

UL/cUL SYSTEM NO. HW-D-0920

**TOP OF WALL JOINT : GYPSUM SHAFT WALL ASSEMBLY**

ASSEMBLY RATING = 2-HR.

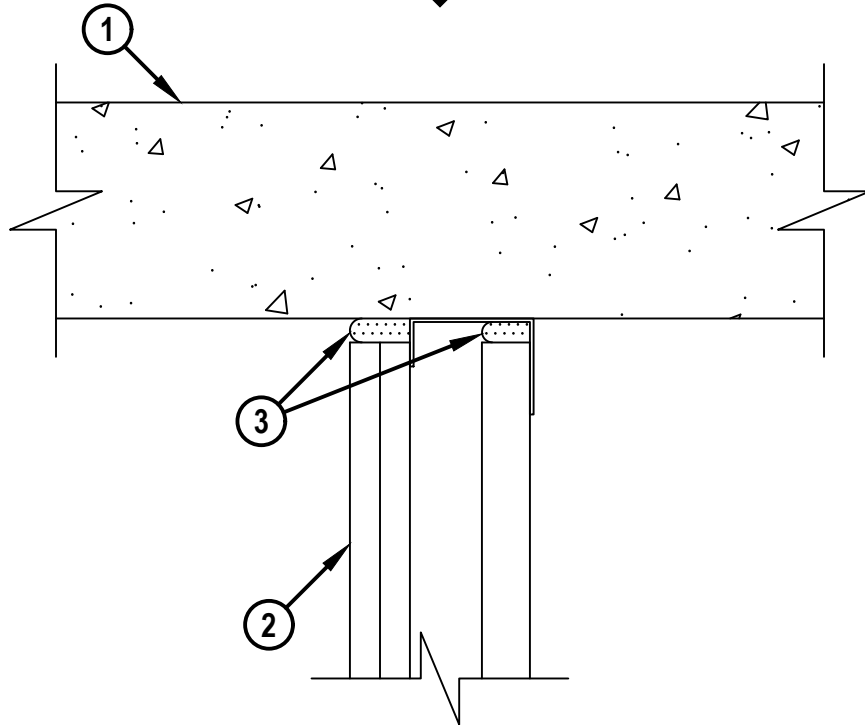
CLASS II MOVEMENT CAPABILITIES - 50% COMPRESSION OR EXTENSION OR  
66% COMPRESSION ONLY (SEE NOTE BELOW)

L-RATING AT AMBIENT = 1.65 CFM / LIN FT OR LESS

L-RATING AT 400°F = 1.33 CFM / LIN FT OR LESS

HW-D-0920c-032323

**CROSS-SECTIONAL VIEW**



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

Sheet	1 of 2
Scale	1/4" = 1"
Date	Mar. 23, 2023

Drawing No.  
**HWD  
0920c**

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**1. CONCRETE FLOOR ASSEMBLY (2-HR. FIRE-RATING) :**

**A. LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE FLOOR (MINIMUM 4-1/2" THICK).**

**B. ANY UL/cUL CLASSIFIED PRECAST (HOLLOW-CORE) CONCRETE FLOOR (MINIMUM 6" THICK).**

**2. GYPSUM SHAFT WALL ASSEMBLY (UL/cUL CLASSIFIED U400, V400, OR W400 SERIES) (2-HR.**

**FIRE-RATING) TO INCLUDE THE FOLLOWING CONSTRUCTION FEATURES :**

**A. "J" SHAPED 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 CONCRETE FLOOR WITH STEEL FASTENERS OR WELDS SPACED MAXIMUM 24" O/C.**

**B. "C-H" SHAPED STUDS (MINIMUM 2-1/2" WIDE, MINIMUM 25 GA.) CUT 1/2" TO 3/4" LESS IN LENGTH THAN ASSEMBLY HEIGHT, NESTING IN CEILING RUNNER WITHOUT ATTACHMENT.**

**C. NOMINAL 1" THICK GYPSUM LINER PANEL CUT MAX 3/4" LESS IN LENGTH THAN ASSEMBLY HEIGHT. TYPE AND SHEET ORIENTATION AS SPECIFIED IN THE INDIVIDUAL UL DESIGN.**

**D. NOMINAL 5/8" THICK TYPE C GYPSUM WALLBOARD CUT MAX 3/4" LESS IN LENGTH THAN ASSEMBLY HEIGHT WITH SCREW ATTACHMENT 1" BELOW THE BOTTOM OF THE CEILING RUNNER OR SLOTTED CEILING TRACK. NO GYPSUM BOARD ATTACHMENT SCREWS ARE TO PENETRATE THE CEILING TRACK. TYPE, NUMBER OF LAYERS, AND SHEET ORIENTATION AS SPECIFIED 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".**

**NOTE : ALLOWABLE JOINT WIDTHS TO BE DETERMINED AS FOLLOWS :**

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

**B. TO ACCOMMODATE MAX 66% COMPRESSION ONLY, MAX WIDTH OF JOINT = 3/4".**



**Hilti Firestop Systems**

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Sheet 2 of 2

Scale -

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