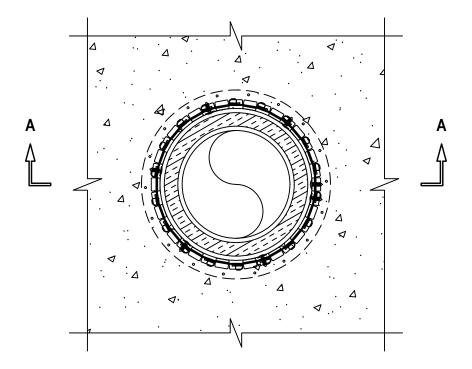
cUL SYSTEM NO. F-A-5077

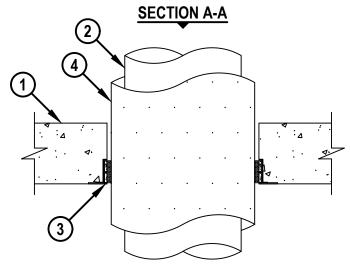
cUL FA5077a.102422

INSULATED METAL PIPE THROUGH CONCRETE FLOOR ASSEMBLY F-RATING = 2-HR.

FT-RATING = 1-HR. AND 1-3/4-HR. (SEE TABLE BELOW) FH-RATING = 0-HR. AND 2-HR. (SEE NOTE NO. 1 BELOW) FTH-RATING = 0-HR. AND 1-3/4-HR. (SEÈ TABLE AND NOTE NO. 1 BELOW)

TOP VIEW







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Sheet	1 of 2
Scale	9/64" = 1"
Date	Oct. 24, 2022

Drawing No. FA5077a

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INSULATED METAL PIPE THROUGH CONCRETE FLOOR ASSEMBLY

F-RATING = 2-HR.

FT-RATING = 1-HR. AND 1-3/4-HR. (SEE TABLE BELOW)
FH-RATING = 0-HR. AND 2-HR. (SEE NOTE NO. 1 BELOW)
FTH-RATING = 0-HR. AND 1-3/4-HR. (SEE TABLE AND NOTE NO. 1 BELOW)

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- 1. LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE FLOOR ASSEMBLY (MINIMUM 4-1/2" THICK) (2-HR. FIRE-RATING).
- 2. PENETRATING ITEM TO BE ONE OF THE FOLLOWING (SEE TABLE BELOW):
 - A. MAXIMUM 8" NOMINAL DIAMETER STEEL PIPE (SCHEDULE 40 OR HEAVIER).
 - B. MAXIMUM 8" NOMINAL DIAMETER CAST IRON PIPE.
 - C. MAXIMUM 6" NOMINAL DIAMETER COPPER PIPE OR TUBING.
- 3. HILTI CFS-CID M FIRESTOP CAST-IN DEVICE CAST OR GROUTED INTO CONCRETE FLOOR (SEE TABLE BELOW).
- 4. THE FOLLOWING TYPES AND SIZES OF PIPE INSULATION MAY BE USED (SEE TABLE BELOW):
 - A. NOMINAL 1" OR 2" THICK GLASS-FIBER PIPE INSULATION (MIN. 3.5 PCF DENSITY).
 - B. NOMINAL 1" OR 2" THICK UNFACED MINERAL FIBER PIPE INSULATION (HIGH TEMPERATURE PIPE INSULATION 1200, HIGH TEMPER PIPE INSULATION BWT, OR HIGH TEMPERATURE PIPE INSULATION THERMALOC BY INDUSTRIAL INSULATION GROUP, LLC). PIPE INSULATION SECURED WITH NOMINAL 16 AWG STEEL WIRE SPACED MAX 12" OC.

NOM PIPE DIAM	PIPE TYPE	PRODUCT DESCRIPTION	NOM PIPE COVERING THICKNESS	FT-RATINGS
6"	ALL	CFS-CID M 10"	2"	1-HR.
4"	ALL	CFS-CID M 8"	2"	1-HR.
8"	STEEL, IRON	CFS-CID M 10"	1"	1-3/4-HR.
6"	STEEL, IRON	CFS-CID P 8"	1"	1-3/4-HR.

NOTE: WHEN NOMINAL 2" THICK PIPE COVERING IS USED, THE FH AND FTH RATING IS 0-HR.



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