

# ACTS CONSTRUCTION, LLC TEST REPORT

## SCOPE OF WORK

FLEXURAL STRENGTH TESTING OF CROWN 7-INCH ICF ROOF FOAM IN ACCORDANCE WITH  
ASTM C203-05A(2017) (METHOD I)(PROCEDURE B)

## REPORT NUMBER

104588008MID-009R0

## TEST DATE(S)

04/20/21

## ISSUE DATE [REVISED DATE]

05/17/21 N/A

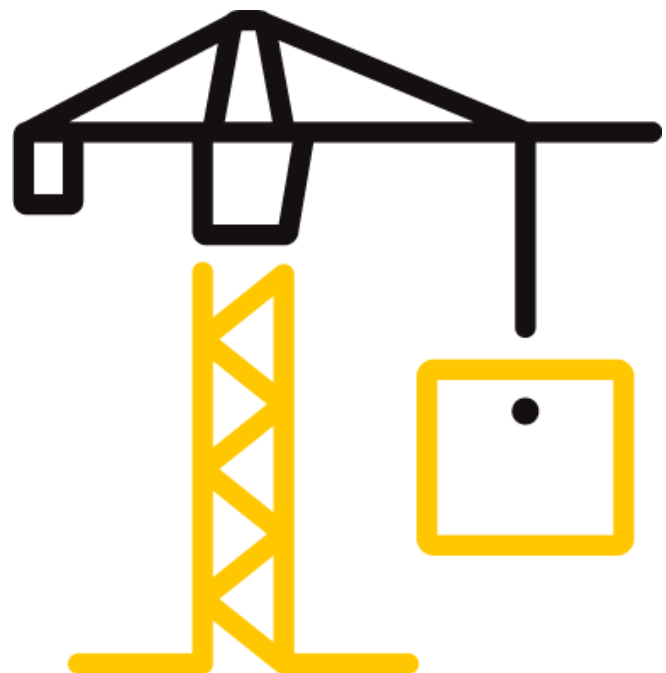
## PAGES

8

## DOCUMENT CONTROL NUMBER

GFT-OP-10c (09/29/20)

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## TEST REPORT FOR ACTS CONSTRUCTION, LLC

Report No.: 104588008MID-009R0

Date: 05/17/21

### REPORT ISSUED TO

#### ACTS CONSTRUCTION, LLC

7816 113<sup>th</sup> Ave

Pleasant Prairie, WI 53158

### SECTION 1

#### SCOPE

Intertek Building & Construction (B&C) was contracted by Acts Construction, LLC of Pleasant Prairie, WI to perform testing in accordance with ASTM C203-05A(2017), *Breaking Load and Flexural Properties of Block-Type Thermal Insulation (Method I)(Procedure B)*, on their Crown 7-inch ICF. Results obtained are tested values and were secured by using the designated test method(s). Testing was conducted at the Intertek B&C test facility in Middleton, Wisconsin.

This report does not constitute certification of this product nor an opinion or endorsement by this laboratory.

Intertek B&C will service this report for the entire test record retention period. The test record retention period ends four years after the test date. Test records, such as datasheets or other pertinent project documentation, will be retained for the entire test record retention period.

### SECTION 2

#### SUMMARY OF TEST RESULTS

	BREAKING LOAD (lbf)	FLEXURAL STRENGTH (psi)
Average	16.5	58.3
Standard Deviation	0.5	3.1

For INTERTEK B&C:

<b>COMPLETED BY:</b>	Javier Castro	<b>REVIEWED BY:</b>	Baldeep Sandhu
<b>TITLE:</b>	Technician II Building & Construction	<b>TITLE:</b>	Manager Building & Construction
<b>SIGNATURE:</b>		<b>SIGNATURE:</b>	
<b>DATE:</b>	05/17/21	<b>DATE:</b>	05/17/21

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### SECTION 3

#### TEST METHOD(S)

The specimens were evaluated in accordance with the following:

**ASTM C203-05a(2017)**, *Standard Test Methods for Breaking Load and Flexural Properties of Block-Type Thermal Insulation (Method I)(Procedure B)*

### SECTION 4

#### MATERIAL SOURCE/INSTALLATION

Samples were independently selected on April 12, 2021 by Intertek representative John Schachtner. Samples were received at the Middleton Evaluation Center on April 15, 2021 in good condition and labeled MID2104151202-001.

### SECTION 5

#### EQUIPMENT

ASSET #	DESCRIPTION	CAL DUE DATE
1347	Caliper	10/15/21
1084	Scale	8/17/21
870	Instron	1/5/22

### SECTION 6

#### LIST OF OFFICIAL OBSERVERS

NAME	COMPANY
Javier Castro	Intertek B&C
Bryan Bowman	Intertek B&C

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### SECTION 7

#### TEST PROCEDURE

All conditioning of test specimens and test conditions were at standard laboratory conditions unless otherwise reported. Refer to the test related photos in Section 11.

#### ASTM C203-05a(2017) Method I, Procedure B, Flexural Strength

Five samples of Crown 7-inch ICF were tested approximately 12-inches long, 4-inches wide, and 1-inch thick. Two original surfaces was retained. The samples were conditioned at  $23 \pm 2^{\circ}\text{C}$  and a relative humidity of  $50 \pm 5\%$  for 40+ hours. Length and width dimensions were measured (ICN: 1347) and recorded as the average of three measurements while thickness was measured and recorded as the average of six measurements. Samples were tested in center-point flexure using a universal test machine (ICN: 870) at a rate of 1.67 inch/minute over a support span of 10 inches. Testing continued until failure or material yield, whichever occurred first

### SECTION 8

#### TEST CALCULATIONS

Flexural strength or Modulus of Rupture (MOR) was calculated using the following equation:

$$MOR = \frac{3PL}{2bd^2}$$

Where:

$P$  = Breaking Load (lbf)

$L$  = Support Span (inches)

$b$  = Sample Width (inches)

$d$  = Sample Depth (inches)

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### SECTION 9

#### TEST RESULTS

SPECIMEN	BREAKING LOAD (lbf)	FLEXURAL STRENGTH (psi)
1	16.1	58.3
2	16.2	56.5
3	16.0	55.5
4	16.7	57.8
5	17.3	63.5
<b>Average</b>	<b>16.5</b>	<b>58.3</b>
<b>Standard Deviation</b>	<b>0.5</b>	<b>3.1</b>

### SECTION 10

#### CONCLUSION

After testing in accordance with Method I Procedure B of ASTM C203-05a(2017), the provided samples exhibited an average flexural strength of 58.3 psi. Samples exhibited an average breaking load of 16.5 lbf. ASTM C203-05a(2017) does not contain minimum performance requirement.

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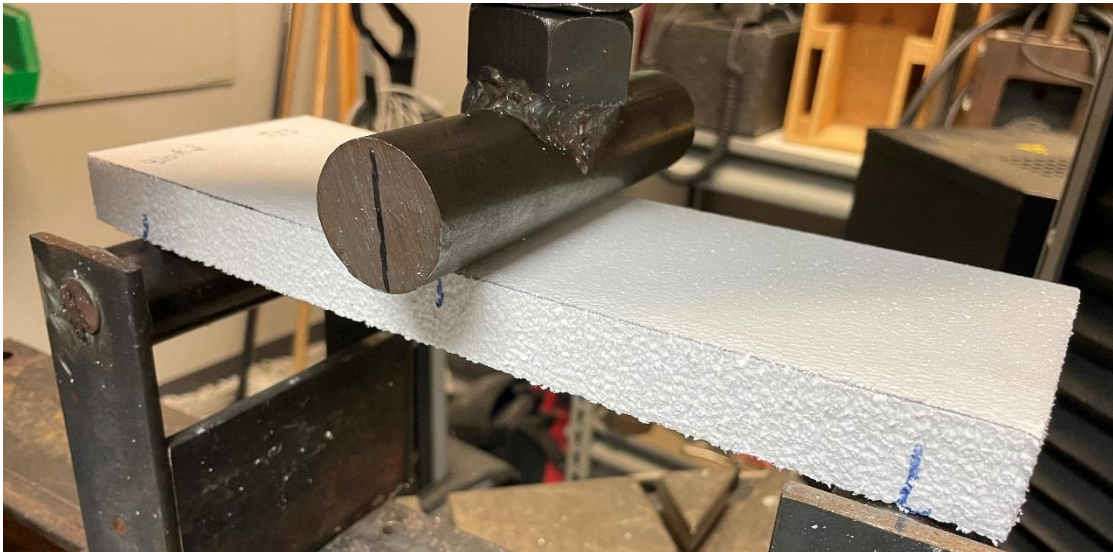
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### SECTION 11

#### PHOTOGRAPHS



**Photo No. 1**  
**Typical Sample**



**Photo No. 2**  
**Typical Test Arrangement**

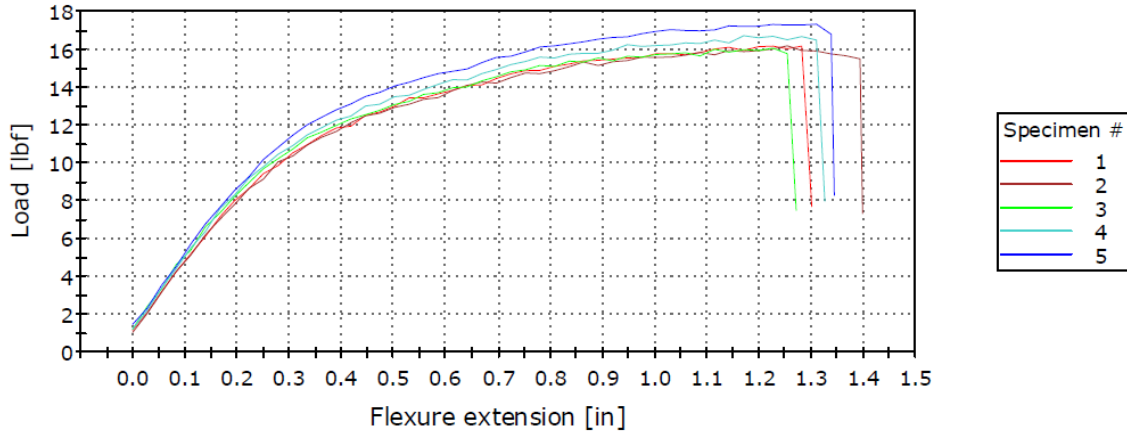
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### SECTION 12

#### CHARTS



**Chart No. 1**  
**Load Vs Extension**



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### SECTION 13

#### REVISION LOG

REVISION #	DATE	SECTION	REVISION
0	05/17/21	N/A	Original Report Issue