

Geomembrane







Applications for Textured HDPE

- Construction of reservoirs and dams
- Construction of canals
- · Construction of liquid waste disposal sites, transfer stations, or secondary containment
- Construction of solid waste storage and disposal sites
- Construction of transportation infrastructure
- Attenuation ponds
- Lagoons
- · Anaerobic digestion ponds

Benefits of Textured HDPE

· Increased frictional resistance

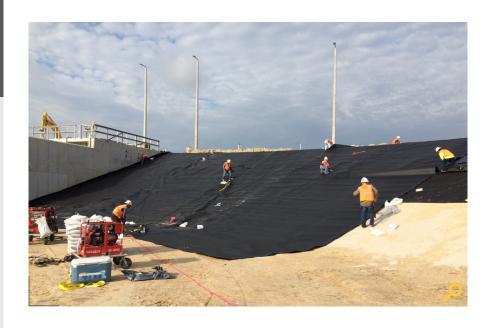
- Wrekin Products Ltd is continually seeking to improve our products and therefore reserves the right to alter product specifications without prior notice.
- It is the responsibility of all users to satisfy themselves the above data is current.
- Installation details are available on request. Published March 2017 Version 1.AC











HDPE Textured Geomembrane

HDPE geomembranes are the most commonly specified liners in the construction industry. Tried and tested the HDPE membranes are resistant to most chemicals, are extremely robust and have a high stress fracture resistance. HDPE liners are available in 1mm, 1.5mm, 2mm, 2.5mm and 3mm sheet thickness.



Protection - Stress reduction layer to prevent or reduce damage



Reinforcement - Resists stresses or reduces deformations



Drainage - Collects and transports fluids within its thickness

			Thickness				
Characteristic	Test Method	Unit	1.0mm	1.5mm	2.00mm	2.5mm	3.0mm
Material Properties							
Material	DSC analysis	High Density Polythylene (HDPE)					
Width		m	5.1 or 8.0				
Length		m	110	90	75	65	50
GRI-GM13 Properties							
Thickness (min. ave.) - Lowest individual for 8 out of the 10 values - Lowest individual of any of the 10 values	ASTM D 5994	mm	1.0 (-5%) -10% -15%	1.5 (-5%) -10% -15%	2.0 (-5%) -10% -15%	2.5 (-5%) -10% -15%	3.0 (-5%) -10% -15%
Asperity height (min. ave.)	ASTM D 7466	mm	0.40	0.40	0.40	0.40	0.40
Density (min)	ASTM D 1505	g/cm³			0.940		
Tensile Properties (min. ave.)							
Yield Strength	ASTM D 6693 type IV	kN/m	17.00	25.00	33.00	40.00	45.00
Break Stength		kN/m	29.00	38.00	58.00	65.00	75.00
Yield Strength		%	12.00	12.00	12.00	12.00	12.00
Break Elongation		%	750.00	750.00	750.00	750.00	750.00
Tear Resistance (min. ave.)	ASTM D 1004	Ν	130	190	260	340	380
Puncture Resistance (min. ave.)	ASTM D 4833	N	330	530	650	810	930
Stress Crack Resistance	ASTM D 5397	hr.	500	500	500	500	500
Carbon Black Content	ASTM D 4218/6370	%	2-3	2-3	2-3	2-3	2-3
Carbon Black Dispersion	ASTM D 5596	Category	min. 9 in (Categories	1 or 2 and	max. 1 in (Category 3
Oxidative Induction Time (OIT)							
(min. ave.) Standard OIT	ASTM D 3895	min.	100	100	100	100	100
High Pressure OIT	ASTM D 5885	111111.	400	400	400	400	400
Oven Aging at 85°C Standard OIT (min. ave.) % retained after 90 days	ASTM D 5721 ASTM D 3895 ASTM D 5885	%	55	55	55	55	55
High Pressure (min. ave.) % retained 90 days			80	80	80	80	80
UV Resistance High Pressure OIT (min. ave.) % retained after 1600 hours	ASTM D 7238 ASTM D 5885	%	50	50	50	50	50