



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

www.qedlab.com

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

Northclad "EF" Panel System
"Exposed Fastener" – 4mm ACM

Rainscreen Panel Type: Northclad EF 4mm 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
5 Centerfield courses at 24" on Center

Panel Composition: 4mm ACM 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 #8320: 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/ft²

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: 2.02 mm
(-) Max Deflection: 9.32 mm
(+) Set Deformation: 0.12 mm
(-) Set Deformation: 0.33 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