

TOP OF WALL JOINT : GYPSUM WALL ASSEMBLY

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

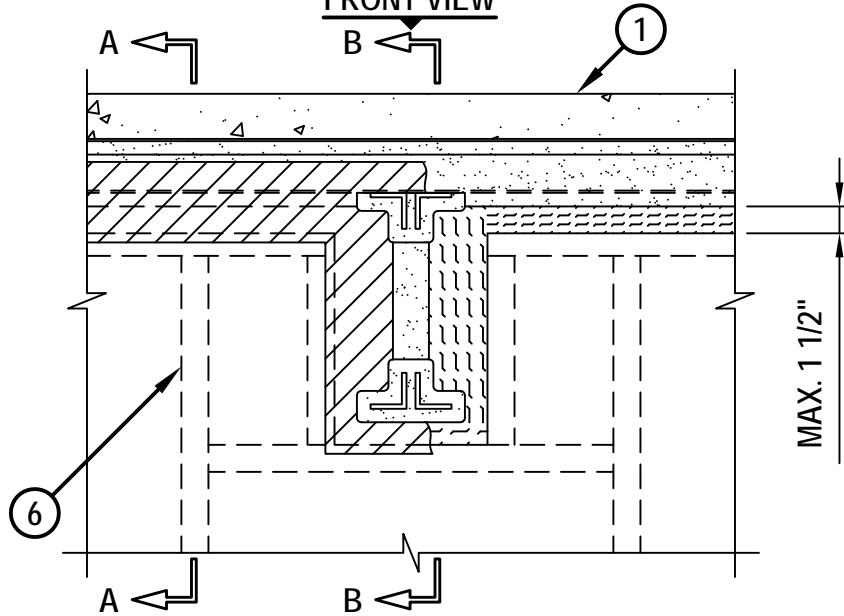
CLASS II MOVEMENT CAPABILITIES - 25% COMPRESSION OR EXTENSION

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

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

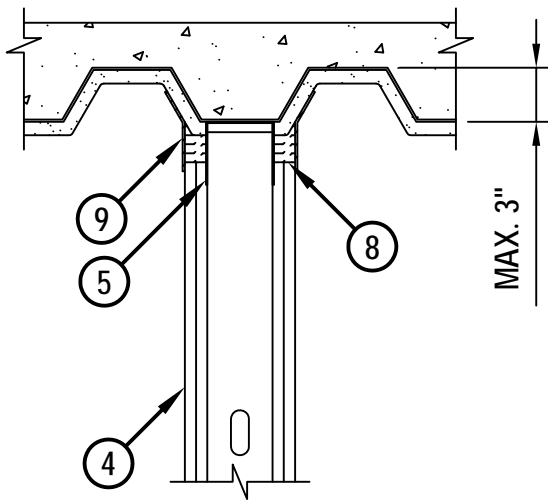
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FRONT VIEW



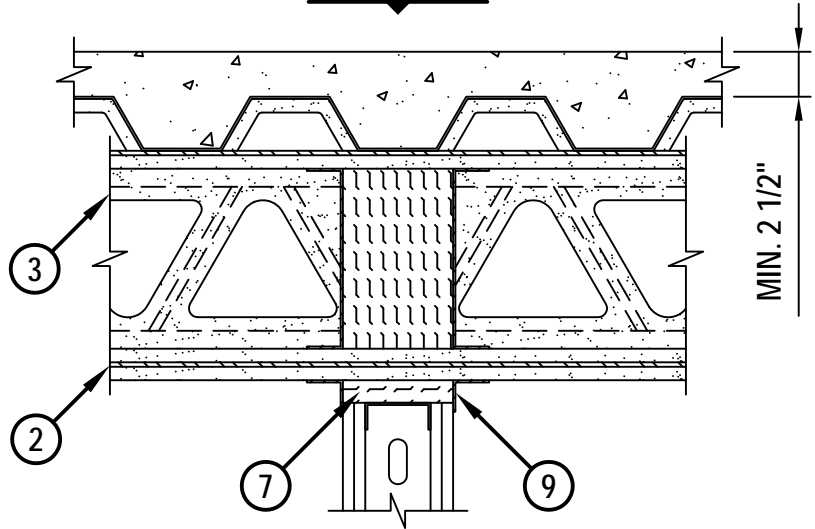
MAX. 1 1/2"

SECTION A-A



MAX. 3"

SECTION B-B



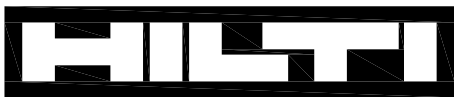
MIN. 2 1/2"

1. FLOOR OR ROOF ASSEMBLY (1-HR. OR 2-HR. FIRE-RATING) :

A. LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE FLOOR (MIN. 2-1/2" THICK) OVER METAL DECKING (UL/cUL CLASSIFIED D700 OR D900 SERIES).

B. INSULATING CONCRETE (MIN. 2-1/4" THICK) OVER METAL DECKING (UL/cUL CLASSIFIED P900 SERIES).

C. [NOT SHOWN] FLUTED STEEL ROOF DECK WITH SPRAY-APPLIED FIREPROOFING (UL/cUL CLASSIFIED P700 SERIES).



Hilti Firestop Systems

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

Sheet	1 of 2
Scale	3/32" = 1"
Date	Oct. 23, 2013

Drawing No.

**HWD
0218j**

UL/cUL SYSTEM NO. HW-D-0218

TOP OF WALL JOINT : GYPSUM WALL ASSEMBLY

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

CLASS II MOVEMENT CAPABILITIES - 25% COMPRESSION OR EXTENSION

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

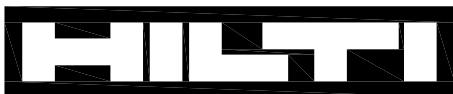
L-RATING AT 400°F = LESS THAN 1 CFM / LIN FT

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2. [OPTIONAL] STEEL BEAM OR OPEN WEB STEEL JOIST, ORIENTED PERPENDICULAR TO WALL ASSEMBLY (SEE NOTE NO. 2 BELOW).
3. UL CLASSIFIED MONOKOTE TYPE MK-6/HY (MANUFACTURED BY W.R. GRACE) OR TYPE 300 (MANUFACTURED BY ISOLATEK, INT.) FIREPROOFING SPRAYED TO THE THICKNESS SPECIFIED IN THE INDIVIDUAL D700 SERIES DESIGN (SEE NOTE NO. 3 BELOW).
4. GYPSUM WALL ASSEMBLY (UL/cUL CLASSIFIED U400 OR V400 SERIES) (1-HR. OR 2-HR. FIRE-RATING) (2-HR. SHOWN).
5. CEILING RUNNER (MIN. 25 GA., FLANGE HEIGHT OF CEILING RUNNER SHALL BE MINIMUM 1/4" GREATER THAN MAXIMUM EXTENDED JOINT WIDTH) FASTENED TO UNDERSIDE OF DECK WITH STEEL MASONRY ANCHORS, STEEL FASTENERS, OR WELDS (SPACED MAX. 24" O.C.), PRIOR TO APPLYING FIREPROOFING (SEE NOTE NO. 5 BELOW).
6. STEEL STUDS (MINIMUM 3-5/8" WIDE), CUT 1/2" TO 3/4" LESS IN LENGTH THAN ASSEMBLY HEIGHT, NESTING IN CEILING RUNNER WITHOUT ATTACHMENT.
7. MINERAL WOOL SAFING (MIN. 4 PCF DENSITY) COMPRESSED AND INSERTED INTO JOINT AND AROUND BEAM, FLUSH WITH WALL SURFACES. MINERAL WOOL INSTALLED WITH FIBERS VERTICAL (MIN. 25% COMPRESSION) ALONG THE SIDES OF THE BEAM AND HORIZONTAL (MIN. 50% COMPRESSION) AT THE BOTTOM OF THE BEAM.
8. HILTI CP 767 SPEED STRIPS OR MINERAL WOOL SAFING (MIN. 4 PCF DENSITY) COMPRESSED 50% AND INSERTED INTO JOINT, FLUSH WITH BOTH SIDES OF WALL.
9. MINIMUM 1/8" (WET) THICKNESS HILTI CFS-SP WB FIRESTOP JOINT SPRAY TO COMPLETELY COVER MINERAL WOOL AND TO OVERLAP MINIMUM 1/2" ONTO GYPSUM WALL, AND MINIMUM 2" ONTO FIREPROOFING, ON BOTH SIDES OF WALL ASSEMBLY.

NOTES : 1. MAXIMUM WIDTH OF JOINT = 1-1/2".

2. WHERE OPEN-WEB STEEL JOISTS PASS THROUGH THE WALL, 3/8" DIAMOND MESH EXPANDED STEEL LATH (NOMINAL WEIGHT = 1.7 TO 3.4 LB. PER YARD) SHALL BE SECURED TO ONE SIDE OF EACH JOIST WITH STEEL TIE WIRE.
3. FIREPROOFING MATERIAL TO BE EXCLUDED FROM METAL DECK DIRECTLY ABOVE THE GYPSUM BOARD AND FROM THE FLANGES OF THE CEILING RUNNER.
4. FRAMED OPENING SHALL BE CONSTRUCTED AROUND EACH STRUCTURAL STEEL MEMBER. MINIMUM CLEARANCE OF 1" TO MAXIMUM OF 4" SHALL BE MAINTAINED BETWEEN FRAMING AND FIREPROOFING ON THE TWO SIDES OF MEMBER. MAXIMUM CLEARANCE OF 2" SHALL BE MAINTAINED ON THE BOTTOM OF THE STEEL SUPPORT MEMBER.
5. AS AN ALTERNATE TO CEILING RUNNER IN ITEM NO. 5, SLOTTED CEILING RUNNERS MAY BE USED. CONSULT THE UL FIRE RESISTANCE DIRECTORY FOR APPROVED MANUFACTURERS.



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