

# INDUSTRIAL GENERAL CATALOG





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ZARIFMOSAVAR  
INDUSTRIAL







“GEOMEMBRANE  
GEOTEXTILE  
GEOCOMPOSITE”

[www.zarifmosavar.com](http://www.zarifmosavar.com)



# ABOUT US

Yalda Company is a multi-function industrial trading company committed to keep its clients delighted by providing quality geosynthetic products and cost effective services. The need for reliable containment of liquids, solids and waste materials continues to increase as environmental demands and standards are elevated.

Our Geomembrane technology offers a wide range of materials capable of meeting these demands. Yalda Company supports a complete selection of geomembrane materials with design assistance, fabrication and installation services. We work with the engineering consultant or general contractor to en-sure the optimum design with the most efficient and cost-effective installation for any geomembrane ap-plication (HDPE & LLDPE).



# PRODUCTS

YALDA COMPANY

## Geosynthetics (Geomembrane, Geotextile, Geocomposite)

Geosynthetics has been known as the most popular and effective materials for industrial and engineering insulation since the last two decades.

### Geomembranes

We are highly specialized in supplying and manufacturing HDPE / LLDPE polyethylene Geomembrane liners based upon international standards (GRI GM13) since many years ago. We've built a reputation of reliability through our dedication to providing the highest quality Geomembranes made from high quality Polyeth-ylene Resin, Carbon black & Antioxidant added for best UV protection and long life. We supply liners with Smooth/Smooth surfaces in green, blue and black colour. Our Geomembranes are manufactured to meet and exceed the test values, frequency of testing & functional requirements of the GRI CM13 specification which was established by Geomembrane Research Institute (GRI), USA.

Roll Lengths Based on Each Thickness, in width of 4.1 Mtrs			
Thickness	1.0 mm	1.5 mm	2.0 mm
Length	50 - 75 m	50 - 60 m	50 m





GEOMEMBRANE  
GEOTEXTILE  
GEOCOMPOSITE

Our Polyethylene Geomembranes are made from relatively thin continuous impermeable polymeric sheets being widely used as canal and pond liners. These products are resistant against UV and chemicals and have excellent flexibility and durability.

All these together have made our Geomembranes be widely used in exposed areas and places where long durability is essential and in industries such as Oil & Chemicals, Waste Liquids (e.g., sewage sludge), Landfill Sites, Agriculture, Aquiculture and Mining.



# GEOMEMBRANE

## TYPES

Our Geomembrane Sheets are generally used for containment of liquids, solids and waste materials and are of two types as follows:

- High Density Polyethylene Geomembranes (HDPE GMB)
- Linear Low Density Polyethylene Geomembranes (LLDPE GMB)

Our HDPE / LLDPE GMB technology offers a wide range of materials capable of meeting most of your

## High Density Polyethylene Geomembranes (HDPE GMB)

Our HDPE GMB offers great ultraviolet protection and ageing resistance from the intense stresses of weather. Although, less flexible than its LLDPE counterpart, it still offers great elongation properties making it extremely cost-effective for many applications.

### HDPE GMB Main Advantages

1. The chemical resistance of Our HDPE GMB is the best of any available geomembranes. Polyethylene is chemically resistant to a wide variety of chemicals including aromatic and halogenated hydrocarbons. They have been used successfully for years as primary and secondary landfill liners, in secondary containment applications and as liners for mining leach pads.
2. The stress crack resistance of Our HDPE GMB is outstanding. The appendix to ASTM D 5397, Single Point Notched Constant Tensile Load, is the test method most commonly specified for determination of stress crack resistance.
3. Permeability of Our HDPE GMB against gases and liquids is the lowest of any available geomembranes. This coupled with outstanding chemical and stress crack resistance combine to maximize the integrity of containment for any application.
4. Flexibility and high resistance against tearing, rubbing and puncturing.
5. High resistance against U.V. rays (Thermal stability the sunrays).
6. Excellent flexibility and elongation.
7. Easy installation/ transport / logistics.
8. Excellent solder ability.
9. Impact resistance.





# APPLICATIONS

## HDPE GMB MAIN

### LANDFILLS

Solid & Municipal Waste, Hazard Waste, Construction & Demolition Waste, Industrial.

### POWER

Retention Ponds, Cooling Water Ponds, Brine Ponds, Pumped Storage Reservoirs, Ash Repositories.

### CONCRETE PROTECTION

Concrete Pipe & Sewer Lines, Trenches & Sumps, Wastewater Facilities, Tunnels, Manholes.

### INDUSTRIAL

Tank Lining, Storm Water Runoff, Vertical Barriers, Secondary Containment.

### LIQUID CONTAINMENT

Water & Wastewater, Petro-Chemical, Agriculture/ Aquaculture pools, Simulated lakes, Aqua-culture Canal Lining, Dams, Floating Covers, Relaxing pools, Water storage constructions, Waste water storage constructions, Pool insulation, Water ways.

### MINING

Heap Leach Pads, Solution Ponds, Treatment Lagoons.

LANDDILLS  
POWER  
INDUSTRIAL  
MINING . . .



## OTHERS

Golf Course Ponds, Decorative Ponds, Waterproofing, Simulated lakes & Constructions.

### Linear Low Density Polyethylene Geomembranes (LLDPE GMB)

Our LLDPE GMB provides much of the same durability and resistance properties found in HDPE GMB, but with the added benefit of increased material flexibility because it is a lower-density polymer. This increased flexibility makes LLDPE GMB well suited to pre-fabrication into large panels, minimizing field work. Additionally, LLDPE GMB is often used in applications where long-term large settlements may be anticipated, such as landfill covers. Thanks to Our LLDPE GMB Flexibility and elongation, it can simply take the place of PVC Sheets and be used instead.

### LLDPE GMB Main Applications

Solid Waste Landfills, Hazardous Waste Landfills Mining, Industrial and wastewater treatment, Lagoon Constructions Etc.

# TECHNICAL DATA

Technical Specifications (LLDPE)

PARAMETER	METHOD	UNIT	RESULTS
			GM150L
Thickness	ASTM D5199	mm	1.5
Tensile Strength at Break	ASTM D6693	N.mm-1	Min.40
Tensile Elongation at Break	ASTM D6693	%	Min.800
2% Modulus	ASTM D5323	N.mm-1	Max.630
Puncture Resistance	ASTM D4833	N	Min.370
Tear Resistance	ASTM D1004	N	Min.150
Carbon Black Content	ASTM D1603	%	2.1
Carbon Black Dispersion	ASTM D5596	-	9 in cat.1



# TECHNICAL DATA

Technical Specifications (HDPE)

PARAMETER	METHOD	UNIT	RESULTS		
			GM100H	GM150H	GM200H
Thickness	ASTM D5199	mm	1.00	1.50	2.00
Density	ASTM D1505	GR.ml <sup>-1</sup>	Min.0.940	Min.0.940	Min.0.940
Tensile Strength at Yield	ASTM D6693	KN.ml <sup>-1</sup>	Min.15	Min.22	Min.29
Tensile Strength at Break	ASTM D6693	KN.ml <sup>-1</sup>	Min.27	Min.40	Min.53
Tensile Elongation at Yield	ASTM D6693	%	Min.12	Min.12	Min.12
Tensile Elongation at Break	ASTM D6693	%	Min.700	Min.700	Min.700
Tear Resistance	ASTM D1004	N	Min.125	Min.187	Min.249
Puncher Resistance	ASTM D4833	N	Min.320	Min.480	Min.640
Carbon Black Content	ASTM D1603	%	2.1	2.1	2.1
Carbon Black Dispersion	ASTM D5596	-	9 in cat.1	9 in cat.1	9 in cat.1





# GEOTEXTILES

## DESCRIPTION

Geotextiles are permeable fabrics which, when used in association with soil, have the ability to separate, filter, reinforce, protect, or drain. Typically made from polypropylene or polyester.

In many cases, geotextiles replace or reduce the need to use natural aggregate construction materials providing both economic and environmental benefits.

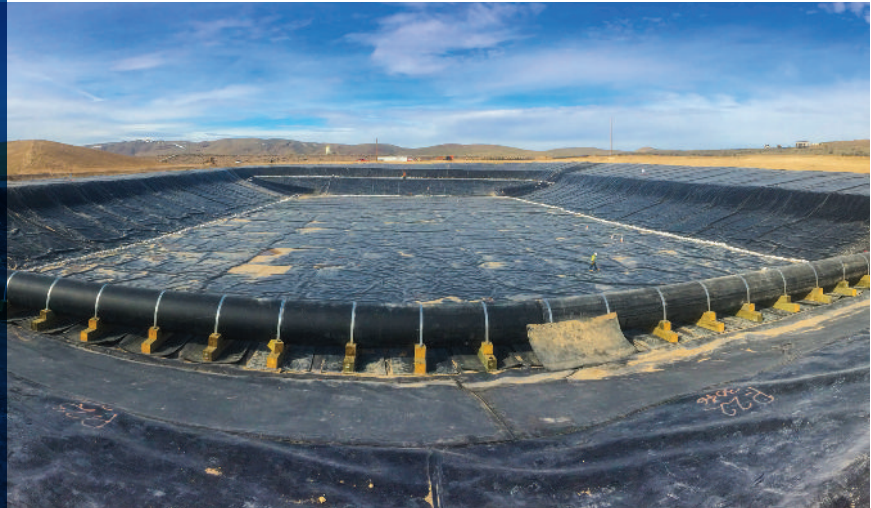
H.Tis Enterprise FZE offers a range of geotextiles including nonwoven and composites.

Our Nonwoven Geotextiles are made from polypropylene fibers that are needle-punched to form a dimensionally stable network and have a wide range of applications in civil environmental engineering and construction projects. Their uses include:

1. Filtration of soils in drainage applications by retaining soil particles while allowing for the free flow of water.
2. Separation and stabilization in road and railway construction.
3. Prevention of soil movement in erosion control measures.
4. Cushioning and protection in many containment projects.

They are available in varying strengths and thicknesses to ensure appropriate material selection for your project.

# TO SPLIT FILTERING REINFORCEMENT PROTECTION DISCHARGE



## Geotextile applications Geotextile Applications:

1. Road construction, highways.
2. Embankments. Asphalt repaving of roads.
3. Coastal & riverbank revetment systems.
4. Filtration.
5. Drainage.
6. Composites.
7. Protection for Geomembrane in landfills.

TEST	TEST METHOD	UNIT	M . A . R . V
Grab Strength	ASTM D-4632	N	450
Mass Per Unit Area	ASTM D-3776	g/m <sup>2</sup>	140
Ultimate Elongation	ASTM D-4632	%	50
Asphalt Retention	Texas DOT Item 3099	l/m <sup>2</sup>	1.2
Melting Point	ASTM D-276	C	150°



# GEOCOMPOSITES

## DESCRIPTION

Our Composite Geomembrane, as a kind of impervious material made through the combination of geotextile and geomembrane, is mainly used in water drainage and rib reinforcement.

Geocomposite Types We produce two types of Geocomposites including:

### 1. Three Layer Geocomposites

Two clothes plus one membrane

(Geotextile for protective use is applied on both sides of anti-seepage membrane).

The geotextile is made of Polypropylene or Polyester.

### 2. Two Layer Geocomposites

One cloth plus one membrane

(Geotextile for protective use is applied on one side of anti-seepage membrane). The geotextile is made of Polypropylene or Polyester.

### Geocomposite Main Applications

1. Water conservation
2. Subways
3. Basement and Tunnels,
4. Tunnel Impermeable lining
5. Road
6. Highway
7. Railway Subgrade
8. Foundation Vertical Impermeable Layer
9. Construction Cofferdam
10. Irrigation Ditch,
11. Liquid Pool (pit, tomb)
12. Scrap Yard;
13. Saline Control in Subgrade
14. Waterproof Layer of Expansive Soil and Collapsible Loess
15. Roofing Leakage Preventio

### Geocomposite Main Applications

1. High tensile
2. High bursting
3. High tear-pro strength
4. And high physical performance in general

Yalda Company supports a complete selection of Geomembrane and Geocomposite materials with design assistance, fabrication and installation services. We work with engineering consultant or general contractor to ensure the optimum design with the most efficient and cost-effective installation for any Geomembrane & Geocomposite application.







## Industrial group Contact Us



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## ZarifMosavar Overview

# Note

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