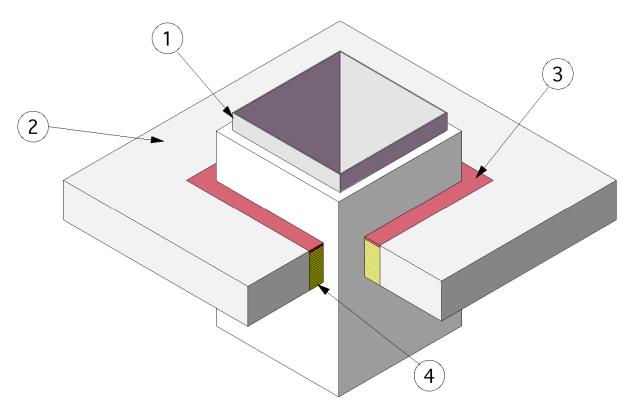
Design No. UNI/FRD 120-22 OPL Design No. FS 590 F FIRE PENETRATION SEAL **Penetrating Item Steel Duct Unifrax I LLC** FyreWrap® Duct Insulations

ASTM E 814 - T-Rating - 2 hr ASTM E 814 - F-Rating - 2 hr



- 1. PENETRATING ITEM: A liquidtight duct system constructed of min. 16 GA (0.028 in.) sheet steel with max. 2500-in. area and max. 50-in. width (max. dim. 50-in. x max. 50-in.) and insulated as detailed in Designs GD 561 F and CFD 505 F.
- 2. CERTIFIED MANUFACTURER: Unifrax I LLC

CERTIFIED PRODUCT: Insulation Blanket

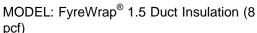
MODEL: FyreWrap[®] Elite™ 1.5 Duct

Insulation (6 pcf)

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

Date Created: April 1, 2004

Revised: October 14, 2008 Project No: 3134214, 3108752, 3099922



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

INSULATION: Use nom. 1-1/2-in. thick, 6pcf (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 foilscrim-metallized polyester facing.

Division 07 – Thermal and Moisture Protection 07 81 00 Applied Fireproofing 07 81 33 Mineral – Fiber Fireproofing

- 3. FLOOR/CEILING ASSEMBLY: The two-hour fire-rated floor/ceiling assembly consists of min. 4-1/2 in. thick normal weight (100-150 pcf) reinforced concrete. Create an opening in the wall assembly measuring max. 58-1/2 long x 55-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. 5 in. on the other.
- 4. FILL, VOID OR CAVITY MATERIAL: Min. 3/8-in. depth of silicone base firestop sealant fill material is to be applied to the recess around the top surface of the floor through-penetration opening. The sealant material is to overlap onto the concrete and the duct insulation nom. 1/2-in.

CERTIFIED MANUFACTURER:

Tremco, Inc.

CERTIFIED PRODUCT: Firestopping

Sealant

MODEL: Tremco Fyre-Sil S/L

MODEL: Tremco Fyre-Sil Gun Grade

5. PACKING MATERIAL: Fill the annular space with leftover unfaced 6pcf soluble fiber blanket. Compress the fiber 25% and

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insert into the annular space around the penetrating item, filling the annular space. Recess the surface of packing material a min. 3/8 in. from the top surface of the floor, as required to accommodate the necessary depth of fill void or cavity material.

CERTIFIED MANUFACTURER: Unifrax I

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)

OPTIONAL PACKING MATERIAL – As an option, Min 4pcf 4 in. thick mineral wool insulation** compressed to 25% may be substituted for the soluble fiber blanket as the packing material.(**Listed with Omega Point Laboratories)

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