



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

[www.qedlab.com](http://www.qedlab.com)

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

**Northclad "EF" Panel System**

**"Exposed Fastener" - .125 Aluminum Plate**

**Rainscreen Panel Type:** Northclad EF .125 Plate Aluminum

**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  
5 Centerfield courses at 24" on Center

**Panel Composition:** .125 Plate Aluminum Panel w/exposed fasteners

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

**Buck Assembly Components:**

- 2" breakshape with 3/8" at 30° deflection
- 7/8" galvanized hat channel
- Galvanized self-tapping 1" screws (19" on center / 9 screw per panel)
- 5/8" Densglass Gold
- 1" Zinc Chromate fasteners
- 18 ga 2"x 6" steel studs @ 16" on center

**TEST REPORT:** QEDLAB LTP #8321: NORTHCLAD  
**TEST DATE:** MAY 22ND, 2008 (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: < 0.10 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)**

DP70 Rating – Tested at 105.00 Psf

(+) Max Deflection: 2.06 mm  
(-) Max Deflection: 7.27 mm  
(+) Set Deformation: 0.37 mm  
(-) Set Deformation: 0.18 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  
70° F / 21° C  
50% RH  
30.09 IN / 1018.8 hPa