

SPECIFICATION STRUCTURAL PLASTIC LUMBER

DESCRIPTION:

Structural plastic lumber shall be manufactured with HDPE and fiberglass elements to act reinforcing with the HDPE. Lumber shall be molded in one piece per specified size. All materials will have UV additives to prevent deterioration of the plastic lumber from exposure to UV light. HDPE will be made up of no less than 80% recycled material; both post industrial and post consumer. Finished plastic lumber will not rot, split, crack or splinter for a minimum of 50 years. It shall be resistant to termites, marine borers, salt spray, oil, and fungus.

MECHANICAL PROPERTIES:

Test	English Units		Metric Units		
	ASTM Test	Value	Units	Value	Units
Flexural Strength	D6109-97	2750	PSI	193	Kg/cm ²
Flexural Modulus	D6109-97	306080	PSI	21520	Kg/cm ²
Compression Strength	D6108-97	2340	PSI	165	Kg/cm ²
Compression Modulus	D6108-97	114900	PSI	8077	Kg/cm ²
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		

DIMENSIONAL TOLERANCES:

CUP/BULDGE TOLERANCES – deviation in the face from a straight line from edge to edge of piece.

FACE WIDTH	4"	6"	8"	10"	12"
Tolerance (+/-)	3/32"	1/8"	3/16"	1/4"	1/4"

LENGTH TOLERANCE = + 3" / - 0" – Measured at 70 deg F.

The above listed are specifications for plastic lumber to be used as a reference for bid specifications. This is only a guide. Your specific application should be addressed by a professional engineer.