

**GENERAL DETAILS**

FA2010 - BRIDGE STARTER INSTALLATION

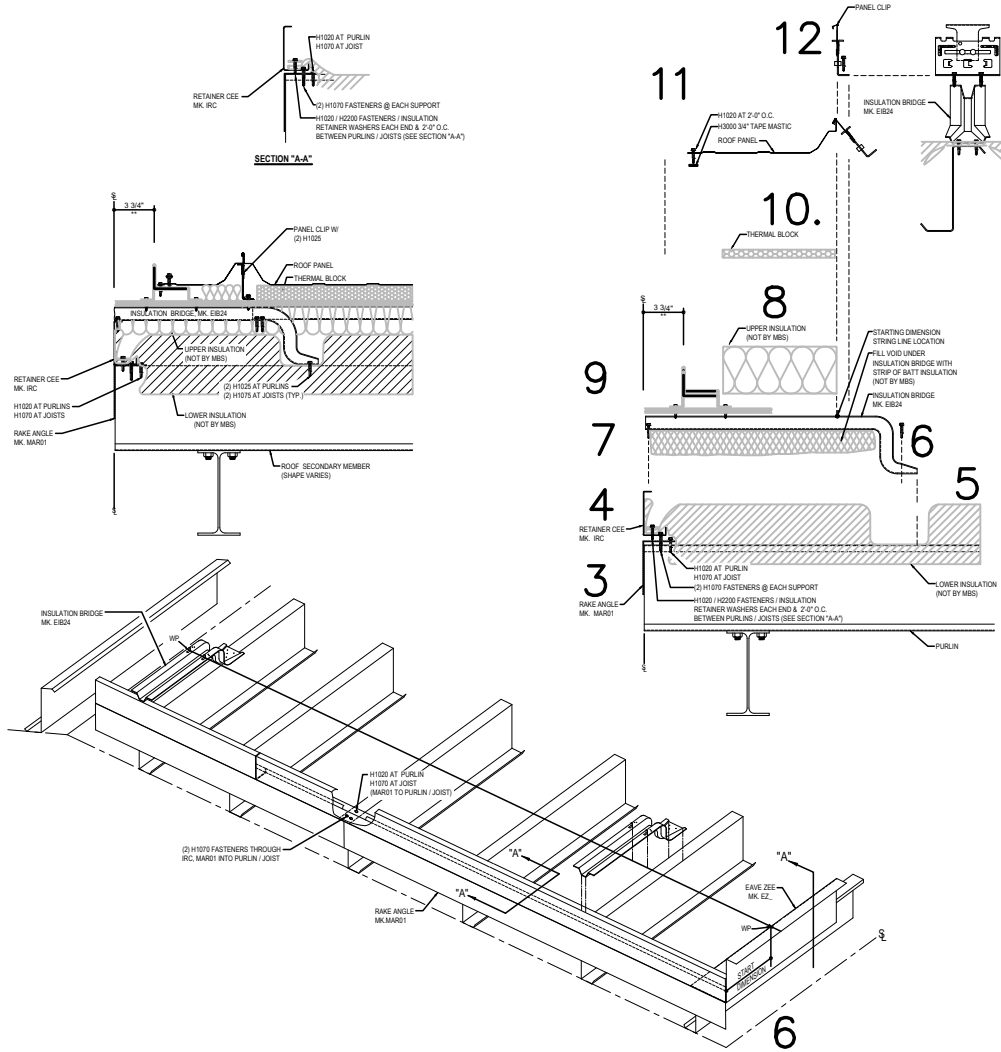
FA2012 - INTERMEDIATE BRIDGE INSTALLATION DETAIL

FA2013 - ENDING BRIDGE INSTALLATION DETAIL

FA2035 - CFR START - FINISH PANEL WIDTH DETAIL

### FA2010 - BRIDGE STARTER INSTALLATION

Download the DWG file by clicking [here](#).



1. FIELD CUT FIRST PANEL THE WIDTH HAS BEEN PRE-DETERMINED AND THE DIMENSION IS LOCATED ON THE ROOF SHEETING PLANS OF THE ERECTION DRAWINGS. THIS PANEL DIMENSION IS CONSIDERED AS THE STARTING DIMENSION.
2. FIELD CUT FIRST RUN OF INSULATION BRIDGES. THE WIDTH OF THE INSULATION BRIDGE IS MEASURED FROM THE BRIDGE LOCATING TAB TO THE END OF THE BRIDGE. THE WIDTH IS EQUAL TO THE WIDTH OF THE FIRST PANEL MINUS 1/4". (SEE BELOW AND SEE INSULATION STARTING DIMENSION DETAIL.)
3. RAKE ANGLE MK. MAR91 TO BE INSTALLED OVER THE ENDS OF THE PURLINS BEFORE THE INSULATION RETAINER CEE IS INSTALLED USING H1020 FASTENER AT EACH PURLIN. USE H1070 FASTENER TO ROOF JOIST. NOTE THE DETAIL THAT THE SCREW MUST BE LOCATED AT THE OUTER EDGE OF THE TOP LEG IN ORDER TO ACCEPT THE RETAINER CEE.
4. INSTALL THE RETAINER CEE MK. RC TO THE RAKE ANGLE ALONGING BOTH TO THE STEEL LINE. ATTACH RETAINER CEE THROUGH RAKE ANGLE INTO PURLIN JOIST USING H1070 FASTENERS AT EACH PURLIN LOCATION. PRE-DRILLING MAY BE REQUIRED WITH JOISTS OR WHEN PURLIN THICKNESS IS GREATER THAN 13 Ga.
5. ROLL OUT THE FIRST SECTION OF LOWER FACED INSULATION (TYPICALLY WIDE ROLL) FROM THE HIGH EAVE / RIDGE TO LOW EAVE ZEE. TUCK THE INSULATION INTO THE RC AND ATTACH WITH H1020 & H2020 FASTENER / INSULATION RETAINER WASHER AT EACH END OF RC AND 2'-0" O.C. BETWEEN PURLIN / JOISTS.
6. THE FIRST RUN OF THE INSULATION BRIDGES REQUIRES SETTING A STRING LINE FROM THE LOWER EAVE TO THE PEAK PURLIN OR HIGH SIDE EAVE MEMBER. THE STRING LINE DIMENSION IS BASED OFF THE START DIMENSION. THIS WILL ESTABLISH A CONSTANT LINE THAT THE BRIDGE PANEL CLIP TABS WILL ALIGN WITH. AFTER THE LINE HAS BEEN ESTABLISHED, INSULATION BRIDGES ARE INSTALLED BY ATTACHING TO THE RETAINER CEE AND PURLIN. INSULATION BRIDGES ARE LOCATED AT EVERY PURLIN AND A LOW EAVE ZEE.
7. FILL VOID UNDER INSULATION BRIDGE WITH A STRIP OF BATT INSULATION.
8. INSTALL UPPER INSULATION DIRECTLY ON TOP OF THE LOWER INSULATION. THE WIDTH OF THE UPPER INSULATION WILL BE THE SAME WIDTH OF THE STARTING PANEL (FIELD CUT WIDTH AS REQUIRED).
9. RAKE CLIP AND RAKE ANGLE INSTALLATION SETTING OF RAKE ANGLE POSITION IS CRITICAL AS IT WILL ESTABLISH ROOF POSITION AND ALIGNMENT. Slide the rake clips on to the rake angle (MAR92) prior to installing the angle. This assembly method allows the rake angle to move with the thermal expansion and contraction of the roof panels. Rake clip part numbers: H2051 at all eaves, H2051 at super tall eaves. Refer to the erection drawing details for your projects clip type. Prior to installing the rake angle, apply a continuous run of 1 1/2" mastic (H3001) the full length of the top leg of the eave plate. NOTE: The mastic must be held flush with the outside end of the eave plate (see below). Do not remove the paper backing until the panels are installed, and then remove only enough for each panel run. This will help the mastic form backing continuous. Before placing the rake angle on the mastic, extend the angle to the proper overhang dimension (refer to the low eave details on the erection drawings for this dimension). Place the rake clips and the angle over the insulation and eave plate. Use a small offset pin to locate the pre-drilled clip hole. While holding the rake clip in place with the offset pin and the opposite clip hole with (1) fastener. Use H1020 at purlins with +/- R19 of insulation and H1020 with +/-R19 and +/-R26 of insulation. Remove the offset pin and fasten with the same type fastener (the remaining clip hole as described in the previous step). NOTE: (2) SCREWS ARE REQUIRED AT EVERY CLIP LOCATION. Do not cut the insulation around the clip locations. Rake angles are to be spaced with a minimum 2' gap. Fasten top with (1) fastener (H1020). Keep the rake angle laps a minimum of 2' away from any rake clip. The rake angle must not be fastened into the rake angle clip, as this will not allow the roof to expand and contract properly. After rake angle is secured, place a small piece of 1" mastic (H3001) on top of the rake as shown below and be sure to make it to the 1 1/2" mastic (H3001) on the eave plate. Roll out 1/2" mastic (H3000) along the horizontal leg of the rake angle as shown below.
10. THERMAL BLOCKS Thermal blocks are used only with tall panel clips. Position the thermal block (H3340 OR H3346) on top of the insulation over each purlin line before installing the roof panels. Place the thermal block tight against the rake angle and the next panel clip. Thereafter, the blocks will be placed between panel clips. FINAL PRE-PANEL INSTALLATION DETAIL. Before installing any roof panels, refer to the erection drawing roof sheeting and roof details to see if there are any other special requirements. Make sure that the eave plate is fastened to the eave member at 6" o.c. with H1020 screws.
11. INSTALL PRE-CUT WIDTH ROOF PANEL OVER THE FIRST BRIDGE. AT THIS POINT, ATTACH PANEL TO RAKE SUPPORT ANGLE TO SECURE PANEL IF PANEL WILL BE USED AS A WORKING PLATFORM TO INSTALL CLIPS.
12. INSTALL PANEL CLIP OVER ROOF PANEL AT EACH BRIDGE. INSTALL BY ROLLING CLIP OVER PANEL RIB AND SWING BASE DOWN AGAINST LOCATING TAB OF BRIDGE. ATTACH CLIP TO BRIDGE IN FASTENERS IN THE PRE-PUNCHED HOLES. MAKE SURE TWO HOLES ARE VISIBLE THROUGH CLIP BASE BEFORE INSTALLING FIRST FASTENER.

R-Boost™ BRIDGE INSTALLATION DETAIL  
BRIDGE INSTALLATION STARTING DIM. (FA2010)

**Detailer Notes:**

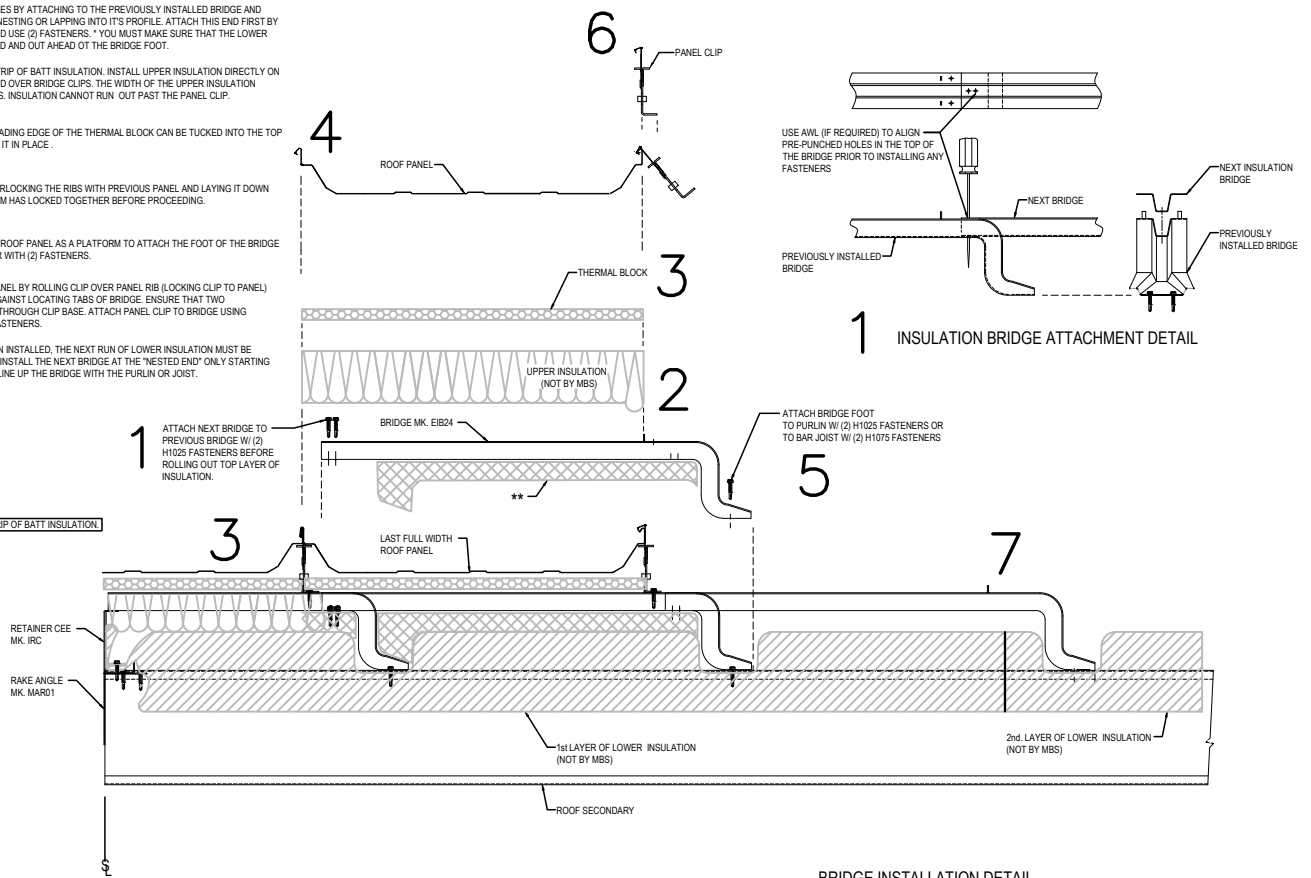
- 1) REQUIRED ON ALL R-Boost™ PROJECTS.

### FA2012 - INTERMEDIATE BRIDGE INSTALLATION DETAIL

[Download the DWG file by clicking here.](#)

1. START THE SECOND ROW OF BRIDGES BY ATTACHING TO THE PREVIOUSLY INSTALLED BRIDGE AND PURLIN. INSTALL NEXT BRIDGE BY NESTING OR LAPPING INTO ITS PROFILE. ATTACH THIS END FIRST BY LINING UP PRE-PUNCHED HOLES AND USE (2) FASTENERS. \* YOU MUST MAKE SURE THAT THE LOWER INSULATION IS PROPERLY INSTALLED AND OUT AHEAD OF THE BRIDGE FOOT.
2. FILL VOID UNDER BRIDGE WITH A STRIP OF BATT INSULATION. INSTALL UPPER INSULATION DIRECTLY ON TOP OF THE LOWER INSULATION AND OVER BRIDGE CLIPS. THE WIDTH OF THE UPPER INSULATION SHOULD BE PRE-CUT TO 2-0 WIDTHS. INSULATION CANNOT RUN OUT PAST THE PANEL CLIP.
3. INSTALL THERMAL BLOCKS. THE LEADING EDGE OF THE THERMAL BLOCK CAN BE TUCKED INTO THE TOP OF THE FIBERGLASS TO HELP HOLD IT IN PLACE.
4. INSTALL NEXT ROOF PANEL BY INTERLOCKING THE RIBS WITH PREVIOUS PANEL AND LAYING IT DOWN ACROSS BRIDGE. BE SURE THE SEAM HAS LOCKED TOGETHER BEFORE PROCEEDING.
5. YOU CAN NOW USE THE INSTALLED ROOF PANEL AS A PLATFORM TO ATTACH THE FOOT OF THE BRIDGE TO THE ROOF SECONDARY MEMBER WITH (2) FASTENERS.
6. INSTALL PANEL CLIP OVER ROOF PANEL BY ROLLING CLIP OVER PANEL RIB (LOCKING CLIP TO PANEL) AND SWING BASE OF CLIP DOWN AGAINST LOCATING TABS OF BRIDGE. ENSURE THAT TWO PRE-PUNCHED HOLES ARE VISIBLE THROUGH CLIP BASE. ATTACH PANEL CLIP TO BRIDGE USING PRE-PUNCHED HOLES W/ (2) CLIP FASTENERS.
7. AFTER THE PANEL CLIPS HAVE BEEN INSTALLED, THE NEXT RUN OF LOWER INSULATION MUST BE INSTALLED AND YOU CAN LOOSELY INSTALL THE NEXT BRIDGE AT THE "NESTED END" ONLY STARTING THE PROCESS OVER. (BE SURE TO LINE UP THE BRIDGE WITH THE PURLIN OR JOIST).

ERECTOR NOTE: \*\*  
FILL VOID UNDER BRIDGE WITH A STRIP OF BATT INSULATION.



BRIDGE INSTALLATION DETAIL  
INTERMEDIATE BRIDGE INSTALLATION DETAIL

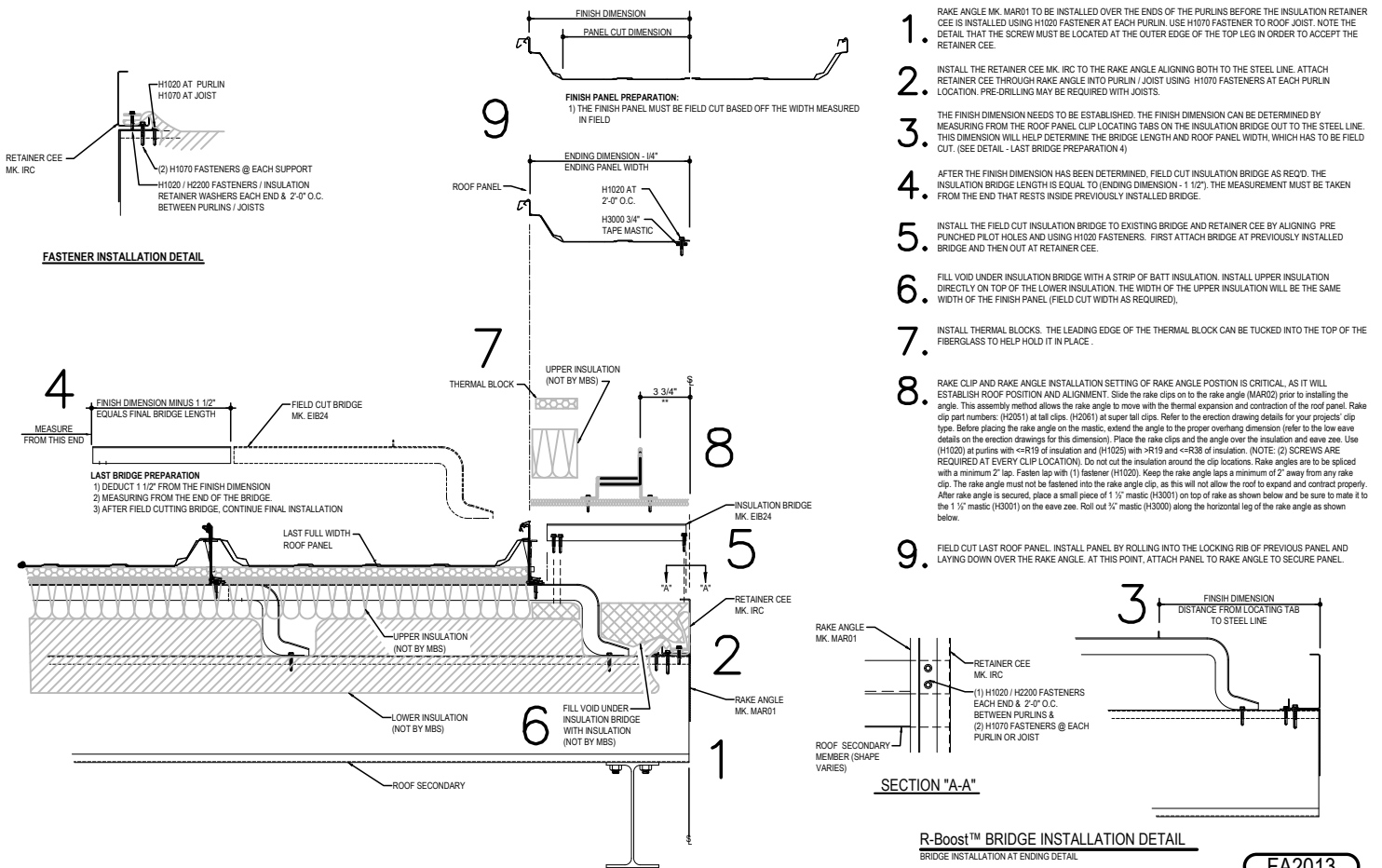
FA2012

#### Detailer Notes:

- 1) REQUIRED ON ALL R-Boost™ PROJECTS

### FA2013 - ENDING BRIDGE INSTALLATION DETAIL

Download the DWG file by clicking [here](#).



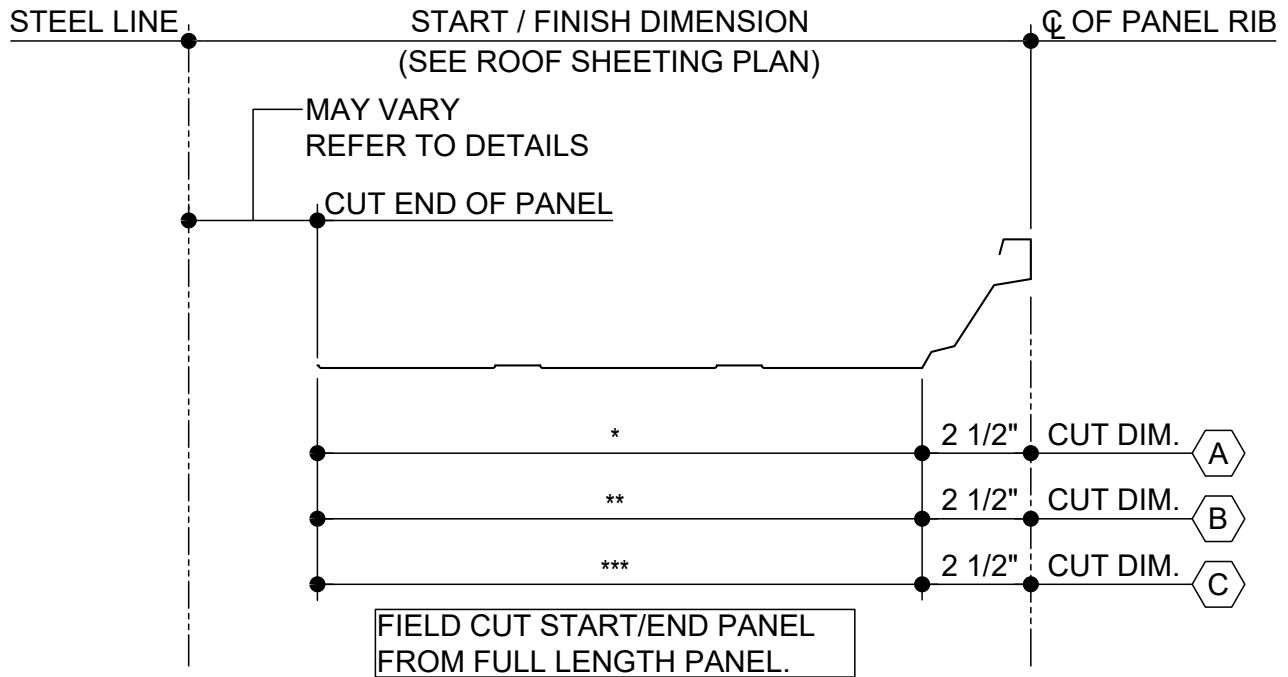
1. RAKE ANGLE MK MAR01 TO BE INSTALLED OVER THE ENDS OF THE PURLINS BEFORE THE INSULATION RETAINER CEE IS INSTALLED USING H1020 FASTENER AT EACH PURLIN. USE H1070 FASTENER TO ROOF JOIST. NOTE THE DETAIL THAT THE SCREW MUST BE LOCATED AT THE OUTER EDGE OF THE TOP LEG IN ORDER TO ACCEPT THE RETAINER CEE.
2. INSTALL THE RETAINER CEE MK IRC TO THE RAKE ANGLE ALIGNING BOTH TO THE STEEL LINE. ATTACH RETAINER CEE THROUGH RAKE ANGLE INTO PURLIN / JOIST USING H1070 FASTENERS AT EACH PURLIN LOCATION. PRE-DRILLING MAY BE REQUIRED WITH JOISTS.
3. THE FINISH DIMENSION NEEDS TO BE ESTABLISHED. THE FINISH DIMENSION CAN BE DETERMINED BY MEASURING FROM THE ROOF PANEL CLIP LOCATING TABS ON THE INSULATION BRIDGE OUT TO THE STEEL LINE. THIS DIMENSION WILL HELP DETERMINE THE BRIDGE LENGTH AND ROOF PANEL WIDTH, WHICH HAS TO BE FIELD CUT. (SEE DETAIL - LAST BRIDGE PREPARATION 4)
4. AFTER THE FINISH DIMENSION HAS BEEN DETERMINED, FIELD CUT INSULATION BRIDGE AS REQD. THE INSULATION BRIDGE LENGTH IS EQUAL TO (ENDING DIMENSION - 1 1/2"). THE MEASUREMENT MUST BE TAKEN FROM THE END THAT RESTS INSIDE PREVIOUSLY INSTALLED BRIDGE.
5. INSTALL THE FIELD CUT INSULATION BRIDGE TO EXISTING BRIDGE AND RETAINER CEE BY ALIGNING PRE PUNCHED HOLE HOLES AND USING H1020 FASTENERS. FIRST ATTACH BRIDGE AT PREVIOUSLY INSTALLED BRIDGE AND THEN OUT AT RETAINER CEE.
6. FILL VOID UNDER INSULATION BRIDGE WITH A STRIP OF BATT INSULATION. INSTALL UPPER INSULATION DIRECTLY ON TOP OF THE LOWER INSULATION. THE WIDTH OF THE UPPER INSULATION WILL BE THE SAME WIDTH OF THE FINISH PANEL (FIELD CUT WIDTH AS REQUIRED).
7. INSTALL THERMAL BLOCKS. THE LEADING EDGE OF THE THERMAL BLOCK CAN BE TUCKED INTO THE TOP OF THE FIBERGLASS TO HELP HOLD IT IN PLACE.
8. RAKE CLIP AND RAKE ANGLE INSTALLATION SETTING OF RAKE ANGLE POSITION IS CRITICAL AS IT WILL ESTABLISH ROOF POSITION AND ALIGNMENT. Slide the rake clips on to the rake angle (MAR02) prior to installing the angle. This assembly method allows the rake angle to move with the thermal expansion and contraction of the roof panel. Rake clip part numbers: (H2051) at tall clips, (H2061) at super tall clips. Refer to the erection drawing details for your projects' clip type. Before placing the rake angle on the mastic, extend the angle to the proper overhang dimension (refer to the low eave details on the erection drawings for this dimension). Place the rake clips and the angle over the insulation and eave zee. Use (H1020) at purline with <math>\leq R19</math> of insulation and (H1025) with <math>+R19</math> and <math>\leq R38</math> of insulation. (NOTE: (2) SCREWS ARE REQUIRED AT EVERY CLIP LOCATION). Do not cut the insulation around the clip locations. Rake angles are to be spliced with a minimum 2' lap. Fasten lap with (1) fastener (H1020). Keep the rake angle laps a minimum of 2" away from any rake clip. The rake angle must not be fastened into the rake angle clip, as this will not allow the roof to expand and contract properly. After rake angle is secured, place a small piece of 1 1/2" mastic (H3001) on top of rake as shown below and be sure to mate it to the 1 1/2" mastic (H3001) on the eave zee. Roll out 1/2" mastic (H3000) along the horizontal leg of the rake angle as shown below.
9. FIELD CUT LAST ROOF PANEL. INSTALL PANEL BY ROLLING INTO THE LOCKING RIB OF PREVIOUS PANEL AND LAYING DOWN OVER THE RAKE ANGLE. AT THIS POINT, ATTACH PANEL TO RAKE ANGLE TO SECURE PANEL.

#### Detailer Notes:

- 1) REQUIRED ON ALL R-Boost™ PROJECTS

FA2035 - CFR START / FINISH PANEL WIDTH DETAIL

[Download the DWG file by clicking here.](#)



**START / END CUT PANEL DIMENSION DETAIL**

- WHEN FIELD CUTTING OR MITERING ROOF PANELS, NON-ABRASIVE CUTTING TOOLS SUCH AS NIBBLERS OR TIN-SNIPS SHALL BE USED.
- ABRASIVE CUTTING TOOLS SUCH AS MECHANICAL GRINDERS, SAWS, SHEARS OR SCISSORS CAN DAMAGE THE PANEL FINISH AND CREATE EXCESS METAL SHAVINGS THAT CAN CORRODE THE PANELS.
- THE USE OF NON-APPROVED CUTTING DEVICES MAY VOID YOUR FACTORY WARRANTY.

**FA2035**

Detailer Notes:

- 1) THIS DETAIL IS REQUIRED ON EVERY R-Boost™ PROJECT.