Architectural Testing

PERFORMANCE TEST REPORT

Rendered to:

GAMCO CORPORATION
131 - 10 Maple Avenue
Flushing, New York 11355

Report No: 01-41009.02

Product: 30° Ridge Skylight with Gable Ends

Project Summary: Architectural Testing, Inc. (ATI) was contracted by Gamco Corporation to conduct performance testing on a skylight mock-up. All testing was performed in accordance with the attached test procedure. The mock-up met the specified performance requirements. This report includes complete written and photographic documentation of all testing performed and a copy of "As-Tested" mock-up drawings.

Drawing Reference: Gamco Corporation "As-Built" drawings for the 30° Ridge Skylight; Sheet Nos. 1-7/7, dated 03/18/02. Copy attached to this report.

General Description of Test Specimen:

Overall Size: 5' 0" wide by 10' 0" long by 2' 2-1/2" high

General Description of Mock-up: The 30° skylight consisted of extruded aluminum framing 1/4" clear annealed insulating glass units. The skylight consisted of two gable ends and utilized ridge and rafter construction. (See Photo #1) An aluminum sill curbing was utilized at the base of the unit that contained an interior gutter along each 10' long side. Drainage was provided by a 3/16" diameter weephole, one each, midspan of the 10' long side. The unit was a pressure bar system with exterior DC 795 silicone wet sealed snap pressure caps and joinery. The horizontal glass ends were structurally sealed.

Installation: A bedding of silicone was laid down on the 2" by 6" wood chamber curb and the unit was lowered into place. The unit was fastened with 3" screws on 12" centers.

130 Derry Court
York, PA 17402-9405
phone: 717.764.7700
fax: 717.764.4129
www.archtest.com

Test Methods:

Air Infiltration: ASTM E 283-99, *Rate of Air Leakage Through Exterior Windows, Curtain Walls and Doors by Uniform Static Air Pressure Difference.* Testing was conducted at 6.24 psf positive static air pressure difference.

Static Water Resistance: ASTM E 331-00, *Water Penetration of Exterior Windows, Curtain Walls and Doors by Uniform Static Air Pressure Difference.* Testing was conducted at 15.0 and 18 psf positive static air pressure difference. Water was applied to the mock-up at a minimum rate of 5 gal/ft^2/hr. The test duration was 15 minutes.

Structural Performance: ASTM E 330-96, *Standard Test Method for Structural Performance of Exterior Windows, Curtain Walls, and Doors by Uniform Static Air Pressure Difference.* Testing was conducted at positive and negative loads as described in the Test Procedure and listed in the test results.

Test Witnesses: The following representatives witnessed all or part of the testing:

John Chang	Gamco Corporation
Charlie Chan	Gamco Corporation
Scott Kramer	Architectural Testing, Inc.
Eric Rock	Architectural Testing, Inc.
Thomas Sands	Architectural Testing, Inc.

TEST RESULTS
March 20, 2002

Title of Test	Test Results	Allowable
Static Pressure Air Infiltration @ 6.24 psf	PASSED 0.03 cfm/ft^2 See Photo #2	0.06 cfm/ft^2
Repeat Static Pressure Water Resistance @ 15.0 psf	PASSED No uncontrolled leakage	No uncontrolled leakage
Static Pressure Water Resistance @ 18.0 psf	PASSED No uncontrolled leakage	No uncontrolled leakage
Uniform Load Deflection @ Design Loads 45, 60, 90, & 120 psf	PASSED See Tables #1, 2, 3, & 4 and Photo #3	See Tables #1, 2, 3. 4
Uniform Structural Overloads @ 150% Design Loads 120, 135, & +180 psf	PASSED See Tables #5, 6, & 7 and Photo #3	See Tables #5, 6, & 7

Observations: *The mock-up was visually inspected after the test conclusion, there were no visual problems observed.*

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.:

Thomas R. Sands
Senior Technician

Joseph W. Wise
Director - Project/Curtain Wall Testing

TRS:nlb
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