

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. **U942**

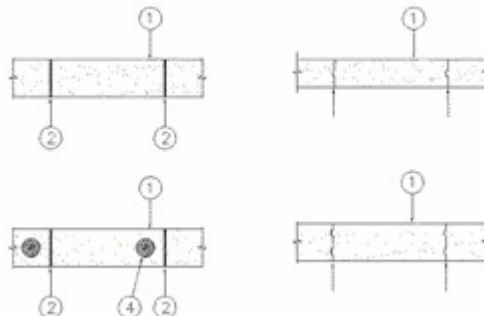
March 16, 2023

Bearing Wall Rating — 2-1/2, 3 and 4 Hr (See Items 1 and 4)

Nonbearing Wall Rating — 2, 2-1/2, 3 and 4 Hr (See Items 1 and 4)

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. **Precast Autoclaved Aerated Concrete Blocks** — Min 4 in. thick by min 7-7/8 in. high by min 23-5/8 in. long blocks for use in 4 hr nonbearing wall assemblies. Min 6 in. thick by min 7-7/8 in. high by min 23-5/8 in. long blocks for use in 4 hr bearing wall assemblies. Min 3 in. thick by min 7-7/8 in. high by min 23-5/8 in. long blocks for use in 2 hr nonbearing wall assemblies. See Item 4 for minimum block thickness when cores are present.

AERCON FLORIDA L L C — AC-2, AC-4, AC-6

2. **Thin Bed Mortar** — Blocks laid in a ANSI A118.4 Latex/Portland cement thin bed mortar installed with vertical joints staggered. Thin bed mortar is optional in 8 in. thick blocks with tongue and groove joints for nonbearing walls.

3. **Precast Autoclaved Aerated Concrete Lintel (Not Shown)*** — Min 6 in. thick lintel for use in bearing and nonbearing wall assemblies.

AERCON FLORIDA L L C

4. **Core** — (Optional) As an option, the blocks may have one or two cores as specified below with a max. #7 (7/8 in.) rebar and filled with ASTM C404 grout. Where two cores are specified, the minimum distance from center to center of the cores shall be twice the core diameter.

Maximum Core Diameter	Maximum Number of Cores per Block	Minimum Block Thickness	Bearing Wall Rating, Hr	Nonbearing Wall Rating, Hr
4 in.	2	8 in.	4	4
4 in.	2	7 in.	3	3
3.54 in. (90 mm)	2	6 in.	2-1/2	2-1/2

5. **Angles** — (Optional - when used, items 6 through 8 must also be used) - Angles 0.063 in. thick with one 2 in. leg and one 2-1/4 in. leg. Aluminum angles spaced a minimum of 32 in. vertically and 32 in. horizontally with Type W, min. 1-1/4 in. to max. 2-1/2 in. long screws (used for 3 in. thick blocks, Item 1), or min. 1-1/4 in. to max. 3 in. long screws (used for 4 in. or larger blocks, Item 1) secured through each angle leg at pre-drilled hole, studs (Item 6 or 6A) and precast autoclaved aerated concrete blocks (Item 3), 2-1/4 in. leg to be positioned on stud side and 2 in. leg to be positioned on AAC side.

6. **Steel Studs** — (Optional - for use with item 5) - Corrosion protected steel studs, min. 2-5/8 in wide, min. No. 20 MSG (0.0329 in. thick), cold formed, 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. The max stud spacing of wall assemblies shall not exceed 24 in. O.C. Studs attached to floor and ceiling runners with 1/2 in. long Types S-12 pan head, self-drilling, self-tapping steel screws on both sides of the studs or by welded or bolted connections designed in accordance with AISI specifications.

6A. **Wood Studs** — (Optional - for use with item 5) - As an alternate to Item 6, nom. 2 in. by 4 in., spaced a max of 24 in. O.C. Stud to be effectively firestopped at the top and bottom of the wall with nom. 2 in. by 4 in. plates.

7. **Gypsum Board*** — (Optional - for use with items 5, 6 or 6A, and 7) - **Any 1/2 in. thick UL Classified Gypsum Board that is eligible for use in Design No. X515. Any 5/8 in. thick UL Classified Gypsum Board that is eligible for use in Design Nos. L501, G512 or U305.** One layer of nom. 1/2 in. or 5/8 in. thick by 48 in. wide boards installed vertically to wood studs or steel studs. Joints to occur at stud locations. Gypsum board attached to steel studs using 1 in. long Type S-12 steel screws spaced 8 in. O.C. along the edges and 12 in. O.C. in the field. Gypsum board attached to wood studs using 1-3/4 in. long galv. nails with 0.128 in. dia. shank and 7/16 in. dia. head, spaced 8 in. O.C. along the edges and in the field Screws and nails located a min. of 1/2 in. from side joints and 3 in. from end joints.

CABOT MANUFACTURING ULC ([View Classification](#)) — CKNX.R25370

AMERICAN GYPSUM CO ([View Classification](#)) — CKNX.R14196

BEIJING NEW BUILDING MATERIALS PUBLIC LTD CO ([View Classification](#)) — CKNX.R19374

CERTAINTED GYPSUM INC ([View Classification](#)) — CKNX.R3660

CGC INC ([View Classification](#)) — CKNX.R19751

CERTAINTED GYPSUM INC ([View Classification](#)) — CKNX.R18482

GEORGIA-PACIFIC GYPSUM L L C ([View Classification](#)) — CKNX.R2717

NATIONAL GYPSUM CO ([View Classification](#)) — CKNX.R3501

PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM ([View Classification](#)) — CKNX.R7094

PANEL REY S A ([View Classification](#)) — CKNX.R21796

SIAM GYPSUM INDUSTRY (SARABURI) CO LTD ([View Classification](#)) — CKNX.R19262

THAI GYPSUM PRODUCTS PCL ([View Classification](#)) — CKNX.R27517

UNITED STATES GYPSUM CO ([View Classification](#)) — CKNX.R1319

USG MEXICO S A DE C V ([View Classification](#)) — CKNX.R16089

8. **Finishing System** — (Not Shown) - Vinyl, dry or premixed joint compound, applied in two coats to joints and screw-heads or nail heads, paper tape, 2 in. wide, embedded in first layer of compound over all joints. As an alternate, nom. 3/32 in. thick veneer plaster may be applied to the entire surface of the gypsum wallboard.

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