international business

SETA TECHNIC

WATERPROOFING

www.setatechnic.com

BITUMEN MEMBRANES

Bitumen membranes, derived from the petroleum refining process, serve as effective waterproofing solutions in construction, particularly for roofs and foundations. Reinforced with materials like polyester or fiberglass, these membranes offer durability and protection against water infiltration.

A polymer modified bituminous waterproofing membrane, is a superior bitumen obtained by high temperature treatment of a mixture of bitumen and polymers (APP or SBS) to improve the physical characteristics (deformation, softening and bending points, UV, fatigue, etc.) of bitumen.

APP Modified

- High performance in warm climates
- Easier application in warm weather conditions
- High UV resistance
- Long aging process
- Ideal for vertical applications
- Affordable costs

SBS Modified

- High performance in cold climates
- Easier application in cold weather conditions
- High malleability
- Ease of application on recessed and protruding surfaces, and in detail-intensive applications
- High performance application on the structural elements with high deformation
such as steel roofs

01 Underlay Membranes

Technical Specifications

Property	Unit	Value
Thickness or Weight	mm & kg/m²	2-5
Cold Bending	°C	0/-5/-10/-20/-30
Felt Type		Polyester / Glassfiber
Roll Size	mt	1x7.5 / 1x10 / 1x15
Surface		HDPE Film
Tensile Strenght	N/5cm	300/200
		600/400
		800/600

Application Areas

- Waterproofing In Foundations
- Basement Tanking
- Conventional Terrace Roofs
- Inverted Terrace Roof

02 Toplayer Membranes

Toplayer bitumen waterproofing membrane is a high-quality solution utilized in construction for its exceptional waterproofing properties. It forms a durable barrier against water ingress, offering long-lasting protection to structures such as roofs, basements, and foundations. Its versatility and reliability make it a preferred choice for ensuring structural integrity and preventing moisture-related damages.

Technical Specifications

Property	Unit	Value
Thickness or Weight	mm & kg/m²	2-5
Cold Bending	°C	0/-5/-10/-20/-30
Felt Type		Polyester / Glassfiber
Roll Size	mt	1x7.5 / 1x10 / 1x15
Surface		Mineral or Sand
Tensile Strenght	N/5cm	300/200
		600/400
		800/600

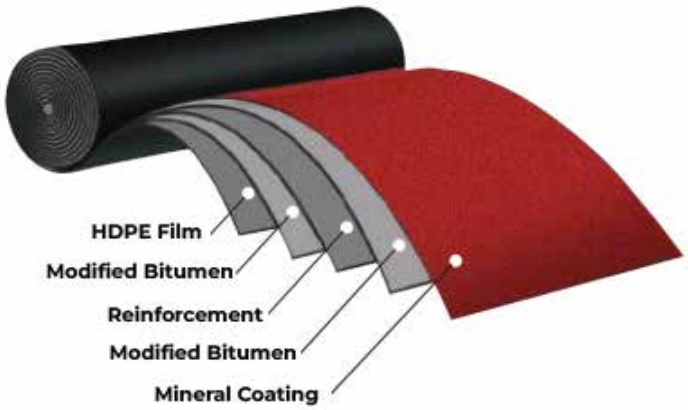
Application Areas

- Roofs
- Inaccessible terraces and garden roofs
- Dome and vaulted roofs
- In the pergolas
- In garden sheds
- On porches

Color Types

*Contact us for different color options.

Bitumen Membranes Layers



SETA SEAL
A TRADEMARK OF SETA TECHNIC

SETA TECHNIC international business

03 Shingles

Shingles, in the context of roofing, a shingle refers to a flat, rectangular piece of material, often asphalt, wood, or slate, used to cover and protect the roof of a building. Shingles are layered in overlapping fashion to create a durable and weather-resistant roofing surface.

Application Areas

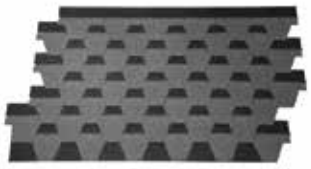
·On all types of wooden, reinforced concrete and metal roofs
·Inaccessible terraces and garden roofs
·Dome and vaulted roofs
·In the pergolas
·In garden sheds
·On porches

Technical Specifications

Property	Unit	Value	Tolerance
Width	320	mm	(+/- 3)
Length	1000	mm	(+/- 3)
Tensile Strength(With)	≥400	N/50mm	≥ 400
Tensile Strength (Length)	≥600	N/50mm	≥ 600
Flowing At High Temperatures	(90°C) ≤2	mm	≤ 2
Resistance Against Tearing	≥100	N	≥ 100
Water Absorption	<2	%	<2
Resistance To Uv Radiation	Pass	-	Pass
Granule Adhesion	≤ 2,5	gr	≤ 2,5
Bitumen Mass	> 1300	gr/m²	≥ 1300
Fire Performance	Class E	-	Pass
Exterior Fire Performance	Broof	-	Pass

Shape Types


Square


Hexagon


Classic

Color Types


RED


GREEN


GRAY


NIGHT BLUE


MIXED GRAY


SMOKED


NIGHT BROWN


RED & WHITE


GREEN & WHITE


GREEN & BLACK


RED & BLACK


BEIGE MELANGE

PVC MEMBRANES

PVC Geomembranes are both used in waterproofing and in applications that require the protection of concrete due to its high chemical resistance.
Geomembranes produced with two different color layers to enable detection of deformation that may occur during application .

PVC Geomembranes are produced in thicknesses between 0.8 mm - 1.2 mm 1.5 mm - 2 mm - 2.5 mm - 3 mm - 3.5 mm, up to 2.40 m width, in roll size of 20 m and above surface in the requested colors.

- Thickness: 1.50 mm - 3.50 mm
- Width: Max 2.40 m
- Length: Max 60 m (in requested dimensions)
- Type: Plain, Signal Layered, UV Additive, T-GRIP, Felt Laminated

Product Features

- High mechanical strength
- Long-Life
- Easy application
- Suitable for extreme climatic conditions
- Resistance to plant roots
- Fire-resistant

Technical Specifications

Property	Unit	Value
Thickness	mm	1,5-3,0
Mass per Unit Area	g/m²	≥1905-3810
Static Puncture Force (CBR)	kN	≥1,5-3,0
Shear Strength	N / 50 mm	≥600-1200
Peeling Strength	N / 50 mm	≥420-840
Liquid Permeability	m³ / (m² day)	≤4x10-⁶
Foldability at Low Temperature	°C	-20
Carbon Black Quantity	%	≥%25
Density	g / cm³	1,270-1,330

Area of Usage

- Dams / Ponds
- Tunnels (Highway, Subway, Cut and Cover)
- Bridges And Viaducts
- Water Tanks / Irrigation Channels
- Industrial Waste Storage Facilities / Treatment Facilities
- Pools (Sedimentation / Ventilation / Swimming / Ornamental)
- In Port Constructions
- Basement Tanking
- Oil and Mining Fields
- Underground Car Parks
- Terraces (Visited and Non-Visited)
- Wood, Steel and Green Roofs

EPDM MEMBRANES

Geomembranes, which are (SYNTHETIC RUBBER THERMOPLASTIC EPDM OB) EPDM (Ethylene Propylene diene Monomer) based and have Thermoplastic Synthetic Rubber with Olefin blendl, are environmentally friendly geosynthetic insulation geomembranes due to their chemical structure

It adds value to the structures with its long-life and high elasticity structure in foundation, curtain, terrace, irrigation ponds and all structures where waterproofing is considered.

Product Range

·Thickness: 0,80 mm - 3,50 mm
·Width: Max 2,40 m (In the requested size)
·Length: Max 75 m (In the requested size)
·Type: Straight, Felt Lamination

Product Features

· Suitable for extreme climatic conditions
· Robust and testable
· Impact and puncture resistant, Local repairs can be done with hot air hand welding machines without the need for special chemical adhesives.
· EPDM Based Geomembranes are produced without reinforcement and with geotextile reinforcement.
· They can be welded easily by using PVC and PE Robot Welding machines

Technical Specifications

Property	Unit	Value
Thickness	mm	1,5-2,5
Mass per Unit Area	g/m^2	1650-2750
Static Puncture Force (CBR)	kN	≥0,75-1,25
Shear Strength	N / 50 mm	≥360-600
Peeling Strength	N / 50 mm	≥180-300
Liquid Permeability	m^3 / (m^2 day)	$4x10^{-6}$
Foldability at Low Temperature	°C	-40
Carbon Black Quantity	%	≥%25
Density	g / cm^3	1,100-1,200

TPO MEMBRANES

TPO (Thermoplastic PolyOlefins) are products which belong to the group of flexible polyolefins and which can be adapted to different hardness modifications. This modification is obtained by means of adding of elastomeric molecules (EPR Ethylene Propylene Rubber) and by means of mixing of polyolefins during the polymerization stage.

These products are harder than PVC-P and show good behaviors against temperature changes. Their tensile breaking values are high. It has high flexibility and more than 25 years usage life. It is quite good in terms of its mechanical properties. TPO synthetic waterproofing geomembranes are successfully used in superstructure projects, especially in roof insulation.

- Thickness: 0.80 mm - 3.50 mm
- Width: Max 2.40 m (in the requested dimensions)
- Length: Max 75 m (in the requested dimensions)
- Type: Flat, Felt Laminated

Product Features

- Resistant to Ozone and Chemicals
- Flexible
- Resistant to Impact and Puncture
- It reduces the surface temperature of the roof.
- They can be welded easily with PVC and PE Robot Welding machines.

POLYETHYLENE GEOMEMBRANES

(HDPE/LDPE/LLDPE/VLDPE)

Polyethylene waterproofing geomembranes formed by processing and homogeneously forming polyethylene raw materials with different densities in extruders.

PE Geomembranes are manufactured in the thicknesses of; 0.8 mm, 1.2 mm, 1.5 mm, 2 mm, 2.5 mm, 3 mm, 3.5 mm, width up to 7.00 m, roll length of 100 m and above in the desired colors with UV additives.

- Thickness: 0,80 mm - 3,50 mm
- Width: Max 7,00 m (In the requested size)
- Length: Max 150 m (In the requested size)
- Type: Straight, T-GRIP, Cross, Felt Lamination

Technical Specifications - HDPE

Property	Unit	Value
Thickness	mm	1,5-3,0
Mass per Unit Area	g/m²	≥1410-2820
Static Puncture Force (CBR)	kN	≥3,75-7,5
Shear Strength	N / 50 mm	≥750-1500
Peeling Strength	N / 50 mm	≥525-1050
Liquid Permeability	m^3 / (m^2 day)	≤4x10-⁶
Foldability at Low Temperature	°C	-30
Carbon Black Quantity	by mass %	2,00-3,00
Density	g / cm^3	0,940-0,970

Technical Specifications - LLPDE

Property	Unit	Value
Thickness	mm	1,5-3,0
Mass per Unit Area	g/m²	≥1380-2760
Static Puncture Force (CBR)	kN	≥2,4-4,8
Shear Strength	N / 50 mm	≥750-1500
Peeling Strength	N / 50 mm	≥525-1050
Liquid Permeability	m^3 / (m^2 day)	≤4x10-⁶
Foldability at Low Temperature	°C	-30
Carbon Black Quantity	%	2,00-3,00
Density	g / cm^3	0,920-0,939

Area of Usage

- Dams / Artificial Ponds / Fire Pools
- Irrigation and Water Conveyance Channels
- Solid, Medical and Hazardous Waste Landfills
- Waste Pools (Solid, Medical, Hazardous, Chemical)
- Oil Fields and Mine Sites
- Sewage Facilities / Sewage Systems
- Fishery and seafood farming pools

Product Features

- High resistance to chemicals
- Low permeability
- Resistant to breakdown and leakage
- Long lasting
- High strength and elongation
- Easy-to-install
- UV resistant
- Easy-to-repair

Types

- HDPE - High Density
- LDPE - Low Density
- LLDPE - Linear Low Density
- VLDPE - Very Low Density

PVC JOINT TAPES

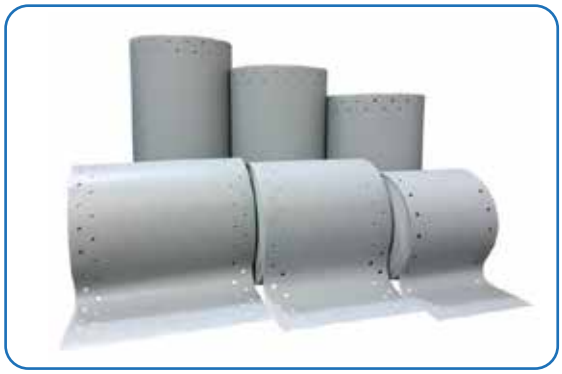
PVC Joint Tapes are PVC-based insulation tapes used in the insulation of dilatations, joints and cracks caused by different reasons.

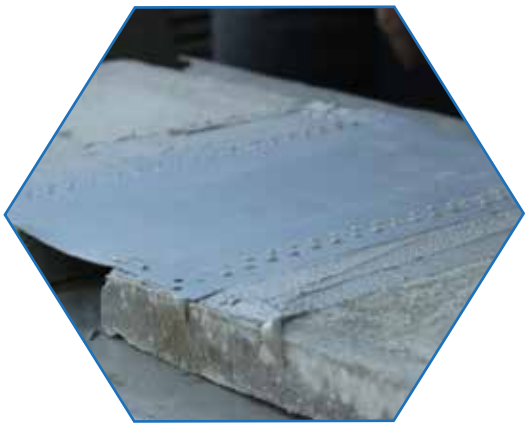
PVC Joint Tapes

·DB 1 ,2 mm, 1 ,5 mm , 2 mm
·DB 10 cm , 15 cm , 20 cm , 25 cm and the multiples of them
·In White / Grey / Yellow / Black and in the requested colors.

Product Features

·High elasticity
·Chemical-resistant
·Resistant to adverse weather conditions and water.
·Easy to install and cost-saving





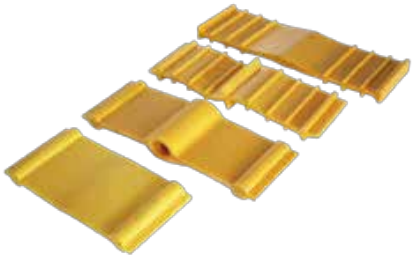
PVC WATERSTOP TAPES

PVC Waterproofing Tapes are used in the expansion and contraction joints in the reinforced concrete structures, in order to provide water tightness and to prevent damage to the building in the construction joints formed in concretes poured at different times since the concrete casting process is not continuous.

Joints are needed to be left at some points of concrete and reinforced concrete buildings. As it is known, the expansion and contraction actions in the buildings are too big and constantly repetitive movements to be neglected.

Areas of Use

- Dams / Artificial Ponds
- Tunnels
- Bridges and Viaducts
- Water Reservoirs
- Irrigation Channels
- Industrial Waste Facilities
- Pools
- Hydroelectric
- Thermal Power Plants
- Industrial buildings
- Retaining Walls
- Floorings
- Foundations



Type / Shapes / Dimensions

Type	Tape Shape	Dimensions	
A		Width (cm)	15-30
		Wing Thickness (mm)	4-10
O		Width (cm)	15-32
		Wing Thickness (mm)	3-5
OL		Width (cm)	20-35
		Wing Thickness (mm)	5-10
B		Width (cm)	15-30
		Wing Thickness (mm)	7-10
I		Width (cm)	15-30
		Wing Thickness (mm)	3-6
V		Width (cm)	15-25
		Wing Thickness (mm)	3-4
M		Width (cm)	20-30
		Wing Thickness (mm)	4-7
DO		Width (cm)	20-35
		Wing Thickness (mm)	4-6
DI		Width (cm)	20-25
		Wing Thickness (mm)	4-6
DT		Width (cm)	20-25
		Wing Thickness (mm)	4-8
AK		Width (cm)	20-24
		Wing Thickness (mm)	3-6
D		Width (cm)	15-50
		Wing Thickness (mm)	3,5-6
A		Width (cm)	15-50
		Wing Thickness (mm)	3,5-6
DA		Width (cm)	15-50
		Wing Thickness (mm)	4-8
AA		Width (cm)	15-50
		Wing Thickness (mm)	4-8

BITUMEN MEMBRANE PRIMER

Bituminous Membrane Primer's are ready to use primer for bituminous membranes that obtained by mixing water and bitumen by using special methods.
They can be applied as a primer before the application of all brands of bitumen membranes or bitumen liquid systems.

Product Features

·Excellence surface adherence
·Adheres perfectly to all kind of surfaces, even when the surface is moist.
·Ready to use and easy to apply.
·Economic product.
·Non-toxic and non-flammable content.
·Water based. Environment friendly.
·Applied as cold. Does not required heating and thinning.

Technical Specifications

Property	
Content	Bitumen
Color	Liquid form is dark brown, dry form is black
Density	1,02 g/cm³
Solid Content	20%
Softening Temperature	+70°C
pH	9
Viscosity	Concentrated Syrup
Application Temperature	+5°C to +35°C
Drying Time	
Touch Dry	1 hour
Full Drying	5-6 hours
Mechanical Strength	8 days
Consumption	0,250 kg/m² for each layer

BITUMEN EMULSION (Bitumen Primer)

Bituminous Membrane Primer's are ready to use primer for bituminous membranes that obtained by mixing water and bitumen by using special methods.

Product Features

·Thanks to its superior adhesion, bituminous membrane can be adhere on the surface excellently.
·After evaporation of the water it contains, it forms a waterproof and water-insoluble layer.
·Suitable for interior applications because of non-toxic and non-flammable content.
·Water based. Environment friendly.
·Adheres perfectly to all kind of surfaces, even when the surface is moist.

Technical Specifications

Property	
Content	Bitumen
Color	Liquid form is dark brown, dry form is black
Density	1,08 g/cm3
Solid Content	56±1 %
Softening Temperature	+70°C
Thinner	Water
Application Temperature	+5°C to +35°C
Drying Time	
Touch Dry	1 hour
Full Drying	5-6 hours
Mechanical Strength	8 days
Consumption	0,400 kg/m² for each layer

Area of Usage

·Used as a priming coat before the application of all brands of roll or liquid bitumen membranes.
·In all horizontal and vertical applications.
·In base of buildings, underground storehouses and basements insulation from the direction of water (positive direction).
·In wet areas insulation such as bathroom, kitchen, balcony.
·In parquet flooring applications with hot bituminous materials, it is applied over the screed as an undercoat.
·Applied onto construction molds for easy demolding and providing a smooth surface..

BITUMEN SOLUTION

Bitumen Solution is a ready to use, rubber content, waterproofing bituminous solution without any filler. After evaporation of the solvents it contains, adheres firmly to the surface it is applied, forming an elastic waterproof layer.

Technical Specifications

Property	
Content	Bitumen - Rubber
Color	Black
Density	0,98 g/cm3
Solid Content	65%
Softening Temperature	+65°C
Application Temperature	+5°C to +35°C
Curing Time	1 hour
Consumption	0,500 kg/m2 for each layer.

Product Features

·Thanks to its superior adhesion, bituminous membrane can be adhere on the surface excellently.
·Provides a seamless insulation layer.
·Resistant to sulfate.
·Applied as cold.
·Quick dry.
·Ready to use..

Area of Usage

·Used as a priming coat before the application of all brands of roll or liquid bitumen membranes.
·In all horizontal and vertical applications.
·In base of buildings, underground storehouses and basements insulation from the direction of water (positive direction).
·In wet areas insulation such as bathroom, kitchen, balcony.
·In parquet flooring applications with hot bituminous materials, it is applied over the screed as an undercoat.
·Applied onto construction molds for easy demolding and providing a smooth surface..

BITUMEN-RUBBER BASED
ONE COMPONENT - LIQUID MEMBRANE

RCS ECO is a bitumen-rubber modified, water-based, ready-to-use, and reinforced with elastomeric polymer resin additives, single-component liquid coating used against water and moisture. By the evaporation of the water it contains, it adheres firmly to the applied surface and forms an elastic waterproof layer.

Product Features

- Easy to apply.
- It provides a seamless insulation layer.
- As a water-based material it is environment friendly.
- Due to its non-flammable and non-toxic characteristics it can be safely used in closed areas.
- It enables good adhesion even when the surface is moist.
- It provides permanent elasticity.
- It is ready to use.
- As a cold applied material, it does not require heating or thinning.

Technical Specifications

Property	
Content	Elastomeric Polymer Content Bitumen Emulsion
Color	Liquid form is brown, dry form is black
Density	1,05 g/cm3
pH	10-11
Solid Content	60%
Application Temperature	+5°C to +35°C
Drying Time	
Touch Dry	1 hour
Full Drying	5-6 hours
Mechanical Strength	8 days
Consumption	0,80 – 1,0 kg/m2 for each layer. Recommended at least 2 layers.

Area of Usage

- It can be used on all horizontal and vertical surfaces.
- It is used for the external insulation of foundations, underground constructions, basements etc.
- It is used for insulating water leakages in closed damp environments such as bathrooms kitchens, toilets, etc.
- For the applications requiring durability against higher water pressure, and on cracked surfaces, it must be reinforced with polyester felt, reinforcing fabric, fibermesh, etc.

BITUMEN-RUBBER MODIFIED
WATER BASED - ELASTOMERIC LIQUID MEMBRANE

Itis a bitumen-rubber modified, water based, single-component, ready to use liquid membrane with elastomeric additives, used for insulating water and damp. By the evaporation of the water it contains, it adheres firmly to the applied surface and forms an elastic waterproof layer.

Product Features

·Applied as cold. Does not require heating or thinning.
·Ready to use.
·Provides a seamless insulation layer.
·Suitable for interior applications because of non-toxic and non-flammable content.
·Water based. Environment friendly.
·Adheres perfectly to all kind of surfaces, even when the surface is moist.
·Covers the capillary cracks.
·Provides permanent elasticity.
·It provides permanent elasticity.
·It is ready to use.
·As a cold applied material, it does not require heating or thinning.

Technical Specifications

Property	
Content	Elastomeric Polymer Content Bitumen Emulsion
Color	Liquid form is petrol color Dry form is black
Density	1,03 g/cm3
Solid Content	0,56
Application Temperature	+5°C to +35°C
Carbon dioxide Permeability	418,24 m
Water Vapor Permeability	14,293 m
Capillary Water Permeability	0,025 kg/m2.h^{0,5}
Adhesion Strength	0,6 N/mm2
Drying Time	
Touch Dry	1 hour
Full Drying	4-5 hours
Mechanical Strength	8 days
Consumption	0,80 – 1,0 kg/m2 for each layer. Recommended at least 2 layers application.

Area of Usage

·It can be used on all horizontal and vertical surfaces.
·It is used for the external insulation of foundations, underground constructions, basements etc.
·It is used for insulating water leakages in closed damp environments such as bathrooms kitchens, toilets, etc.
·For the applications requiring durability against higher water pressure, and on cracked surfaces, it must be reinforced with polyester felt, reinforcing fabric, fibermesh, etc.

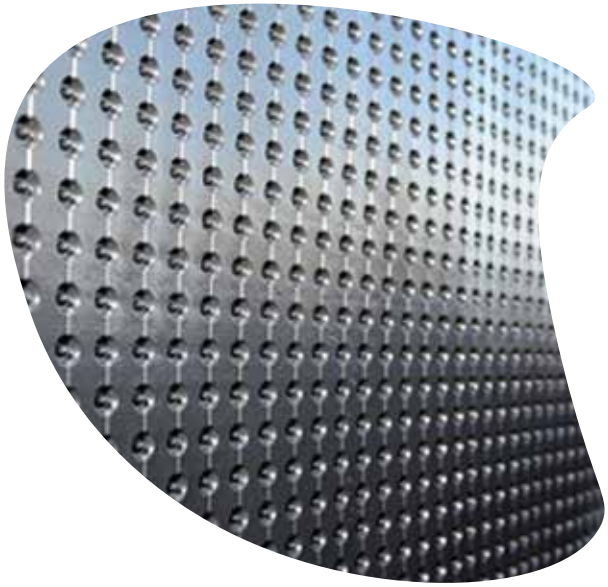
DRAINAGE BOARD

Drainage Dimpled Sheets

Drainage boards are dimpled structure drainage andunderground insulation protection boards made of high density polyethylene(HDPE), has high compressive strength, resistant to plant roots and chemicals.

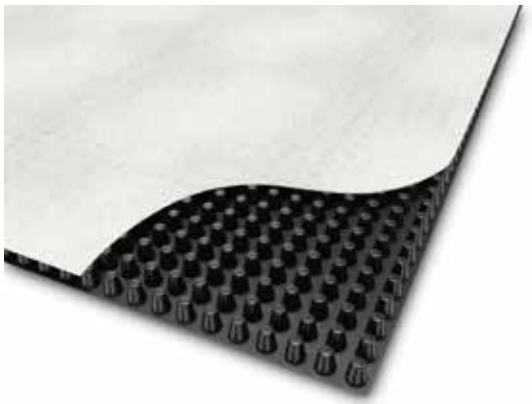
Product Description

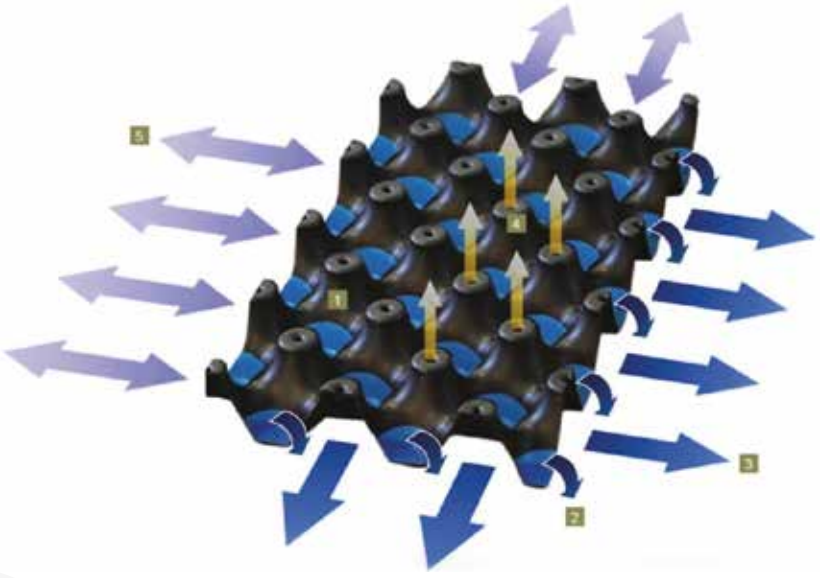
Serves as a protection layer throughout backfill work and prevents below-grade water from penetrating the structure. Allows for vertical and horizontal installations. Mainly used for the following applications: underground structures, basements and retaining walls, tunnels, underground car parks



Geotextile Drainage Boards

2 layer system which further enhances drainage capacity. The integrated layer of geotextile filters out the soil particles in order to prevent the flow passages from being blocked up. Composed of a recycled high-density polyethylene with a polypropylene heat-bonded geotextile filter fabric attached to the dimpled surface. Allows for vertical and horizontal installations. Mainly used fort he following applications: undeground structures, basement-walls, retaining walls, tunnels, underground car parks





VAPOR BALANCER SHEETS

Vapor Balancer Sheets for waterproofing are 3-layer breathing water-impermeable and high density polyethylene layer vapor balancing cover with mass of 80-195 kg/m2 unit area.
Thanks to their mico-pores that do not allow water passage, they prevent the formation of mold and bacteria in the building systems with their breathability and extends the life of the thermal insulation materials.

Property	Value
Thickness	0.3-0.65 mm
Mass per Unit Area	80-195 g/m²
Fire Response Class	E - B S1 D0
Water Vapor Permeability	0.04m (min. -0.05, max. +0.05)
Water Impermeability	>3.000 mm
Air Permeation Resistance	max. 0.02 m³ (m² x h x 50 Pa)
Low Temperature Flexibility	-40

Area of Usage

- As a cover under tiles or shingles
- Metal roof systems (clamped / unclamped)
- Curtain wall systems
- On roofs without rear ventilation or ventilation
- Bottom coating and bottom stretching
- In applications instead of under-shingle membrane

GEOTEXTILE FELT

Geotextile felts are specialized fabrics engineered for a wide range of civil engineering and environmental applications. These versatile materials are designed to provide essential functions such as filtration, separation, reinforcement, protection, and drainage in construction projects. Whether used for roadways, retaining walls, erosion control, or landscaping, geotextile felts offer durability, permeability, and strength to enhance the performance and longevity of infrastructure while promoting environmentally sustainable practices. With their ability to address diverse engineering challenges, geotextile felts serve as indispensable components in modern construction and environmental protection efforts.

Product Features

- In any requested dimensions from 150 gr to 1200 gr
- Type: PP (Polupropylene), PES (Polyester), Salt and Pepper Grey

BITUM WATERPROOFING TAPES

Product Description:
Self-adhesive, elastomeric bitumen based, aluminium surfaced, waterproofing tapes.

SPECIFICATION	EXPLANATION / VALUE
Top Surface	Aluminum Foil (Anthracite Grey, Terracotta, Green, Metallic)
Bottom Surface	Siliconised PP
Composition	Elastomeric Bitumen
Application Temperature	+5˚C / +30˚C
Thickness	1.5 mm (1mm option)
Width	5-10-15-20-30-60 cm
Length	10 mt
Watertightness	Pass
Flexibility at Low Temperature	-20˚C
Tensile Strength (MD/CD)	150/150 N/50mm
External Fire Performance	Broof (t2)

Area of Usage

It adheres to wood, metal, plastic, concrete surfaces and provides insulation.

COLORS
Anthracite Grey
Terracotta
Green
Metallic

Product Features

·UV resistant thanks to the aluminum foil on its upper surface.
·Flexible structure, it can be easily applied even on inclined surfaces.
·Suitable for contact with bitumen.
·Self-adhesive.
·Can be applied easily.
It has a wide application area.

international business

SETA TECHNIC

Unlimited TRADE, Unlimited SERVICE

SETA TECHNIC YALITIM
SANAYİ VE DIŞ TİCARET LİMİTED ŞİRKETİ

Contact Us

Head Office
Ataköy Towers | Ataköy 7-8-9-10. Kısım Mah. Çobançeşme E-5 Yanyol Cad.
No: 20/1 D:70, 34518 Bakırköy İstanbul Türkiye

Phone
+90 850 309 99 43

E-mail
info@setatechnic.com

www.setatechnic.com