

STRUCTURAL TEST REPORT

Rendered to:

CMI ARCHITECTURAL PRODUCTS INC.
2800 Freeway Boulevard, Suite 205
Minneapolis, Minnesota 55430

Report No: ATI-19389-N
Test Date: 02/26/1997
Report Date: 03/04/1997

Series/Model: 200T Casement

Type: Aluminum Thermally Broken Casement Window

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 C-HC80 performance requirements.

Test Specimen Description:

Overall Size: 2' 0" wide by 4' 0" high

Sash Size: 1' 10-3/8" wide by 3' 10-3/8" high

Sash Crack: 11.5 ln ft

Area: 8.0 ft²

Glazing: Nominal 1" insulating glass comprised of two nominal 1/4" clear annealed sheets with a desiccant-filled spacer was set from the interior against pre-shimmed 1/2" by 1/8" butyl glazing tape. Interior aluminum glass stops and an EPDM wedge gasket formed the interior glazing seal.

Weatherstripping:

<u>Description</u>	<u>Quantity</u>	<u>Location</u>
EPDM bulb gasket with mitered and sealed corners	2 rows	Interior and exterior sash perimeter

Frame Construction: All frame members utilized poured-and-debridged polyurethane thermal break system. Frame corners were mitered and secured with corner blocks crimped at two locations per side (four per corner). All frame corners were sealed with small joint sealant during assembly.

Test Specimen Description: 200T Casement (Continued)

Sash Construction: All sash members utilized a poured-and-debridged polyurethane thermal break system. Sash corners were mitered and secured with aluminum corner blocks crimped at two locations per side (four per corner).

Hardware:

<u>Description</u>	<u>Quantity</u>	<u>Location</u>
Anderberg 4-bar stainless steel hinges	2	Top corners
Cam handles	4	Sash stile at 1/4" points
Keepers	2	Adjacent to locks on jamb

Test Results:

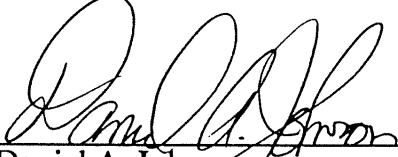
<u>Paragraph</u>	<u>Title of Test</u>	<u>Results</u>	<u>Allowed</u>
2.1.2	Air Infiltration @ 1.56 psf	0.01 cfm/ft	--
		0.03 cfm/ft ²	--
	@ 6.24 psf	0.01 cfm/ft	--
		0.03 cfm/ft ²	0.3 cfm/ft ²
The tested specimen meets the performance level specified for air infiltration.			
2.1.3	Water Resistance @ 6.0 psf	No entry	No entry @ 6.0 psf
2.1.4.2	Uniform Load Structural @ 60.0 psf (exterior) @ 60.0 psf (interior)	Negligible	0.4% L = 0.096"
		Negligible	0.4% L = 0.096"
2.2.5.6.1	Vertical Deflection Test @ 60 lbf	0.055"	0.250"/ft = 0.487"
2.2.5.6.3	Torsion test @ 20 lbf	1.25"	1.50 A/8 = 1.35"
2.1.8	Forced Entry Resistance AAMA 1302.5	NO entry	No entry

Optional Performance:

<u>Paragraph</u>	<u>Title of Test</u>	<u>Results</u>	<u>Allowed</u>
4.3	Water Resistance @ 12.0 psf	No entry	No entry @ 12.0 psf
4.4.2	Uniform Load Structural @ 120.0 psf (exterior) @ 120.0 psf (interior)	Negligible	0.4% L = 0.096"
		Negligible	0.4% L = 0.096"

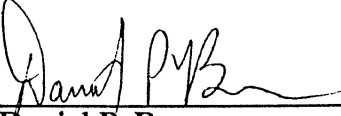
Detailed drawings of the test specimen and a copy of this report will be retained by ATI for a period of four years. The above results were secured by using the designated test methods and they indicate compliance with the performance requirements of the above referenced specification. This report does not constitute certification of this product which may only be granted by the certification program administrator.

ARCHITECTURAL TESTING, INC.



Daniel A. Johnson
Laboratory Manager

ARCHITECTURAL TESTING, INC.



Daniel P. Braun
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