

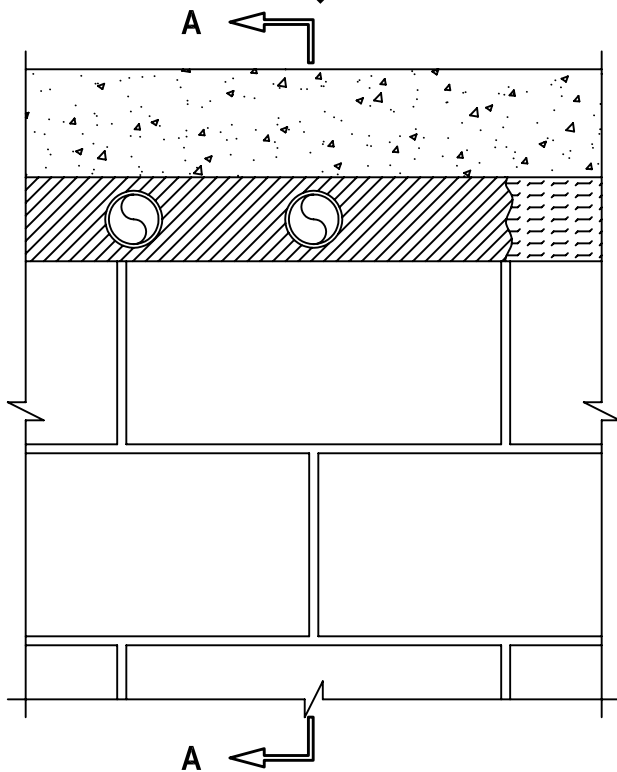
**FIRE-RATED JOINT THROUGH CONCRETE WALL OR BLOCK WALL ASSEMBLY**

F-RATING = 3-HR.

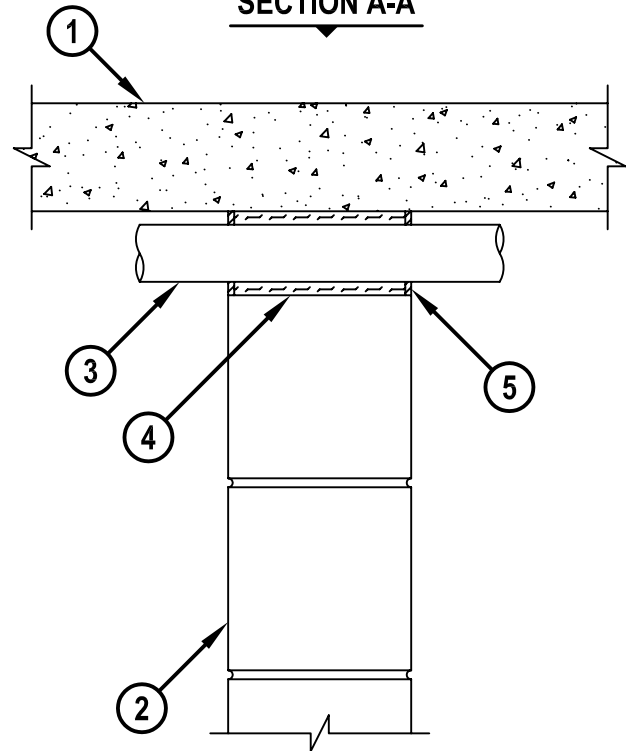
FT, FH AND FTH-RATINGS = 0-HR.

CLASS II MOVEMENT CAPABILITIES - 7% COMPRESSION OR EXTENSION

**FRONT VIEW**



**SECTION A-A**



cUL HWD1003a.070704

1. LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE FLOOR ASSEMBLY (MINIMUM 5" THICK) (3-HR. FIRE-RATING).
2. CONCRETE WALL ASSEMBLY (3-HR. FIRE-RATING) :
  - A. LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE WALL (MINIMUM 5" THICK).
  - B. ANY UL/cUL CLASSIFIED CONCRETE BLOCK WALL.
3. MULTIPLE METALLIC PIPES TO CONSIST OF THE FOLLOWING :
  - A. MAXIMUM 2" NOMINAL DIAMETER STEEL PIPE SCHEDULE 5 OR HEAVIER).
  - B. MAXIMUM 2" NOMINAL DIAMETER CAST OR DUCTILE IRON PIPE.
  - C. MAXIMUM 2" NOMINAL DIAMETER STEEL CONDUIT.
  - D. MAXIMUM 2" NOMINAL DIAMETER EMT.
4. MINIMUM 4-1/2" THICKNESS MINERAL WOOL (MINIMUM 4 PCF DENSITY) COMPRESSED 50% AND RECESSED TO ACCOMMODATE FIRESTOP SEALANT.
5. MINIMUM 1/4" DEPTH HILTI CP 606 FLEXIBLE FIRESTOP SEALANT.

**NOTES :** 1. MAXIMUM WIDTH OF JOINT = 3-1/2".  
 2. ANNULAR SPACE BETWEEN PIPE AND BOTTOM OF FLOOR OR TOP OF WALL = MINIMUM 1/2", MAXIMUM 1".  
 3. ANNULAR SPACE BETWEEN PIPES = MINIMUM 1".



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Sheet	1 of 1
Scale	1/8" = 1"
Date	July 07, 2004

Drawing No.  
**cUL**  
**HWD1003a**