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

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

### **Northshore Rainscreen Test Panel Assembly**

**Rainscreen Panel Type:** Paperstone with 3/8" Cavity

**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:** PaperStone Certified comprised of 100% FSC-Certified recycled paper, water-based phenolic resin with cashew nut shell binder and pigment. Heat and pressure transform this mixture into a thoroughly impregnated network of cellulose fibers that give PaperStone its hardness, density and strength in span or cantilevered designs.

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

#### **Buck Assembly Components:**

2" breakshape with 3/8" at 30° defection  
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 #8315: NS/PAPERSTONE**  
**TEST DATE: MAY 22ND, 2008 (080522)**  
**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)**

**DP50 Rating – Tested at 75.00 Psf**

**(+) Max Deflection: 10 mm**  
**(-) Max Deflection: 9.7 mm**  
**(+) Set Deformation: 0.55 mm**  
**(-) Set Deformation: 1.25 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: 5/22/08**  
**SEATTLE WA 98125**  
**TESTED INDOORS AT CERTIFICATION FACILITY**  
**70° F / 21° C**  
**50% RH**  
**30.09 IN / 1018.8 hPa**