

GEOFLEX PRO

Smooth Flexible Polyethylene

HP30 & HP40

Product Description

GeoFlex™ Pro HP-Series HP30 and HP40 are co-extruded linear-low density polyethylene geomembranes developed for applications requiring enhanced flexibility along with a combination of high strength and impact resistance. These elements are critical for the pliability necessary in reliable, above-ground tank lining systems, as well as earthen pits and ponds.

The gray color on the top layer minimizes thermal expansion while providing a cooler surface. Contrasting colors also provide a vital function for ease of damage detection during the installation process. The additive package in the black bottom layer includes carbon black and thermal stabilizers for protection from UV radiation. Both sides are designed for ease of welding in the factory or field. GeoFlex™ Pro is also available in a two-sided, gray version, as well.

Product Use

GeoFlex™ Pro HP-Series is an economical solution for many containment applications including durable liners and covers requiring high impact, cold temperature installations, puncture and tear strengths. HP-Series is designed to remain flexible and offer excellent elongation properties to conform to a wide variety of shapes and surfaces in demanding conditions.

GeoFlex™ Pro is engineered with ultra-low modulus characteristics to resist pinholes and flex-cracks during installation. Trouble free installations include proper sub-grade preparation in addition to the appropriate needle punched geotextile for added puncture protection.

Size & Packaging

GeoFlex™ Pro HP30 is available in large, one-piece panels, up to 50,000 square foot panels. GeoFlex™ Pro HP40 is available in up to 38,000 square foot panels. Pre-fabricated, stepped panels are produced in our quality controlled factory environment; all panels are accordion folded and tightly rolled onto a heavy duty core for ease of handling and time saving installation.



Tank Liner

Product

Part

GEOFLEX™ PRO	HP30BD
GEOFLEX™ PRO	HP30DD
GEOFLEX™ PRO	HP40BD
GEOFLEX™ PRO	HP40DD

APPLICATIONS

Above Ground Tanks	Remediation Liners
Containment Liners	Brine Ponds
Canal Linings	Leachate Collection Ponds
Oilfield Pit Liners	Interim Landfill Covers
Decorative Ponds	Outdoor Covers
Fish Hatchery Liners	Farm Ponds

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PRO-FORMA DATA SHEET

PROPERTIES	TEST METHOD	GEOFLEX™ PRO HP30BD/ HP30DD		GEOFLEX™ PRO HP40BD/HP40DD	
		Imperial Avg	Metric Avg	Imperial Avg	Metric Avg
APPEARANCE		Black/Gray Gray/Gray	Black/Gray Gray/Gray	Black/Gray Gray/Gray	Black/Gray Gray/Gray
THICKNESS, NOMINAL		30 mil	0.76 mm	40 mil	1.0 mm
WEIGHT	ASTM D751	140 lbs/MSF	683 g/m ²	189 lbs/MSF	922 g/m ²
*1" TENSILE STRENGTH	ASTM D882	140 lbf/in	245 N/cm	172 lbf/in	301 N/cm
*ELONGATION AT BREAK (FILM BREAK)	ASTM D882	1000 %	1000 %	1000 %	1000 %
*TEAR RESISTANCE	ASTM D1004	16 lbf	71 N	23 lbf	102 N
PUNCTURE RESISTANCE	ASTM D4833	60 lbf	267 N	80 lbf	356 N
TENSILE STRENGTH AT BREAK (MAX LOAD)	ASTM D6693	169 lbf/in	296 N/cm	229 lbf/in	401 N/cm
ELONGATION AT BREAK (FILM BREAK)	ASTM D6693	980 %	980 %	1000 %	1000 %
2% SECANT MODULUS	ASTM D5323	24,099 psi	166 N/mm ²	25,959 psi	179 N/mm ²
LOW TEMP BRITTLENESS BY IMPACT	ASTM D1790	Pass @ -103° F	Pass @ -75° C	Pass @ -103° F	Pass @ -75° C
MAXIMUM STATIC USE TEMPERATURE		180° F	82° C	180° F	82° C
MINIMUM STATIC USE TEMPERATURE		-70° F	-57° C	-70° F	-57° C

*Tests are an average of MD and TD directions.

Hydraulic conductivity values are derived from permeability data.
HP30 = 2.49×10^{-10} cm/sec, and HP40 = 1.93×10^{-10} cm/sec.

PRO-FORMA Sheet Contents:

The test values listed in this Pro-Forma data sheet are representative of initial production runs. These values may be revised at anytime without notice as additional test data becomes available.

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