# BXUV.V452 - Fire-resistance Ratings - ANSI/UL 263

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.

## Fire-resistance Ratings - ANSI/UL 263

BXUV - Fire Resistance Ratings - ANSI/UL 263 Certified for United States
BXUV7 - Fire Resistance Ratings - CAN/ULC-S101 Certified for Canada

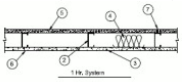
See General Information for Fire-resistance Ratings - ANSI/UL 263 Certified for United States
Design Criteria and Allowable Variances

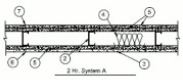
See General Information for Fire Resistance Ratings - CAN/ULC-S101 Certified for Canada
Design Criteria and Allowable Variances

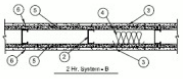
### Design No. **V452**

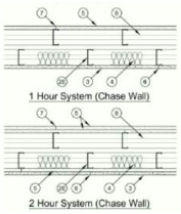
March 2, 2022

**Nonbearing Wall Rating — 1 and 2 Hr (See Items 3, 5 and 5A)**
*** Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.**










1. **Steel Floor and Ceiling Runners —** (Not Shown) — Channel shaped, min 3-5/8 in. wide by 1-1/4 in. deep, fabricated from min 25 MSG galvanized steel. Attached to floor and ceiling with steel fasteners spaced 24 in. OC max.

1A. **Framing Members* — Floor and Ceiling Runner —** Not Shown — In lieu of Item 1 — For use with Item 2A, proprietary channel shaped runners, 1-1/4 in. deep by min 3-5/8 in. wide fabricated from min 0.018 in. thick galv steel, attached to floor and ceiling with fasteners spaced 24 in. OC max.
**CALIFORNIA EXPANDED METAL PRODUCTS CO** — Viper20™ Track

**MARINO/WARE, DIV OF WARE INDUSTRIES INC** — Viper20™ Track

**IMPERIAL MANUFACTURING GROUP INC** — Viper20™ Track

1B. **Framing Members* — Floor and Ceiling Runners —** As an alternate to Item 1 — For use with Item 2B, channel shaped, min 3-5/8 in. wide fabricated from min 0.018 in. thick galv steel, attached to floor and ceiling with fasteners spaced max 24 in. OC.
**CLARKDIETRICH BUILDING SYSTEMS** — CD ProTRAK

**DMFCWBS L L C** — ProTRAK

**MBA METAL FRAMING** — ProTRAK

**RAM SALES L L C** — Ram ProTRAK

**STEEL STRUCTURAL PRODUCTS L L C** — Tri-S ProTRAK

1C. **Framing Members* — Floor and Ceiling Runner —** Not Shown — In lieu of Item 1 — For use with Item 2C, proprietary channel shaped runners, 1-1/4 in. deep by min 3-5/8 in. wide fabricated from min 0.018 in. thick galv steel, attached to floor and ceiling with fasteners spaced 24 in. OC max.
**MARINO/WARE, DIV OF WARE INDUSTRIES INC** — Viper20™ Track

1D. **Framing Members* — Floor and Ceiling Runners —** As an alternate to Item 1 — For use with Item 2D, channel shaped, min 3-5/8 in. wide fabricated from min 0.018 in. thick galv steel, attached to floor and ceiling with fasteners spaced max 24 in. OC.
**TELLING INDUSTRIES L L C** — TRUE-TRACK™

1E. **Floor and Ceiling Runners —** As an alternate to Item 1 — Channel shaped, attached to floor and ceiling in two rows, a min 1 in. apart, with steel fasteners spaced 24 in. OC. Runners fabricated from min No. 25 MSG galv steel, 1-1/4 in. wide and min 2-1/2 in. deep.

1F. **Framing Members* — Floor and Ceiling Runners —** (Not Shown) — As an alternate to Item 1E - For use with Item 2F, channel shaped, min 2-1/2 in. deep fabricated from min 0.018 in. thick galv steel, attached to floor and ceiling with fasteners 24 in. OC. max.
**CLARKDIETRICH BUILDING SYSTEMS** — CD ProTRAK

**DMFCWBS L L C** — ProTRAK

**MBA METAL FRAMING** — ProTRAK

**RAM SALES L L C** — Ram ProTRAK

**STEEL STRUCTURAL PRODUCTS L L C** — Tri-S ProTRAK

1G. **Framing Members* — Floor and Ceiling Runners —** (Not Shown) — As an alternate to Item 1E - For use with Item 2G, channel shaped, min 2-1/2 in. deep fabricated from min 0.018 in. thick galv steel, attached to floor and ceiling with fasteners 24 in. OC. max.
**TELLING INDUSTRIES L L C** — TRUE-TRACK™

1H. **Framing Members* — Floor and Ceiling Runners —** (Not Shown) — As an alternate to Item 1E - For use with Item 2H, channel shaped, min 2-1/2 in. deep, attached to floor and ceiling with fasteners 24 in. OC. max.
**MARINO/WARE, DIV OF WARE INDUSTRIES INC** — Viper20™ Track

**IMPERIAL MANUFACTURING GROUP INC** — Viper20™ Track

1I. **Framing Members* — Floor and Ceiling Runners —** (Not Shown) — As an alternate to Item 1E for a 2 hour rating only - For use with Item 2I, channel shaped, min 2-1/2 in. deep, attached to floor and ceiling with fasteners 24 in. OC. max.
**MARINO/WARE, DIV OF WARE INDUSTRIES INC** — Viper25™ Track

**IMPERIAL MANUFACTURING GROUP INC** — Viper25™ Track

1J. **Framing Members* — Floor and Ceiling Runners —** As an alternate to Item 1 — For use with Item 2K, channel shaped, min 3-5/8 in. wide fabricated from min 0.018 in. thick galv steel, attached to floor and ceiling with fasteners spaced max 24 in. OC.
**RESCUE METAL FRAMING, L L C** — AlphaTRAK

2. **Steel Studs —** Channel shaped, fabricated from min 25 MSG galvanized steel, min 3-5/8 in. deep, min 1-1/4 in. flanges and 1/4 in. return, spaced max 16 in. OC. Studs to be cut 1/2 in. less than assembly height and friction-fitted into floor and ceiling runners.

2A. **Framing Members* — Metal Studs —** Not Shown — In lieu of Item 2 — For use with Item 1A, proprietary channel shaped steel studs, 1-1/4 in. deep by n 3-5/8 in. wide fabricated from min 0.018 in. thick galv steel. Studs cut 1/2 in. less in length than assembly height. Spaced 16 in. OC max.
**CALIFORNIA EXPANDED METAL PRODUCTS CO** — Viper20™

**MARINO/WARE, DIV OF WARE INDUSTRIES INC** — Viper20™

**IMPERIAL MANUFACTURING GROUP INC** — Viper20™

2B. **Framing Members* — Steel Studs —** As an alternate to Item 2 — For use with Item 1B, channel shaped studs, min 3-5/8 in. wide fabricated from min 0.018 in. thick galv steel, spaced a max of 16 in. OC. Studs to be cut 1/2 in. less than assembly height.
**CLARKDIETRICH BUILDING SYSTEMS** — CD ProSTUD

**DMFCWBS L L C** — ProSTUD

**MBA METAL FRAMING** — ProSTUD

**RAM SALES L L C** — Ram ProSTUD

**STEEL STRUCTURAL PRODUCTS L L C** — Tri-S ProSTUD

2C. **Framing Members* — Metal Studs —** Not Shown — In lieu of Item 2 — For use with Item 1C, proprietary channel shaped steel studs, 1-1/4 in. deep by n 3-5/8 in. wide fabricated from min 0.018 in. thick galv steel. Studs cut 1/2 in. less in length than assembly height. Spaced 16 in. OC max.
**MARINO/WARE, DIV OF WARE INDUSTRIES INC** — Viper20™

2D. **Framing Members* — Steel Studs —** As an alternate to Item 2 — For use with Item 1D, channel shaped studs, min 3-5/8 in. wide fabricated from min 0.018 in. thick galv steel, spaced a max of 16 in. OC. Studs to be cut 1/2 in. less than assembly height.
**TELLING INDUSTRIES L L C** — TRUE-STUD™

2E. **Steel Studs —** As an alternate to Item 2, For use with Item 1E, Channel shaped, supplied with cutouts, friction -fitted into floor and ceiling runners and spaced a max 16 in. OC. Studs cut 1/2 in. less than assembly height and evenly staggered between the two rows of floor and ceiling runners. Studs fabricated from min No. 25 MSG galv steel, min 2-1/2 in. deep by 1-5/8 in. wide with 3/8 in. folded back return flange legs.

2F. **Framing Members*— Steel Studs —** As an alternate to Item 2E - For use with Item 1F, channel shaped studs, min 2-1/2 in. deep fabricated from min 0.018 in. thick galv steel, spaced a max of 16 in. OC. Studs to be cut 1/2 in. less than assembly height.
**CLARKDIETRICH BUILDING SYSTEMS** — CD ProSTUD

**DMFCWBS L L C** — ProSTUD

**MBA METAL FRAMING** — ProSTUD

**RAM SALES L L C** — Ram ProSTUD

**STEEL STRUCTURAL PRODUCTS L L C** — Tri-S ProSTUD

2G. **Framing Members* — Steel Studs —** As an alternate to Item 2E — For use with Item 1G, channel shaped studs, min 2-1/2 in. deep fabricated from min 0.018 in. thick galv steel, spaced a max of 16 in. OC. Studs to be cut 1/2 in. less than assembly height.
**TELLING INDUSTRIES L L C** — TRUE-STUD™

2H. **Framing Members* — Steel Studs —** As an alternate to Item 2E — For use with Item 1H, channel shaped studs, min 2-1/2 in. deep, spaced a max of 16 in. OC. Studs to be cut 3/4 in. less than assembly height.
**MARINO/WARE, DIV OF WARE INDUSTRIES INC** — Viper20™

**IMPERIAL MANUFACTURING GROUP INC** — Viper20™

2I. **Framing Members* — Steel Studs —** As an alternate to Item 2E for a 2 hour rating only — For use with Item 1I, channel shaped studs, min 2-1/2 in. deep, spaced a max of 16 in. OC. Studs to be cut 3/4 in. less than assembly height.
**MARINO/WARE, DIV OF WARE INDUSTRIES INC** — Viper25™

**IMPERIAL MANUFACTURING GROUP INC** — Viper25™

2J. **Framing Members* — Steel Studs —** As an alternate to Item 2 — For use with Item 1A (3-5/8 in. wide track), channel shaped studs, fabricated from min 25 MSG corrosion-protected steel, 1-1/4 in. wide by 3-5/8 in. deep, spaced a max of 16 in. OC. Studs to be cut 3/8 to 3/4 in. less than assembly height.
**MARINO/WARE, DIV OF WARE INDUSTRIES INC** — StudRite™

2K. **Framing Members* — Steel Studs —** As an alternate to Item 2 — For use with Item 1J, channel shaped studs, min 3-5/8 in. wide fabricated from min 0.018 in. thick galv steel, spaced a max of 16 in. OC. Studs to be cut 1/2 in. less than assembly height.
**RESCUE METAL FRAMING, L L C** — AlphaSTUD

3. **Cementitious Backer Units* —** 7/16 in., 1/2 in., 5/8 in., 3/4 in. or 1 in. thick, min. 32 in. wide. **1 Hr System** - Applied vertically or horizontally with vertical joints centered over studs. Fastened to studs and runners with 1-1/4 in. long, sharp point cement board screws spaced a max of 8 in. OC. When 4 ft. wide boards are used, horizontal joints need not be backed by framing. When boards less than 4 ft. wide are used, they shall be applied vertically, or one row of horizontal joints shall be backed by steel studs if applied horizontally. All vertical joints staggered one stud cavity from gypsum board vertical joints on the opposite side of studs. **2-Hr System A** — Applied vertically or horizontally with vertical joints centered over studs. Face layer fastened over gypsum board to studs and runners with 1-5/8 in. long, sharp point cement board screws spaced a max of 8 in. OC. All face layer joints offset min 16 in. from underlying base layer joints. Base layer joints shall be staggered from base layer joints on the opposite side of the wall. **2-Hr System B** — Applied vertically or horizontally with vertical joints centered over steel studs (Item 2 only). Fastened over gypsum board base layer (Item 5C) to studs and runners with 1-5/8 in. long, sharp point cement board screws spaced a max of 8 in. OC. All joints offset min 24 in. from underlying base layer gypsum board joints.
**NATIONAL GYPSUM CO** — Type DuraBacker, PermaBase, DuraBacker Plus, or PermaBase Plus

4. **Batts and Blankets* —** Nom. 3 in. thick mineral wool batts having a min. density of 2.6 lbs per cubic foot, friction-fitted between studs.
See **Batts and Blankets** (BKNV or BZJZ) Categories for names of Classified companies.

5. **Gypsum Board* — 1 Hr System** — 5/8 in. thick, with square or tapered edges, applied vertically with vertical joints centered over studs. Fastened to studs and runners with 1-1/8 in. long Type S screws spaced max 8 in. OC at vertical edges and spaced max 12 in. OC in the field. Vertical joints staggered one stud cavity from cement board vertical joints on opposite side of studs.
**NATIONAL GYPSUM CO** — Types eXP-C, FSL, FSW, FSK, FSW-C, FSK-C, FSW-3, FSW-5, FSW-6, FSW-8, FSMR-C, SBWB

5A. **Gypsum Board* — 2 Hr System A** — 1/2 in. or 5/8 in. thick, with square or tapered edges, applied vertically or horizontally with vertical joints centered over studs. Base layers fastened with 1 in. long Type S screws spaced max 24 in. OC to studs and runners. Face layer fastened with 1-5/8 in. long Type S screws spaced max 16 in. OC to studs and runners with screws offset from base layer screws. Face layer joints offset min 16 in. from base layer joints. Base layer joints shall be staggered from base layer joints on the opposite side of the wall.
**NATIONAL GYPSUM CO** — Types eXP-C, FSK, FSK-C, FSL, FSW, FSW-C, FSW-3, FSW-G, FSW-5, FSMR-C, FSW-6, FSW-8, SBWB

5B. **Gypsum Board* —** (As an alternate to 5/8 in. Type FSW in Item 5) — Nom. 5/16 in. thick gypsum panels applied vertically. Two layers of 5/16 in. for every single layer of 5/8 in. gypsum board described in Item 5 or 5A. Horizontal joints on the same side need not be staggered. Inner layer of each double 5/16 in. layer attached with fasteners, as described in item 5 or 5A, spaced 24 in. OC. Outer layer of each double 5/16 in. layer attached per Item 5 or 5A.
**NATIONAL GYPSUM CO** — Type FSW

5C. **Gypsum Board* — 2 Hr System B —** 5/8 in. thick, with square or tapered edges, applied vertically or horizontally with vertical joints centered over studs. Fastened with 1 in. long Type S screws spaced max 16 in. OC to steel studs (Item 2 only) and runners. Joints offset from face layer joints (Item 3) minimum 24 in.
**NATIONAL GYPSUM CO** — Types eXP-C, FSL, FSW, FSK, FSW-C, FSK-C, FSW-3, FSW-5, FSW-6, FSW-8, FSMR-C, SBWB

6. **Joints of Cementitious Backer Units —** Covered with glass fiber mesh tape and latex modified Portland cement mortar meeting ANSI A118.4.

7. **Joints of Gypsum Board —** When tapered edge gypsum board is used, face layer joints covered with joint compound and paper tape. As an alternate, gypsum veneer plaster may be applied to the entire surface of Classified veneer baseboard with joints reinforced. When square-edge gypsum board is used, treatment of joints is optional.

8. **Lateral Bracing —** Required with Items 2E-2I only. The bracing shall be in accordance with the SSMA Technical Note Dated March 2000 Referencing Unsheathed Flange Bracing.

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

Last Updated on 2022-03-02