



Quality Accuracy Assurance

Fenestration Testing Laboratory, Inc.

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Report Date: 7/3/2015
 Completion Date: 6/4/2015
 Expiration Date: 6/4/2019
 Page No. Page 1 of 16
 Lab. Number: 8398
 Project Number: 15-5706

OFFICIAL TEST REPORT

CLIENT: Aluminco S.A.

SPECIFICATIONS: Florida Building Code
 Concentrated Load Test

ADDRESS: Inofita, Viotia Greece, 32011

PROJECT: Aluminco S.A.

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DESCRIPTION OF SAMPLE	
Model Designation:	Series: F50 Accord Picket Railing
Overall Size:	10'-6" (126") by 3'-6 1/4" (42 1/4") high
Size and Location of Post:	Four 39" high aluminum horizontal post located 4", 43", 82 3/8" and 121 3/4" left
Size and Location of Pickets:	Nine 122 1/8" long aluminum horizontal pickets located 4 1/8" on center
Sample G-1	

MATERIAL CHARACTERISTICS			
Members	Material**	Part Number**	Joint Type
Hand Rail	6060-T6	F50-200	n/a
Vertical Post	6060-T6	F50-107	n/a
Horizontal Pickets	6060-T6	F50-300/1	n/a
Two Piece Picket Bracket	6060-T6	4312	Butt joint
Saddle	6063-T6	4314	Butt joint
Anchor Base	6060-T6	986-200	n/a

Additional Information
<p>The sample was tested using one 126" long aluminum hand rail. The hand rail was fastened to the vertical post using one saddle (part No. 4314) per post. The saddle slides onto the vertical post and is secured with epoxy and the saddle is fastened to the hand rail using two No. 8 by 3/4" FH SDS.</p> <p>The pickets slide into a two piece extruded aluminum bracket (part No. 4312) at each vertical post and were fastened to the bracket using two 10-32 by 3/16" socket set MS. the bracket was fastened to the vertical post using one No. 8 by 1 1/2" FH SDS.</p> <p>The sample was tested using one extruded aluminum anchor base. The anchor base was below each vertical post and was fastened to the vertical post using one M8 by 1" socket set MS.</p>

Sample Installation
<p>Each vertical post was anchored to the concrete test slab using one 9 1/16" long metallic installation pin (part No. 4188). The installation pin penetrates 5 1/8" into the vertical post and was fastened to the vertical post using three No. 8 by 3/4" FH SDS. The installation pin was set into a 5/8" diameter hole using **Aluminco UA320-1EL polyester resin.</p>



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Sample: G-1		Temperature: 78°F		Barometric Reading: 30.05 inches Hg	
Title of Test		Load		Notes	
Concentrated Load Test		525.0 lbs		As per FBC section 1607.7.1 A horizontal load was applied at mid span of the handrail.	
Reading#	Deflection	Permanent Set	Results	Add. Info	
1	3.000"	0.598"	Passed		



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Sample: G-1		Temperature: 78°F		Barometric Reading: 30.05 inches Hg	
Title of Test		Load		Notes	
Concentrated Load Test		200.0 lbs		As per FBC section 1607.7.1.1 A horizontal load was applied at the corner of the handrail.	
Reading#	Deflection	Permanent Set	Results	Add. Info	
1	2.250"	0.312"	Passed		



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Sample: G-1		Temperature: 78°F		Barometric Reading: 30.05 inches Hg	
Title of Test		Load		Notes	
Concentrated Load Test		3.50.0 lbs		As per FBC section 1607.7.1.2 A horizontal load was applied in a one square foot area.	
Reading#	Deflection	Permanent Set	Results	Add. Info	
3	n/a	n/a	Passed		



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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/wall, sample or fasteners.</p>

Remarks
<p>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.</p> <p>This product was tested and meets the requirement set forth by the Florida Building Code (2010) concentrated load test sections 1607.7.1, 1607.7.1.1 and 1607.7.1.2.</p> <p>Testing was conducted as per instructions received from the manufacturers company representative.</p>

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

Technicians:
Mr. Harold Anacona

FENESTRATION TESTING LABORATORY, INC.

Mr. Manny Sanchez
Chief Executive Officer