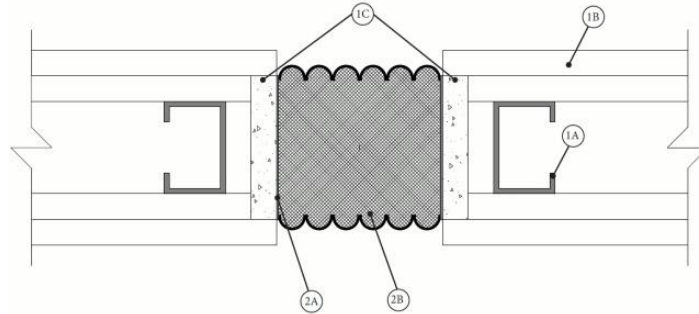


System No. WW-D-1161

August 20, 2014

Assembly Rating — 1,2 or 3 Hr (See Item 1)
Nominal Joint Width — 2 to 6 in.
Class II and III Movement Capabilities — 50 % Compression or Extension



1. Wall Assembly — The 1, 2 or 3 hr fire rated gypsum wallboard/steel stud wall assembly shall be constructed of the materials and in the manner described in the individual U300, U400, V400 or W400 -Series Wall or Partition Design in the UL Fire Resistance Directory and shall include the following construction features:

- A. **Studs** — Wall framing may consist of either wood studs or steel channel studs. Wood studs to consist of nom 2 by 4 in. (50 by 100 mm) (or larger) lumber spaced 16 in. (400 mm) OC. Steel studs to be min 3-5/8 in. (92 mm) wide and spaced max 24 in. (610 mm) OC.
- B. **Gypsum Board*** — Wallboard sheets to be installed to a min total thickness of 5/8 (16 mm), 1-1/4 in. (32 mm) or 1-7/8 in. (48 mm) on each side of the wall for a 1, 2 or 3 hr rated assemblies, respectively. Additional wallboard sheets installed to a min total thickness of 5/8 (16 mm), 1-1/4 in. (32 mm) or 1-7/8 in. (48 mm) within the opening on each side of opening for a 1, 2 or 3 hr rated assemblies, respectively.
- C. **Cementitious Backer Units*** — **(Required for ANSI/UL2079, Optional for CAN/ULC S115)** — Vertical opening lined with 1/2 in., 5/8 in., 3/4 in. or 1 in. thick, Face layer fastened over gypsum board to studs and runners with cement board screws of adequate length to penetrate stud by a minimum of 3/8 in. for steel framing members, and a minimum of 3/4 in. for wood framing members spaced a max of 8 in. OC.
When Item 1C is not used the CAN/ULC S115 FH and FTH rating are 0 Hr.

NATIONAL GYPSUM CO — 5/8 in. Type PermaBase

CERTAINTED GYPSUM INC — 3/8 in. Type Backer Board

The hourly fire rating of the joint system is dependent on the hourly fire rating of the wall.

2. Joint System — **Nominal width of joint is 2 to 6 in. (51 to 152 mm). The joint system is designed to accommodate a max 50 percent compression or extension from its installed width.** The joint system shall consist of the following:

- A. **Epoxy Adhesive** — Consists of two parts; part A (base), and part B (hardener) or one part gun grade adhesive. The epoxy is supplied by joint system manufacturer, and installed in accordance with accompanying installation instructions.
- B. **Mechanical Joint Assembly*** — Compressed, fire-retardant impregnated, 4 in. (102 mm) deep foam. Foam is installed in joint opening as a permanent form.

WILLSEAL L L C — FR Joint

*** Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.**