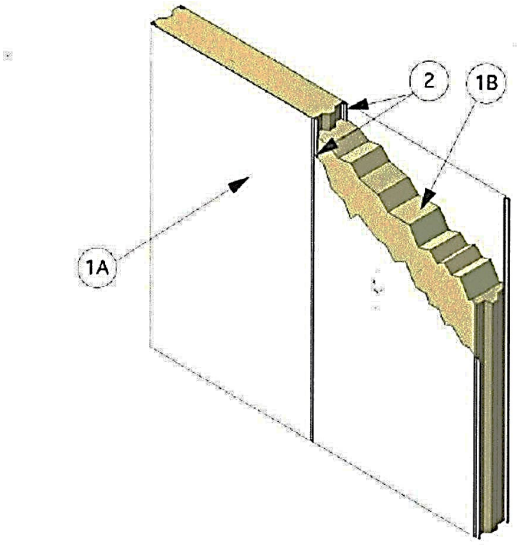
Kingspan Insulated Panels, Inc.
Design No. KIP/CWP 180-01
Insulated Wall Panels
K-ROC Fire Rated Wall Panels
ASTM E119 and CAN/ULC S101
Ratings: 1, 2, and 3 Hour



1. **INSULATED WALL PANELS:** Steel-faced panels, with a core of mineral wool insulation

   TABLE OF RATINGS:

PANEL THICKNESS	FIRE RESISTANCE RATING
4 in.	1 Hour
6 in.	2 Hour
8 in.	3 Hour

   CERTIFIED PRODUCT: Kingspan Insulated Panels, Inc., K-ROC Fire Rated Wall Panels

   Roofing and siding panels; metal roof and wall panels. The panels are max. 42 in. wide. The panels are constructed with tongue and groove interfaces on the long dimension edges that mate with adjacent panels. Panels may be installed with long dimensions placed horizontally or vertically.

   When constructing a wall, the panel perimeter is secured with panel attachment angles as described in Item 5. The wall panels are constructed of the following materials:

   A. PANEL FACING – The panel facing is min. 26 GA galvanized or galvalume steel with a painted or mill finish, or min. 26 GA stainless steel with mill finish.

   B. MINERAL WOOL INSULATION – The panel core consists of nominal 8.5 pcf mineral wool batt adhered to the panel facing with a polyurethane adhesive.

2. **SEALANT:** Install a nominal 3/16 in. bead of non-skinning butyl sealant to the interior and exterior side of the panel joints prior to joining the panels.

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 the mineral wool core 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. Use one bead between the panel and the steel angles used for perimeter support.

B. OPTION 2 – Refer to Figures 1, 2, and 3. Apply a layer of 1mm 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.

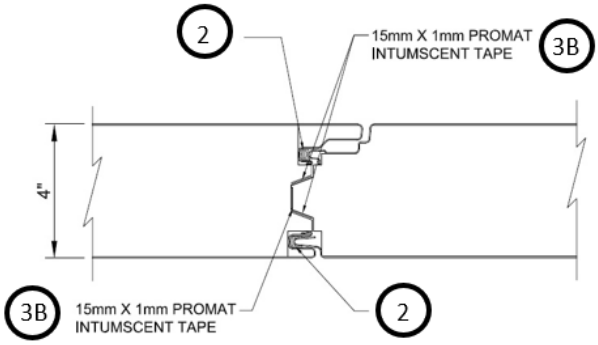


Figure 1. 4-in. Panel Intumescent Installation

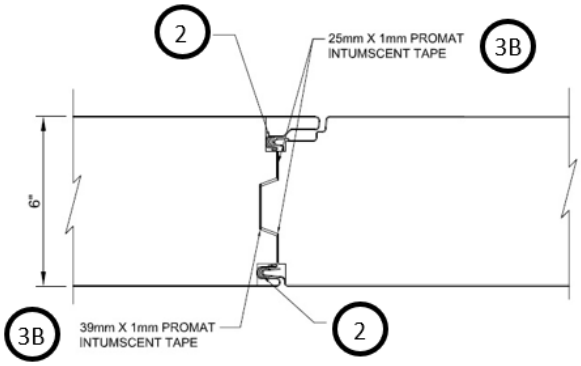


Figure 2. 6-in. Panel Intumescent Installation

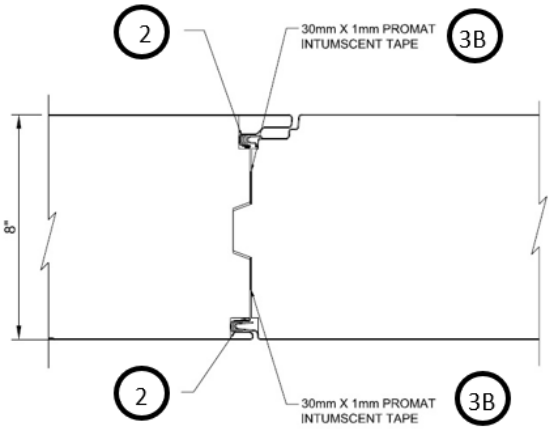


Figure 3. 8-in. Panel Intumescent Installation

4. **PANEL CONNECTING JOINT SCREWS:** Install stitching 36 in. on center (oc) on both the interior and exterior side of the 8 in. panel when a 3-hour fire rating is required from both sides. Install stitching 36 in. oc on the side of the 8 in. panel requiring a 3-hour fire rating when a fire rating from only one side is required. Stitching at the top and bottom of the 8 in. panel joints from both sides is required in either case. Stitching at the top and bottom of the 4 in. or 6 in. panel joints from both sides is required for a 1-hour fire rating when using 4 in. panels and a 2-hour fire rating when using 6 in. panels. The fire resistance rating is valid from either direction when using 4 in. or 6 in. panels. Use 1 in. long steel or stainless-steel No. 14 screws with 3/8 in. diameter heads, or No. 14-13 × 1-1/2 in. long DP1 pancake-head screws.

5. **PERIMETER SUPPORTS (Not Shown):** Panels are attached to perimeter supports on both sides when installed horizontally, or top and bottom panel supports when installed vertically. Additionally, horizontally oriented wall panels must be supported on the bottom edge of the bottom panel with min. 18 GA steel channel that is secured to the foundation and engages the tongue-and-groove configuration of the panel edge.

6. **INTERMEDIATE SUPPORTS (Optional for Fire Resistance, Not Shown)**: Where the panels require additional support for project specific reasons, intermediate steel supports may be installed in accordance with manufacturer's instructions, on the panel span between the end panel support connections, using No. 14 self-drilling or self-tapping screws having sufficient length to extend through the panel and completely into the steel support on the opposite side. Spacing is determined by project requirements.

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.