#### UL/cUL SYSTEM NO. F-A-5084

## INSULATED METAL PIPE THROUGH CONCRETE FLOOR

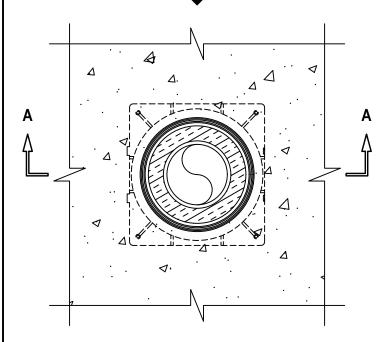
F-RATING = 3-HR.

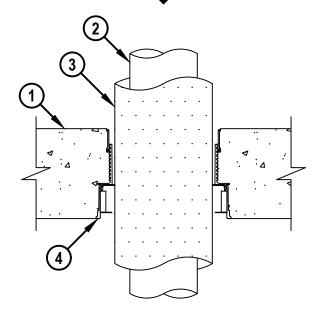
T-RATING = 1-3/4-HR., 2-HR., 2-1/2-HR., 2-3/4-HR., OR 3-HR. (SEE TABLE BELOW)
L-RATING AT AMBIENT = SEE TABLE BELOW
L-RATING AT 400°F = SEE TABLE BELOW

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#### **TOP VIEW**

## SECTION A-A





- 1. LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE FLOOR (MINIMUM 4-1/2" THICK) (3-HR. FIRE-RATING).
- 2. PENETRATING ITEM TO BE ONE OF THE FOLLOWING:
  - A. MAXIMUM 4" NOMINAL DIAMETER STEEL PIPE (SCHEDULE 10 OR HEAVIER).
  - B. MAXIMUM 4" NOMINAL DIAMETER CAST OR DUCTILE IRON PIPE.
  - C. MAXIMUM 4" NOMINAL DIAMETER COPPER PIPE OR TUBING.
- 3. NOMINAL 1", 1-1/2" OR 2" THICK GLASS-FIBER PIPE INSULATION.
- 4. HILTI CFS-CID U [2", 3", 4", OR 6"] OR CFS-CID U 2" CA CAST-IN FIRESTOP DEVICE CAST OR GROUTED INTO CONCRETE FLOOR (SEE TABLE BELOW) WITH MAXIMUM 2" EXTENSION ABOVE FLOOR.



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Sheet	1 of 2
Scale	5/32" = 1"
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#### **UL/cUL SYSTEM NO. F-A-5084**

### **INSULATED METAL PIPE THROUGH CONCRETE FLOOR**

F-RATING = 3-HR.

T-RATING = 1-3/4-HR., 2-HR., 2-1/2-HR., 2-3/4-HR., OR 3-HR. (SEE TABLE BELOW)
L-RATING AT AMBIENT = SEE TABLE BELOW
L-RATING AT 400°F = SEE TABLE BELOW

NOM PIPE DIAMETER, IN. (MM) (SEE NOTE 2 AND 3)	NOM THICK OF PIPE COVERING, IN. (MM)	FIRESTOP DEVICE	T, FT AND FTH RATINGS, HR	L RATING AT AMBIENT CFM/SQ FT (L/S/M²)	L RATING AT 400°F (204°C) CFM/SQ FT (L/S/M²)
1/2 (13)	1 (25)	CFS-CID U 2" OR CFS-CID 2" CA	2-1/2	3 (15.2)	1.5 (7.6)
1/2 (13)	1 (25)	CFS-CID U 2" OR CFS-CID 2" CA	2-3/4	3 (15.2)	1.5 (7.6)
1 (25)	1 (25)	CFS-CID U 3"	1-3/4	3 (15.2)	1.5 (7.6)
1 (25) (SEE NOTE 1)	1-1/2 (38)	CFS-CID U 4"	3	N/A	N/A
2 (51)	1 (25)	CFS-CID U 4"	1-3/4	3 (15.2)	1.5 (7.6)
2 (51)	1 (25)	CFS-CID U 4"	2-3/4	3 (15.2)	1.5 (7.6)
2 (51)	2 (51)	CFS-CID U 6"	2-3/4	LESS THAN 1 (LESS THAN 5.1)	LESS THAN 1 (LESS THAN 5.1)
4 (102)	1 (25)	CFS-CID U 6"	2	3 (15.2)	1.5 (7.6)

- NOTES: 1. WHEN USING A NOMINAL 1" DIAMETER PIPE WITH 1-1/2" THICK INSULATION IN A 4" DEVICE, TIGHTLY PACK A MINIMUM 2" THICKNESS OF MINERAL WOOL (MIN. 4 PCF DENSITY) AROUND PIPE FLUSH WITH THE TOP OF FIRESTOP DEVICE.
  - 2. WHEN PIPE SIZES ARE LESS THAN THOSE SHOWN IN THE TABLE, TIGHTLY PACK A MINIMUM 4" THICKNESS OF MINERAL WOOL (MIN. 4 PCF DENSITY) AROUND PIPE FLUSH WITH THE TOP OF FIRESTOP DEVICE.
  - 3. [OPTIONAL] MIN 1/4" DEPTH HILTI CFS-SIL GG OR CFS-S SIL SL SILICONE FIRESTOP SEALANT MAY BE APPLIED WITHIN THE ANNULUS, FLUSH WITH THE TOP SURFACE OF THE FLOOR.



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Scale	-
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