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

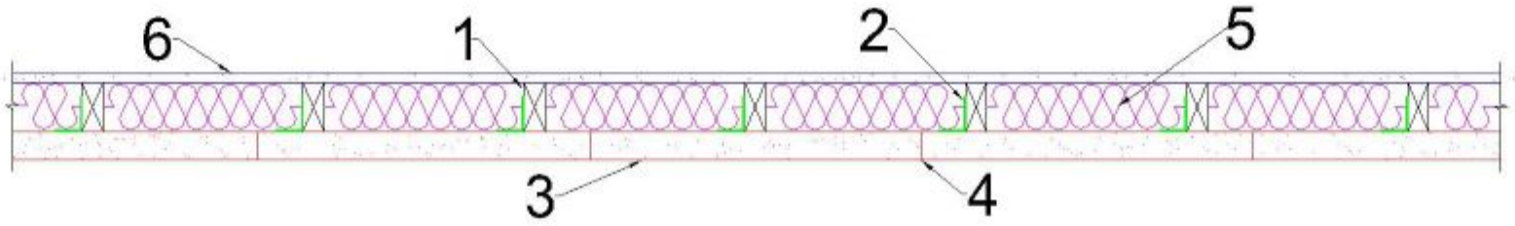
Design No. **U217**

April 06, 2026

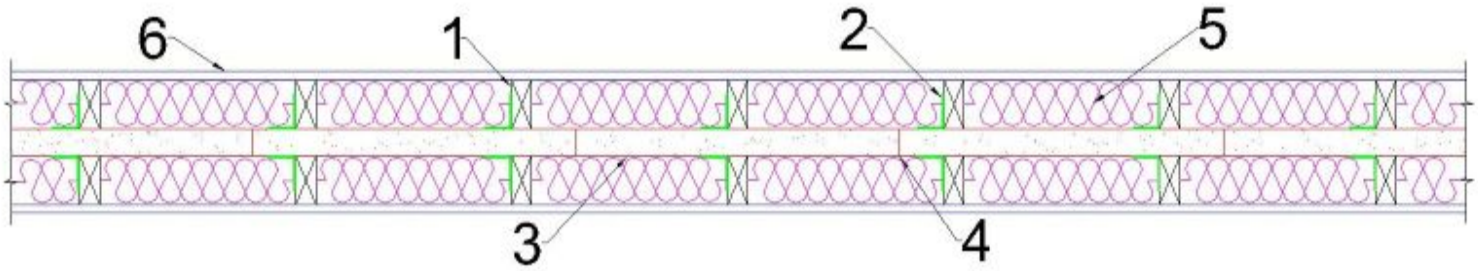
Wall Rating — 1, 2, 3, or 4 Hr (See Item 1)
Load Bearing — See Item 1
Finish Rating — See Item 9

Loaded Per 2018 NDS Supplement, ASD Method, Wall Braced at Mid-height, 100% of Design Load Applied to Wall.

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



Configuration A - 1, 2 Hr (2 in. thick PAAC panel)
Configuration A - 3 Hr (3 in. thick PAAC panel)
Exposed to Fire from PAAC Panel Side only



Configuration B - 2, 3 Hr (2 in. thick PAAC panel)
Configuration B - 4 Hr (3 in. thick PAAC panel)

1. **Wood Studs —** Nom 2 in. by 4 in., spaced a max of 16 in. OC. Studs to be effectively firestopped at the top and bottom of the wall with nom 2 in. by 4 in. plates. Studs effectively cross-braced at mid-height of the wall.

1A. **Steel Studs —** (Not Shown – For 1 hour rating in Configuration A and 2 hour rating in Configuration B only) — As an alternate to Item 1 — Min 0.0329 in., bare metal thickness (No. 20 MSG) corrosion-protected steel studs, min 3-1/2 in. wide, 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 (AISI). Load based on bracing at mid-height of wall assembly. The max stud spacing shall not exceed 16 in. OC. Studs attached to floor and ceiling runners (Item 1B) with 1/2 in. long Type S-12 steel screws on both sides of the studs or by welded or bolted connections designed in accordance with the AISI specifications.

1B. **Floor and Ceiling Runners —** (Not Shown – For 1 hour rating in Configuration A and 2 hour rating in Configuration B only) — For use with Item 1A. Channel shaped, fabricated from min 0.0329 in., bare metal thickness (No. 20 MSG) corrosion-protected steel. Attached to floor and ceiling assemblies with steel fasteners spaced not greater than 16 in. OC.

2. **Attachment Clips —** Aluminum angles nominal 0.050 in. thick and 2 in. wide with one 2 in. leg and one 2-1/2 in. to 5-1/2 in. leg. Clips positioned with 2 in. leg on panel side and 2-1/2 in. to 5-1/2 in. leg on stud side. Clips attached to studs with two #6 by 1-1/4 in. bugle head coarse drywall screws at pre-drilled holes. Clips not to be attached to horizontal blocking or top or bottom plate. Clips attached to panels with two #8 by 1-1/2 in. self-piercing lath screws at pre-drilled holes. Clips may be installed with minimum no air gap and maximum 1 in. air gap between panels and studs with 2-1/2 in. clips, maximum 3 in. air gap between panels and studs with 5-1/2 in. clips. Maximum 16 in. clip spacing from vertical or horizontal narrow panel ends. Configuration B – Clips shall be staggered on opposite sides of panel to permit attachment to studs and panels.

Panel Size	Minimum Number of Clips per Panel
3 ft. and Under	2
Greater than 3 ft., Up to 7 ft.	3

Greater than 7 ft., Up to 9 ft.	4
Greater than 9 ft., Up to 10 ft.	5

3. **Precast Autoclaved Aerated Concrete Blocks* —** (Non load bearing component) — Minimum 2 in. thick, max 24 in. wide and 7, 8, or 10 ft long reinforced panels. Minimum 2 in. thick PAAC panel for use in 1 and 2 hour assembly ratings for Configuration A and for use in 2 and 3 hour assembly rating for Configuration B. Minimum 3 in. thick PAAC panel for use in 3 hour assembly rating for Configuration A and for use in 4 hour assembly rating for Configuration B. Reinforced PAAC panels installed horizontally or vertically. Vertical and horizontal joints need not be backed by nor centered over studs. Panels mechanically attached to adjacent wood or steel stud structure (Items 1 and 1A). Panel width may be less than 24 in. and length less than 7 ft. to accommodate field conditions. Panels installed 3/4 in. short of wall height.

LITECON CORP – AAC-4

4. **Thin Bed Mortar —** Horizontal and vertical joints between each reinforced precast autoclaved aerated concrete panel bonded full depth with 1/8 in. thin bed mortar, designated Adhesive Mortar manufactured by Aircrete - Litecon, intended for use with Item 3 per manufacturer's specifications.

5. **Batts and Blankets* —**

Configuration A

(Optional) — Placed to completely or partially fill the stud cavities, any glass fiber or mineral wool insulation, nominal 0.70 pcf density, bearing the UL Classification Marking as to Surface Burning Characteristics and/or Fire Resistance. See **Batts and Blankets** (BKNV or BZJZ) Categories for names of Classified companies.

Configuration B

(Required) – Placed to completely fill the stud cavities in both rows of studs, any glass fiber or mineral wool insulation, nominal 0.70 pcf density, bearing the UL Classification Marking as to Surface Burning Characteristics and/or Fire Resistance. See **Batts and Blankets** (BKNV or BZJZ) Categories for names of Classified companies.

6. **Gypsum Board*** - (Required) — **Any 5/8 in. thick UL Classified Gypsum Board that is eligible for use in Design Nos. L501, G512 or U305.** One layer of min 5/8 in. thick by 48 in. wide boards installed horizontally or vertically to wood studs. Gypsum board attached to wood studs using 1-5/8 in. wallboard screws spaced 8 in. OC along the edges and in the field. Gypsum board attached to steel studs using 1-5/8 in. long Type S-12 steel screws spaced 8 in. OC along the edges and in the field.

7. **Finishing System —** (Not Shown) — Gypsum board joints to be covered with paper tape and joint compound. Fastener heads optionally covered with joint compound.

8. **Ceramic Blanket** – (Not Shown) – 3/4 in. wide by 2 in. thick 8 pcf density ceramic blanket insulation friction-fit in top gap above Item 3.

9. **Finish Rating** – The finish rating is 69 minutes for 2 in. thick PAAC panels with minimum no airgap between Items 1 and 3, with or without Batts and Blankets in Configuration A.

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Last Updated on 2026-04-06