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**Qualified Envelope Diagnostics, Inc.**  
AAMA ACCREDITED LAB & FIELD TESTING AGENCY

**Q.E.D. = QUOD ERAT DEMONSTRANDUM**  
"That which is proven"

### "Northclad ACM"

### (Aluminum Composite Metal Rainscreen Panel System)

**Rainscreen Panel Type:** Northclad ACM

**Test Buck Size:** 10' x 10' (120" x 120") (3024 mm x 3024 mm)

**Panel Size:** 39.75" x 39.75" (1010 mm x 1010 mm)

**Test Panel Array:** 3 panels high X 3 panels wide  
1 (39.5" x 39.5") jiggled panel (ASTM E 330)

**Panel Composition:** 4mm ACM with Aluminum perimeter extrusion and one stiffener vertically (7/8" hat .063 attached with VHB tape)

**WRB Assembly Type:** Tyvek Commercial Wrap with 3" Tyvek tape.  
Tyvek Tape over screw heads.

**Buck Assembly Components:** 2" x 6" dimensional 18 gauge steel studs  
5/8" Densglass Gold substrate  
1.5" Zinc Chromate Fasteners  
WRB – Tyvek w/taped seams  
Panel Clips / Panels  
Northclad flashing closures at perimeter

TEST REPORT: QEDLAB LTP #8315: NORTHCLAD ACM  
TEST DATES: (080522) & (090125)  
TEST TYPE: AWS BLOCK

ASTM E 283: AIR INFILTRATION  
ASTM E 331: WATER PENETRATION  
ASTM E 330: STRUCTURAL PERFORMANCE

### **ASTM E 283** (Air Infiltration)

(+) 6.24 psf:  
Total Air Flow: 0.44 cfm  
Product Air Flow: < 0.01 cfm/ft<sup>2</sup>

### **ASTM E 331** (Water Penetration)

**Full Pass:** 25.00 Psf / 1197 Pa / 4.80 "WC / 99 Mph  
**Full Pass:** 30.00 Psf / 1436 Pa / 5.77 "WC / 108 Mph  
**Full Pass:** 35.00 Psf / 1676 Pa / 6.73 "WC / 117 Mph

### **ASTM E 330** (Structural Performance)

DP80 Rating – Tested at 120.00 Psf

(+) Max Deflection: 1.19 mm  
(-) Max Deflection: 5.01 mm  
(+) Set Deformation: 0.36 mm  
(-) Set Deformation: 0.22 mm

L/175 = 17 mm (Deflection)  
0.02% = 0.6 mm (Deformation)  
0.03% = 0.9 mm (Deformation)  
0.04% = 1.21 mm (Deformation)

### **TEST CONDITIONS:** SEATTLE WA 98125

TESTED INDOORS AT CERTIFICATION FACILITY  
67° F / 19° C  
27% RH  
30.09 IN / 1018.8 hPa