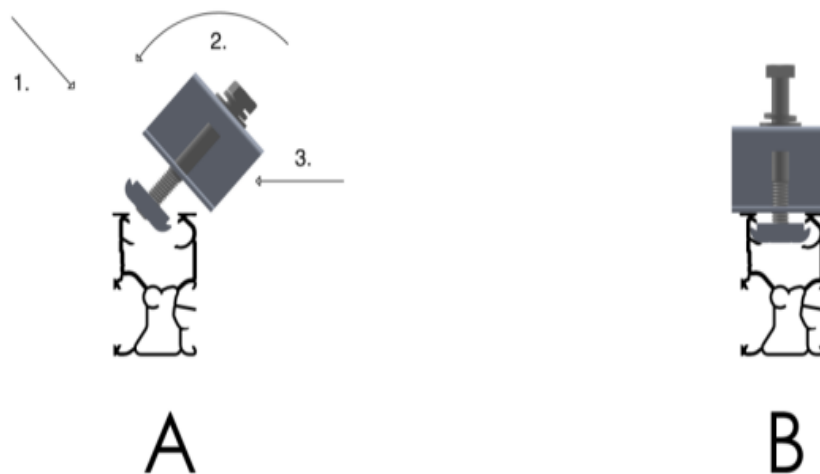
- Positioned **between two adjacent panels**.
- The clamp's T-bolt slides into the rail, sandwiches the panel frames, then is tightened with a nut to secure them together.

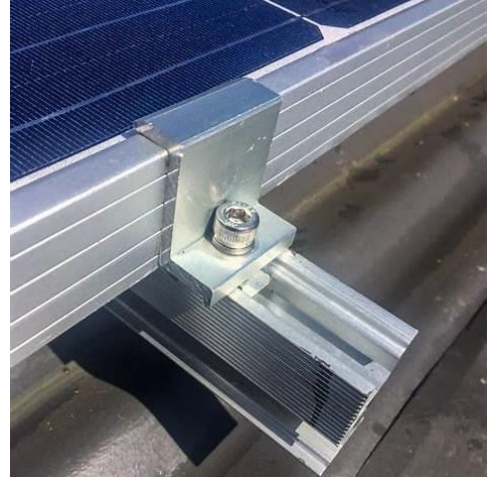
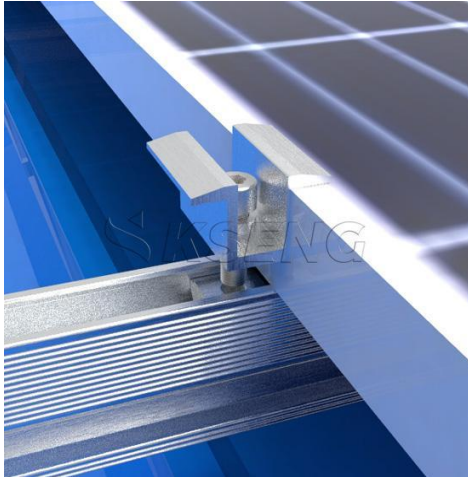
End-Clamp:

- Placed at the **outer edge** of the panel array.
- It grips the panel frame and secures it to the rail's edge using a T-bolt and nut.

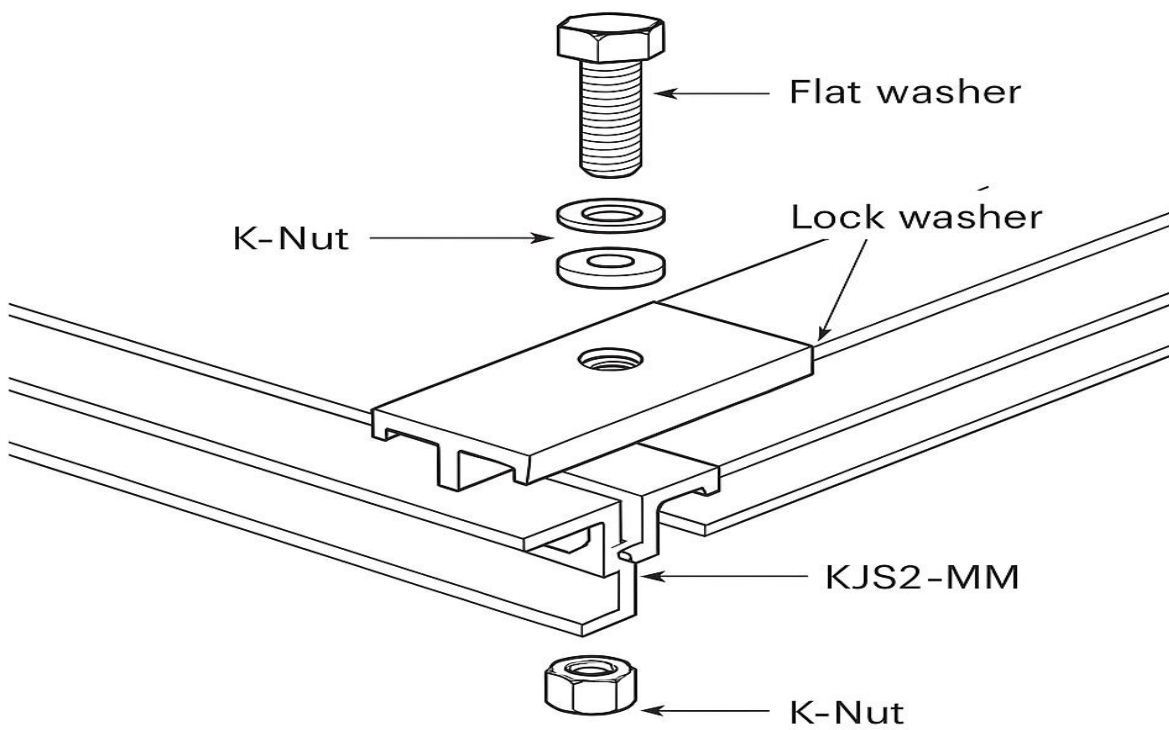
Place the solar panel on the rails, leaving a small gap between panels. Insert a mid-clamp into the rail slot at the junction of two panels, align it with panel edges, and tighten the nut to secure both panels.

At the array ends, use an end-clamp on the rail edge, align with the outer panel frame, then tighten the nut to firmly hold the panel in place.





5) Joiners (If needed): -



Slide a K-Nut into the deep channel of each rail section and rotate it flat to lock in place. Align the KJS2-MM joiner across the rail ends, ensuring proper positioning.

Insert the 5/16" bolts with washers through the joiner into the K-Nuts. Tighten all bolts evenly for a secure connection.

6) Grounding Lugs



Slide a K-Nut into the rail's deep channel, positioning it under the chosen lug location. Set the grounding lug over the rail with the green barbed bolt facing the rail surface to ensure proper bonding. Insert the bolt with its washer through the lug and thread it into the K-Nut. Connect your copper grounding conductor to the lug's terminal, ensuring proper strain relief and routing along the rail.

8. Warranty & Support

For warranty and support, please contact ROCKSOLAR Customer Support.

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Email: support@rocksolar.io

Phone: +1 5195047970