



DATE: May 5, 1992

Report #18154

**SUBMITTED BY:** Petersen Aluminum Corporation

955 Estes Avenue

Elk Grove Village, IL 60007

**DATE OF TESTING:** April 22, 1992

**TESTING FACILITY:** The Dallas Laboratories, Inc.

Dallas, Texas

**WITNESSED BY:** 

Yoosef Lavi, P.E. — Lavi & Associates

Andy Wilson — The Dallas Laboratories, Inc. Larry Warren — The Dallas Laboratories, Inc. Don Davidson — Petersen Aluminum Corporation Josh Jacobi - Petersen Aluminum Corporation

**TESTS:** 

ASTM E 331-86- Standard test method for water penetration of exterior windows, curtain walls and doors by uniform static air pressure differ-

ence.

ASTM E 283-91- Standard test method for rate of air leakage through

exterior windows, curtain walls, and doors.

## **DESCRIPTION OF UNIT TESTED**

Type: Metal deck roof panel

Series: Integral Standing Seam

Panel Profile: 18 wide by 1-1//2 high

Overall size: 8 -0 wide by 10 -0 long



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Test unit was installed over an 8 -0 wide by 10 -0 long chamber, at a slope of approximately 2:12 in the following sequence.

15/32 plywood decking supported at 24 o.c., was installed as substrate support. Type 30 organic felt as underlayment was installed over the plywood using 3/8 long steel staples. 18 wide by .024 thick panels were attached to the substrate using clips at 24 o.c.. The Clips were made of .050 extruded aluminum, and were fastened with 2 No. 10 x 1 long coated steel screws.

## **SUMMARY OF TEST RESULTS**

<u>Title of Test</u>	Test Method	Measured
Air Infiltration @ 1.57 psf	ASTM E 2283-91	.02CFM/FT2
Air Infiltration @ 6.24 psf	ASTM E 283-91	.06CFM/Ft2
Air Exfiltration @ 1.57 psf	ASTM E 283-91	.03CFM/Ft2
Air Exfiltration @ 6.24 psf	ASTM E 283-91	.11CFM/Ft2
Water Penetration @ 12.00 psf	ASTM E 331-86	No Leakage

The above test results were obtained using the applicable ASTM test methods.

TEST SUPERVISED BY:	TEST CONDUCTED BY:	
Yoosef Lavi, P.E.	Larry Warren	