



David Viera

Model Designation: Standoff Glass Railing

Client Package

Fenestration Testing Laboratory
8148 N.W. 74th Avenue
Medley, Florida 33166
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Las Vegas, NV (702) 922-7142
Houston, TX (281) 763-0401

Test Report and Drawings



Quality Accuracy Assurance

Fenestration Testing Laboratory, Inc.

8148 N.W. 74th Avenue Medley, FL 33166 Phone: (305) 885-3328 Fax: (305) 885-3329 (888) 819-7877

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Report Date: 10/2/2024
Completion Date: 9/9/2024
Expiration Date: 9/9/2028
Page No. 1 of 5
Lab. Number: 9145
Project Number: 16-6710

OFFICIAL TEST REPORT

MANUFACTURER: David Viera, LLC
ADDRESS: 10435 NW 132nd Street
Hialeah, Florida 33018
SPECIFICATIONS: Florida Building Code
Concentrated Load Test and ANSI Z97.1
PROJECT: David Viera, LLC

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Results Sample A-1		
Concentrated Load Test	1607.8.1/1607.8.1.1	3
Concentrated Load Test	1607.8.1/1607.8.1.1	4
Drop Test	ANSI Z97.1	4
Drop Test	ANSI Z97.1	5
Drop Test	ANSI Z97.1	5



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OFFICIAL TEST REPORT

Revision	Description	Author	Effective Date
0	Initial Release	Ms. Lusinda Delgado	10/5/2016

Notes

* designates measurements by laboratory

** as per manufacturer

Fenestration Testing Laboratory Inc., does not have, nor does it intend to acquire or will acquire, a financial interest in any company manufacturing or distributing products tested or labeled by the Fenestration Testing Laboratory Inc. Fenestration Testing Laboratory Inc., is not owned, operated or controlled by any company manufacturing or distributing products it tests or labels.

Drawings referenced in this document are an integral part of this report, therefore, are required when distributing this test report. Test results obtained represent the actual value of the tested specimens and do not constitute opinion, endorsement or certification by this laboratory.

This test report is considered the exclusive property of the client named herein and is applicable to the sample tested. This report may not be reproduced without the approval of Fenestration Testing Laboratory, Inc.

At conclusion of above tests, there was no apparent damage to the concrete slab or fasteners and after the impact the glass did break, but remained in place and there wasn't any apparent tear in the inter layer film.

Remarks

Detailed drawings will be retained by Fenestration Testing Laboratory for a period of one year from the original test date, and test report for a period of four years. Due to the code cycle change it is recommended that this report be evaluated during the lifespan of this document.

This product was tested in accordance with ANSI Z-97.1-09 (FBC section 1618.4.6.3) with no deviations.

This product was tested in accordance with the Florida Building Code section 1607.8.1/1607.8.1.1 (concentrated load test) with no deviations.

Testing was conducted as per instructions received from the manufacturer's company representative.

DESCRIPTION OF SAMPLE

Model Designation:	Standoff Glass Railing
Overall Size:	4'-0" (48") by 4'-2" (50") high
Sample A-1	



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OFFICIAL TEST REPORT

Glazing			
Glazing Location	Glazing Material	Glazing Compound	Compound Color
One lite of glass	**9/16 nominal glass composed of (2) 1/4" **tempered glass	None	N/A
Interlaying Film: *0.090" **Kuraray SentryGlas®		Laminator: **Ready Glass	
Glazing Method: The glass was secured using stainless steel glass clamps. Each clamp had two protective neoprene washers on the interior and two rigid plastic projective washers on the exterior.			
Daylight Opening:	48" by 50" high		

Additional Information

The glass was secured to the concrete test slab using two stainless steel adjustable glass clamps located 5", 25", and 45" from left and 2 1/2" and 5 1/2" from bottom.

Sample Installation

The railing was installed into the face of a concrete test slab. The mounting stub of the glass clamp consists of one 1/2-20 by 4 1/2" long threaded rod and a drop in anchor. The standoff of the glass clamp consists of one 8-3/16 by 1" long threaded rod.

Sample: A-1		Temperature: 89.0°F	Barometric Reading: 30.11 inches Hg	
Title of Test		Load	Notes	
Concentrated Load Test		200 lbf	As per FBC section 1607.8.1/1607.8.1.1. The load was applied at the upper right corner of the glass.	
1				
Reading#	Deflection	Permanent Set	Results	Add. Info
1	5.75"	None	Passed	



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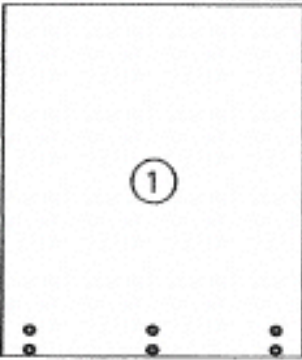
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Lab. Number: 9145

Project Number: 16-6710

OFFICIAL TEST REPORT

Sample: A-1		Temperature: 89.0°F		Barometric Reading: 30.11 inches Hg	
Title of Test		Load		Notes	
Concentrated Load Test		200 lbf		As per FBC section 1607.8.1/1607.8.1.1. The load was applied at the center of the glass.	
					
Reading#	Deflection	Permanent Set	Results	Add. Info	
2	3.187"	None	Passed		

Sample: A-1		Temperature: 89.0°F		Barometric Reading: 30.11 inches Hg	
Title of Test		Notes			
Drop Test		As per FBC section 1618.4.6.3			
					
Drop #	Results	Add. Info			
1	Passed	Impacted center of lite. After impact the glass did break but remained in the place and there wasn't any apparent tear in the inter layer film.			



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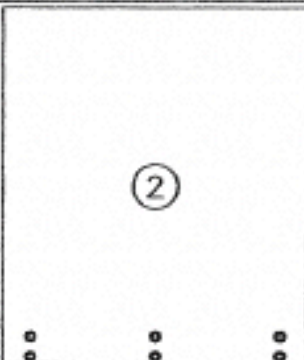
Expiration Date: 9/9/2028

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Lab. Number: 9145

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Sample: A-1	Temperature: 89.0°F	Barometric Reading: 30.11 inches Hg
Title of Test		Notes
Drop Test		As per FBC section 1618.4.6.3
		
Drop #	Results	Add. Info
2	Passed	Impacted center of lite. After impact the glass did break but remained in the place and there wasn't any apparent tear in the inter layer film.

Sample: A-1	Temperature: 89.0°F	Barometric Reading: 30.11 inches Hg
Title of Test		Notes
Drop Test		As per FBC section 1618.4.6.3
		
Drop #	Results	Add. Info
3	Passed	Impacted center of lite. After impact the glass did break but remained in the place and there wasn't any apparent tear in the inter layer film.

Witnessed by:
Ms. Idalmis Ortega, FTL P.E.
Mr. David Viera

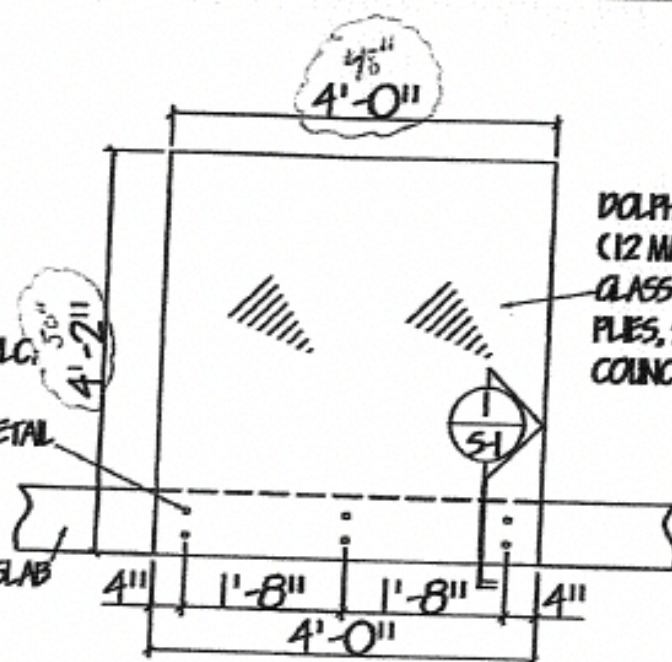
FENESTRATION TESTING LABORATORY, INC.

Technicians:
Mr. Michael Chala

Mr. Manny Sanchez
Chief Executive Officer

ARTEFERRO MIAMI D.L.C.
GLASS STAND OFF
CONNECTOR, SEE DETAIL
TYPICAL 4 PLACES

8" CONC. SLAB

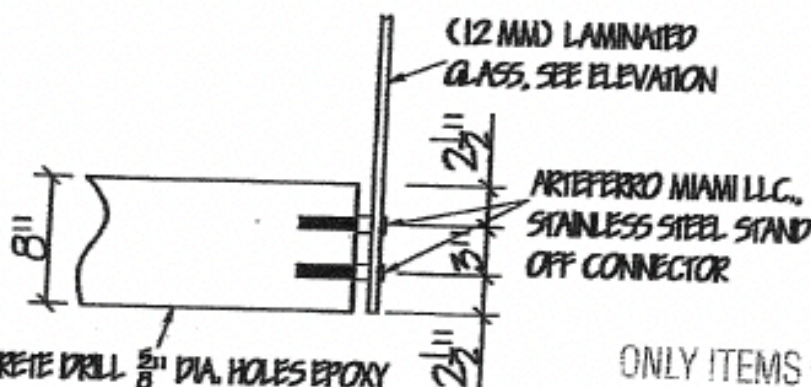
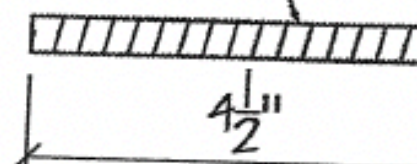


DOLPHIN GLASS SPECIALTIES, LLC,
(12 MM THICKNESS, LAMINATED
GLASS MADE OF CLASS A CLASS 2
PLUS, SAFETY GLAZING CERTIFICATION
COUNCIL ID. NO. 4729

48" STAND OFF GLASS ELEVATION

$$\frac{1}{2}'' = 1'-0''$$

3/8" DIA. S.S. 304 ROD



8" CONCRETE DRILL 5/8" DIA. HOLES EPOXY
3/8" DIA. S.S. RODS FROM ACCESSORY W/
HILTI HIT-HY-200 ADHESIVE

(12 MM LAMINATED
GLASS, SEE ELEVATION

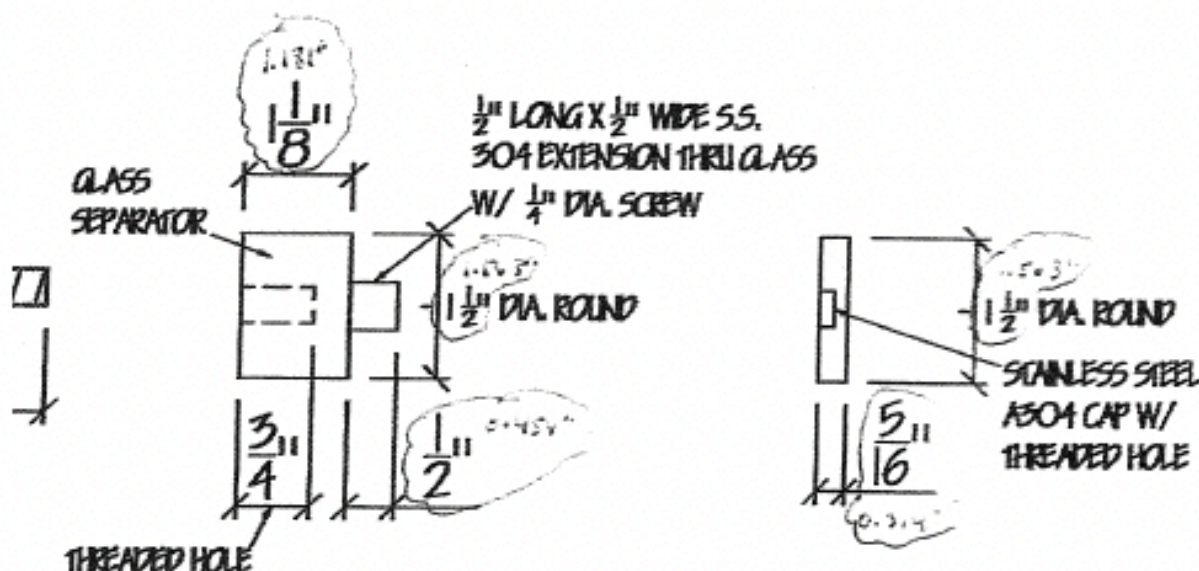
ARTEFERRO MIAMI D.L.C.,
STAINLESS STEEL STAND
OFF CONNECTOR

ONLY ITEMS CHECKED IN RED HAVE
BEEN VERIFIED BY LABORATORY

SECTION 1
1" = 1'-0" S-1

[Signature]
3392-16
C-16

1
B
H
2
1
V
3
4
P
5



GLASS STAND OFF CONNECTOR

6" = 1'-0"

NOTE: PROVIDE 1/8" THICK NEOPRENE WASHERS, BOTH SIDES OF GLASS WHEN TIGHTENING CAPS

FENESTRATION TESTING LAB, INC.

LAB # 9145

DATE: 10/31/16

DRAWING VERIFIED BY: JLB

GENERAL NOTES:

- GLASS PANEL SHALL BE TESTED IN COMPLIANCE WITH THE FLORIDA BUILDING CODE 2014, 5TH EDITION SECTION ON HIGH WIND VELOCITY HURRICANE ZONE FOR IMPACT LOADS, ANSI Z97.1-2009, 400 FT-LB IMPACT TEST.
- GLASS USED IN THE ASSEMBLY SHALL BE DOLPHIN GLASS SPECIALISTS, LLC., 2 MM THICKNESS, SAFETY GLAZING CERTIFICATION COUNCIL ID. 4729, MADE WITH CLASS A GLASS LAMINATED MINIMUM 2 PLYES.
- ALL STAINLESS STEEL PARTS IN THE CONNECTOR SHALL BE A304.
- CONCRETE SLAB SHALL ATTAIN A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI AT THE END OF 28 DAYS.
- USE ONLY HILTI HIT-HY-200 ADHESIVE IN SETTING THREADED RODS.

REVISIONS	BY



ALFREDO ARRIAGA, JR. P.E.
REGISTERED PROFESSIONAL ENGINEER, STATE OF FLORIDA
P.E. NO. 100,000
P.O. BOX 100, MIAMI

48" GLASS WITH STAND OFF
CONNECTION FOR:
DAVID VIERA, LLC.
8840 N.W. 161 ST.
MIAMI LAKES, FL. 33018

DRAWN:	A.A.A.
CHECKED:	A.A.
DATE:	8-4-16
SCALE:	AS NOTED
JOB No. :	
SHEET:	S-1
	1 OF 1

