

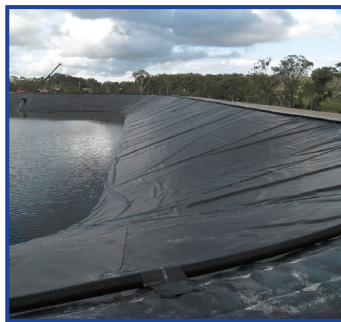
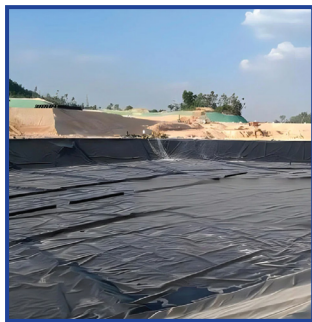
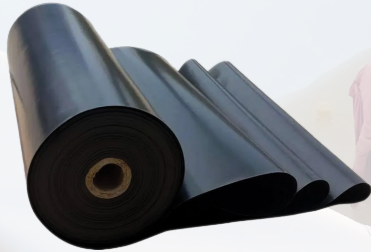


MEGA HDPE MEMBRANE

PLASTIC SHEETS USED WITHIN SOILS AS A WATERPROOF BARRIER

Product Description

The MEGA HDPE Membrane is a high-density polyethylene (HDPE) liner, ideal for use as a protective membrane in both horizontal and vertical applications. It is available in two standard roll widths (5.1m and 8.0m) and thicknesses ranging from 0.75mm to 3.0mm. This membrane serves as a robust barrier against moisture, water, chemicals, gases (radon, methane, carbon dioxide), root penetration, and the spread of invasive plant species.



Applications

- Reservoirs and embankments
- Encapsulation of invasive plants (e.g., Japanese Knotweed)
- Landfill capping and containment cells
- Moisture and water insulation in industrial applications (mining, power, chemical industries)
- Leachate lagoons and effluent treatment basins
- Stormwater retention ponds Tunnels, underground structures, and water reservoirs
- Aquaculture, contaminated land remediation, and canal linings

Key Features

- Complies with CE marking and GRI GM13 standards
- Low permeability to hydrocarbons and gas vapors
- High resistance to tearing and puncture
- Robust single-layer membrane with high durability

Installation

For optimal installation, joint welding is recommended for certain applications, although tape can also be used. Ensure that surfaces are clean and dry before applying tape. Overlap adjoining sections by a minimum of 150mm and secure with reinforcement tape where necessary.

For best results in installation, it's advised to use joint welding for specific applications, but tape can also serve as an alternative. Make sure all surfaces are properly cleaned and dried before applying the tape. Adjoining sections should overlap by at least 150mm, and reinforcement tape should be used to secure the joints as needed.

For successful installation, joint welding is preferred for certain cases, though tape is also an option. Prior to applying tape, ensure surfaces are clean and dry. Overlap adjoining sections by no less than 150mm and apply reinforcement tape to maintain a secure seal.

Product Specifications						
Standard Roll Dimensions	Thickness (mm)					
	Unit	1.0	1.5	2.0	2.5	3.0
Roll Length	m	200	150	120	100	85
Roll Width	m	5.1 / 8.0	5.1 / 8.0	5.1 / 8.0	5.1 / 8.0	5.1 / 8.0
Roll Area (5.1m roll)	m ²	1020	765	612	510	434
Roll Area (8.0m roll)	m ²	1600	1200	960	800	680

Technical Data

Properties	Test Method	Unit	Thickness (mm)					
			0.75	1.0	1.5	2.0	2.5	3.0
Surface			G/G (smooth/smooth)					
Thickness (min. ave.) • lowest individual of 10 values	ASTM D 5199	mm	0.75 - 10 %	1.0 - 10 %	1.5 - 10 %	2.0 - 10 %	2.5 - 10 %	3.0 - 10 %
Density (min.)	ASTM D 1505	g/cm3	0.940	0.940	0.940	0.940	0.940	0.940
Tensile Properties (min. ave.) • yield strength • break strength • yield elongation • break elongation	ASTM D 6693 typ IV	kN/m	12	17	25	33	42	48
		kN/m	24	30	45	58	75	85
		%	12	12	12	12	12	12
		%	750	750	750	750	750	750
Tear Resistance (min. ave.)	ASTM D 1004	N	100	130	190	280	340	380
Puncture Resistance (min. ave.)	ASTM D 4833	N	250	350	550	700	850	1000
Stress Crack Resistance	ASTM D 5397	hr.	500	500	500	500	500	500
Carbon Black Content	ASTM D 4218 ASTM D 6370	%	2 - 3	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	100
Oven Aging at 85 °C • Standard OIT (min. ave.) % retained after 90 days	ASTM D 5721 ASTM D 3895	%	55	55	55	55	55	55

Standards and Compliance

- BS EN 13361: Specifies characteristics needed for construction in reservoirs and dams.
- BS EN 13362: Specifies characteristics required for canal construction.
- BS EN 13492: Outlines requirements for liquid waste disposal sites or transfer stations.
- BS EN 13493: Details characteristics necessary for solid waste storage and disposal facilities.
- BS EN 15382: Specifies requirements for construction in transportation infrastructure.

Storage and Handling On-Site

The MEGA HDPE Membrane does not contain any hazardous substances.

This membrane is chemically inert, meaning acids or alkalis in the subsoil will not impact it. However, prolonged exposure to direct sunlight and harsh weather is not recommended. Once installed, the membrane will not degrade due to weathering. It is advised to store rolls under cover to maintain product integrity.

Proper quality control during installation is crucial. The membrane should be shielded by temporary protection over its entire surface or covered immediately with a suitable layer to ensure durability.

In case of any query or technical assistance, please feel free to contact us on following numbers mentioned below. Our dedicated customer support team will be happy to assist you.



MEGA HDPE MEMBRANE

PLASTIC SHEETS USED WITHIN SOILS
AS A WATERPROOF BARRIER

HEAD OFFICE: C-1-C, 2nd Floor, Main Khy-e-Itehad, Near KFC, Opposite Dubai Islamic Bank, DHA Phase 7, Karachi-Pakistan.
PLANT: Plot B-653, Sec. 3, Near Life Care Medical, Ahsanabad Industrial Area, Karachi-Pakistan.
☎ +92 213 5318800 📞 +92 318 3880164 | +92 318 3880163
✉ info@megagroup.com.pk 🌐 www.megasealers.com