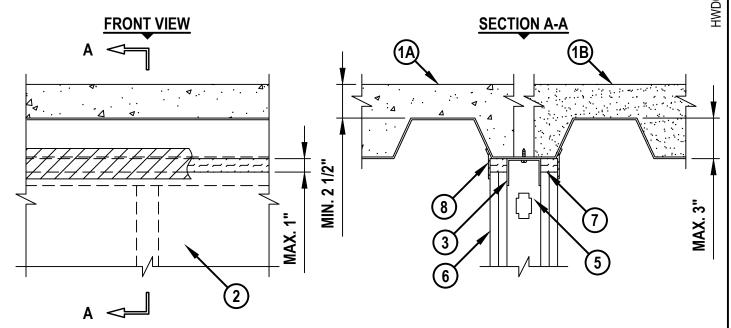
UL/cUL SYSTEM NO. HW-D-0049

TOP OF WALL JOINT: GYPSUM WALL ASSEMBLY

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

CLASS II MOVEMENT CAPABILITIES - 50% COMPRESSION OR EXTENSION
L-RATING AT AMBIENT = LESS THAN 1 CFM / LIN FT
L-RATING AT 400°F= LESS THAN 1 CFM / LIN FT



- 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).
 - A1. REINFORCED CONCRETE (MIN. 2-1/2" THICK) OVER COMPOSITE METAL DECK (MAX. 2-1/2" DEEP FLUTES) (BY EPIC METALS).
 - A2. REINFORCED CONCRETE (MIN. 2-1/2" THICK) OVER COMPOSITE METAL DECK (MAX. 2" DEEP FLUTES VERSA-DEK®) (BY NEW MILLENNIUM BUILDING SYSTEMS).
 - A3. STEEL FLOOR AND FORM UNITS (CONFIGURATION B) COMPOSITE MAX 2 IN. (51 MM) DEEP GALV STEEL FLUTED UNITS. (VERCO DECKING INC A NUCOR CO TYPE 2.0D FORMLOK).
 - A4. STEEL FLOOR AND FORM UNITS (CONFIGURATION B) COMPOSITE MAX 2 IN. (51 MM) DEEP GALV STEEL FLUTED UNITS. (VULCRAFT, DIV OF NUCOR CORP TYPE 2.0D FORMLOK).
 - B. INSULATING CONCRETE (MIN. 2-1/2" THICK) OVER METAL DECKING (UL/cUL CLASSIFIED P900 SERIES).
 - C. [NOT SHOWN] FLUTED STEEL ROOF DECK (UL/cul classified P700 OR P900 SERIES).



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

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Scale	9/64" = 1"
Date	Aug. 27, 2024

HWD 0049y

UL/cUL SYSTEM NO. HW-D-0049

TOP OF WALL JOINT: GYPSUM WALL ASSEMBLY

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

CLASS II MOVEMENT CAPABILITIES - 50% 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. GYPSUM WALL ASSEMBLY (UL/cUL CLASSIFIED U400 OR V400 SERIES) (1-HR. OR 2-HR. FIRE-RATING).
- 3. 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.) (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 (MIN. 2-1/2" WIDE), CUT 1/2" TO 3/4" LESS IN LENGTH THAN ASSEMBLY HEIGHT, NESTING IN CEILING RUNNER WITHOUT ATTACHMENT.
- 6. 5/8" OR 1-1/4" THICKNESS GYPSUM WALLBOARD AS SPECIFIED IN THE INDIVIDUAL UL DESIGN. TOP ROW OF SCREWS SHALL BE INSTALLED INTO STUDS 1-1/2" TO 2" BELOW THE BOTTOM OF THE CEILING RUNNER.
- 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 WALL SURFACES.
- 8. 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 METAL DECKING, ON BOTH SIDES OF WALL ASSEMBLY.

NOTES: 1. MAXIMUM WIDTH OF JOINT = 1".

- 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 767 SPEED STRIPS, MINERAL WOOL SAFING (MIN. 4 PCF DENSITY) COMPRESSED 50% MAY BE USED.



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 Scale

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