

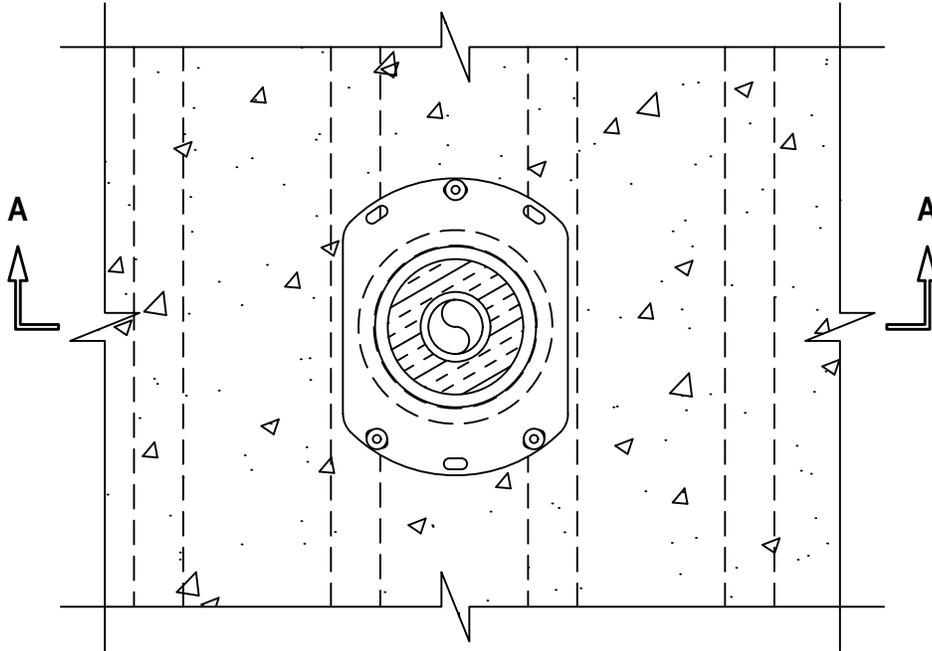
UL SYSTEM NO. F-B-5010

**INSULATED METAL PIPE THROUGH HOLLOW-CORE CONCRETE FLOOR ASSEMBLY**

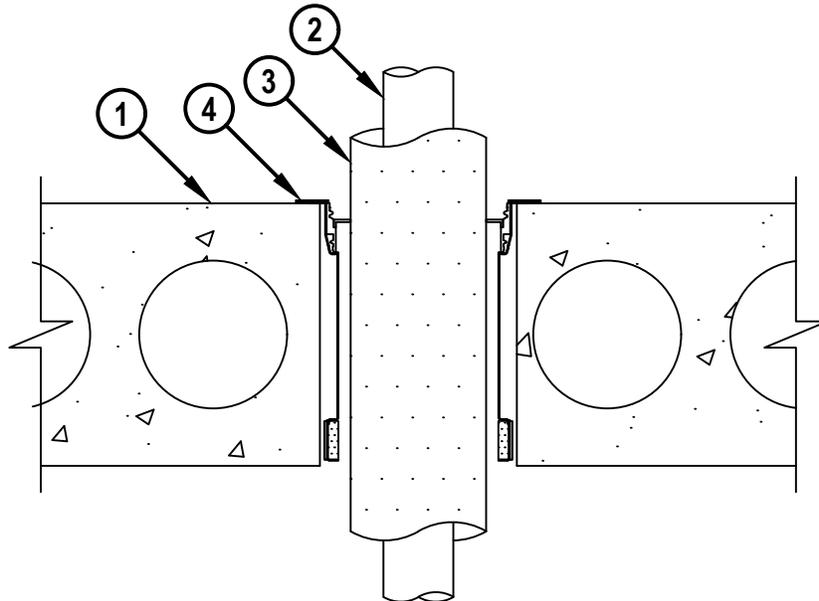
F-RATING = 2-HR.  
T-RATING = 1-3/4-HR.

FB5010b.031918

**TOP VIEW**



**SECTION A-A**



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

Sheet	1 of 2
Scale	1 1/64" = 1"
Date	Mar. 19, 2018

Drawing No.

**FB  
5010b**

*Saving Lives through Innovation and Education*

**INSULATED METAL PIPE THROUGH HOLLOW-CORE CONCRETE FLOOR ASSEMBLY**

F-RATING = 2-HR.  
T-RATING = 1-3/4-HR.

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1. ANY UL/cUL CLASSIFIED PRECAST (HOLLOW-CORE) CONCRETE FLOOR (MINIMUM 6" TO MAXIMUM 12-1/2" THICK) (2-HR. FIRE-RATING).
2. MAXIMUM 2" NOMINAL DIAMETER CROSS-LINKED POLYETHYLENE (PEX) TUBING (SDR 9) (AQUAPEX OR WIRSBO HEPEX BY UPONOR) (CLOSED PIPING SYSTEM ONLY).
3. NOMINAL 1" THICK GLASS-FIBER PIPE INSULATION (MIN. 3.5 PCF DENSITY).
4. HILTI CFS-DID FIRESTOP DROP-IN DEVICE INSERTED INTO OPENING (SEE TABLE BELOW) AND SECURED TO TOP OF FLOOR WITH THREE HILTI 1/4" (6mm) DIAMETER BY 1-1/4" (32mm) LONG KWIK-CON II+ CONCRETE SCREW ANCHORS, HILTI 1/4" (6mm) DIAMETER BY 1-3/4" (45mm) LONG KWIK BOLT 3 STEEL EXPANSION ANCHORS, OR HILTI 1/4" (6mm) BY 3/4" (19mm) LONG METAL HIT ANCHORS (INSTALLED IN A TRIANGULAR FASHION THROUGH HOLES PROVIDED). IN ADDITION, FOR NOMINAL 2", 3", AND 4" DEVICES, FOUR 11/16" (18mm) LONG HILTI X-GH P18 MX STEEL FASTENERS MAY BE INSTALLED THROUGH THE STEEL FLANGE, TWO ON EACH SIDE.

NOM PIPE OR TUBE (ITEM 2) DIAM	INSULATION (ITEM 3) THICKNESS	FIRESTOP DEVICE	CORE HOLE	FLOOR THICKNESS (MIN. MAX.)
1/2"	1"	CFS-DID 2" C	4"	6" to 6-1/2"
1"	1"	CFS-DID 3" C	5"	6" to 6-1/2"
2"	1"	CFS-DID 4" C	6"	6" to 6-1/2"
1/2"	1"	CFS-DID 2" HC8	4"	7-1/2" to 8-1/2"
1"	1"	CFS-DID 3" HC8	5"	7-1/2" to 8-1/2"
2"	1"	CFS-DID 4" HC8	6"	7-1/2" to 8-1/2"
1/2"	1"	CFS-DID 2" HC10	4"	9-1/2" to 10-1/2"
1"	1"	CFS-DID 3" HC10	5"	9-1/2" to 10-1/2"
2"	1"	CFS-DID 4" HC10	6"	9-1/2" to 10-1/2"
1/2"	1"	CFS-DID 2" HC12	4"	11-1/2" to 12-1/2"
1"	1"	CFS-DID 3" HC12	5"	11-1/2" to 12-1/2"
2"	1"	CFS-DID 4" HC12	6"	11-1/2" to 12-1/2"



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