Architectural Testing

AAMA 508 TEST REPORT

Rendered to:

NORTHCLAD RAINSCREEN SOLUTIONS

SERIES/MODEL: NorthClad AL

PRODUCT TYPE: Interlocking Rain Screen Wall Cladding System

Report No.: 94366.01-901-44
Test Date: 09/29/09
Report Date: 10/09/09
Expiration Date: 09/29/13

22155 68th Ave S
Kent, WA 98032
phone: 253-395-5656
fax: 253-395-5657
www.archtest.com

Architectural Testing

AAMA 508 TEST REPORT

Rendered to:

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

Report No.:	94366.01-901-44
Test Date:	09/29/09
Report Date:	10/09/09
Expiration Date:	09/29/13

Project Summary: Architectural Testing, Inc. was contracted by NorthClad Rainscreen Solutions to conduct performance tests on their interlocking aluminum 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.

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Test Results: The following results have been recorded.

Title of Test - Test Method	Results	Allowed
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. 0.0 ft²	3.2 ft²
Water Penetration per AAMA 501.1 @ 6.24 psf	Approx. 0.2 ft²	3.2 ft²

***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:

Name	Company
Brian Elbert	NorthClad Rainscreen Solutions
Dave Killian	NorthClad Rainscreen Solutions
Paul Brunner	Architectural Testing, Inc.
Steve Powers	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.

Digitally Signed by: Paul S. Brunner

Paul S. Brunner
Technician

Digitally Signed by: Jeffrey L. Dideon

Jeffrey L. Dideon
Director – Regional Operations

JLD:pac

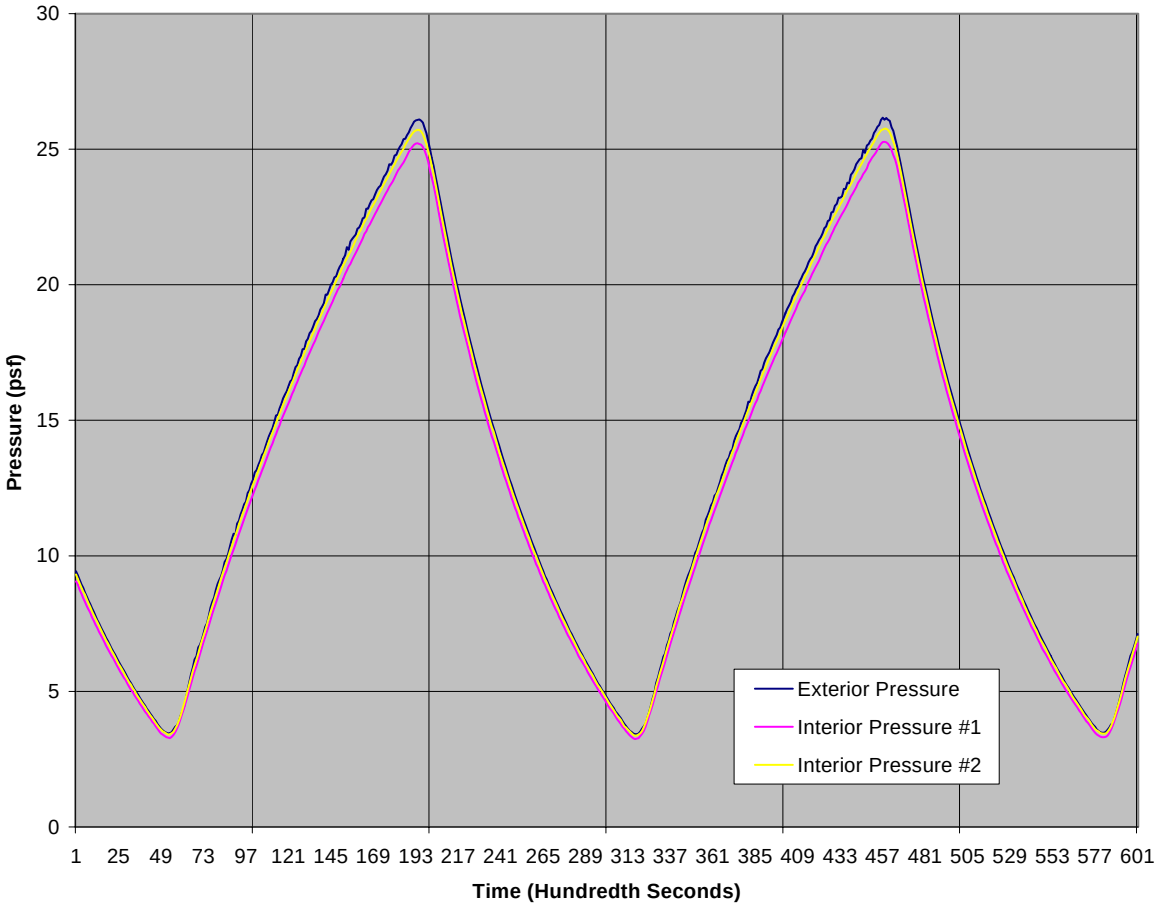
Attachments (pages):
Appendix-A: Graphs (2)
Appendix-B: Photograph (1)
Appendix-C: Drawings (6)

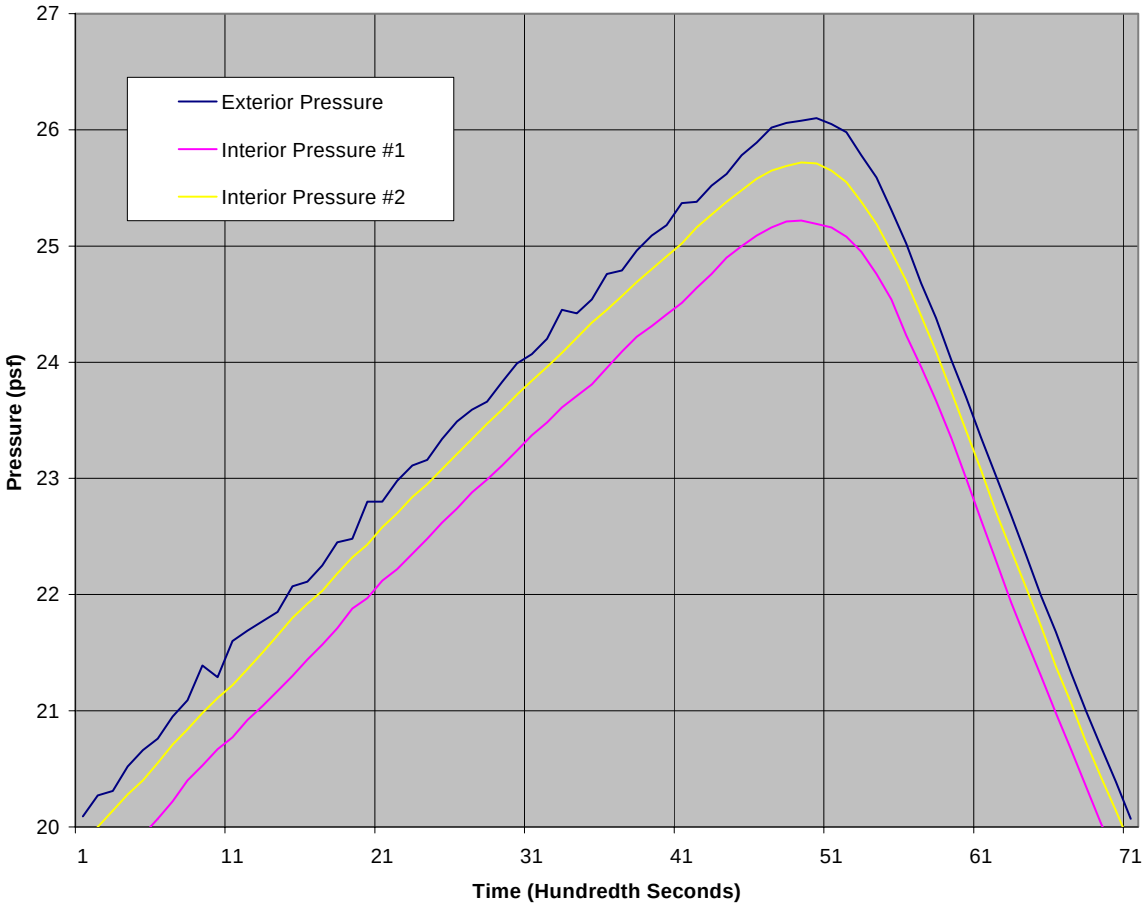
Revision Log

Rev. #	Date	Page(s)	Revision(s)
0	10/09/09	N/A	Original report issue.

Appendix A

Graphs




Exterior Pressure
Interior Pressure #1
Interior Pressure #2
Pressure (psf)
27
26
25
24
23
22
21
20
1
11
21
31
41
51
61
71
Time (Hundredth Seconds)

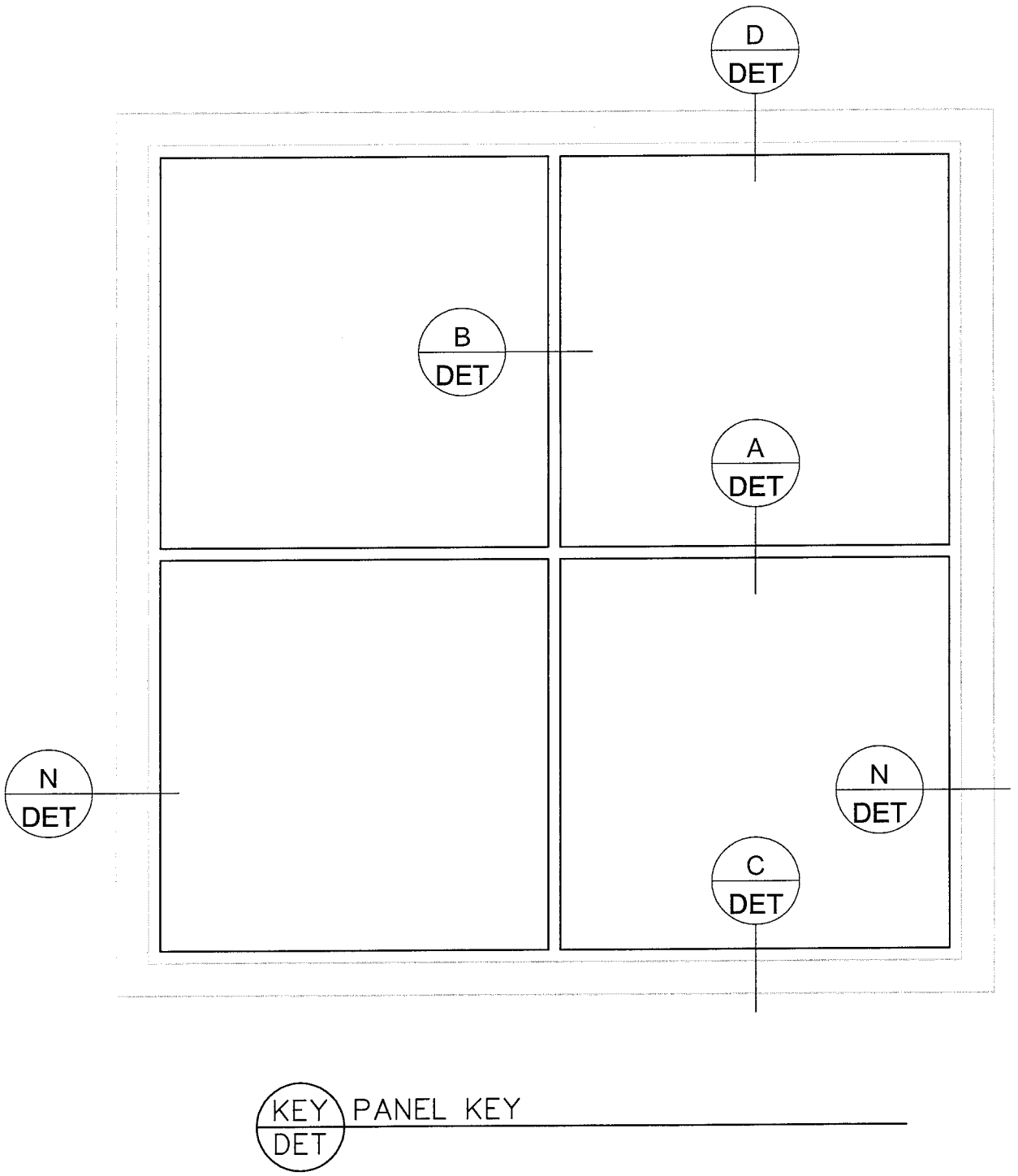
Appendix B

Photograph

Appendix C

Drawings

North Clad®
rainscreen solutions



KEY DET PANEL KEY

JOB NAME:
NorthClad
AL TEST SPECIMEN

SCALE: 3"=1'-0"

REVISION DATE: 10.07.2009

DRAWING NO: KEY

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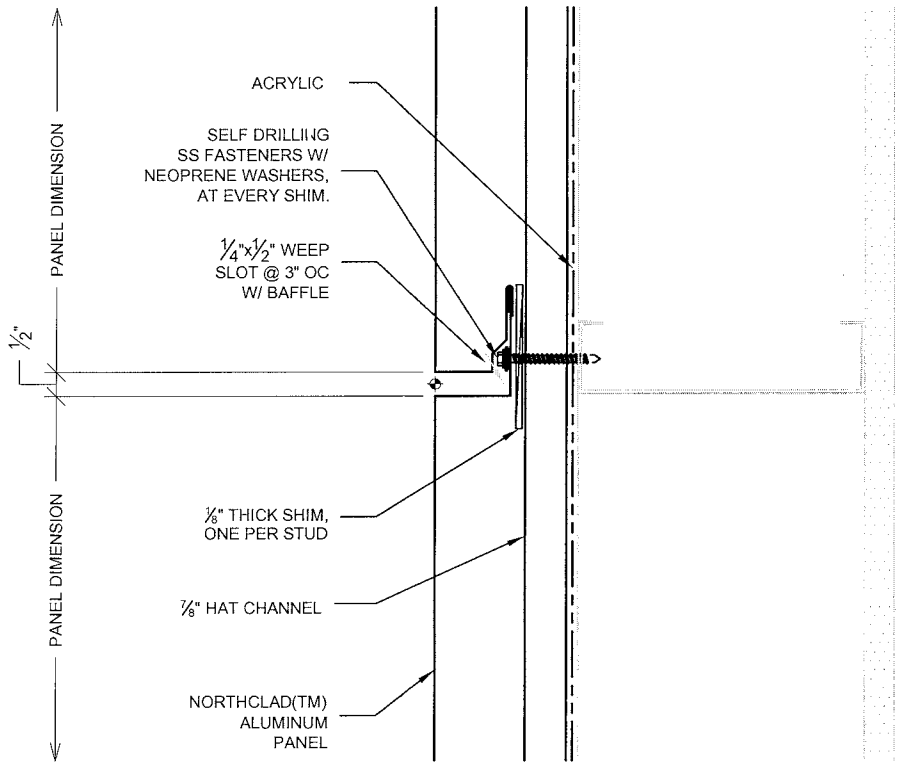

A DET HORIZONTAL JOINT

JOB NAME: NorthClad AL TEST SPECIMEN

SCALE: 3"=1'-0"

REVISION DATE: 10.07.2009

DRAWING NO: A

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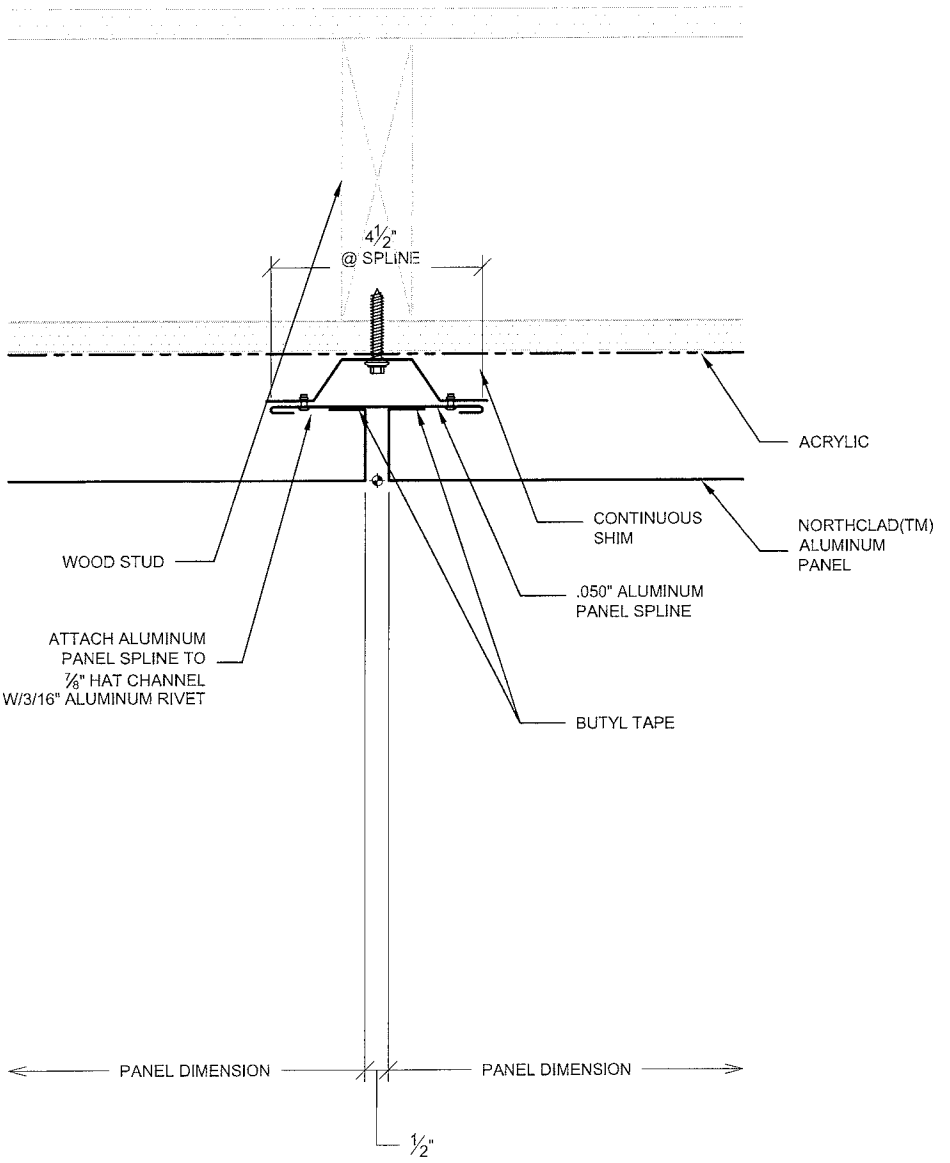

B DET VERTICAL JOINT

JOB NAME: NorthClad AL TEST SPECIMEN

SCALE: 3"=1'-0"

REVISION DATE: 10.07.2009

DRAWING NO: B

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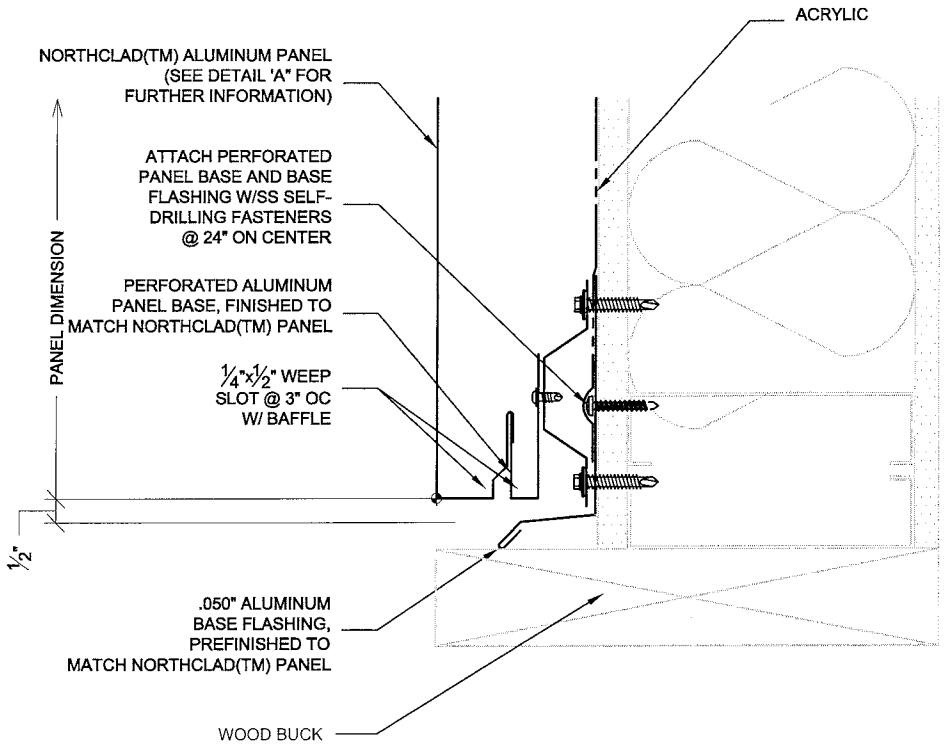

C / DET BASE DETAIL

JOB NAME: NorthClad AL TEST SPECIMEN

SCALE: 3"=1'-0"

REVISION DATE: 10.07.2009

DRAWING NO: C

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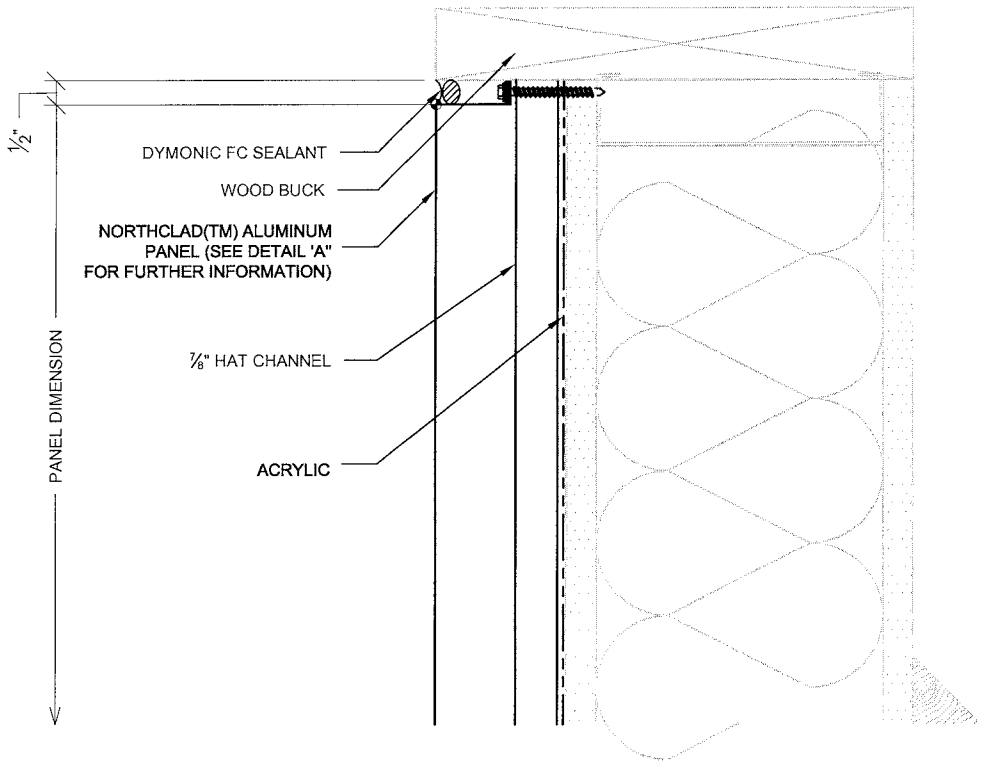

D / DET TOP DETAIL

JOB NAME: NorthClad AL TEST SPECIMEN

SCALE: 3"=1'-0"

REVISION DATE: 10.07.2009

DRAWING NO: D

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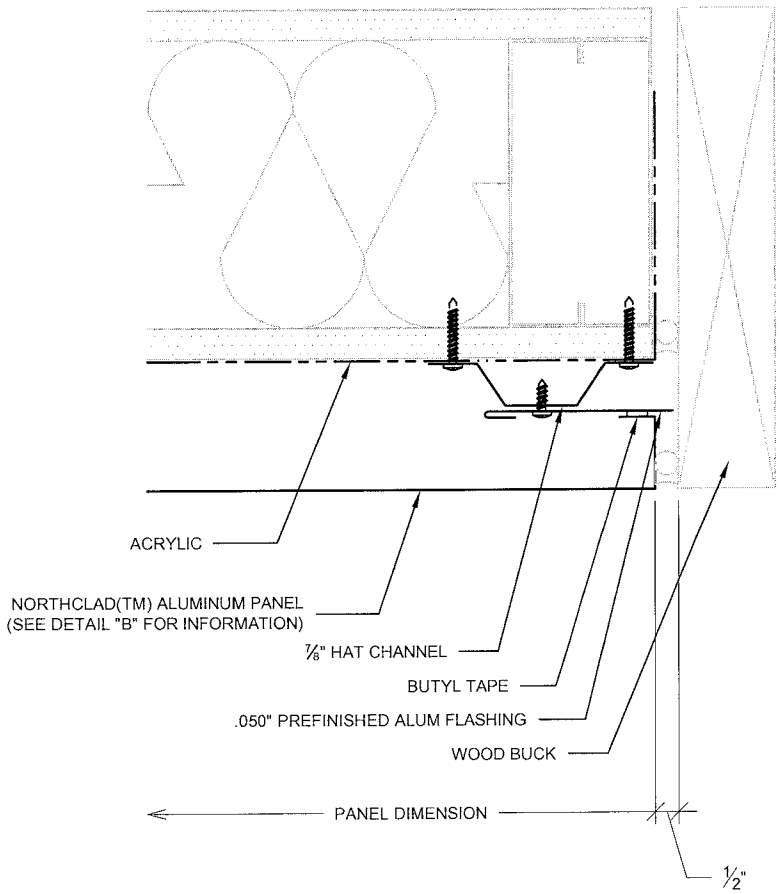

N DET JAMB DETAIL

JOB NAME: NorthClad AL TEST SPECIMEN

SCALE: 3"=1'-0"

REVISION DATE: 10.07.2009

DRAWING NO: N

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