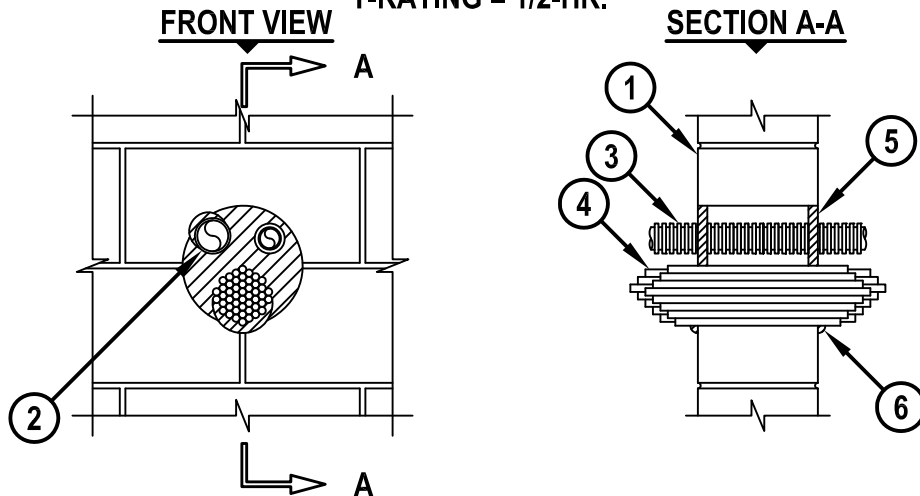


MULTIPLE PENETRANTS THROUGH CONCRETE OR BLOCK WALL ASSEMBLY

F-RATING = 2-HR.
T-RATING = 1/2-HR.



1. CONCRETE WALL ASSEMBLY (2-HR. FIRE-RATING) :
 - A. LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE WALL (MINIMUM 6" THICK).
 - B. ANY UL CLASSIFIED CONCRETE BLOCK WALL.
2. ONE OR MORE OF THE FOLLOWING PIPES, CONDUITS OR TUBES MAY BE INSTALLED WITHIN THE OPENING :
 - A. MAXIMUM 2" NOMINAL DIAMETER STEEL PIPE (SCHEDULE 10 OR HEAVIER).
 - B. MAXIMUM 2" NOMINAL DIAMETER CAST OR DUCTILE IRON PIPE.
 - C. MAXIMUM 2" NOMINAL DIAMETER STEEL CONDUIT OR EMT.
3. MAXIMUM 2" NOMINAL DIAMETER ENT.
4. MAXIMUM 4" DIAMETER CABLE BUNDLE TO CONSIST OF ANY OF THE FOLLOWING :
 - A. MAXIMUM 200 PAIR NO. 24 AWG TELEPHONE CABLE WITH PVC JACKET.
 - B. MAXIMUM 1/C NO. 500 KCMIL COPPER CONDUCTOR POWER CABLE WITH KLPE JACKET.
 - C. MAXIMUM 3/C (+GROUND) NO. 2/0 AWG ALUMINUM CONDUCTOR SER CABLE WITH PVC JACKET.
 - D. MAXIMUM 3/C NO. 8 AWG COPPER CONDUCTOR METAL CLAD CABLE.
 - E. MAXIMUM 4 PAIR NO. 24 AWG COPPER CONDUCTOR COMMUNICATION CABLE.
 - F. MAXIMUM RG/U COAXIAL CABLE WITH PVC JACKET.
5. MINIMUM 5/8" DEPTH HILTI FS-ONE MAX OR FS-ONE INTUMESCENT FIRESTOP SEALANT.
6. MINIMUM 1/2" BEAD HILTI FS-ONE MAX OR FS-ONE INTUMESCENT FIRESTOP SEALANT APPLIED AT POINT OF CONTACT.

ANNULAR SPACE	MINIMUM	MAXIMUM
BETWEEN METALLIC PENETRANTS AND PERIPHERY OF OPENING	0"	2"
BETWEEN METALLIC PENETRANTS, ENT AND CABLES	1/2"	1-1/2"
BETWEEN ENT AND PERIPHERY OF OPENING	1/4"	2"
BETWEEN CABLES AND PERIPHERY OF OPENING	0"	2"

NOTE : MAXIMUM DIAMETER OF OPENING = 8".



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Sheet	1 of 1
Scale	5/64" = 1"
Date	Jan. 09, 2015

Drawing No.
**WJ
8039b**

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