UL/cUL SYSTEM NO. HW-D-0089

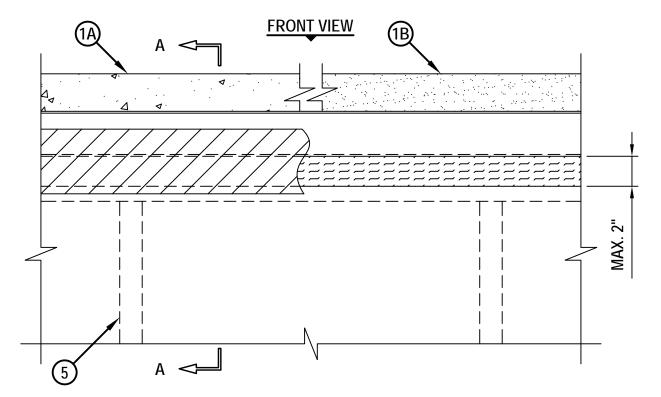
TOP OF WALL JOINT: GYPSUM WALL ASSEMBLY

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

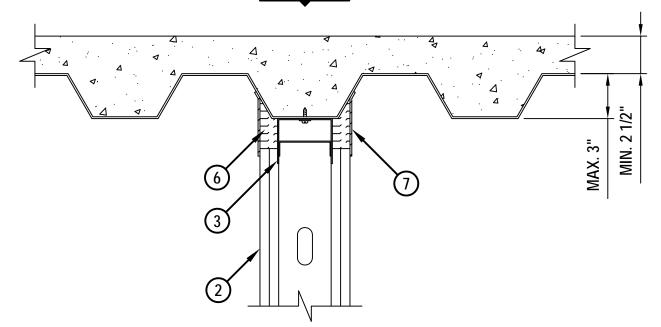
CLASS II AND III MOVEMENT CAPABILITIES - 20% COMPRESSION OR EXTENSION)

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

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



SECTION A-A





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

Sheet	1 of 2
Scale	5/32" = 1"
Date	Oct. 23, 2013

Drawing No. HWD 0089s

Saving Lives through Innovation and Education

UL/cUL SYSTEM NO. HW-D-0089

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

HWD0089s.102313

- 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.
 - 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. 3 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 767 SPEED STRIPS OR MINERAL WOOL SAFING (MIN. 4 PCF DENSITY) COMPRESSED 50% AND INSERTED INTO FLUTES, FLUSH WITH BOTH SIDES OF WALL.
- 7. 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 OF 1/2" ONTO GYPSUM 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.



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 Scale

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