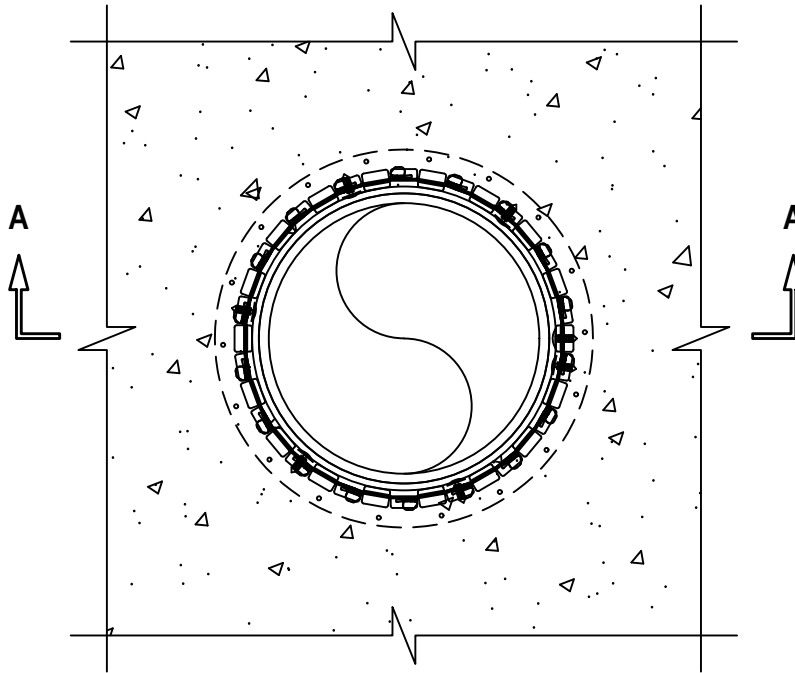


UL SYSTEM NO. F-B-1034
METAL PIPE THROUGH CONCRETE FLOOR ASSEMBLY

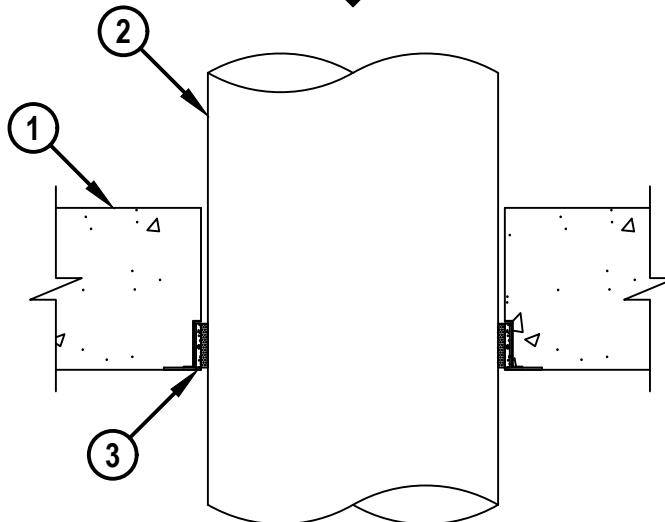
F-RATING = 2-HR.
T-RATING = 0-HR. OR 1/2-HR.
L-RATING AT AMBIENT = LESS THAN 1 CFM PER DEVICE AND 1.47 CFM PER DEVICE
L-RATING AT 400°F = LESS THAN 1 CFM PER DEVICE
W-RATING = CLASS I (SEE NOTE BELOW)

FB1034d.101422

TOP VIEW



SECTION A-A



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

Sheet	1 of 2
Scale	9/64" = 1"
Date	Oct. 14, 2022

Drawing No.

**FB
1034d**

Saving Lives through Innovation and Education

UL SYSTEM NO. F-B-1034

METAL PIPE THROUGH CONCRETE FLOOR ASSEMBLY

F-RATING = 2-HR.

T-RATING = 0-HR. OR 1/2-HR.

L-RATING AT AMBIENT = LESS THAN 1 CFM PER DEVICE AND 1.47 CFM PER DEVICE

L-RATING AT 400°F = LESS THAN 1 CFM PER DEVICE

W-RATING = CLASS I (SEE NOTE BELOW)

FB1034d.101422

1. LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE FLOOR ASSEMBLY (MINIMUM 6" THICK) (2-HR. FIRE-RATING).
2. PENETRATING ITEM TO BE ONE OF THE FOLLOWING (SEE TABLE BELOW) :
 - A. MAXIMUM 10" NOMINAL DIAMETER STEEL PIPE (SCHEDULE 40 OR HEAVIER).
 - B. MAXIMUM 10" NOMINAL DIAMETER CAST IRON PIPE.
 - C. MAXIMUM 4" NOMINAL DIAMETER COPPER PIPE OR TUBING.
 - D. MAXIMUM 6" NOMINAL DIAMETER STEEL CONDUIT.
3. HILTI CFS-CID M OR HILTI CFS-CID P FIRESTOP CAST-IN DEVICE CAST OR GROUTED INTO CONCRETE FLOOR (SEE TABLE BELOW).
4. [NOT SHOWN] WHEN PIPE DIAMETER DOES NOT EQUAL DEVICE SIZE, INSTALL EACH OF THE ITEMS 4A AND 4B LISTED BELOW. W-RATING APPLIES WHEN ITEMS 4A AND 4B ARE INSTALLED. FOR ALTERNATIVE REQUIREMENTS FOR W-RATING WHEN NOMINAL PIPE SIZE EQUALS DEVICE SIZE, SEE NOTE BELOW.
 - A. MINIMUM 4" THICKNESS MINERAL WOOL (MIN. 4 PCF DENSITY) TIGHTLY PACKED, RECESSED TO ACCOMMODATE SEALANT.
 - B. [OPTIONAL] MINIMUM 1/2" DEPTH HILTI CFS-S SIL GG FIRESTOP SILICONE SEALANT, HILTI CFS-S SIL SL FIRESTOP SILICONE SEALANT, OR HILTI FS-ONE MAX INTUMESCENT FIRESTOP SEALANT FLUSH WITH TOP SURFACE OF FLOOR.

MAX PIPE DIAM	PRODUCT DESCRIPTION	T-RATING+	L-RATING AT AMBIENT
10"	CFS-CID M 10"	1/2-HR.	LESS THAN 1 CFM PER DEVICE
8"	CFS-CID M 8"	1/2-HR.	LESS THAN 1 CFM PER DEVICE
8"	CFS-CID P 8"	0-HR.	1.47 CFM PER DEVICE

+WHEN PIPE SIZE DOES NOT EQUAL DEVICE SIZE, T-RATING = 0-HR.

NOTES : 1. [OPTIONAL] FOR W-RATING ONLY, WHEN NOMINAL PIPE DIAMETER EQUALS THE DEVICE SIZE, THE FOLLOWING MATERIALS MUST BE INSTALLED :

- A. MINIMUM 2-1/2" THICKNESS MINERAL WOOL (MIN. 4 PCF DENSITY) TIGHTLY PACKED AND RECESSED TO ACCOMMODATE SEALANT - MINERAL WOOL SHALL NOT EXTEND INTO THE WRAP STRIP LAYERS.
- B. MINIMUM 1/2" DEPTH HILTI CFS-S SIL GG FIRESTOP SILICONE SEALANT, HILTI CFS-S SIL SL FIRESTOP SILICONE SEALANT OR HILTI FS-ONE MAX INTUMESCENT FIRESTOP SEALANT FLUSH WITH TOP SURFACE OF FLOOR.



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

Sheet	2 of 2
Scale	-
Date	Oct. 14, 2022

Drawing No.
FB
1034d

Saving Lives through Innovation and Education