

Geomembrane – Linear Low Density Polyethylene

Product Data Sheet

Penteco LD-T40 40 mil LLDPE Textured Surface

- ❖ **Containment**
- ❖ **Erosion Control**
- ❖ **Leak Detection**
- ❖ **Water Proofing**
- ❖ **Buried Applications**

LLDPE geomembranes have a lower dense cell structure making them more flexible, easier to install, and less sensitive to stress cracking than HDPE geomembranes. Although, further comparison shows LLDPE has lower UV resistance, it's still considered a great option for exposed applications.

LLDPE liners have great tensile properties allowing them to accommodate stretching and creasing, which can be a critical design factor for buried applications. Due to its flexibility, thinner LLDPE geomembrane can be prefabricated in larger panels saving installation time, cost, and a more-controlled quality install.

LD-T40			Minimum Average Values	
Property	Test Method	Frequency	Imperial	Metric
Thickness (nominal)	ASTM D-5994	Per Roll	40 mil	1.00 mm
Thickness (min. average)			38 mil	0.95 mm
Lowest ind. for 8 out of 10 values			36 mil	0.90 mm
Lowest ind. for any of 10 values			34 mil	0.85 mm
Asperity Height	ASTM D-7466	Every 2 nd Roll	16 mil	0.40 mm
Density	ASTM D-1505	200,000 lbs (90,000 kg)	0.034 lb/in ³	0.94 g/cm ³
Tensile Properties	ASTM D-6693 Type IV	20,000 lbs (9,000 kg)		
Break Strength			60 lb/in	11 N/mm
Break Elongation			250 %	250 %
Tear Resistance	ASTM D-1004	45,000 lbs (20,000 kg)	22 lb	100 N
Puncture Resistance	ASTM D-4833	45,000 lbs (20,000 kg)	44 lb	200 N
Axi-Symmetric Break Resistance Strain	ASTM D-5617	200,000 lbs (90,000 kg)	30 %	30 %
Carbon Black Content	ASTM D-4218	20,000 lbs (9,000 kg)	2.0 % - 3.0%	2.0 % - 3.0%
Carbon Black Dispersion	ASTM D-5596	45,000 lbs (20,000 kg)	Only near spherical agglomerates as per GRI-GM13	
Oxidative Induction Time	ASTM D-8117	200,000 lbs (90,000 kg)	100 mins	100 mins
Oven Aging - % retained after 90 days	ASTM D-8117	200,000 lbs (90,000 kg)	35 %	35 %
UV Res. - % retained after 1600 hrs	ASTM D-5885	200,000 lbs (90,000 kg)	35 %	35 %
Dimensions				
Typical Roll Size	Measured	Single-Sided Textured	22.5 ft x 787 ft	6.86 m x 240 m
Area	Calculated		17,707 ft ²	1646 m ²
Typical Roll Size	Measured	Double-Sided Textured	22.5 ft x 755 ft	6.86 m x 230 m
Area	Calculated		16,987 ft ²	1578 m ²

Notes:

- (1) All roll widths/lengths have a tolerance of ±1 %.
- (2) Custom roll lengths can be ordered. Transportation cost might be affected.
- (3) Penteco is a distributor for this product with manufacturing partners based out of Canada & USA.
- (4) Manufacturer's data sheet provided at time of purchase with adjusted widths/lengths.
- (5) Penteco's LLDPE specifications are equivalent to GRI's GM 17 standard.

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