

UL/cUL SYSTEM NO. HW-D-0979

# TOP OF WALL JOINT : GYPSUM SHAFT WALL ASSEMBLY

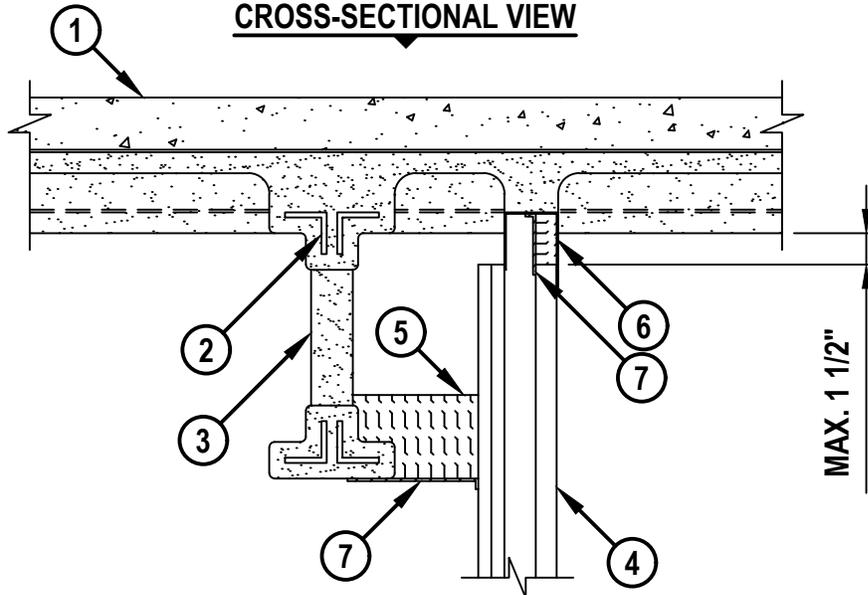
ASSEMBLY RATING = 1-HR. OR 2-HR.

CLASS II MOVEMENT CAPABILITIES - 25% COMPRESSION OR EXTENSION

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

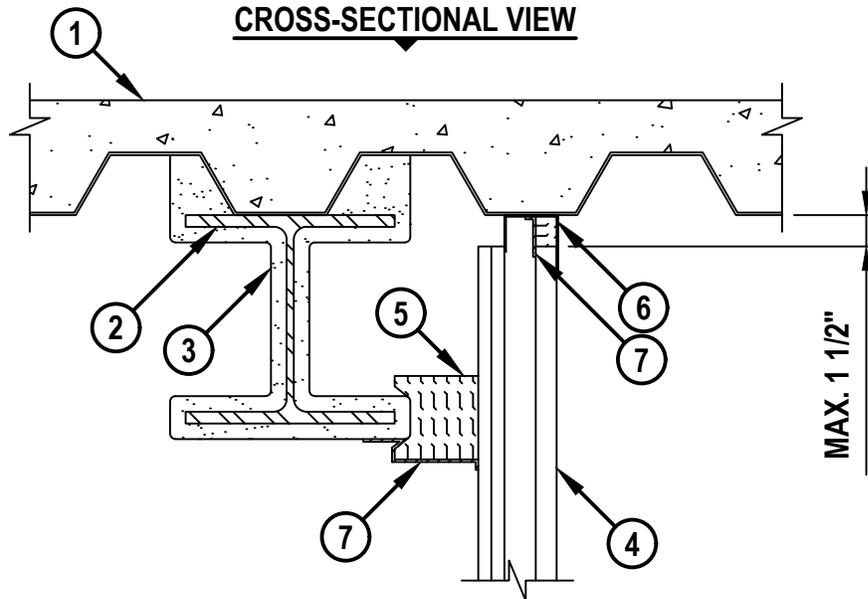
L-RATING AT 400°F = LESS THAN 1 CFM / LIN FT

## CROSS-SECTIONAL VIEW



CONFIGURATION A

## CROSS-SECTIONAL VIEW



CONFIGURATION B

HW-D-0979b.011626



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Sheet	1 of 3
Scale	7/64" = 1"
Date	Jan. 16, 2026

Drawing No.  
**HWD  
0979b**

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1. FLOOR OR ROOF ASSEMBLY (1-HR. OR 2-HR. FIRE-RATING) :
  - A. LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE FLOOR (MINIMUM 2-1/2" THICK) OVER METAL DECK (UL/cUL CLASSIFIED D700 OR D900 SERIES).
  - B. [NOT SHOWN] FLUTED STEEL ROOF DECK WITH SPRAY-APPLIED FIREPROOFING (UL/cUL CLASSIFIED P700 OR P900 SERIES).
2. STRUCTURAL STEEL BEAM OR OPEN-WEB STEEL JOIST AS SPECIFIED IN THE INDIVIDUAL D700, D900, OR P700 SERIES FLOOR/ROOF-CEILING DESIGN. STEEL SUPPORT ORIENTED PARALLEL AND LOCATED 1" TO 6" FROM WALL.
3. UL/cUL CLASSIFIED MONOKOTE (TYPE MK-6/HY, MK-6/HY ES, MK-6S, RG, MK-10HB) OR (TYPE 300, TYPE 400) FIREPROOFING SPRAYED TO THE THICKNESS SPECIFIED IN THE INDIVIDUAL D700, D900, OR P700 SERIES DESIGN (SEE NOTE NO. 2 BELOW) AFTER INSTALLATION OF CEILING RUNNER. FIREPROOFING TO COMPLETELY FILL FLUTES ABOVE THE STRUCTURAL STEEL SUPPORT AND ABOVE THE CEILING RUNNER (SEE NOTE NO. 3 BELOW).
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 OR PERPENDICULAR 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. MINIMUM 4" THICKNESS MINERAL WOOL SAFING (MIN. 4 PCF DENSITY) COMPRESSED 33% AND INSTALLED FLUSH WITH OR EXTENDING A MAX. 1-1/2" BELOW BOTTOM SURFACE OF FIREPROOFING ON STRUCTURAL STEEL MEMBER.
6. MINIMUM 1" THICKNESS MINERAL WOOL SAFING (MIN. 4 PCF DENSITY) COMPRESSED 50% AND INSERTED INTO JOINT COMPLETELY FILLING AREA ABOVE THE SHAFT LINER.
7. MINIMUM 1/8" (WET) THICKNESS HILTI CFS-SP WB FIRESTOP JOINT SPRAY TO COMPLETELY COVER MINERAL WOOL / FIREPROOFING AND TO OVERLAP A MINIMUM 1/2" ONTO GYPSUM AND CEILING RUNNER, AND MINIMUM 2" ONTO FIREPROOFING.



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

2. WHEN STRUCTURAL STEEL SUPPORT CONSISTS OF OPEN-WEB STEEL JOISTS, 3/8" DIAMOND MESH EXPANDED STEEL LATH (1.7 TO 3.4 LB./SQ. YD.) SHALL BE INSTALLED TO COMPLETELY COVER ONE SIDE OF EACH JOIST. LATH SHALL BE SECURED WITH STEEL TIE WIRE AND COMPLETELY FILLED WITH FIREPROOFING.

3. AS AN ALTERNATE, FIREPROOFING IN THE FLUTES ABOVE THE CEILING RUNNER MAY BE APPLIED TO FOLLOW THE CONTOUR OF THE STEEL DECK. IN THIS CASE, MINERAL WOOL SAFING (MIN. 4 PCF DENSITY) TIGHTLY PACKED OR HILTI CP 777 SPEED PLUGS SHOULD BE INSTALLED TO COMPLETELY FILL VOID ABOVE CEILING RUNNER FLUSH WITH WALL OPPOSITE OF STEEL SUPPORT.

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. WHERE TOP OF WALL ASSEMBLY IS INACCESSIBLE ABOVE THE STRUCTURAL STEEL SUPPORT, THE GYPSUM BOARD ATTACHMENT SCREWS MAY BE OMITTED.



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