

Thermal Simulation Report

Manufacture: Matthews Millwork

Address: 1105 Jim Circle

Monroe, North Carolina 28110

Specifications: ANSI/NFRC 100-2017: Procedure for Determining Fenestration Product U-Factor

Software: Therm 7.4.4.0, Simulation Manual

Spectral Data Library: N/A

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 100-2017 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 ID Number	Door Description	Door Sub-Structure	Panel	U Factor
Embossed door	01	EM	WD	N	0.19

Door Test Size: N/A



Model Designation:	Embossed door
Operator Code:	EDSL
Simulated Model Size:	960 mm (37 3/4") by 2090 mm (82 3/8") high

Frame and Panel Construction			
Frame Material and Finish:	(WD) Wood profiles		
Panel Material and Finish:	(OT) Hardboard skin on the interior and exterior with EPS foam insulation		
	and fiberboard at perimeter		

Weather Stripping		
Quantity	Description	Location
Single row	Q-lon	Perimeter of frame on the interior

Hardware			
Quantity	Description	Location	
None	None	None	

Only continuous elements which require modeling are listed

Reinforcement			
Material	Location		
None	None		

Modeling Assumptions: None



Simulated Data

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Remarks

"Ratings values included in this report are for submittal to an NFRC-licensed IA for certification purposes and are not meant to be used for labeling purposes. Only those values identified on a valid Certification Authorization Report (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 NFRC 100 unless the associated validation test requirements have been satisfied, as applicable."

"The Condensation Resistance results obtained from this procedure are for controlled laboratory 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 laboratory.

This test report is considered the exclusive property of the client named herein and is applicable to the specimen simulated. This report may not be reproduced without the approval of Fenestration Testing Laboratory, Inc and if so must be in full.

Revision History Table				
Revision	Description	Author	Effective Date	
0	Initial Release	Monika Sanchez	06/29/2020	

Simulation Conducted by

Monika Sanchez

NFRC Certified Simulator

Jose Sanchez

Simulator- in- Responsible- Charge

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Appendix

Fenestration Simulated Product Drawings and Bill of Material