



REDWOOD
PLASTICS AND RUBBER

TECHNICAL DATA

FiberForce® & BarForce® Plastic material properties

Test Methods		English Units		Metric Units	
Test	ASTM Test	Value	Units	Value	Units
Compression Modulus	D695	170,000	PSI		
Compression Strength	D695	4500	PSI		
Chemical Resistance Salt water	ASTM D543	.05	% by Weight		
	ASTM D543/D638	3736	PSI – Tensile – 7 Day soak		
Chemical Resistance Gasoline	ASTM D543	2.9	% by Weight		
	ASTM D543/D638	3431	PSI – Tensile – 7 Day soak		
Chemical Resistance #2 Diesel	ASTM D543	0.98	% by Weight		
	ASTM D543/D638	3596	PSI – Tensile – 7 Day soak		
Hardness	D4329	67	Shore D		
Specific Gravity	D6111-97	0.93	g/cc	0.93	g/cc
Flash point		644	Deg F	340	Deg C
Water Absorption	D570	0.25	% by Weight – 24 hour		
Thermal Expansion	D6341-98	0.00003 3	Inch/Inch/Deg F		
Average Screw pull out	D6117	646	Lbs	293	Kg
Flame Spread	E84(03a)	62			
Flame Spread Classification	E84(03a)	60			
Smoke Developed	E84(03a)	230			
Smoke Developed Classification	E84(03a)	250			
Spontaneous Ignition	D-1929	824	Deg F	440	Deg C
Tensile test	D638	3623	PSI	254	Kg/cm2`
Notched impact resistance Method A	D256	2.77	Ft*LB/IN		
Brittleness – Base materials	D746	< -40 Deg C			
Abrasion resistance	D4060	<0.023	Grams (0.043%)		
Hardness	D4329	66	Shore D		
Ultraviolet	D4329	< 10	% Change in Type D Durometer at 500 hours		
Coefficient of Friction – Static	D1849	0.253			
Coefficient of Friction – Kinetic	D1849	0.175			
Formaldehyde gassing	D6007	0.02	ppm		

The technical data on this page represents only average values and not minimum values. Safety factors must be added into the design.

Ultraviolet Weathering

An ultraviolet stabilizer is added at the time of manufacture to help protect against ultraviolet degradation of the plastic surface in exterior applications.