Test Report Summary

New Thermal Entrance Series

AIR – WATER – STRUCTURAL

PRODUCT **New Thermal Entrance Series**
Narrow, Medium, and Wide Stile

TEST RESULTS

		Narrow Single	Narrow Pair	Medium Single
Air Infiltration	*ASTM E283*		**0.41 (actual, infiltration) 0.44 actual, exfiltration) 1.0 (allowed) cfm/ft² @ 1.57 psf**	**0.81 (actual, infiltration) 0.88 (actual, exfiltration) 1.0 (allowed) cfm/ft² @ 1.57 psf**
Static Water Resistance	*ASTM E331*		**limited water (see page 2 for description)**	**limited water (see page 2 for description)**
Structural – Design Load	*ASTM E330*		**+/- 30 psf**	**+/- 30 psf**
Structural – Overload	*ASTM E330*		**+/- 45 psf**	**+/- 45 psf**
Forced Entry Resistance	*AAMA 1304-02*	**300 lb**		
Operating Force	*ASTM E2068*		**2.1 lbf opening 16.7 lbf closing**	**1.4 lbf opening 15.9 lbf closing**
Specimen Size: Leaf Size:		48” x 108” 35-13/16” x 83-7/16”	72” x 84” 35-13/16” x 83-7/16”	36” x 84” 35-13/16” x 83-7/16”

TEST LAB

Quast Consulting & Testing
Mosinee, WI 54455

Report Number	QCT22-6729.02-R3
Test Date	01/03/2023
Report Date	10/20/2023

Reference above Quast Consulting & Testing reports for complete test specimen description and data.

Tubelite Representative: (sign) 08/27/2024
(date)

Tim Fookes - Vice President of Engineering (title)

TEST METHODS

Air Infiltration: *ASTM E283-04, Standard Test Method for Determining Rate of Air Leakage Through Exterior Windows, Curtain Walls, and Doors Under Specified Pressure Differences Across the Specimen*. Testing was conducted at 1.57 psf positive static air pressure difference.

Static Pressure Water Resistance: ASTM E331-00, *Standard Test Method for Water Penetration of Exterior Windows, Skylights, Doors, Curtain Walls by Uniform Static Air Pressure Difference.* Testing was conducted at 0 psf positive static air pressure difference for 15 minute duration. Water applied at a minimum rate of 5 gal/ft^2/hr.

Structural Performance: ASTM E330-02, *Standard Test Method for Structural Performance of Exterior Windows, Skylights and Curtain Walls by Uniform Static Air Pressure Difference.* Testing for the narrow- double configuration was conducted at +/- 30 psf design loads and +/- 45 psf overloads. Testing for the medium - single configuration was conducted at +/- 50 psf design loads and +/- 75 psf overloads. Allowable Criteria: Design - L/175 deflection normal to wall plane for clear spans up to 13'-6". Overload – net permanent set shall not exceed 0.2% of the clear span.

Forced Entry Resistance: AAMA 1304-02, *Voluntary Specification for Forced Entry Resistance of Side Hinged Door Systems.* Testing for the narrow-double configuration was conducted at 300 lbs.

Operating Force: ASTM E2068, *Standard Test Method for Determination of Operating Force of Sliding Windows and Doors.* Testing for the medium-single at configuration was conducted at 9.0 lbf force to latch.

Reference Quast Consulting & Testing report #QCT22-6729.02-R3 dated 10/20/2023 for complete test specimen description and data. Contact a Tubelite representative for more information.