



# KINETIC SOLAR HIDDEN END CLAMP INSTALLATION GUIDE

*UL 2703, TIL A-40 Listed*





Kinetic Solar  
65 Martin Ross Ave.  
www.Kineticsolar.com  
Tel: 1-416-665-3755  
Toll Free: 1-855-655-3755

## Commercial | Residential | Industrial | Institutional

### Disclaimer

Before attempting to install, operate or service a Kinetic Solar racking system, all instructions should be read and understood. Failure to follow these instructional guidelines may result in injury, property damage or death.

Kinetic Solar Racking and Mounting Inc. (Kinetic Solar) does not install any racking or mounting systems components. Kinetic Solar Racking and Mounting does not hold any duty or responsibility for the safe and proper installation and/or maintenance of its racking and mounting systems, including job site safety standards and procedures.

All installation work must comply with the applicable regional and local regulations or other national or international electrical standards and are the sole responsibility of the installer, contractor and/or developer.

Kinetic Solar Racking and Mounting shall not be held responsible for damages of any kind, including but not limited to injury, property damage or death. Kinetic Solar Racking and Mounting Inc. shall not be held responsible for the misuse or non-compliance with the instructions detailed in this manual including handling solar modules, solar racking or system installation.

Packing materials, including plastic bags and foam, may pose suffocation, choking, or injury hazards. Keep away from children and animals. Dispose of packing materials responsibly per local and provincial regulations. Recycle through local programs where applicable.

Installation should not be performed during adverse weather conditions, which can compromise personal safety and the integrity of the installation. Exercise caution during installation.

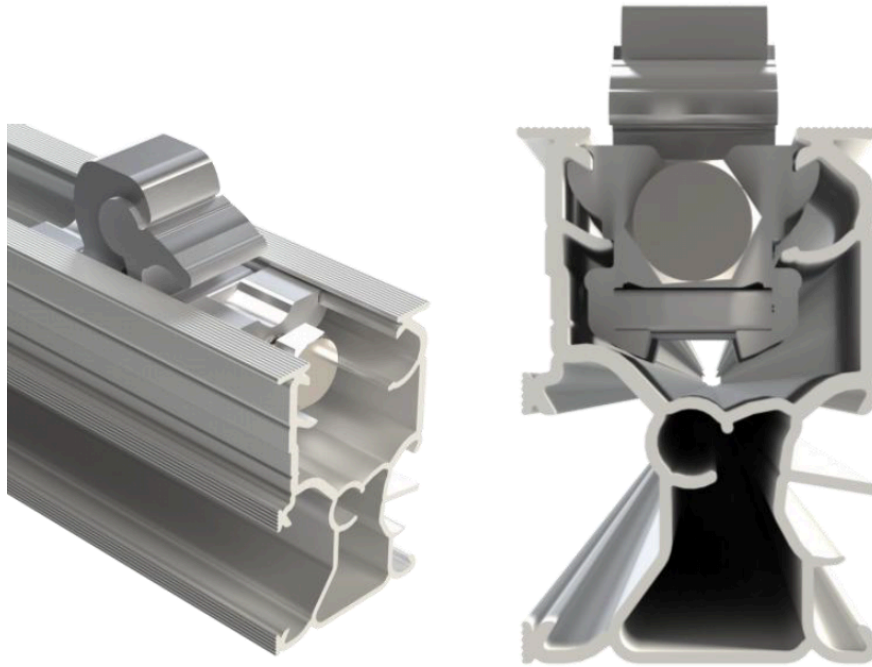
As specified in UL 61730-1 5.2.3DV, PV modules are considered to be in compliance with the mechanical loading and bonding and grounding requirements of UL 61730-1 when mounted, bonded and grounded in the manner specified by either the PV module mounting instructions, or the mounting system manufacturer's instructions when the mounting, bonding, and grounding means have been evaluated with the PV module to UL 2703. Fasteners shall be clean and free of damage or signs of corrosion during installation.

The instructions contained in this manual are exclusive to the products referenced. Use of any other products in conjunction with the listed products is done at one's own risk. Please retain this manual for future reference. Kinetic Solar reserves the right to make additions, deletions and modifications to the content of this document without prior notice.

## Hidden End Clamp

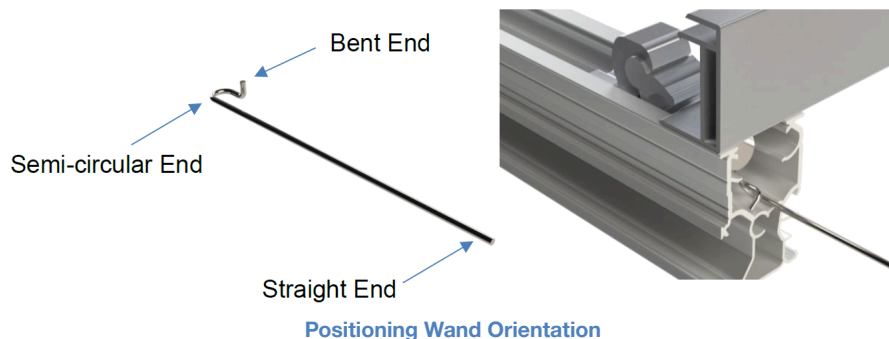
The unique design of the Hidden End Clamp (KECHC8) securely interlocks with the Rapid1 Rail's profile, while the lever firmly clamps the top surface of the module frame's return onto the rail when the bolt is tightened from the rail's end. If any rails need to be cut, you must cut the rail before installation.

1. Insert the Hidden End Clamp into the Rapid1 rail from the end of the rail, enough to clear the panel's return approximately 1.5" inches from the end of the rail, with the hex bolt facing toward the end of the rail.



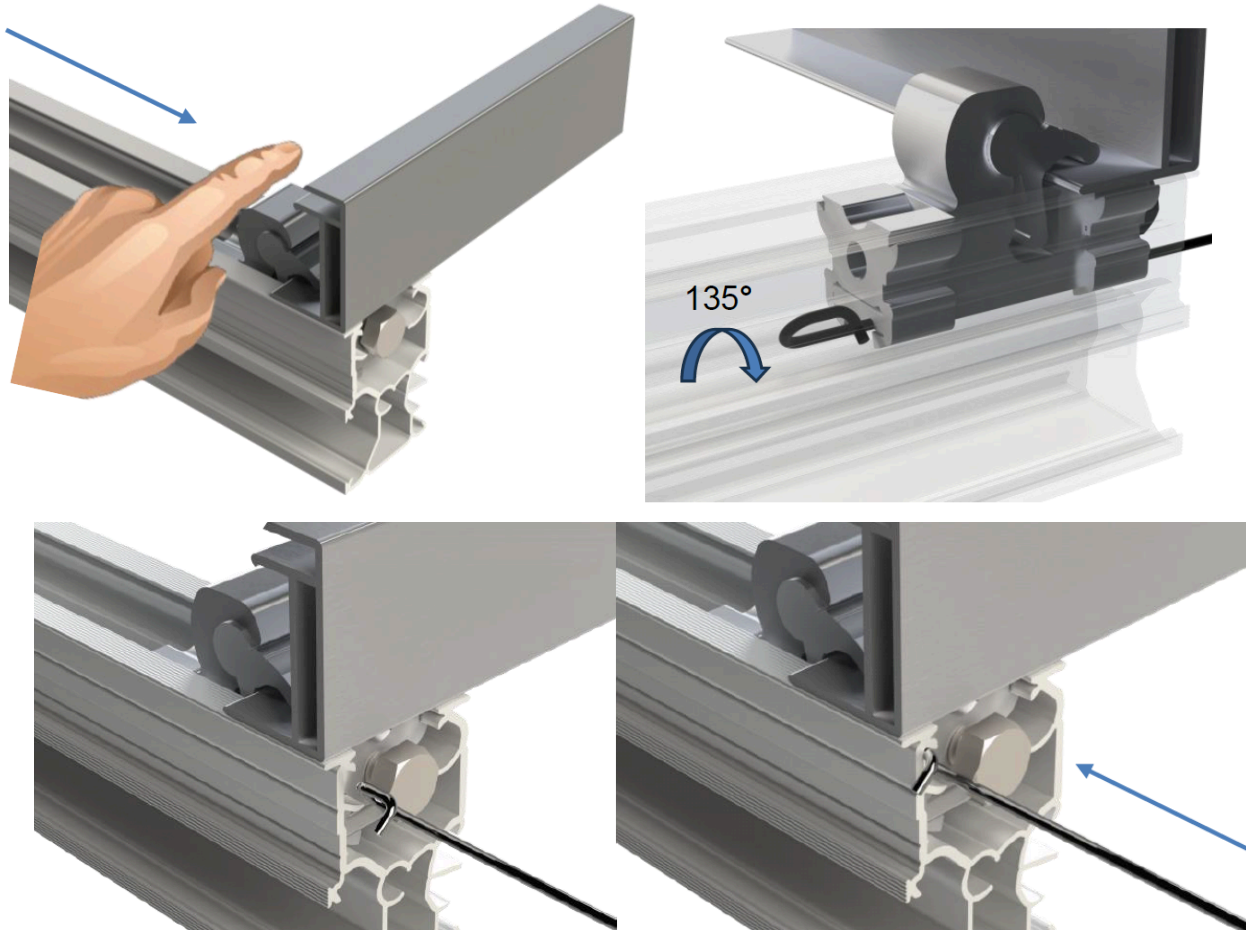
Hidden End Clamp Inserted in the Rail

2. Place the module on the rail so that the edge of the module is flush with the end of the rail. Orientate the Positioning Wand so that the shaft and bent end touch the bottom of the upper rail channel at the same time. Hold the Positioning Wand on its straight end and slide it forward under the clamp until your fingers touch the end of the rail.



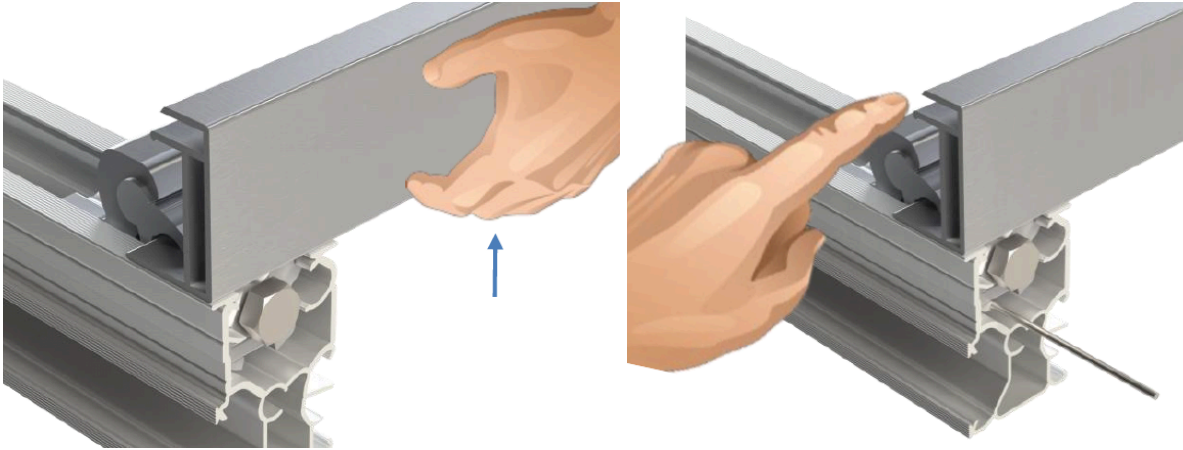
Positioning Wand Orientation

3. Rotate the Positioning Wand clockwise  $3/8$  of a turn (approximately  $135^\circ$ ), and the bent end should now be vertical. Pull the Positioning Wand towards you stopping when Clamp Lever touches the return of the module. Rotate the Positioning Wand counterclockwise  $3/8$  of a turn (approximately  $135^\circ$ ) and remove the Positioning Wand. Alternatively, you may position the Hidden End Clamp each under the module frame with your index finger and slide the clamp body toward you stopping when Clamp Lever touches the module's return.



Hidden End Clamp Positioning

4. Use the Positioning Wand as a depth stop and place the semi-circular end against the Clamp Body and push forward until the bent end touches the end of the rail.
5. a) Fastening Option #1: Use your hand to apply upward pressure on the underside of the panel and use a  $1/2$ " socket to tighten the Hidden End Clamp, to ensure the clamp will not be pushed forward.  
  
b) Fastening Option #2: Alternatively, reach under the module frame and use your index finger to hold the Clamp Body in place. This prevents the clamp from shifting forward when you tighten it with a  $1/2$ " socket.



Fastening the Hidden End Clamp

6. After tightening the bolt, the module should be flush with the end of the rail, and the bolt should be flush with or recessed into the rail's end. Remove the Positioning Wand and ensure the bolt is fastened to 12 ft-lbs. Install the left and right Rail End Caps accordingly.

## About Us

Kinetic Solar is a North America-based manufacturer with 45+ years of experience.

Our signature K-Rack™ product line is recognized within the industry for its ease of installation, superior quality, and useful features. Kinetic Solar is the trusted choice for any solar system.

The Specifications and key features contained in this manual may deviate slightly from our actual products due to ongoing innovation and product enhancement. Kinetic Solar reserves the right to make necessary adjustments to the information described here at any time.

We ask that any K-Rack™ product should be handled by qualified professionals during installation and that all installation instructions are followed as per our installation guide.

Toll Free: 1-855-655-3755  
Tel: 416-655-3755  
E-Mail: [info@kineticsolar.com](mailto:info@kineticsolar.com)

1-65 Martin Ross Ave, North York, ON M3J 2L6, Canada