

ASTM E119  
Fire Resistance Performance

TEST REPORT

Rendered to:

LITECON

PRODUCT:

*3-in. thick, Precast Aerated Autoclaved Concrete (PAAC) Panels*

Report No.: LBAB051922-56 (R1)  
Test Date(s): 08/09/2022  
Report Date: 09/08/2022  
43 pages

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**TEST REPORT**

Rendered to:

LITECON  
 18911 Hardy Oak Boulevard  
 San Antonio, TX 78258

Report No.: LBAB051922-56 (R1)  
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 Report Date: 09/08/2022

**1.0 General Information**

**1.1 Product**

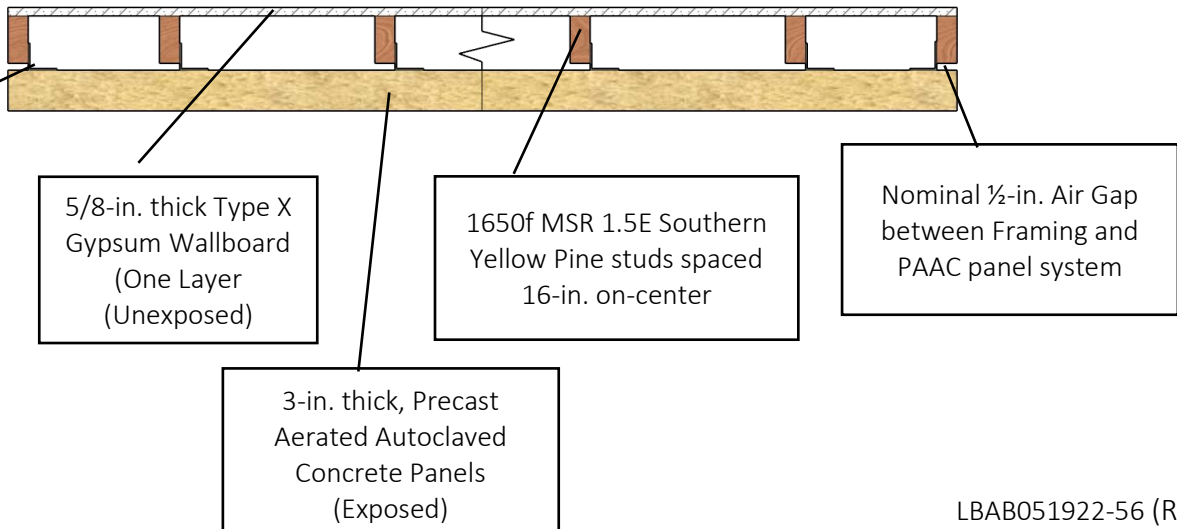
*3-in. thick, Precast Aerated Autoclaved Concrete (PAAC) Panels*

**1.2 Project Summary**

ICC NTA, LLC was contracted by LITECON to evaluate *3-in. thick, Precast Aerated Autoclaved Concrete (PAAC) Panels* in accordance with ASTM E119. Testing was conducted at ICC NTA, LLC Southwest Test Facility in Bryan, Texas. Results obtained are tested values and were secured by using the designated test method(s). Test results and construction details are reported herein.

**1.3 Product Description**

The asymmetrical, non-loadbearing area separation wall assembly consisted of light, prefabricated concrete panels, with reinforcing, steel mesh inside and a smooth exterior finish. The panels are installed applying an adhesive mortar between mating faces and fasteners to attach the panels to standard wood or steel framing. The PAAC panel system was subjected to a superimposed load equivalent to the self-weight of the panels up to 60-ft. Only one side of the wall was built with the occupied living space wall portion to simulate a worse case event.



## 1.4 Qualifications

ICC NTA in Bryan, TX has demonstrated compliance with ISO/IEC 17025 and is consequently accredited as a Testing Laboratory. ICC NTA is accredited to perform all testing reported herein.

## 1.5 Product Sampling

The 3-in. thick Precast Aerated Autoclaved Concrete panels were pulled from the manufacturing plant after construction, reference ICC NTA, LLC Sample Submission Form 3.3, project number LBAB042222-33. The sampling process took place on 05/20/2022. All samples were stamped and initialed prior to shipment. All sampled materials were provided by the client and was received at the testing facility on 06/14/2022.

## 1.6 Witnessing

The following were present for testing reported herein:

Witness	Organization
Leonel Borja	Aircrete Mexico
Consuelo Trujillo	Litecon USA
Alfredo Parra	Litecon USA

## 1.7 Conditions of Testing

Unless otherwise indicated, all testing reported herein was conducted in ambient laboratory conditions.

## 2.0 Referenced Standards

**ASTM E119-20**, *Standard Test Methods for Fire Tests of Building Construction and Materials*

## 3.0 Summary of Results

**Fire Resistance Period: 120 minutes (3-in. thick Precast Aerated Autoclaved Concrete Panels Exposed)**  
**Hose Stream: Pass**  
**Non-Loadbearing Assembly**

## 4.0 Test Method

The wall assembly was evaluated in accordance with the following:

- ASTM E119-20, Standard Test Methods for Fire Tests of Building Construction and Materials. ASTM International, West Conshohocken, PA.
- ASTM E2226-15b, Standard Practice for Application of Hose Stream. ASTM International, West Conshohocken, PA.

#### 4.5 Summary and Conclusions

The non-loadbearing, asymmetrical area separation wall assembly described in this report did meet the Conditions of Acceptance of ASTM E119 when 3-in. Precast Aerated Autoclaved Concrete (PAAC) panels were exposed to the standard time-temperature curve for a target exposure period of 120 minutes. The unexposed temperatures of the wall assembly described in this report did not exceed the temperature thresholds per ASTM E119 for the duration of the exposure period. The wall assembly only had the occupied living space wall system installed on the unexposed side of the area separation portion in order to provide a worst-case scenario in which the exposed face living space wall system had already burned away in the event of a fire.

Although a non-loadbearing wall, the PAAC system of the wall assembly described above was subjected to a superimposed load equivalent to the self-weight of the PAAC system upwards to 60-ft tall. The wall assembly was able to sustain the applied superimposed load for the duration of the fire-resistance test. Following the ASTM E119 fire-resistance period, the wall assembly was subjected to a hose stream test in accordance with ASTM E2226. No projection of water was observed through the unexposed face.

The area separation wall assembly described in this report obtained a fire resistance rating of 120 minutes.

#### 5.0 Closing Statement

This report contains only findings and results arrived at after employing the specific test procedures listed herein. It does not constitute a recommendation for, endorsement of, or certification of the product or material tested. Unless differently required, ICC NTA, LLC reports apply the "Simple Acceptance" rule, also called "Shared Risk approach", of ILAC-G8:09/2019, Guidelines on Decision Rules and Statements of Conformity. ICC NTA makes no warranty, expressed or implied, except that the test has been performed, and a report prepared, based upon the specimen specified by the client. Extrapolation of data, from the test data provided herein, to the batch or lot from which the specimens were obtained may not correlate and should be interpreted with extreme caution. ICC NTA assumes no responsibility for variations in quality, composition, appearance, performance, or other features of similar materials produced by the client, other persons, or under conditions over which ICC NTA has no control. ICC NTA has issued this report for the exclusive use of the client to whom it is addressed. Any use or duplication of this report shall not be made without their consent. This report shall only be reproduced in its entirety.

For ICC NTA, LLC:

  
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