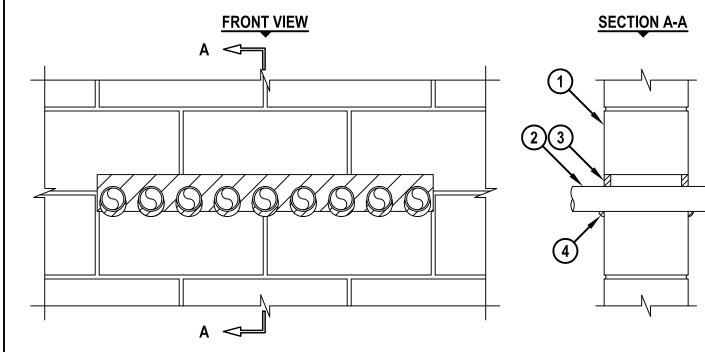
## **UL/cUL SYSTEM NO. W-J-1191**

## MULTIPLE METALLIC PIPES THROUGH CONCRETE WALL OR BLOCK WALL ASSEMBLY

F-RATING = 1-HR. OR 2-HR. T-RATING = 0-HR.



- 1. CONCRETE WALL ASSEMBLY (1-HR. OR 2-HR. FIRE-RATING):
  - A. LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE WALL (MINIMUM 5" THICK).
  - B. ANY UL/cUL CLASSIFIED CONCRETE BLOCK WALL.
- 2. ANY COMBINATION OF THE FOLLOWING PIPES INSTALLED IN A SINGLE ROW:
  - A. MAXIMUM 2" NOMINAL DIAMETER STEEL PIPE (SCHEDULE 5 OR HEAVIER).
  - B. MAXIMUM 2" NOMINAL DIAMETER STEEL CONDUIT.
  - C. MAXIMUM 2" NOMINAL DIAMETER EMT.
- 3. MINIMUM 5/8" DEPTH HILTI FS-ONE MAX OR FS-ONE INTUMESCENT FIRESTOP SEALANT (SEE NOTE NO. 4 BELOW).
- 4. MINIMUM 1/2" BEAD HILTI FS-ONE MAX OR FS-ONE INTUMESCENT FIRESTOP SEALANT APPLIED AT POINT OF CONTACT (SEE NOTE NO. 4 BELOW).

NOTES: 1. MAXIMUM SIZE OF OPENING = 32" x 3-1/2".

- 2. ANNULAR SPACE BETWEEN PIPES AND PERIPHERY OF OPENING = MINIMUM 0", MAXIMUM 1-3/8".
- 3. ANNULAR SPACE BETWEEN PIPES = MINIMUM 0", MAXIMUM 1-1/4".
- 4. AS AN ALTERNATE TO FS-ONE MAX OR FS-ONE ON 1-HR. RATED WALLS ONLY, HILTI CP 606 FLEXIBLE FIRESTOP SEALANT MAY BE USED.
- 5. [OPTIONAL] [NOT SHOWN] FOAM BACKER ROD, MINERAL WOOL, OR GLASS-FIBER INSULATION MAY BE USED AS PACKING MATERIAL.



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Scale	7/64" = 1"
Date	Jan. 08, 2015

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