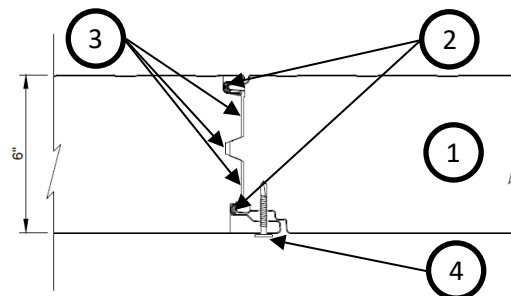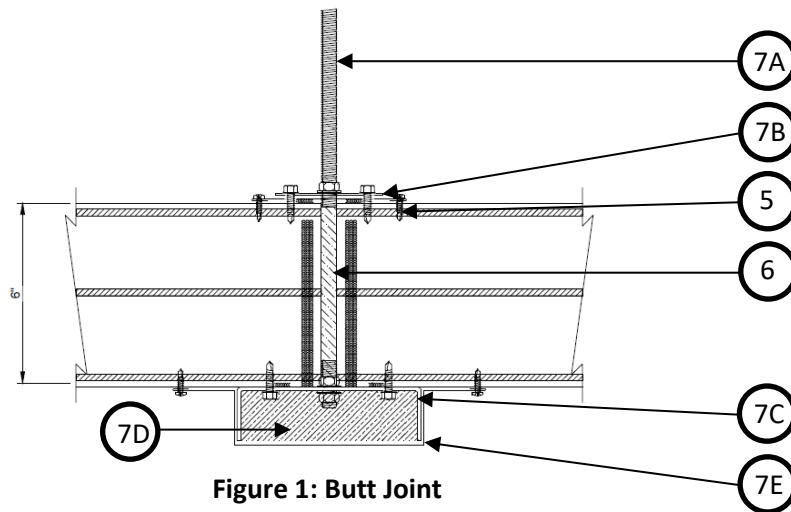**Kingspan Insulated Panels, Inc.**
Design No. KIP/MRP 60-01
Ceiling Assembly
K-ROC Fire Rated Panels
ASTM E119 and CAN/ULC-S101
Rating: 1 Hour
Superimposed Load: None

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 6 in. thick Kingspan K-ROC Panels using the mounting attachments.

2. **SEALANT:** Apply a bead of 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 × 1-1/2 in. long pancake-head screws to the underside (exposed side) of the panels. Space screws 36 in. on center (oc) along the length of the interlocking joints of the insulated metal panels.

5. **BUTT JOINT PANEL SCREWS:** Install No. 10 × 3/4 in. long hex-head screws spaced at 12 in. oc at the end of the panels at the butt joints on the top (unexposed) surface of the panel joints.

6. **PACKING MATERIAL:** Install 1/2 in. thick × 6 in. wide nominal 8.5 pcf density strips of Roxul mineral wool at the end (butt) joints of the panels prior to securing cover trim and butt joint channel described in Item 7.

7. **MOUNTING ATTACHMENTS:** Use the following items to secure the insulated metal panels:

   A. THREADED ROD – Install 3/8 in. diameter threaded rod and secure to structural member (not shown), spaced a max. of 42 in. oc. Secure threaded rod to mounting attachments using 3/8 in. nuts.

   B. COVER TRIM – After insulated metal panel butt joints are compressed against packing material, install 4 in. wide, 26 GA cover trim piece spanning the unexposed surface butt

joint. After installing the cover trim, install 12 GA galvanized steel, 3-1/2 in. square ceiling plates through the threaded rod. Secure ceiling plate and cover trim using No. 14 × 7/8 in. long hex-head Stitch Tek fasteners. Install four fasteners at each ceiling plate and spaced 12 in. oc along the length of the cover trim, one fastener on each side of the butt joint through the insulated metal panels.

   C. BUTT JOINT CHANNEL – Install 12 GA galvanized steel ceiling butt joint channel to the underside of the insulated metal panel butt joint and secure using No. 12 × 3/4 in. long hex-head fasteners spaced 12 in. oc.

   D. CHANNEL PACKING MATERIAL – Install 1-1/2 in. × 5 in. wide strips of 8.5 pcf density strips of Roxul mineral wool on the underside of the butt joint channel prior to installing the butt joint trim.

   E. 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 (Item 6C). Overlap joints min. 4 in. and secure using No. 14 × 7/8 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.