

ULTRAL HDPE

HDPE GEOMEMBRANE

The membrane is made from High Density Polyethylene (HDPE). It has excellent mechanical properties.

FEATURES

HDPE membrane polymers are non-toxic, tasteless and odorless

Have good heat resistance and cold resistance

HDPE resin is formulated for Ultraviolet and Ozone resistance and is an excellent Geomembrane to use in an exposed environment

HDPE membrane has chemical stability, high rigidity and toughness

HDPE membrane has mechanical strength, and resistant to environmental stress cracking resistance tear strength and good

HDPE membrane impermeable maximum performance, with increased density, HDPE membrane mechanical properties and barrier properties will be a corresponding increase, heat, and higher tensile strength

HDPE membrane can be acid, alkali, organic solvents, such as corrosion

High density polyethylene smooth Geomembrane are produced from prime HDPE resins result in a high Quality premium grade, flexible Geomembrane. The product has been formulated to be chemical resistant, free of leachable additives and resistant to ultraviolet degradation.

Geo membrane applications:

- Liquid fuel distribution and storage facility sealing.
- Urban sewage treatment plant sealing.
- Liquid manure tanks.
- Sealing of engineering structures,
- Hydraulic engineering structures.
- The waste disposal site sealing, including protection against leachateinfiltration
- The typical pond liner, Canals and Lagoons Hazardous & Solid Waste Landfills
- Foundation & Basin Liners

Geomembrane is designed to be used in transport engineering:

- To form insulating layers protecting against polluted storm runoff from roads;
- To seal storage reservoirs and evaporating basins;
- To build drainage ditches;
- To provide waterproof insulation of those structure elements which come into contact with the ground, i.e. retaining walls, abutments, transportation tunnels, etc.



engineered to perform

PHYSICAL PROPERTIES

Properties	Units	0.75mm	1.00mm	1.50mm	2.00mm	2.50mm
Thickness	mm	0.75	1.00	1.50	2.00	2.50
Density	g/cc	0.940	0.940	0.940	0.940	0.940
Roll Dimensions						
• Width	M	7	7	7	7	7
• Length	M	280	210	140	105	84
• Area	Sq.m	1960	1470	980	735	588
Tear Resistance	N	93	125	187	249	311
Puncture Resistance	N	240	320	480	640	80
Tensile Strength						
• Strength at yield	kN/m	11	15	22	29	37
• Strength at break	kN/m	20	27	40	53	67
• Elongation at yield	12	12	12	12	12	12
• Elongation at break	700	700	700	700	700	700

Site Preparation

Subgrade preparation required:

- Channel reprofiling to form a consistent channel profile.
- Subgrade preparation to remove silt and debris.
- Prevention of regrowth by chemical suppressants.

INSTALLATION

The material was delivered to the site in large rolls. The HDPE liner was rolled out and laid across the channel with sections overlapping to enable welding of joints

DURABILITY

The lifespan of exposed HDPE is estimated to be 20-40 years

STORAGE AND HANDLING

Store products in unopened packaging until ready for installation .Do not store in direct sunlight or in high heat environment exceeding 150 degrees F(66 degrees C)

For all containment works involving the use of concrete structures, the use of a concrete embedment will ensure the junction between the liner and the fixed structures, and consequently the imperviousness of the system in place.

