



Quality Accuracy Assurance

Fenestration Testing Laboratory, Inc.

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Report Date: 9/25/2015
 Completion Date: 9/3/2015
 Expiration Date: 9/3/2019
 Page No. Page 1 of 18
 Lab. Number: 8483
 Project Number: 15-5706

OFFICIAL TEST REPORT

MANUFACTURER: Aluminco S.A.

SPECIFICATIONS: Florida Building Code
 Concentrated Load Test
 ANSI Z97.1

ADDRESS: Inofita, Viotia Greece, 32011

PROJECT: Aluminco S.A.

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DESCRIPTION OF SAMPLE	
Model Designation:	Series: F50 Accord X Square Picket Railing
Overall Size:	10'-6" (126") by 3'-6 1/2" (42 1/2") high
Size and Location of Post:	Four 40" high aluminum vertical post located 4", 43 1/2", 82 5/8", and 122" from left
Size and Location of Pickets:	Nine 122" long aluminum horizontal pickets located 4 1/8" on center
Sample H-1	

MATERIAL CHARACTERISTICS			
Members	Material**	Part Number**	Joint Type
Hand Rail	6060-T6	F50-201	N/A
Vertical Post	6060-T6	F50-109	N/A
Horizontal Pickets	6060-T6	F50-302	N/A
Picket Bracket	6060-T6	4245	N/A
Two Piece Saddle	6060-T6	4328	N/A
Cover	6060-T6	F50-122	N/A

Additional Information
<p>The sample was tested using one 126" long extruded aluminum hand rail (part No. F50-201). The hand rail was fastened to the vertical post using one two piece saddle (part No. 4328) per post. The saddle slides into the vertical post and is secured with epoxy, the saddle is fastened together using one 1/4-28 by 5/8" FH MS and the saddle is fastened to the hand rail using two 1/4-28 by 5/8" FH MS with nut.</p> <p>The pickets slide into an extruded aluminum bracket (part No. 4245) at each vertical post. The brackets were fastened to each vertical post using one No. 10 by 1 1/2" FH SDS. The horizontal pickets were fastened to the bracket using one No. 8 by 3/4" FH SDS.</p> <p>The sample was tested using a snap on extruded aluminum cover (part No. F50-122) at each vertical post.</p>

Sample Installation
<p>The sample was installed onto a 3,000 psi concrete test slab using one 4" by 4" by 1/4" thick aluminum installation plate at bottom of each post. The installation plate was fastened to concrete slab using four 1/2" by 4" HWH wedge bolts. And the installation plate was fastened to each vertical post using four 5/16-28 by 1 1/2" OH MS.</p>



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Sample: H-1		Temperature: 85°F		Barometric Reading: 30.12 inches Hg	
Title of Test		Load		Notes	
Concentrated Load Test		525.0 lbs		As per FBC section 1607.8.1. A horizontal load was applied at the center of the hand rail.	
Reading#	Deflection	Permanent Set	Results	Add. Info	
1	2.475"	0.181"	Passed		

Sample: H-1		Temperature: 85°F		Barometric Reading: 30.12 inches Hg	
Title of Test		Load		Notes	
Concentrated Load Test		200.0 lbs		As per FBC section 1607.8.1.1. A horizontal load was applied at the corner of the hand rail.	
Reading#	Deflection	Permanent Set	Results	Add. Info	
2	2.000"	0.125"	Passed		



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Sample: H-1		Temperature: 85°F		Barometric Reading: 30.12 inches Hg	
Title of Test		Load		Notes	
Concentrated Load Test		50.0 lbs		As per FBC section 1607.8.1.2. A horizontal load was applied at the picket.	
Reading#	Deflection	Permanent Set	Results	Add. Info	
3	n/a	n/a	Passed		

Revision	Description	Author	Effective Date
0	Initial Release	Ms. Iliana Sanchez	9/25/2015
1	Renamed the report as per manufactures instructions	Ms. Lusinda Delgado	12/15/2015

Notes
<p>* designates measurements by laboratory ** as per manufacturer</p> <p>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.</p> <p>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.</p> <p>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.</p>



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Remarks

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

This product was tested and meets the requirement set forth by the Florida Building Code (2014) concentrated load test sections 1607.8.1, 1607.8.1.1 and 1607.8.1.2.

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

Testing was conducted as per instructions received from the manufacturers company representative.

Witnessed by:
Ms. Idalmis Ortega, P.E.

Technicians:
Mr. Harold Anacona

FENESTRATION TESTING LABORATORY, INC.

Mr. Manny Sanchez
Chief Executive Officer