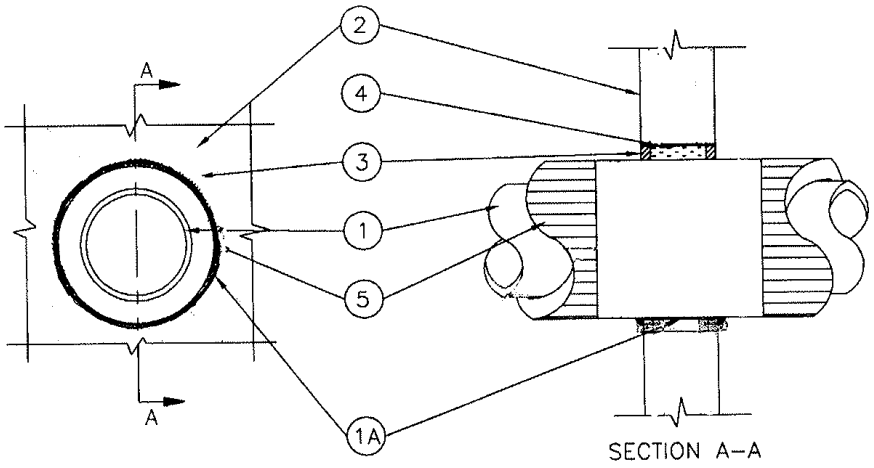
Kingspan Insulated Panels, Inc.
Design No. KIP/PF 120-02
Single Penetrations, Vertical (Wall)
K-ROC FX Fire Rated Wall Panels
CAN/ULC S115 and ASTM E814
Rating: 2 Hour



1. **PENETRATING ITEM:** See Table 1 below for approved penetrating items. Single penetrations only, max. hole size and annular space not to exceed dimensions stated in the table.

   A. METAL SLEEVE – (Optional) Min. 26 GA sheet metal sleeve fit tightly into the opening, flush with the perimeter of the penetration on both surfaces of the wall assembly.

2. **WALL ASSEMBLY:**

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

   Galvanized, galvalume, or stainless steel faced panels, with a core of mineral wool insulation. The panels are max. 42 in. wide, and thicknesses of 4 in., 6 in., or 8 in. 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.

3. **FIRESTOP SYSTEM COMPONENT 1:**

   PLAIN PIPE PENETRATIONS – PFP Partners Firestop Caulk 4800DW*, 3600EX* installed at a min. thickness of 1/2 in. within the annulus on both surfaces of wall assembly. On 0 in. - 1/4 in. annular spaces, a 1/2 in. diameter fillet bead must be placed around the penetrating item.

   THROUGH-INSULATED PIPE PENETRATIONS – PFP Partners Firestop: 2 layers of WSI intumescent wrap strip* installed on each side of the wall with 1/4 in. of wrap strip exposed.

4. **FIRESTOP SYSTEM COMPONENT 2:**

   PLAIN PIPE PENETRATIONS – Filler material; mineral rock wool insulation with a min. density of 4-6 pcf compressed a min. of 25% into the annular space at a min. depth of wall thickness minus 1 in. Recess filler material 1/2 in. for sealant placement.

5. **THROUGH-INSULATION MATERIALS:** (Optional up to max. 8 in.): 1 in. fiberglass pipe insulation (paper faced), tightly wrapped around the penetrating item, having a min. density of 3.5 lbs./pcf and listed to provide a flame spread rating of 25 and a smoke developed rating of 50.

TABLE 1 – APPROVED PENETRATING ITEMS

Penetrating Material & Size	Max. Hole Size	Annular Space	Fire "F" Rating	Fire/Hose "FH" Rating	Temp. "FTH" Rating
Max. 6 in. ID Copper, or 8 in. ID Sch. 40 and Up Steel and Cast-Iron Pipe	Pipe OD plus 1-1/4 in.	3/8 in. – 7/8 in.	2 Hour	2 Hour	9 Minutes
Fiberglass Insulation Max. 6 in. ID Copper, or 8 in. ID Sch. 40 and Up Steel and Cast-Iron Pipe	Pipe OD plus 3 in.	1/4 in.	2 Hour	2 Hour	53 Minutes in 4 in. panel, 2 Hour in 6 in. panel
30 in. Steel Pipe Sch. 40 and Up	Pipe OD plus 2-1/4 in.	3/4 in.	2 Hour	0	38 Minutes

*Intertek certified products, see Intertek Spec 32894.

This Design Listing is intended to provide guidance for on-site verification of the installation of system components and shall not be used in place of the manufacturer's published installation instructions. The manufacturer is responsible for providing installation instructions and requirements that ensure compliance with the system as tested and evaluated by Intertek. Installation must comply with this Design Listing, the manufacturer's installation instructions, and the applicable Code. In the event of conflict, this Design Listing governs.

Compliance of the assembly described in this Design Listing with the referenced standard(s) is contingent upon verification that the field-constructed assembly is consistent with the assembly described herein. Intertek-certified products may be verified by the authorized Intertek label. Products not bearing the Intertek label shall be verified by the Authority Having Jurisdiction as meeting the specifications stated herein.

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Refer to the listing report in the Directory of Building Products (https://bpdirectory.intertek.com) for the applicable edition of the referenced standard(s).