

# INSULATED SHEET METAL DUCT THROUGH CONCRETE WALL OR BLOCK WALL ASSEMBLY

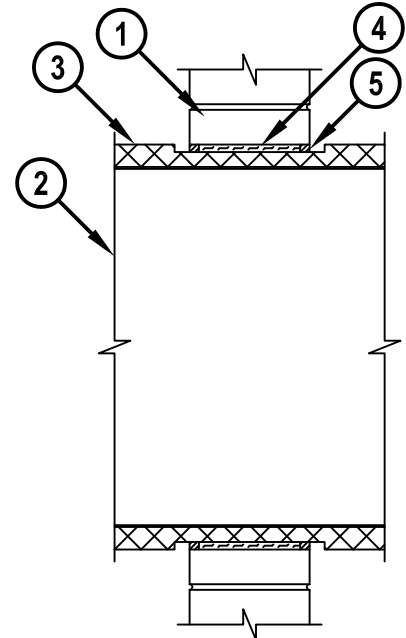
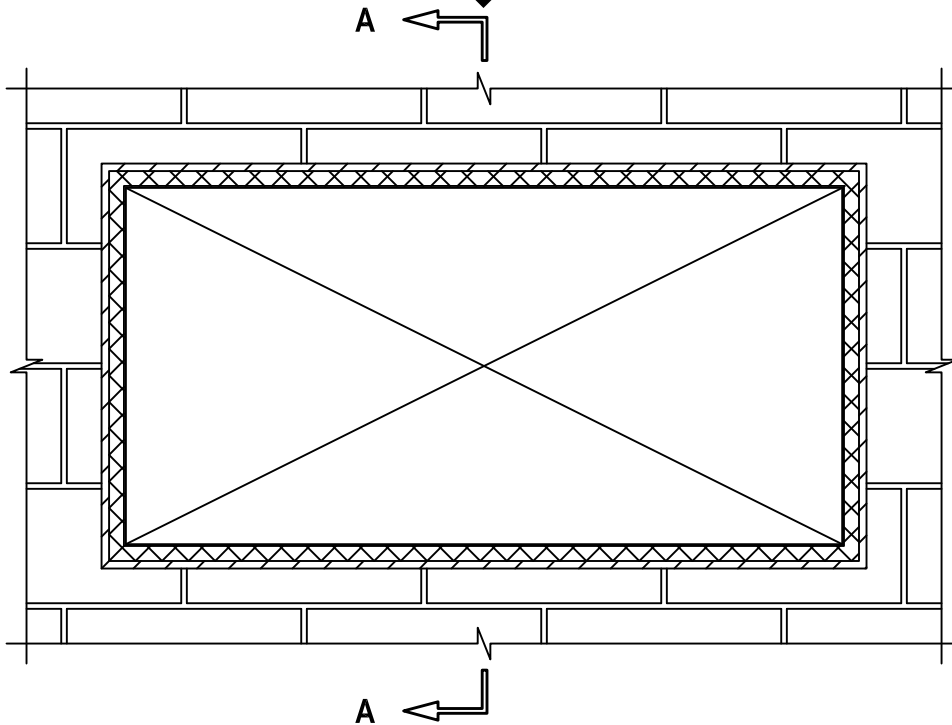
F-RATING = 2-HR.

FT-RATING = 1/4-HR.

FH AND FTH-RATINGS = 0-HR.

**FRONT VIEW**

**SECTION A-A**



cUL WJ7001b.011715

1. CONCRETE WALL ASSEMBLY (2-HR. FIRE-RATING) :
  - A. LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE WALL (MINIMUM 6" THICK).
  - B. ANY UL/cUL CLASSIFIED CONCRETE BLOCK WALL.
2. MAXIMUM 48" x 24" RECTANGULAR SHEET METAL DUCT (MIN. 26 GA.).
3. MAXIMUM 1-1/2" THICK GLASS-FIBER DUCT INSULATION (MIN. 3/4 PCF) WITH FOIL-SCRIM-KRAFT FACING (SEE NOTE NO. 2 BELOW).
4. MINIMUM 3-1/2" THICKNESS MINERAL WOOL (MIN. 4 PCF DENSITY) TIGHTLY PACKED, RECESSED TO ACCOMMODATE SEALANT.
5. MINIMUM 5/8" DEPTH HILTI FS-ONE MAX OR FS-ONE INTUMESCENT FIRESTOP SEALANT.

**NOTES :**

1. MAXIMUM SIZE OF OPENING = 51" x 27".
2. INSULATION TO BE COMPRESSED 50% SUCH THAT THE ANNULAR SPACE = MINIMUM 1/4", MAXIMUM 1-1/4".
3. [OPTIONAL] AFTER SEALING SPACE BETWEEN DUCT AND CONCRETE WALL ASSEMBLY WITH HILTI FIRESTOP SEALANT, FASTEN STEEL ANGLE (MIN. 18 GA.) TO DUCT, THROUGH INSULATION, WITH 3/4" LONG NO. 8 SHEET METAL SCREWS SPACED 6" C/C. STEEL ANGLE TO OVERLAP DUCT MINIMUM 2" AND CONCRETE WALL ASSEMBLY BY MINIMUM 1". ANGLE DOES NOT HAVE TO BE FASTENED TO CONCRETE WALL ASSEMBLY.



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

Sheet	1 of 1
Scale	5/64" = 1"
Date	JAN. 17, 2015

Drawing No.  
**cUL**  
**WJ7001b**