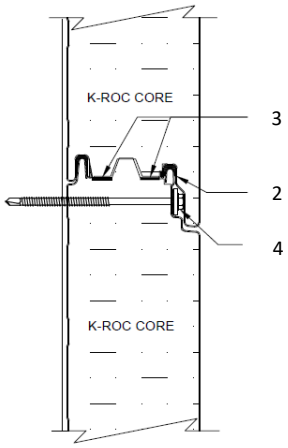
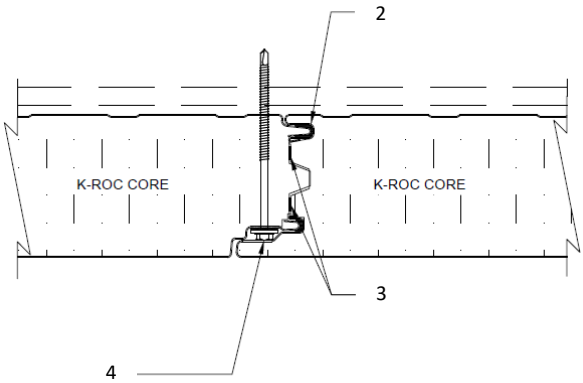
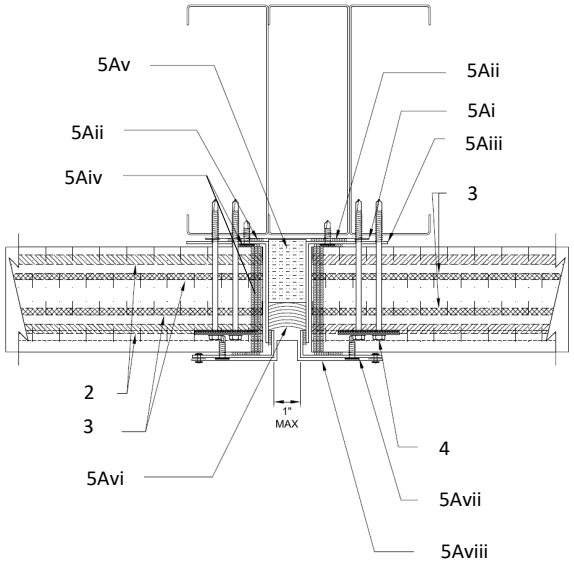
**Kingspan Insulated Panels, Inc.**
**Design No. KIP/IMWP 30-10**
**Insulated Metal Wall Panels**
**K-ROC**
**NFPA 285**
**Rating: Meets Conditions of Acceptance**



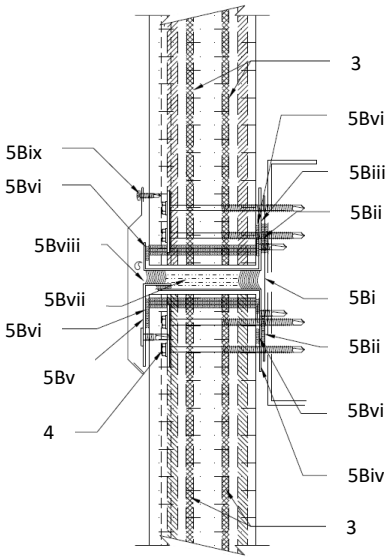

**Standard Panel Joint (Horizontal)**




**Standard Panel Joint (Vertical)**




**Butt Joint (Horizontal)**




**Stack Joint (Vertical)**

1. **COMPONENT NAME:** Insulated Metal Wall Panels

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

   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:** Use one of the options listed below.
   A. OPTION 1 (Not Shown) – Apply beads of Kingspan's Safire Intumescent Mastic in the interlocking joints of each panel prior to joining the panels. Use two beads for 4 in. thick panels and three beads for 6 in. or 8 in. thick panels.
   B. OPTION 2 – Refer to Figures 1, 2, and 3. Apply a layer of 1 mm thick Promat Promaseal®-LW Intumescent Tape in the interlocking joints of the mineral wool core of each panel prior to joining the panels, as shown in the drawings below with widths and locations specified.

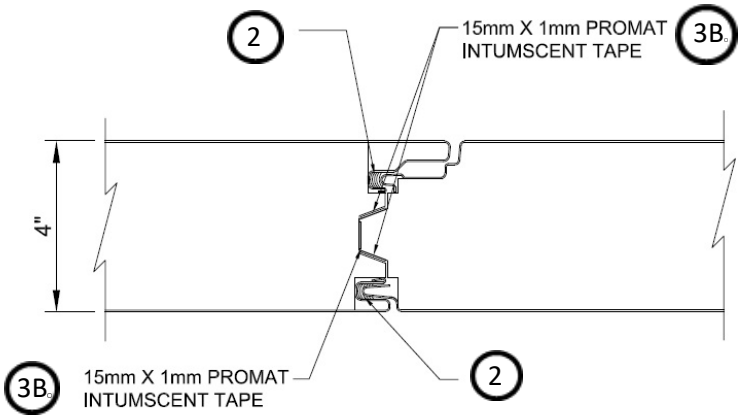



**Figure 1. 4-in. Panel Intumescent Installation**

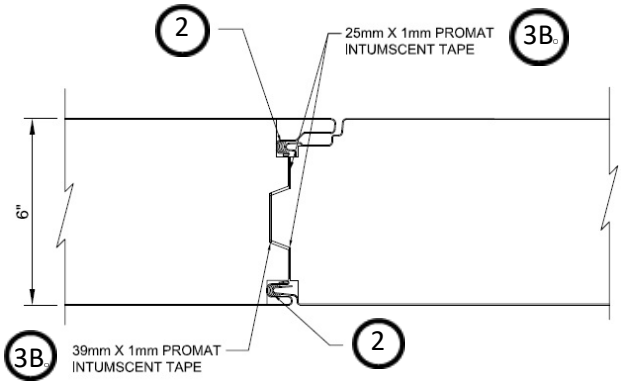



**Figure 2. 6-in. Panel Intumescent Installation**

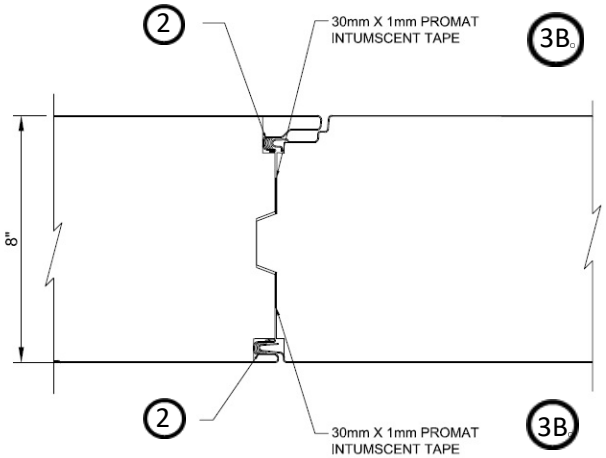



**Figure 3. 8-in. Panel Intumescent Installation**

4. **FASTENERS:** Fix the K-Roc panels to the steel framing using nominal 1/4 in. diameter or No. 14 fasteners driven through the K-Roc Panels.

5. **BUTT AND STACK JOINTS:** 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. INTUMESCENT: Apply marriage bead of Kingspan's Safire Intumescent Mastic 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. INTUMESCENT: Apply marriage bead of Kingspan's Safire Intumescent Mastic 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.

*Consult the listing report on the Directory of Building Products (https://bpdirectory.intertek.com) for the edition of the standard(s) evaluated.*

*Compliance of the assembly described in this Design Listing with the referenced standard relies on verification that the assembly constructed in the field is consistent with that described herein. Intertek certified products may be verified by the approved Intertek label; other products must be verified by the Authority Having Jurisdiction as meeting the specifications stated herein.*