

TOP OF WALL JOINT : GYPSUM SHAFT WALL ASSEMBLY

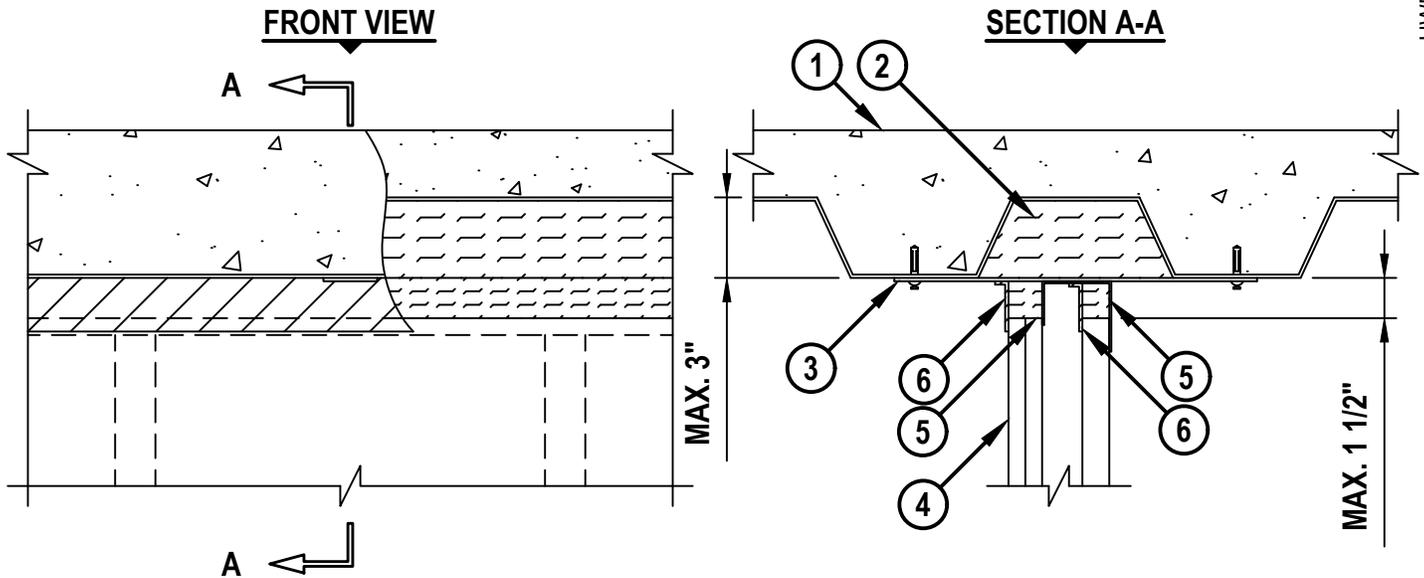
ASSEMBLY RATING = 1-HR. OR 2-HR.

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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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. HILTI CP 777 SPEED PLUGS FRICTION FITTED TO COMPLETELY FILL FLUTES. ADJACENT LENGTHS OF SPEED PLUGS TO BE TIGHTLY BUTTED WITH SEAMS SPACED MINIMUM 24" APART ALONG LENGTH OF THE PLUGS (SEE NOTE NO. 5 BELOW).
3. MINIMUM 2" WIDE, 16 GA., STEEL STRAPS CUT TO A LENGTH TO SPAN THE FLUTE AND OVERLAP THE ADJACENT VALLEYS BY 1-1/2". STEEL STRAPS SPACED MAXIMUM 24" ON CENTER AND FASTENED TO FLOOR ASSEMBLY WITH APPROPRIATE HILTI ANCHORS (1/4" DIAMETER x 1-1/2" LONG) OR 1" LONG HILTI X-U 27 P8S15 POWDER ACTUATED FASTENERS WITH 9/16" DIAMETER STEEL WASHERS OR WITH MASONRY ANCHORS OR STEEL FASTENERS.



Hilti Firestop Systems

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

Sheet	1 of 2
Scale	9/64" = 1"
Date	Jan. 16, 2026

Drawing No.

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- 4. GYPSUM SHAFT WALL ASSEMBLY (UL/cUL CLASSIFIED U400, V400, OR W400 SERIES) (1-HR. OR 2-HR. FIRE-RATING) (2-HR. SHOWN) TO INCLUDE THE FOLLOWING CONSTRUCTION FEATURES :
 - A. "J" SHAPED CEILING RUNNER, MINIMUM 2-1/2" WIDE WITH LEGS OF MINIMUM 2-1/2" (MINIMUM 25 GA.) FASTENED TO UNDERSIDE OF DECK OR FLOOR WITH STEEL FASTENERS (OR WELDS) SPACED MAXIMUM 24" OC. CEILING RUNNER MAY BE INSTALLED PARALLEL TO DECK FLUTES.
 - B. "C-H" OR "C-T" SHAPED STUDS (MINIMUM 2-1/2" WIDE, MINIMUM 25 GA.) CUT 1" TO 1-1/4" LESS IN LENGTH THAN ASSEMBLY HEIGHT, NESTING IN CEILING RUNNER.
 - C. NOMINAL 1" THICK GYPSUM LINER PANEL CUT 1" TO 1-1/2" LESS IN LENGTH THAN FLOOR TO CEILING HEIGHT. TYPE AND SHEET ORIENTATION AS SPECIFIED IN THE INDIVIDUAL UL DESIGN.
 - D. NOMINAL 5/8" THICK GYPSUM WALLBOARD "TYPE C" GYPSUM WALLBOARD APPLIED VERTICALLY OR HORIZONTALLY IN ONE OR TWO LAYERS FOR 1-HR. OR 2-HR. RATED WALLS RESPECTIVELY. CUT WALLBOARD MAXIMUM 1-1/2" LESS IN LENGTH THAN ASSEMBLY HEIGHT WITH SCREW ATTACHMENT 1" BELOW THE BOTTOM OF THE CEILING RUNNER.
- 5. HILTI CP 767 SPEED STRIPS OR MINERAL WOOL SAFING (MIN. 4 PCF DENSITY) COMPRESSED 50% AND INSERTED INTO JOINT, FLUSH WITH FINISHED SIDE OF THE WALL AND COMPLETELY FILLING AREA ABOVE THE SHAFT LINER.
- 6. MINIMUM 1/8" (WET) THICKNESS HILTI CFS-SP WB FIRESTOP JOINT SPRAY TO COMPLETELY COVER MINERAL WOOL AND TO OVERLAP A MINIMUM 1/2" ONTO GYPSUM WALL, CEILING RUNNER, STEEL STRAPS, AND METAL DECK.

- NOTES :
- 1. MAXIMUM WIDTH OF JOINT = 1-1/2".
 - 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 GCP APPLIED TECHNOLOGIES) OR CAFCO TYPE 300 (MANUFACTURED BY ISOLATEK, INT.) FIREPROOFING, PRIOR TO 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 4A, 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 (ITEM 2), MINERAL WOOL SAFING (MIN. 4 PCF DENSITY) MAY BE CUT TO THE SHAPE OF THE FLUTED FLOOR TO COMPLETELY FILL THE FLUTES ABOVE STRAPS. ADJACENT LENGTHS OF SAFING TO BE TIGHTLY BUTTED WITH SEAMS SPACED 24" APART ALONG LENGTH OF FLUTES. ALTERNATELY, FLUTE MAY BE FILLED WITH FIREPROOFING ABOVE THE STRAPS.



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