



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: F50-200 and 4140 Hand Rail
Overall Size of Hand Rail:	9'-10 1/8" (118 1/8") long
Sample I-1	

MATERIAL CHARACTERISTICS			
Members	Material**	Part Number**	Joint Type
Hand Rail	6060-T6	F50-200	n/a
Two Piece Mounting Bracket with Saddle	6060-T6	F50-4140	Butt joint

Additional Information
The sample was tested using one 118 1/8" long aluminum hand rail. The hand rail was fastened to four two-piece mounting brackets with saddles (part No. F50-4140) located 1 1/2", 39 3/8", 79" and 116 1/2" from left. The saddle was fastened to the hand rail using two No. 8 by 3/4" FH SDS. The saddle was fastened to the two piece mounting bracket using one M5 by 13/16" FH MS and the two piece bracket was fastened together using one M5 by 13/16" FH MS.

Sample Installation
The mounting bracket was fastened to the concrete test wall using three 3/16" by 2 1/4" concrete fasteners.



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Sample: I-1	Temperature: 78.9°F	Barometric Reading: 29.92 inches Hg		
Title of Test		Load	Notes	
Concentrated Load Test		491.0 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	0.374"	0.014"	Passed	



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Sample: I-1	Temperature: 78.9°F	Barometric Reading: 29.92 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	0.145"	0.025"	Passed	

Revision	Description	Author	Effective Date
0	Initial Release	Ms. Iliana Sanchez	7/3/2015
1	Renamed the report as per manufactures instructions	Ms. Lusinda Delgado	12/15/2015



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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