

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

### 5.1 Self-Adhered Membranes

Product Property	Test Standard	Test Standard Title	UNIT	Requirements	
				Min	Max
Air Permeance	ASTM E2178-11	Standard Test Method for Air Permeance of Building Materials	L/(s·m <sup>2</sup> ) at a pressure differential of 75 Pa  (cfm /ft <sup>2</sup> at a pressure differential of 1.57 psf)	-	0.02  (0.004)
Resistance to Puncture (reduce damage)	ASTM E154-08a	Standard Test Methods for Water Vapor Retarders Used in Contact with Under Concrete Slabs, on Walls or as Ground Cover - Section 10 only.	lbf  (N)	40  (178)	-
Tensile Strength	ASTM D882-12	Standard Test Method for Tensile Properties of Thin Plastic Sheeting	lbf/in  (N/mm)	20 or until substrate failure  (3.5 or until substrate failure)	-
Water Resistance	AATCC 127 - 2008	Water Resistance: Hydrostatic Pressure Test for 5 hours	inches  (cm)	22  (55)	-
Peel or Stripping Strength of Adhesive Bonds	ASTM D903-98 (2004)	Standard Test Method for Peel or Stripping Strength of Adhesive Bonds - <i>Specify substrates and surface preparation for glass fiber faced gypsum sheathing and/or concrete block. Declare failure mode.</i>	lbf/in  (N/mm)	5.0  (0.875)	-
Lap Adhesion	ASTM D1876-08	Standard Test Method for Peel Resistance of Adhesives (T peel test) – <i>Specify Substrates and surface preparation for glass fiber faced gypsum sheathing and/or concrete block. Declare failure mode.</i>	lbf/in  (N/mm)	5.0  (0.875)	-
Low Temperature Flexibility	ASTM D1970 / D1970M - 11	Standard Specification for Self-Adhering Polymer Modified Bituminous Sheet Materials Used as Steep Roofing Underlayment for Ice Dam Protection – Section 7.6 Low Temperature Flexibility	-20°F  (-30°C)	Pass	-
Self Sealability	ASTM D1970 / D1970M - 11	Standard Specification for Self-Adhering Polymer Modified Bituminous Sheet Materials Used as Steep Roofing Underlayment for Ice Dam Protection – Section 8.9 Nail Sealability	-	Pass or specify sealing detail	-

**Air Barrier Association of America Inc.**

				around fasteners	
--	--	--	--	------------------	--

Pull Adhesion	ASTM D4541-09e1	Modified Version of Standard Test Method for Pull-Off Adhesion Strength of Coatings on Concrete using Portable Pull-Off Adhesion Testers <i>Specify substrates and surface preparation for glass fiber faced gypsum sheathing and concrete block. Declare failure mode</i>	psi (kPa)	16 (110) or report value at substrate failure	-
Tear Initiation and Tear Propagation	ASTM D4073-06	Standard Test Method for Tensile-Tear Strength of Bituminous Roofing Membrane  Machine direction / cross direction	lbf (N)	9.0 (40)	-
Crack Bridging	ASTM C1305-08	Standard Test Method for Crack Bridging Ability of Liquid Applied Waterproofing Membrane	-15°F (-26°C)	Pass	-
Water Vapor Permeance	ASTM E96/E96M-10 (Desiccant and Water Methods)	Standard Test Methods for Water Vapor Transmission of Materials	US Perms (ng/(Pa·s·m <sup>2</sup> ))	Declare	

