



XHBN.WW-S-0057 - Joint Systems

Design/System/Construction/Assembly Usage Disclaimer

- Authorities Having Jurisdiction should be consulted in all cases as to the particular requirements covering the installation and use of UL Certified products, equipment, system, devices, and materials.
- Authorities Having Jurisdiction should be consulted before construction.
- Fire resistance assemblies and products are developed by the design submitter and have been investigated by UL for compliance with applicable requirements. The published information cannot always address every construction nuance encountered in the field.
- When field issues arise, it is recommended the first contact for assistance be the technical service staff provided by the product manufacturer noted for the design. Users of fire resistance assemblies are advised to consult the general Guide Information for each product category and each group of assemblies. The Guide Information includes specifics concerning alternate materials and alternate methods of construction.
- Only products which bear UL's Mark are considered Certified.

XHBN - Joint Systems

See General Information for Joint Systems

System No. WW-S-0057

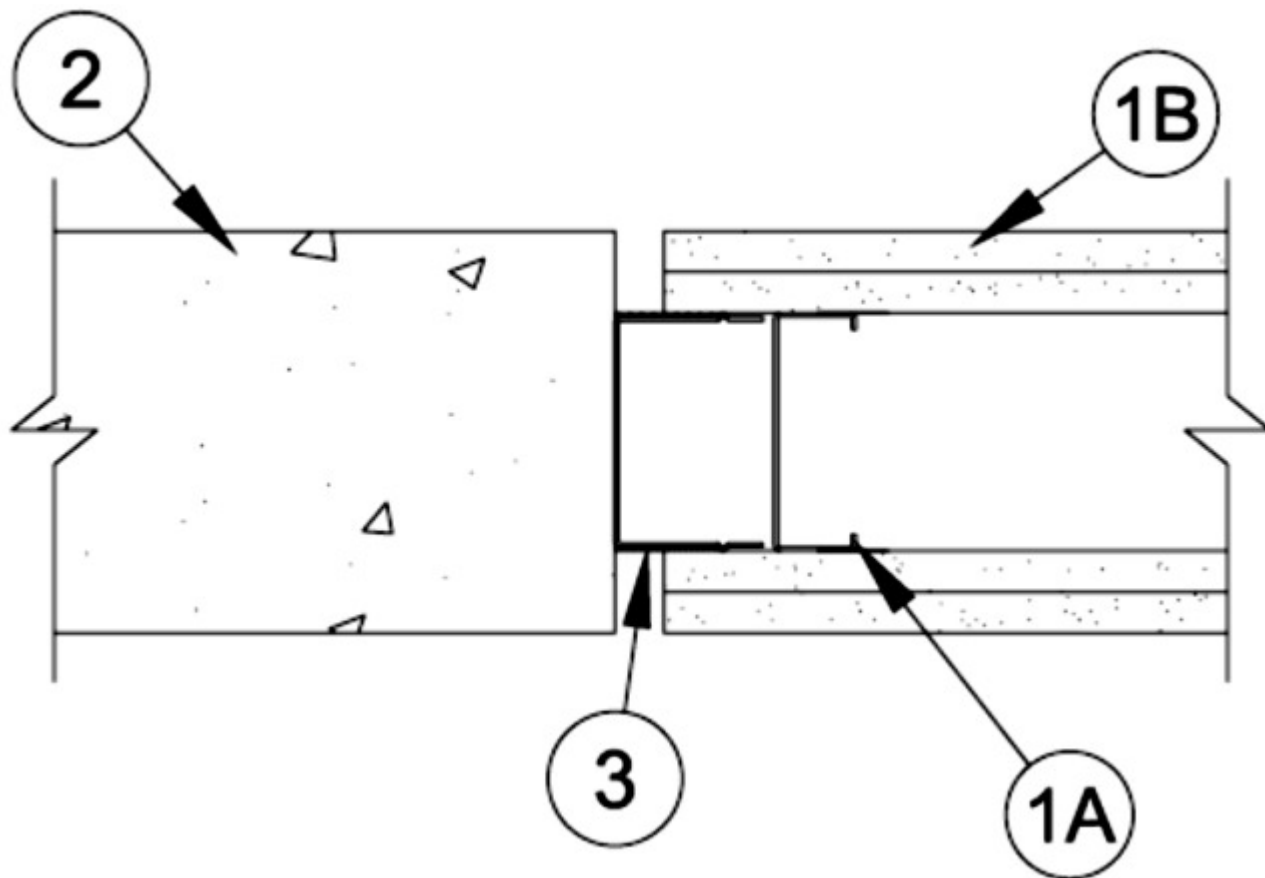
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Assembly Ratings — 1 and 2 Hr (See Item 1)

Joint Width — 1/2, 1, 1-1/2 in. Maximum

L Rating at Ambient — Less than 1 CFM/Lin Ft

L Rating at 400°F — Less than 1 CFM/Lin Ft



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

A. Studs — Steel studs to be min 3-1/2 in. (89 mm) wide by 1-1/4 in. (32 mm) deep corrosion protected min 25 MSG steel channels. Stud spacing not to exceed 24 in. (610 mm) OC with first stud located max 3-1/4 in. (83 mm) from concrete wall assembly (Item 2).

A1. Framing Members - Steel Studs* — In lieu of Item A - Proprietary channel shaped studs, 3-5/8 in. (92 mm) wide spaced a max of 24 in. (610 mm) OC. For direct attachment of gypsum board only.

CALIFORNIA EXPANDED METAL PRODUCTS CO — ViperStud™

B. Gypsum Board* — Gypsum board sheets installed to a min total thickness of 5/8 in. (16 mm) or 1-1/4 in. (32 mm) on each side of wall for 1 and 2 hr fire rated assemblies, respectively. A max 1/2 in. (13 mm) gap shall be maintained between the edges of the gypsum board and the concrete wall assembly (Item 2).

The hourly rating of the joint system is dependent on the hourly fire rating of the wall assembly in which it is installed.

2. Wall Assembly — Min 4-3/4 in. (121 mm) thick steel-reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m³) structural concrete. Wall may also be constructed of any UL Classified **Concrete Blocks***.

See **Concrete Blocks** (CAZT) category in the Fire Resistance Directory for names of manufacturers.

3. Joint System — **Max width of joint (at time of installation) is 1/2 in. (13 mm).** When Item 3A3 is used the joint will accommodate 100% compression/extension for nominal 1/2 in. (12 mm) gaps or compression only for nominal 5/8 in. (16 mm) gaps. When Item 3A4 is used the joint will accommodate 100% compression/extension for nominal 3/4 in. (19 mm) gaps or compression only for 1-1/2 in. (38 mm) gaps. The joint system consists of the following:

A. Fill, Void or Cavity Material* — Min 20 ga U-shaped track having 3 in. (76 mm) legs and a nom 1-1/4 in. (32 mm) wide intumescent strip affixed to the top of both legs. Gypsum board to overlap a min of 1/2 in. (13 mm) over the intumescent strip. Track attached to concrete wall (Item 2) with steel fasteners max 24 in. (610 mm) OC.

CALIFORNIA EXPANDED METAL PRODUCTS CO — FAS Track DL

A1. Fill, Void or Cavity Material* — (Not Shown) — As an alternate to 3A, For 1/2 in. (13 mm) gap, Nom., 1 in. (25.4 mm) open cell foam plug having a nom 5/16 in. (8 mm) intumescent tape applied to the top surface of the foam profile. The foam is sized for 1 or 2 hour walls and shall be placed in the joint between the edges of the gypsum board between the wall assemblies.

CALIFORNIA EXPANDED METAL PRODUCTS CO — HOT ROD Type-X

MARINO/WARE, DIV OF WARE INDUSTRIES INC — HOT ROD Type-X

A2. Fill, Void or Cavity Material* — (Not Shown) — As an alternate to HOTROD (3A, 3A1) for 1/2 (13 mm) gap between the edge of the drywall and the adjoining assembly shall be filled with vinyl deflection bead with 5/16 in. (8 mm) intumescent strip and foam applied to horizontal leg that runs above the edge of the drywall. The perforated leg may be attached to surface of drywall with 1/2 in. (13 mm) staples every 6-8 in. (152-203 mm).

CALIFORNIA EXPANDED METAL PRODUCTS CO — HOTROD XL

TRIM-TEX INC — Trim Tex-Hot Rod Type XL

MARINO/WARE, DIV OF WARE INDUSTRIES INC — HOT ROD Type-XL

A3. Fill, Void or Cavity Material* — (Not Shown) - For nominal 1/2 in. (12 mm) gaps 100% compression/ extension or 1 in. (25 mm) compression only. As an alternate to HOTROD (3A, 3A1) a composite corrugated vinyl profile with a 1-1/2 in. (38 mm) wide leg and a 3/8 in. (10 mm) bubble gasket along the upper edge. A 5/8 in. (16 mm) wide intumescent strip affixed along the inside 1-1/2 in. (38 mm) leg. Composite vinyl profile is attached to the leg of the ceiling runner/track with 1/2 in. (13 mm) No. 8 framing screws or adhesively attached with double sided foam tape.

CALIFORNIA EXPANDED METAL PRODUCTS CO — Fire Gasket 1

MARINO/WARE, DIV OF WARE INDUSTRIES INC — Fire Gasket 1

TRIM-TEX INC — Trim Tex-Fire Gasket 1

A4. Fill, Void or Cavity Material* — (Not Shown) - For nominal 3/4 in. (19 mm) gaps 100% compression/extension or 1-1/2 in. (38 mm) compression only. As an alternate to HOTROD (3A, 3A1) a composite corrugated vinyl profile with a 2 in. (50 mm) wide leg and a 3/8 in. (10 mm) bubble gasket along the upper edge. A 1 in. (25 mm) wide intumescent strip affixed along the inside 1-1/2 in. (38 mm) leg. Composite vinyl profile is attached to the leg of the ceiling runner/track with 1/2 in. (13 mm) No. 8 framing screws or adhesively attached with double sided foam tape.

CALIFORNIA EXPANDED METAL PRODUCTS CO — Fire Gasket 1.5

MARINO/WARE, DIV OF WARE INDUSTRIES INC — Fire Gasket 1.5

TRIM-TEX INC — Trim Tex-Fire Gasket 1.5

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

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