

AAMA 508 TEST REPORT

Rendered to:

NORTHCLAD RAINSCREEN SOLUTIONS

SERIES/MODEL: NorthClad ACM

**PRODUCT TYPE: Aluminum Composite Material
Rain Screen Wall Cladding System**

Report No.:	94364.01-901-44
Test Date:	09/23/09
Report Date:	10/09/09
Test Record Retention End Date:	09/23/13
Revision 1:	11/14/13

AAMA 508 TEST REPORT

Rendered to:

NORTHCLAD RAINSCREEN SOLUTIONS
11831 Beverly Park Road, Building C
Everett, WA 98204

Report No.: 94364.01-901-44
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Project Summary: Architectural Testing, Inc. was contracted by NorthClad Rainscreen Solutions to conduct performance tests on their Aluminum Composite Material (ACM) panel system. General construction details and test results are included herein.

Test Methods: The test specimen was evaluated in accordance with AAMA 508-07, *Voluntary Test Method and Specification for Pressure Equalized Rain Screen Wall Cladding Systems*.

Test Specimen Description: Reference attached drawings

Overall Size: 96" wide by 96" high

Panel Sizes (4): 47-1/2" wide by 47-1/2" high

Test Set-Up:

An 8' wide by 8' high stud wall was constructed with 2 x 4 wood studs spaced 24" on center inside a 2 x 8 wood buck. The stud wall was covered with a 1/4" thick sheet of clear polycarbonate sealed and fastened to the exterior of the wall to simulate an air/water barrier. The rain screen system was then installed in a manner consistent with normal construction procedures for the system, and the perimeter was sealed to the test buck to eliminate water leakage around the perimeter.

The polycarbonate was calibrated to a pre-determined air leakage rate by drilling 1/8" diameter holes in the back side of the polycarbonate, in a uniform pattern, making sure to create an even pressure drop and leakage rate across the wall and in each quadrant.

Test Results: The following results have been recorded.

<u>Title of Test - Test Method</u>	<u>Results</u>	<u>Allowed</u>
Air Infiltration per ASTM E 283 @ 1.57 psf	0.117 cfm/ft ²	Between 0.108 and 0.132 cfm/ft ²
*Pressure Cycling per ASTM E 1233 100 cycles @ 25.00 psf	<0.08 sec.	0.08 sec.
Water Penetration per ASTM E 331 @ 6.24 psf	Approx. 0.3 ft ²	3.2 ft ²
Water Penetration per AAMA 501.1 @ 6.24 psf	Approx. 0.8 ft ²	3.2 ft ²

**Cavity pressure readings were taken in the top right and bottom left quadrants (interior view).*

Test Witnesses: The following representatives witnessed all or part of the testing:

<u>Name</u>	<u>Company</u>
Brian Elbert	NorthClad Rainscreen Solutions
Dave Killian	NorthClad Rainscreen Solutions
Paul Brunner	Architectural Testing, Inc.
Steve Powers	Architectural Testing, Inc.
Jeffrey Dideon	Architectural Testing, Inc.

Detailed drawings, data sheets, 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. This report does not constitute certification of this product nor an opinion or endorsement by this laboratory. This report is not intended as a comprehensive evaluation of the system regarding performance and application to specific buildings. 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.

Brian L. Rasmussen
Technician

Jeffrey L. Dideon
Director – Regional Operations

JLD:pac

Attachments (pages):

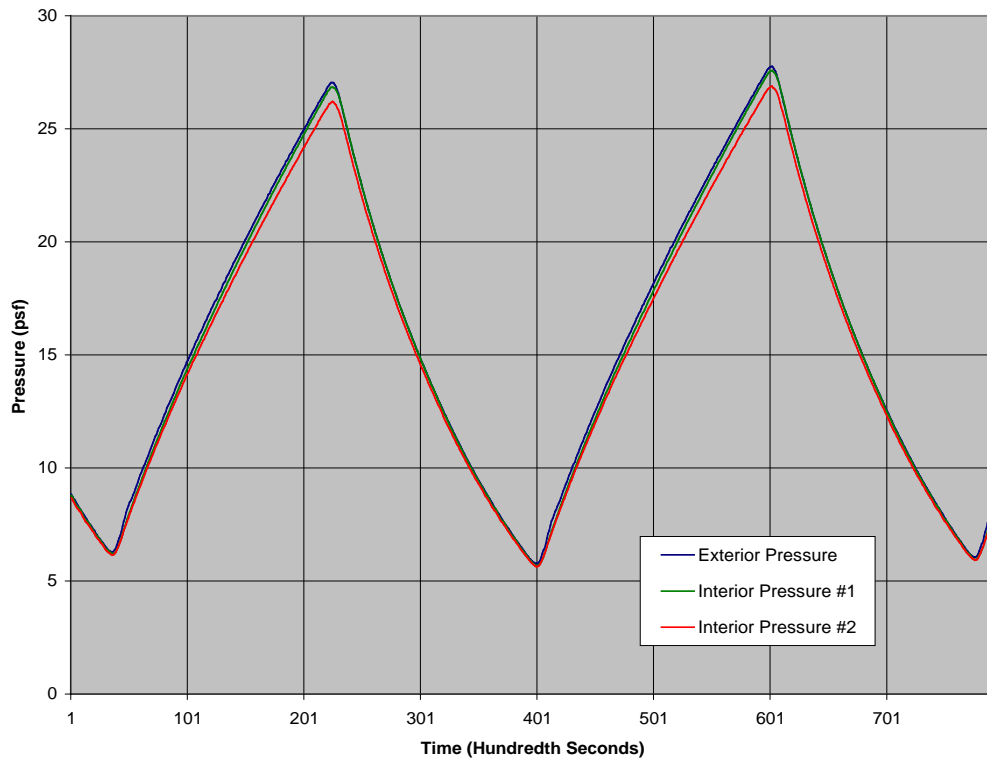
- Appendix-A: Graphs (2)
- Appendix-B: Photograph (1)
- Appendix-C: Drawings (6)

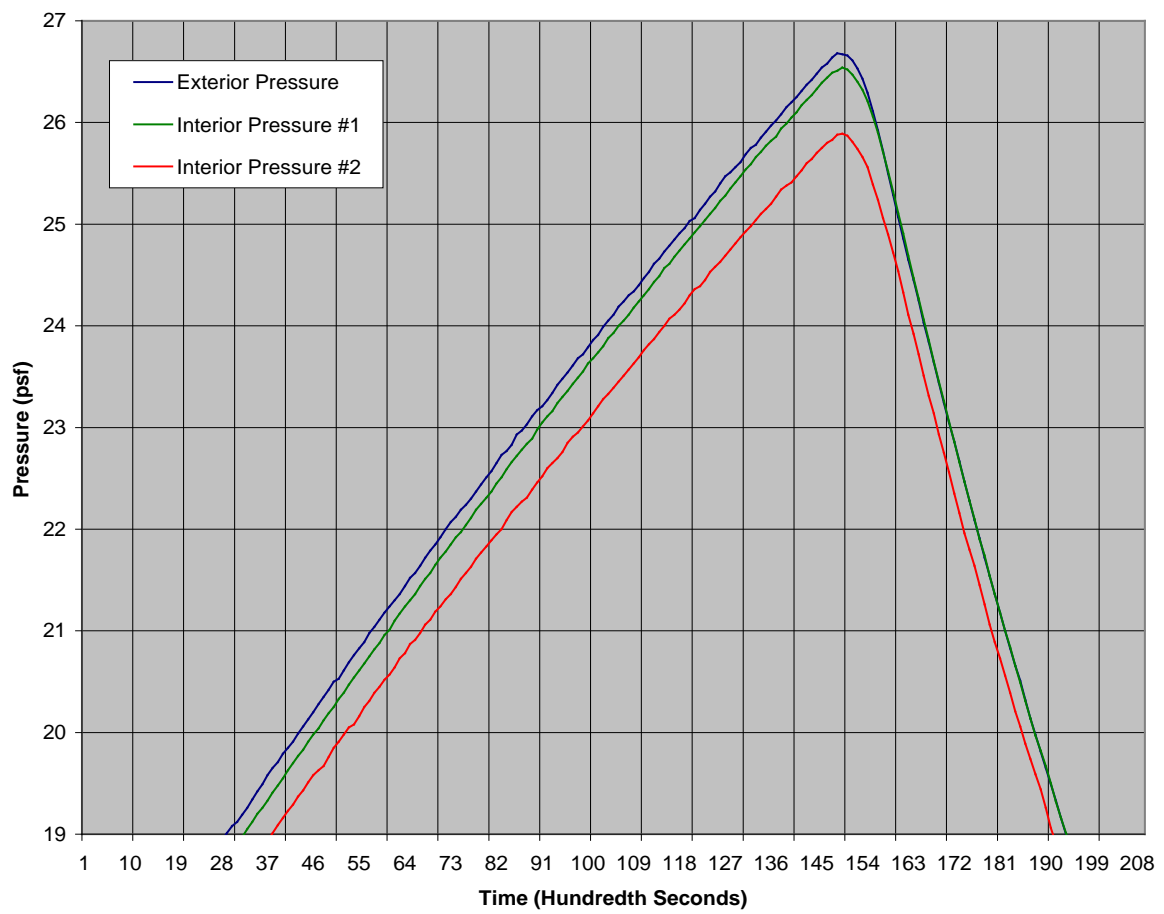
Revision Log

<u>Rev. #</u>	<u>Date</u>	<u>Page(s)</u>	<u>Revision(s)</u>
0	10/09/09	N/A	Original report issue.
1	11/14/13	Cover page, Page 1	Expiration Date changed to Test Record Retention End Date.

Appendix A

Graphs





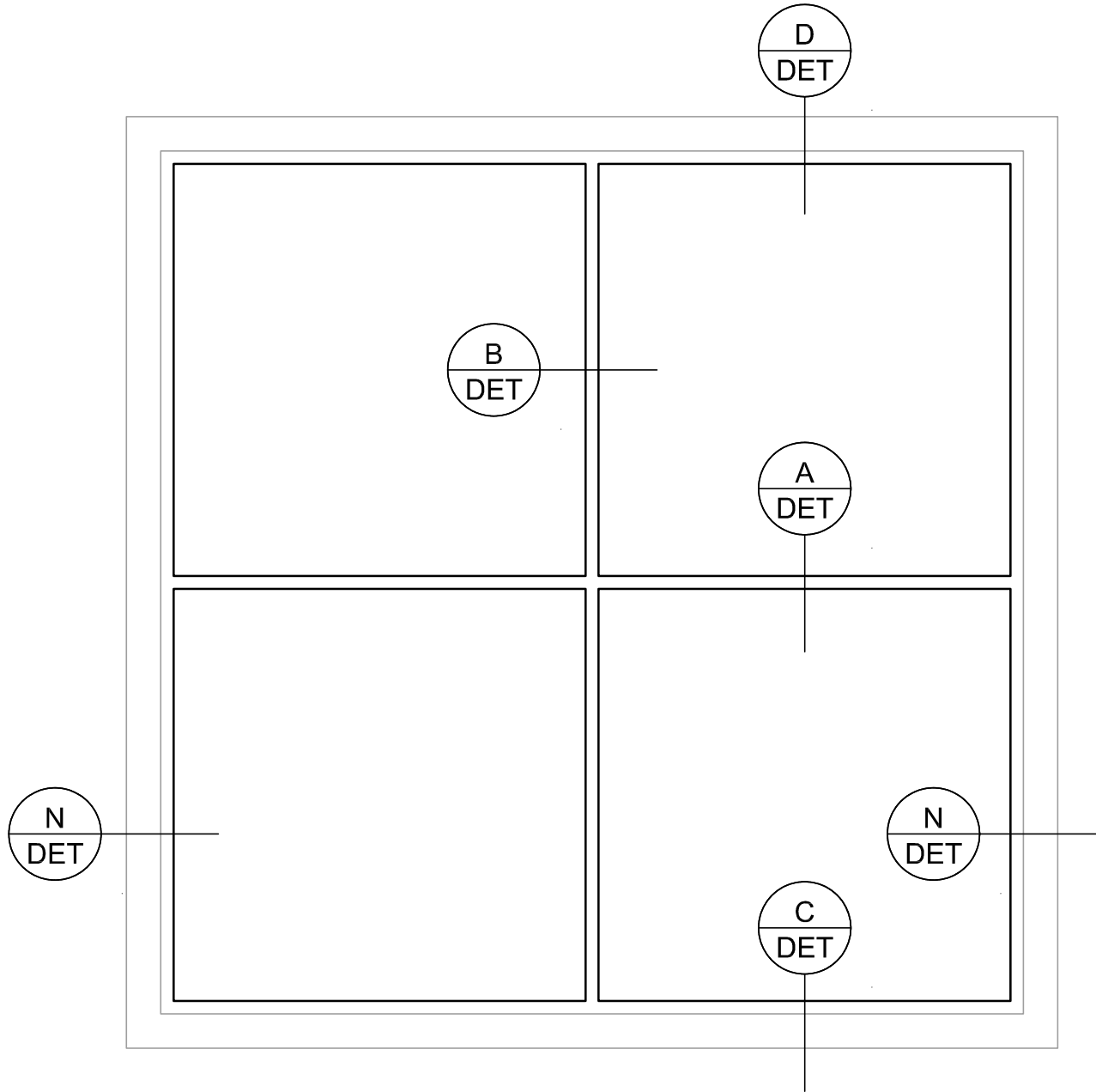
Appendix B

Photograph



Appendix C

Drawings




KEY PANEL KEY

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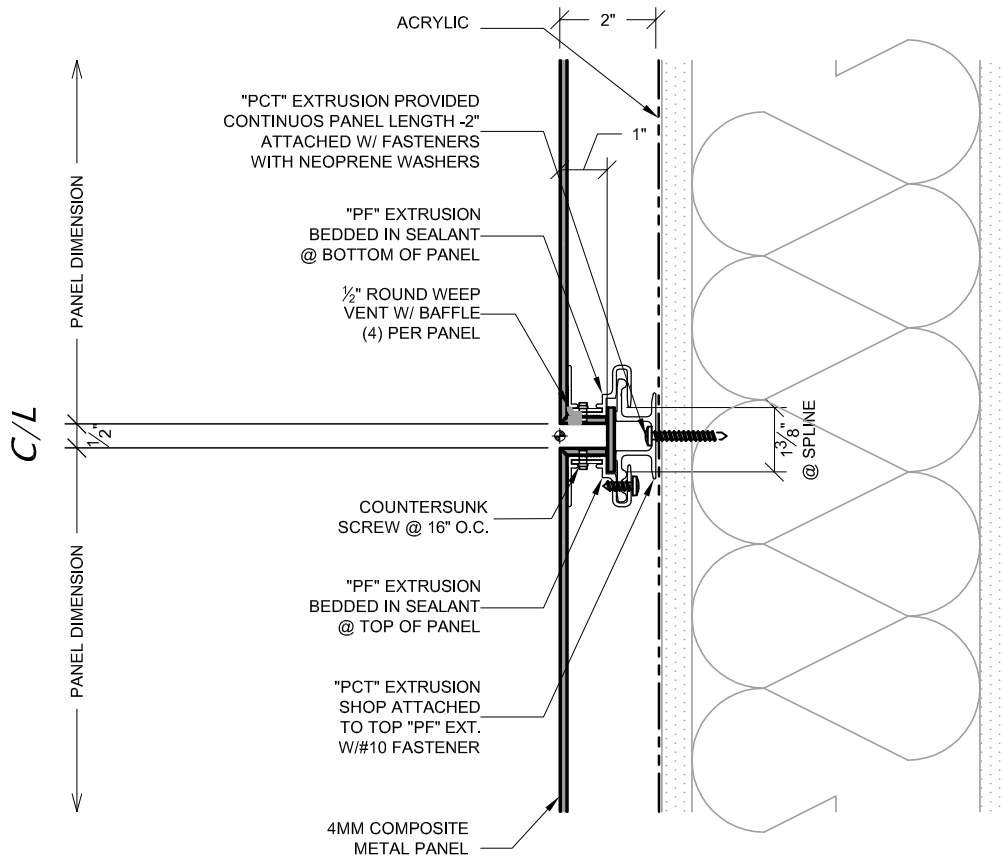
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NorthClad
508 TEST SPECIMEN

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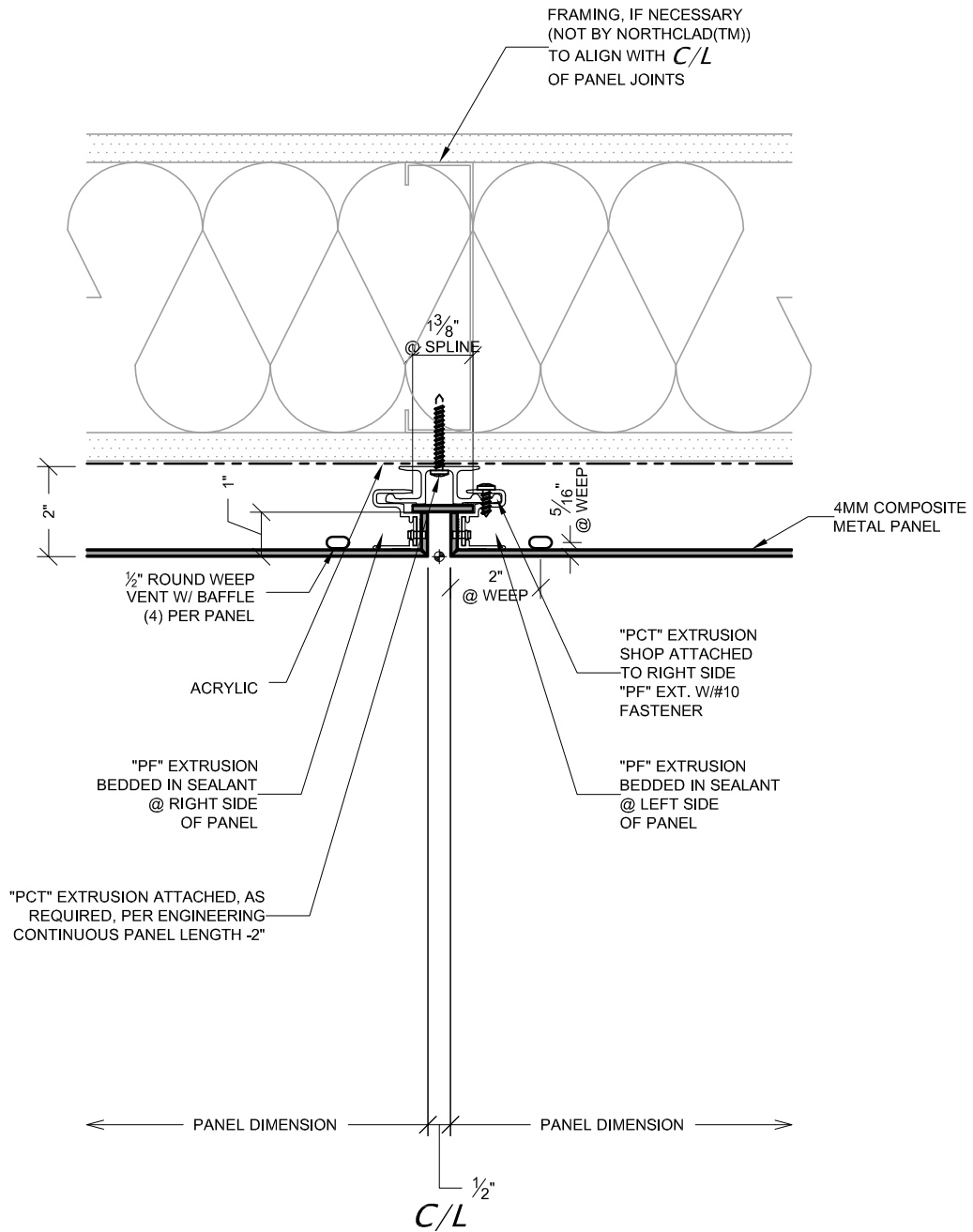
A HORIZONTAL JOINT
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508 TEST SPECIMEN

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B
DET VERTICAL JOINT

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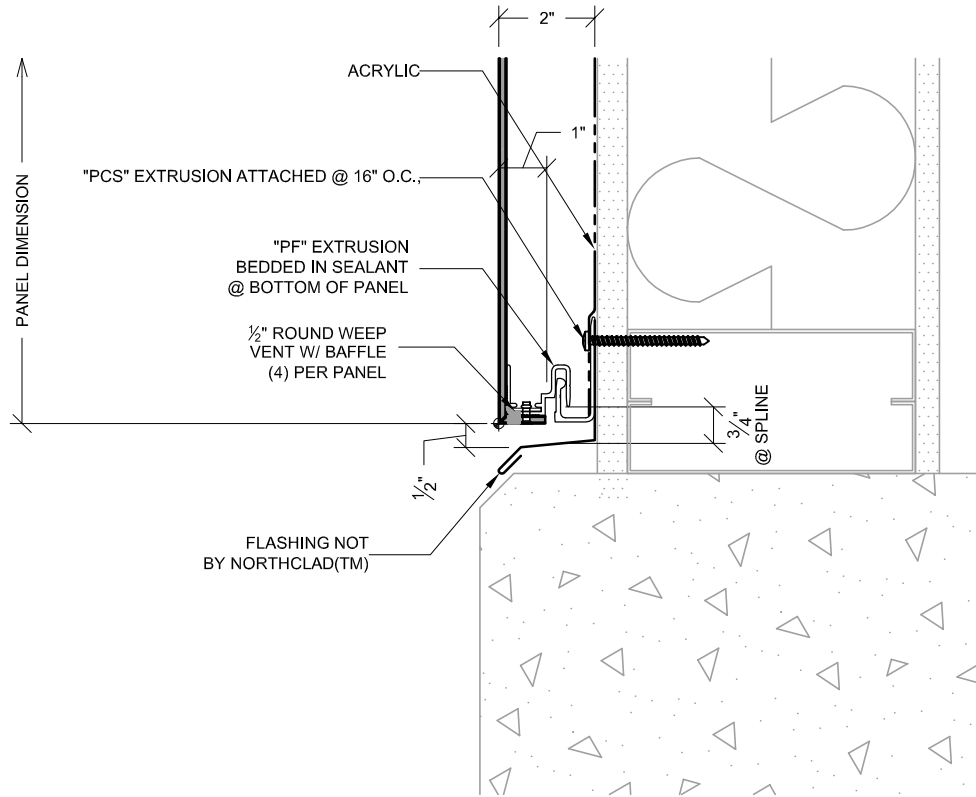
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BASE DETAIL

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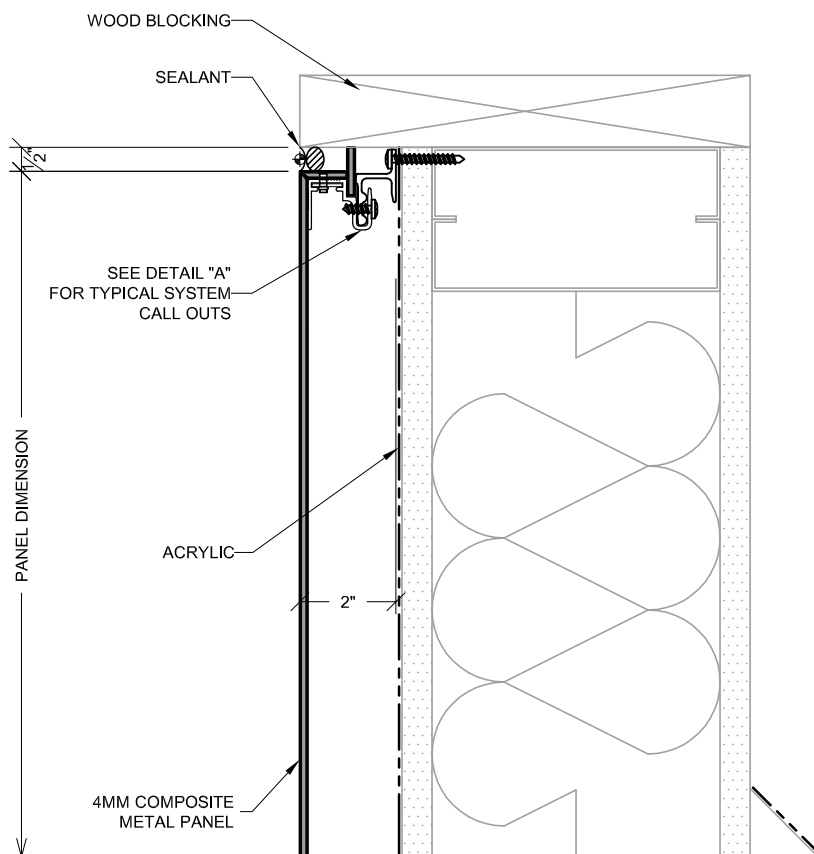
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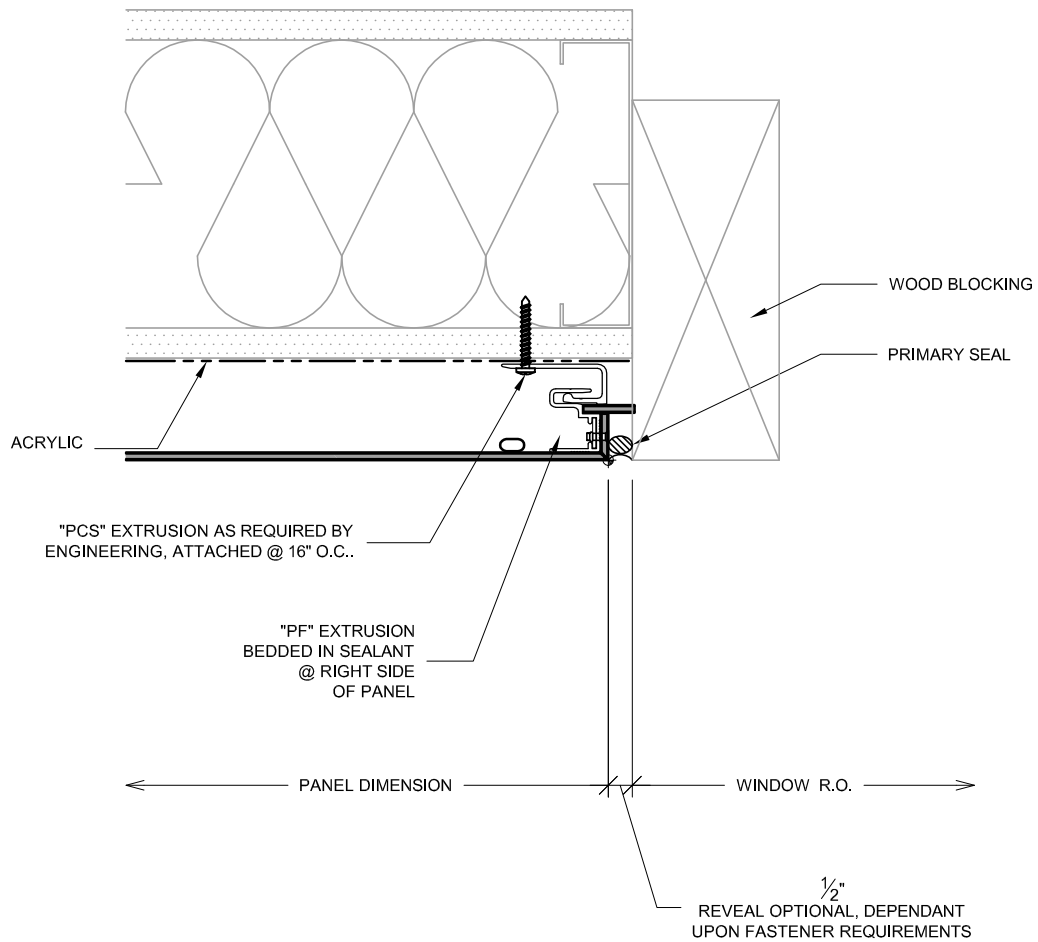
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