

TECHNICAL INFORMATION

• Material Specifications

Tested Properties	FRP		Polymer Concrete		
	ASTM Test Method	Performance	ASTM Test Method	W/O Fiberglass Cloth Reinforced Performance	W/ Fiberglass Cloth Reinforced Performance
Mechanical	Tensile Strength at Break (PSI)	D2343 9000	D638 1560		2000
	Elongation at Break	D2343 1.1	C496 6 x 10 ⁻³		—
	Compressive Strength (PSI)	D3410 20000	D695 10000		19000
	Flexural Strength (PSI)	D790 19190	D790 3180		10000
	Tensile Modulus, 10 ³ (PSI)	D2343 800	D790 —		990
	Flexural Modulus, 10 ³ (PSI)	D790 1490	D790 2720		1480
Thermal	Coef. of Thermal Expansion 10 ⁻⁶ in./ in./ °F	D696 20	D696 15		15
	Deflection Temperature 264 PSI	D648 350	D648 —		—
Physical	Specific Gravity	D1505 1.7	D1505 2.3		2.3
	Water Absorption (1/2" thick specimen %) (24 hr.)	D570 .38	D570 .01		.01

In addition to the above, the following certified test results have been performed on both Polymer Concrete and Fiber Reinforced Polymer Products.

Attribute	ASTM Test Method	Attribute	ASTM Test Method
Accelerated Service Exposure	ASTM D-756-56 Procedure E	Chemical Resistance	ASTM D543-47 Section 7, Procedure 1
Simulated Sunlight Exposure	ASTM D-1501-71 Procedure B		
Water Absorption	ASTM D-570-63 Section 5, 6.1, 6.5	<i>Chemical</i>	<i>Concentration</i>
Flexural Properties	ASTM D-790	Sodium Chloride	5 %
Flamability Test	ASTM D-635-74	Sulfuric Acid	0.1N
		Sodium Sulfate	0.1N
		Hydrochloric Acid	0.2N
		Sodium Hydroxide	0.1N
		Kerosene	Per ASTM D-543-67
		Transformer Oil	Per ASTM D-543-67