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INTERFLEX

Waterproof Membrane Technologies

PRODUCT CATALOG

Kerem KALKANCI
Noter Yeminli Tercüman
Notary Certified Translator

ABOUT US

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INTERFLEX PLASTIC INSULATION is a company established in 2013 to meet the needs in the construction and insulation sector and to contribute to the country's industry.

INTERFLEX PLASTIC INSULATION, which provides the production and sales of products that offer the maximum benefit for the construction sector, serves with its solutions suitable for the purpose in all projects it takes place.

It produces geomembranes with an annual capacity of 2 million m² in its production facility, which started operating in Ankara in June 2020 and has an area of 2,500 square meters.

INTERFLEX branded Geomembrane product successfully passed TS EN 13967, TS EN 13491, TS EN 13361 and TS EN 13362 conformity tests.

The production line is the latest technology and it continues its R&D activities with its own laboratory and with experienced competent personnel structure in order to meet the needs of the sector.


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OUR PRODUCTS

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1- PVC GEOMEMBRANE

- a. Solid Color with signal layer
- b. UV Resistant
- c. Anti-Bacterial

2-EPDM GEOMEMBRANE

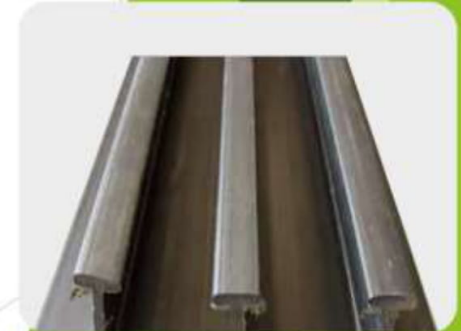
3-HDPE GEOMEMBRANE

4-T-GRIP HDPE / PVC GEOMEMBRANE

5-DRAINAGE SHEET

6-WATER HOLDING BANDS

7-GEOTEXTILE SEALS



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Geomembrane

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GEOMEMBRANES

As it is used for waterproofing in foundations, curtains and roofs, due to its high chemical resistance, it is also used in applications of requiring protection of concrete from all kinds of gas, acid and base chemicals and in isolation of HDPE types of solid wastes.

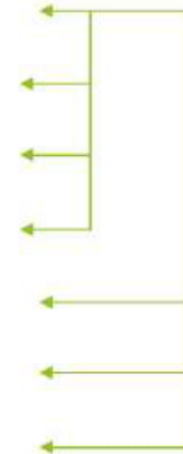
AREAS OF USE

Roofs, tanks, irrigation channels, ponds, foundations, bridges, tunnels, industrial facilities, sports facilities, parking garages, residences and solid wastes.

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MEMBRANE TYPES

PVC
SOLID COLOR
SIGNAL LAYER
UV RESISTANT
HDPE
LDPE
LLDPE



Pvc geomembrane

TECHNICAL FEATURES

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FEATURE	LIMITS	EXPERIMENT STANDARD
Thickness	1.00 mm minimum	DIN 53370
Tensile Strength	15 N/mm ² minimum	DIN 53455
Breaking Elongation	250% minimum	DIN 53455
Compressive Strength at 20% elongation	2,5 N/mm ²	DIN 53454
Tear Spread Strength	100 N/mm minimum	DIN 53363
Resistance Under Water Pressure	Impermeable for 10 hours at 10 bars	DIN 16726
Strength of Welded Joint	13.5 N/mm ² minimum	DIN 16726
Dimensional Stability After Rapid Aging	± 2% max	DIN 16726
Material Properties During and After Storage at 80 °C:		
a. General Appearance	There will be no bubbles	
b. Dimensional Stability, longitudinal and transverse	<-3%	
c. Change in Tensile Strength, longitudinal and transverse	<±20%	
d. Change in Unit Elongation at break, longitudinal and transverse	<±20%	
e. Folding, at a temperature of -20 °C	Will not be cracked	
Behavior After Storage in Acid and / or Alkaline Solutions:		DIN 16726
a. Change in Tensile Strength, longitudinal and transverse	<±20%	
b. Change in Unit Elongation	100 N/mm minimum	DIN 53363
c. Folding, at a temperature of -20 °C	Will not be cracked	
Shear Strength, Bituminous Joint	100 N / 50 mm	DIN 16726
Behavior During Stapling Test	No punching at 750 mm high	DIN 50014
Water Absorption	Max. 1%	DIN 53495

- High in tensile and elongation resistance.
- It shows flexibility in cold, does not crack or break.
- If desired, they can be produced with Signal Layer - UV Resistant and Geotextile Reinforced.
- Since they are applied with free laying technique, they are affected at a minimum level from the vibrations that occur in the buildings.
- They can be produced in different colors and sizes.
- It is resistant to plant roots.
- It is recyclable.
- It is resistant to -40, +70 degrees.
- Joints are combined with double-channel seam welding robots.
- It prevents corrosion and is resistant to aging.
- It is in E class in fire resistance. It is nonflammable.
- It is long-lasting.
- It shows high resistance to mechanical impacts.

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EPDM Geomembrane

EPDM is a synthetic rubber made of Ethylene and Propylene.

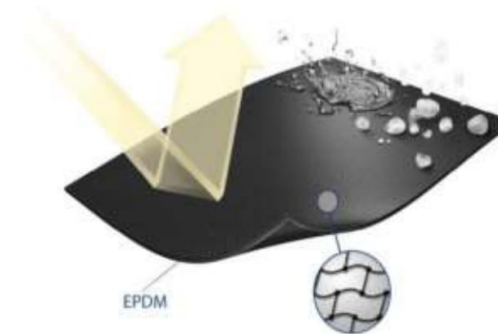
While the properties of natural rubber (high elasticity, expansion, tensile strength, resistance to cold) cannot be changed practically, synthetic rubber has the opportunity to produce rubber according to the desired place of use and requirements by affecting / changing the raw materials and molecular structure of the rubber, namely the structure of the polymer.

Even in high temperature changes, preserving its elasticity, tensile strength and elongation at break, it is resistant to different weather conditions, sunlight, ozone, acid and solutions.

AREAS OF USE

In building foundation and side curtain insulation,
On terraces and domed roofs,
On curtain walls,
At the bottom of the ponds,
In refinement facilities

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EPDM Geomembrane

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TECHNICAL FEATURES

STANDARD NO	FEATURE	REQUIRED
TS EN 1850-2	VISIBLE DEFECTS	THERE SHOULD BE NO VISIBLE DEFECTS
TS EN 1848-2	LENGTH	DECLARED LIMIT
TS EN 1848-2	WIDTH	DECLARED LIMIT
TS EN 1849-2	THICKNESS	DECLARED LIMIT
TS EN 1849-2	UNIT FIELD MASS	DECLARED LIMIT
TS EN 1928 (METHOD B) - EN 14150	LIQUID PROOF	TEST RESULT SHOULD BE WATERPROOF.
TS EN 12691	IMPACT RESISTANCE	THE SMALLEST DIAMETER THAT THE PRODUCT CAN SHOW RESISTANCE MUST BE EQUAL OR SMALL TO THE MANUFACTURER'S LIMIT VALUE.
TS EN 1296TS EN 1928 (METHOD B)	DURABILITY	THE WATERPROOFING MUST CONTINUE AFTER THE PRODUCT HAS BEEN EXPOSED TO AGING.
TS EN 1847TS EN 1928 (METHOD B)	RESISTANCE AGAINST CHEMICAL AGENT	WATERPROOFING SHOULD CONTINUE AFTER THE PRODUCT IS EXPOSED LONG-TERM TO DILUTE ALKALINE.
TS EN 12310-1	RESISTANCE TO TEARING	DECLARED LIMIT
TS EN 12317-2	ADDITIONAL SPACE STRENGTH	DECLARED LIMIT
TS EN 12730 (METHOD B)	RESISTANCE TO STATIC LOADS	DECLARED LIMIT
TS EN 12311-2	TENSILE PROPERTIES	DECLARED LIMIT
TS EN 12311-2	BREAKING ELONGATION	DECLARED LIMIT
EN ISO 527	TENSILE STRENGTH	DECLARED LIMIT
EN ISO 12236	RESISTANCE TO STATIC PUNCHING	DECLARED LIMIT
EN 12224	RESISTANCE TO WEATHER CONDITIONS	DECLARED LIMIT
EN 14575	RESISTANCE TO OXIDATION	DECLARED LIMIT
ASTM D 1434	GAS SEALING	NPD
TS EN 12317-2	SCRAPPING RESISTANCE	DECLARED LIMIT
TS EN 1847 - TS EN 1928	RESISTANCE TO ALKALINE	WATERPROOFING MUST CONTINUE.
TS EN 13501	COMBUSTION CLASS	CLASSIFICATION
TS EN 1931	WATER VAPOR PROOF FEATURE	DECLARED LIMIT

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Noter Tercümanı
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HDPE Geomembrane

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AREAS OF USE

- Solid waste storage areas
- Liquid waste collection and refinement stations
- Seepage water collection pools of gold and other mines
- Oil tank and oil fields isolation
- Sedimentation Ponds
- Manure pits
- Building foundation bunding works if desired
- Ponds
- Tunnels
- Irrigation channels
- Bioenergy production facilities



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PRODUCT FEATURES

- It is highly resistant to chemical substances.
- It is UV resistant.
- Due to rough surface, friction share decreases.
- It shows high resistance to organic and inorganic solutions.
- It is extremely resistant to cracking.
- It is resistant to natural conditions.
- It is resistant to punctures and cracks.
- It has low permeability.
- It has high tensile strength.

HDPE Geomembrane

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PHYSICAL FEATURES

THICKNESS	EN1849-2	mm	1.0 mm	1,5 mm	2.0 mm	2.5 mm	3.0 mm
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
UNIT FIELD MASS	EN1849-2	gr/m ²	940	1410	1880	2350	2820

MECHANICAL FEATURES

STRESS IN FLOW STRENGTH	EN ISO 527	N/mm ²	> 16	> 16	> 16	> 16	> 16
ELONGATION IN THE FLOW	EN ISO 527	%	>12	>12	>12	>12	>12
STRESS AT BREAK STRENGTH	EN ISO 527	N/mm ²	>26	>26	>26	>26	>26
ELONGATION AT BREAK	EN ISO 527	%	>700	>700	>700	>700	>700
STATIC DRILLING	EN ISO 12236	N	2400	3700	4900	6050	7200
TEAR STRENGTH	ISO 34-1	N/mm	>130	>140	>140	>140	>140
UNIT FIELD MASS	EN1849-2	gr/m ²	940	1410	1880	2350	2820
SLIP STRENGTH	ASTM 6392	N/25mm	350	525	701	876	1050

HDPE Geomembrane

DURABILITY AND CHEMICAL RESISTANCE

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CARBON BLACK CONTENT	ASTM D 1603	%	2-3	2-3	2-3	2-3	2-3
CARBON BLACK DISTRIBUTION	ASTM D 5596	CATEGORY	1/2b	1/2b	1/2b	1/2b	1/2b
MELT FLOW INDEX	EN ISO 1133	gr/10 min	2.16 kg 190 0C; <1	2.16 kg 190 0C; <1	2.16 kg 190 0C; <1	2.16 kg 190 0C; <1	2.16 kg 190 0C; <1
			5.0 kg 190 0C; <3	5.0 kg 190 0C; <3	5.0 kg 190 0C; <3	5.0 kg 190 0C; <3	5.0 kg 190 0C; <3
RESISTANCE TO WEATHER CONDITIONS	EN 12224	%	<25	<25	<25	<25	<25
OXIDATION RESISTANCE	EN 14575	%	<25	<25	<25	<25	<25
RESISTANCE TO TENSION CRACK	EN14576	h	>200	>200	>200	>200	>200
OXIDATIVE INDUCTION TIME	ASTM D 5397						
	ASTM D 3895	>100	>100	>100	>100	>100	>100
FIRE TEST	EN ISO 11925-2	-	Class E	Class E	Class E	Class E	Class E
RESISTANCE TO SOLID LIQUID EXTRACTION	EN 14415	%	METHOD A, B; <5 METHOD C; <25	METHOD A, B; <5 METHOD C; <25	METHOD A, B; <5 METHOD C; <25	METHOD A, B; <5 METHOD C; <25	METHOD A, B; <5 METHOD C; <25
WATER PERMEABILITY	EN 14150	m ³ /m ² .day	<10-6	<10-6	<10-6	<10-6	<10-6

T-grip Geomembrane

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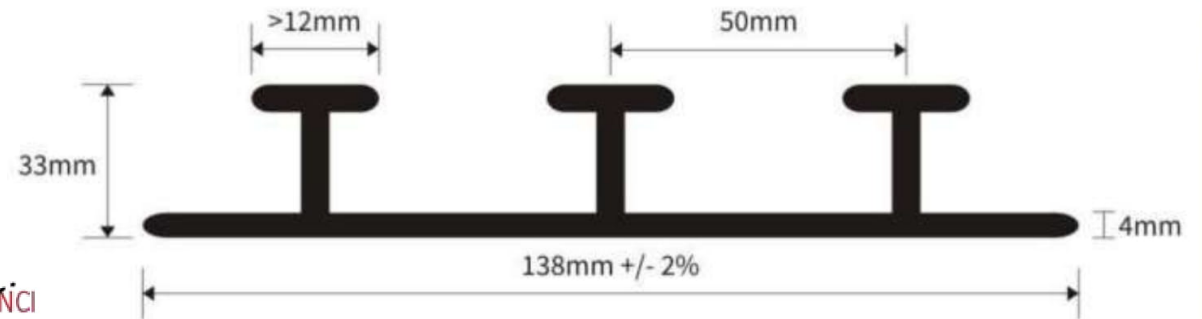
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T-Grip Geomembrane

It is a model with protrusions at certain intervals along the roll to hold the geomembrane to the concrete.

Areas of Use

- In reinforced concrete tanks
- In refinement facilities
- In irrigation channels
- In waste water tunnel insulation
- In sewer systems



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T-grip Geomembrane

TECHNICAL FEATURES

Features	Standard	Control
Visible Defects	TS EN 1850-2	There should not be any visible defects
Length	TS EN 1848-2	Declared limit
Width	TS EN 1848-2	Declared limit
Thickness	TS EN 1849-2	Declared limit
Unit Field Mass	TS EN 1849-2	Declared limit
Density (g/cm3)	TS 1320	Between 1.25-1.27
Liquid Impermeability (Under 0.15 Bar Pressure)	EN 14150	It must be waterproof
Tensile Strength (N/mm2), minimum	EN ISO 527	Min. 15 N
Elongation at Break (%), minimum	EN ISO 527	Min. 250%
Weather Resistance (%)	EN 12224	Between 1 to 10
Oxidation Resistance (%)	EN 14575	Max. 5%
Gas Tightness	ASTM D 1434	NPD
Tear Strength (kN/m)	ISO 34-1	Between 80-100
Resistance to Heat and Cold (10 minutes at 80°C and -30°C)	DIN 53361	It should not be torn or cracked
Flammability class	TS EN 13501	Classification
Flexibility in Cold	EN 495-5	There should be no breakage or cracking

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Drain board

HDPE, made of high density polyethylene, is a layer resistant to plant roots and rot, separating the curtain wall from the soil

by protecting it from water and moisture. Due to its bubbly structure, it is both protective and is also used as a means of insulation

Advantages

It provides equal distribution of pressure given by soil load.

Resistant to plant roots and rotting.

Prevents the waterproofing from damages that may occur while making the earthfill.

The air between the bubbles allows the curtain wall to breathe.

Areas of Use

It is used in foundations, curtain, terrace roofs and floors and for water removal on highways, railways and tunnels.



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Water retaining tape

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It is a concrete building element that aims to prevent the passage of fluids when they are continuously embedded in concrete joints and flow. It protects the building against damaging elements such as water, mud and moisture that can be encountered in ordinary construction.

Where to Use?

- Dams
- Tunnels
- Water Storage Tanks
- Waste Refinement Units
- Swimming Pools
- Channels - Bridges
- Subway Stations
- Sewerage Systems
- Irrigation channels
- Transport Tunnels
- Hydroelectric Power Plants
- Air Ducts
- Protection Walls



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Geotextile felt

It is a continuous surface used to separate two different types of floors. It resists the tensile forces dispersed in the ground mass and acts as a reinforcing element. Filter properties can be used for pollution purposes. While it prevents the passage of solid particles, it remains sufficiently permeable to liquid and gas. It has hydraulic and mechanical level functions. It is the protective and separating layer.

It is used for insulation of vertical and horizontal surfaces, pond and tunnel lining in order to increase the double-sided durability and flexibility of the geomembrane material.

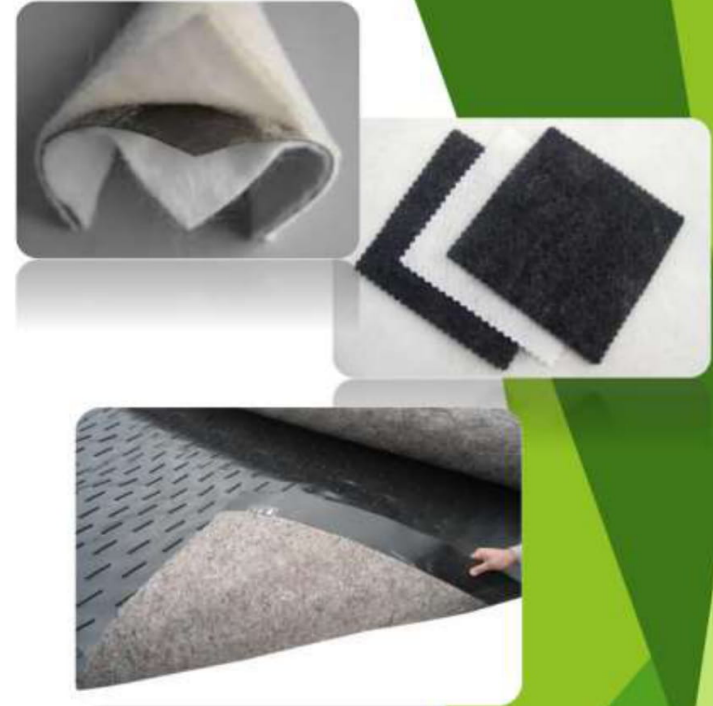
Functions

1. Drainage
2. Filtration
3. Separation
4. Protection
5. Reinforce

AREAS OF USE

- In tunnels
- In the drainage of groundwater
- Where drilling of insulation material will not be required
- In slope arrangement


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Geotextile felt

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TECHNICAL FEATURES

Weight	Thickness	Withdraw Strength	Tearing	Static Puncture	Dynamic Puncture	Water	Aperture Size
gr/m2	mm	[kN/m]	%	N	mm	m/sec	mm
100	1	6--7	50-80	1500	28	0,09	0,14
150	1,5	8--10	50-80	2000	26	0.08	0,13
200	1,5	11--13	50-80	250	24	0,07	0,13
250	2	13-15	50-80	3000	20	0.06	0,12
300	2.3	17-19	50-80	3400	16	0,05	0,12
350	2.6	19-21	50-80	3800	12	0,042	0,11
400	3	21-23	50-80	4300	8	0,035	0,11
450	3.3	23-25	50-80	4800	4	0,03	0,1
500	4	27-40	50-80	5500	3	0.036	0.08
600	4,7	31-33	50-80	6000	2	0,02	0,09
700	5.4	35-37	50-80	6500	1	0,015	0,09
800	6.1	39-41	50-80	7700	0.5	0.001	0.08
1000	6,5	45-49	50-80	9200	0,4	0.006	0,07
1200	7.1	51-55	50-80	10900	0,35	0,004	0.06

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OUR QUALITY STANDARDS

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In line with the honest, principled working basis, in order to manufacture the right products for our business partners all our business processes from manufacture to sale, from sales to customer services are designed according to our quality handbook and are binding for all INTERFLEX PLASTİK employees.

Our Quality Handbook is the proof of our commitment to providing services in accordance with customer and legal requirements. In this context, the main purpose of our Quality Handbook is to indicate the proximity and importance of our company to the concept of quality and to describe the activities that our company has done or plans to do for this. The documents we receive to certify our quality standards are an integral part of our Quality Handbook.



OUR REFERENCES

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info@protranslate.net

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On any topic

Murat ÖZTÜRK

Mobile ve Whatsapp : **+90 533 633 33 88**

ozturk@gramersan.com.tr

Kerem KALKANCI
Noter yeminli Tercüman
Notary Certified Translator