

Fiberglass Coatings Requirements

	AAMA 623-07	AAMA 624-07	AAMA 625-07
Minimum Initial Dry Film Thickness	20 microns (0.8 mil)	30 microns (1.2 mil)	30 microns (1.2 mil)
Color Uniformity	Consistent with specified range or numerical value		
Specular Gloss (per ASTM D 523)	Within ± 5 units of manufacturer's recommended values		
Dry Film Hardness	No film rupture per ASTM D 3363 pencil test – grade H hardness lead pencil	No film rupture per ASTM D 3363 pencil test – grade F hardness lead pencil	
Film Adhesion	No film removal per ASTM D 3359, Method B (Method A for film thicknesses >125 microns)		
Dry adhesion	No film removal per ASTM D 3359 after 24-hr immersion in 100°F water		
Wet adhesion	N/A		
Boiling Water Adhesion	No film removal per ASTM D 3359 after 20-min immersion in boiling water		
Direct Impact	No removal of film from substrate		
Abrasion Resistance (minimum abrasion coefficient)	N/A	20	40
Chemical Resistance	No visual change after 10 min exposure to 10% solution		
Muriatic Acid	Easily removed after 24hr exposure at 100% humidity		
Mortar	N/A		
Nitric Acid	E5DE (Hunter) units color change after 30 min fume exposure		
Detergent Resistance	No loss of coating adhesion per ASTM D 2248		
Window Cleaner Resistance	N/A	No noticeable change after 24 hr exposure	
Humidity Resistance	No blistering after 1,500 hrs. high-humidity exposure	No blistering after 3,000 hrs. high-humidity exposure	No blistering after 4,000 hrs. high-humidity exposure
Cold Crack Cycle	No cracking or loss of adhesion after 15 cycles of humidity exposure (24 hr), room temperature (4 hr) then cold (-10°F)		
Oven Aging	No loss of adhesion after seven days at 140°F		
Weather Exposure	No checking, crazing, chalking or loss of adhesion after one year exposure in South Florida site	No checking, crazing, chalking (E8 for colors/E6 for whites per ASTM D 4214), loss of color retention (within ± 5 Hunter units), loss of gloss <30%, loss of adhesion (per ASTM D 3359, Method B) and <10% film erosion after five years exposure in South Florida site or 1450 MJ TUVB accelerated exposure per ASTM G90	No checking, crazing, chalking (E8 for colors/E6 for whites per ASTM D 4214), loss of color retention (within ± 5 Hunter units), loss of gloss <50%, loss of adhesion (per ASTM D 3359, Method B) and <10% film erosion after ten years exposure in South Florida site or 2900 MJ TUVB accelerated exposure per ASTM G90

Source: Data taken from AAMA 623-07, AAMA 624-07 and AAMA 625-07.