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AAMA/NWDA STRUCTURAL TEST REPORT

Rendered to:

EAGLE WINDOW & DOOR, INC.
375 East Ninth Street
P.O. Box 1072
Dubuque, Iowa 52004-1072

Report No: 02-32207.01
Test Date: 03/15/2000
Report Date: 04/07/2000
Expiration Date: 03/15/2004

Project Summary: Architectural Testing, Inc. (ATI) was contracted to perform tests one Eagle Window & Door Series 00 8080 Clad French Style Slider.

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

AAMA/NWDA 101/I.S. 2-97, "Voluntary Specifications for Aluminum, Vinyl (PVC) and Wood Windows and Glass Doors," for conformance to the Class SGD-C35 (96" x 97") performance requirements.

Test Specimen Description:

Series/Model: Series 00 8080 Clad French Style Slider

Type: Aluminum Clad Horizontal Sliding Wood Patio Door (OX)

Overall Size: 7' 11-3/4" wide by 8' 0-3/4" high

Operating Panel Size: 4' 1-1/2" wide by 7' 9-1/2" high

Stationary Panel Size: 4' 1-1/2" wide by 7' 9-1/2" high

Screen Size: 4' 0-1/4" wide by 7' 11-1/4" high

Overall Area: 64.3 ft²

Finish: Interior wood was unfinished, exterior cladding was painted.

Glazing: The door utilized nominal 3/4" insulating glass fabricated from two nominal 1/8" tempered sheets and a desiccant-filled spacer system, set from the interior against butyl rubber backbedding. Wood glazing beads with foam glazing tape were secured on the interior with 3/16" by 1-1/8" staples spaced 1" from each corner and 6" on center.

Test Specimen Description (Continued)**Weatherstripping:**

| <u>Description</u> | <u>Quantity</u> | <u>Location</u> |
|-------------------------------------|-----------------|--|
| Flexible vinyl leaf | 1 row | Lock jamb, head jamb and stationary panel interlock |
| Wool pile with fin | 1 row | Bottom rail of operable panel and operable panel interlock |
| Rigid vinyl leaf | 1 row | Frame jambs and head, interior stops |
| 1/4" foam-filled rubber bulb gasket | 1 row | Fixed panel interlock |
| Closed-cell foam pad | 1 | Base of interlock |

Frame Construction: The frame jambs and head were comprised of Ponderosa pine with the corners butted, sealed with siliconized acrylic caulk and secured with four #7 by 1-1/4" screws per corner. Aluminum cladding was slip-fit over the exterior with the corners secured with two #6 by 7/16" screws per corner. Silicone sealant was used on the exterior of the cladding mitered corners. A sloped fiberglass sill was attached with four #7 by 1-1/4" screws.

Panel Construction: The panels were comprised of Ponderosa pine with blind mortise-and-tenon corner construction and secured with glue and two #10 by 2-1/2" wood screws per corner. Aluminum cladding was slip-fit over the exterior of the panel members with mitered corners, sealed with silicone and secured with a nylon corner key and one #5 by 1-3/4" screw per corner. The stationary panel meeting stile contained a 1/8" thick aluminum member which was screwed to the panel and sealed with silicone. The stationary panel was secured to the frame with three screws equally-spaced through the frame jamb into the jamb stile, two screws equally-spaced through the frame head into the top rail and one screw through the aluminum reinforcing angle at the meeting stile. The stationary panel was sealed to the jambs, sill and head with silicone.

Screen Construction: The screen frame consisted of extruded aluminum with aluminum corner keys. Fiberglass screen cloth was held in place with a vinyl spline.

Drainage:

| <u>Description</u> | <u>Quantity</u> | <u>Location</u> |
|-------------------------|-----------------|--------------------------------|
| 1" by 0.040" weep holes | 2 | Vinyl stationary support block |

Hardware:

| <u>Description</u> | <u>Quantity</u> | <u>Location</u> |
|-----------------------------|-----------------|---|
| Adjustable metal rollers | 2 | Bottom rail of panel, 11" from each end |
| Adjustable lock with handle | 1 | Lock stile of operating panel, 39" from bottom rail with keeper located on frame jamb |
| Metal screen rollers | 2 | Bottom rail of screen, 6" from each end |


Installation: The unit was installed into a #2 SPF 2" by 8" wood test frame, secured through the nailing flange with screws and sealed with silicone.

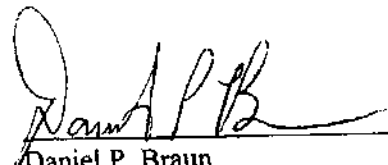
Optional Performance:

| <u>Paragraph</u> | <u>Title of Test</u> | <u>Results</u> | <u>Allowed</u> |
|------------------|--|------------------------|----------------------------|
| 4.3 | Water Resistance per ASTM E 547-97 & E 331-97 (With and without screen) WTP = 9.0 psf | No leakage | No leakage @ 5.25 psf |
| 4.4.1 | Uniform Load at Design Pressure per ASTM E 330-97 (60 seconds) @ 35.0 psf (positive) @ 35.0 psf negative) | No damage No damage | No damage No damage |
| 4.4.2 | Uniform Load Structural per ASTM E 330-97 (10 seconds) @ 52.5 psf (positive) @ 52.5 psf (negative) | 0.01" 0.01" | 0.382" max. 0.382" max. |

Detailed drawings, representative samples 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.

For ARCHITECTURAL TESTING, INC.


Daniel A. Johnson
Regional Manager


Daniel P. Braun
Regional Operations