

ASTM E119 Fire Resistance Performance

TEST REPORT

Rendered to:

LITECON

PRODUCT:

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

Report No.: Test Date(s): Report Date: LBAB080822-81 08/10/2022 10/03/2022 38 pages

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TEST REPORT

Rendered to:

LITECON 18911 Hardy Oak Boulevard San Antonio, TX 78258

> Report No.: Test Date: Report Date:

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1.0 General Information

1.1 Product

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

1.2 Project Summary

ICC NTA, LLC was contracted by LITECON to evaluate 2-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, load-bearing 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.





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 2-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: 60 minutes (One layer of 5/8-in. thick, Type X GWB Exposed) Hose Stream: Pass Load Bearing 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.



4.5 Summary and Conclusions

The loadbearing, asymmetrical wall assembly described in this report did meet the Conditions of Acceptance of ASTM E119 with one layer of 5/8-in. thick, Type X gypsum wallboard conforming to ASTM C1396 exposed to the standard time-temperature curve for a target exposure period of 60 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 was able to sustain the applied load for the duration of the fire-resistance test. A hose stream retest was performed on a duplicate wall assembly after subjecting the wall assembly for a period of 30 minutes, half the duration of the initial fire exposure period per ASTM E119. No projection of water was observed during the hose stream. The wall assembly described in this report obtained a fire resistance rating of 60 minutes when one layer of Type X gypsum wallboard conforming to ASTM C1396 was exposed to the ASTM E119 furnace environment.

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:

Gour Brita

Joseph Briski Test Engineer

10/03/2022

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Michael Luna Sr. Director

10/03/2022