

CLIENT: **Sol A Trol**
4101 NW 132nd Street
Miami, Florida

Project No: QA-5875a	Report Date: December 31, 2025
-----------------------------	---------------------------------------

SAMPLE ID: Series: Projected Window with 24mm thermal break

SAMPLING DETAIL: Test sample information was submitted directly to QAI for evaluation

DATE OF RECEIPT: Documentation was received on **December 9, 2025**

SIMULATION DATE: December 31, 2025

RETENTION DATE: December 31, 2030

SIMULATION LOCATION: 8148 NW 74TH Avenue Medley Florida 33166

AUTHORIZATION: Proposal Number QAI-5028 dated November 21, 2025, signed by Tony Soler on December 9, 2025

TEST PROCEDURE: Testing to the following requirements:

- ANSI/NFRC 100-2023 Procedure for Determining Fenestration Product U-Factor
- ANSI/NFRC 200-2023 Procedure for Determining Fenestration Product Solar Heat Gain Coefficients and Visible Transmittance at Normal Incidence
- NFRC 500-2023 Procedure for Determining Fenestration Product Condensation Resistance Values

TEST RESULTS: Based on evaluation conducted by QAI, energy performance values for **Sol A Trol series projected window** product is found in Simulated Data section of this report for glazing options evaluated

CONTENTS: Test report pages 1 through 5.

Prepared By
Monika Sanchez
Monika Sanchez
NFRC Certified Simulator

Signed for and on behalf of
QAI Laboratories

Jose Sanchez
Simulator-in-Responsible-Charge

"This report is the confidential property of the client addressed. The report may only be reproduced in full. Publication of extracts from this report is not permitted without written approval from QAI. Any liability attached thereto is limited to the fee charged for the individual project file referenced. The results of this report pertain only to the specific sample(s) evaluated. Unless specifically stated or identified otherwise, QAI has utilized a Simple Acceptance rule per ILAC-G8:09/2019 Section 4.2.1 to make conformity decisions on testing results contained in this report, as applicable."



Software: Therm 7.8.71.0 / Window v7.8.71.0 Simulation Manual, Optics 6
Spectral Data Library: IGDB v108.0

Baseline Product Validation

The baseline product must be tested in accordance with NFRC 102 "Test Procedure for Measuring the Steady-State Thermal Transmittance of Fenestration Systems" to validate the U Values indicated. NFRC 100-2023 states "The baseline product is the individual product selected for validation testing". The individual product selected as the baseline product shall have a simulated U-factor within 0.10 Btu/h·ft²·F or 20% of the lowest simulated U-factor, whichever is greater.

Product Description	Product Number	Grouping Number	Pane Thickness #1	Pane Thickness #2	Pane Thickness #3	Gap	Emissivity Surface #4	U Factor
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a

Window Test Size: 1500 mm (59") by 600 mm (23 5/8") high

"This report is the confidential property of the client addressed. The report may only be reproduced in full. Publication of extracts from this report is not permitted without written approval from QAI. Any liability attached thereto is limited to the fee charged for the individual project file referenced. The results of this report pertain only to the specific sample(s) evaluated. Unless specifically stated or identified otherwise, QAI has utilized a Simple Acceptance rule per ILAC-G8:09/2019 Section 4.2.1 to make conformity decisions on testing results contained in this report, as applicable."



Model Designation:	Projected Window
Operator Code:	PRAW

Frame and Vent Construction	
Frame Material and Finish:	(AT) Thermally broken members
Vent Material and Finish:	(AT) Thermally broken members

Glazing Number	Laminates created in Optics
30001	5052-090 PVB-5012
30002	5020-090 PVB-5012
30003	5044-090 PVB-5012
30004	5036-090 PVB-5012

Spacer Type	Sealant Primary	Sealant Secondary	Desiccant
Aluminum spacer	Butyl	Silicone	Bulk

Edge of Glass Construction	
Interior Condition:	Silicone and vinyl gasket
Exterior Condition:	Silicone and vinyl gasket

Gas Type	Filling Technique	Gas Fill Percentage
Argon	Single Probe	95%

Weather Stripping		
Quantity	Description	Location
Single Row	Vinyl bulb	Perimeter of frame and vent

Hardware		
Quantity	Description	Location
None	None	None

Reinforcement	
Material	Location
None	None

Dividers/Grids		
Grid Size	Material	Grid Pattern
None	None	None
<i>Note: any deviations in grid pattern are noted here</i>		

Modeling Assumptions: Glazing was grouped per NFRC 100 section 4.2.4.1

"This report is the confidential property of the client addressed. The report may only be reproduced in full. Publication of extracts from this report is not permitted without written approval from QAI. Any liability attached thereto is limited to the fee charged for the individual project file referenced. The results of this report pertain only to the specific sample(s) evaluated. Unless specifically stated or identified otherwise, QAI has utilized a Simple Acceptance rule per ILAC-G8:09/2019 Section 4.2.1 to make conformity decisions on testing results contained in this report, as applicable."



**Simulated Data
 for
 Casement Frame Option 1**

Product Description	Product ID Number	Grouping ID Number	Pane Thickness #1	Pane Thickness #2	Gap	Gap Fill	Emissivity Surface #2	Tint	Grid Type	Total Product U-Factor	Condensation Resistance	Total Product SHGC No Grid	Total Product VT No Grid
1/4 SB60-ARG-1/4 clear+090+1/4 clear	1	00	0.236	0.539	0.500	ARG	0.035	CL	N	0.45	46	0.24	0.39
1/4 SB60-ARG-1/4 gray+090+1/4 clear		01	0.236	0.531	0.500	ARG	0.035	GY	N	0.45	46	0.23	0.20
1/4 SB60-ARG-1/4 geen+090+1/4 clear		02	0.236	0.531	0.500	ARG	0.035	GR	N	0.45	46	0.24	0.34
1/4 SB60-ARG-1/4 bronze+090+1/4 clear		03	0.236	0.531	0.500	ARG	0.035	BZ	N	0.45	46	0.23	0.23
1/4 SB60-ARG-1/4 blue+090+1/4 clear		04	0.236	0.531	0.500	ARG	0.035	BL	N	0.45	46	0.23	0.30
1/4 SB70-ARG-1/4 clear+090+1/4 clear	2	00	0.236	0.539	0.500	ARG	0.018	CL	N	0.45	46	0.17	0.36
1/4 SB70-ARG-1/4 gray+090+1/4 clear		01	0.236	0.531	0.500	ARG	0.018	GY	N	0.45	46	0.17	0.18
1/4 SB70-ARG-1/4 geen+090+1/4 clear		02	0.236	0.531	0.500	ARG	0.018	GR	N	0.45	46	0.17	0.31
1/4 SB70-ARG-1/4 bronze+090+1/4 clear		03	0.236	0.531	0.500	ARG	0.018	BZ	N	0.45	46	0.17	0.21
1/4 SB70-ARG-1/4 blue+090+1/4 clear		04	0.236	0.531	0.500	ARG	0.018	BL	N	0.45	46	0.17	0.27
1/4 SB90-ARG-1/4 clear+090+1/4 clear	3	00	0.236	0.539	0.500	ARG	0.023	CL	N	0.45	46	0.15	0.28
1/4 SB90-ARG-1/4 gray+090+1/4 clear		01	0.236	0.531	0.500	ARG	0.023	GY	N	0.45	46	0.14	0.14
1/4 SB90-ARG-1/4 geen+090+1/4 clear		02	0.236	0.531	0.500	ARG	0.023	GR	N	0.45	46	0.15	0.25
1/4 SB90-ARG-1/4 bronze+090+1/4 clear		03	0.236	0.531	0.500	ARG	0.023	BZ	N	0.45	46	0.15	0.17
1/4 SB90-ARG-1/4 blue+090+1/4 clear		04	0.236	0.531	0.500	ARG	0.023	BL	N	0.45	46	0.15	0.22

"This report is the confidential property of the client addressed. The report may only be reproduced in full. Publication of extracts from this report is not permitted without written approval from QAI. Any liability attached thereto is limited to the fee charged for the individual project file referenced. The results of this report pertain only to the specific sample(s) evaluated. Unless specifically stated or identified otherwise, QAI has utilized a Simple Acceptance rule per ILAC-G8:09/2019 Section 4.2.1 to make conformity decisions on testing results contained in this report, as applicable."



Remarks

"Rating values included in this report are for submittals to an NFRC licensed IA and are not meant to be used directly for labeling purposes. Only those values identified on a valid Certificate of Authorization (CA) by an NFRC accredited inspection agency (IA) are to be used for labeling purposes."

"The values included in this report are not considered in compliance with ANSI/NFRC 100, ANSI/NFRC 200, and/or NFRC 500 unless the associated validation test requirements have been satisfied, as applicable."

"The Condensation Resistance results obtained from this procedure are for controlled Laboratories conditions and do not include the effects of air movement through the specimen, solar radiation, and the thermal bridging that may occur due to the specific design and construction of the fenestration system opening."

Simulations were conducted in full compliance with NFRC requirements. Simulation relates only to the simulated Fenestration product.

Rounding is per requirements of NFRC 601, NFRC Unit and Measurement Policy.

U factors, Solar Heat Gain Coefficients, Visible Transmittance and Condensation Resistance values are calculated with a default frame absorption of 0.30 for all products other than glazed walls and slope glazing which have a frame absorption of 0.50.

Drawings referenced in this document are an integral part of this report, therefore, are required when distributing this test report. Simulation results obtained represent the actual value of the simulated specimen and does not constitute opinion, endorsement or certification by this Laboratories.

REVISION HISTORY:

12/31/2025: Initial report release

*****END REPORT*****

"This report is the confidential property of the client addressed. The report may only be reproduced in full. Publication of extracts from this report is not permitted without written approval from QAI. Any liability attached thereto is limited to the fee charged for the individual project file referenced. The results of this report pertain only to the specific sample(s) evaluated. Unless specifically stated or identified otherwise, QAI has utilized a Simple Acceptance rule per ILAC-G8:09/2019 Section 4.2.1 to make conformity decisions on testing results contained in this report, as applicable."