

**MULTIPLE PENETRATIONS THROUGH CONCRETE WALL OR BLOCK WALL ASSEMBLY**

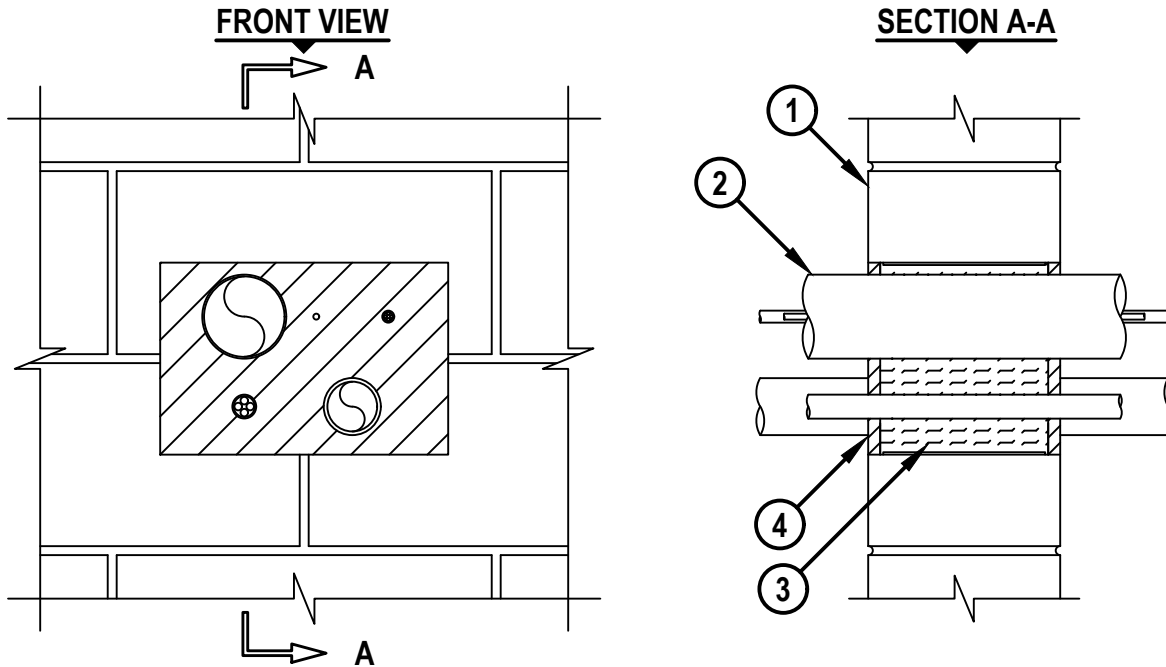
F-RATING = 2-HR.

T-RATING = 1/4-HR.

L-RATING AT AMBIENT = LESS THAN 1 CFM / SQ FT

L-RATING AT 400° F = 4 CFM / SQ FT

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1. CONCRETE WALL ASSEMBLY (2-HR. FIRE-RATING) :
  - A. LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE WALL (MINIMUM 5" THICK).
  - B. ANY UL/cUL CLASSIFIED CONCRETE BLOCK WALL.
2. PENETRATING ITEMS TO BE ANY OF THE FOLLOWING :
  - A. MAXIMUM 3" NOMINAL DIAMETER EMT.
  - B. MAXIMUM 2" NOMINAL DIAMETER PVC PLASTIC PIPE (SCH 40) (CLOSED PIPING SYSTEM ONLY).
  - C. MAXIMUM 25 PAIR NO. 24 AWG TELEPHONE CABLE.
  - D. MAXIMUM 3/C NO. 10 (+GRND) AWG CABLE (ROMEX).
  - E. MAXIMUM 300 KCMIL POWER CABLE.
3. MINIMUM 4" THICKNESS MINERAL WOOL (MIN. 4 PCF DENSITY) TIGHTLY PACKED.
4. MINIMUM 1/2" DEPTH HILTI FS-ONE MAX INTUMESCENT FIRESTOP SEALANT INSTALLED FLUSH WITH BOTH SURFACES OF WALL.

**NOTES :** 1. MAXIMUM SIZE OF OPENING = 12" x 8".  
 2. ANNULAR SPACE BETWEEN PENETRANTS = MINIMUM 1-11/16", MAXIMUM 7-7/16".  
 3. ANNULAR SPACE BETWEEN PENETRANTS AND PERIPHERY OF OPENING = MINIMUM 1/2", MAXIMUM 12" (EXCEPTION: 300 KCMIL POWER CABLE MUST BE MINIMUM 1-1/2" FROM THE EDGE OF OPENING).



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Sheet	1 of 1
Scale	1/8" = 1"
Date	Sep. 13, 2022

Drawing No.  
**WJ**  
**8004m**