

ZENOVA LTD.

SOLAR REFLECTANCE INDEX TEST REPORT

SCOPE OF WORK

ROOF PRODUCTS PROGRAM TESTING PER ASTM C1371, ASTM C1549, ASTM E1980
AND ASTM D1005 ON COATED METAL PANEL OF AN INSULATION RENDER > WHITE

REPORT NUMBER

N1106.01-301-41 R0

TEST DATE

11/17/21

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11/18/21

RECORD RETENTION END DATE

11/17/25

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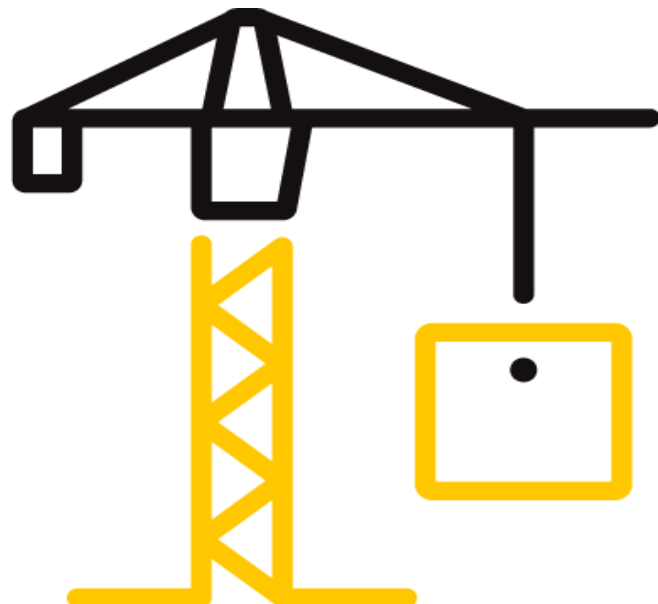
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TEST REPORT FOR ZENOVA LTD.

Report No.: N1106.01-301-41 R0

Date: 11/17/21

REPORT ISSUED TO

ZENOVA LTD.

15a Shenfield Road, Brentwood
 Essex, United Kingdom CM158AG

SECTION 1

SCOPE

Intertek Building & Construction (B&C) was contracted by Zenova Ltd. to perform Energy Star® Roof Products Program testing in accordance with ASTM C1371, ASTM C1549, ASTM E1980 and ASTM D1005 on their Coated Metal Panel of an Insulation Render > White, Metal Panel. Results obtained are tested values and were secured by using the designated test method. Testing was conducted at the Intertek B&C test facility in Fresno, California.

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

SECTION 2

SUMMARY OF TEST RESULTS

Type:	Coated Metal Panel
Series/Model:	Zenova IR > Insulation Render on Metal Panel - White
Unit Size:	4" x 16" (101.6 mm x 406.4 mm)

For INTERTEK B&C:

COMPLETED BY	Jerry A. Bontilao, BSME
TITLE	Project Lead
SIGNATURE	
DATE	11/18/21

REVIEWED BY	Tyler Westerling, P.E.
TITLE	Operations Manager, IIRC
SIGNATURE	
DATE	11/18/21

JB:ss

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Report No.: N1106.01-301-41 R0

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SECTION 3

TEST METHOD(S)

The specimens were evaluated in accordance with the following:

***ASTM C1371-15**, Standard Test Method for Determination of Emittance of Materials Near Room Temperature Using Portable Emissometers*

***ASTM C1549-16**, Standard Test Method for Determination of Solar Reflectance Near Ambient Temperature Using a Portable Solar Reflectometer*

***ASTM E1980-11 (Reapproved 2019)**, Standard Practice for Calculating Solar Reflectance Index of Horizontal and Low-Sloped Opaque Surfaces*

***ASTM D1005-95 (2020)**, Measurement of Dry-Film Thickness of Organic Coatings Using Micrometers .*

* ASTM E1980 references ASTM E408 for emissivity testing. The samples tested were determined to be acceptable for the ASTM C1371 test method.

Test Sample Identification:

The Zenova IR > White - Insulation Render applied on Metal Panel was provided by Zenova Ltd. thru Intertek Testing Services NA Ltd. CAN20 , and tested at the Intertek-B & C, Fresno-Laboratory.

SECTION 4

MATERIAL SOURCE/PREPARATION

Test sample was provided by Zenova Ltd.. Detailed drawings (if any), representative sample of the test specimen, and a copy of this report will be retained by Intertek B&C for a minimum of four years from the test completion date.

The test surface of the specimen was not washed, cleaned, or wiped in any fashioned. Loose dirt, embedded dirt, environmental stains, mold, mildew, and any other material that rested on-or became incorporated into the surface of the material was not altered.

TEST REPORT FOR ZENOVA LTD.

Report No.: N1106.01-301-41 R0

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SECTION 5

EQUIPMENT

Temperature: 75 °F

Relative Humidity: 30%

ICN/ASSET #	DESCRIPTION	ASSIGNED EMITTANCE	CALIBRATION DATE
SN 159	Reflectance Standard, Model SSR-E		Prior to Testing
Asset # 5738	Thermal Emittance Standard, Model		Prior to Testing

SECTION 6

LIST OF OFFICIAL OBSERVERS

NAME	COMPANY
Jerry Bontilao	Intertek B&C

SECTION 7

TEST PROCEDURE

The test procedure was conducted in accordance with ASTM C 1371, ASTM C 1549, ASTM E1980 and ASTM D1005 test methods.

TEST REPORT FOR ZENOVA LTD.

Report No.: N1106.01-301-41 R0

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SECTION 8

TEST SPECIMEN DESCRIPTION

MANUFACTURER	Zenova Ltd.
PRODUCT TYPE	Coated Metal Panel with Insulation Render - White
PRODUCT NAME	Zenova IP
UNIT SIZE	4" x 16" (101.6 mm x 406.4 mm)
THICKNESS	N/A
COATING	N/A
TEXTURE	N/A
SURFACE CONTOUR	N/A
OPTICAL PROPERTIES	N /A

SECTION 9

TEST RESULTS

Test Dates: 6/12/2020 and 7/06/2020

Test Start Time: 10:00:00 AM

Test End Time: 1:30:00 PM

Estimated Precision: N/A

Estimated Uncertainty: 3.50%

This was determined using ANSI/NCSL Z540-2-1997 type B evaluation as described in section 4.3 of the specification. For assumptions used for this calculation or for a description of the procedure contact the "Individual-In-Responsible-Charge (IIRC)" that signed this report.

TEST REPORT FOR ZENOVA LTD.

Report No.: N1106.01-301-41 R0

Date: 11/17/21

SECTION 9 (CONT'D)

SPECIMEN	ASTM C1371 EMITTANCE (Ave. 3-Readings)	ASTM C1549 REFLECTANCE (Ave. 6-Readings)	ASTM D1005 COAT THICKNESS in Mils (Ave. 5- Readings)
Insulation Render:			
> White Panel	0.743	0.871	202.20

SPECIMEN	LOW WIND SRI 5 W/m ² K	MEDIUM WIND SRI 12 W/m ² K	HIGH WIND SRI 30 W/m ² K
Insulation Render:			
> White Panel	107	108	108

**SECTION 10
 CONCLUSION**

The test specimen has been submitted by the client for the purpose of calculating the combined test values of reflectivity and emissivity for the Solar Reflectance Index (SRI). The test results does not have a correlation between the client & CRRC and/or Energy Star.

TEST REPORT FOR ZENOVA LTD.

Report No.: N1106.01-301-41 R0

Date: 11/17/21

SECTION 11

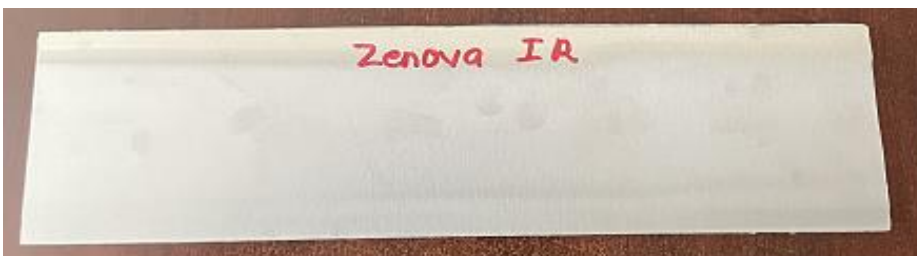
PHOTOGRAPHS



Insulation Render > Coated on Metal Panel - White



Test Surface Side of the Panel



Rear Side of the Panel

TEST REPORT FOR ZENOVA LTD.

Report No.: N1106.01-301-41 R0

Date: 11/17/21

SECTION 12

REVISION LOG

REVISION #	DATE	PAGES	REVISION
0.01R0	11/18/21	N/A	Original Report Issue