



## BXUV.U426

## 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.

## 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

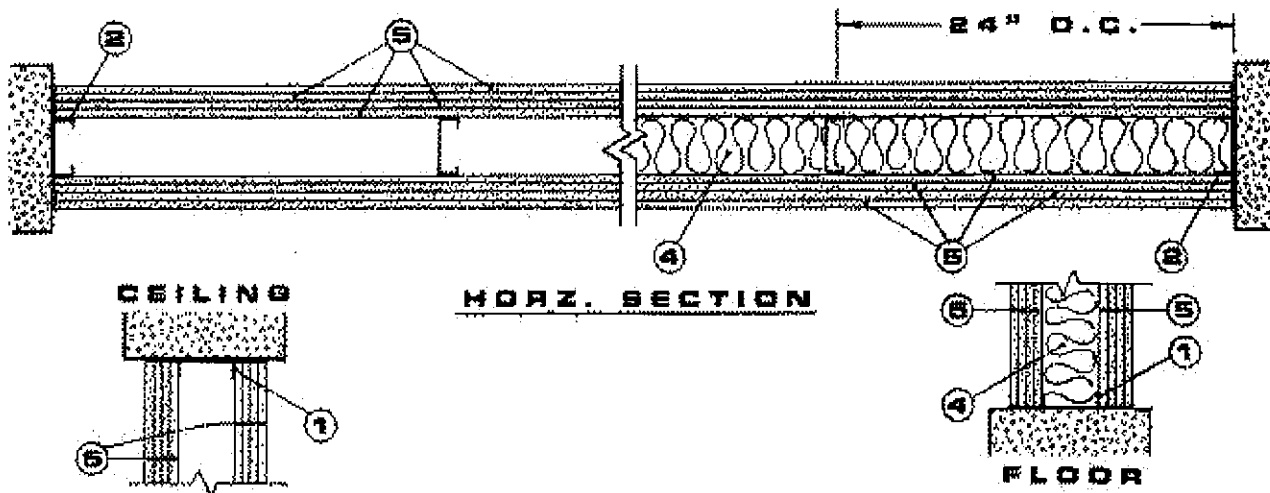
**Design No. U426**

October 13, 2020

**Bearing Wall Rating — 3 HR.**

**This design was evaluated using a load design method other than the Limit States Design Method (e.g., Working Stress Design Method). For jurisdictions employing the Limit States Design Method, such as Canada, a load restriction factor shall be used — See Guide BXUV or BXUV7**

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



**1. Floor Ceiling Runners** — Channel-shaped, min. 3-1/2 in. wide with min 1-1/2 in. legs, fabricated from min No. 20 MSG (0.0329 in., min bare metal thickness) corrosion resistant steel. Attached to floor and ceiling with steel fasteners spaced not greater than 24 in. OC.

**2. Steel Studs** — Corrosion protected steel studs, min. 3-1/2 in. wide min No. 20 MSG (0.0329 in., min bare metal thickness) steel. Studs shall be designed in accordance with the current edition of the Specification for the Design of Cold-Formed Steel Structural Members by the American Iron and Steel Institute. All design details enhancing the structural integrity of the wall assembly, including the axial design load of the studs, shall be as specified by the steel stud designer and/or producer and shall meet the requirements of all applicable local code agencies. The max stud spacing shall not exceed 24 in. OC. Studs attached to floor and ceiling runners with 1/2 in. long Type S-12 pan head or 5/8 in. long Type S-12 low profile head, self-drilling, self-tapping steel screws on both sides of studs.

**3. Lateral Support Members** — (Not shown) — Where required for lateral support of studs, support may be provided by means of steel straps, channels or other similar means as specified in the design of a particular steel stud wall system.

**4. Batts and Blankets\*** — (Optional) — Mineral wool insulation, partially or completely filling stud cavity.  
**ROCKWOOL** — Type AFB, min. density 1.8 pcf / 28.8 kg/m<sup>3</sup>

**THERMAFIBER INC** — Type SAFB, SAFB FF.

**4A. Fiber, Sprayed\*** — As an alternate to Batts and Blankets (Item 4) — (100% Borate Formulation) — Spray applied cellulose material. The fiber is applied with water to completely fill the enclosed cavity in accordance with the application instructions supplied with the product with a nominal dry density of 2.7 lb/ft<sup>3</sup>. Alternate Application Method: The fiber is applied without water or adhesive at a nominal dry density of 3.5 lb/ft<sup>3</sup>, in accordance with the application instructions supplied with the product.

**U S GREENFIBER L L C** — INS735, INS745, INS750LD for use with wet or dry application. INS765LD and INS773LD are to be used for dry application only.

**4B. Fiber, Sprayed\*** — As an alternate to Batts and Blankets (Item 4) - Spray applied cellulose insulation material. The fiber is applied with water to interior surfaces in accordance with the application instructions supplied with the product. Applied to completely fill the enclosed cavity. Minimum dry density of 4.3 pounds per cubic ft.

**NU-WOOL CO INC** — Cellulose Insulation

**4C. Fiber, Sprayed\*** — As an alternate to Batts and Blankets (Item 4) - Spray applied cellulose fiber. The fiber is applied with water to completely fill the enclosed cavity in accordance with the application instructions supplied with the product. The minimum dry density shall be 4.30 lbs/ft<sup>3</sup>.

**INTERNATIONAL CELLULOSE CORP** — Celbar-RL

**4D. Fiber, Sprayed\*** — As an alternate to Batts and Blankets (Item 4) - Spray-applied cellulose material. The fiber is applied with water to completely fill the enclosed cavity in accordance with the application instructions supplied with the product. To facilitate the installation of the material, any thin, woven or non-woven netting may be attached by any means possible to the outer face the studs. The material shall reach equilibrium moisture content before the installation of materials on either face of the studs. The minimum dry density shall be 5.79 lbs/ft<sup>3</sup>.

**APPLEGATE HOLDINGS L L C** — Applegate Advanced Stabilized Cellulose Insulation

**5. Gypsum Board** — 1/2 in. thick, 4 ft. wide. Four layers of wallboard to be used. Inner layers to be applied vertically with joints centered over studs. Outer layer may be applied vertically or horizontally. First layer fastened to each stud with 1 in. long Type S-12, steel screw. Second layer fastened to each stud through the first layer with 1-5/8 in. long, Type S-12, steel screws. Third layer fastened to each stud through the first and second layers with 2-1/4 in. long, Type S-12, steel screws. Fourth layer fastened to each stud through the first, second and third layers with 2-5/8 in. long, Type S-12, steel screws. First, second and third layer screws shall be installed with a maximum spacing of 48 in. OC vertically. Fourth layer vertically installed wallboard attached with screws spaced 12 in. OC vertically. Fourth layer horizontal board end shall be centered over and secured to the stud with screws spaced 1/2 in. from end joint and 12 in. OC vertically. Board end joints shall be staggered. At board side joints all screws shall be located 1/2 in. from the longitudinal joints. Horizontal applied fourth layer also secured to the second and third layers with 1-1/2 in. long, Type G, steel screws located midway between studs and 1 in. from the longitudinal joint. Joints in each layer of wallboard to be staggered from the joints in the adjacent layer and on opposite sides of studs.

**AMERICAN GYPSUM CO** — Types AG-C

**CABOT MANUFACTURING ULC** — Type C

**CERTAINTED GYPSUM INC** — Type C

**CGC INC** — Types C, IP-X2, IPC-AR.

**CONTINENTAL BUILDING PRODUCTS OPERATING CO, L L C** — Type LGFC-C/A.

**GEORGIA-PACIFIC GYPSUM L L C** — Types 5, DAPC, TG-C.

**NATIONAL GYPSUM CO** — Types eXP-C, FSK-C, FSW-C, FSMR-C.

**PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM** — Type PG-C.

**PANEL REY S A** — Type PRC

**THAI GYPSUM PRODUCTS PCL** — Type C

**THE SIAM GYPSUM INDUSTRY (SONGKHLA) CO** — Type C

**UNITED STATES GYPSUM CO** — Types C, IP-X2, IPC-AR.

**USG BORAL DRYWALL SFZ LLC** — Type C

**USG MEXICO S A DE C V** — Types C, IP-X2, IPC-AR.

5A. **Gypsum Board\*** — (As an alternate to Item 5) — 5/8 in. thick. Four layers installed as described in Item 5, with fourth layer screw length increased by 1/4 in.

**CGC INC** — Type ULIX.

**NATIONAL GYPSUM CO** — Type FSMR-C.

**UNITED STATES GYPSUM CO** — Type ULIX

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Last Updated on 2020-10-13

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