



ICC-ES Listing Report ESL-1481

Reissued November 2023

This listing is subject to renewal November 2024.

CSI: DIVISION: 03 00 00—CONCRETE
Section: 03 41 00—Precast Structural Concrete

DIVISION: 04 00 00—MASONRY
Section: 04 22 26—Autoclaved Aerated Concrete Unit Masonry

Product Certification System:

The ICC-ES product-certification system includes evaluating reports of tests of standard manufactured product, prepared by accredited testing laboratories and provided by the listee, to verify compliance with applicable codes and standards. The system also involves factory inspections, and assessment and surveillance of the listee's quality system.

Product: LITECON PRECAST AUTOCLAVED AERATED CONCRETE (PAAC) PANELS

Listee: LITECON CORPORATION

Evaluation: LITECON Corporation PAAC panels are precast autoclaved aerated reinforced concrete panels complying with ASTM C1693 and ASTM C1694 and having the following nominal dimensions; 2-inches-thick by 2-feet-by-7-feet, 2-inches-thick by 2-feet-by-8-feet or 2-inches-thick by 2-feet-by-10-feet. The panels' actual dimensions are 1.97-inches-thick (50 mm) by 2-feet-by-6.67-feet (610 by 2035 mm), 1.97-inches-thick (50 mm) by 2-feet by 8-feet (610 by 2440 mm) or 1.97-inches-thick (50 mm) by 2-feet by 10-feet (610 mm by 3050 mm); or 3-inches-thick by 2-feet-by-4-feet, 3-inches-thick by 2-feet-by-7-feet, 3-inches-thick by 2-feet by 8-feet, or 3-inches-thick by 2-feet by 10-feet. The panels' actual dimensions are 2.95-inches-thick (75 mm) by 2-feet-by-4-feet (610 by 1220 mm), 2.95-inches-thick (75 mm) by 2-feet by 6.67-feet (610 by 2035 mm)), 2.95-inches-thick (75 mm) by 2-feet by 8-feet (610 by 2440 mm), or 2.95-inches-thick (75 mm) by 2-feet by 10-feet (610 by 3050 mm). The PAAC panels were evaluated as a component in fire-resistance-rated wall assemblies as described in the Design Listing PSC-1481-01 and PSC-1481-02, tested in accordance with the following standards:

- ASTM E119-18B, Standard Test Methods for Fire Tests of Building Construction and Materials.
- UL 263-11 (with revisions through March 2018), Standard for Fire Tests of Building Construction and Materials, Underwriters Laboratories, Inc.

Findings: Evaluation of PAAC panels when used as components of the assembly, is based on testing in accordance with the applicable test method as referenced in ICC Design Nos. PSC-1481-01 and PSC-1481-02, and as referenced in the applicable sections of the following code editions:

- 2021 *International Building Code*® (IBC)
Applicable Section: 703.2
- 2021 *International Residential Code*® (IRC)
Applicable Section: R302

Identification:

1. Each pallet of panels must be identified by a stamp or label on the pallet that includes the name of the report holder (LITECON Corporation), identification of the manufacturing facility, production date or lot number, and/or the ICC-ES listing report number ([ESL-1481](#)) and when applicable, the ICC-ES listing mark.

2. The report holder's contact information is the following:

LITECON CORPORATION
18911 HARDY OAK BOULEVARD # 190
SAN ANTONIO, TEXAS 78258
(210) 605-7052
www.liteconusa.com

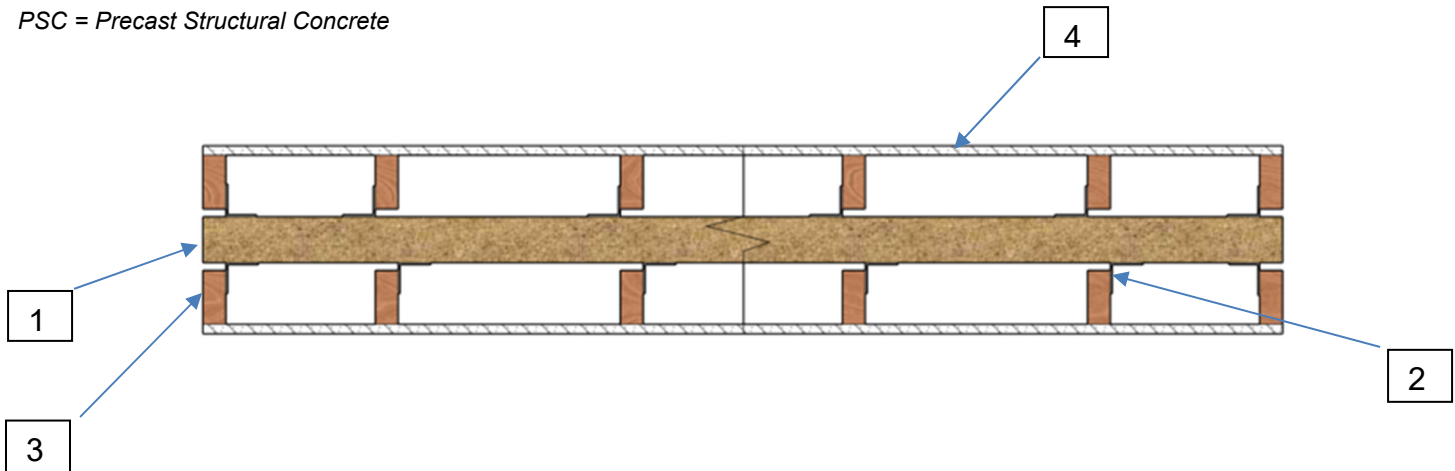
Installation: LITECON Corporation PAAC panels must be installed in accordance with LITECON Corporation published installation instructions and applicable codes.

Conditions of Listing:

1. The listing report addresses only conformance with the standards and code sections noted above.
2. Approval of the product's use is the sole responsibility of the local code official.
3. The listing applies only to the materials tested and as submitted for review by ICC-ES.
4. LITECON Corporation PAAC panels described in this listing report are manufactured under a quality control program with inspections by ICC-ES.

Applicant: LITECON CORPORATION
Product: LITECON PRECAST AUTOCLAVED AERATED CONCRETE (PAAC) PANELS
Standard: ASTM E119 (UL 263)
Assembly Rating: 2-Hour Nonloadbearing symmetrical Area Separation Wall having a maximum wall height of 60 feet (18.3 m).

PSC = Precast Structural Concrete



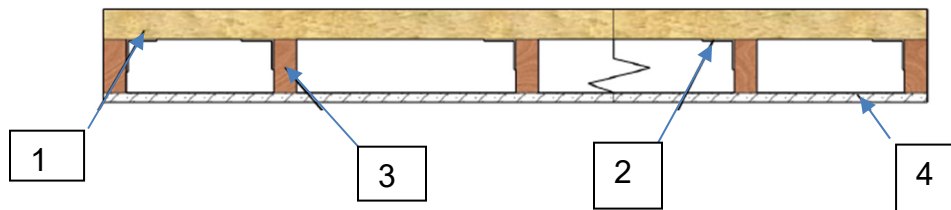
COMPONENTS OF CONSTRUCTION:

1. **Litecon PAAC Panels** – Nominal 3-inch-thick precast autoclaved aerated concrete panels measuring 2 feet by 4 feet or 2 feet by 7 feet installed in a running bond pattern staggered up the wall. A thin layer approximately 1/8-inch-thick of adhesive mortar must be applied on the mating faces of the panels.
2. **Aluminum Breakaway Clips** – 0.050-inch thick by 2-inch-by-2½-inch angle dimensions by 2 inches long aluminum clips. The clips come with predrilled holes used to fasten framing (No. 3) to PAAC panels (No. 1). A ½ -inch air gap must be maintained between the wood framing and the back side of the panels. The clips must be attached to the wood framing using two (2) No. 6 by 1.25-inch-long Type W screws and two (2) No. 8 by 2-inch-long sharp point screws with wafer head to attach the clip to the back of the PAAC panels. The clips must be spaced no more than 24 inches on center vertically and 12 inches from the top and bottom of the wood frame. The clips must also be attached on alternated sides of the studs in the field of the assembly.
3. **Framing**– Nominal 2 x 4 wood framing spaced maximum 16 inches on center.
4. **Gypsum wallboard**– One-layer 5/8-inch-thick Type X gypsum wallboard complying with ASTM C1396 applied vertically to wood framing on both sides with No. 6 coarse thread, bugle head screws at 8 inches on center. Gypsum board joints must be treated with a Level 2 tape and joint compound finish complying with ASTM C840 or GA216. Screw heads are finished with a layer of joint compound.

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm.

Applicant: LITECON CORPORATION
Product: LITECON PRECAST AUTOCLAVED AERATED CONCRETE (PAAC) PANELS
Standard: ASTM E119 (UL 263)
Assembly Rating: 2-Hour Loadbearing asymmetrical fire-resistance-rated wall assembly.

PSC = Precast Structural Concrete



COMPONENTS OF CONSTRUCTION:

1. **Litecon PAAC Panels (Exposed to Fire)** – Nominal 2-inch-thick precast autoclaved aerated concrete panels measuring 2 feet by 7 feet, 2 feet by 8 feet or 2 feet by 10 feet; or 3-inch-thick precast autoclaved aerated concrete panels measuring 2 feet by 7 feet, 2 feet by 8 feet, or 2 feet by 10 feet installed in a running bond pattern staggered up the wall. A thin layer approximately 1/16-inch-thick of adhesive mortar must be applied on the mating faces of the panels. The panels were installed in a vertical orientation.
2. **Aluminum Breakaway Clips** – PAAC panels must be secured to wood framing using 0.060-inch thick by 2-inch-by-2½-inch angle dimensions by 2 inches long aluminum clips. The clips come with predrilled holes used to fasten framing (No. 3) to PAAC panels (No. 1). The 2½-inch leg must be secured to wood stud using two (2) No. 6 by 1¼-inch-long, coarse thread, Type W wood screw. The 2-inch leg must be secured to backside of PAAC panel using two (2) No. 8 by 1½-inch-long, self-piercing, modified truss screw with wafer head. The clips must be spaced no more than 24 inches on center vertically and 12 inches from the top and bottom of the wood frame. The clips must also be attached on alternated sides of the studs in the field of the assembly.
3. **Framing**– Nominal 2 x 4 Southern Yellow Pine No. 2 wood studs spaced maximum 16 inches on center. The studs were secured to single top and single bottom plate of similar grade and species using 3-inch-long by 0.131-inch diameter smooth shank framing nails. Lateral bracing was installed at mid-height and staggered across the horizontal centerline of the assembly. Lateral bracing consists of Southern Yellow Pine No. 2 secured to studs using 3-inch-long by 0.131-inch diameter smooth shank framing nails.
4. **Gypsum wallboard (Not Exposed to Fire)**– One-layer 5/8-inch-thick Type X gypsum wallboard complying with ASTM C1396 applied vertically to wood framing on both sides with No. 6 coarse thread, bugle head screws at 8 inches on center around the perimeter and 12 inches on-center in the field. Gypsum board joints must be treated with a Level 2 tape and joint compound finish complying with ASTM C840 or GA216. Screw heads are finished with a layer of joint compound.

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm