

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

### 5.6 Sprayed Polyurethane Foam (Medium Density Closed Cell)

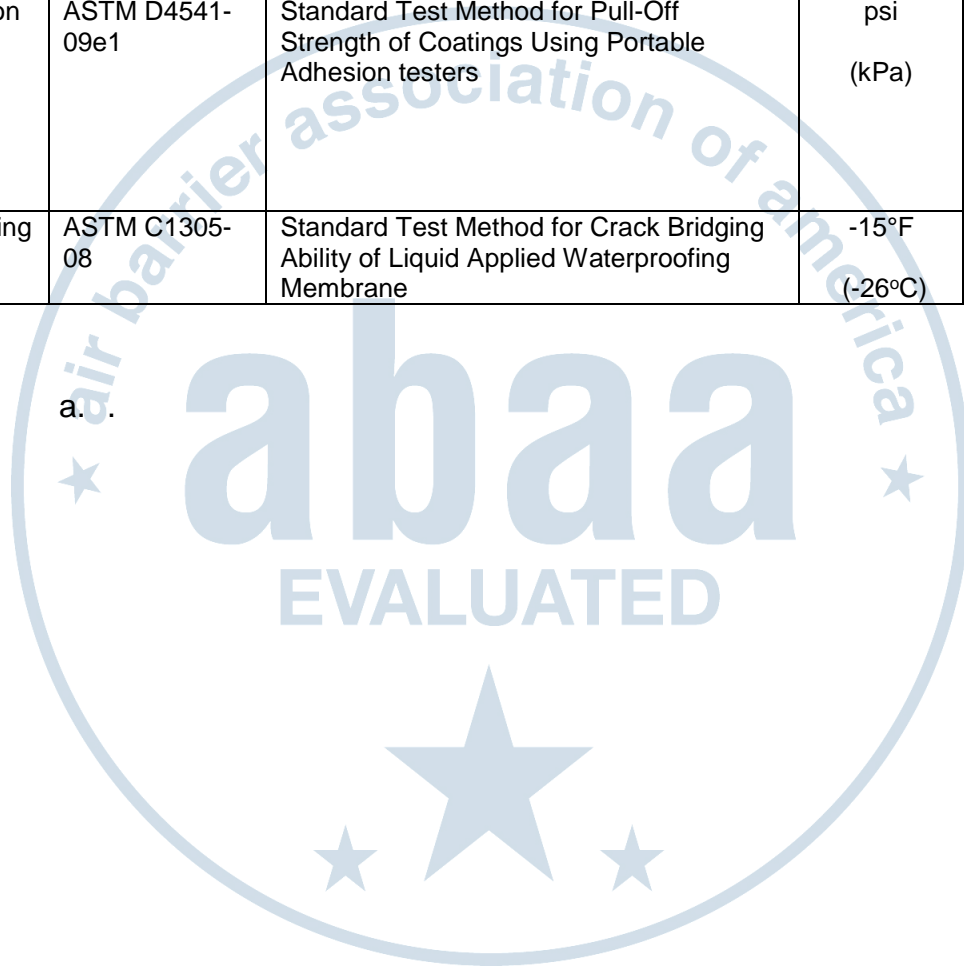
The manufacturer shall declare the minimum or maximum thickness allowed for their liquid applied air barrier material.

All testing shall be conducted with the applied liquid material within the minimum / maximum range. The specific thickness of the material which was used when conducting the following tests shall be recorded on the test report:

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 <sup>2</sup> at a pressure differential of 1.57 psf	-	0.004
			(L/(s·m <sup>2</sup> ) at a pressure differential of 75 Pa)	-	(0.02)
Flame Spread Characteristics	ASTM E84-12c	Standard Test Method for Surface Burning Characteristics of Building Materials	-	-	75
Water Vapor Transmission	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> ))	Report US Perm of material at 1 inch thick	
Thermal Transmission	ASTM C177-10	Standard Test Method for Steady-State Heat Flux Measurements and Thermal Transmission Properties by Means of the Guarded-Hot-Plate Apparatus	<u>ft<sup>2</sup>·°F·h/Btu</u> (m <sup>2</sup> ·°C/W)	Report	
	ASTM C518-10	Standard Test Method for Steady-State Thermal Transmission Properties by Means of the Heat Flow Meter Apparatus	<u>ft<sup>2</sup>·°F·h/Btu</u> (m <sup>2</sup> ·°C/W)	Report	
Compressive Strength	ASTM D1621-10	Standard test method for Compressive Properties of Rigid Cellular Plastics	psi (kPa)	15 (104)	-
Density	ASTM D1622-08	Standard Test Method for Apparent Density of Rigid Cellular Plastics	lb/ft <sup>3</sup> (kg/m <sup>3</sup> )	1.75 (28)	-
Tensile Strength	ASTM D1623-09	Standard Test Method for tensile and Tensile Adhesive Properties of Rigid Cellular Plastics	psi (kPa)	20 (138)	-

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Dimensional Stability	ASTM D2126-09	Standard Test Method for response of Rigid Cellular Plastics to Thermal and humid Aging -20°C 80°C 70°C, 97% ±3 % R.H.	%	- - -	-4 +8 +15
Water Absorption	ASTM D2842-12	Standard test method for Water Absorption of Rigid Cellular Plastics	%	-	4
Open Cell Content	ASTM D2856-94(1998)/ ASTM D6226-10	Standard test Method for Open-Cell Content of Rigid Cellular Plastics by the Air Pycnometer	%	-	10
Pull Adhesion	ASTM D4541-09e1	Standard Test Method for Pull-Off Strength of Coatings Using Portable Adhesion testers	psi  (kPa)	16  (110) or report value at substrate failure	-
Crack Bridging	ASTM C1305-08	Standard Test Method for Crack Bridging Ability of Liquid Applied Waterproofing Membrane	-15°F  (-26°C)	Pass	-



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