

# VILLA ROOT BARRIER, INC.

Wholesale Distributor of Landscape Products

## PVC POND LINER SPECIFICATIONS MINIMUM MATERIAL PROPERTIES

PROPERTY Gauge (nominal)	TEST METHOD	TEST VALUE 20 mils	TEST VALUE 30mils	TEST VALUE 40mils
<b>Thickness, minimum</b> (minimum)	ASTM 01593 Par. 9.1 .3.	19 mils	28.5 mils	38 mils
<b>Specific Gravity</b> (minimum)	ASTM 0792	1.24	1.24	1.24
<b>Minimum Tensile Properties</b> (each direction)	MTD A			
1. Breaking Factor	ASTM D882			
2. Elongation at Break	MTD A or B one inch wide	46 lbs/in width (2300 psi)	69 lbs/in width (2300 psi)	92 lbs/in width (2300)
3. Modulus (Force) @ 100% Elongation	MTD A or B	325%	325%	350%
<b>Tear Resistance</b> (minimum average)	MTD A or B	20 lbs/in width (1000 psi)	30 lbs/in width (1000 psi)	36 lbs/in width (900 psi)
<b>Low Temperature Impact (F)</b> (50% pass)	ASTM D1004 Die C	6 lbs (300 lbs/in)	8 lbs (267 lbs/in)	10 lbs (250 lbs/in)
<b>Dimensional Stability</b> (each direction, percent change maximum)	ASTM D1790	-15°F	-20°F	-20°F
<b>Water Extraction</b> (max % wt loss)	ASTM D1204 212°F 15 Min.	+/-5%	+/-5%	+/-5%
<b>Volatile Loss</b> (max % wt loss)	ASTM D3083 (as modified by NSF)	-0.25%	-0.25%	-0.35%
<b>Resistance to Soil Burial</b> (percent change maximum in original value)	ASTM D1203 MTD A	0.9%	0.7%	0.6%
1. Breaking Factor	ASTM D3083 (as modified by NSF)	5%	5%	5%
2. Elongation at Break		20%	20%	20%
3. Modulus @ 100% Elongation		20%	20%	20%
<b>Hydrostatic Resistance</b> (minimum)	ASTM 0751 MTDA	60 psi	82 psi	95 psi
<b>FACTORY SEAM REQUIREMENTS</b> <b>Factory Seaming Method</b>		----- Dielectric Fusion Weld -----		
Bonded Seam Strength (factory seam breaking factor, ppi width)	ASTM D3083 (as modified by NSF)	46 lbs/in width	80 lbs/in width	69 lbs/in width
Peel Adhesion (minimum)	ASTM D413 (as modified by NSF)	20 lbs/in	20 lbs/in	20 lbs/in
Resistance to Soil Burial (percent change maximum in original value)	ASTM D3083 (as modified by NSF)			
Bonded Seam Strength		-20%	-20%	-20%
Peel Adhesion		-20%	-20%	-20%
<b>FIELD SEAM REQUIREMENTS</b> <b>Field Seaming Method</b>		----- Bodied Solvent Weld -----		
Bonded Seam Strength (Seam Breaking Factor)	ASTM D3083 (as modified by NSF)	36.8 lbs/in width	552 lbs/in width	736 lbs/in width

NOTE: Other thickness specification available upon request

