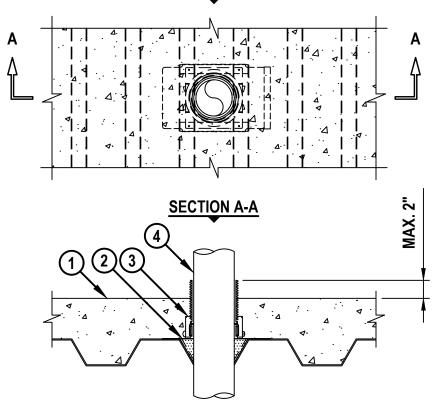
UL/cUL SYSTEM NO. F-A-1192

METAL PIPE THROUGH CONCRETE FLOOR OVER METAL DECK ASSEMBLY

F-RATING = 2-HR. OR 3-HR. T-RATING = 0-HR.

L-RATING AT AMBIENT = LESS THAN 1 CFM / SQ FT (SEE NOTE NO. 5 BELOW)
L-RATING AT 400°F = LESS THAN 1 CFM / SQ FT (SEE NOTE NO. 5 BELOW)
W-RATING = CLASS I (SEE NOTES NO. 3 AND 4 BELOW)





- 1. LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE FLOOR OVER METAL DECKING ASSEMBLY (UL/cUL CLASSIFIED D900 SERIES) WITH 2" OR 3" FLUTED DECKS:
 - A. MINIMUM 2-1/2" THICK (2-HR. FIRE-RATING).
 - B. MINIMUM 4-1/2" THICK (3-HR. FIRE-RATING).
- 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 [M, 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 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.
 - D. MAXIMUM 4" NOMINAL DIAMETER STEEL CONDUIT OR EMT.



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Sheet	1 of 2	
Scale	3/32" = 1"	
Date	Nov. 13, 2019	

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UL/cUL SYSTEM NO. F-A-1192

METAL PIPE THROUGH CONCRETE FLOOR OVER METAL DECK ASSEMBLY

F-RATING = 2-HR. OR 3-HR. T-RATING = 0-HR.

L-RATING AT AMBIENT = LESS THAN 1 CFM / SQ FT (SEE NOTE NO. 5 BELOW)
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W-RATING = CLASS I (SEE NOTES NO. 3 AND 4 BELOW)

NOMINAL PIPE DIAMETER	PENETRANT TYPE	PRODUCT DESCRIPTION
1-1/2" TO 2"	STEEL, CAST IRON, CONDUIT, EMT	CFS-CID MD M 2" CFS-CID MD [P OR PX] 2"
2" TO 2-1/2"	COPPER	CFS-CID MD M 2" CFS-CID MD [P OR PX] 2"
2-1/2" TO 3"	ALL	CFS-CID MD M 3" CFS-CID MD [P OR PX] 3"
>3" TO 4"	COPPER	CFS-CID MD [P OR PX] 4"
	STEEL, CAST IRON, CONDUIT, EMT	CFS-CID MD M 4" CFS-CID MD [P OR PX] 4"
4"	COPPER	CFS-CID MD M 4"

- NOTES: 1. WHEN PIPE DIAMETER IS SMALLER THAN INDICATED ABOVE, A MINIMUM 1" THICKNESS HILTI CP 618 FIRESTOP PUTTY STICK SHALL BE APPLIED WITHIN THE ANNULUS BETWEEN THE PIPE AND PERIPHERY OF THE CAST-IN FIRESTOP DEVICE. FOR A 2.5" HEIGHT DEVICE, AN EXTENSION TUBE MUST BE THREAD INTO TOP OF DEVICE TO ACCOMMODATE HILTI CP 618 FIRESTOP PUTTY STICK.
 - 2. AS AN ALTERNATE TO HILTI CP 618 FIRESTOP PUTTY STICK, FOR 4" HEIGHT DEVICES ONLY, MINIMUM 4" MINERAL WOOL (MIN. 4 PCF DENSITY) SHALL BE TIGHTLY PACKED BETWEEN THE PIPE AND DEVICE FLUSH WITH TOP SURFACE.
 - 3. AS AN ALTERNATE TO ITEMS ABOVE (NOTES NO. 1 AND 2) HILTI IPS OR CPS TOP SEAL MAY BE USED ON 1/2" TO 2" NOMINAL DIAMETER PIPES IN CONJUNCTION WITH HILTI 2" CAST-IN DEVICES. W-RATING APPLIES ONLY TO 1", 1-1/4", 1-1/2", AND 2" COPPER PIPE/TUBES IN CONJUNCTION WITH CORRESPONDING CPS TOP SEAL PLUG AND WHEN DEVICE EXTENSIONS ARE CAST-IN.
 - 4. FOR W-RATING, A WATER BARRIER MODULE MAY BE THREAD ON TOP OF CAST-IN FIRESTOP DEVICES AFTER THE HOLE IN THE FLUTED DECK HAS BEEN MADE FOR NOMINAL 2", 3", AND 4" METAL PIPES (LISTED ABOVE). IN ADDITION, A 3" WATER BARRIER MODULE MAY BE USED ON A NOMINAL 2-1/2" STEEL, CAST IRON, STEEL CONDUIT, OR EMT IN CONJUNCTION WITH A HILTI CFS-CID MD M 3" OR HILTI CFS-CID MD P/PX 3". W-RATING WITH WATER BARRIER MODULE ONLY APPLIES WITH A 4" HEIGHT DEVICE IS USED AND WHEN PIPE IS INSTALLED FROM THE BOTTOM OF DEVICE.
 - 5. L-RATING APPLIES ONLY WHEN NOMINAL DIAMETER OF PIPE EQUALS SIZE OF DEVICE (2" PIPE IN 2" DEVICE, ETC.).



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Scale
Date Nov. 13, 2019

FA 1192b