

## Geomembrane



## LLDPE

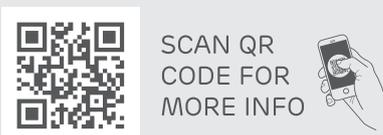
### Impermeable Geomembrane

More flexible than its HDPE alternative, LLDPE material provides greater elongation and malleability making the LLDPE geomembrane easier to work with particularly when forming around corners or obscure angles. High in chemical resistance, LLDPE is ideal for attenuation tanks, SUDS, lagoons, lakes and ponds.

-  Protection - Stress reduction layer to prevent or reduce damage
-  Reinforcement - Resists stresses or reduces deformations
-  Drainage - Collects and transports fluids within its thickness

PROPERTIES		TEST METHOD	UNIT	LLDPE G/G	
				0.75	1.0
Surface				Smooth both sides	
Thickness (min. ave)		ASTM D 5199	mm	0.75	1.0
		Lowest individual of 10 values		-10%	-10%
Density (max)		ASTM D 1505	g/cm <sup>2</sup>	0.939	0.939
Tensile properties (min. ave.)	Break strength	ASTM 6693 type IV	kN/m	20	30
	Break elongation		%	800	800
2% Modulus (max.)		ASTM D 5323	kN/m	370	420
Tear Resistance (min. ave)		ASTM D 1004	N	70	100
Puncture Resistance (min. ave)		ASTM D 4833	N	190	350
Axi-Symmetric Break Resistance Strain (min.)		ASTM D 5617	%	30	30
Carbon Black Content		ASTM D 4218 ASTM D 6370	%	2-3	2-3
Carbon Black Dispersion		ASTM D 5596	Category	min. 9 in Categories 1 and 2 and max. 1 in Category 3	
Oxidative Induction Time (OIT) (min.ave.)	Standard OIT	ASTM D 3895	min.	100	100
	High Pressure OIT	ASTM D 3895		400	400
Oven Aging at 85°C Standard OIT (min. ave.) % retained after 90 days		ASTM D 5721 ASTM D 3895	%	35	35
UV Resistance High Pressure OIT (min. ave.) % retained after 1600 hours		ASTM D 5885	%	35	35
<b>STANDARD ROLL DIMENSIONS</b>					
Roll length			m	100	100
Roll width			m	5.1	5.1
Roll area			m <sup>2</sup>	510	510

1. 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.
2. Installation details are available on request.
3. Published March 2017 - Version 1.AC



BS EN 13361: Characteristics required for use in the construction of reservoirs and dams.

BS EN 13362: Characteristics required for use in the construction of canals.

BS EN 13491: Characteristics required for use in the construction of tunnels and underground structures.

BS EN 13492: Characteristics required for use in the construction of liquid waste disposal sites, transfer stations, or secondary containment.

BS EN 13493: Characteristics required for use in the construction of solid waste storage and disposal sites.

BS EN 15382: Characteristics required for use in the construction of transportation infrastructure.

#### **HANDLING**

Roll weights can be in excess of 200kg and hence appropriate care and equipment is required for unloading and handling.

#### **STORAGE**

Rolls of LLDPE should be stored on stable/level ground and stacked not more than five rolls high, with no other material stacked on top. The rolls can be stored outdoors when packaged, but should be protected from exposure to UV.

#### **INSTALLATION**

LLDPE should be installed in accordance with the product installation guidelines.

#### **JOINTING AND SEALING**

LLDPE should be jointed and sealed in accordance with the product installation guidelines.

#### **ADDITIONAL INFORMATION**

For additional information or assistance, please contact Wrekin directly.