

ABAA Process for Approval of Air Barrier Materials, Accessories and Assemblies

5.7 Adhesive Backed Commercial Building Wraps

Product Property	Test Standard	Test Standard Title	Unit	Requirement	
				Min	Max
Air Permeance	ASTM E2178-11	Standard Test Method for Air Permeance of Building Materials	cfm /ft ² at a pressure differential of 1.57 psf (L/(s·m ²) at a pressure differential of 75 Pa)	-	0.004 (0.02)
Adhesion	ASTM D4541	Standard Test Method for Pull-Off Strength of Coatings Using Portable Adhesion Testers - <i>modified to separate area being tested from the balance of the material by cutting to substrate</i>	Psi (kPa)	16 (110) Or report value at substrate failure	- -
Dry Tensile Strength or Dry Breaking Force	ASTM D882-12	Standard Test Method For Tensile Properties of Thin Plastic Sheeting Test to machine direction and cross direction.	lbf/in (N/mm)	20 (3.5)	-
	OR				
	ASTM D5034-09	Standard Test Method For Breaking Strength and Elongation of Textile Fabrics (Grab Test) Test to machine direction and cross direction.	lbf/in (N/mm)	40 machine/ 35 cross direction (7.0 machine/ 6.1 cross direction)	-
Lap adhesion	D1876-08	Standard Test Method for Peel Resistance of Adhesives (T-Peel Test) – <i>Specify substrate and surface preparation for glass fiber faced gypsum sheathing and/or concrete block.</i>	lbf/in (N/mm)	5 (0.875) <i>Declare failure mode.</i>	- -
	OR				

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	ASTM D3330-10	Standard Test Method for Peel Adhesion of Pressure-Sensitive Tape – <i>Method B</i>	lbf/in (N/mm)	5 (0.875) <i>Declare failure mode.</i>	- -
Pliability	ASTM D1970-14 section 7.6	Standard Specification for Self-Adhering Polymer Modified Bituminous Sheet Materials Used as Steep Roofing Underlayment for Ice Dam Protection - 7.6 <i>Low Temperature Flexibility</i>	material demonstrates no visible signs of cracking	Pass	-
		OR			
	ICC-ES AC38, Section 3.3.4	Acceptance Criteria For Water-Resistive Barriers- <i>material does not crack when bent over a 1.6 mm (1/16 inch) diameter mandrel at a temperature of 0°C (32°F)</i>	material demonstrates no visible signs of cracking	Pass	-
Water Resistance	AATCC-127	Water Resistance: Hydrostatic Pressure Test no leakage under specimen with 55 cm hydrostatic head in 5 hours.	-	Pass	-
Water Vapor Permeance	ASTM E96/E96M-10 (Desiccant and Water Method)	Standard Test Methods For Water Vapor Transmission of Materials	US Perms (ng/(Pa·s·m ²))	declared	-