Kingspan Insulated Panels, Inc.
Design No. KIP/IMWP 25-03
Insulated Metal Wall Panels
K-ROC KARRIER PANELS
CAN/ULC-S134
Rating: Meets Conditions of Acceptance

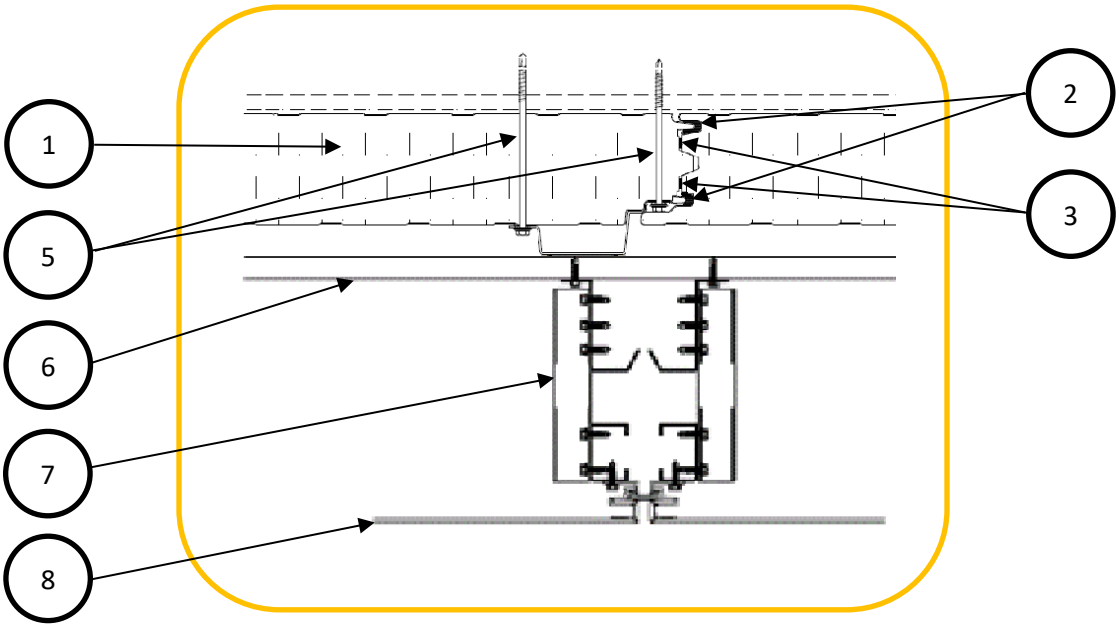

FIG 1. Vertical joint

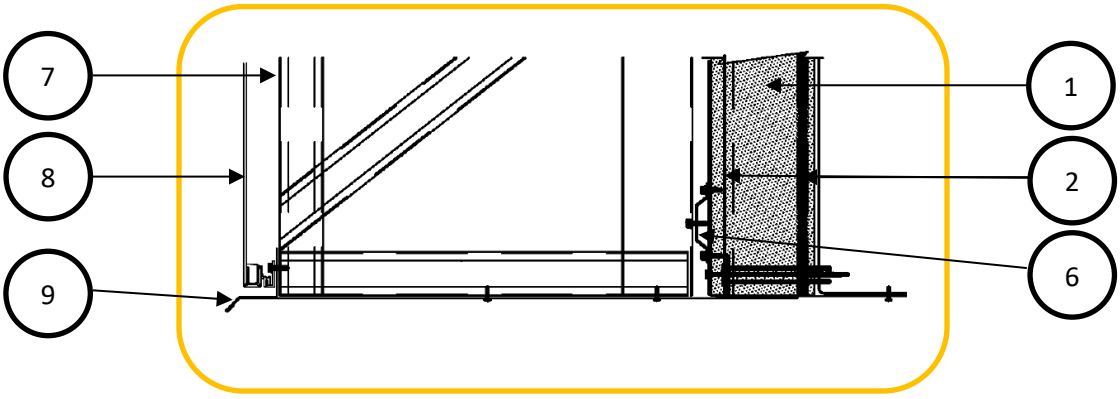

FIG 2. Cross section at window header

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

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

   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 minimum 26 GA galvanized, galvalume, or stainless steel. The panel core is noncombustible 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:** 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.

4. **KARRIERRAILS:** Install the minimum 16 GA galvanized steel KarrierRails at each exterior tongue and groove interlock joint.

5. **FASTENERS:** Fix the K-Roc Karrier Panels and KarrierRails to the steel framing using 8 in. long, 1/4 in. No. 14 HWH DP3 fasteners driven through the KarrierRails and K-Roc Karrier Panels.

6. **HAT CHANNELS:** Install the 20 GA, 7/8 in. hat channels perpendicular to the KarrierRails. Space hat channels maximum 24 in. on center (oc) and secure to the KarrierRail using 1 in. long, 1/4 in. No. 14 HWH DP3 fasteners.

7. **TRUSSES:** Fasten the 24 in. deep steel truss assemblies to the hat channels using 1 in. long 1/4 in. No. 14 HWH DP3 fasteners.

8. **METAL COMPOSITE MATERIAL (MCM):** Install a system of 4 mm FR aluminum composite panels by Alucoil and Carter Architectural Panels Inc. EVO aluminum extrusion pieces onto the trusses, creating a maximum airspace of 25-1/8 in. between the aluminum fastening system and the KarrierRails. Alternatively, the MCM may be attached to the hat channels using EVO aluminum extrusion pieces and a minimum airspace of 1 in. between the aluminum fastening system and the KarrierRails. Use only 4 mm FR aluminum composite panels by Alucoil bearing an Intertek Certified Label.

9. **TRIM AND WINDOW FLASHING:** Install 26 GA steel trim at the window, top and bottom of the assembly, and at the side sides of the outermost trusses to completely encase the space between the MCM or exterior cladding and the KarrierRails. Use 26 GA steel trim to extend the sides of the window opening to the front face of the MCM or exterior cladding.

10. **EXTERIOR CLADDING (Optional, Not Shown):** As an alternative to Items 7 and 8, install any of the following non-combustible claddings to the hat channels, with an airspace between 1 in. and 25-1/8 in. unless otherwise noted:

    A. Thin Brick (Tru-Brix) – Install nominal 1 in. thick Tru-Brix into steel brick holding trays according to manufacturer's instructions.
    B. Porcelain Tile – Install porcelain tile by Shackerley Ceramic Granite Tile using noncombustible materials according to manufacturer's instructions.
    C. Aluminum metal plate – Install min. 1/8 in. thick aluminum metal plate using noncombustible materials according to manufacturer's instructions.
    D. Architectural metal plate – Install minimum 0.08 in. thick aluminum architectural metal

plate using noncombustible materials and according to manufacturer's instructions

E. Single skin profiles – Install min. 24 GA galvalume, galvanized, stainless-steel, or aluminum profiles using noncombustible materials according to manufacturer's instructions.
F. Extruded plank – Install minimum 0.118 in. thick AA6063-T6 extruded planks using noncombustible materials according to manufacturer's instructions.
G. Expanded aluminum mesh – Install expanded aluminum mesh using noncombustible materials according to manufacturer's instructions.
H. Designwall 3000 – Install minimum 1-1/4 in. thick Designwall 3000 panels using noncombustible materials according to manufacturer's instructions. When using Designwall 3000 with aluminum skins, the truss assemblies (Item 7) are required, and the airspace must be 25-1/8 in.

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.