



MECHANICAL PROPERTIES OF RECYCLED STRUCTURAL COMPOSITE PRODUCTS

PROFILE PROPERTY	LARGE	SMALL HEAVY	SMALL LIGHT
Weight, pcf	55	55	52
Modulus of Elasticity, psi	250000	170000	128000
Yield Strength (Bending), psi	3800	3000	2900
Allowable Strength (Bending), psi	800	700	600
Yield Strength (Shear), psi	1500	1500	1250
Allowable Strength (Shear), psi	350	350	300
Coefficient of Thermal Expansion, in/in/°F	0.0000282	0.0000282	0.0000282
Coefficient of Friction, untreated	0.6	0.6	0.5
Screw Withdrawal, pounds (1 1/16 screw predrilled hole)	7100	5000	4000
Linear Burn Rate (UL94HB), mm/min	20.4	20.4	20.4
Electrical Resistance, megaohms (wet condition)	2.38	2.38	2.38
Ultraviolet Degradation, inches/year (full sun exposure)	0.003	0.003	0.003
Thermal resistance, variable strength/deflection	-257°F to +257°F	-257°F to +257°F	-257°F to +257°F
Data courtesy of Axion International			