

Geomembrane – Linear Low Density Polyethylene

Product Data Sheet

Penteco LD-T80 80 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-T80 | | | Minimum Average Values | |
|---------------------------------------|---------------------|----------------------------|--|-------------------------|
| Property | Test Method | Frequency | Imperial | Metric |
| Thickness (nominal) | ASTM D-5994 | Per Roll | 80 mil | 2.0 mm |
| Thickness (min. average) | | | 76 mil | 1.9 mm |
| Lowest ind. for 8 out of 10 values | | | 72 mil | 1.8 mm |
| Lowest ind. for any of 10 values | | | 68 mil | 1.7 mm |
| Asperity Height | ASTM D-7466 | Every 2 nd Roll | 16 mil | 0.4 mm |
| Density | ASTM D-1505 | 200,000 lbs (90,000 kg) | 0.034 lb/in ³ | 0.939 g/cm ³ |
| Tensile Properties | ASTM D-6693 Type IV | 20,000 lbs (9,000 kg) | | |
| Break Strength | | | 120 lb/in | 21 N/mm |
| Break Elongation | | | 250 % | 250 % |
| Tear Resistance | ASTM D-1004 | 45,000 lbs (20,000 kg) | 44 lb | 200 N |
| Puncture Resistance | ASTM D-4833 | 45,000 lbs (20,000 kg) | 88 lb | 400 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 425 ft | 6.86 m x 130 m |
| Area | Calculated | | 9,562 ft ² | 892 m ² |
| Typical Roll Size | Measured | Double-Sided Textured | 22.5 ft x 410 ft | 6.86 m x 125 m |
| Area | Calculated | | 9,225 ft ² | 857 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.

DISCLAIMER: The data above represents the manufacturer's laboratory testing of their product. It is the user's responsibility to determine the suitability of the products. Penteco is a distributor for these products through its manufacturing partners. Penteco will provide the manufacturers data sheet at the time of sale. There may be very slight variation, but overall, the data represents standard industry specifications. Penteco and manufacturing partners assume no liability, nor can they provide any warranty, without having additional information regarding the use of the products. The same goes for any infringement on patents - no permission can be granted without further disclosure.

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