### INSTALLATION OF XPRESSRAIL SYSTEM: STEP BY STEP



#### MOUNT XPRESSCLIPS

Align XpressClips horizontally with each other using a chalk line, and mark the position of the rail on the roof. Mount each XpressClip onto the high bead. Point the K2 logo up toward the roof ridge. The minimum distance from the roof edge must be 59 inches. The XPressClips are each fastened with two self-tapping hexagonal screws 6 x 36 mm with EPDM seal washers.

- ¬ No pre-drilling! Except in the case of overlapping trapezoidal roof sheets, to avoid spaces.

  ¬ Thickness of steel trapezoidal sheet: min. 0.0179 inch,
- gauge 26 (assuming 52213 psi)
- ¬ Thickness of aluminum trapezoidal sheet: min 0.039 inch, gauge 18 (assuming 28282 psi)

Tightening torque based on flush fit.

Materials required: XPressClip, tapping screws with sealing washer



### PLACE XPRESSRAIL

Guide the XPressRail diagonally into the upper groove of the first two XPressClips attached on the roof and push upward until they can go no further.

Lay XPressRail onto the supporting area of the XPress-Clips and push into the lower groove.

Materials required: XPressRail



### CONSIDER THERMAL EXPANSION

The XPressRail must always be built in the clamping range approved by the module manufacturer.

However, due to thermal expansion, we recommend that the rows be interrupted after 20 ft; they must be interrupted after a maximum of 27.6 ft (2 x 13.8 ft). The minimum spac-

ing for thermal break is 1.2 - 2 inch between two rails.

The modules may never be attached over the thermal expansion joint.

Materials required: XPressRail



### LOCK XPRESSRAIL IN PLACE WITH ADDITIONAL

In the low beads, add XPressClips onto the rail, push the XPressClip up on the rail. Then slide the XPressClip down until the top groove of the XPressClip is engaged in the flange of the rail and slide the XPressClip sideways on the rail until it is positioned on the top bead of the trapezoidal roof.

Materials required: XPressClip



### FASTEN XPRESSCLIPS

Attach each XPressClip with two self tapping screws 6 x 36 mm. The number of additional clips required depends on the wind and snow loads.

Screw the self-tapping screws flush.

Materials required: XPressClip, self tapping screws with sealing washer





# sealing washer

INSTALL SPEEDLOCK

The XPressLock must always be mounted in the middle of the rail. First insert an M K2 slot nut level with a XPress-Clip and turn it clockwise by 90°. Screw the XPressLock over the XPressClip with the M K2 using an M8  $\times$  20 counte sunk head screw. The XPressClip fastens the XPressLock and therefore the row of rails.

Distances between two clips are project specific and

¬ Roof middle area: 29.5 inch; for cross-bracing 19.6 inch

In order not to compromise structural integrity, never attach two XPressClips to the same top bead!

For rail joints directly on a top bead: always fasten XPress-

Important! At the end of each rail, a XPressClip must be fastened to the last top bead! The cantilever of the

Materials required: XPressClip, self tapping screws with

Clips to the respective closest top bead of the rails.

can be calculated by our calculation software Everest Base:

otherwise the maximum distance for:

rail must not be more than 9.8 inches.

¬ Roof edge area: 15.7 inch

Tightening torque 10.3 lbf-ft (14 Nm).

Materials required: M K2, XPressLock, Hexagon socket countersunk head screw M8 x 20



ATTACH MODULES

First, insert the slot nut M K2 in the XPressRail and turn  $90^{\circ}$  clockwise. If the end and middle clamps are supplied as a set, please attach the whole set in the rail. Clamp the solar modules onto the rails according to the manufacturer's

Tightening torque moment 10.3 lbf-ft (14 Nm).

Materials required: M K2 slot nuts, end clamps, Allen bolt M8, locking washer S8

Each module at the end of a row is to be fastened with end clamps and Allen bolts M8 and slot nuts.

### Important instructions for assembly

- ¬ Slot nuts at butt joints of the rails must be avoided!
- ¬ Never mount middle or end clamps directly onto the rail joint or rail end! (Distance: min. 0.8 inch from end clamp)
- The modules may never be fixed over the thermal expansion joint.





The XPressRail System is simple and fast to install. Please contact us for further assistance:

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# Mounting systems for solar technology





## **EVEREST SOLAR SYSTEMS** XPRESSRAIL SYSTEM METAL ROOF SOLUTION



XPressRail 22

Material: Aluminum



XPressClip

Material: Glass fibre reinforced polyamid, EPDM



Self-Tapping Screw 6x36

Material: Stainless steel with EPDM Washer SW8 6 x 36 mm



M K2 Slot Nut With Clip

Material: Stainless steel, Glass fibre reinforced polyamid



XPressLock Set

Material: Aluminum, Stainless steel



Module Middle Clamp

Material: Aluminum



Module End Clamp

Material: Aluminum





Burndy KMC WEEB CLIP Material: Stainless steel

Use with Everest Mid Clamps to bond modules

to the XpressRail