

**METAL PIPE THROUGH CONCRETE FLOOR OVER METAL DECK ASSEMBLY**

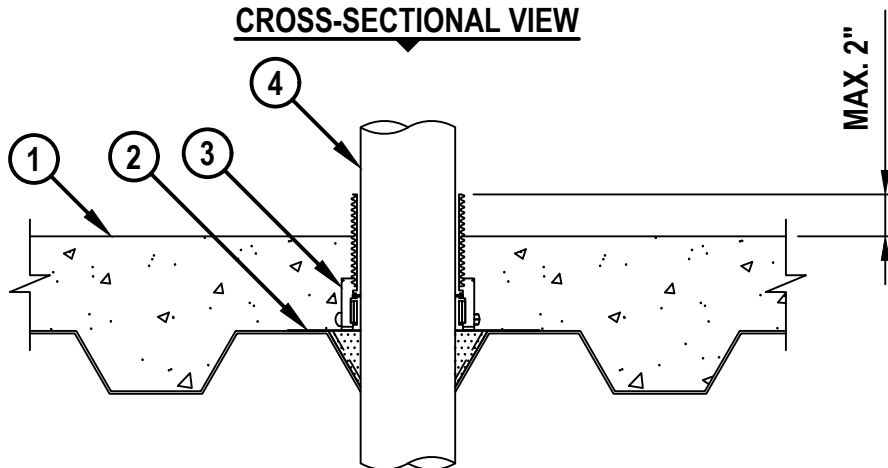
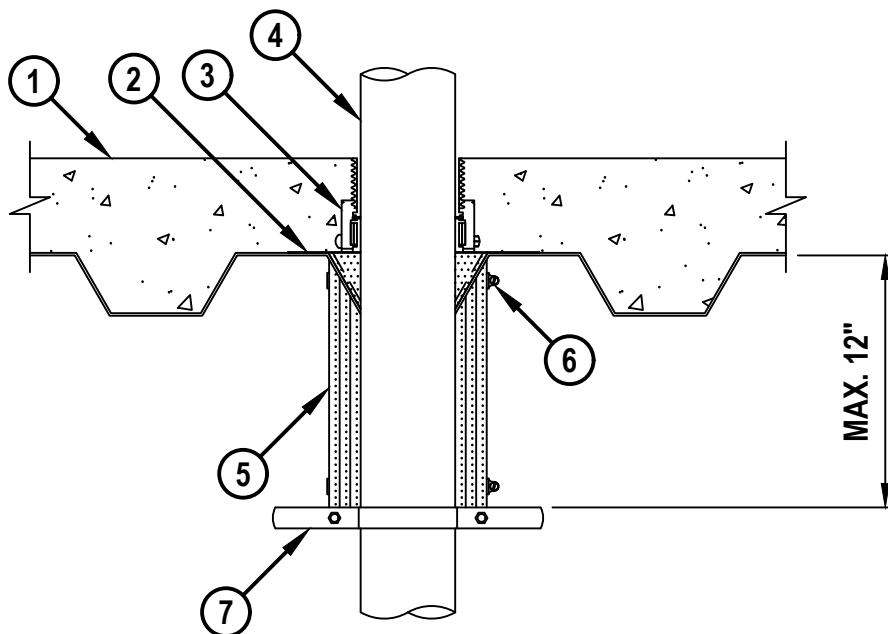
F-RATING = 2-HR.

T-RATING = 0-HR. (CONFIGURATION A) OR 2-HR. (CONFIGURATION B)

L-RATING AT AMBIENT = LESS THAN 1 CFM / SQ FT (SEE NOTE NO. 2 BELOW)

L-RATING AT 400°F = LESS THAN 1 CFM / SQ FT (SEE NOTE NO. 2 BELOW)

FA1220b.070324

**CROSS-SECTIONAL VIEW****CONFIGURATION A****CROSS-SECTIONAL VIEW****CONFIGURATION B**

HILTI, Inc.  
Plano, Texas USA (800) 879-8000

Sheet	1 of 3
Scale	3/32" = 1"
Date	July 03, 2024

Drawing No.

**FA**  
**1220b**

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**1. CONCRETE FLOOR ASSEMBLY (2-HR. FIRE-RATING) :**

A. LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE FLOOR (MINIMUM 7-1/2" THICK).

B. STEEL FLOOR UNIT/FLOOR ASSEMBLY - LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE FLOOR (MINIMUM 4-1/2" THICK) OVER METAL DECKING.

C. STEEL FLOOR UNIT/FLOOR ASSEMBLY - LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE FLOOR (MINIMUM 2-1/2" THICK) OVER METAL DECKING WITH A MINIMUM 2" THICKNESS OF CONCRETE OR GROUT TOPPING EXTENDING CONTINUOUSLY BEYOND THE PERIPHERY OF THE FIRESTOP DEVICE.

**2. HILTI CFS-CID MD PLT [W2" OR W3"] METAL DECK PLATFORM SECURED TO DECK WITH ONE FASTENER IN EACH CORNER.****3. HILTI CFS-CID MD [P OR PX] [2", 3", OR 4"]/[2.5" OR 4"] FIRESTOP CAST-IN DEVICE FOR METAL DECK SECURED TO HILTI CFS-CID MD PLT METAL DECK PLATFORM WITH SCREWS. THE 2.5" HEIGHT DEVICES ARE INTENDED FOR A 2-1/2" CONCRETE TOPPING AND THE 4" HEIGHT DEVICES ARE FOR CONCRETE TOPPINGS GREATER THAN 2-1/2" THICK.****4. PENETRATING ITEM TO BE ONE OF THE FOLLOWING (SEE NOTE NO. 3 BELOW) :**

A. MAXIMUM 4" NOMINAL DIAMETER ALUMINUM PIPE (SCHEDULE 10 OR HEAVIER).

B. MAXIMUM 4" NOMINAL DIAMETER ALUMINUM CONDUIT (SCHEDULE 10 OR HEAVIER).

C. MAXIMUM 4" NOMINAL DIAMETER ALUMINUM EMT (SCHEDULE 10 OR HEAVIER).

**CONFIGURATION B****5. HILTI CFP-ES ENDO-SHIELD INSTALLED IN LAYERS AS FOLLOWS :**

A. FIRST LAYER OF ENDO-SHIELD SHALL EXTEND MINIMUM 12" BELOW THE FLOOR AND BE TIGHTLY WRAPPED AROUND THE PENETRANT WITH ENDS TIGHTLY BUTTED.

B. SECOND LAYER OF ENDO-SHIELD SHALL EXTEND MINIMUM 12" BELOW THE FLOOR AND BE TIGHTLY WRAPPED AROUND THE FIRST LAYER OF ENDO-SHIELD WITH ENDS TIGHTLY BUTTED AND VERTICAL SEAM OFFSET 2" FROM SEAM IN FIRST LAYER OF ENDO-SHIELD.

C. THIRD LAYER OF ENDO-SHIELD SHALL EXTEND MINIMUM 12" BELOW THE FLOOR AND BE TIGHTLY WRAPPED AROUND THE SECOND LAYER OF ENDO-SHIELD WITH ENDS TIGHTLY BUTTED AND VERTICAL SEAM OFFSET 2" FROM SEAM IN FIRST LAYER OF ENDO-SHIELD.

D. NOMINAL 3" WIDE ALUMINUM TAPE TO BE APPLIED AND CENTERED OVER LONGITUDINAL SEAMS WITHIN EACH LAYER OF ENDO-SHIELD.

**6. STAINLESS STEEL CLAMP: INSTALL 1/2" WIDE STAINLESS STEEL HOSE CLAMPS TO SECURE INSULATION (ITEM 5) AROUND PENETRATING ITEM (ITEM 4). INSTALL HOSE CLAMPS AROUND INSULATION SPACED 2" FROM THE ENDS OF THE INSULATION.****7. RISER CLAMP: INSTALL 4" GALVANIZED STEEL RISER CLAMP AROUND PENETRATING ITEM (ITEM 4) FLUSH WITH THE END OF THE INSULATION (ITEM 5).****Hilti Firestop Systems**HILTI, Inc.  
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Scale -

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UL/cUL SYSTEM NO. F-A-1220

## METAL PIPE THROUGH CONCRETE FLOOR OVER METAL DECK ASSEMBLY

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NOMINAL PIPE DIAMETER	PENETRANT TYPE	PRODUCT DESCRIPTION
1-1/2" TO 2"	ALUMINUM	CP 680-[P OR PX] 2" CFS-CID MD [P OR PX] 2"
2-1/2" TO 3"	ALUMINUM	CP 680-[P OR PX] 3" CFS-CID MD [P OR PX] 3"
>3" TO 4"	ALUMINUM	CP 680-[P OR PX] 4" CFS-CID MD [P OR PX] 4"

NOTES : 1. THE T-RATING IS 0-HR. FOR CONFIGURATION A, AND 2-HR. FOR CONFIGURATION B.  
2. L-RATING APPLIES ONLY WHEN NOMINAL DIAMETER OF PIPE EQUALS SIZE OF DEVICE  
(2" PIPE IN 2" DEVICE, ETC.).



Hilti Firestop Systems

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