

UL/cUL SYSTEM NO. W-J-5213

# INSULATED METAL PIPE THROUGH CONCRETE WALL ASSEMBLY

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

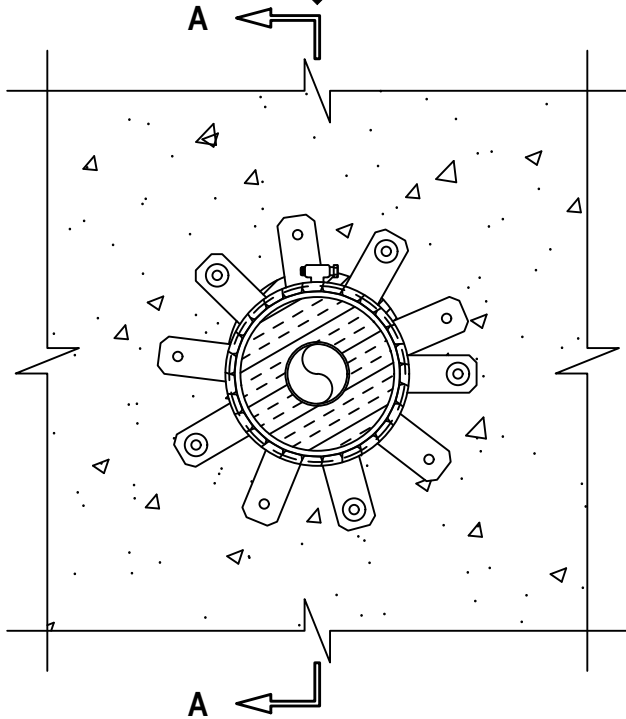
T-RATING = 1-HR. OR 2-HR.

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

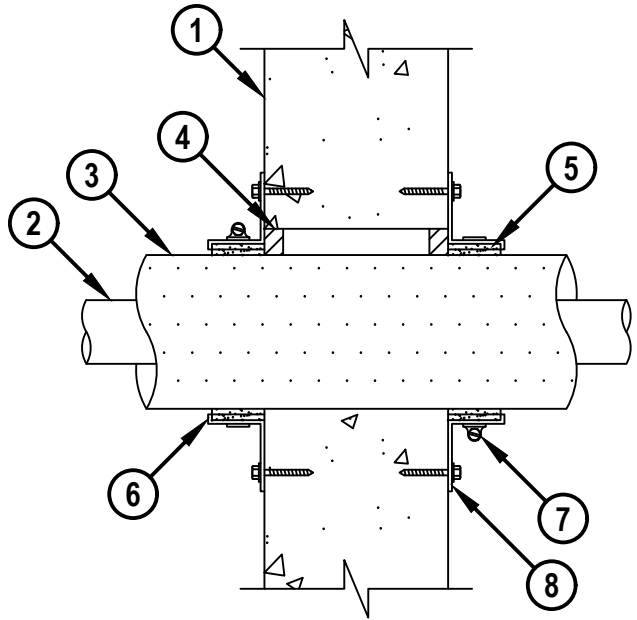
L-RATING AT 400°F = LESS THAN 1 CFM / SQ FT

WJ5213b.010923

**FRONT VIEW**



**SECTION A-A**



HILTI, Inc.  
Plano, Texas USA (800) 879-8000

Sheet	1 of 2
Scale	5/32" = 1"
Date	Jan. 09, 2023

Drawing No.  
**WJ**  
**5213b**

*Saving Lives through Innovation and Education*

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1. LIGHTWEIGHT OR NORMAL CONCRETE WALL OR CONCRETE BLOCK WALL ASSEMBLY. THE RATINGS OF THE SYSTEM ARE EQUAL TO THE RATING OF THE WALL ASSEMBLY.
  - A. MINIMUM 4-7/8" THICK CONCRETE FOR 1-HR. ASSEMBLIES.
  - B. MINIMUM 6-1/8" THICK CONCRETE FOR 2-HR. ASSEMBLIES.
2. PENETRATING ITEM TO BE ONE OF THE FOLLOWING :
  - A. MAXIMUM 2" NOMINAL DIAMETER COPPER PIPE OR TUBING.
3. MAXIMUM 1-1/2" THICK AB/PVC PIPE INSULATION.
4. MINIMUM 5/8" DEPTH HILTI FS-ONE MAX INTUMESCENT FIRESTOP SEALANT.
5. HILTI CP 648E FIRESTOP WRAP STRIPS (NOMINAL 3/16" THICK x 1-3/4" WIDE) CONTINUOUSLY WRAPPED AROUND THE OUTER CIRCUMFERENCE OF THE PENETRATING ITEM, AS SPECIFIED IN TABLE BELOW, WITH ENDS BUTTED AND HELD IN PLACE WITH TAPE.
6. HILTI 1-3/4" RETAINING COLLAR WRAPPED OVER WRAP STRIP, OVERLAPPING MINIMUM 1".
7. NOMINAL 1/2" WIDE STAINLESS STEEL HOSE CLAMP FASTENED AT MID-HEIGHT OF RETAINING COLLAR.
8. EVERY TAB OF RETAINING COLLAR SECURED TO WALL WITH 1-1/2" LONG STEEL MASONRY SCREWS OR ANCHORS IN CONJUNCTION WITH 3/4" DIAMETER STEEL WASHERS.

MAX PIPE DIAMETER	NO. OF LAYERS OF CP 648E
2" (OR SMALLER)	2

NOTES : 1. MAXIMUM DIAMETER OF OPENING = 6".  
2. ANNULAR SPACE = MINIMUM 0", MAXIMUM 1-1/4".



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Sheet	2 of 2
Scale	-
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