



Black Rhino Recycling, Inc.

1.800.974.4669

www.blackrhinoproducts.com

Standard Grade Plastic Lumber
100% Recycled HDPE
TECHNICAL DATA

Test Methods

Test	English Units		Metric Units		
	ASTM Test	Value	Units	Value	Units
Flexural Strength	D6109-97	1355	PSI	95	Kg/cm ²
Flexural Modulus	D6109-97	95939	PSI	6744	Kg/cm ²
Compression Strength	D6108-97	1420	PSI	100	Kg/cm ²
Compression Modulus	D6108-97	51000	PSI	3585	Kg/cm ²
Specific Gravity	D6111-97	0.861	g/cc	0.861	g/cc
Flash point		644	Deg F	340	Deg C
Moisture Absorption		0.06	% by Weight	0.06	% by Weight
Thermal Expansion	D6341-98	0.000055	Inch/Inch/Deg F		
Average Nail pull out	D6117-97	504	Lbs		
Static coefficient of Friction -Dry	D2394-83(99)	.48			
Static coefficient of Friction -Wet	D2394-83(99)	.40			
Sliding coefficient of Friction -Dry	D2394-83(99)	.22			
Sliding coefficient of Friction -Wet	D2394-83(99)	.43			

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.
Plastic Lumber has a high tolerance to exposure by most substances.

Ultraviolet Weathering

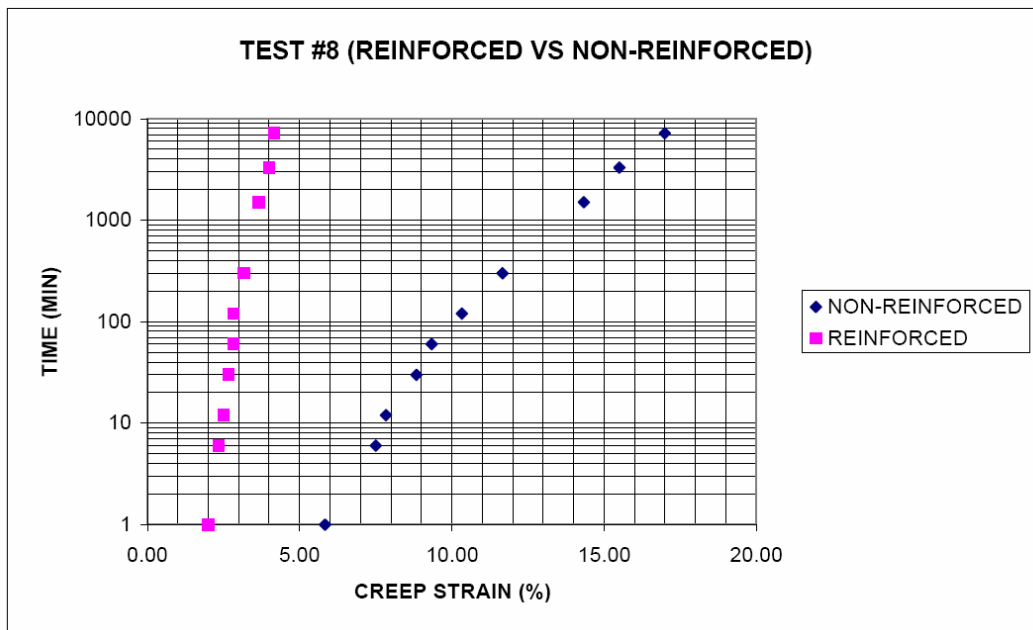
An ultraviolet stabilizer is added at the time of manufacture to help protect against ultraviolet degradation of the plastic surface in exterior applications.

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

INITIAL DIST (IN)

6

TEMP = 72 F
FORCE APPLIED = 195 LB