

SORCONS[®]

HDPE Geomembrane





Specifications

HDPE (High-Density Polyethylene) geomembranes have excellent impermeability, serving as an effective barrier against the movement of liquids, gases, and contaminants. They prevent the seepage of fluids, such as water, chemicals, and pollutants, which is crucial for environmental protection, containment systems and water management.

It is widely used in various applications, including environmental containment, landfill lining, mining, agriculture, and water management.



Highly durable and resistant to UV radiation, weathering, and biological degradation. They can withstand harsh environmental conditions, including temperature variations, moisture, and mechanical stress. This durability ensures long-term performance and reduces the need for frequent maintenance or replacement.

It is flexible and can conform to irregular surfaces, making them suitable for various installation conditions. They can be easily customized to fit different shapes and sizes, allowing for efficient and cost-effective installation in different applications.

Specifications



Cost-Effective: HDPE geomembranes offer cost advantages over other lining materials due to their durability, long lifespan, and low maintenance requirements.

It provides a reliable and long-term solution, reducing the need for frequent repairs or replacement. Additionally, the flexibility and ease of installation of HDPE geomembranes can contribute to reduced labor and installation costs.

Versatility: It can be used in a wide range of applications, including environmental containment, landfill lining, mining, agriculture, water management, and industrial storage. Its adaptability to different conditions and resistance to various substances make them suitable for diverse projects.

Puncture Resistance:

It has high puncture resistance, allowing them to resist damage from sharp objects or rocks that may be present in the underlying soil or water.



Where to be used?

Environmental Containment:

Preventing migration of contaminants in landfill lining and capping.

Mining: Containing harmful substances in tailings storage, heap leach pads, and acid mine drainage control.

Agriculture: Efficient water storage and prevention of seepage in irrigation canals, reservoirs, and ponds.

Water/Wastewater Management: Containing and managing liquids, sludges, and byproducts in treatment facilities, ponds, and lagoons.

Oil and Gas: Preventing release of hydrocarbons and contaminants in exploration, storage, and wastewater treatment.

Industrial Applications:

Effective containment and protection in chemical storage, waste management, and wastewater treatment.

Civil Engineering: Preventing seepage and ensuring water storage in canal lining, reservoirs, dams, and tunnels.

Geotechnical Engineering: Erosion control, stabilization, and water infiltration prevention in slope stability, walls, and land reclamation.

Aquaculture: Creating watertight barriers in fish and shrimp ponds, hatcheries, and aquaculture facilities.

How to be used?

HDPE geomembranes can be easily welded using different techniques, such as hot wedge welding, extrusion welding, or fusion welding. This enables the creation of seamless liners, eliminating potential leakage points and ensuring reliable containment systems. Welded seams have high strength and integrity, enhancing the overall performance and lifespan of the geomembrane.

Technical Data

Data Type	Test Standard	Unit					
Thickness	EN1849-2	mm	1,00	1,50	2,00	2,50	3,00
Density	EN ISO 1183-1	gr/m ³	0,935-0,965	0,935-0,965	0,935-0,965	0,935-0,965	0,935-0,965
Mass per Unit Area	EN1849-2	gr mm ²	940	1410	1880	2350	2820
Tensile Strength in Flow	EN ISO 527	N/mm ²	>16	>16	>16	>16	>16
Elongation in Flow	EN ISO 527	%	>12	>12	>12	>12	>12
Tensile strength at break	EN ISO 527	N/mm ²	>26	>26	>26	>26	>26
Elongation Rate at Break	EN ISO 527	%	>700	>700	>700	>700	>700
Tear Strength	ISO 34-1	N/mm	>130	>140	>140	>140	>140
Shear Strength	EN1849-2	gr/m ²	940	1410	1880	2350	2820
Peel Strength	ASTM 6392	N/25mm	350	525	701	876	1050

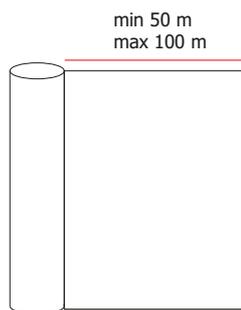
Roll Height (Optional)



Rolls can be produced in any requested height from 2,10 meters to 7,00 meters.

min 2,10 m
max 7,00 m

Roll Length (Optional)



Rolls can be produced in any requested length from 50 meters to 100 meters.

min 50 m
max 100 m

Info

HS CODE:
3921.90.60.00.11

Sampling is available for this product. Contact with sales@sorcons.com to ask sample.

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