

HDPE SMOOTH Geomembrane



Product Description

During production, polyethylene is prepared with raw materials, dyestuffs and auxiliary additives. They are insulation membranes that are homogeneously formed by means of a calendar system after undergoing the necessary processes in extruders. HDPE stands for high density polyethylene and LLDPE stands for linear low density polyethylene.

According to the place to be used, LLDPE should be chosen if there are more details, recesses and protrusions, and HDPE Geomembrane should be chosen if there are flatter details.

HDPE Smooth Geomembrane Black Color UV

The material is black, homogeneous and monochromatic. Special production can be made in different colors upon request. It can be produced smooth or textured according to the need.



HDPE Smooth Geomembrane

a: These tests are valid for monochromatic black HDPE Geomembrane.

b: Roll sizes are standard values. Different sized production upon the request of the customer is available.

c: The values below are valid for the standard Smooth HDPE Geomembrane. Production with different mechanical and chemical properties is available upon customer's request.



**** Please contact [GEOMERT](#) for more information.**

HDPE SMOOTH Geomembrane



PHYSICAL SPECIFICATIONS

Test Method	Unit	Values	Tolerance
Raw Material		High Density Polyethylene (HDPE)	
Density	EN ISO 1183-1	gr/cm ³	0.940 – 0.970
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MECHANICAL SPECIFICATIONS

Identification Code	-			HD 1000	HD 1500	HD 2000	HD 2500	HD 3000	-
Thickness	EN 1849-2	mm		1.00	1.50	2.00	2,50	3.00	+/-10%
Mass per Unit Area	EN 1849-2	gr/m²		940	1410	1880	2350	2820	
Tensile Strength at Yield	EN ISO 527	N/mm²		> 16					
Elongation at Yield	EN ISO 527	%		> 10					
Tensile Strength at Break	EN ISO 527	N/mm²		> 27					
Elongation at Break	EN ISO 527	%		> 700					
Static Puncture Strength	EN ISO 12236	kN		2400	3750	5000	6250	7500	
Tearing Strength	ISO 34-1	N/mm	125	> 125	> 125	> 125	> 125	> 125	
Shear Strength	ASTM D 6392	N/50mm	262	350	525	701	876	1050	
Peel Strength	ASTM D 6392	N/50mm	197	263	398	530	661	793	

MECHANICAL SPECIFICATIONS

Water Permeability	EN 14150	m ³ /m ² .day		< 10-6					+/-10%
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DURABILITY AND CHEMICAL RESISTANCE

Carbon Black Content	ASTM D 1603	%		2-3					-
Carbon Black Distribution	ASTM D 5596	Category		1/2b					-
Melt Flow Index	EN ISO 1133	gr/10 min		2.16 kg 190 °C ; < 1 5.0 kg 190 °C ; < 3					+/-10%
Outdoor Resistance	EN 12224	%		< 30					+/-10%
Oxidation Resistance	EN 14575	%		< 30					+/-10%
Oxidative Induction Time	ASTM D 3895	Minutes		> 150					+/-10%
Fire Test	EN ISO 1 1925-2	-		Class E					-
Resistance to Solid Liquid Extraction	EN 14415	%		METHOD A,B,< 5 METHOD C < 25					+/-10%

PACKING SPECIFICATIONS

Type				HD 1000	HD 1500	HD 2000	HD 2500	HD 3000	
Roll Dimensions	Area	m*m=m ²		6,00*100 = 600				6,00*50 = 300	
	Weight	kg/roll		600	900	1200	750	900	+/-10%

