

UL/cUL SYSTEM NO. HW-D-0087

TOP OF WALL JOINT : GYPSUM WALL ASSEMBLY

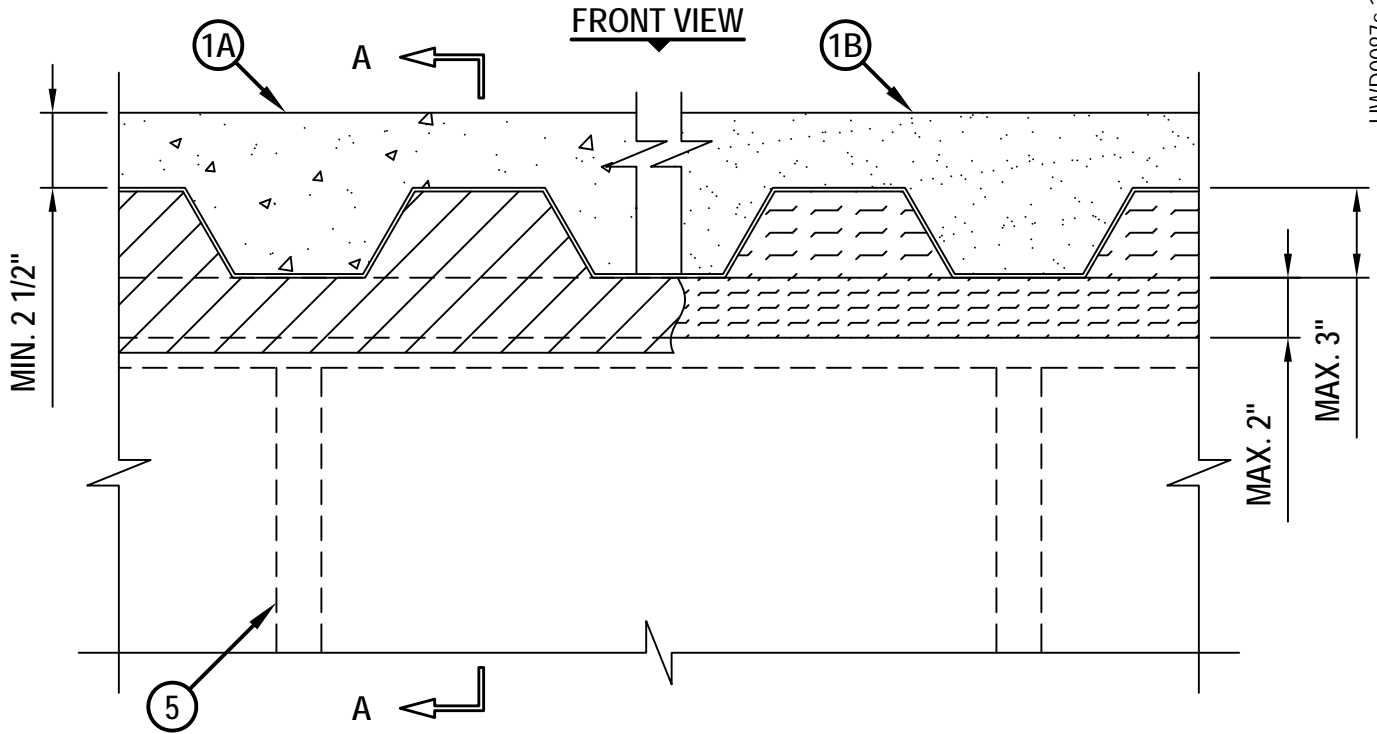
ASSEMBLY RATING = 1-HR. OR 2-HR.

CLASS II AND III MOVEMENT CAPABILITIES - 20% COMPRESSION OR EXTENSION)

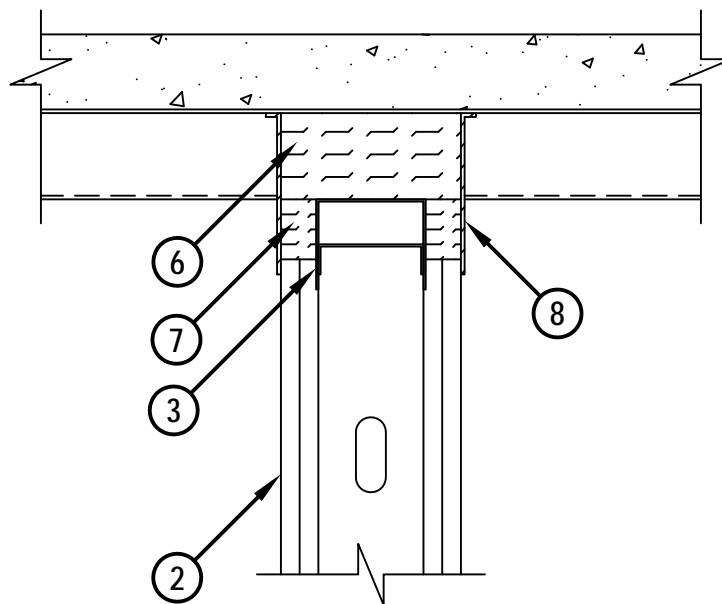
L-RATING AT AMBIENT = LESS THAN 1 CFM / LIN FT

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

HW-D-0087 s. 102313



SECTION A-A



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

Sheet	1 of 2
Scale	5/32" = 1"
Date	Oct. 25, 2013

Drawing No.
**HWD
0087s**

Saving Lives through Innovation and Education

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HWD0087s.102513

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).
2. GYPSUM WALL ASSEMBLY (UL/cUL CLASSIFIED U400 OR V400 SERIES) (1-HR. OR 2-HR. FIRE-RATING).
3. METAL DEFLECTION TRACK (MIN. 22 GA., 3" FLANGES) FASTENED TO UNDERSIDE OF THE DECK WITH STEEL MASONRY ANCHORS, STEEL FASTENERS, OR WELDS (SPACED MAX. 24" O.C.). CEILING RUNNER (1" FLANGES) INSTALLED WITHIN THE U-SHAPED DEFLECTION CHANNEL WITH A 1-1/2" GAP MAINTAINED BETWEEN THE TOP OF THE CEILING RUNNER AND TOP OF DEFLECTION PLATE (SEE NOTE NO. 4 BELOW).
4. [OPTIONAL - NOT SHOWN] WHEN SPRAY-APPLIED FIREPROOFING IS USED, CEILING RUNNER MAY BE SECURED TO DECK WITH Z-SHAPED CLIPS (MIN. 20 GA.) WITH THE FOLLOWING DIMENSIONS : MINIMUM 1" LONG, BUT NOT EXCEEDING THE WIDTH OF THE WALL, BY 1-1/2" OR 2" LONG UPPER AND LOWER LEGS. SUPPORT CLIPS SPACED MAXIMUM 24" OC.
5. STEEL STUDS (MINIMUM 2-1/2" WIDE), CUT 1/2" TO 3/4" LESS IN LENGTH THAN ASSEMBLY HEIGHT, NESTING IN CEILING RUNNER WITHOUT ATTACHMENT.
6. HILTI CP 777 SPEED PLUGS FRICTION FITTED TO COMPLETELY FILL FLUTE, FLUSH WITH BOTH SIDES OF WALL (SEE NOTE NO. 5 BELOW).
7. HILTI CP 767 SPEED STRIPS OR MINERAL WOOL SAFING (MIN. 4 PCF DENSITY) COMPRESSED 50% AND INSERTED INTO JOINT, FLUSH WITH BOTH SIDES OF GYPSUM WALL.
8. MINIMUM 1/8" (WET) THICKNESS HILTI CFS-SP WB FIRESTOP JOINT SPRAY OR HILTI CP 672 SPEED SPRAY TO COMPLETELY COVER MINERAL WOOL AND TO OVERLAP A MINIMUM 1/2" ONTO GYPSUM WALL AND METAL DECKING ON BOTH SIDES OF GYPSUM WALL ASSEMBLY.

- NOTES :
1. MAXIMUM WIDTH OF JOINT = 2".
 2. STEEL FLOOR UNITS MAY BE SPRAYED WITH A MINIMUM 5/16" TO MAXIMUM 1-3/4" THICKNESS OF UL CLASSIFIED MONOKOTE TYPE MK-6/HY (MANUFACTURED BY W.R. GRACE) OR CAFCO TYPE 300 (MANUFACTURED BY ISOLATEK, INT.) FIREPROOFING, PRIOR TO OR AFTER INSTALLATION OF CEILING RUNNERS.
 3. WHEN THE STEEL DECK IS COATED WITH FIREPROOFING, HILTI FIRESTOP JOINT SPRAY SHALL OVERLAP THE WALL A MINIMUM 1/2" AND OVERLAP THE FIREPROOFING A MINIMUM 2" ON BOTH SIDES OF GYPSUM WALL ASSEMBLY.
 4. AS AN ALTERNATE TO CEILING RUNNER IN ITEM NO. 3, SLOTTED CEILING RUNNERS MAY BE USED. CONSULT THE UL FIRE RESISTANCE DIRECTORY FOR APPROVED MANUFACTURERS.
 5. AS AN ALTERNATE TO HILTI CP 777 SPEED PLUGS, MINERAL WOOL SAFING (MIN. 4 PCF DENSITY) COMPRESSED 25% MAY BE USED. ALTERNATELY, MINERAL WOOL SAFING (MIN. 4 PCF DENSITY) CUT TO THE SHAPE OF FLUTE AND NOMINAL 1" LONGER THAN THICKNESS OF WALL, COMPRESSED FROM ENDS (APP. 14%) AND PACKED FLUSH WITH WALL SURFACE.



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