

INOVUES, LLC

TEST REPORT

SCOPE OF WORK

AERC 1.2-2017 TESTING ON IGR TYPICAL SYSTEM

REPORT NUMBER

N5421.01-801-44 R0

TEST DATE

10/06/22

ISSUE DATE

11/07/22

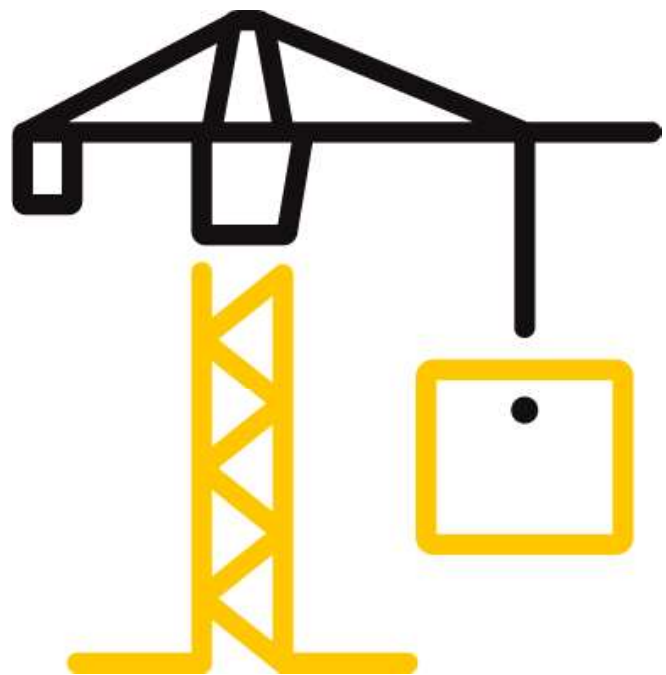
PAGES

10

DOCUMENT CONTROL NUMBER

RT-R-AMER-Test-2803 (03/08/22)

© 2017 INTERTEK



TEST REPORT FOR INOVUES, LLC

Report No.: N5421.01-801-44 R0

Date: 11/07/22

REPORT ISSUED TO

INOVUES, LLC

2700 Post Oak Blvd. Suite 2100
Houston, TX 77056

SECTION 1



SCOPE

Architectural Testing, Inc. (an Intertek company) dba Intertek Building & Construction (B&C) was contracted by Inovues, LLC. to perform testing in accordance with AERC 1.2, *Physical Test Methods for Measuring Energy Performance Properties of Fenestration Attachments*, on their Insulated Glass Retrofit IGR Typical System. Results obtained are tested values and were secured by using the designated test method in full compliance with AERC requirements. Testing was conducted at the Intertek B&C test facility in Plano, Texas. 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 five 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:	Jeffrey Crump, FMPC	REVIEWED BY:	Lucio "Fred" Muñoz
TITLE:	Laboratory Manager – Building & Construction	TITLE:	Project Manager – Building and Construction
SIGNATURE:	 Digitally Signed by: Jeffrey Crump	SIGNATURE:	 Digitally Signed by: Lucio Muñoz
DATE:	11/07/22	DATE:	11/07/22

JC: cm

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.

TEST REPORT FOR INOVUES, LLC

Report No.: N5421.01-801-44 R0

Date: 11/07/22

SECTION 2

TEST METHOD(S)

The specimen was evaluated in accordance (general accordance if deviated from method; all deviations must be described within test report) with the following:

AERC 1.2, *Physical Test Methods for Measuring Energy Performance Properties of Fenestration Attachments*

ASTM E283-04(2012), *Standard Test Method for Determining Rate of Air Leakage Through Exterior Windows, Curtain Walls, and Doors Under Specified Pressure Differences Across the Specimen*

SECTION 3

MATERIAL SOURCE/INSTALLATION

Test specimen was provided by the client.

The specimen was installed into an AERC buck as defined in AERC 1.2, Appendix B. Installation of the tested product was performed by the client.

LOCATION	ANCHOR DESCRIPTION	ANCHOR LOCATION
Interior face of aluminum "spacer" proile	1-1/2" structural glaze tape	Interior face of aluminum "spacer" profile and exterior face of acrylic panel.

SECTION 4

EQUIPMENT

A calibration was performed on the Intertek B&C Structural Control Panel, Asset #004829, on 08/15/22. The calibration procedure is fully described in Standard Calibration Procedure 31-12. The basic procedure requires calibrating the pressure transducers and then measuring flow rates through calibrated orifice plates.

SECTION 5

LIST OF OFFICIAL OBSERVERS

NAME	COMPANY
Dillon Davis, Jeremy Miller	Inovues, LLC
Alex Buruian	Intertek B&C

SECTION 6

TEST SPECIMEN DESCRIPTION

Series/Model: IGR Typical System

Product Size:

OVERALL AREA:	WIDTH		HEIGHT	
	millimeters	inches	millimeters	inches
1.69m ² (18.24ft ²)				
Overall Size	1161	45.69	1460	57.49

Frame Construction:

FRAME MEMBER	MATERIAL	DESCRIPTION
P02202	Aluminium	Left unitized panel
P02301	Aluminium	Right unitized panel
P02601	Aluminium	Top unitized panel
P02701	Aluminium	Bottom unitized panel

Reinforcement: No reinforcement was utilized.

Glazing: *No conclusions of any kind regarding the adequacy or inadequacy of the glass in any glazed test specimen(s) can be made.*

GLASS TYPE	GLAZING	GLAZING METHOD
Monolithic	3/16" tempered	1" structural tape to the aluminium extrusion

Drainage: Weeps were not utilized.

Hardware: Hardware not utilized.

SECTION 7
TEST RESULTS

The temperature during testing was 21.56°C (70.8°F). The results are tabulated as follows:

TITLE OF TEST	RESULTS	TABLE
Air Leakage, Infiltration per AERC 1.2 (qA) at 75 Pa (1.57 psf)	0 L/s.m ² (0 cfm/ft ²)	1

Table #1:

AIR TEMPERATURE	70.8°F		
BAROMETRIC PRESSURE	29.42 in. of Hg		
TOTAL AIRFLOW (Qt)	TARE (Qe)	NET (Qs)	CORRECTED NET AIRFLOW (Qst)
0.33 l/s (0.7 cfm)	0.33 l/s (0.7 cfm)	-0.06 l/s (0 cfm)	0 l/s (0 cfm)

SECTION 8
CONCLUSION

The specimen tested met the performance requirements of AERC 1.2-2017.

TEST REPORT FOR INOVUES, LLC

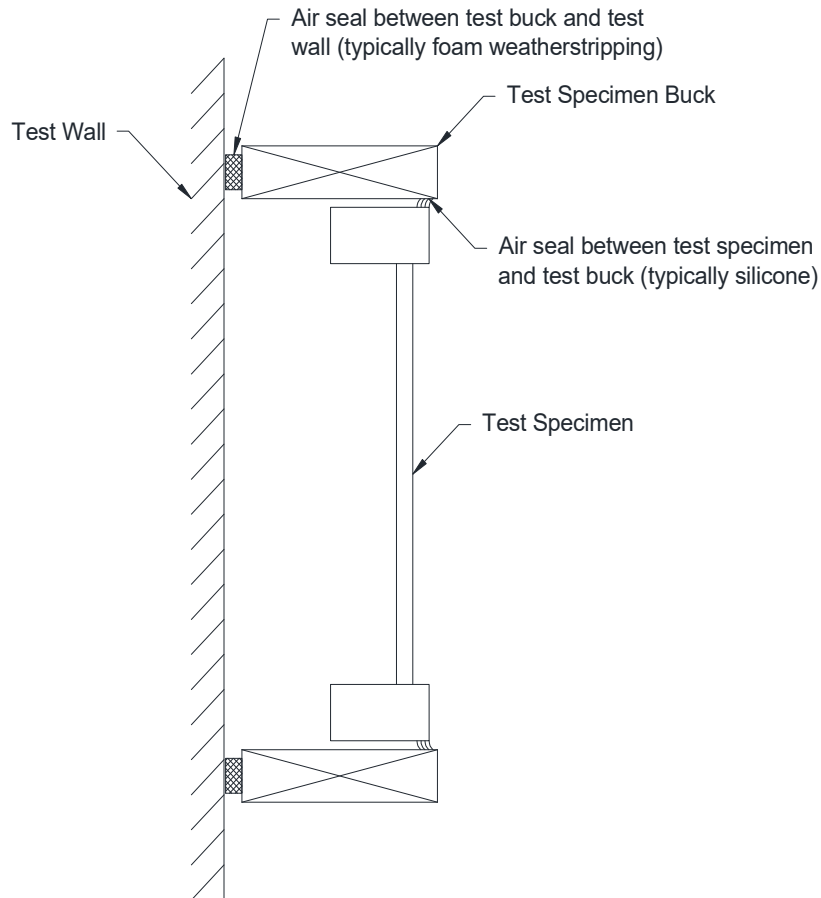
Report No.: N5421.01-801-44 R0

Date: 11/07/22

SECTION 9

LOCATION OF AIR SEAL

The air seal between the test specimen and the test wall is detailed below. The seal is made of foam weatherstripping and is attached to the edge of the test specimen buck. The test specimen buck is placed against the test wall and clamped in place, compressing the weatherstripping and creating a seal.





Total Quality. Assured.

TEST REPORT FOR INOVUES, LLC

Report No.: N5421.01-801-44 R0

Date: 11/07/22

1909 10th Street, Suite 100
Plano, Texas 75074

Telephone: 469-814-0687
www.intertek.com/building

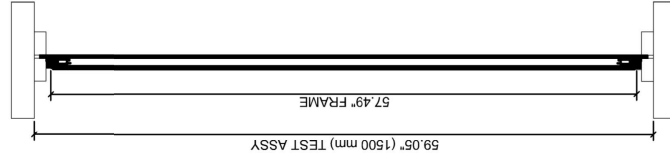
SECTION 10

DRAWING(S)

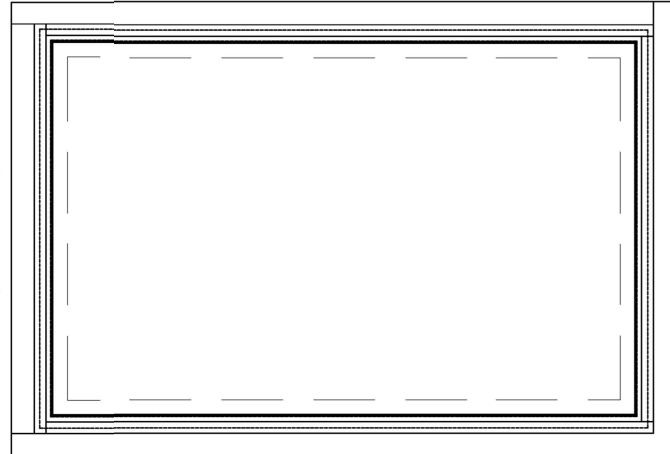
The test specimen drawings have been reviewed by Intertek B&C and are representative of the test specimen reported herein. Test specimen construction was verified by Intertek B&C per the drawings included in this report. Any deviations are documented herein or on the drawings.

BILL OF MATERIALS

MARK #	QTY	LENGTH	DESCRIPTION
P01101L	1	SEE SCHEDULE	SUPPORT SPACER - LEFT
P01101R	1	SEE SCHEDULE	SUPPORT SPACER - RIGHT
P01401	1	SEE SCHEDULE	SUPPORT SPACER - TOP
P01501	1	SEE SCHEDULE	SUPPORT SPACER - BOTTOM
P01801	4	SEE SCHEDULE	SUPPORT SPACER CONNECTOR
P02202	1	SEE SCHEDULE	UNITIZED PANEL - LEFT
P02301	1	SEE SCHEDULE	UNITIZED PANEL - RIGHT
P02601	1	SEE SCHEDULE	UNITIZED PANEL - TOP
P02701	1	SEE SCHEDULE	UNITIZED PANEL - BOTTOM
ALSPCR	VARIES	SEE SCHEDULE	ALUMINUM SPACER



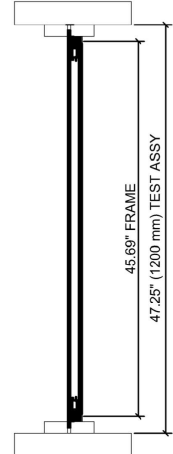
P01101R
P02301
P01801
ALSPCR



P01401
P02601
ALSPCR

P01101L
P02201
P01801
ALSPCR

P01501
P02701
ALSPCR



Report #: N5421.01-801-44
Date: 11/07/22
Verified by: J.Crump

© COPYRIGHT INOVUES, INC. | CONFIDENTIAL

INOVUES
ADAPTIVE GLAZING SHIELDS

INOVUES, INC.
2700 POST OAK BLVD, 2100, HOUSTON, TX 77056 USA
www.inovues.com | info@inovues.com | +1 (833) INO-VUES

DRAWN BY: PG	CHECKED BY: AAK	SCALE NTS	TYPICAL SYSTEM (NO OFFSET) UNIT DRAWING
DATE: 2022-10-20	CUSTOMER/REF.NO. --		REVISION R0
			PAGE