

PERFORMANCE TEST REPORT

Rendered to:

ALLIED METAL

SERIES/MODEL: ESTOLGA 3000

PRODUCT TYPE: Aluminum Composite Wall Panel System

Title	Summary of Results
Air Infiltration	<0.01 cfm/ft ²
Water Resistance Test Pressure	12.12 psf
Uniform Load Deflection Test Pressure	±120.37 psf
Uniform Load Structural Test Pressure	±180.56 psf

Reference should be made to Architectural Testing, Inc. Report No. 73801.03-109-44 for complete test specimen description and data.

PERFORMANCE TEST REPORT

Rendered to:

ALLIED METAL
3114 Tonnelle Avenue
North Bergen, New Jersey 07047

Report No.: 73801.03-109-44
Revision 1: 12/08/08
Test Date: 05/29/07
Through: 05/30/07
Report Date: 07/05/07
Expiration Date: 05/30/11

Project Summary: Architectural Testing, Inc. was contracted by Allied Metal to perform testing on a Series/Model ESTOLGA 3000, aluminum composite wall panel system. Test specimen description and results are reported herein. The sample was provided by the client.

Test Methods: The test specimen was evaluated in accordance with the following:

ASTM E 283-04, Test Method for Determining Rate of Airflow Through Exterior Windows, Curtain Walls and Doors Under Specified Pressure Differences Across the Specimen.

ASTM E 330-02, Test Method for Structural Performance of Exterior Windows, Curtain Walls and Doors by Uniform Static Air Pressure Difference.

ASTM E 331-00, Test Method for Water Penetration of Exterior Windows, Curtain Walls and Doors by Uniform Static Air Pressure Difference.

Test Specimen Description:

Series/Model: ESTOLGA 3000

Product Type: Aluminum Composite Wall Panel System

Overall Size: 36-1/8" wide by 46-1/8" high

Panel Size (16): 8-1/2" wide by 11" high

Overall Area: 11.57 ft²

Test Specimen Description: (Continued)

Finish: All aluminum composite panels are mill finished.

Wall Panel Construction: The 8-1/2" by 11" composite panel was constructed from two sheets of 0.020" thick aluminum with a 0.120" thick polyethylene core. A 4-5/8" wide by 3" long aluminum clip was installed on all horizontal panel intersections. A 3" wide by 7" long aluminum clip was installed on all vertical panel intersections. Continuous aluminum U-shaped spacer tracks were installed between all panels using #10 x 1" self-tapping screws into plywood sheathing. A continuous 3/8" foam backer rod was installed onto the aluminum spacer tracks. A silicone sealant was applied between all panels, onto the foam backer rod. Aluminum gusset plates were installed on all panel corners using two #8 x 1/2" self-tapping screws attached 1" from all corners.

Wall Construction: The frame was constructed of 2x6 Spruce-Pine-Fir members. Vertical Spruce-Pine-Fir studs, spaced 16" on center were utilized. 5/8" thick plywood sheathing was secured to the frame with #10 x 2-1/4" Tek screws. 1/2" Densglass sheathing was secured to the exterior of the plywood with #10 x 1-1/4" Tek screws. A perforated weather barrier was sealed to the sheathing with a silicone sealant.

Hardware:

<u>Description</u>	<u>Quantity</u>	<u>Location</u>
Continuous aluminum spacer track 5/8" wide by 3/4" high	1	Between all vertical panels
Aluminum spacer track 5/8" wide by 3/4" high by 8-1/2" long	1	Between all horizontal panels
Aluminum gusset plate	1	Each corner on all panels

Reinforcement: No reinforcement was utilized.

Test Results: The temperature during testing was 74°F. The results are tabulated as follows:

<u>Test Method</u>	<u>Title of Test</u>	<u>Results</u>
ASTM E 283	Air Infiltration	
	1.6 psf	<0.01 cfm/ft ²
	4.0 psf	<0.01 cfm/ft ²
	6.24 psf	<0.01 cfm/ft ²

Test Results: (Continued)

<u>Test Method</u>	<u>Title of Test</u>	<u>Results</u>
ASTM E 547 and E 331	Water Resistance 12.12 psf	No leakage
ASTM E 330	Uniform Load Deflection (Deflections reported were taken on the panel) (Loads were held for 10 seconds) 120.37 psf (positive) 120.37 psf (negative)	<0.01" <0.01"
ASTM E 330	Uniform Load Structural (Permanent sets reported were taken on the panel) (Loads were held for 10 seconds) 180.56 psf (positive) 180.56 psf (negative)	<0.01" <0.01"

General Note: Upon completion of testing, the specimens met the requirements of the referenced standards.

Tape and film were used to seal against air leakage during structural testing. In our opinion, the tape and film did not influence the results of the test.

Drawing Reference: The test specimen drawings have been reviewed by Architectural Testing, and are representative of the test specimen reported herein.

List of Official Observers:

<u>Name</u>	<u>Company</u>
Henry Bilge	Allied Metal
Michael D. Stremmel, P.E.	Architectural Testing, Inc.
Eric M. Brennan	Architectural Testing, Inc.

Detailed drawings, data sheets, representative samples of test specimens, a copy of this report, or other pertinent project documentation will be retained by Architectural Testing, Inc. for a period of four years from the original test date. At the end of this retention period, such materials shall be discarded without notice and the service life of this report will expire.

Results obtained are tested values and were secured by using the designated test methods. No conclusions of any kind regarding the adequacy or inadequacy of the glass in the test specimen can be made. This report does not constitute certification of this product nor an opinion or endorsement by this laboratory. It is the exclusive property of the client so named herein and relates only to the specimen(s) tested. This report may not be reproduced, except in full, without the written approval of Architectural Testing, Inc.

For ARCHITECTURAL TESTING, INC:

Eric M. Brennan
Technician

Michael D. Stremmel, P.E.
Senior Project Engineer

EMB:vlm

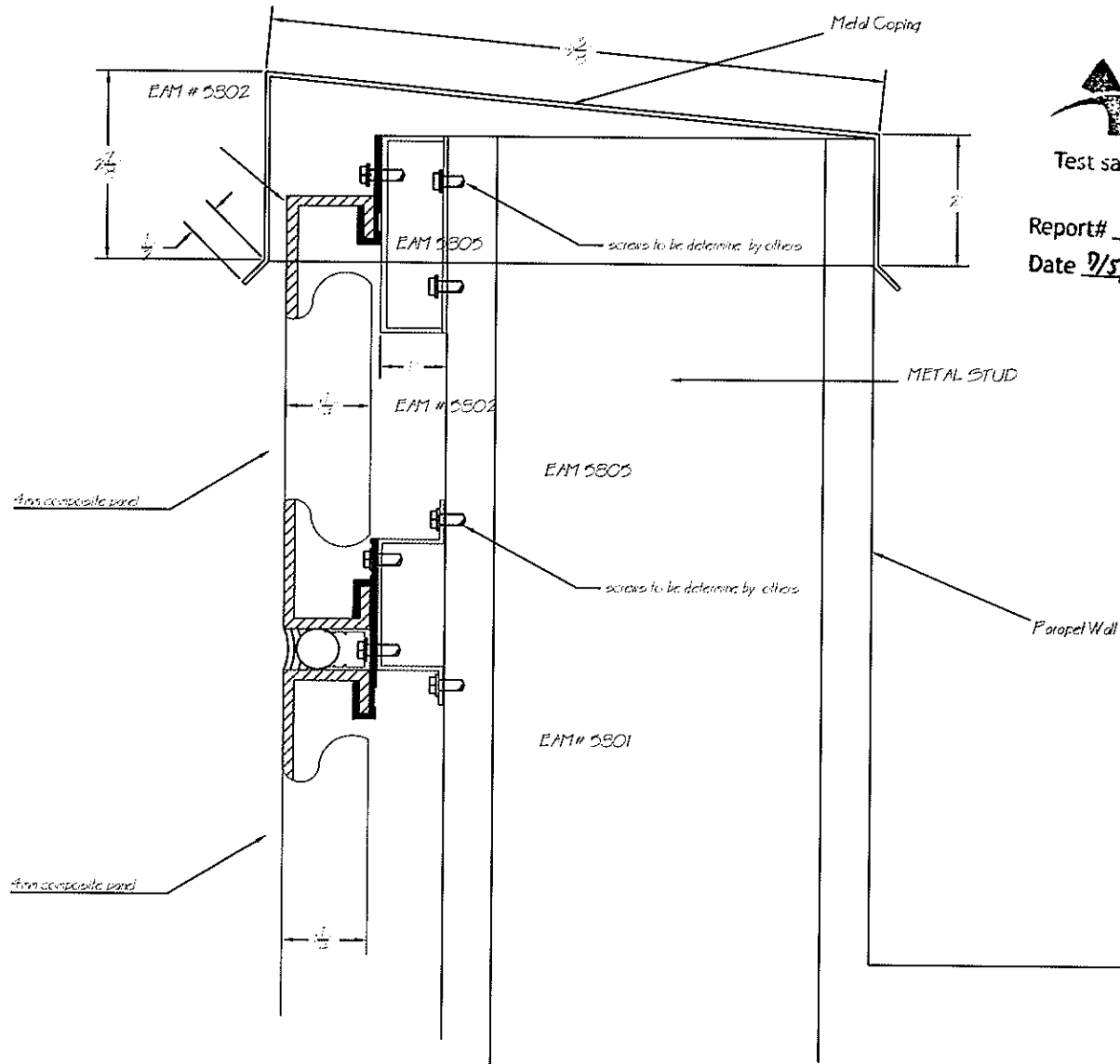
Attachments (pages): This report is complete only when all attachments listed are included.
Appendix-A: Drawings (5)

Revision Log

<u>Rev. #</u>	<u>Date</u>	<u>Page(s)</u>	<u>Revision(s)</u>
0	07/10/07	N/A	Original report issue
1	12/08/08	Summary Page and Page 1	Removed Dry Seal from Series/Model

Appendix A

Drawings



Architectural Testing

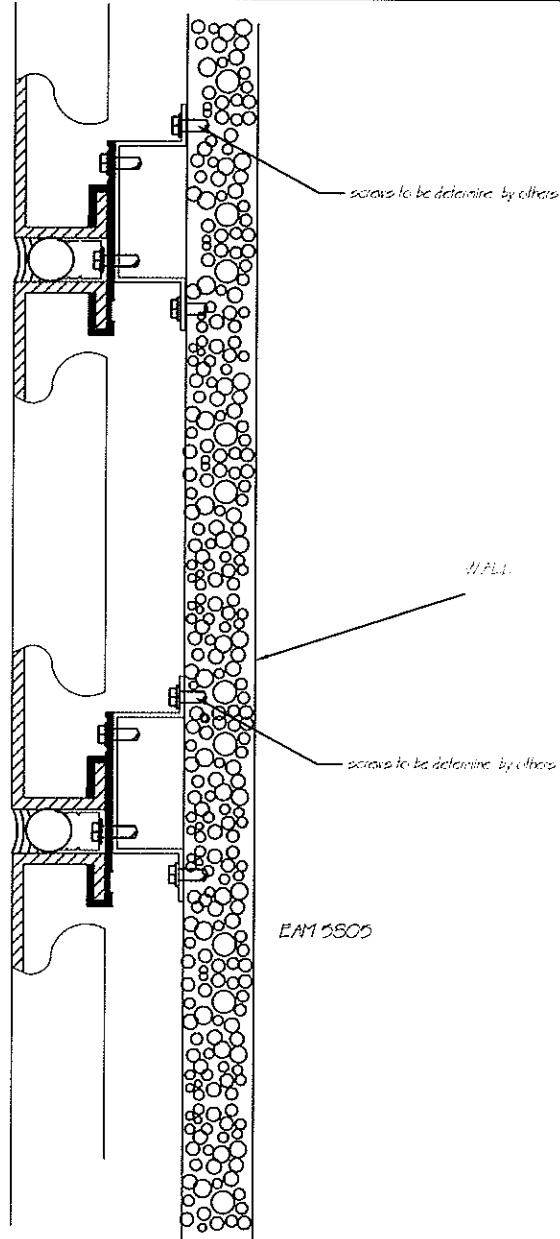
Test sample complies with these details.
Deviations are noted.

Report# 93801.03-109-44

Date 7/5/17 Tech Brennan

AlliedMetal "ESTOLGA 3000" Dry Seal System 888-520-8800 www.alliedmetal.com	Date: 04.17.2007	Scale:	Coping Detail at Parapet Wall
	Project Name:	Project Address:	

1MM composite panel



Architectural Testing

Test sample complies with these details.
Deviations are noted.

Report# 73801.03-109-44

Date 9/5/17 Tech Brennan

AlliedMetal
"ESTOLGA 3000"
Dry Seal System
888-520-8800
www.alliedmetal.com

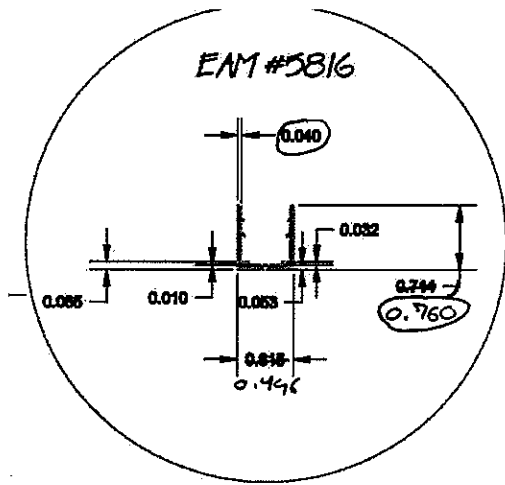
Date: 04.17.2007

Scale:

Window Sill Detail

Project Name:

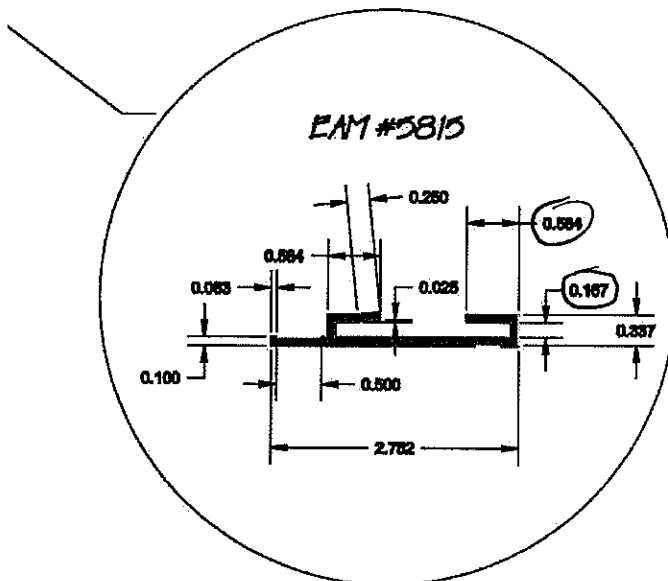
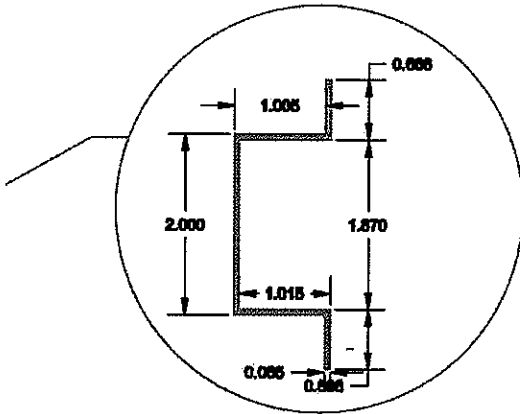
Project Address:



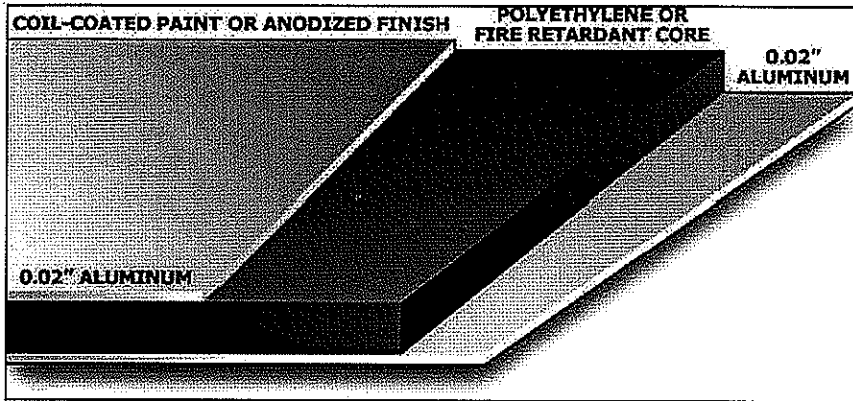
Test sample complies with these details.
Deviations are noted.

Report# 73801.03-104-44

Date 7/5/77 Tech Brennan



ALUCOBOND PANEL



Architectural Testing

Test sample complies with these details.
Deviations are noted.

Report# 73801.03-109-44

Date 9/5/9 Tech Brennan

