

CLIENT: **Miracle Distributions Inc.**
#106, 2451 W. Grapevine Mills Circle
Grapevine, TX 76051

Project No: MED-1245e	Report Date: July 1, 2024
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SAMPLE ID: Fixed Window

SAMPLE DESCRIPTION: 8'-0" (96") by 8'-0" (96") high.

SAMPLING DETAIL: The test sample manufactured by Miracle Distributions Inc. was submitted directly to QAI by the client. Samples were not independently selected for testing.

DATE OF RECEIPT: Samples were received at the QAI Medley Laboratories on March 8, 2024.

TESTING PERIOD: March 19, 2024.

TESTING LOCATION: QAI Laboratories – Medley, Florida, USA

TEST PROCEDURE: Testing to the following requirements:

- AAMA/WDMA/CSA 101/1. S.2/A440-22 North American Fenestration Standard/Specification for windows, doors, and skylights

TEST RESULTS: Miracle Distributions Inc. Fixed Window achieved a CW-PG25 rating when tested in accordance with the NAFS standard.

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Prepared By

Lusinda Delgado

Lusinda Delgado
Technical Report Writer

Signed for and on behalf of
QAI Laboratories

Jose Sanchez
Operation Manager



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Technician:
Jose Sanchez



DESCRIPTION OF SAMPLE	
Model Designation:	Fixe Window
Overall Size:	8'-0" (96") by 8'-0" (96") high
Configuration:	O
Product Designator:	CW-PG25
Sample E-1	

Frame Corners Construction	Number of Fasteners	Size of Fasteners
Upper corners fastened with	N/A	Welded
Lower corners fastened with	N/A	Welded

Glazing			
Glazing Location	Glazing Material	Glazing Compound	Compound Color
Fixed lite	7/8" overall nominal insulated laminated glass composed of 3/16" **tempered glass-1/2" air space using a **Tecnofoam spacer-3/16" **tempered glass	None	N/A
Glazing Penetration: 5/16"			
Glazing Method: Exterior glazed			
Glazing Compound Exterior side of glass: using a glazing bead			
Glazing Compound Interior side of glass: using glazing tape			
Daylight Opening:	93 1/8" by 93 1/8" high		

Sample Installation
The sample was tested in a single 2" by 12" wood test buck with a double 2" x 4" pressure treated wood buck strip. The frame head, frame sill and frame jambs were installed using a single row of No. 10 by 1 1/2" PH SMS spaced 18" on center.

Sample: E-1	Temperature: 75.8°F	Barometric Reading: 30.01 inches Hg	
Notes: Maximum allowable 0.30 cfm/sq.ft			
Title of Test	Pressure	Reading	Results
Air Infiltration Test: (ASTM E283)	(76.61 pa) 1.6 psf	0.01 cfm/sq.ft	Passed

Sample: E-1	Temperature: 75.8°F	Barometric Reading: 30.01 inches Hg		
Notes:				
Title of Test	Pressure		Results	Add. Info
Water Resistance Test	(180 pa) 3.76 psf	Cycle 1	Passed	ASTM E547
		Cycle 2	Passed	
		Cycle 3	Passed	
		Cycle 4	Passed	

Sample: E-1	Temperature: 75.8°F	Barometric Reading: 30.01 inches Hg		
Notes:				
Title of Test	Pressure		Results	Add. Info
Water Resistance Test	(180 pa) 3.76 psf	15 minutes	Passed	ASTM E331

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Sample: E-1	Temperature: 75.8°F	Barometric Reading: 30.01 inches Hg	
Title of Test		Pressure	Notes
1/2 Design Load Test Positive Load		(600 pa) 12.53 psf	
		Results	Passed

Sample: E-1	Temperature: 75.8°F	Barometric Reading: 30.01 inches Hg	
Title of Test		Pressure	Notes
Design Load Test Positive Load		(1200 pa) 25.06 psf	
see appendix A			
Reading#	Deflection	Permanent Set	Results
1	0.098"	0.002"	Passed
2	0.059"	0.002"	Passed

Sample: E-1	Temperature: 75.8°F	Barometric Reading: 30.01 inches Hg	
Title of Test		Pressure	Notes
1/2 Design Load Test Negative Load		(600 pa) 12.53 psf	
		Results	Passed

Sample: E-1	Temperature: 75.8°F	Barometric Reading: 30.01 inches Hg	
Title of Test		Pressure	Notes
Design Load Test Negative Load		(1200 pa) 25.06 psf	
see appendix A			
Reading#	Deflection	Permanent Set	Results
1	0.128"	0.004"	Passed
2	0.120"	0.003"	Passed

Sample: E-1	Temperature: 75.8°F	Barometric Reading: 30.01 inches Hg	
Title of Test		Pressure	Notes
1/2 Structural Load Test Positive Load		(900 pa) 18.80 psf	
		Results	Passed

Sample: E-1	Temperature: 75.8°F	Barometric Reading: 30.01 inches Hg	
Title of Test		Pressure	Notes
Uniform Structural Test Positive Load		(1800 pa) 37.59 psf	
see appendix A			
Reading#	Deflection	Permanent Set	Results
1	0.181"	0.011"	Passed
2	0.170"	0.009"	Passed

Sample: E-1	Temperature: 75.8°F	Barometric Reading: 30.01 inches Hg	
Title of Test		Pressure	Notes
1/2 Structural Load Test Negative Load		(900 pa) 18.80 psf	
		Results	Passed

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Sample: E-1	Temperature: 75.8°F	Barometric Reading: 30.01 inches Hg		
Title of Test		Pressure	Notes	
Uniform Structural Test Negative Load		(1800 pa) 37.59 psf		
see appendix A				
Reading#	Deflection	Permanent Set	Results	Add. Info
1	0.202"	0.012"	Passed	
2	0.196"	0.010"	Passed	

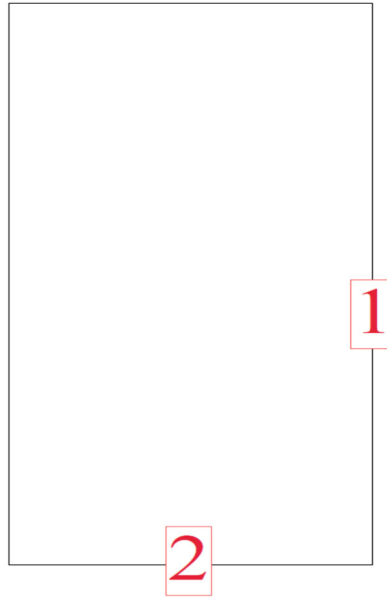
Sample: E-1	Temperature: 75.8°F	Barometric Reading: 30.01 inches Hg		
Title of Test		Results		
Forced Entry Test		Passed		
ASTM F588		Type D Window	Grade 10	
Disassembly Test		Section A2.1		

Sample: E-1	Temperature: 75.8°F	Barometric Reading: 30.01 inches Hg		
Title of Test		Results		
Corner Weld Test		Passed		
Lower Left Frame Corner	60 pounds	the break occurred but did not extend along the entire weld line		
Lower Right Frame Corner	42 pounds	the break occurred but did not extend along the entire weld line		
Upper Left Frame Corner	48 pounds	the break occurred but did not extend along the entire weld line		
Upper Right Frame Corner	54 pounds	the break occurred but did not extend along the entire weld line		

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Appendix A



Notes

* Designates measurements by laboratory

** as per manufacturer

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At conclusion of above tests, there was no apparent damage to fasteners. Test specimens were covered with 1.5 mil plastic sheeting to seal from air leakage when load test was performed, however this had no effect on above results.

The loads were held for 10 seconds.

REVISION HISTORY:

7/1/2024: Initial report release

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

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