

UL/cUL SYSTEM NO. W-J-1020

## METAL PIPE THROUGH CONCRETE WALL OR BLOCK WALL

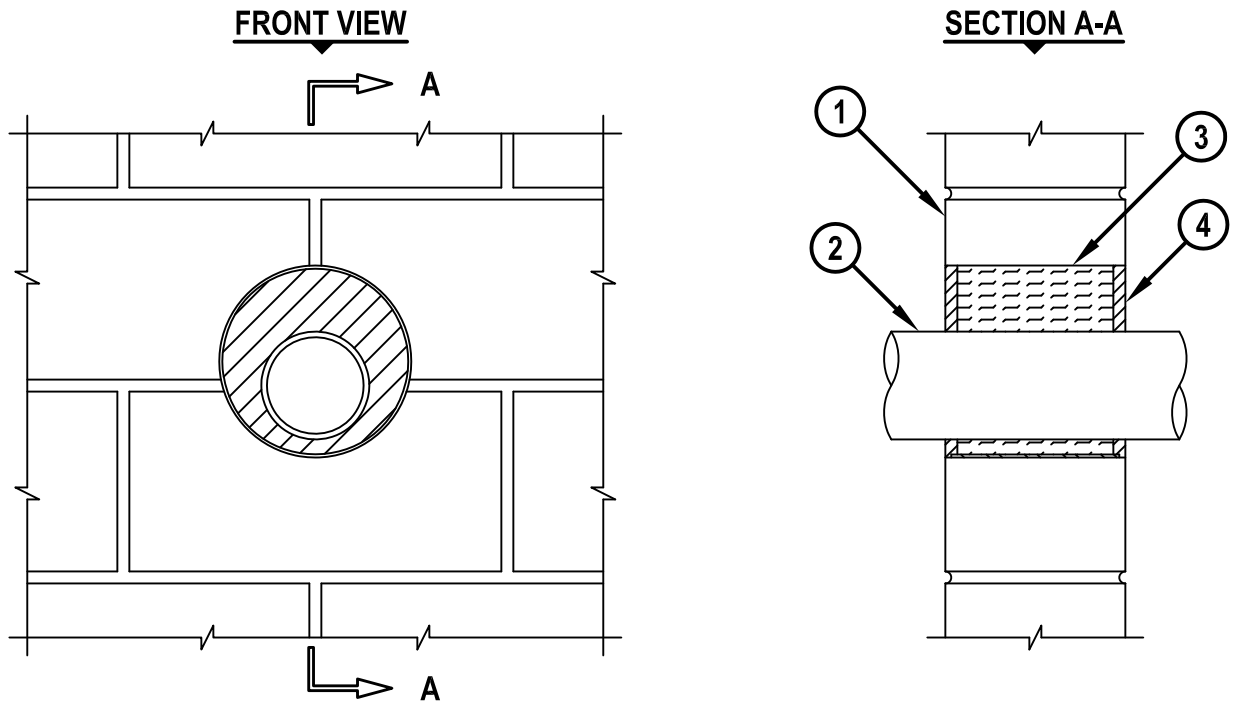
F-RATING = 2-HR.

T-RATING = 0-HR. OR 1/4-HR.

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

L-RATING AT 400°F = 4 CFM / SQ FT

WJ1020f.010815



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 ITEM TO BE ONE OF THE FOLLOWING :
  - A. MAXIMUM 4" NOMINAL DIAMETER COPPER PIPE.
  - B. MAXIMUM 4" NOMINAL DIAMETER STEEL CONDUIT.
  - C. MAXIMUM 4" NOMINAL DIAMETER EMT.
3. MINERAL WOOL (MIN. 4 PCF DENSITY), BACKER ROD, OR HILTI CF 128 FILLER FOAM TO BE USED AS A BACKER.
4. HILTI FS-ONE MAX OR FS-ONE INTUMESCENT FIRESTOP SEALANT :
  - A. MINIMUM 1/4" DEPTH WHEN EMT OR STEEL CONDUIT IS THE PENETRATING ITEM.
  - B. MINIMUM 1/2" DEPTH WHEN COPPER PIPE IS THE PENETRATING ITEM.

NOTES : 1. MAXIMUM DIAMETER OF OPENING = 8".  
2. ANNULAR SPACE = MINIMUM 3/4", MAXIMUM 3-1/2".  
3. FOR HOLLOW BLOCK WALLS, USE NO. 8 STEEL WIRE MESH TO AID IN THE INSTALLATION.



HILTI, Inc.  
Tulsa, Oklahoma USA (800) 879-8000

Sheet	1 of 1
Scale	1/8" = 1"
Date	Jan. 08, 2015

Drawing No.  
**WJ**  
**1020f**

*Saving Lives through Innovation and Education*