Figure 1

Module Clamp Kits

One of the main problems with installing and seaming any trapezoidal roof system has been the difficulty of holding the panels accurately on module. This especially evident when installing ultra-long panel runs with panel laps and /or meeting the higher energy code demands which require thicker faced fiberglass blanket insulation systems. There have been numerous devices that erectors have used to keep a trapezoidal roof panel on module, but none of them have been very effective. BRS has designed a groundbreaking clamp/bar Module Clamp Kit which includes one Alignment Bar and three aluminum specially notched T-Bar Spacers to ensure the panel and clips are installed properly on module.

The **patented** Module Clamp with the alignment bar are spaced approximately 20'-0" away from each other and the aluminum spacer

T-Bars are recommended to be no more than 10'-0" apart. The alignment bar locks the panel corrugation into the design dimension, even if the panel was slightly deformed during shipment or

other facets of installation that may cause the panel corrugation to spread or shrink. The Alignment Bar locks into the Module Clamp and holds the clip and the panel leading edge on module until the clip fasteners are installed while the notched T-Bar spacers located at the same clamp location on the preceding panel and approximately 10'-0" upslope and downslope assist in holding the panel modularity. The Module Clamp, Alignment Bar and T-Bar spacers are used during panel installation, but the Module Clamp can also be used to assist in seaming of a roof that has been installed out of module.



We have tested the Module Clamp, Alignment Bar along with the three notched T-Bar spacers on several roof mockups and the kit components did an exceptional job of forcing the panel to stay on module, compared to the existing gauges that only try to hold the top of the panel seam on module. The Module Clamp Kit is extremely easy to use and will replace the pre-drilling of the clip fastener holes in purlins. Figure 2 shows how the Module Clamp is forcing the panel corrugation into the design dimension, and the Alignment Bar, which is connected to the Module Clamp in place over a panel clip, is holding the panel leading edge and panel clip vertical, at the exact on module position. Once two completed corrugations are installed, one of the notched aluminum T-Bar Spacers is placed at the Module Clamp location on the preceding installed panel by slipping the notched end under the seam and the opposite end is placed on the backside of the shoulder of the previous corrugation then the remaining two notched T- Bar Spacers are installed approximately 10'-0" up and downslope from the module clamp location on the panel being installed in the same manner.

Many times, panel corrugations are deflected out of dimension by shipping, packaging constraints and handling, making it difficult in holding the panel width module during installation.





BRS Inc. has developed an innovative patented Module ClampTM Kit to easily hold the TS-324TM panel on module.

Recommended use of the Module Clamp, Alignment Bar and the three T-Bar Spacers during roof panel installation

After the first two runs of panels are installed, but prior to the installation of the next run of panels clips, place the Module Clamp over the panel corrugation at the eave, end lap and ridge of a two panel run, or on the second end lap if the roof run has more than one end lap.

Place the Alignment Bar on the Module Clamp and over the panel at the eave, and the clip at the end laps and ridge. Place one notched T-Bar spacer on the installed preceding panel at the same modular clamp location(s) placing another T-Bar spacer up slope along with the remaining T-Bar spacer downslope approximately 10'-0" away. (See figure 2).

Install fasteners in the panel pan at eave and clips at the end lap and ridge. Then install the remaining panel clips. Remove the Alignment Bar and install the next panel run. After the next panel run is rolled in place, remove the Module Clamp and replace it in the same location, over the just installed panel seam, then place the alignment bar over the panel and clip, at the panel leading edge.

Repeat this process as the remaining roof panel runs are placed. On roofs with panels and/or insulation systems that are extremely out of module, more than three Module Clamp Kits may be required. It may also be necessary to leave the Module Clamps and notched T-bar Spacers on the previously installed panel run when placing the Module Clamp Kits on the next panel runs.

Use of the Module Clamp Kits to seam a roof that has been installed out of module.

If the roof panels are installed out of module, seaming becomes increasingly difficult because the portions to be seamed are not in proper alignment. Module Clamp Kits are ideally suited to pull the seam portions of the pane corrugation into proper alignment, ahead of the seamer.

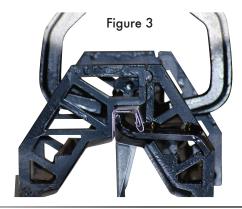


Figure 3 shows the Module Clamp locking the panel and clip in their proper alignment.

We believe this tool kit will improve the installation of the TS-324 roof system and minimize seaming problems by accurately holding the panel on module.

We suggest you include a minimum of three Module Clamp Tool Kits in each TS-324 roof shipment and offer a refund if the tools are returned at the end of the roof installation. See BRS website for Technical Bulletin "Use of Module Clamp/Bar on TS-324 number TS16 dated July31, 2016.

The Module Clamp, Alignment Bar and three notched Aluminum T-Bar Spacers are available from BRS for a very reasonable cost-plus shipping.

We usually have a limited supply of the tool kits in stock for immediate shipment.

Submit your orders to: Building Research Systems, Inc. PO Box 5816 Edmond, OK 73083

Phone: 405.607.8877 • Fax: 405.607.2828 e-mail: therren@brsusa.com