

TOP OF WALL JOINT : GYPSUM WALL ASSEMBLY

ASSEMBLY RATING = 1-HR.

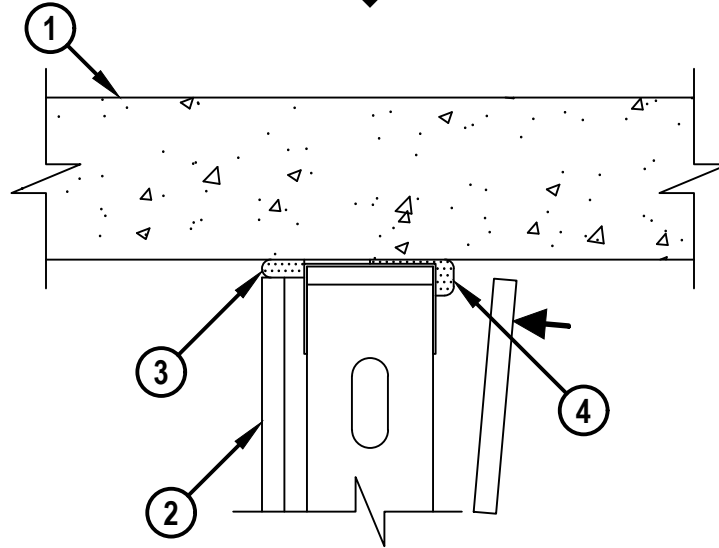
CLASS II MOVEMENT CAPABILITIES - 50% COMPRESSION OR EXTENSION, 19% COMPRESSION OR EXTENSION, 66% COMPRESSION ONLY, OR 19% COMPRESSION ONLY (SEE NOTES NO. 1 AND 2 BELOW)

L-RATING AT AMBIENT = 1 CFM / LIN FT OR LESS (SEE NOTE NO. 4 BELOW)

L-RATING AT 400°F = 1 CFM / LIN FT OR LESS (SEE NOTE NO. 4 BELOW)

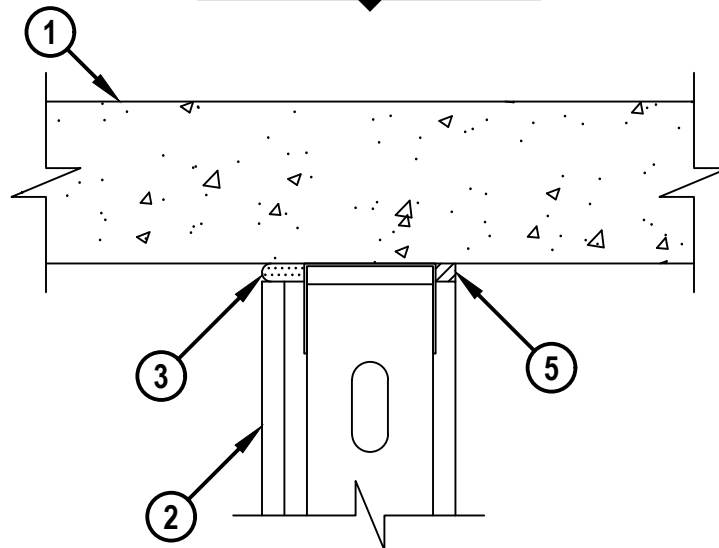
HW-D-0947b.032323

CROSS-SECTIONAL VIEW



CONFIGURATION A

CROSS-SECTIONAL VIEW



CONFIGURATION B



HILTI, Inc.
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Sheet	1 of 3
Scale	3/16" = 1"
Date	Mar. 23, 2023

Drawing No.
**HWD
0947b**

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1. LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE FLOOR ASSEMBLY (MINIMUM 4-1/2" THICK).
2. GYPSUM WALL ASSEMBLY (UL/cUL CLASSIFIED U400, V400, OR W400 SERIES) (1-HR. FIRE-RATING).
 - A. 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 CONCRETE FLOOR WITH STEEL MASONRY ANCHORS OR STEEL FASTENERS (SPACED MAX 24" OC) (SEE NOTE NO. 3 BELOW).
 - B. STEEL STUDS (MIN. 3-1/2" WIDE) CUT 3/4" TO 1" LESS IN LENGTH THAN ASSEMBLY HEIGHT WITH BOTTOM NESTING IN CEILING RUNNER WITHOUT ATTACHMENT.
 - C. 5/8" THICK GYPSUM WALLBOARD AS SPECIFIED IN THE INDIVIDUAL UL DESIGN. TOP ROW OF SCREWS SHALL BE INSTALLED INTO STUD 1" TO 1-1/2" BELOW THE BOTTOM EDGE OF THE CEILING RUNNER.
 - D. ADDITIONAL LAYER OF 5/8" THICK GYPSUM WALLBOARD, MEETING THE SAME REQUIREMENTS AS ITEM 2C, SHALL BE INSTALLED ON ONE SIDE OF WALL ASSEMBLY. TOP ROW OF SCREWS SHALL BE INSTALLED INTO STUD 1" TO 1-1/2" BELOW THE BOTTOM EDGE OF THE CEILING RUNNER.
3. HILTI CFS-TTS 212, CFS-TTS 358, CFS-TTS 600, CFS-TTS R OS, OR CFS-TTS OS TOP TRACK SEAL INSTALLED IN JOINT AS BACKER ROD. TOP TRACK SEAL CUT IN HALF LENGTHWISE AT DOTTED LINE OR TEAR STRIP. ON EACH SIDE OF THE WALL, ONE HALF OF THE TOP TRACK SEAL IS TO BE FOLDED AND PUSHED INTO THE JOINT TO BE FRICTION FIT AND TO BE FLUSH AGAINST THE CEILING RUNNER. BUTT JOINTS IN TOP TRACK SEAL SHALL BE COMPRESSED TOGETHER A MIN 1/4".
4. HILTI CFS-TTS 212, CFS-TTS 358, CFS-TTS 600, CFS-TTS OS, OR CFS-TTS R OS FIRESTOP TOP TRACK SEAL INSTALLED OVER CEILING RUNNER PRIOR TO ATTACHMENT TO UNDERSIDE OF CONCRETE FLOOR IN ACCORDANCE WITH THE ACCOMPANYING INSTALLATION INSTRUCTIONS.
5. MINIMUM 5/8" DEPTH HILTI CP 601S ELASTOMERIC FIRESTOP SEALANT, HILTI CP 606 FLEXIBLE FIRESTOP SEALANT, OR HILTI CFS-S SIL GG FIRESTOP SILICONE SEALANT.



Hilti Firestop Systems

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UL/cUL SYSTEM NO. HW-D-0947

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- NOTES :**
- 1. ALLOWABLE JOINT WIDTHS TO BE DETERMINED AS FOLLOWS FOR CONFIGURATION A :**
 - A. FOR UNBALANCED WALLS TO ACCOMMODATE MAX 50% COMPRESSION OR EXTENSION, MAX WIDTH OF JOINT = 1/2".**
 - B. FOR UNBALANCED WALLS TO ACCOMMODATE MAX 66% COMPRESSION ONLY, MAX WIDTH OF JOINT = 3/4".**
 - 2. ALLOWABLE JOINT WIDTHS TO BE DETERMINED AS FOLLOWS FOR CONFIGURATION B :**
 - A. FOR UNBALANCED WALLS TO ACCOMMODATE MAX 19% COMPRESSION OR EXTENSION, MAX WIDTH OF JOINT = 1/2".**
 - B. FOR UNBALANCED WALLS TO ACCOMMODATE MAX 19% COMPRESSION ONLY, MAX WIDTH OF JOINT = 3/4".**
 - 3. AS AN ALTERNATE TO CEILING RUNNER IN ITEM 2C, SLOTTED CEILING RUNNERS MAY BE USED. CONSULT THE UL FIRE RESISTANCE DIRECTORY FOR APPROVED MANUFACTURERS.**
 - 4. FOR CONFIGURATION B, L-RATING ONLY APPLIES WHEN HILTI CP 606 FLEXIBLE FIRESTOP SEALANT OR HILTI CFS-S SIL GG FIRESTOP SILICONE SEALANT IS USED.**



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