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OAK RIDGE FOAM & COATING SYSTEMS, INC.

TEST REPORT

SCOPE OF WORK
ANSI/UL 2218 IMPACT RESISTANCE TESTING OF POLYUREA COATING OVER ROOFING FOAM

REPORT NUMBER
N6463.01-109-44

TEST DATE(S)
05/25/22

ISSUE DATE
06/22/22

RECORD RETENTION END DATE
05/25/26

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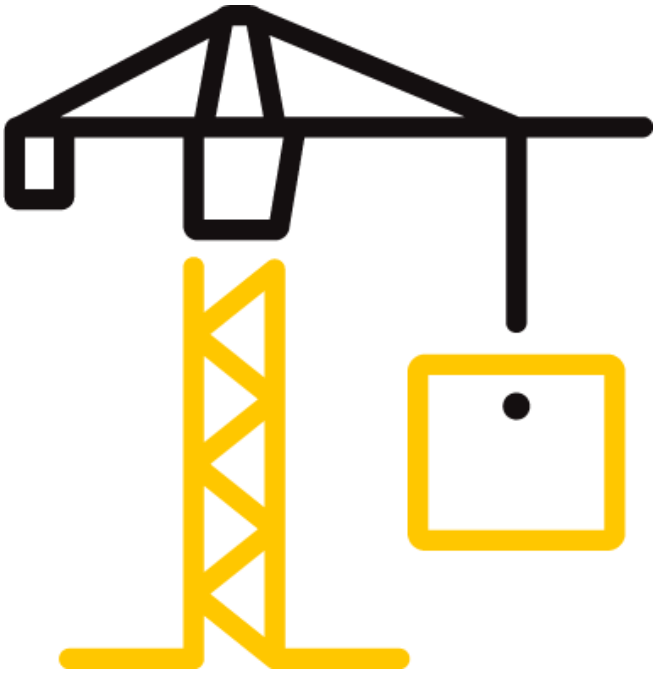

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TEST REPORT FOR OAK RIDGE FOAM & COATING SYSTEMS, INC.
Report No.: N6463.01-109-44
Date: 06/22/22

REPORT ISSUED TO

OAK RIDGE FOAM & COATING SYSTEMS, INC.
575 Commercial Avenue
Green Lake, Wisconsin 54941

SECTION 1

SCOPE

Architectural Testing, Inc. (an Intertek company) dba Intertek Building & Construction (B&C) was contracted by Oak Ridge Foam & Coating Systems, Inc. to perform impact resistance testing in accordance with ANSI/UL 2218 on their polyurea coating over roofing foam. Results obtained are tested values and were secured by using the designated test method(s). Testing was conducted at Intertek B&C test facility in York, Pennsylvania.

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 detailed drawings, datasheets, representative samples of test specimens, or other pertinent project documentation, will be retained for the entire test record retention period.

Unless differently required, Intertek reports apply the "Simple Acceptance" rule, also called "Shared Risk approach," of ILAC-G8:09/2019, Guidelines on Decision Rules and Statements of Conformity.

For INTERTEK B&C:

COMPLETED BY:	Richard E. Hartman III	**REVIEWED BY:**	Vicki L. McElwain
TITLE:	Team Lead – Product Testing	**TITLE:**	Manager – Product Testing
SIGNATURE:	Digitally Signed by: Richard Hartman III	**SIGNATURE:**	Digitally Signed by: Vicki L. McElwain
DATE:	06/22/22	**DATE:**	06/22/22

REH:nls

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SECTION 2
TEST METHOD(S)

The specimen was evaluated in accordance with the following:

ANSI/UL 2218-2020, *Standard for Safety for Impact Resistance of Prepared Roof Covering Materials*

SECTION 3
MATERIAL SOURCE/INSTALLATION

Test specimen was provided by the client. Representative samples of the test specimen(s) will be retained by Intertek B&C for a minimum of four years from the test completion date.

Installation of the tested product was performed by the client.

SECTION 4
EQUIPMENT

Drop Tube: Constructed from PVC piping with an electromagnet release mechanism
Missile: 2.0" (50.8 mm) steel ball

SECTION 5
LIST OF OFFICIAL OBSERVERS

NAME	COMPANY
Christopher Sartalis	Intertek B&C
Vicki L. McElwain	Intertek B&C
Richard E. Hartman III	Intertek B&C

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SECTION 6
TEST SPECIMEN DESCRIPTION

Product Type: Polyurea Coating over Roofing Foam
Color: Chrome
Finish: Smooth
Overall Assembly Size: 36" (914 mm) width by 36" (914 mm) length
Polyurea Coating Thickness: 0.145" (3.7 mm)
Roofing Foam Thickness: 3-1/4" (82.6 mm)

Deck Construction:
The wood test deck was 3' wide by 4' high and constructed with 2x4 pine construction lumber at the perimeter with one stud located midspan. The test deck was covered with 15/32" thick plywood decking secured to the test deck with #6 x 1-5/8" screws located 2" from each end and on 6" centers.

Specimen Description:
A layer of closed-cell roofing foam was applied across the entire deck and allowed to cure for two days. A liquid applied polyurea coating was then applied with a sprayer across the entire deck and allowed to cure for a minimum of 5 days prior to testing.

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SECTION 7
TEST RESULTS

ANSI/UL 2218, *Standard for Safety for Impact Resistance of Prepared Roof Covering Materials*

Sample Conditioning Temperature: 67° - 78°F (19° - 26°C)
Sample Conditioning Relative Humidity: 38 - 86%
Steel Ball Weight: 1.15 lbs (521.6 g)
Steel Ball Diameter: 2" (50.8 mm)
Steel Ball Drop Height: 20.0' (6.1 m)
Muzzle Distance from Test Specimen: 35" (889.0 mm)

The ambient temperature during testing was 68°F (20°C). The results are tabulated as follows.

IMPACT	IMPACT AREA	OBSERVATIONS	RESULTS
1	Top edge center	Dented impact location, no tearing or fractures observed	Pass
2	Center of deck	Dented impact location, no tearing or fractures observed	Pass
3	Center of right cavity	Dented impact location, no tearing or fractures observed	Pass
4	Thickest area	Dented impact location, no tearing or fractures observed	Pass
5	Thinnest area	Dented impact location, no tearing or fractures observed	Pass
6	Bottom of left cavity	Dented impact location, no tearing or fractures observed	Pass

SECTION 8
CONCLUSION

The sample tested met the performance requirements set forth in the referenced test procedures for a Class 4 rating.

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SECTION 9
PHOTOGRAPH

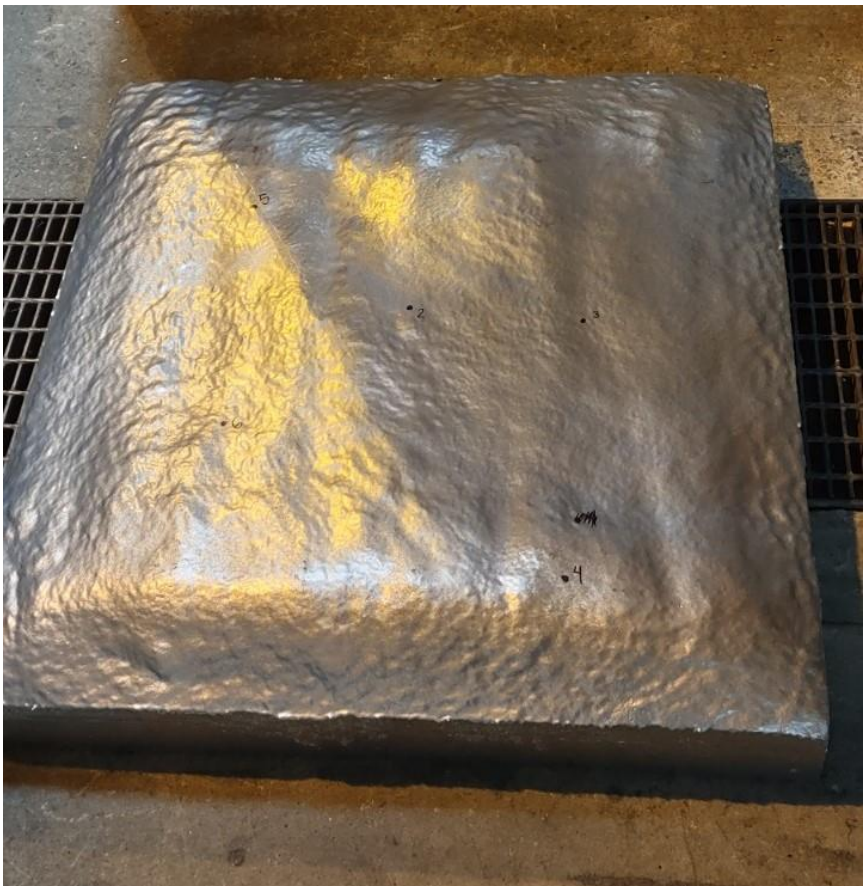

Photo No. 1
View of Tested Specimen

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SECTION 10
DRAWINGS

The test specimen drawings were not supplied by the client.

SECTION 11
REVISION LOG

REVISION #	DATE	PAGES	REVISION
0	06/22/22	N/A	Original Report Issue