

UL/cUL SYSTEM NO. W-L-8035

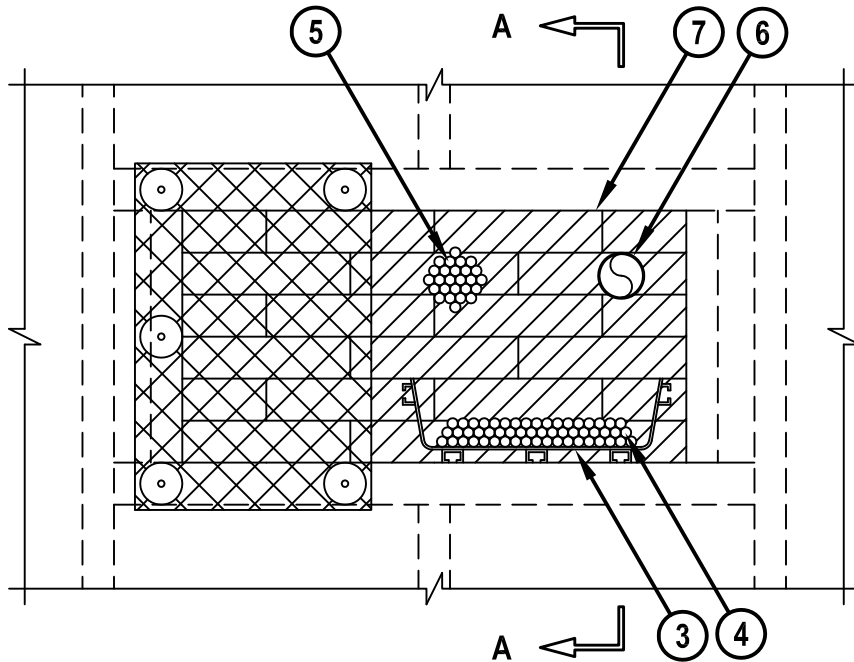
MULTIPLE PENETRATING ITEMS THROUGH GYPSUM WALL ASSEMBLY

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

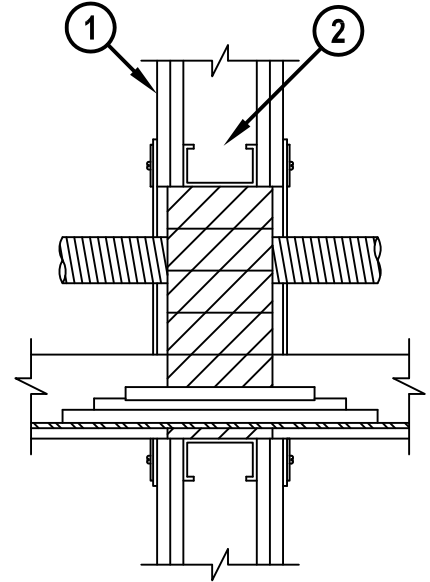
T-RATING = 1-HR., 1 1/2-HR., OR 2-HR.

NOTE : TESTED TO A 2.5 Pa PRESSURE DIFFERENTIAL

FRONT VIEW

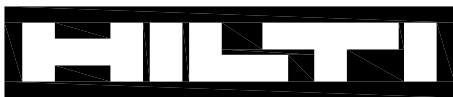


SECTION A-A



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1. GYPSUM WALL ASSEMBLY (UL/cUL CLASSIFIED U300, U400, V400, OR W400 SERIES) (1-HR. OR 2-HR. FIRE-RATING) (2-HR. SHOWN).
2. WOOD STUDS TO CONSIST OF NOMINAL 2" x 4" LUMBER. STEEL STUDS TO BE MINIMUM 2-1/2" WIDE. OPENING TO BE COMPLETELY "FRAMED OUT".



Hilti Firestop Systems

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

Sheet	1 of 2
Scale	7/64" = 1"
Date	Feb. 09, 2016

Drawing No.

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8035e**

Saving Lives through Innovation and Education

MULTIPLE PENETRATING ITEMS THROUGH GYPSUM WALL ASSEMBLY

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

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

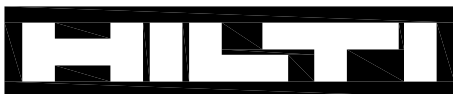
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3. MAXIMUM 12" x 4" FIBER OPTIC CABLE TRAY (ABS) WITH OPTIONAL COVER PLATE. (SEE NOTE NO. 3 BELOW).
4. MAXIMUM 1/2" DIAMETER FIBER OPTIC CABLES WITH PVC JACKET MAY BE INSTALLED WITHIN CABLE TRAY. CABLES TO FILL MAX. 40% OF CROSS-SECTIONAL AREA OF FIBER OPTIC TRAY.
5. MAXIMUM 3" DIAMETER CABLE BUNDLE TO CONSIST OF ANY OF THE FOLLOWING :
 - A. MAXIMUM 100 PAIR NO. 24 AWG TELEPHONE CABLES WITH PVC JACKET.
 - B. MAXIMUM 7/C NO. 12 AWG POWER CABLES WITH PVC JACKET.
 - C. MAXIMUM 1/2" DIAMETER FIBER OPTIC CABLES WITH PVC JACKET.
6. MAXIMUM 2" NOMINAL DIAMETER FIBER OPTIC RACEWAY (PVC).
7. HILTI CFS-BL FIRESTOP BLOCK (2" THICK x 8" WIDE x 5" DEEP, REFERENCE : FRONT VIEW) FIRMLY PACKED AND CENTERED WITHIN THE OPENING.

ANNULAR SPACE	MINIMUM	MAXIMUM
BETWEEN RECTANGULAR FIBER OPTIC TRAY (ABS) AND PERIPHERY OF OPENING	0"	12"
BETWEEN CABLE BUNDLE AND PERIPHERY OF OPENING	1-3/4"	-
BETWEEN ROUND FIBER OPTIC RACEWAY (PVC) AND PERIPHERY OF OPENING	2"	-
BETWEEN ADJACENT PENETRANTS	3-1/2"	-

- NOTES :
1. MAXIMUM AREA OF OPENING = 288 SQ. IN., WITH A MAXIMUM DIMENSION OF 24".
 2. FOR WALLS CONSTRUCTED OF STEEL STUDS LARGER THAN 3-5/8", FIRESTOP BLOCKS SHOULD BE INSTALLED 8" DEEP, RECESSED UP TO A MAXIMUM 1/2" FROM OUTER WALL SURFACES.
 3. WHEN OPTIONAL COVER PLATE IS USED, FIRESTOP BLOCKS SHALL BE PLACED WITHIN THE FIBER OPTIC CABLE TRAY TO FILL VOID.
 4. APPLY HILTI FS-ONE MAX INTUMESCENT FIRESTOP SEALANT, HILTI CP 618 FIRESTOP PUTTY STICK, HILTI CP 620 FIRE FOAM, OR HILTI CP 660 FIRESTOP FOAM INTO ANY VOID THAT MAY EXIST (AROUND PENETRANTS, INTO INTERSTICES OF CABLES, BETWEEN CABLES AND CABLE TRAY, OR BETWEEN FIRESTOP BLOCKS), TO MAXIMUM EXTENT POSSIBLE.
 5. WHEN ANNULAR SPACE EXCEEDS 4", A NOMINAL 2" x 2" STEEL WIRE MESH (16 GA.) SHALL BE ATTACHED TO BOTH SIDES OF THE WALL BY MEANS OF 1/4" HILTI TOGGLER BOLTS WITH 1-1/2" DIAMETER FENDER WASHERS (SPACED MAX. 8" C/C) OR ATTACHED TO STEEL STUDS WITH STEEL SCREWS AND 1-7/16" DIAMETER FENDER WASHERS (SPACED MAX. 6" C/C). STEEL WIRE MESH SHALL BEGIN MAXIMUM 2-1/2" FROM THE PENETRANT AND OVERLAP MINIMUM 3" BEYOND THE PERIPHERY OF THE OPENING.



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