

# Polyfabrics

Reliability you  
can build on



## HDPE Liner



### APPLICATIONS

- Channels, Ponds, Lakes
- Containment Areas
- Landfill Liner & Caps
- Golf Course Ponds
- Irrigation Reservoirs
- Waste Water Treatment

Due to its excellent chemical resistance and low material cost, HDPE is extremely popular in lining applications requiring low permeability and high strength/density ratio. HDPE Liners are becoming more widely used as the implications of contaminated soil conditions on structures and the general environment. Polyfabrics' HDPE Liners are most commonly used in lining of channels, small dams and other containment structures.

HDPE is known for its large strength to density ratio. The density of HDPE can range from 930 to 970 kg/m<sup>3</sup>. Although the density of HDPE is only marginally higher than that of low-density polyethylene, HDPE has little branching, giving it stronger intermolecular forces and tensile strength than LDPE. The difference in strength exceeds the difference in density, giving HDPE a higher specific strength. It is also harder and more opaque and can withstand somewhat higher temperatures (120°C/ 248°F for short periods).

CODE	SIZE
HDPEL1.0-5.8/50	1mm Liner – 5.8m x 50m
HDPEL15-5.8/50	1.5mm Liner – 5.8m x 50m
HDPEL2-5.8/100	2mm Liner – 5.8m x 100m

Smooth HDPE Liner Specifications					
Index Properties	Units	Standard	1MM	1.5MM	2MM
Thickness Average	mm	ASTM D 5199	1	1.5	2
Density	g/cm³	ASTM D 792		0.94	
Tensile Properties					
Yield Strength	kN/m	ASTM D 6693	15	22	29
Break Strength	kN/m	ASTM D 6693	27	40	53
Yield Elongation	%	ASTM D 6693		12	
Break Elongation	%	ASTM D 6693		700	
Tearing Resistance	N	ASTM D 1004	125	187	249
Puncture Resistance	N	ASTM D 4833	320	480	640
Stress Crack Resistance	Hr	ASTM D 5397		500	
Carbon Black Content	%	ASTM D 1603		2-3	
Carbon Black Dispersion	Cat	ASTM D 5596	For 10 different views: 9 in Categories 1 or 2 and 1 in Category 3		
Oxidative Induction Time	Min	ASTM D 3895	100min in standard OIT		
Oven Aging at 85°C					
Standard (90 days)	%	ASTM D 5721		55	
High Pressure (90 days)	%	ASTM D 3895		88	
UV Resistance (1600 hours)	%	ASTM D 5885		50	
Dimensions					
Sizes	m	-	5.8 X 50	5.8 x 50	5.8 x 100
Weight	kg/m²	-	0.94	1.41	1.88

DISCLAIMER Consult Jaybro Group or a certified Engineer for site specific installation instructions. Jaybro Group reserves the right to change its product specification at any time. It is the responsibility of the specifier and purchaser to ensure that product specifications used for design and procurement purposes are current and consistent with the products used in each instance. E&OE

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