

AF-217 & AF-220 Testing

AF-217/220	Test	Description	Performance
	ASTM E 283	Air Infiltration, single door, pressure differential of 6.24 psf.	Shall not exceed 0.45 cfm per square foot
	ASTM E 330	Uniform Structural Load, single door	Plus or minus 80 psf
	ASTM E 331	Water Penetration	No leakage.
	ASTM D 1761-06	Screw Pullout	Minimum 924 pounds
	ASTM E 84	Surface Burning Characteristics, FRP Doors and Panels Flame Spread, Class C Smoke Developed, Class C	Maximum of 200 Maximum of 450
	ASTM E 84	Surface Burning Characteristics, Interior Faces of FRP Exterior Panels and Both Faces of FRP Interior Panels Flame Spread, Class A Smoke Developed, Class A	Maximum of 25 Maximum of 450
	ASTM C 1363-2011	Thermal Transmission, Exterior Doors, U Value: Maximum of 0.18 BTU/hr x sf x degrees F	R-Value 5.54
	AAMA 1304-02	Forced Entry Resistance	Pass
	ASTM E 1996	Large Missile Impact Test	Pass
	ASTM E 1886	Air Pressure Cycle Test	Plus or Minus 75psf
	ASTM D 6670-01	Indoor Air Quality	Greenguard Gold Certification
		FRP Face Sheet Properties	
	ASTM D 256	Izod Impact Strength	Minimum 7 ft-lb/in notched
	ASTM D 638	Tensile Strength	Minimum 18 x 10 ³ psi
	ASTM D 638	Tensile Modulus	Minimum 18 x 10 ⁶ psi
	ASTM D 570	Water Absorption	Maximum 0.16% / 24 hours @ 77° F
	ASTM D 790	Flexural Strength	Minimum 27 x 10 ³ psi
	ASTM D 790	Flexural Modulus	Minimum .7 x 10 ⁶ psi
	ASTM D 2583	Barcol Hardness	Minimum 40
	ASTM D 3029	Gardner Impact Strength	Minimum 30 in-lb