

Rating: Meets Conditions of Acceptance

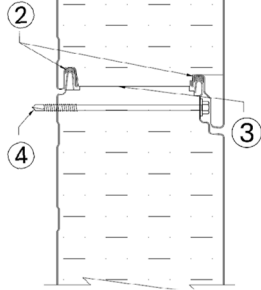


Figure 1. Standard Panel Joint (Horizontal)

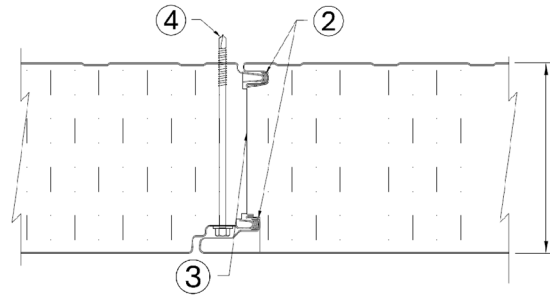
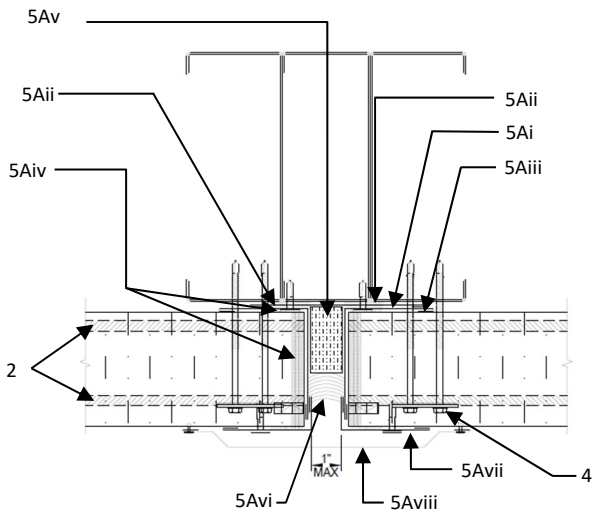
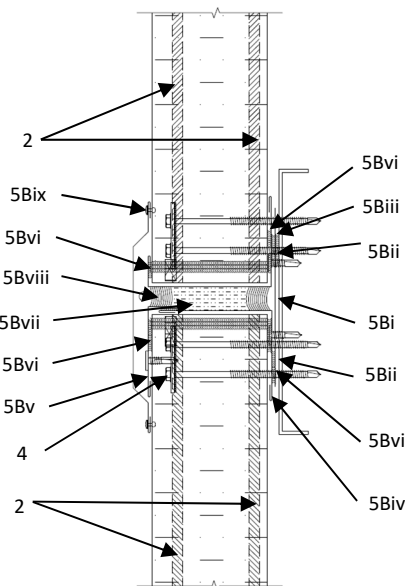


Figure 2. Standard Panel Joint (Vertical)



**Figure 3. Butt Joint
(Horizontal)**



**Figure 4. Stack Joint
(Vertical)**



1. COMPONENT NAME: Insulated Metal Wall Panels

CERTIFIED PRODUCT: Kingspan Insulated Panels, Inc., Insulated Metal Wall Panels, K-Roc FX

Horizontally or vertically oriented, 42 in. wide × 4 in., 6 in., or 8 in. thick insulated metal panels installed to the exterior side of steel framing. Interior and exterior panel facings are min. 26 GA galvanized, galvalume, or stainless steel. The panel core is mineral wool.

2. SEALANT: Apply 1/4 in. bead of non-skinning butyl sealant on the interior and exterior tongue and groove interlocks.

3. INTUMESCENT: Refer to Figure 2. Use Promat Promaseal®-LW intumescent tape with the widths described below.

A. 4 in. Panel – 50 × 1mm

B. 6 in. and 8 in. Panel – 60 × 1mm

Note: The intumescent is not depicted in the butt and stack joint images in Figures 3 and 4 for clarity.

4. FASTENERS: Fix the K-Roc FX panels to the steel framing using nominal 1/4 in. diameter or No. 14 fasteners driven through the manufacturer's hidden fastener clips, into the K-Roc FX Panels.

5. BUTT AND STACK JOINTS: Refer to Figures 3 and 4. Construct butt and stack joints as follows:

- A. BUTT JOINT – When panels are installed horizontally and vertical joints are required, install the following:
- i. MENDING PLATE: Install 6 in. wide, 26 GA steel mending plate over the studs.

- ii. BUTYL SEALANT: Apply butyl sealant to the mending plate.

- iii. REAR CAP CHANNEL: Fasten 16 GA steel rear cap channel to interior studs, through mending plate, using 1/4-14 × 1 in. pancake fasteners without washers, spaced 24 in. on center (oc).

- iv. MARRIAGE BEAD: Apply marriage bead of Kingspan's butyl sealant across panel thickness, at panel ends to exterior face of the panel.

- v. MINERAL FIBER: Compress min. 4 pcf mineral wool insulation into butt joint cavity.

- vi. SEALANT: Apply min. 1 in. of Hilti CP 606 flexible firestop sealant over the mineral wool.

- vii. FRONT CAP CHANNEL: Install 16 GA steel front cap channel to the face of the panels using pancake fasteners without washers spaced 24 in. oc.

- viii. COVER TRIM: Secure 4-3/4 in. wide 26 GA steel cover trim to the front cap channel using pop rivets spaced 8 in. oc to cover the butt joint. Alternatively, attach 26 GA steel 7 in. wide cover trim to the panels using pop rivets spaced 8 in. oc or fix an aluminum top hat joint extrusion to the steel studs, through the butt joint, using nominal 1/4 in. diameter or No. 14 fasteners.

B. STACK JOINT – When panels are installed vertically and horizontal joints are required, install the following:

- i. MENDING PLATE: Install 6 in. wide, 26 GA steel mending plate over the studs.

- ii. BUTYL SEALANT: Apply butyl sealant between the mending plate and the "J" channel at the base of the panels above, between the mending plate and the rear angle at the top of the panels below the stack joint, and at the stack trim where the stack trim is fastened to the panels.



- iii. “J” CHANNEL: Install 16 GA steel “J” shaped channel to the mending plate using 1/4-14 × 1 in. pancake fasteners without washers, spaced 24 in. oc.
 - iv. REAR ANGLE: Install 16 GA steel rear channel to the mending plate using 1/4-14 × 1 in. pancake fasteners without washers, spaced 24 in. oc.
 - v. FRONT CHANNEL: Install 16 GA steel front channel to the exterior face of the panels using 1/4-14 × 1 in. pancake fasteners without washers, spaced 24 in. oc.
 - vi. MARRIAGE BEAD: Apply marriage bead of Kingspan’s butyl sealant across panel thickness at panel ends to exterior face of the panel.
 - vii. MINERAL FIBER: Compress min. 4 pcf mineral wool insulation into the stack joint.
 - viii. SEALANT: Apply min. 5/8 in. of Hilti CFS-S SIL GG Firestop Silicone Sealant over the mineral wool.
 - ix. STACK TRIM: Fasten 26 GA steel stack trim to the exterior face of the upper panel using Phillips pan head screws spaced 8 in. oc.
- 6. FLASHING (Not Shown):** The inside perimeter of the openings in the wall assembly shall be enclosed with 26 GA steel flashing, covering min. 2 in. over the front face of the panels.
- 7. FLOORLINE FIRESTOPPING (Not Shown):** Min. 4 pcf mineral wool in each stud cavity and at each floorline, attached with Z-clips or equivalent.



This Design Listing is intended to provide guidance for on-site verification of the installation of system components and shall not be used in place of the manufacturer's published installation instructions. The manufacturer is responsible for providing installation instructions and requirements that ensure compliance with the system as tested and evaluated by Intertek. Installation must comply with this Design Listing, the manufacturer's installation instructions, and the applicable Code. In the event of conflict, this Design Listing governs.

Compliance of the assembly described in this Design Listing with the referenced standard(s) is contingent upon verification that the field-constructed assembly is consistent with the assembly described herein. Intertek-certified products may be verified by the authorized Intertek label. Products not bearing the Intertek label shall be verified by the Authority Having Jurisdiction as meeting the specifications stated herein.

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Division 07 – Thermal and Moisture Protection

07 42 00 Wall Panels

07 42 13.19 Insulated Metal Wall Panels