

SAFETY GLAZING CERTIFICATION COUNCIL TEST REPORT

SCOPE OF WORK

BOIL AND IMPACT TESTING ON LAMINATED SAFETY GLAZING MATERIAL

REPORT NUMBER

K1763.02-119-37

TEST DATE(S)

09/11/19

ISSUE DATE

09/16/19

RECORD RETENTION END DATE

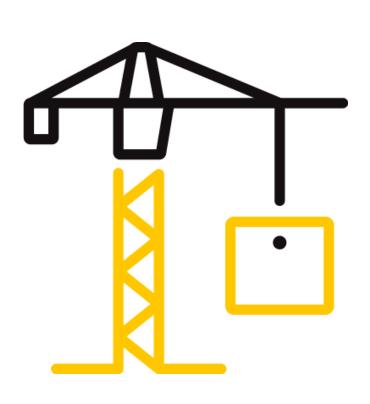
09/11/23

PAGES

8

DOCUMENT CONTROL NUMBER

ATI 00067 (08/07/17) RT-R-AMER-Test-2883 © 2017 INTERTEK





Telephone: 717-764-7700 Facsimile: 717-764-4129 www.intertek.com/building

TEST REPORT FOR SAFETY GLAZING CERTIFICATION COUNCIL

Report No.: K1763.02-119-37

Date: 09/16/19

REPORT ISSUED TO

SAFETY GLAZING CERTIFICATION COUNCIL

P.O. Box 730 Sackets Harbor, New York 13685

SECTION 1

SCOPE

Intertek Building & Construction (B&C) was contracted by Safety Glazing Certification Council - Sackets Harbor, New York to perform safety glazing boil and impact testing in accordance with ANSI Z97.1, CAN/CGSB 12.1, and CPSC 16 CFR 1201 on laminated transparent glass. Results obtained are tested values and were secured by using the designated test methods. Testing was conducted at the 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.

SECTION 2

SUMMARY OF TEST RESULTS

SPECIMEN NUMBER	1	2	3	4
BOIL TEST RESULTS	Pass	Pass	Pass	N/A
IMPACT TEST RESULTS	Pass	Pass	Pass	Pass
THICKNESS COMPLIANCE (BOIL)	Pass	Pass	Pass	N/A
THICKNESS COMPLIANCE (IMPACT)	Pass	Pass	Pass	Pass
INTERLAYER THICKNESS COMPLIANCE	Pass			
PERMANENT LABEL COMPLIANCE	Pass			

For INTERTEK B&C:

COMPLETED BY:

Title:

Lead Technician

SIGNATURE:

DATE:

DATE:

tmw:vtm/aas

Virgal T. Mickley, Jr., P.E.

Senior Staff Engineer

SIGNATURE:

DATE:

O9/16/19

PROFESSIONAL
VIRGAL THOMAS MICKLEY, JR.
ENGINEER
PE-078184
PH-078184
PH-0781

2019.09.18 08:08:02 -04'00'

This report is for the exclusive use of Intertek's Client and is provided pursuant to the agreement between Intertek and its Client. Intertek's responsibility and liability are limited to the terms and conditions of the agreement. Intertek assumes no liability to any party, other than to the Client in accordance with the agreement, for any loss, expense or damage occasioned by the use of this report. Only the Client is authorized to permit copying or distribution of this report and then only in its entirety. Any use of the Intertek name or one of its marks for the sale or advertisement of the tested material, product or service must first be approved in writing by Intertek. The observations and test results in this report are relevant only to the sample(s) tested. This report by itself does not imply that the material, product, or service is or has ever been under an Intertek certification program.



Version: 08/07/17 Page 2 of 8 RT-R-AMER-Test-2883



Telephone: 717-764-7700 Facsimile: 717-764-4129 www.intertek.com/building

TEST REPORT FOR SAFETY GLAZING CERTIFICATION COUNCIL

Report No.: K1763.02-119-37

Date: 09/16/19

SECTION 3

TEST METHOD(S)

The specimens were evaluated in accordance with the following:

ANSI Z97.1-2015, For safety glazing materials used in buildings - safety performance specifications and methods of test, American National Standard

CAN/CGSB 12.1-2017, Safety Glazing, National Standard of Canada

CPSC 16 CFR 1201, *Safety Standard for Architectural Glazing Materials,* Consumer Product Safety Commission (Version: 2012; Source: 42 FR 1441, Jan. 16, 1977)

SECTION 4

MATERIAL SOURCE

Test samples were obtained from the manufacturer. The specimens were received on 08/30/19, in good condition and suitable for testing unless noted otherwise.

SECTION 5

SAMPLE RETENTION

All test specimens were destroyed by test or by personnel and have been disposed of as trash. Representative sections of the failing samples will be retained for up to 30 days from the date of report issuance. After 30 days, representative samples will be automatically discarded.

SECTION 6

LIST OF OFFICIAL OBSERVERS

NAME	COMPANY
Todd M. Wilt	Intertek B&C

Version: 08/07/17 Page 3 of 8 RT-R-AMER-Test-2883



Telephone: 717-764-7700 Facsimile: 717-764-4129 www.intertek.com/building

TEST REPORT FOR SAFETY GLAZING CERTIFICATION COUNCIL

Report No.: K1763.02-119-37

Date: 09/16/19

SECTION 7

TEST PROCEDURE

Overview

Designated impact specimens were impacted once from the select drop height unless noted otherwise. For asymmetric materials, two specimens were impacted from each side. Three boil specimens were preconditioned and placed in boiling water for two hours, a visual inspection of the boil specimens was conducted following the exposure.

Drop Height Classification

All specimens were impacted once from a drop height of 48 inches.

DROP HEIGHT CLASSIFICATION			DROP HEIGHT
ANSI	CGSB	CPSC	
Class A	Class A	Category II	48 in.

SECTION 8

TEST SPECIMEN DESCRIPTION

Manufacturer: Onyx Solar Energy, S.L. - Avila, Spain

Glazing Product Designation: 7071 F19 **Overall Glazing Thickness**: 1/2" (nominal)

Glazing Type: Laminated Transparent Glass (LTG)

Sample Dimensions: **Impact**: 34" wide x 76" high $(\pm 1/8")$ **Boil**: 12" x 12" $(\pm 1/8")$

Size Classification: Unlimited

Interlayer Manufacturer/Type: Hornos Industries/Evalam Interlayer Manufacturer/Type Obtained from SGCC.

Laminated Glazing Composition Details

	THICKNESS MEASUREMENTS (inches) A			
SAMPLE TYPE	OVERALL	GLASS LITE 1	INTERLAYER B	GLASS LITE 2
Boil	0.528	0.230	0.069	0.229
Impact	0.525	0.229	0.067	0.229
Туре		Heat-Strengthened	Interlayer	Heat-Strengthened

^A Measurement values obtained from the first test specimen of the boil and impact test.

^B Calculated thickness based on summation of glass thicknesses subtracted from overall.



Telephone: 717-764-7700 Facsimile: 717-764-4129 www.intertek.com/building

TEST REPORT FOR SAFETY GLAZING CERTIFICATION COUNCIL

Report No.: K1763.02-119-37

Date: 09/16/19

SECTION 9

TEST RESULTS

Lab Temperature: 71°F

Duration of Pre-Conditioning @ 65 - 85°F: 24 Hours

Boil Test Results

SPECIMEN NUMBER	OVERALL THICKNESS (inches)	TEST RESULTS & OBSERVATIONS	PASS/FAIL
1	0.528	No bubbles or defects	Pass
2	0.529	No bubbles or defects	Pass
3	0.528	No bubbles or defects	Pass

Acceptance Criteria: No bubbles or defects more than 1/2" from edge or crack.

Impact Test Results

SPECIMEN NUMBER	OVERALL THICKNESS	TEST RESULTS & OBSERVATIONS	PASS/FAIL
	(inches)	OSSERVATIONS	17100/17112
1 ^A	0.525	1" x 4" opening	Pass
2 ^B	0.528	No openings	Pass
3 ^A	0.526	Did not break	Pass
4 ^B	0.530	Did not break	Pass

^A Impacted, Light side

Acceptance Criteria: After impact, openings are evaluated as described below and detached particles are collected. Individual detached particles less than the mass equivalent of 1 sq. in. of the original test specimen are excluded from evaluation.

- (a) No shear or opening through which a 3" sphere can freely pass with 4 lbs. force.
- (b) Detached particles collected after impact shall not weigh more than 15.5 sq. in. of the original test specimen.
- (c) No single particle shall weigh more than 6.82 sq. in. of the original test specimen.

SECTION 10

CONCLUSION

The specimens meet the boil and impact test requirements of the referenced standards for the size classification listed.

Version: 08/07/17 Page 5 of 8 RT-R-AMER-Test-2883

^B Impacted, Dark side



Telephone: 717-764-7700 Facsimile: 717-764-4129 www.intertek.com/building

TEST REPORT FOR SAFETY GLAZING CERTIFICATION COUNCIL

Report No.: K1763.02-119-37

Date: 09/16/19

SECTION 13

REVISION LOG

	DATE	PAGES	REVISION
0	09/16/19	N/A	Original Report Issue

Version: 08/07/17 Page 8 of 8 RT-R-AMER-Test-2883