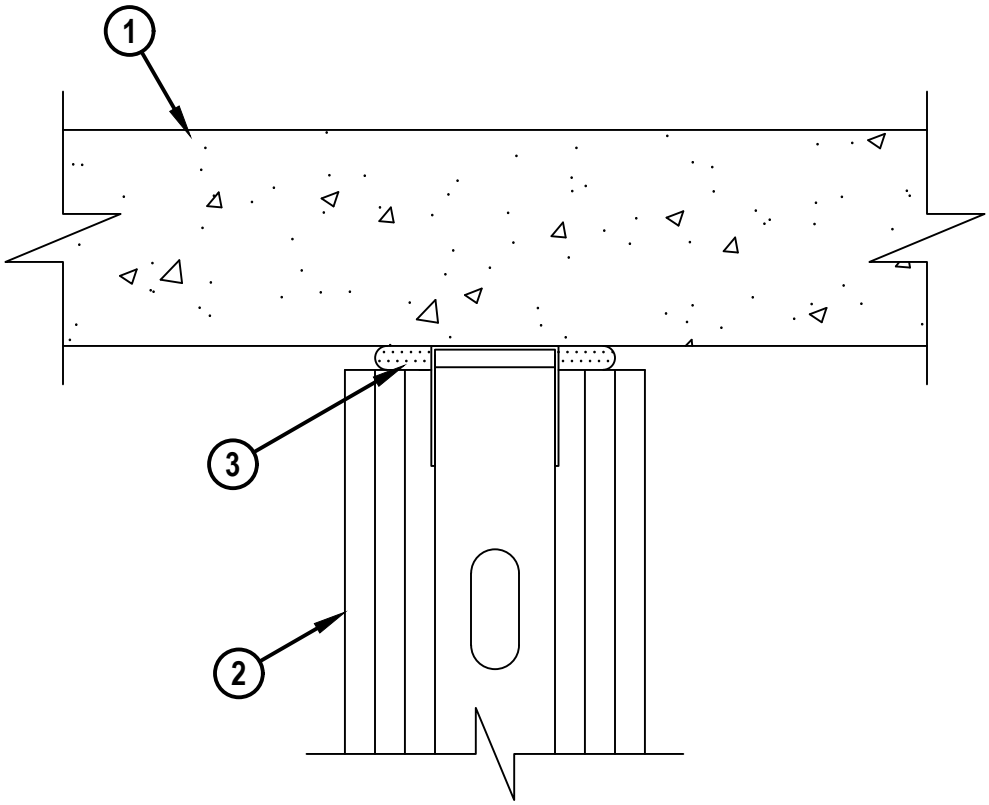
UL/cUL SYSTEM NO. HW-D-0905

TOP OF WALL JOINT : GYPSUM WALL ASSEMBLY

ASSEMBLY RATING = 2-HR. OR 3-HR.
CLASS II MOVEMENT CAPABILITIES - 50% COMPRESSION OR EXTENSION, OR 66% COMPRESSION ONLY (SEE NOTE NO. 1 BELOW).
L-RATING AT AMBIENT = 1 CFM / LIN FT OR LESS
L-RATING AT 400°F = 1 CFM / LIN FT OR LESS

HWD0905b.032323

CROSS-SECTIONAL VIEW



Hilti Firestop Systems	HILTI, Inc. Plano, Texas USA (800) 879-8000	Sheet: 1 of 2 Scale: 1/4" = 1" Date: Mar. 23, 2023	Drawing No. HWD 0905b

Saving Lives through Innovation and Education

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1. CONCRETE FLOOR ASSEMBLY. LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE (MIN. 4-1/2" THICK).
2. GYPSUM WALL ASSEMBLY (UL/cUL CLASSIFIED U400, V400 OR W400 SERIES) (2-HR. OR 3-HR. FIRE-RATING). THE HOURLY RATING OF THE JOINT SYSTEM IS DEPENDENT ON THE HOURLY RATING OF THE WALL.
   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. 2 BELOW).
   B. STEEL STUDS (MIN. 2-1/2" WIDE) CUT 3/4" TO 1" LESS THAN ASSEMBLY HEIGHT, NESTING IN CEILING RUNNER WITHOUT ATTACHMENT. STUDS SPACED A MAXIMUM 24" OC.
   C. GYPSUM BOARD - FOR 2-HR. ASSEMBLY, USE TWO LAYERS OF 5/8" THICK GYPSUM BOARD. FOR 3-HR ASSEMBLY USE THREE LAYERS OF 5/8" THICK GYPSUM BOARD. TYPE, NUMBER OF LAYERS, AND SHEET ORIENTATION AS REQUIRED IN THE INDIVIDUAL UL DESIGN.
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".

NOTES : 1. ALLOWABLE JOINT WIDTHS TO BE DETERMINED AS FOLLOWS:
   A. FOR 2-HR WALLS TO ACCOMMODATE MAX 50% COMPRESSION OR EXTENSION, MAX. WIDTH OF JOINT = 1/2".
   B. FOR 2-HR WALLS TO ACCOMMODATE MAX 66% COMPRESSION ONLY, MAX. WIDTH OF JOINT = 3/4".
   C. FOR 3-HR WALLS TO ACCOMMODATE MAX 50% COMPRESSION OR EXTENSION, MAX. WIDTH OF JOINT = 5/8".
   D. FOR 3-HR WALLS TO ACCOMMODATE MAX 66% COMPRESSION ONLY, MAX. WIDTH OF JOINT = 15/16".
   2. AS AN ALTERNATE TO CEILING RUNNER IN ITEM 2, SLOTTED CEILING RUNNERS MAY BE USED. CONSULT THE UL FIRE RESISTANCE DIRECTORY FOR APPROVED MANUFACTURERS.