

AAMA STRUCTURAL TEST REPORT

Rendered to:

CMI ARCHITECTURAL PRODUCTS, INC.
608 Fourth Street, S.E.
DeSmet, South Dakota 57231-0475Report No: 02-31772.01
Test Dates: 10/13/1999
And: 10/25/1999
Report Date: 11/17/1999

Series/Model: CMI 6600 Wall

Type: Two-wide Aluminum Pressure Wall

Test Procedure: The test specimen was evaluated in accordance with AAMA/NWWDA 101/I.S. 2-97, "*Voluntary Specifications for Aluminum, Vinyl (PVC) and Wood Windows and Glass Doors*," for conformance to the Class F-HC65 (96" x 96") performance requirements.

Test Specimen Description:**Overall Size:** 8' 0" wide by 8' 0" high**Daylight Opening Size (2):** 3' 8-1/4" wide by 7' 7" high**Overall Area:** 64.0 ft²**Finish:** Mill finished aluminum

Glazing: The window utilized nominal 1" insulating glass fabricated from two 1/4" annealed sheets separated by a desiccant-filled spacer system. The glass was set from the exterior against 60-durometer EPDM gasket. Aluminum pressure plates with 60-durometer EPDM gasket were used on the exterior. The pressure plates were secured to the main frame with 1/4" by 12" by 1" Type AB panhead screws located 6" from each end and 12" on center. The sill glazing pockets were sealed with closed-cell EPDM end dams and silicone. All joints of the vertical and horizontal pressure plates were sealed with silicone. A 3/16" EPDM thermal break gasket was located beneath the pressure plate at each screw location.

Test Specimen Description (Continued)

Frame Construction: The frame consisted of extruded aluminum with the corners square-cut, sealed and secured with screws. The center mullion was secured to the head and sill with a shear block on each end.

Drainage:

<u>Description</u>	<u>Quantity</u>	<u>Location</u>
1/4" diameter weephole	24" on center	Sill pressure plate to drain the glazing cavity located 12" from each end and 24" on center
1/4" diameter weephole	4	Sill pressure plate cover, two per lite

Installation: The mock-up was installed within a 2" by 8" wood frame and secured to the frame with continuous F-anchor clips. The F-anchor clips were secured with #10 by 1" screws located 6" from each end and 18" on center. The interior and exterior of the frame were sealed to the buck with silicone.

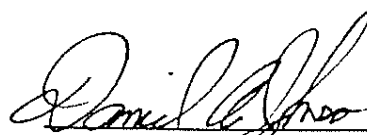
Test Results: The results are tabulated as follows.

<u>Paragraph</u>	<u>Title of Test</u>	<u>Results</u>	<u>Allowed</u>
2.1.2	Air Infiltration per ASTM E 283 @ 1.57 psf (25 mph) @ 6.24 psf (50 mph)	< 0.01 cfm/ft ² < 0.01 cfm/ft ²	0.3 cfm/ft ² max. --
	<i>The tested specimen meets the performance levels specified in AAMA/NWWDA 101/I.S. 2-97 for air infiltration for an F-HC window.</i>		
2.1.3	Water Resistance per ASTM E547 & E 331 WTP = 15.0 psf	No leakage	No leakage @ 12.0 psf
2.1.4.1	Uniform Load Deflection per ASTM E 330* @ 65.0 psf (positive) @ 65.0 psf (negative)	0.26" 0.28"	-- --
2.1.4.2	Uniform Load Structural per ASTM E 330 @ 97.5 psf (positive) @ 97.5 psf (negative)	0.02" 0.02"	0.4% L = 0.384" 0.4% L = 0.384"
2.1.8	Forced Entry Resistance per ASTM F 588 Level 10	No entry	No entry

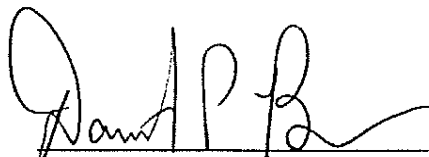
*Not a requirement for AAMA/NWWDA 101/I.S. 2-97

A copy of this report will be retained by ATI for a period of four years. This report is the exclusive property of the client so named herein and is applicable to the sample tested. Results obtained are tested values and do not constitute an opinion or endorsement by this laboratory.

For ARCHITECTURAL TESTING, INC.

A handwritten signature in black ink, appearing to read "Daniel A. Johnson", written over a horizontal line.

Daniel A. Johnson
Regional Manager

A handwritten signature in black ink, appearing to read "Daniel P. Braun", written over a horizontal line.

Daniel P. Braun
Regional Manager

DAJ/jb
02-31772