

UL/cUL SYSTEM NO. HW-D-0956

## TOP OF WALL JOINT : GYPSUM WALL ASSEMBLY

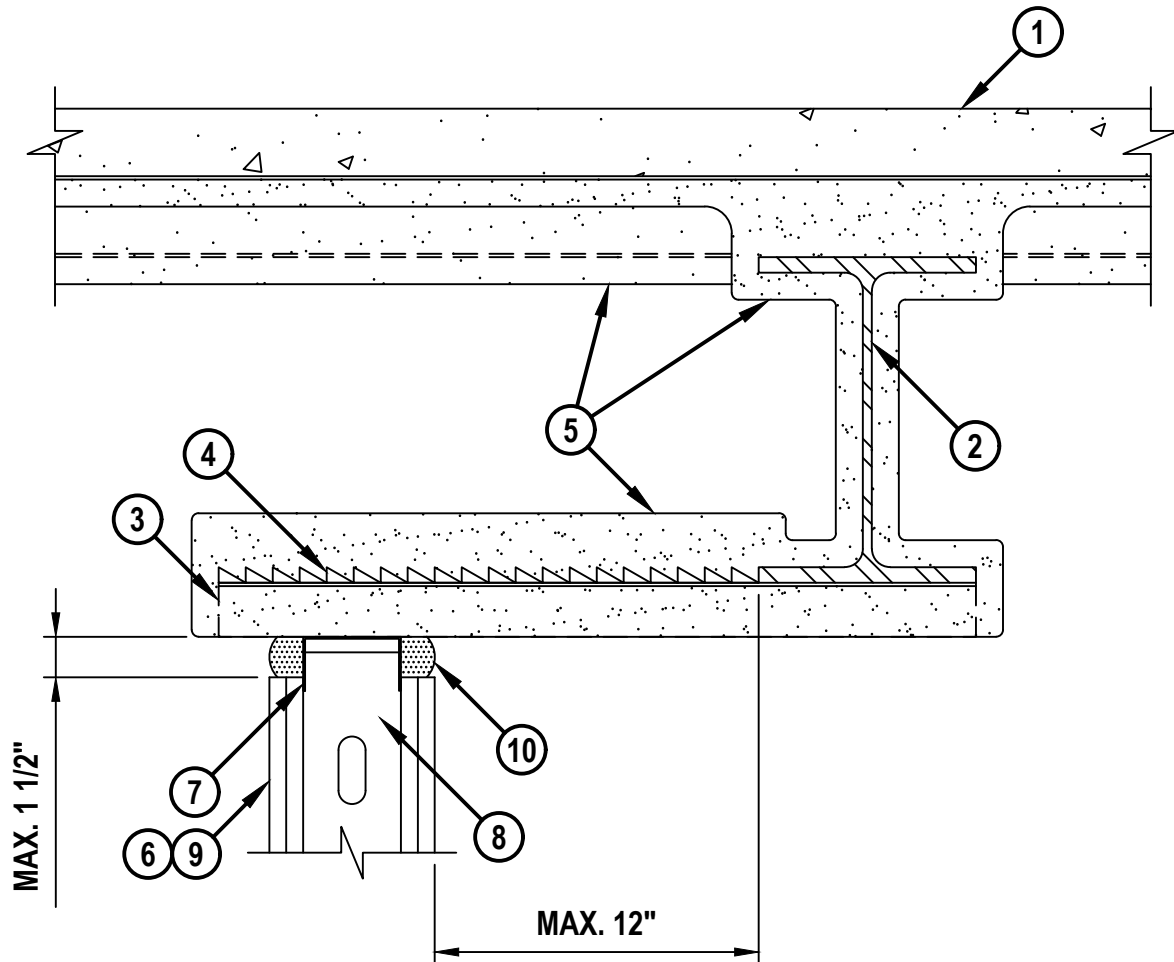
ASSEMBLY RATING = 1-HR. OR 2-HR.

CLASS II AND III MOVEMENT CAPABILITIES - 50% COMPRESSION OR EXTENSION  
OR 66% COMPRESSION ONLY (SEE NOTES NO. 2 AND 3 BELOW)

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

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

### CROSS-SECTIONAL VIEW



HWD0956b032823



Hilti Firestop Systems

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

Sheet	1 of 2
Scale	9/64" = 1"
Date	Mar. 28, 2023

Drawing No.

**HWD  
0956b**

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1. LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE FLOOR (MINIMUM 2-1/2" THICK) OVER METAL DECKING (UL/cUL CLASSIFIED D900 SERIES) (2-HR. FIRE-RATING).
2. STEEL BEAM, AS SPECIFIED IN THE INDIVIDUAL D900 SERIES, ORIENTED PARALLEL TO AND MAXIMUM 12" FROM WALL ASSEMBLY.
3. NOMINAL 1-1/2" TO 2" PAINTED OR GALVANIZED Z-SHAPED BARS OR CHANNELS (MIN. 16 GA.) WELDED OR FASTENED WITH STEEL FASTENERS TO BEAM SPACED MAXIMUM 24" O/C.
4. NOMINAL 3/8" DIAMOND MESH EXPANDED STEEL LATH (NOMINAL WEIGHT 3.4 LB/YD<sup>2</sup>) INSTALLED OVER AND SECURED TO THE STEEL FURRING BARS OR CHANNELS WITH STEEL FASTENERS OR TIE WIRE.
5. UL/cUL CLASSIFIED MONOKOTE TYPE MK-6/HY, MK-6/HY ES, MK-6S, OR RG (MANUFACTURED BY GCP APPLIED TECHNOLOGIES) OR TYPE 300 (MANUFACTURED BY ISOLATEK, INT.) FIREPROOFING SPRAYED ON STEEL BEAM AND DECK (AS APPLICABLE) TO THE THICKNESS SPECIFIED IN THE INDIVIDUAL D900 SERIES DESIGN. FIREPROOFING TO COMPLETELY FILL FLUTES ABOVE THE STRUCTURAL STEEL BEAM, FULLY COVER FURRING MEMBER TO THE MINIMUM THICKNESS OF MATERIAL REQUIRED ON THE FLANGES OF STEEL BEAM, AND COMPLETELY FILLING THE SPACE BETWEEN THE BAR/CHANNEL FURRING ABOVE THE WALL (SEE NOTES NO. 4 AND 5 BELOW).
6. GYPSUM WALL ASSEMBLY (UL/cUL CLASSIFIED U400, V400, OR W400 SERIES) (2-HR. FIRE-RATING).
7. CEILING RUNNER (MIN. 25 GA., FLANGE HEIGHT OF CEILING RUNNER SHALL BE MINIMUM 2") SECURED TO Z-SHAPED CLIPS WITH STEEL FASTENERS AT MAXIMUM 24" OC (SEE NOTE NO. 4 BELOW).
8. STEEL STUDS (MINIMUM 3-5/8" WIDE) CUT 1/2" TO 1" LESS IN LENGTH THAN ASSEMBLY HEIGHT WITH BOTTOM NESTING IN CEILING RUNNER WITHOUT ATTACHMENT.
9. 5/8" OR 1-1/4" THICKNESS GYPSUM WALLBOARD AS SPECIFIED IN THE INDIVIDUAL UL DESIGN. TOP ROW OF SCREWS SHALL BE INSTALLED INTO STUD 3-1/2" TO 5-1/2" BELOW THE BOTTOM EDGE OF THE CEILING RUNNER.
10. HILTI CFS-TTS MD OS OR CFS-TTS MD 600 TOP TRACK SEAL INSTALLED OVER CEILING RUNNER PRIOR TO ATTACHING TO Z-SHAPED CLIPS, BUTT JOINTS IN TOP TRACK SEAL TO BE COMPRESSED MINIMUM 1/2".

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

2. TO ACCOMMODATE MAX. 50% COMPRESSION OR EXTENSION MAX. WIDTH OF JOINT = 1".

3. TO ACCOMMODATE MAX. 66% COMPRESSION ONLY MAX. WIDTH OF JOINT = 1-1/2".

4. AS AN ALTERNATE TO CEILING RUNNER IN ITEM 3, SLOTTED CEILING RUNNERS MAY BE USED. CONSULT THE UL FIRE RESISTANCE DIRECTORY FOR APPROVED MANUFACTURERS.

5. THE TOTAL THICKNESS OF FIREPROOFING APPLIED TO EACH SIDE OF THE STEEL BEAM WEB SHALL BE MINIMUM 13/16" THICKNESS FOR 1-HR. ASSEMBLY RATING AND MINIMUM 1-3/8" THICKNESS FOR A 2-HR. ASSEMBLY RATING, WHEN USING MONOKOTE TYPE MK-6/HY, AND MINIMUM 11/16" THICKNESS FOR A 1-HR. ASSEMBLY RATING AND MINIMUM 1-1/2" THICKNESS FOR A 2-HR. ASSEMBLY RATING WHEN USING TYPE 300.

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