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Report # 25673

SUBMITTED BY: Petersen Aluminum Corporation  
1005 Tonne Road  
Elk Grove Village, Illinois 60007DATE OF TESTING: March 25, 1997TESTING FACILITY: The Dallas Laboratories, Inc.  
Dallas, TexasWITNESSED BY:  
Yoosef Lavi, P.E. - Lavi & Associates  
Andy Wilson - The Dallas Laboratories, Inc.TESTS:ASTM E-1680-95- Standard Test Method For:  
Rate of Air Leakage Through Exterior Metal Roof  
Panel SystemsASTM E-1646-95- Standard Test Method For:  
Water Penetration of Metal Roof Panel Systems  
by Uniform Static Air Pressure DifferenceDESCRIPTION OF UNIT TESTEDType: Metal deck roof panel  
Series: Snap-Clad roof panel  
Panel Profile: 18" wide by 1-3/4" high  
Overall size: 8'-0" wide by 10'-0" long

18 in. wide by 1-3/4 in. high, and 0.024 in. thick Snap-Clad roof panels were installed over 6 in. deep by 16 ga. thick "C" purlins, which in turn were attached to a 8'-0" wide by 10'-0" long chamber. Purlins were spaced at 3'-4" on centers as shown on roof plan drawing of this report.

Panels were installed using the Snap-Clad roof panel standard clips. Panels were installed with factory applied sealant installed at female corrugation of the panel. No endlap condition was included in this evaluation.

Side, ridge, and eave condition was not a part of this evaluation, and therefore were excluded from this evaluation. This was accomplished by sealing the ends and sides of the panel to the test frame.

The specimen was constructed using the following sequence:  
A 16" wide start up panel was secured over the purlins using Snap-Clad roof panel standard clips, and 2-#10 Pancake head fasteners. Following installation of the start up panel a full width panel was installed by snapping the female portion of the panel over the male section. This sequence was followed throughout the installation.

Upon completion of the panel installation, the test specimen was preloaded for 22.5 psf positive and negative load respectively. Following preloading, the specimen was tested for air infiltration, and water penetration in accordance with:  
ASTM E-1680-95 and ASTM E-1646-95 respectively.

The summary of test results are shown below.

#### SUMMARY OF TEST RESULTS

<u>Title of test</u>	<u>Test Method</u>	<u>Measured</u>
Air Infiltration @ 1.57 psf	ASTM E-1680-95	.037 cfm/ft <sup>2</sup> .059 cfm/Lft
Air Infiltration @ 6.24 psf	ASTM E-1680-95	.066 cfm/ft <sup>2</sup> .105 cfm/Lft
Water Penetration @ 6.24 psf	ASTM E-1646-95	No leakage

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

Panels tested were not the actual job condition length.

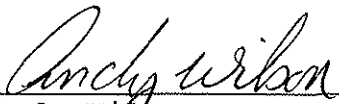
Ambient temperature was measured at 67, and 68 degrees fahrenheit, prior to and during testing respectively.

Surface temperature of the panel during the test was measured at 57 degrees fahrenheit.

TEST SUPERVISED BY:

TEST CONDUCTED BY:

  
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Yoosef Lavi, P.E.

  
\_\_\_\_\_  
Andy Wilson

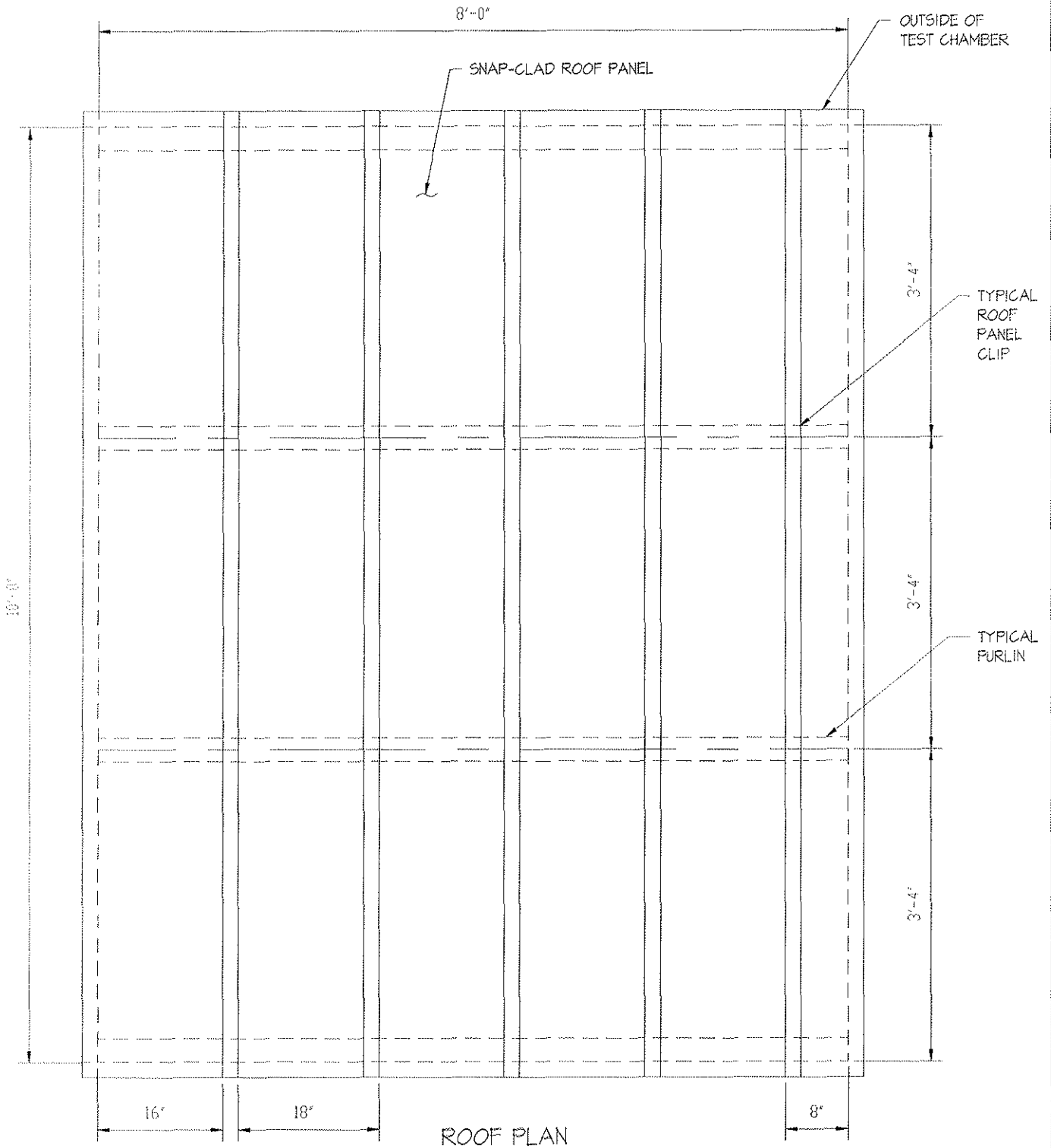
JOB NAME: PETERSON ALUMINUM

REPORT # 25673

SUBJECT: SNAP-CLAD

DATE: 6/10/97

SHEET NO.: 4 OF 5



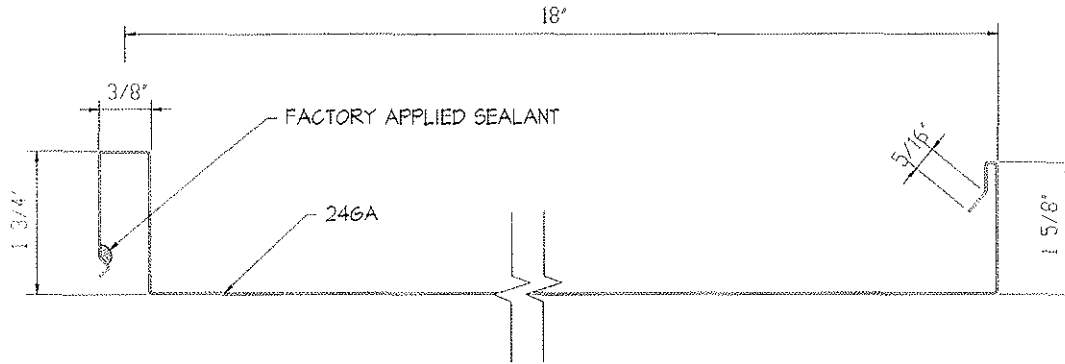
JOB NAME: PETERSON ALUMINUM

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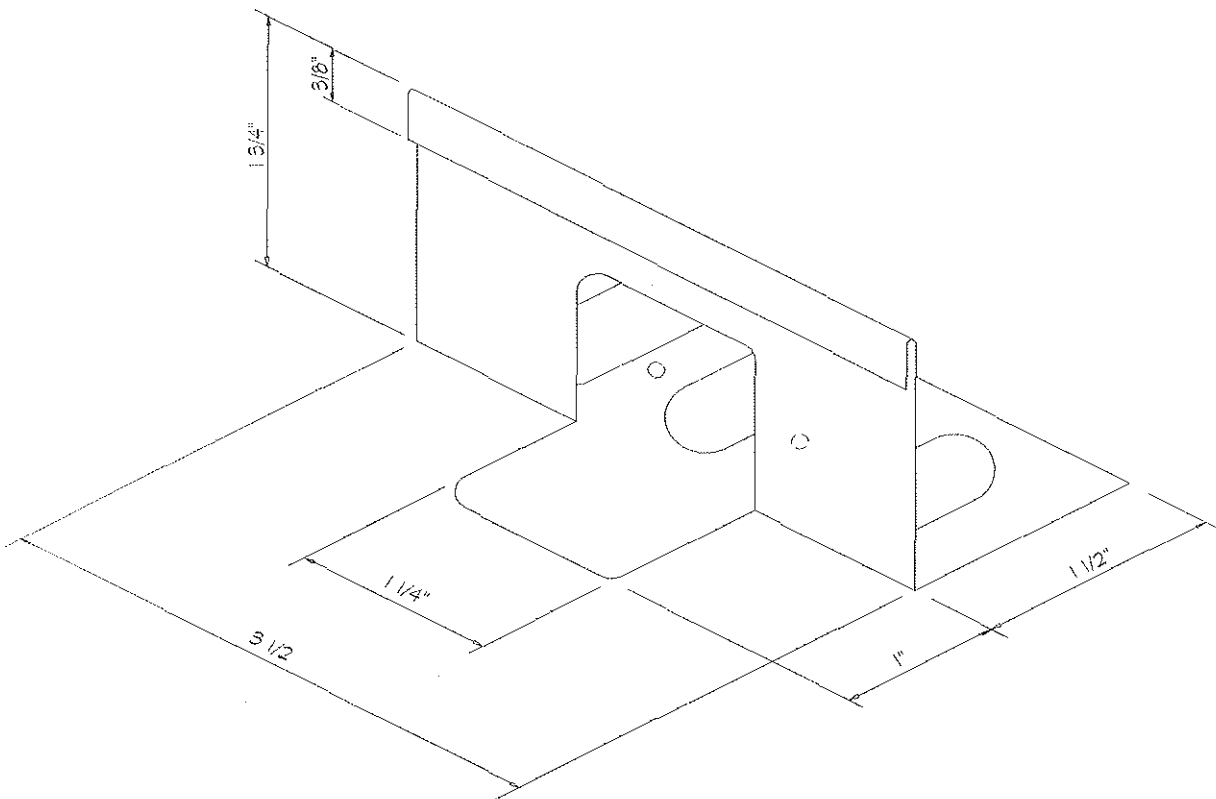
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SNAP-CLAD PANEL PROFILE



SNAP-CLAD ROOF PANEL CLIP