



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

e-mail: clientservices@ftl-inc.com www.ftl-inc.com

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.

Table of Contents

Sample	Page	Rev	Sample	Page	Rev
Sample E-1			Sample G-1 continued		
Description of Test Sample	2		Additional Information	9	
Material Characteristics	2		Test Sample Installation	9	
Additional Information	2		Results Sample G-1		
Test Sample Installation	3		Concentrated Load Test	FBC section 1607.7.1	10
Results Sample E-1			Concentrated Load Test	FBC section 1607.7.1.1	11
Concentrated Load Test	FBC section 1607.7.1	3	Concentrated Load Test	FBC section 1607.7.1.2	12
Concentrated Load Test	FBC section 1607.7.1.1	4	Sample I-1		
Sample F-1			Description of Test Sample	13	
Description of Test Sample	5		Material Characteristics	13	
Material Characteristics	5		Additional Information	13	
Additional Information	5		Test Sample Installation	13	
Test Sample Installation	6		Results Sample I-1		
Results Sample F-1			Concentrated Load Test	FBC section 1607.7.1	14
Concentrated Load Test	FBC section 1607.7.1	6	Concentrated Load Test	FBC section 1607.7.1.1	15
Concentrated Load Test	FBC section 1607.7.1.1	7	Revision Table	15	1
Concentrated Load Test	FBC section 1607.7.1.2	8	Notes Table	16	
Sample G-1			Remarks Table	16	
Description of Test Sample	9				
Material Characteristics	9				



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 Page No. Page 5 of 16
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OFFICIAL TEST REPORT

DESCRIPTION OF SAMPLE	
Model Designation:	Series: F50 Vertical Q Picket Railing
Overall Size:	10'-6 1/4" (126 1/4") by 3'-6 3/16" (42 3/16") high
Size and Location of Post:	Four 41" high aluminum vertical post located 4" and 43 3/8" from each end
Size and Location of Pickets:	Twenty eight 38" long aluminum vertical pickets located 4 3/8" on center
Sample F-1	

MATERIAL CHARACTERISTICS			
Members	Material**	Part Number**	Joint Type
Top Rail	6060-T6	F50-203	n/a
Bottom Rail	6060-T6	F50-310	n/a
Hand Rail	6060-T6	F50-223	n/a
Vertical Post	6060-T6	F50-109	n/a
Vertical Pickets	6060-T6	F50-302	n/a
Cover	6060-T6	F50-311	Butt joint
Vertical Post Cover	6060-T6	F50-122	Butt joint
Hand Rail Cover	6060-T6	4451-1	Butt joint
Bottom Rail Cover	6060-T6	F50-3K10	n/a

Additional Information
<p>The sample was tested using one snap on extruded aluminum cover (part No. F50-311) between each picket at the top and bottom rail.</p> <p>The hand rail snaps on the top rail and was fastened to the top rail at each end using one extruded aluminum cover (part No. 4451-1). The cover was fastened to the hand rail using one No. 8 by 3/4" FH SDS and the cover was fastened to the top rail using one No. 8 by 3/4" FH SDS.</p> <p>The top rail and bottom rail were fastened to each vertical post using two No. 10 by 1 1/2" FH SDS.</p> <p>The sample was tested using one snap on extruded aluminum cover (part No. F50-122) at each vertical post.</p> <p>The sample was tested using one snap on extruded aluminum cover (part No. F50-3K10) at each bottom rail.</p> <p>The sample was tested using one slide in extruded aluminum cover (part No. 4452) at each end of the bottom rails.</p>



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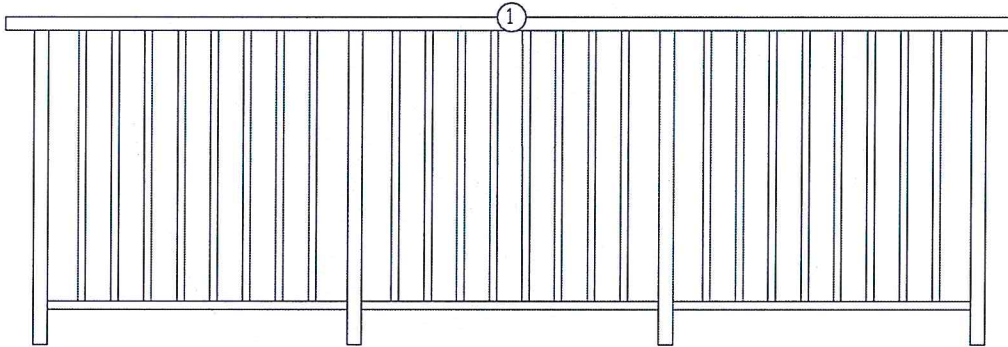
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 Expiration Date: 6/4/2019
 Page No. Page 6 of 16
 Lab. Number: 8398
 Project Number: 15-5706

OFFICIAL TEST REPORT

Sample Installation
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.

Sample: F-1	Temperature: 85°F	Barometric Reading: 29.96 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	2.625"	0.375"	Passed	



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 Page No. Page 7 of 16
 Lab. Number: 8398
 Project Number: 15-5706

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Sample: F-1		Temperature: 85°F		Barometric Reading: 29.96 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	2.437"	0.250"	Passed		



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 Page No. Page 8 of 16
 Lab. Number: 8398
 Project Number: 15-5706

OFFICIAL TEST REPORT

Sample: F-1		Temperature: 85°F		Barometric Reading: 29.96 inches Hg	
Title of Test		Load		Notes	
Concentrated Load Test		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

* designates measurements by laboratory

** as per manufacturer

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/wall, sample or fasteners.

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 (2010) concentrated load test sections 1607.7.1, 1607.7.1.1 and 1607.7.1.2.

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

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

Technicians:
Mr. Harold Anacona

FENESTRATION TESTING LABORATORY, INC.

Mr. Manny Sanchez
Chief Executive Officer