# AAMA STRUCTURAL
# TEST REPORT SUMMARY

Rendered to:

**CMI ARCHITECTURAL PRODUCTS, INC.**

CMI 200T Awning

Report No: 02-31409.01
Report Date: 07/28/1999

**AAMA STRUCTURAL TEST REPORT**

Rendered to:

CMI ARCHITECTURAL PRODUCTS, INC.
408 Fourth Street, S.E.
DeSmet, South Dakota 57283-0475

| | |
|---|---|
| Report No: | 02-31409.01 |
| Test Dates: | 06/08/1999 |
| | 06/09/1999 |
| Report Date: | 07/28/1999 |
| Expiration Date: | 06/09/2003 |

**Series/Model**: CMI 200T Awning

**Type**: Thermally Broken Project-out Aluminum Window

**Test Procedure**: The test specimen was evaluated in accordance with the following:

AAMA/NWWDA 101/I.S. 2-97, *"Voluntary Specifications for Aluminum, Vinyl (PVC) and Wood Windows and Glass Doors,"* for conformance to the Class AP-C60 (60" x 36") performance requirements.

**Test Specimen Description**:

**Overall Size**: 5' 0" wide by 3' 0" high

**Vent Size**: 4' 11-3/8" wide by 2' 11-3/8" high

**Overall Area**: 15.0 $ft^2$

**Finish**: Anodized aluminum

**Glazing**: The window utilized nominal 1" insulating glass fabricated from two nominal 1/4" annealed sheets separated by a desiccant-filled metal spacer system. The glass was set from the interior against 1/8" by 1/2" pre-shimmed butyl tape. Aluminum glazing beads with a 70 durometer EPDM wedge gasket were used on the interior.

**Frame Construction**: The frame corners were coped, butted, sealed with small joint sealant and secured with crimped metal corner key. All frame members contained poured-in-place and debridged urethane thermal break.

**Vent Construction**: Vent corners were miter-cut and secured with a crimped metal corner key. The corners were sealed with small joint sealant and all vent members contained poured-in-place and debridged urethane thermal break.

**Hardware**:

| Description | Quantity | Location |
|---|---|---|
| 4-bar hinge | 2 | Vent top corners |
| Cam locks | 4 | Vent bottom rail: 6" from each end,<br>Vent stiles: 6" from bottom |

**Test Results**: The results are tabulated as follows:

| Paragraph | Title of Test | Results | Allowed |
|---|---|---|---|
| 2.1.2 | Air Infiltration per ASTM E 283 | | |
| | @ 1.57 psf (25 mph) | < 0.01 cfm/ft$^2$ | 0.3 cfm/ft$^2$ max. |
| | @ 6.24 psf (50 mph) | < 0.01 cfm/ft$^2$ | -- |
| | *The tested specimen meets the performance levels specified in AAMA/NWWDA 101/I.S. 2-97 for air infiltration.* | | |
| 2.1.3 | Water Resistance per ASTM E 547 | | |
| | WTP = 4.50 psf | No leakage | No leakage |
| 2.1.4.2 | Uniform Load Structural per ASTM E 330 | | |
| | @ 45.0 psf (positive) | 0.01" | 0.4% L = 0.120" |
| | @ 45.0 psf (negative) | 0.01" | 0.4% L = 0.120" |
| 2.1.8 | Forced Entry Resistance per ASTM F 588 | | |
| | Level 10 | No entry | No entry |
| 2.2.4.5.2 | Sash Torsion Test | | |
| | @ 30 lbf | 1.00" | 2.00" |
| **Optional Performance:** | | | |
| 4.3 | Water Resistance per ASTM E 547 & E 331 | | |
| | WTP = 12.0 psf | No leakage | No leakage @ 9.0 psf |
| 4.4.2 | Uniform Load Structural per ASTM E 330 | | |
| | @ 90.0 psf (positive) | 0.01" | 0.4% L = 0.120" |
| | @ 90.0 psf (negative) | 0.01" | 0.4% L = 0.120" |

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.

Daniel A. Johnson
Regional Manager

Daniel P. Braun
Regional Manager

DAJ/jb
02-31409

DOCUMENT CONTROL ADDENDUM 02-31409

Current Issue Date: 07/28/99

---

Report No. 02-31409.01

| | |
|---|---|
| Requested by: | Gary Geigler |
| Purpose: | AAMA Structural Test Report |
| Issue Date: | 07/28/99 |