

ALPOLIC Technical Summary

	Property	Standard	Alpolic					unit
			PE			fr		
			3 mm	4 mm	6 mm	4 mm	6 mm	
Physical Properties	Aluminum Skin Thickness		0.02					inch
			0.5					mm
	Weight		0.93	1.12	1.5	1.56	2.23	lb/ft ²
			4.54	5.47	7.32	7.62	10.89	kg/m ²
	Sound Transmission Coefficient	ASTM E90	25	26	26	—	—	dB
	Coefficient of Thermal Expansion		0.000013					in/in-°F
		0.0000234					mm/mm-°C	
	Drum Peel	ASTM D1781	33.6	33.6	33.6	27.6	—	lb-in/in
			150	150	123	110	—	N-mm/mm
Fire Resistance Properties	Smoke Developed Index	ASTM E84	15	0	10	10	0	—
	Flame Spread Index	ASTM E84	5	0	0	0	0	—
	Flash Ignition Temperature	ASTM D1929	—	716	716	811	811	°F
			—	380	380	432.8	432.8	°C
	Self Ignition Temperature	ASTM D1929	—	752	752	837	837	°F
			—	400	400	447.2	447.2	°C
	Rate of Burning	ASTM D635	—	CC1	—	—	—	—
	ISMA Test	UBC 26-9	—	—	—	Pass	Pass	—
	Potential Heat Release	UBC 17-2	—	—	—	<6000	—	BTU/ft ²
	Other Fire Tests	ASTM E162	—	0	—	0	—	—
		ASTM E108	Pass	Pass	Pass	Pass	Pass	—
ASTM E119		—	—	—	Pass	—	—	
UL-94		V-O rating	V-O rating	—	—	—	—	
UL-879		Pass	Pass	—	—	—	—	
	NFPA-285	—	—	—	Pass*	Pass*	—	
Production Tolerances	Width		0.08					inches
			2					mm
	Length		0.16					inches
			4					mm
	Thickness		0.008		0.012	0.008	0.012	inches
			0.2		0.3	0.2	0.3	mm
Bow		0.5					%	
Squareness (Diagonal Difference)		0.2					inches	
		5					mm	
LEED	Post-Consumer Recycled Content		7.4	6.2	4.6	4.4	3.1	%
	Pre-Consumer Recycled Content		58.4	57	55.25	22.7	15.9	%
	Total = 100% Post + 50% Pre		36.6	34.7	32.2	15.76	11.1	%
AAMA 2605**	8.1 Color Uniformity		Pass					—
	8.2 Specular Gloss		Pass					—
	8.3 Dry Film Hardness		Pass					—
	8.4 Film Adhesion		Pass					—
	8.5 Impact Resistance		Pass					—
	8.6 Abrasion Resistance		Pass					—
	8.7 Chemical Resistance		Pass					—
	8.8 Corrosion Resistance		Pass					—
	8.9 Weathering		Pass					—
Code Approvals	ICC-ES		ESR-3704			ESR-2653		—
	Florida		FL10520-R3, FL12087-R2, FL17186-R2					—
	Miami-Dade County		14-0610.01***, 14-0610.02***					—
	City of LA		26029			26008		—
	Warnock Hersey		—			Certified: ASTM E119; ASTM E84 (2013a); CAN / ULC S102; CAN / ULC S134; NFPA 285		—

*NFPA 285 is a system test. Alpolic passed as a system component.

**ASTM Tests listed on following page

***number changes upon renewal.

AAMA 2605 Section	Section Title	ASTM Test Referenced	Test Title
5.3	—	D7091-12	Standard Practice for Nondestructive Measurement Of Dry Film Thickness Of Nonmagnetic Coatings Applied To Ferrous Metals And Nonmagnetic, Non Conductive Coatings Applied To Non-Ferrous Metals
7.2.1	Chemical Conversion Coating Weight Procedure	D5723-95(2010)	Standard Practice for Determination Of Chromium Treatment Weight On Metal Substrates By X-Ray Fluorescence
8.1.2	Color Uniformity Performance	D2244-11	Standard Practice for Calculation Of Color Tolerances And Color Differences From Instrumentally Measured Color Coordinates
8.2.1	Specular Gloss Procedure	D523-08	Standard Test Method for Specular Gloss
8.3.1	Dry Film Hardness Procedure	D3363-05(2011)e2	Standard Test Method for Film Hardness By Pencil Test
8.3.2	Dry Film Hardness Performance	D3363-05(2011)e2	Standard Test Method for Film Hardness By Pencil Test
8.4.1.2	Film Adhesion Procedure: Tape Pull-Off	D3359-09e2	Standard Test Method for Measuring Adhesion By Tape Test
8.5.1	Impact Resistance Procedure	D3359-09e2	Standard Test Method for Measuring Adhesion By Tape Test
8.6.1	Abrasion Resistance Procedure	D968-05(2010)	Standard Test Method for Abrasion Resistance Of Organic Coatings By Falling Abrasive
8.7.2.1	Chemical Resistance: Mortar Resistance Procedure	C207-06(2011)	Standard Specification for Hydrated Lime For Masonry Purposes
8.7.3.2	Chemical Resistance: Nitric Acid Resistance Performance	D2244-11	Standard Practice for Calculation Of Color Tolerances And Color Differences From Instrumentally Measured Color Coordinates
8.7.4.1	Chemical Resistance: Detergent Resistance Procedure	D2248-01a(2007)	Standard Practice for Detergent Resistance Of Organic Finishes
8.7.4.1	Chemical Resistance: Detergent Resistance Procedure	D3359-09e2	Standard Test Method for Measuring Adhesion By Tape Test
8.8.1.1	Corrosion Resistance: Humidity Resistance Procedure	D2247-11	Standard Practice for Testing Water Resistance Of Coatings In 100% Relative Humidity
8.8.1.1	Corrosion Resistance: Humidity Resistance Procedure	D4585-07	Standard Practice for Testing Water Resistance Of Coatings Using Controlled Condensation
8.8.1.2	Corrosion Resistance: Humidity Resistance Performance	D714-02(2009)	Standard Test Method for Evaluating Degree Of Blistering Of Paints
8.8.2.1	Corrosion Resistance: Cyclic Corrosion Testing Procedure	D3359-09e2	Standard Test Method for Measuring Adhesion By Tape Test
8.8.2.1	Corrosion Resistance: Cyclic Corrosion Testing Procedure	G85-11	Standard Practice for Modified Salt Spray (Fog) Testing
8.8.2.2	Corrosion Resistance: Cyclic Corrosion Testing Performance	D1654-08	Standard Test Method for Evaluation Of Painted Or Coated Specimens Subjected To Corrosive Environments
8.9.1.1	Weathering: Testing Site and Duration	G7/G7M-13	Standard Practice for Atmospheric Environmental Exposure Testing Of Nonmetallic Materials
8.9.1.2.1	Weathering: Color Retention Performance	D2244-11	Standard Practice for Calculation Of Color Tolerances And Color Differences From Instrumentally Measured Color Coordinates
8.9.1.3.1	Weathering: Chalk Resistance Performance	D4214-07	Standard Test Method for Evaluating The Degree Of Chalking Of Exterior Paint Film
8.9.1.4.1	Weathering: Gloss Retention Procedure	D523-08	Standard Test Method for Specular Gloss
8.9.1.5.1	Weathering: Resistance to Erosion Procedure	B244-09	Standard Test Method for Measurement Of Thickness Of Anodic Coatings On Aluminum Nonconductive Coatings On Nonmagnetic Basis Metals With Eddy Current Instruments
A3.1	—	D7091-12	Standard Practice for Nondestructive Measurement Of Dry Film Thickness Of Nonmagnetic Coatings Applied To Ferrous Metals And Nonmagnetic, Non Conductive Coatings Applied To Non-Ferrous Metals
A5.1.1.1	T-Bend Test for Coating Flexibility	D4145-10	Standard Test Method for Coating Flexibility Of Prepainted Sheet
A5.1.1.5	T-Bend Test for Coating Flexibility	D3359-09e2	Standard Test Method for Measuring Adhesion By Tape Test
A5.2.1	Impact Resistance: Direct Impact	D3359-09e2	Standard Test Method for Measuring Adhesion By Tape Test
A5.2.2	Impact Resistance: Reverse Impact	D3359-09e2	Standard Test Method for Measuring Adhesion By Tape Test