

# TECHNICAL DATA

## FiberForce® Structural Plastic Lumber

### Test Methods

Test	English Units			Metric Units	
	ASTM Test	Value	Units	Value	Units
Flexural Strength	D6109-97	2750	PSI	193	Kg/cm <sup>2</sup>
Flexural Modulus	D6109-97	306080	PSI	21520	Kg/cm <sup>2</sup>
Compression Strength	D6108-97	2340	PSI	165	Kg/cm <sup>2</sup>
Compression Modulus	D6108-97	114900	PSI	8077	Kg/cm <sup>2</sup>
Specific Gravity	D6111-97	0.93	g/cc	0.93	g/cc
Flash point		644	Deg F	340	Deg C
Moisture Absorption		0.06	% by Weight	0.06	% by Weight
Thermal Expansion	D6341-98	0.000033	Inch/Inch/Deg F		
Average Nail pull out	D6117-97	504	Lbs	229	Kg
Static coefficient of Friction -Dry	D2394-83(99)	.53			
Static coefficient of Friction -Wet	D2394-83(99)	.51			
Sliding coefficient of Friction -Dry	D2394-83(99)	.23			
Sliding coefficient of Friction -Wet	D2394-83(99)	.51			
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

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

### Chemical Resistance

High-Density Polyethylene has a high resistance to most acids and chemicals. Bedford Plastic Lumber has a high tolerance to exposure by most substances.

### Ultraviolet Weathering

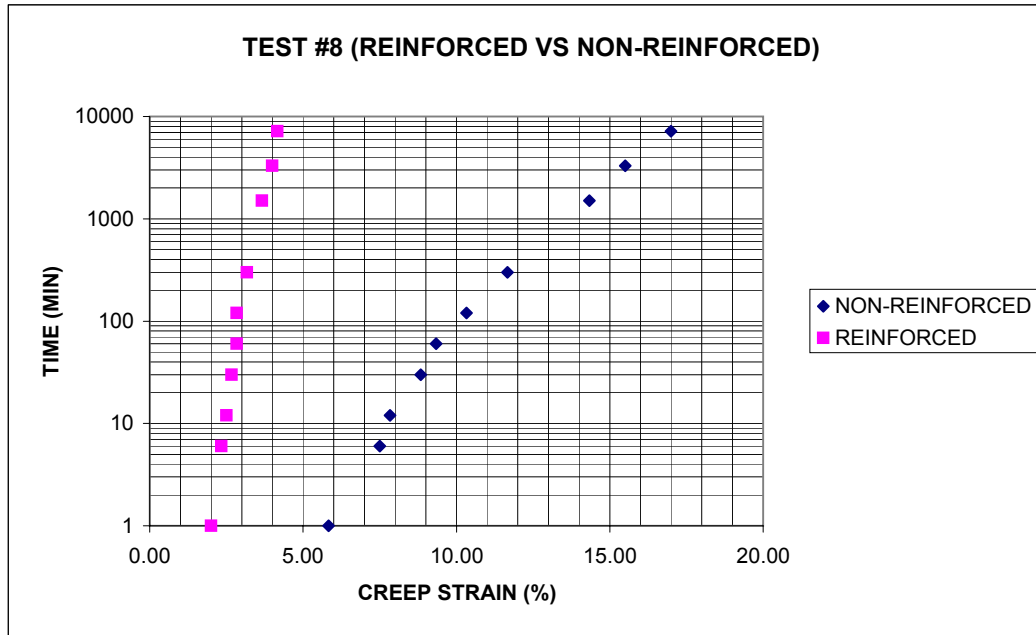
An ultraviolet stabilizer is added at the time of manufacture to help protect against ultraviolet degradation of the plastic surface in exterior applications.

**NON-REINFORCED**

<u>TIME (MIN)</u>	<u>MEASUREMENT (IN)</u>	<u>DEFLECTION</u>	<u>STRAIN (IN/IN)</u>	<u>STRAIN (%)</u>
1	5.65	0.35	0.058	5.83
6	5.55	0.45	0.075	7.50
12	5.53	0.47	0.078	7.83
30	5.47	0.53	0.088	8.83
60	5.44	0.56	0.093	9.33
120	5.38	0.62	0.103	10.33
300	5.3	0.7	0.117	11.67
1500	5.14	0.86	0.143	14.33
3300	5.07	0.93	0.155	15.50
7200	4.98	1.02	0.170	17.00

INITIAL DIST (IN)  
6

TEMP = 72 F  
FORCE APPLIED = 195 LB



**REINFORCED**

<u>TIME (MIN)</u>	<u>MEASUREMENT (IN)</u>	<u>DEFLECTION</u>	<u>STRAIN (IN/IN)</u>	<u>STRAIN (%)</u>
1	5.88	0.12	0.020	2.00
6	5.86	0.14	0.023	2.33
12	5.85	0.15	0.025	2.50
30	5.84	0.16	0.027	2.67
60	5.83	0.17	0.028	2.83
120	5.83	0.17	0.028	2.83
300	5.81	0.19	0.032	3.17
1500	5.78	0.22	0.037	3.67
3300	5.76	0.24	0.040	4.00
7200	5.75	0.25	0.042	4.17

9/18/2000

INITIAL DIST (IN)  
6

TEMP = 72 F  
FORCE APPLIED = 195 LB