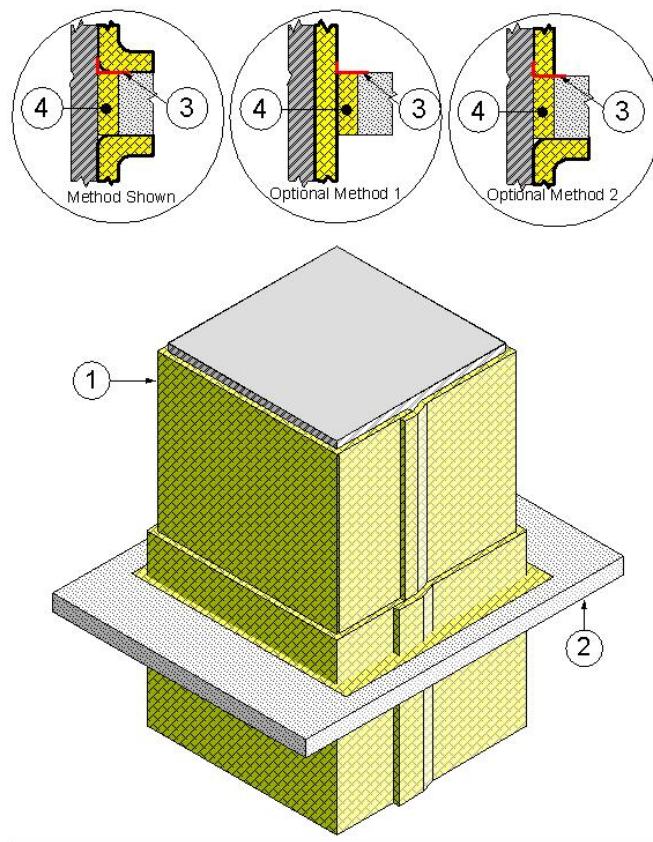


Design No. UNI/FRD 120-20
OPL Design No. FS 600 F
FIRE PENETRATION SEAL (Grease Duct)
Unifrax I LLC
FyreWrap® Duct Insulations
ASTM E 814 - F-Rating – 2 hr
ASTM E 814 - T-Rating – 2 hr



1. PENETRATING ITEM: A continuously welded, liquidtight L-shaped duct system with horizontal and vertical duct sections constructed of minimum 16 GA (0.028 in.) plain sheet steel or 18 GA stainless steel with max. 2704-in. area and max. 52-in. width (max. dim. 52-in. x max. 52-in.) and insulated I LLC's ® as detailed in Design GD 600 F.
2. CERTIFIED MANUFACTURER: Unifrax I LLC
CERTIFIED PRODUCT: Insulation Blanket

MODEL: FyreWrap® Elite™ 1.5 Duct Insulation (6 pcf)
MODEL: FyreWrap® EZ 1.5 Duct Insulation (6 pcf)
MODEL: FyreWrap® 1.5 Duct Insulation (8 pcf)
MODEL: FyreWrap® MAX 2.0 Duct Insulation (8 pcf)

INSULATION: Use nom. 1-1/2-in. thick, 6-pcf (FyreWrap® Elite™ 1.5 or FyreWrap® EZ 1.5), 1-1/2-in. thick, 8-pcf (FyreWrap® 1.5), or nom. 2 in. 8pcf (FyreWrap® MAX 2.0) blanket made of soluble amorphous wool fibers or

calcium magnesium silica fibers. Use one layer min. 1-1/2-in. thick, 6-pcf blanket. Use blanket that is fully encapsulated or single faced with foil-scrim-metallized polyester facing. The FyreWrap® Duct Insulation was terminated and flared out onto the bottom side of the floor/ceiling assembly (Item 3) for a minimum distance of one inch, covering the packing material (Item 6). On the top side the ® was terminated and flared out onto the floor/ceiling assembly (Item 3) three inches to cover the fill, void or cavity material (Item 5).

- A. Optional Method 1 – The FyreWrap® Duct Insulation was run continuously through the floor/ceiling assembly (Item 3).
 - B. Optional Method 2 – The FyreWrap® Duct Insulation was terminated and flared out onto the bottom side of the floor/ceiling assembly (Item 3) for a minimum distance of one inch, covering the packing material (Item 6). On the top side the FyreWrap® Duct Insulation was terminated straight down to cover all or part of the fill, void or cavity material (Item 5).
3. FLOOR/CEILING ASSEMBLY: The two-hour fire-rated floor/ceiling assembly consists of min. 4-1/2 in. thick normal weight (100 to 150 pcf) reinforced concrete. Create an opening in the floor assembly measuring max. 54 in. long x 56-in. wide. Position the duct assembly concentrically or eccentrically in the opening so that the annular space ranges from min. 1 in. on one side to max. 2 in. on the other. Other opening sizes are allowed provided that the size does not create an annular space greater than 2 in. or smaller than 1 in. between the penetrating item and the face of the opening in the floor/ceiling assembly.
4. FILL, VOID OR CAVITY MATERIAL: Min. 1/4-in. depth of sealant fill material is to be applied to the recess around the top surface of the floor through-penetration

opening. The sealant material abutted the concrete and the duct.

CERTIFIED MANUFACTURER:
Specified Technologies Inc. (STI)

CERTIFIED PRODUCT: Firestopping
Sealant

MODEL: SpecSeal Series SSS
Intumescent Firestop Sealant

6. PACKING MATERIAL: Fill the annular space with leftover FyreWrap® Duct Insulation without the foil facing, 6 pcf fibrous blanket. Cut the blanket into 9 - in strips. Then fold the blanket into a "U" shape and compress it a minimum of 33% and put in into the annual space. Recess the surface of packing material a min. 1/4 in. from the top surface of the floor, as required to accommodate the necessary depth of caulk fill material.

CERTIFIED MANUFACTURER: Unifrax
I LLC

CERTIFIED PRODUCT: Applied
Fireproofing Insulation Blanket

MODEL: FyreWrap® Elite™ 1.5 Duct
Insulation (6 pcf)

MODEL: FyreWrap® EZ 1.5 Duct
Insulation (6 pcf)

MODEL: FyreWrap® 1.5 Duct Insulation
(8 pcf)

MODEL: FyreWrap® MAX 2.0 Duct
Insulation (8 pcf)