

PRODUCT **14000 IO Series Storefront Outside Plane**
 2" x 4-1/2" (thermally broken)

TEST RESULTS

Air Infiltration	ASTM E283	0.06 cfm/ft² @ 6.24 psf
Static Pressure Water Resistance	ASTM E331	12 psf
Dynamic Pressure Water Resistance	AAMA 501.1	15 psf
Structural – Design Load	ASTM E330	30 psf
Thermal Cycling	AAMA 501.5	0 °F to 180 °F
Structural – Overload	ASTM E330	45 psf

TEST LAB

INTERTEK – ATI
 York, PA 17406

Report Number	C3406.01-450-44
Test Date	11/08/12
Report Date	1/16/13

Reference ATI report #C3406.01-450-44, dated 1/16/2013, for complete test specimen description and data.

Tubelite Representative:



(sign) 8/12/2016 (date)

Tim Fookes - Director 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 6.24 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 12 psf positive static air pressure difference for 15 minute duration. Water applied at a minimum rate of 5 gal/ft²/hr.

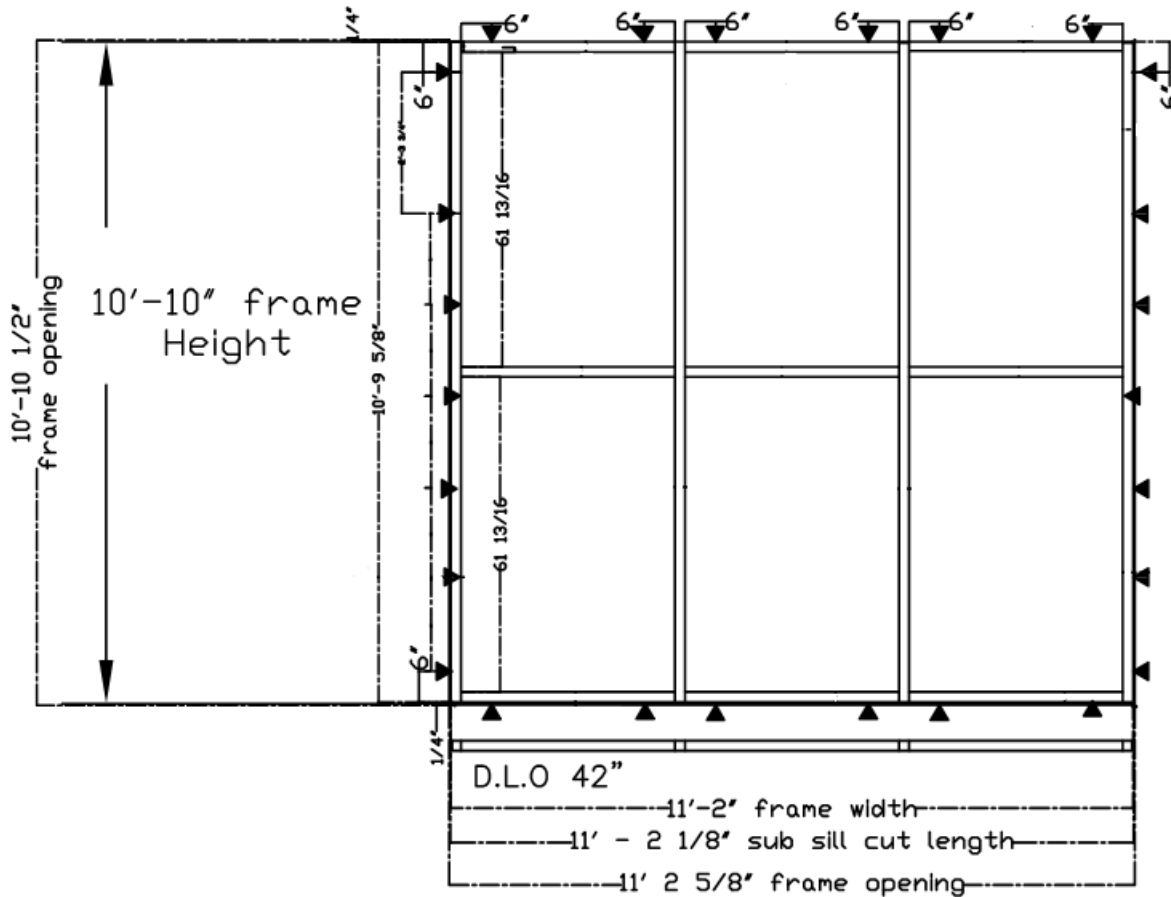
Dynamic Pressure Water Resistance: *AAMA 501.1-05, Standard Test Method for Water Penetration of Windows, Curtain Walls, and Doors Using Dynamic Pressure.* Testing was conducted with a dynamic pressure equivalent of 15 psf for a 15 minute duration. Water applied at a minimum rate of 5 gal/ft²/hr.

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 was conducted at +/- 30 psf design loads and +/- 45 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.

Thermal Cycling: *AAMA 501.5-07, Standard Test Method for Thermal Cycling of Exterior Walls.* Testing was conducted with three thermal cycles. Each cycle maintained for two hours after establishing the following temperatures and consist of:

- a. Low exterior temperature of 0 °F.
- b. High exterior temperature of 180 °F.
- c. System components shall withstand thermal movements without buckling, distortion, cracking, failure or glass, and failure of joint seals or undue stress on the finished surfaces, materials, or fixing assemblies.

TEST SPECIMEN



Reference ATI report #C3406.01-450-44, dated 1/16/2013, for complete test specimen description and data. Contact a Tubelite representative for more information.