

UL/cUL SYSTEM NO. F-A-1127

METAL PIPE THROUGH CONCRETE FLOOR ASSEMBLY

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

-A1127b<u>.</u>01071

- 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 CLASSIFIED D700, D800, OR D900 SERIES) LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE FLOOR (MINIMUM 2-1/2" THICK) OVER METAL DECKING.
 - C. ANY UL/cUL CLASSIFIED PRECAST (HOLLOW-CORE) CONCRETE FLOOR (MINIMUM 6" THICK).
- 2. ONE ORE MORE PENETRATING ITEM(S) TO BE 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 STEEL CONDUIT OR EMT.
 - D. MAXIMUM 1" NOMINAL DIAMETER FLEXIBLE STEEL CONDUIT.
- 3. MINIMUM 2" MINERAL WOOL (MIN. 4 PCF DENSITY) TIGHTLY PACKED AND RECESSED FROM TOP SURFACE OF FLOOR TO ACCOMMODATE FIRESTOP SEALANT. IN HOLLOW-CORE FLOORS, AN ADDITIONAL MINIMUM 2" THICKNESS MINERAL IS TO BE TIGHTLY PACKED, FLUSH WITH BOTTOM OF FLOOR.
- 4. MINIMUM 1/2" DEPTH HILTI FS-ONE MAX OR FS-ONE INTUMESCENT FIRESTOP SEALANT.
- 5. MINIMUM 1/4" BEAD HILTI FS-ONE MAX OR FS-ONE INTUMESCENT FIRESTOP SEALANT APPLIED AT POINT OF CONTACT.
- 6. MINIMUM 1-1/2" THICK DUCT WRAP TIGHTLY WRAPPED AROUND PENETRANTS TO EXTEND 24" ABOVE FLOOR. AN ADDITIONAL LAYER OF MINIMUM 1-1/2" THICK DUCT WRAP TIGHTLY WRAPPED AROUND THE FIRST LAYER OF DUCT WRAP TO EXTEND 12" ABOVE FLOOR. THE SPACES BETWEEN PENETRANTS AT THE TOP OF THE DUCT WRAP ARE TO BE TIGHTLY PACKED WITH A NOMINAL 2" DEPTH OF DUCT WRAP MATERIAL, FLUSH WITH THE TOP OF THE INNER LAYER OF DUCT WRAP. ALL LONGITUDINAL SEAMS OF BOTH LAYERS OF DUCT WRAP ARE SEALED WITH FOIL TAPE.
 - THERMAL CERAMICS, INC. FIREMASTER FASTWRAP+, FIREMASTER FASTWRAP XL, OR PYROSCAT DUCT WRAP XL
 - UNIFRAX FYREWRAP DUCT INSULATION OR FYREWRAP DUCT 1.5 INSULATION.
 - NOTES: 1. MAXIMUM AREA OF OPENING IS 96 SQ. IN. WITH A MAXIMUM DIMENSION OF 16" FOR NORMAL CONCRETE AND CONCRETE OVER METAL DECKING. MAXIMUM AREA OF OPENING IS 49 SQ. IN. WITH A MAXIMUM DIMENSION OF 7" FOR PRECAST (HOLLOW-CORE) CONCRETE FLOORS.
 - 2. ANNULAR SPACE BETWEEN PENETRATING ITEMS AND PERIPHERY OF OPENING = MINIMUM 0", MAXIMUM 2".
 - 3. ANNULAR SPACE BETWEEN PENETRATING ITEMS = MINIMUM 0", MAXIMUM 1/2".



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