

WRAPSHIELD® APPROVALS and TESTING

ACCEPTANCE CRITERIA FOR WEATHER RESISTIVE BARRIERS AC 38 (POLYMERIC-BASED BARRIERS)

PROPERTY	STANDARD/TEST	RESULT
Tensile Strength	ASTM D882	MD – 44.8 lbf/inch (7.8 N/mm) CD – 25.1 lbf/inch PASS
Dry Breaking Force	ASTM D5034 (Grab Method)	MD – 118.5 lbf CD – 84.6 lbf PASS
Water Resistance (control and weathered specimens)	AATCC 127 (55cm hydrostatic head of water for 5 hrs)	No leakage noted on underside of control or weathered samples PASS
Water Resistance (Ponding)	ASTM D779	24hrs PASS
Water Vapor Transmission	ASTM E96* (Method B)	308.9 g/m ² 24hrs 2860 ng/Pa/s/m ² 50 Perms PASS
Low Temperature Bend	5 specimens bent over a 1/16 inch mandrel at 32°F	No cracking or delamination noted. PASS

AIR BARRIER TESTING

PROPERTY	STANDARD/TEST	RESULT
Air Permeance of Building Materials	ASTM 2178 (required to Massachusetts Energy Code and Air Barrier Association of America criteria)	0.0095 L/s/m ² 0.0019 cfm/ft ² PASS
Air Leakage through Wall Systems	ASTM E – 283	0.00017 L/s/m ² 0.000034 cfm/ft ² PASS
Air Retarder Materials & Systems	ASTM E – 1677	Type 1 Air Barrier PASS

FIRE TESTING

PROPERTY	STANDARD/TEST	RESULT
Flamespread Index	ASTM E-84	10 – Class A PASS
Smoke Development Index	ASTM E-84	35 – Class A PASS

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INDEPENDENT TESTING

PROPERTY	STANDARD/TEST	RESULT
Nominal Thickness	Calibrated Deadweight Micrometer	0.023 inch (0.58mm)
Basis Weight	Electronic Weigh Scale	5.01 oz/yd ² (0.55 oz/ft ²) 170g/m ²
Drying Rate Analysis of Wet Plywood & OSB**	Water Loss (g) Over 100 hrs at 70°F, 50% RH	180 grams of water vapor lost through Wrapshield membrane (double nearest competitor)
Water Resistance (UBC Flashing Requirements)	ASTM 2112 (Appendix XI)	24hrs PASS

Tested in accordance with ICC-ES-AC 38 criteria to meet IBC and IRC requirements for Weather Resistive Barriers (ICC Certificate #ESR-1916).

***ASTM E 96 - Method B (wet cup method) typically gives a more realistic result for permeance of highly permeable products than does the Method A (dry cup/desiccant method).**

****Test report available from VaproShield LLC**

REFERENCES

AATCC - American Association of Textile Chemists & Colorists
 ASTM - American Society for Testing & Materials
 ICC-ES-AC - International Code Council, Evaluation Service Report