UL/cUL SYSTEM NO. HW-D-0571

TOP OF WALL JOINT : GYPSUM SHAFT 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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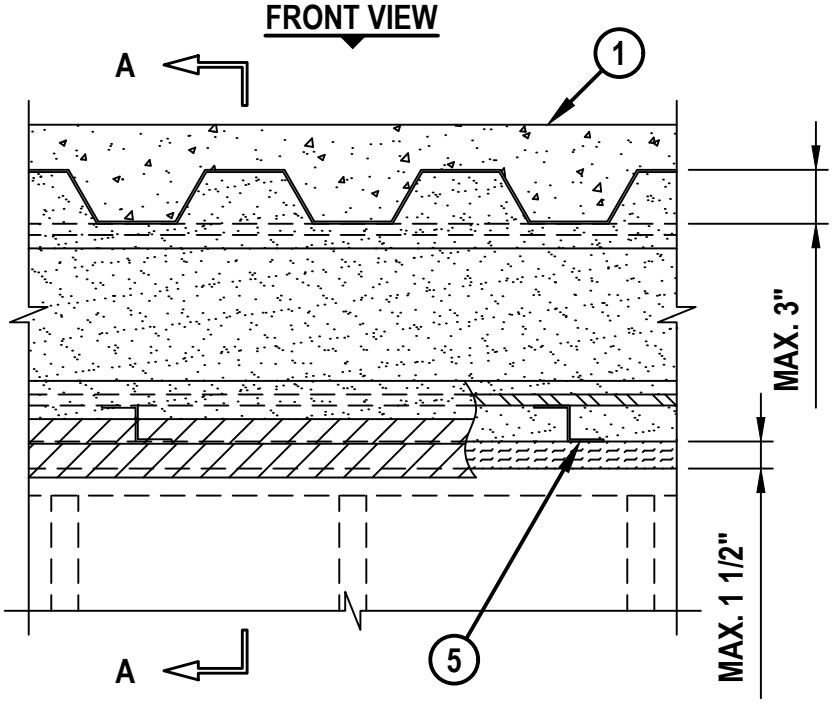
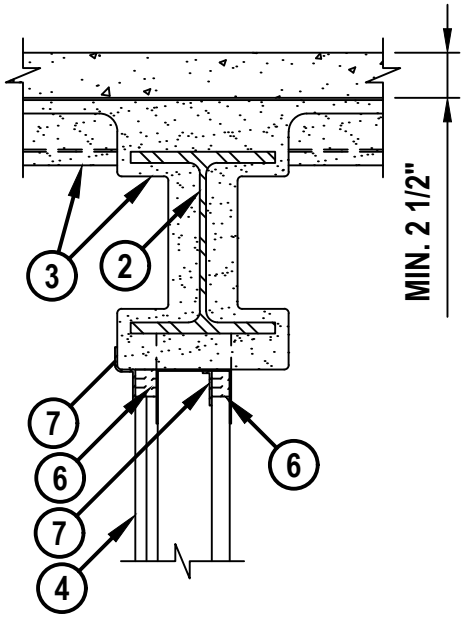
FRONT VIEW



SECTION A-A



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, D800, 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. STRUCTURAL STEEL BEAM, AS SPECIFIED IN THE INDIVIDUAL D700, D800, OR D900 SERIES FLOOR/CEILING DESIGN, ORIENTED PARALLEL TO WALL ASSEMBLY.

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3. UL CLASSIFIED MONOKOTE TYPE MK-6/HY (MANUFACTURED BY GCP APPLIED TECHNOLOGIES) OR TYPE 300 (MANUFACTURED BY ISOLATEK, INC.) FIREPROOFING SPRAYED TO THE THICKNESS SPECIFIED IN THE INDIVIDUAL D700, D800, OR D900 SERIES DESIGN. FIREPROOFING TO COMPLETELY FILL FLUTES ABOVE STRUCTURAL STEEL BEAM. WHEN MK-6/HY IS USED THE TOTAL THICKNESS OF FIREPROOFING APPLIED TO EACH SIDE OF THE STEEL BEAM WEB SHALL BE MINIMUM 13/16" FOR 1-HR. ASSEMBLIES AND MINIMUM 1-3/8" FOR 2-HR. ASSEMBLIES. WHEN TYPE 300 FIREPROOFING IS USED THE TOTAL THICKNESS OF FIREPROOFING APPLIED TO EACH SIDE OF THE STEEL BEAM WEB SHALL BE MINIMUM 11/16" FOR 1-HR. ASSEMBLIES AND MINIMUM 1-1/2" FOR 2-HR. ASSEMBLIES.
4. GYPSUM SHAFT WALL ASSEMBLY (UL/cUL CLASSIFIED U400 OR V400 SERIES) (1-HR. OR 2-HR. FIRE-RATING) (2-HR. SHOWN) TO INCLUDE THE FOLLOWING CONSTRUCTION FEATURES :
   A. CEILING RUNNER, SIZED TO ACCOMMODATE STEEL STUDS. FLANGE HEIGHT OF CEILING RUNNER SHALL BE MINIMUM 1/4" GREATER THAN THE MAXIMUM EXTENDED JOINT WIDTH. RUNNER SECURED TO Z-SHAPED CLIPS WITH STEEL FASTENERS OR WELDS SPACED MAXIMUM 24" O/C (SEE NOTE NO. 2 BELOW).
   B. "C-H" OR "C-T" SHAPED STUDS (MINIMUM 4" WIDE, MINIMUM 25 GA.) CUT 3/4" TO 1" LESS IN LENGTH THAN ASSEMBLY HEIGHT, NESTING IN CEILING RUNNER WITHOUT ATTACHMENT.
   C. NOMINAL 1" THICK GYPSUM LINER PANEL CUT 1-1/2" LESS IN LENGTH THAN ASSEMBLY HEIGHT. TYPE AND SHEET ORIENTATION AS SPECIFIED IN THE INDIVIDUAL UL DESIGN.
   D. NOMINAL 5/8" THICK GYPSUM WALLBOARD CUT 1-1/2" LESS IN LENGTH THAN ASSEMBLY HEIGHT WITH SCREW ATTACHMENT 1" TO 1-1/2" BELOW THE BOTTOM OF THE CEILING RUNNER OR SLOTTED CEILING TRACK. TYPE, NUMBER OF LAYERS, AND SHEET ORIENTATION AS SPECIFIED IN THE INDIVIDUAL UL DESIGN.
5. Z-SHAPED CLIPS (MIN. 20 GA.) WITH THE FOLLOWING DIMENSIONS : MINIMUM 1" WIDE (BUT NOT EXCEEDING THE WIDTH OF THE WALL) WITH 2" UPPER AND LOWER LEGS, HEIGHT OF CLIPS TO BE EQUAL TO THE REQUIRED THICKNESS OF SPRAY APPLIED FIREPROOFING ON THE BOTTOM FLANGE OF BEAM. LEGS OF CLIPS FASTENED TO BOTTOM OF BEAM (PRIOR TO APPLYING FIREPROOFING) AND TOP OF CEILING RUNNER WITHE STEEL FASTENERS OR WELDS. CLIPS SPACED MAXIMUM 24" OC.
6. HILTI CP 767 SPEED STRIPS OR MINERAL WOOL SAFING (MIN. 4 PCF DENSITY) COMPRESSED 50%, FLUSH WITH GYPSUM BOARD SURFACES.
7. MINIMUM 1/8" (WET) THICKNESS HILTI CFS-SP WB FIRESTOP JOINT SPRAY TO COMPLETELY COVER MINERAL WOOL AND OVERLAPPING MINIMUM 1/2" ONTO GYPSUM BOARD AND CEILING RUNNER, AND MINIMUM 2" ONTO FIREPROOFING.

NOTES : 1. MAXIMUM WIDTH OF JOINT = 1-1/2".
2. AS AN ALTERNATE TO CEILING RUNNER IN ITEM NO. 4A, SLOTTED CEILING RUNNERS MAY BE USED. CONSULT THE UL FIRE RESISTANCE DIRECTORY FOR APPROVED MANUFACTURERS.