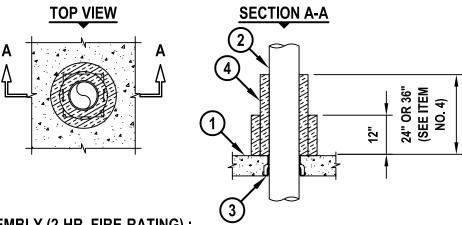
1106e 012016

UL/cUL SYSTEM NO. F-A-1106

METAL PIPE THROUGH CONCRETE FLOOR ASSEMBLY

F-RATING = 2-HR. T-RATING = 2-HR.

L-RATING AT AMBIENT = 1 CFM / SQ FT L-RATING AT 400°F = LESS THAN 1 CFM / SQ FT W-RATING = CLASS I (SEE NOTE NO. 2 BELOW)



- 1. CONCRETE FLOOR ASSEMBLY (2-HR. FIRE-RATING):
 - A. LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE FLOOR (MINIMUM 4-1/2" THICK).
 - B. STEEL FLOOR UNIT/FLOOR ASSEMBLY (UL/cUL D700, D800, OR D900 SERIES) LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE FLOOR (MINIMUM 2-1/2" THICK) OVER METAL DECKING.
- 2. PENETRATING ITEM TO BE ONE OF THE FOLLOWING:
 - A. MAXIMUM 6" NOMINAL DIAMETER STEEL PIPE (SCHEDULE 40 OR HEAVIER).
 - B. MAXIMUM 6" NOMINAL DIAMETER CAST OR DUCTILE IRON PIPE.
 - C. MAXIMUM 6" NOMINAL DIAMETER STEEL CONDUIT.
 - D. MAXIMUM 4" NOMINAL DIAMETER EMT.
- 3. HILTI CP 680-P [2",3",4", OR 6"] OR CP 680-PX [2" OR 3"] CAST-IN FIRESTOP DEVICE CAST OR GROUTED INTO CONCRETE FLOOR (SIZE OF DEVICE SHOULD EQUAL NOMINAL DIAMETER OF PIPE).
- 4. DUCT WRAP (NOMINAL 1-1/2" OR 2" THICK FYREWRAP 2.0 DUCT INSULATION OR FIREWRAP 1.5 DUCT INSULATION [MANUFACTURED BY UNIFRAX] OR NOMINAL 1-1/2" THICK FIREMASTER FASTWRAP XL DUCT INSULATION [MANUFACTURED BY THERMAL CERAMICS]) WRAPPED AROUND PENETRANT, EXTENDING 24" ABOVE THE FLOOR (FOR PENETRANTS OF NOMINAL 4" DIAMETER OR SMALLER) OR 36" ABOVE THE FLOOR (FOR PENETRANTS GREATER THAN A NOMINAL 4" DIAMETER). AN ADDITIONAL LAYER OF DUCT WRAP TIGHTLY WRAPPED AROUND THE FIRST LAYER OF DUCT WRAP, EXTENDING 12" ABOVE FLOOR. SEAMS TO OVERLAP MINIMUM 1" AND SEALED WITH FOIL TAPE.
 - NOTES : 1. FOR CONCRETE FLOOR OVER METAL DECKING APPLICATIONS, A METAL DECK ADAPTER KIT IS REQUIRED.
 - 2. WATER BARRIER MODULE MAY BE THREADED ON TOP OF CAST-IN FIRESTOP DEVICE FOR NOMINAL 2", 3", 4", AND 6" METAL PIPES (LISTED ABOVE). W-RATING WITH WATER BARRIER MODULE ONLY APPLIES WHEN DIAMETER OF PIPE EQUALS SIZE OF MODULE AND WHEN PIPE IS INSTALLED FROM BOTTOM OF DEVICE.
 - 3. L-RATING APPLIES ONLY WHEN NOMINAL DIAMETER OF PIPE EQUALS SIZE OF DEVICE (2" PIPE IN 2" DEVICE, ETC.).



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

Sheet	1 of 1
Scale	3/64" = 1"
Date	Jan. 20, 2016

FA 1106e