

Kingspan Insulated Panels, Inc.
Design No. KIP/MRP 120-01
Ceiling Assembly
K-ROC Fire Rated Panels
ASTM E119 and CAN/ULC-S101
Rating: 2 Hour
Superimposed Load: None

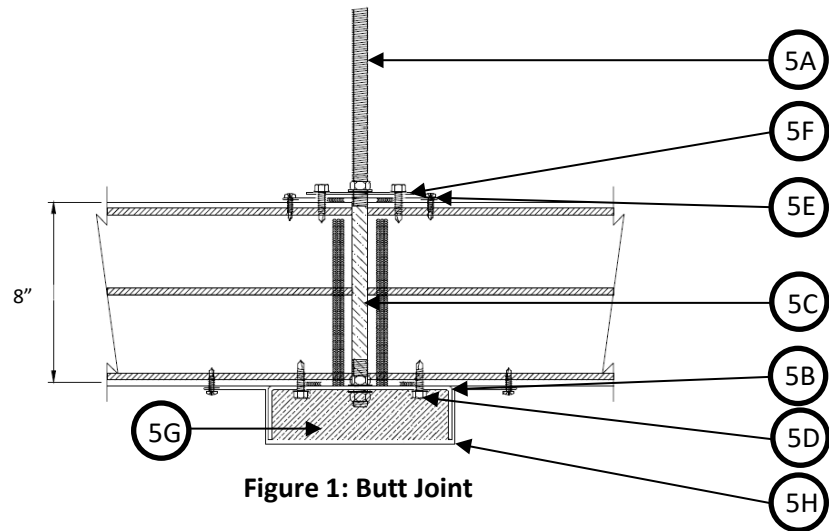


Figure 1: Butt Joint

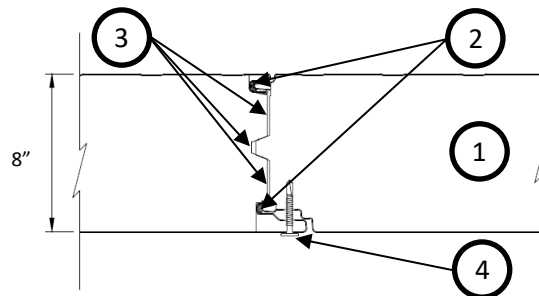


Figure 2: Interlocking Panel Joint

1. INSULATED METAL PANEL:

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

Install nominal 8 in. thick Kingspan K-ROC Panels using the mounting attachments (Item 5). The

maximum span between mounting attachments is 5 ft.

- 2. SEALANT:** Apply a bead of Kingspan's non-skinning butyl sealant at the top and bottom joints of the interlocking edges of the insulated metal panels.



3. **INTUMESCENT:** Apply three 20 mm beads of Kingspan's Safire Intumescent Mastic in the interlocking joints of the mineral wool core.
4. **INTERLOCKING JOINT PANEL SCREWS:** Install No. 14-13 × 2 in. long pancake-head screws to the underside of the panels. Space screws 24 in. on center (oc) along the length of the interlocking joints of the insulated metal panels.
5. **MOUNTING ATTACHMENTS:** Use the following items to secure the insulated metal panels:
 - A. **THREADED ROD** – Secure 3/8 in. diameter threaded rod, spaced a max. of 42 in. oc., to structural member (not shown).
 - B. **BUTT JOINT CHANNEL** – Secure 12 GA galvanized steel ceiling butt joint channel to threaded rod using 3/8 in. hex nuts and lock washers. Apply two continuous beads of Kingspan's non-skinning butyl sealant on the topside of the butt joint channel to set panel edges onto.
 - C. **PACKING MATERIAL** – Install 1/2 in. thick × 8 in. wide nominal 8 pcf density strips of ROCKWOOL Comfortboard® 80 or Curtainrock 80® mineral wool at the end (butt) joints of the panels prior to fastening the butt joint channel to panels.
 - D. **BUTT JOINT CHANNEL FASTENERS** – Compress panel ends against packing material and secure butt joint channel to the underside of the insulated metal panels using 1/4 in. -14 × 1 in. long hex-head fasteners spaced 12 in. oc.
 - E. **COVER TRIM** – Apply two continuous beads of Kingspan's non-skinning butyl sealant, one on the topside of each panel, then install 5 in. wide, 26 GA cover trim spanning the topside surface of the butt joint. Fasten cover trim to panels using No. 10 × 3/4 in. hex washer-head Tek fasteners on each side of the butt joint, spaced 12 in. oc along the length of the cover trim.
 - F. **SQUARE CEILING PLATES** – After installing the cover trim, install 14 GA galvanized steel, 4 in. square ceiling plates through the threaded rod. Fasten square ceiling plates through cover trim into panels using four 1/4 in. -14 × 1 in. long hex-head Stitch Tek fasteners at each ceiling plate.
 - G. **CHANNEL PACKING MATERIAL** – Install nominal 1-1/2 in. × 6 in. wide strips of 8 pcf density strips of ROCKWOOL Comfortboard® 80 or Curtainrock 80® mineral wool on the underside of the butt joint channel prior to installing the butt joint trim.
 - H. **BUTT JOINT TRIM** – After installing the channel packing material, install 26 GA butt joint trim pieces over the channel packing material and butt joint channel. Overlap joints min. 3 in. and secure using No. 10 × 3/4 in. long hex-head Stitch Tek fasteners spaced 12 in. oc.

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.