



Panelized Composite Decking for Marine Applications

Mechanical Properties	Test Method	Test Result
Self Ignition Temperature (Spontaneous)	ASTM D1929	450C/ 842F
Flame Spread Index 1	ASTM E84	65
Smoke Developed Index 2	ASTM E84	340 Class B (Class II)
Rate of Burning	ASTM D365	0.68"/ min
Static Coefficient of Friction Dry	ASTM C1028	0.58
Static Coefficient of Friction Wet	ASTM C1028	0.64
Fungus Resistance Rating	ASTM D2017	<3% (high resistant)
Resistance - Termites	ASTM D3345	<10 (no damage)
Weathering Test 2000 Hr Xenon Arc	ASTM D2565	Color change
Flexural Strength after Weathering	ASTM D790	Loss 0.5%- 4% (<10%)
Coefficient of Linear Expansion Between	ASTM D6341	2.70×10^{-5} in/in/1 ^o F 4.87×10^{-5} in/in/1 ^o C
Hygrothermal Cycles (-20F)	ASTM D6662	
Flexural Strength after Hygrothermal Cycle	ASTM D6109	-0.40%
Water Absorption	ASTM D1037	Negligible
Bulk Density	ASTM D6111	<0.8%
Specific Gravity	ASTM D6111	0.581
Relative Density	ASTM D792	1.175 g/cm ³
Specific Gravity	ASTM D792	1.178
Toxicity		No harmful materials
Notch Impact Resistance (parallel to length)	ASTM D256	0.52 ft.lb/in
Notch Impact Resistance (perpendicular to length)	ASTM D256	0.46 ft.lb/in
Hardness	ASTM D143	346 ibf
Compression Strength (parallel to length)	ASTM D6108	1970 psi
Ultimate Tensile Strength of the Beam	ASTM D368	2,230 psi
Ultimate Tensile Strength of the Material	ASTM D638	2,840 psi
Ultimate Modulus of Elasticity (2 x 6)	ASTM D6109	403,068 psi
Ultimate Modulus of Rupture (2 x 6)	ASTM D6109	2,923 psi
Screw Lift	ASTM D2047	312 lbs
Direct Screw Removal	ASTM D6117	392 lbs