

ECO-TECH, INC.

EXPANSION/CONTRACTION CHARACTERISTICS

Our product primarily includes polyethylene's, although we have designed specific blends to provide specific board qualities which our customers require. Board made from polyethylene's expand and contract less than its wooden counterpart. There is no moisture retention or exulsion.

Over a one year period, ECO-LINER has shown the following characteristics:

- ** More durable than wood in all weather conditions.
- ** Will not crack or splinter like wood.
- ** Nail pops and resulting damage is eliminated due to the inherent nature of plastic. Plastic has memory and will resume its original shape.
- ** After initial curing process at our plant, shrinkage is virtually eliminated.
- ** Resists chemical and organic contamination.
- ** Does not mold, mildew, rot or harbor germs and infestations like wood.
- ** Maintenance free.
- ** Can accept machine nails or screws.
- ** Can be drilled and bolted.
- ** Can be cut like wood, although we suggest carbide tip saw blades be used.

<u>Mechanical Properties</u>	<u>Test Method</u>	<u>Typical Value</u>
Accel. Weathering > 1MM langley	(ASTM E838)	1.0 Color
Compressive Strength	(ASTM D695), psi @ .2in.def.	2600 - 2650
	psi @ .4in.def.	3190 - 3220
	psi @ .6in.def.	5350 - 5580
Coeff. Thermal Expansion in/in/F.	(ASTM D696)	0.00001
Density, lbs/cu.in.	(ASTM D792)	.020 - .026
Flexural Modulus, psi	(ASTM D790)	98700 - 108500
Shear Strength, psi	(ASTM D732-90)	1950 - 3300
Tensile Strength, psi	(ASTM D638)	2300 - 2850
Specific Gravity (molecular weight)		.94 - .955

For Deflection/Load Calculations, use $\delta = (5)(W)L^4 / (384)(97900)(I)$
W = # / in of load, L = in. span, and I = moment of inertia (bh³/12)