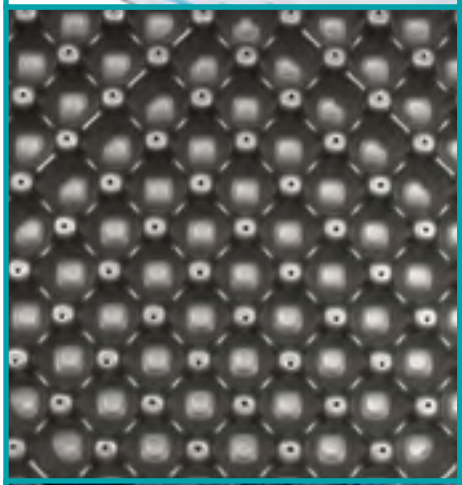
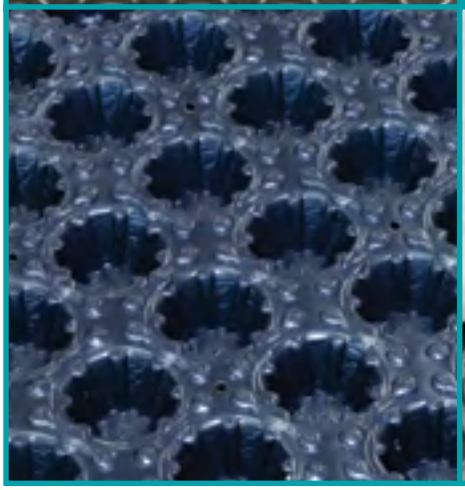
Ready to improve your construction



Insulation Products

Istanbul Teknik offers solutions to meet your needs in the insulation industry from foundation to building roof with quality, assurance and wide product range.



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To improve life...

İstanbul Teknik is a leading Turkish building materials and civil engineering solutions company that provides cutting edge products and high quality services to its customers and communities since 1998.

İstanbul Teknik is the first and the largest geogrid producer in Turkey and is a member of the International Geosynthetics Society (IGS). With its wide range of products, İstanbul Teknik provides services in the fields of Geosynthetics, Asphalt Chemicals, Insulation Products, GeoArme Wall Systems, GeoGreen Green Roof Systems and Marble Products. It offers unique solutions for each customer through its engineers and specialized employees. It has achieved many FIRSTs and BESTs with the products, solutions and applications developed by own.

In 2019, the Company became an authorized R&D Center in the field of Geosynthetics and Asphalt Chemicals based on the approval of the Ministry of Industry and Trade. İstanbul Teknik, which was ranked as one of the top 500 companies in the year it was founded thanks to its R&D investments, is in the league of giant corporations with its increased investments every year, the cooperation that it jointly conducts with universities and international research organizations and its scientific publications. Our R&D Center aims to contribute to the economy by presenting innovative solutions for our sector and for our country, with our scientific researches on geosynthetics and asphalt chemicals.

İstanbul Teknik has currently become a company that continuously develops new products and solutions, presents products and solutions that are used safely at 1000+ in domestic market and in more then 80 countries across all 5 continents, and manufactures its products at its own factory equipped by modern technology on an area of 30.000 sqm in Bolu, and maintains its leadership.

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TekDrain Star
YKL Drainage Boards

Series

TekDrain Star YKL Drainage Board is made of high density polyethylene (hdpe), resistant to plant roots and decay, and protects the shear wall from water and moisture together with the insulation layer.

Advantages

- The star-shaped channels prevent the dimple from being easily crushed under pressure and increase the long-term strength performance.
- The void volume created by the star shape allows increased drainage capacity and free flow of water.
- The star design provides a more flexible and stronger structure. It is therefore easier to apply in the field.

Fields Of Application

- Foundation insulation and shear walls,
- In tunnels where high drainage capacity is required,
- Transfer of water from the ground to the drainage slab,
- Under the road.

Packaging and Storage

- 2.4m plate is produced in 20m rolls.
- Rolls are shipped to the field vertically on pallets.
- Stored in a way to be protected from direct sunlight and extreme temperature differences.

Thanks to its star design, it evenly distributes the incoming pressure and provides resistance against earth load.

Technical Specifications

Test	Standard	Unit	TekDrain Star YKL 150	TekDrain Star YKL 200	TekDrain Star YKL 250	TekDrain Star YKL 300	TekDrain Star YKL 350	TekDrain Star YKL 400
Compression Strength	TS EN ISO 25619-2	kN/m^2	150	200	250	300	350	400
Tensile Strength at Break (MD - CMD)	TS EN ISO 12311-2	N / 5 cm	200 150	250 200	300 250	350 300	400 330	430 360
Dimple Height	-	mm	8,0	8,0	8,0	8,0	8,0	8,0
Working Temperature	-		-30 +80	-30 +80	-30 +80	-30 +80	-30 +80	-30 +80
Roll Length	-	m	20	20	20	20	20	20
Roll Wide	-	m	2.40	2.40	2.40	2.40	2.40	2.40
Raw Material	-	-	HDPE	HDPE	HDPE	HDPE	HDPE	HDPE

All values are given as average. Please contact Istanbul Teknik for more detailed information.

MADE IN TÜRKİYE

TekDrain Star
GDL Drainage Boards
Series

TekDrain Star GDL Drainage Board is produced by laminating single-sided or double-sided geotextile to a dimple sheet made of high density polyethylene (HDPE). It is resistant to plant roots and decay. Thanks to the geotextile layer, it allows the water coming to the shear wall to drain to the drainage pipes in the foundation ampacity frame.

Advantages

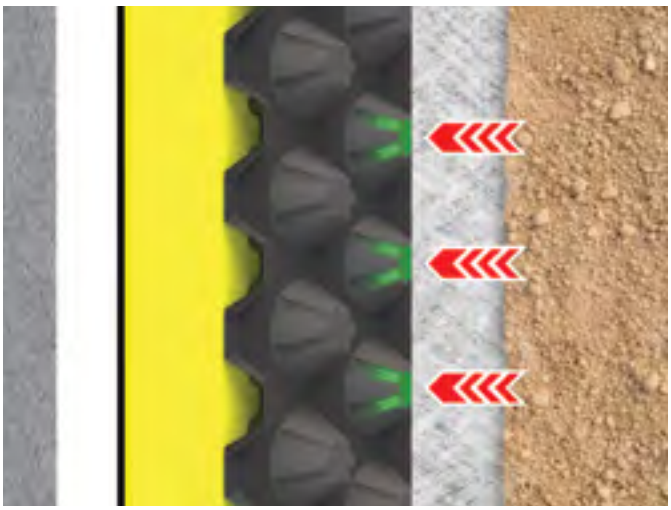
- The star-shaped channels prevent the dimple from being easily crushed under pressure and increase the long-term strength performance.
- The geotextile allows the water coming into the wall to drain down to the drainage pipes, reducing the load on the wall.
- Laminated geotextile eliminates the need for extra steps and saves time.
- The void volume created by the star shape allows increased drainage capacity and free flow of water.

Fields Of Application

- Foundation insulation in shear walls,
- In tunnels where high drainage capacity is required,
- Transfer of water from the floor to the drainage plate,
- Under the roads,
- Waste storage facilities,
- In stadiums,
- Very sloping green roofs.

Packaging and Storage

- 2.4m plate is produced in 20m rolls.
- Rolls are shipped to the field vertically on pallets.
- Stored in a way to be protected from direct sunlight and extreme temperature differences.



Thanks to its star design and laminated geotextile, it evenly distributes incoming pressure and provides high resistance to soil loads.

Technical Specifications

Test	Standard	Unit	TekDrain Star GDL 150	TekDrain Star GDL 200	TekDrain Star GDL 250	TekDrain Star GDL 300	TekDrain Star GDL 350	TekDrain Star GDL 400
Compression Strength	TS EN ISO 25619-2	kN/m²	150	200	250	300	350	400
Tensile Strength at Break (MD - CMD)	TS EN ISO 10319	kN/m	10 10	11 11	12 12	13 13	14 14	14 14
Dimple Height	-	mm	8,0	8,0	8,0	8,0	8,0	8,0
Geotextile Water Permeability	EN ISO 11058	l/m²s	145	145	145	145	145	145
Working Temperature	-		-30 +80	-30 +80	-30 +80	-30 +80	-30 +80	-30 +80
Roll Length	-	m	20	20	20	20	20	20
Roll Wide	-	m	2.40	2.40	2.40	2.40	2.40	2.40
Raw Material	-	-	HDPE	HDPE	HDPE	HDPE	HDPE	HDPE

All values are given as average. Please contact Istanbul Teknik for more detailed information.

MADE IN TÜRKİYE

TekDrain

Geo 10 Drainage Geocomposite

TekDrain Geo 10 Drainage Geocomposite is produced from high density polyethylene (HDPE) by laminating a 10mm high dimple sheet with single-sided or double-sided geotextile and is used in foundations, tunnel applications, flat roofs and landscaping areas.

In vertical applications, it is used to protect waterproofing against damage caused by soil pressure; in horizontal applications, it is used for safe and continuous drainage of water by ensuring equal distribution of soil load.

Fields Of Application

- TekDrain Geo 10 Series Geotextile Drainage Geocomposite with integrated geotextile cover ensures that the waste space around the dimple prevents blockage. It has a high drainage capacity. The air space between the bubbles ensures safe drainage of the flowing water and protection of the structure.

  Drainage Geocomposite can be safely used in shear walls with a height of 10 m and above, exposed to excessive soil load, thanks to its high compressive strength.

  TekDrain Geo 10 Series Geotextile Drainage Geocomposite is preferred under roads, parking areas, bridges and garages with its high drainage performance.

Packaging and Storage

- Produced in 2.4m slabs, 12.5m rolls.
- Rolls are stored upright.

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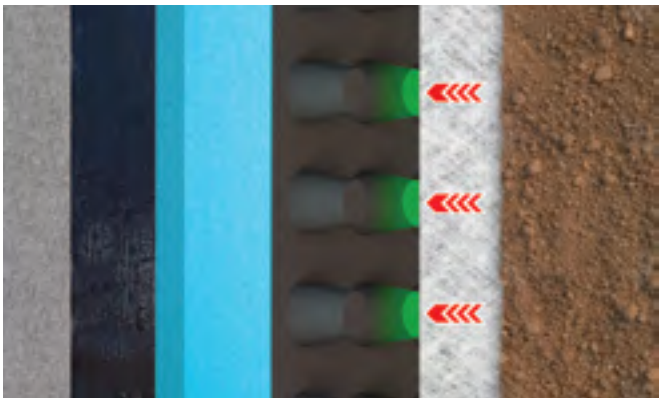

Technical Specifications

	Geo10 400	Geo10 650
Compression Strength	400 kN/m²	650 kN/m²
Tensile Strength (MD/CMD)	10/10 kN/m	12/12 kN/m
Geotextile permeability	85 l/m².s	85 l/m².s
Raw Material	HDPE	HDPE
Geotextile Raw Material	PP	PP
Color	Black	Black
Geotextile Color	Grey / White	Grey / White
Geotextile Unit Weight	>100 g/m²	>100 g/m²
Roll Width	2.4 m	2.4 m
Roll Lenght	12.5 m	12.5 m
Dimple Height	10 mm	10 mm
Working Temperature	-30 °C or +80 °C	-30 °C or +80 °C

*All values are given as average. Please contact Istanbul Teknik for more detailed information.

TekDrain

Geo D 10 Drainage Board

TekDrain Geo D 10 Drainage Board is made of high density polyethylene (HDPE) with 10mm high dimples and is used in foundations, tunnel applications, flat roofs and landscaping areas.

Fields Of Application

It is used to protect the waterproofing against damage caused by soil pressure in vertical applications, and to discharge water safely and continuously by ensuring equal distribution of the soil load in horizontal applications.

Technical Specifications

	Geo D 10 400	Geo D 10 650
Compression Strength	400 kN/m²	650 kN/m²
Tensile Strength (MD/CMD)	10/10 kN/m	12/12 kN/m
Raw Material	HDPE	HDPE
Color	Black	Black
Roll Width	2.4 m	2.4 m
Roll Lenght	12.5 m	12.5 m
Dimple Height	10 mm	10 mm
Working Temperature	-30 °C or +80 °C	-30 °C or +80 °C

***All values are given as average. Please contact Istanbul Teknik for more detailed information.**

Packaging and Storage

- Produced in 2.4m slabs, 12.5m rolls.
- Rolls are stored upright

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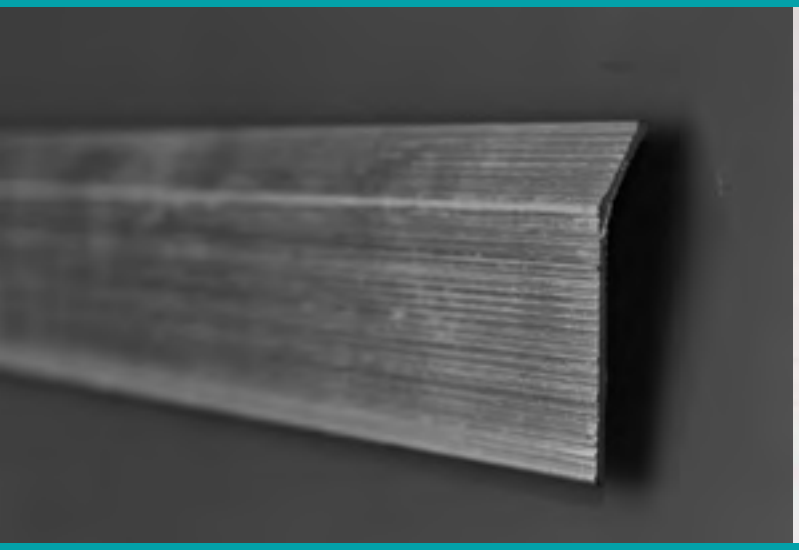

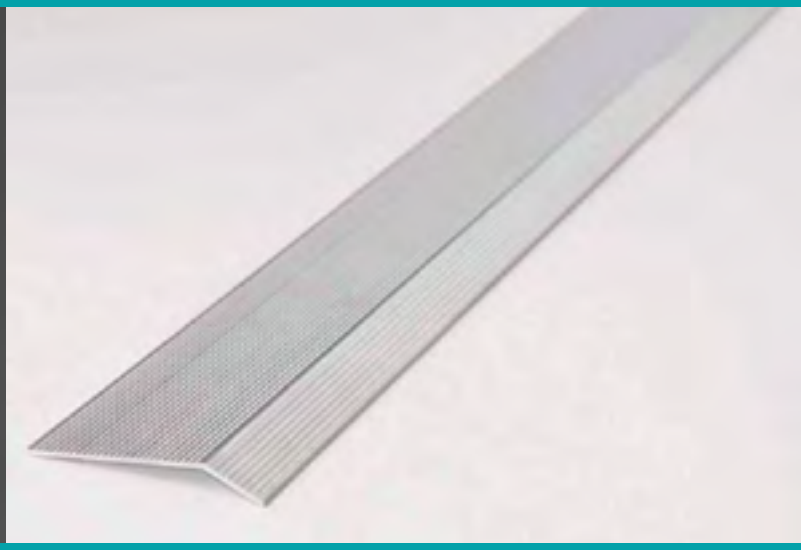

TekDrain

Fixing Aluminum Profile

TekDrain Fixing Aluminum Profile, made of aluminum, is a member of shear wall insulation ensuring the drainage board hanging like a shear wall, designed with a single lug.

Fields Of Application

- In fixing the drainage plate in shear insulations,
- It is used as the starting and ending profile in bituminous membrane applications.

Advantages

- Takes the weight of the filling load on the drainage board.
- In bituminous membrane applications, when applied with mastic, it prevents the water flowing from the wall surface from leaking from weak points.

Packaging and Storage

- 3 m long pressure laths are shipped in packages of 50 pieces.
- It can be stored vertically or horizontally.

Technical Specifications

Plate Raw Material	Aluminum
Width	Normal width 3 cm and 1cm lug: total width 4 cm.
Length	3 m

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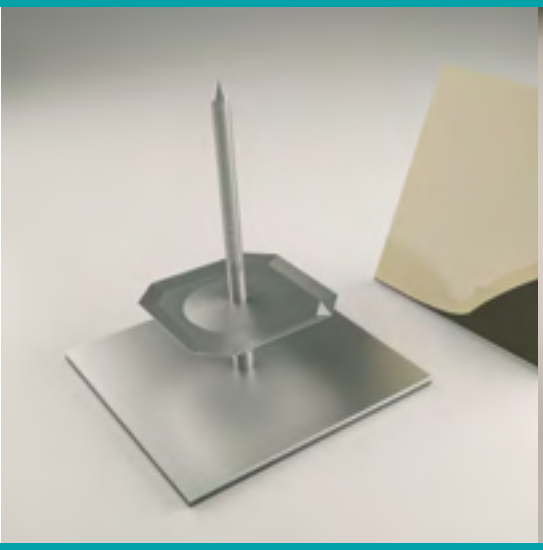

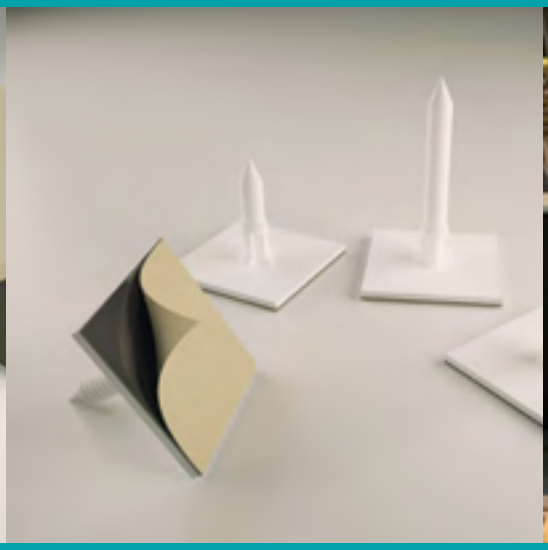

TekDrain

Drainage Board Fixing Pin

TekDrain Fixing Pin is a fixing element which ensures the drainage boards used in the shear wall insulation for protection purpose to remain on the wall more safely during filling.

Fields Of Application

- It ensures the fixing of drainage plates and thermal insulation materials on the wall.
- It is also used as a fixing element in the insulation of ventilation pipes.

Advantages

- When shear insulation is made, it is adhered on the membrane and ensures that the thermal insulation plates hold on the wall.
- It ensures that the drainage board adheres to the surface under the load during filling, thanks to the 6 pieces / m^2 hanger pins used per unit area.

Technical Specifications

- Hanger pin nail lengths are produced as 4, 6, 8, 10 cm.
- 4 cm has an adhesive metal surface layer.
- 4, 6, 8 cm ones are made of galvanized. 10 cm hanger pin nails are made of aluminum.
- 4, 6, 8 cm self adhesive hanger pin nails, Made of PVC based material.

Packaging and Storage

- 4, 6, 8 cm hanger pins are shipped in boxes of 500 pieces, 10 cm hanger pins are shipped in boxes of 400 pieces.

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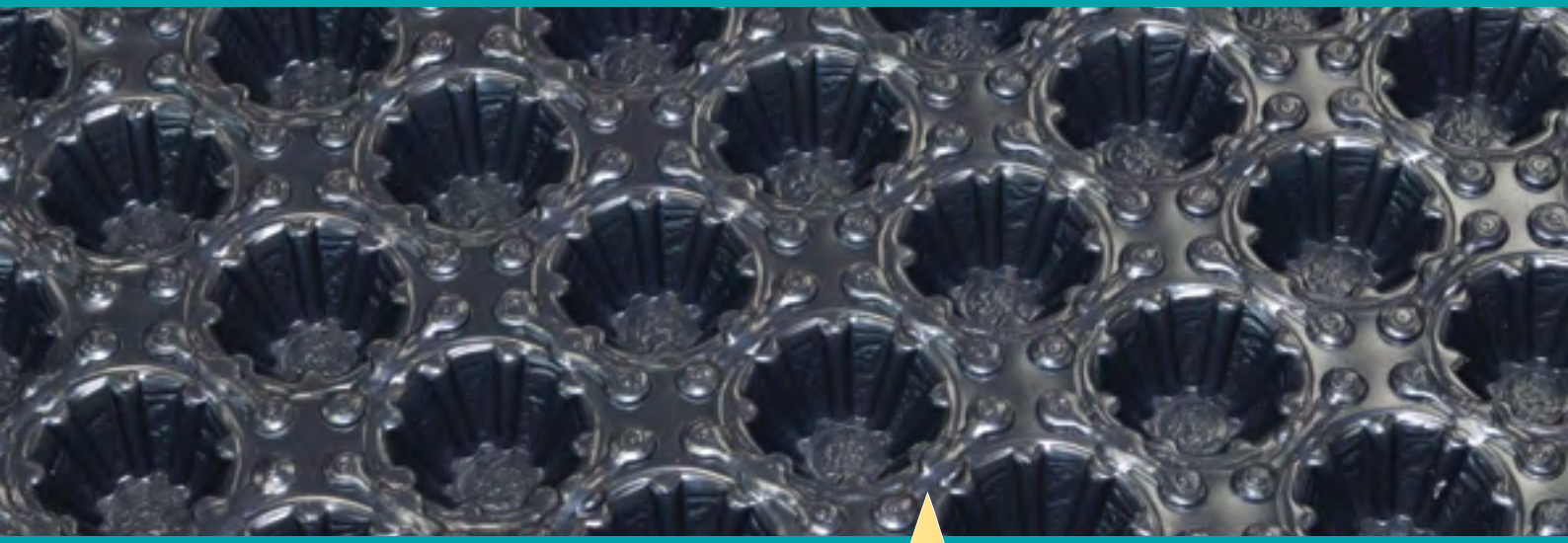


TekDrain Star Series

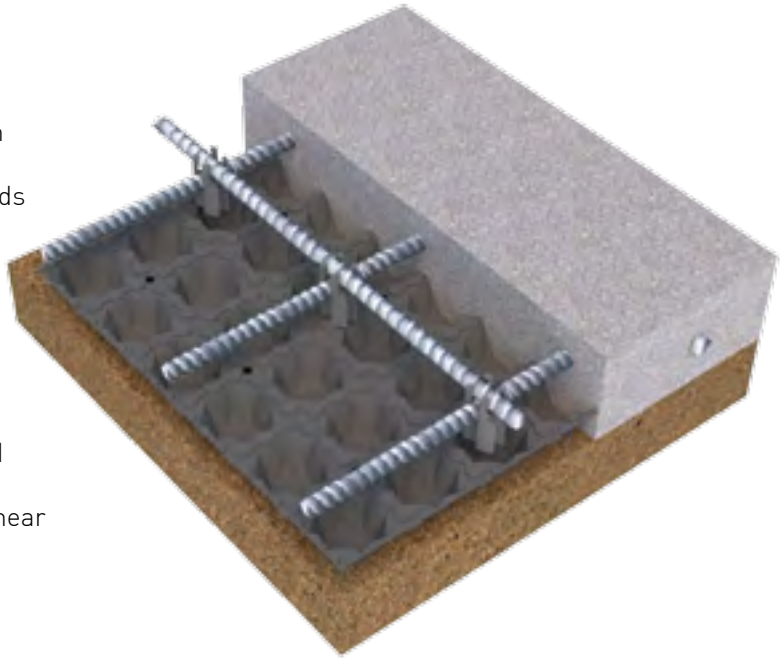
ZMN 20 Drainage Board

TekDrain Star ZMN Dranaige Board, is a protective layer made of high density polyethylene (HDPE) resistant to plant roots and decay, separating shear walls and foundation concrete from soil by preserving them from water and moisture.

It protects the foundation concrete and reinforcement from corrosion by preventing the capillary water rising from the ground to the foundation (basement, parking lot, etc.) from reaching the foundation. It ensures that the foundation concrete sets under suitable conditions. Contributes to extend the life of the structure.

Fields Of Application

- It creates an area ready for concrete pouring and can be used as a formwork.
- It protects the insulation in shear walls and withstands high-pressure soil loading.
- Resistant to plant roots, rainwater and alkali.



Advantages

- It protects the foundation concrete against water and moisture rising from the ground.
- It is a versatile product that can also be applied on shear walls and protects the slope by taking the soil load.

Packaging and Storage

- Produced in 2.40 x 20 m and 2 x 20 m rolls.
- Rolls are stored vertically and plates are stored horizontally.

Technical Specifications

	ZMN 20 150	ZMN 20 200
Compression Strength	150 kN/m²	200 kN/m²
Raw Material	HDPE	HDPE
Color	Black	Black
Roll Width	2.0 m and 2.4 m	2.0 m and 2.4 m
Roll Lenght	20 m	20 m
Dimple height	20 mm	20 mm
Air Gap	14 l/m²	14 l/m²
Water Storage Capacity	7.00 l/m²	7.00 l/m²
Working Temperature	-30 °C or +80 °C	-30 °C or +80 °C
Warnings	Does not degrade under soil	Does not degrade under soil

*Other Features: Resistant to chemicals and plant roots. Does not harm drinking water. Resistant to acid, alkali, oil and solvents.

*All values are given as average. Please contact Istanbul Teknik for more detailed information.

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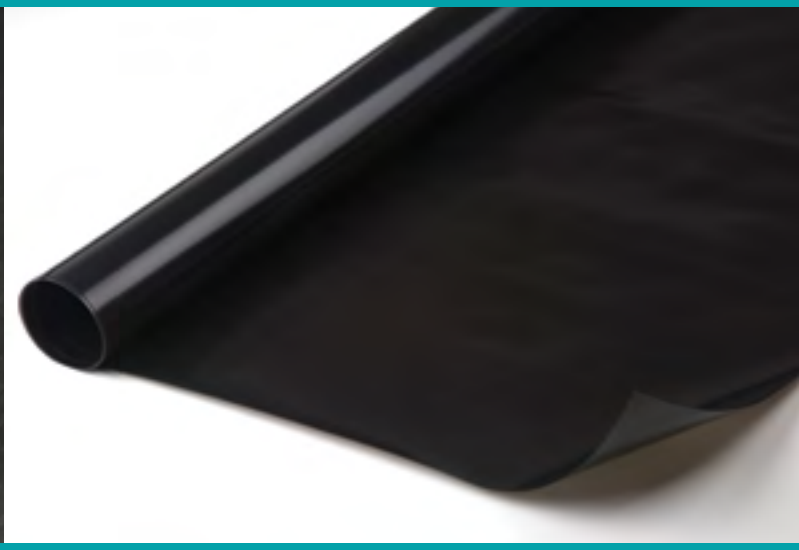

TekDrain

Root Barrier Foil

TekDrain Root Barrier Foil is a black and color cover made of low density polyethylene material resistant against plant roots.

Fields Of Application

- It is a versatile material used on green roofs to prevent plant and tree roots from damaging the insulation and also used as a vapor barrier between two concretes. Rolls should be laid with 1.5 m overlap.

Advantages

- Prevents plant roots from damaging the insulation.
- Used between two concretes, it prevents moisture and vapor coming from the bottom to rise up.

Packaging and Storage

- It prevents plant roots from damaging the insulation.
- By using it between two concretes, it prevents moisture and vapor coming from below from rising up.

Technical Specifications

	320	380	1 mm
Unit weight	320 g/m²	380 g/m²	980 g/m²
Sizes	5x30 m	5x30 m	5x30 m
Thickness	340 micron	400 micron	1000 micron
Raw Material	Polyethylene	Polyethylene	Polyethylene
Stabilized against effects of UV rays.			

*All values are given as average. Please contact Istanbul Teknik for more detailed information.

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TekDrain

GF Green Roof Drainage Boards

TekDrain GF Green Roof Drainage Board is a Drainage board produced for roof applications, made of high density polyethylene (HDPE), with high compression strength. It is resistant to plant roots and decay, preventing dehydration of plants on non-rainy days, assisting holding water.

Fields Of Application and Use

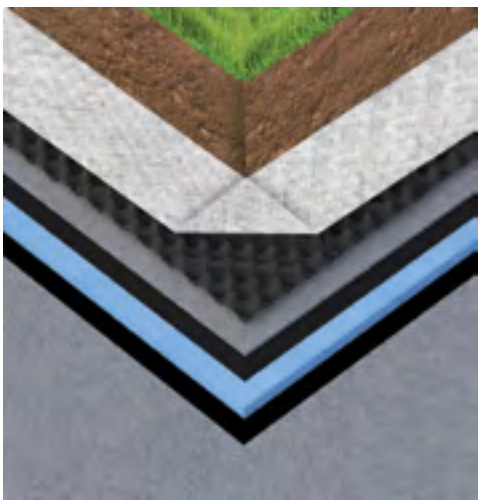
- Building roofs.
- Parking Lot roofs.

Advantages

- It has a major role in building insulation.
- It provides significant savings in heating and air conditioning system costs and carbondioxide emissions of green building applications.
- Due to its plant layer, roof facade systems of the building are also protected against external factors.
- With multidimensional use of plant layer, it assists urban water management.
- Green roof and facade systems that can hold a significant amount of rainwater assists in water treatment.
- Investment to green building systems also provides savings in operation and investment to canalization systems and water treatment systems.
- Green roof application is known to improve air quality as well.
- It diminishes the effects of sun rays that affect the building.

Packaging and Storage

- Produced in 1 x 2 m plates.
- Stored horizontally.



Technical Specifications

	GF 25 200	GF 25 270	GF 25 320	GF 25 370	GF 25 420
Compression Strength	200 kN/m²	270 kN/m²	320 kN/m²	370 kN/m²	420 kN/m²
Water Filled Weight	5.1 kg/ m²	5.3 kg/ m²	5.4 kg/ m²	5.5 kg/ m²	6.18 kg/ m²
Roll Length	2 m	2 m	2 m	2 m	2 m
Roll Width	1 m	1 m	1 m	1 m	1 m
Water Storage Capacity	5 l/m²	5 l/m²	5 l/m²	5 l/m²	5 l/m²
Dimple Height	25 mm	25 mm	25 mm	25 mm	25 mm
Water Flow Ratio	İ=0.01 0.95 lt/(m.s) İ=0.02 1.35 lt/(m.s) İ=0.03 2.10 lt/(m.s)	İ=0.01 0.95 lt/(m.s) İ=0.02 1.35 lt/(m.s) İ=0.03 2.10 lt/(m.s)	İ=0.01 0.95 lt/(m.s) İ=0.02 1.35 lt/(m.s) İ=0.03 2.10 lt/(m.s)	İ=0.01 0.95 lt/(m.s) İ=0.02 1.35 lt/(m.s) İ=0.03 2.10 lt/(m.s)	İ=0.01 0.95 lt/(m.s) İ=0.02 1.35 lt/(m.s) İ=0.03 2.10 lt/(m.s)

*All values are given as average. Please contact Istanbul Teknik for more detailed information.

	GF 40 270	GF 40 300
Compression Strength	270 kN/m²	300 kN/m²
Water Filled Weight	10 kg/m²	12 kg/ m²
Roll Length	2 m	2 m
Roll Width	1 m	1 m
Water Storage Capacity	9 l/m²	9 l/m²
Dimple Height	40 mm	40 mm
Water Flow Ratio	İ=0.01 1.80 lt/(m.s) İ=0.02 2.50 lt/(m.s) İ=0.03 3.85 lt/(m.s)	İ=0.01 0.95 lt/(m.s) İ=0.02 1.35 lt/(m.s) İ=0.03 2.10 lt/(m.s)

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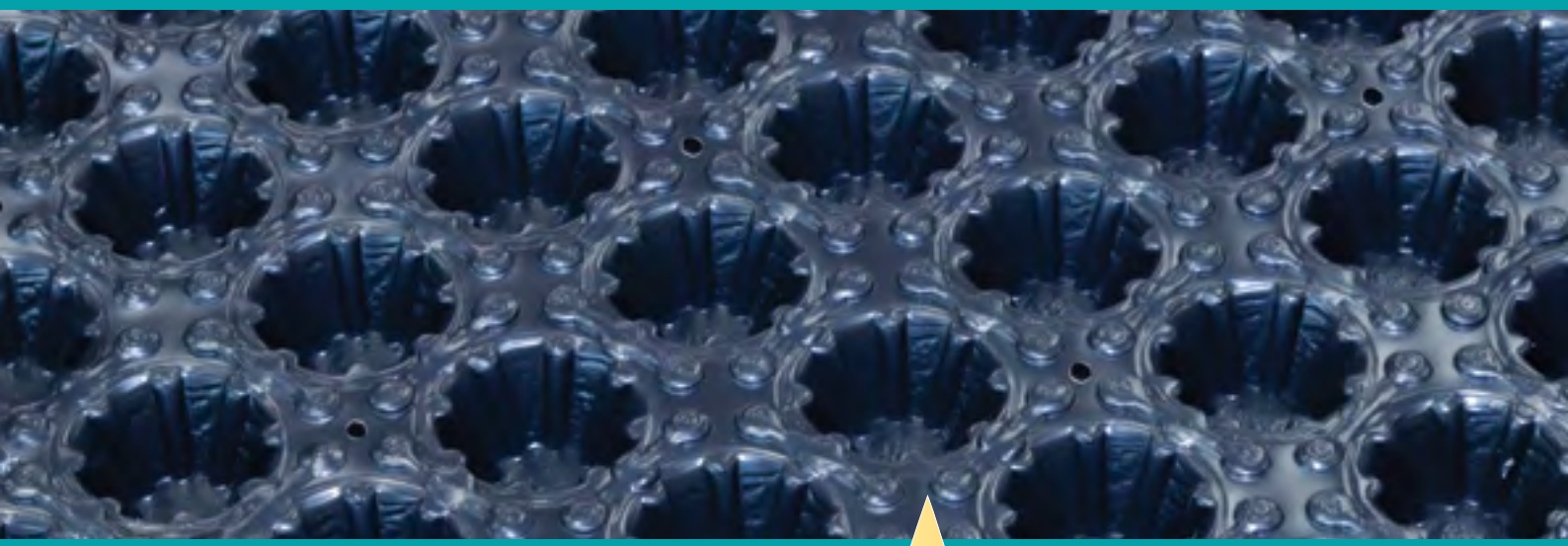


TekDrain Star Series

GGF 20 Green Roof Drainage Board

TekDrain Star GGF 20 Green Roof Drainage Sheets are a durable sheet made of high density polyethylene (HDPE) with a dimple height of 20 mm.

It plays an important role in green roof applications and building insulation. It reduces the heating and cooling system costs of the building. Due to the water retention capacity in its reservoir, it allows plants to grow without the need for extra irrigation costs.

It contributes to the purification of water by retaining a significant amount of rainwater. It also contributes to urban water management through the versatile use of plant layers.

Fields Of Application

- Building roofs.
- Parking Lot roofs.

Advantages

- It plays a very important role in building insulation.
- It provides a significant reduction in the heating and cooling system costs and carbon dioxide emissions of green building applications.
- Thanks to the plant layer, the roof facede system of the is also protected against factors.
- Contributes to urban water management through the versatile use of the plant layer.
- Green roof and facade systems, which can hold a significant amount of rainwater, also contribute to water purification.
- Investing in green building systems also saves money in the operation and investment of the sewage system and water treatment system.
- Green roof applications are also known to improve air quality.
- It reduces the effect of sun rays affecting the structure.

Packaging and Storage

- Produced in 2.40 x 20 m and 2 x 20 m rolls.
- Rolls are stored vertically and plates are stored horizontally.

Technical Specifications

	GGF 20 150	GGF 20 200
Compression Strength	150 kN/m²	200 kN/m²
Raw Material	HDPE	HDPE
Color	Black	Black
Roll Width	2.0 m ve 2.4 m	2.0 m ve 2.4 m
Roll Length	20 m	20 m
Dimple height	20 mm	20 mm
Water Storage Capacity	7 l/m²	7 l/m²
Working Temperature	-30 °C or + 80 °C	-30 °C or + 80 °C
Warnings		

*Other Features: Resistant to chemicals and plant roots. Does not harm drinking water. Resistant to acid, alkali, oil and solvents.

*All values are given as average. Please contact Istanbul Teknik for more detailed information.

MADE IN TÜRKİYE

TekDrain Star Series

GRF 20 Drainage Board

TekDrain Star GRF 20 is a material with a dimple height of 20 mm, laminated with single-sided or double-sided geotextile, made of high-density polyethylene (HDPE), resistant to plant roots and decay, preventing plants from being dehydrated on days without rain, compressive strength and high strength for water storage.

It plays an important role in green roof applications and building insulation. It reduces the heating and cooling system costs of the building. Due to the water retention capacity in its reservoir, it allows plants to grow without the need for extra irrigation costs.

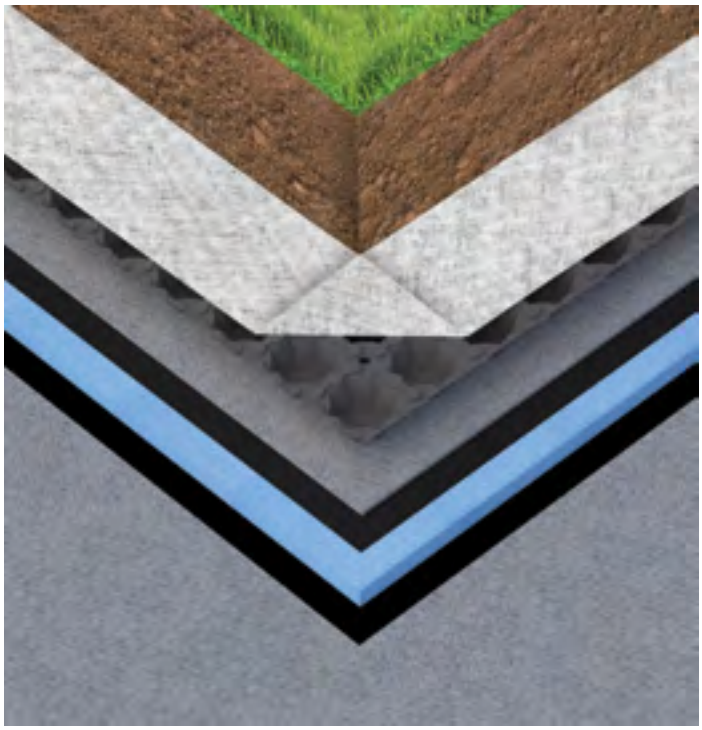
It contributes to the purification of water by retaining a significant amount of rainwater. It also contributes to urban water management through the versatile use of plant layers.

Fields Of Application

- Building roofs.
- Parking Lot roofs.

Advantages

- It plays a very important role in building insulation.
- It provides a significant reduction in the heating and cooling system costs and carbon dioxide emissions of green building applications.
- Thanks to the plant layer, the roof façade system of the is also protected against factors.
- Contributes to urban water management through the versatile use of the plant layer.
- Green roof and facade systems, which can hold a significant amount of rainwater, also contribute to water purification.
- Investing in green building systems also saves money in the operation and investment of the sewage system and water treatment system.
- Green roof applications are also known to improve air quality.
- It reduces the effect of sun rays affecting the structure.



Packaging and Storage

- It is produced in 2.40x12.5 m rolls.
- Rolls are stored upright and plates are stored horizontally.

Technical Specifications

	GRF 20 150	GRF 20 200
Compression Strength	150 kN/m²	200 kN/m²
Raw Material	HDPE+PP	HDPE+PP
Color	Black	Black
Roll Width	2.40 m	2.40 m
Roll Length	12.5 m	12.5 m
Dimple height	20 mm	20 mm
Air Gap	14 l/m²	14 l/m²
Water Storage Capacity	7.00 l/m²	7.00 l/m²
Working Temperature	-30 °C or +80 °C	-30 °C or +80 °C
Does not decompose under soil		

*Other Features: Resistant to chemicals and plant roots. Does not harm drinking water. Resistant to acid, alkali, oil and solvents.

*All values are given as average. Please contact Istanbul Teknik for more detailed information.

MADE IN TÜRKİYE

ForCell
Cellular Confinement System

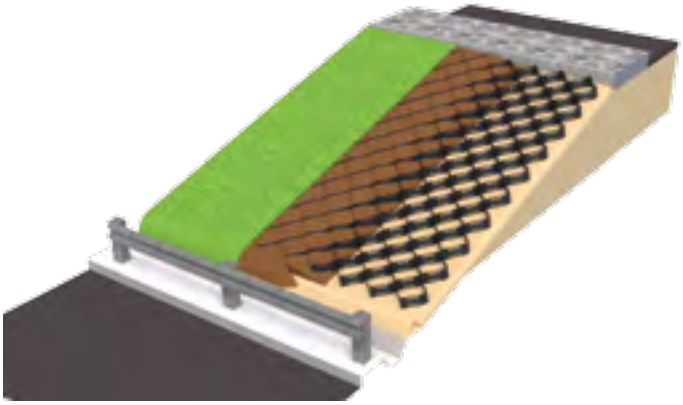
ForCell is 3D geosythetic material which has honeycomb shape cells composed of PE welded perforated strips allows drainage between neighbour cells.

Fields of Application

Erosion Control and Landscape

Erosion Control Products are used to prevent surface erosion that may be caused by wind and water before planting on slope surfaces..

- Cut and Fill Slope Surfaces
- Ditches and Pits
- Coastal Protection Structures
- Culvert / Tunnel Outlets
- Waste Storage Areas
- Landscape and Green Roof Applications
- Aesthetic Stone Applications
- Road and Railway Slopes



Retaining Walls

Green walls can be manufactured by filling the cells inside with vegetative soil and stabilized material. GeoArme ForCell walls are retaining walls, which can be manufactured with geogrid reinforcements and GeoCell facing unit. Geogrid rainforced earth walls show excellent performance against earthquakes, unlike conventional reinforced concrete walls.

- Steep Slopes
- Road and Railway Expansion
- Embankments
- Sound Barriers
- Sports Fields Expansion
- Green Retaining Walls
- Open Canal Walls
- Coastal Protection Structures
- Culvert Walls

Application

ForCells are used for three different purposes as erosion control products on slopes, as protection concrete formwork in canals, dams and as load bearing component on green roofs. They are fixed to the ground with iron or polymer rods on slopes with a properly-prepared surface. The materials are fixed to the ground with the anchor ditches formed.

ForCell panels are combined by using materials such as locked plastic strips and staples. If there are any materials such as geomembranes in the area of application that might be damaged by the anchor rods under the geocell, it can be applied by using ropes and fixation parts between the anchor trenches on top and heel. It is generally applied on top of non-woven or knitted geotextiles to prevent the soil from being drained from the bottom.

Advantages

- It adapts to the surface with its flexible structure.
- It can be filled with different materials such as vegetable soil, gravel, concrete etc.
- Thanks to the raw materials used and the production technology, it is long lasting.
- It prevents erosion with the terracing effect that slows down the flow of water over slope.
- It creates infrastructure for landscaping in the weak planting areas such as rock etc.
- It also has aesthetic appearance because it provides opportunities for greening.

Packaging And Storage

ForCell Erosion Control Products are shipped on pallets. The materials must be stored on smooth surface in an enclosed area.
The stored products must be kept away from direct sunlight, heat and combustible sources.

Products

Small Cells	Medium Cells	Large Cells
330/75	440/75	660/75
330/100	440/100	660/100
330/150	440/150	660/150
330/200	440/200	660/200
330/300	440/300	660/300

Weld distance can be adjusted 250mm-880mm

Properties	T	B	E	
330	250 cm^2	250 cm^2	250 cm^2	Nominal Cell Area
440	455 cm^2	455 cm^2	455 cm^2	
660	1000 cm^2	1000 cm^2	1000 cm^2	
Thickness (mm)	1.5±0.2	1.4±0.2	1.3±0.2	
Strip Tensile Strength (kN/m)	17(±3)	16(±3)	15(±3)	EN ISO 10319
Perforated Strip Tensile Strength (kN/m)	⩾12	⩾11	⩾10	EN ISO 10319
Shear Strength at Joint (Perforated) (kN/m)	12.6	10.8	9.6	EN ISO 13426-1 (A)
Peel Strength at Joint (kN/m)	9	7	6	EN ISO 13426-1 (B)

Thickness can be adjusted 1,3mm-2,5mm

MADE IN TÜRKİYE

Flexo SBS

Elastomeric Bituminous Liquid Membrane

Fields of use

- On all vertical and non-pressurized horizontal surfaces,
- External insulation of foundation, cellar and basement walls,
- In closed wet areas such as bathrooms, kitchens, toilets and low floors,
- In isolation of leachate,
- Under the cladding in terrace insulations,
- In tunnels and canals,
- In isolation of depressurized groundwater.

Application

- After surface preparation, primer application is made with Flexo Prima Insulation Primer.
- The opened product is mixed until it becomes homogeneous.
- It is applied on Prima Insulation Primer with an insulation brush.
- It dries in approximately 1-2 hours depending on weather conditions.
- It can be applied on damp but not wet surfaces.
- It should not be applied in rainy weather or at temperatures lower than +5° C. Before one coat is completely dry, the other coat should not be applied.

Packaging and Storage

- Gross: Packaged in 18 kg plastic buckets. It should be stored in a dry and cool place away from direct sunlight and heat.

Flexo SBS 2K

Elastomeric Bituminous Liquid Membrane

Fields of use

- On all vertical and non-pressurized horizontal surfaces,
- External insulation of foundation, cellar and basement walls,
- In closed wet areas such as bathrooms, kitchens, toilets and low floors,
- In isolation of leachate,
- Under the cladding in terrace insulations,
- In tunnels and canals,
- Used as insulation material against temporary water pressure,
- On surfaces with superficial cracks.

Application

- After surface preparation, apply primer with Flexo Prima Insulation Primer.
- Liquid bitumen component is mixed until homogenous.
- Add 8 kg of powder component to 22 kg of bitumen component and mix with a low speed mixer until it reaches a homogeneous consistency without lumps.
- Apply on Prima Insulation Primer with an insulation brush.
- After the primer layer dries, Flexo 2K should be applied evenly and in at least 2 coats over the entire surface without thinning.
- It can be applied on damp but not wet surfaces.
- Do not apply in rainy weather or at temperatures lower than +5° C. Do not apply another coat before one coat is completely dry..

Packaging and Storage

- Packaged in plastic buckets of 22 + 8kg gross. It should be stored in a dry and cool place away from direct sunlight and heat.

Flexo
Prima
Insulation Primer

Fields of use

- On all horizontal and vertical surfaces,
- External insulation of foundation, cellar and basement walls,
- In tunnels and canals,
- In closed spaces such as bathrooms, kitchens, toilets and double floors,
- Under the coating in terrace insulations,
- Used as primer before all 1k and 2k bitumen based liquid membrane waterproofing applications.

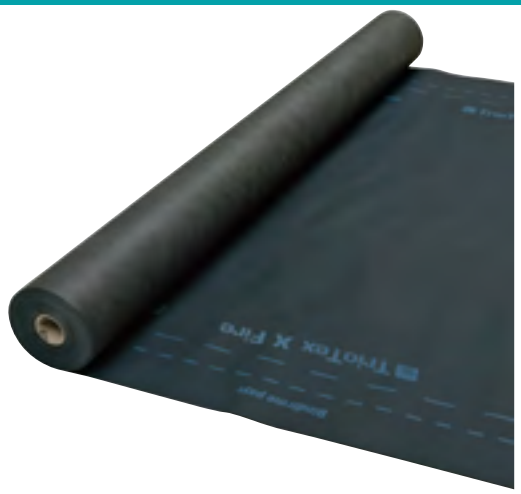
Application

- Open the lid and mix Flexo Prima Insulation Primer until homogenized. No external water is added. The product is ready for application.
- It is applied to the prepared surface with an insulation brush or spraying machine.
- After the product is completely dry, the product color turns black. After this stage, the other insulation layer can be applied.
- Drying is achieved in approximately 1-2 hours depending on weather conditions.

Packaging and Storage

- Gross: Packaged in 18 kg plastic buckets. It should be stored in a dry and cool place away from direct sunlight and heat.

MADE IN TÜRKİYE



TrioTex

X Fire

Fire Retardant Facade Underlay

TrioTex X Fire and X Fire WB 20, is a two layer breathing membrane has improved fire reaction and UV resistance for open jointed facade systems. It consists of a Polyester spunbond layer coated with a functional breathing water proof polyurethane layer. TrioTex "Plus" type products provide easy application and price advantage with self-adhesive overlapping.overlapping.

Fields Of Application and Use

Underlay should be laid by being stretched with at least 10 cm overlapping and overlaps should be sealed with recommended adhesive tape. Overlapping width can vary according to vertical and horizontal applications for roof and facade. The edges of underlay and other surface should be sealed with mastic or butyl tapes.
If the product is not PLUS type, TrioTex SP UNI one side acryl tape or for long term UV resistance TrioTex X Fire one side acryl tape should be applied to the overlaps top. TrioTex SP UNI is also used as repairing tape for small damage or rips and sealing for connection to brackets, ventilation shafts with short term UV resistance. TrioTex X Fire can be fixed with staple or flat tip screw to metal profiles on overlaps.
There should be an air gap between underlay and cover panels minimum 40 mm.

Rolls have a physical surface of 75 m² and area to be covered is 70 m² at ideal conditions.
The surface of product should be protected from dust and water once it is unpacked. Application of adhesives such as tapes and mastic requires clean surfaces. Underlay should be covered against sunlight in maximum 4 months. "TrioTex Roof and Facade Solutions" should be reviewed for details.

- Wooden cladding applications.
- Terra cotta, granite, basalt, ceramic facade applications.
- Glass facade applications.
- Aluminum composite panel applications.
- All facade applications requiring high UV resistance like.
- All facade applications requiring fire retardant performance.

Advantages

- It is a product with premium fire performance. Its fire class is B s1 d0 according to EN 13501-1 & 119252. During a likely fire it burns by turn in to ashes with no dripping possibility and it ceases to burn immediately when the fire is removed.
- It is designed especially for open joint ventilated facade systems which opening area is up to %30 of total surface.
- It has a design with particularly high mechanical properties (tensile and tearing strength).
- Effectively transmits the moisture out that is contained in the building by its breathing feature.
- Increases efficiency of the cold and warm air in the building by means of its wind barrier effect. It also prevents abrasion of the heat insulation.
- It is completely water proof. It protects the outer surface of heat insulation from external rain and snow.
- Based on results of aging tests, it is a durable and long-life product against UV and heat impacts received from open joints. It is exposed to UV for 5000 hours during artificial aging test.

Advantages

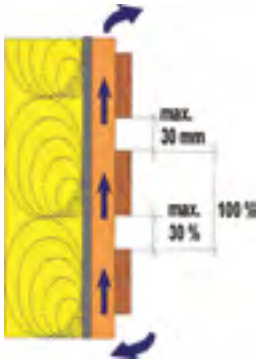
- High strength, possibility to use for a long period of time after a single application and heat loss prevention properties make
- TrioTex an environment friendly product.
  It is equipped with a coating that prevents disturbing light reflections.

Packaging and Storage

- It is delivered as rolls in polyethylene packaging.
- Roll dimensions: 1.5 x 50 m.
  Rolls should be kept on a clean surface in the storage facility either vertically or horizontally protected from sunlight.

Technical Specifications

(EN 13859-2)			X Fire	X Fire WB 20	Fire Mono Easy
Mass per unit area	EN 1849-2	g/m²	210 (±20)	180 (±20)	160 (±20)
Reaction to fire	EN 13501 / EN 11925-2	Class	B-s1-d0	B-s1-d0	B-s1-d0
Water penetration	EN 1928	Class	W1	W1	W1
Change after artificial ageing Resistance to water penetration	EN 13859-2 / Annex C	Class	W1	W1	W1
Water vapour transmission properties (Sd)	EN 12572	m	0,04 (-0,02 /+0,02)	0,02 (-1,01 +0,02)	0,01 (-0,05 /+0,05)
Maximum Tensile Strenght MD / CMD	EN 12311-2 / EN13859-2	N / 50 mm	300 (-70/ +70)	340 (-70 /+120)	280 (-30/ +50)
			200 (-30 /+70)	220 (-50 /+100)	220 (-20/ +30)
Maximum Tensile Strength After Aging (MD/CMD)	EN 13859-2 / Annex C	N / 50 mm	290 (-70 /+70)	320 (-70 /+100)	260 (-40 /+60)
			190 (-30 /+70)	210 (-50 /+100)	200 (-20/+40)
Elongation at Maximum Tensile Strenght (MD/CD)	EN 12311-2 EN 13859-1	%	25 (±15) 25 (±15)	30(±15) 35 (±15)	50 (-20/ +35) 60 (-20 /+35)
Elongation at Maximum Tensile Strenght After Aging (MD/CD)	EN 12311-2	%	20 (±10) 20 (±10)	25 (-10/+15) 30 (-10/+15)	40 (-20 +25) 50 (-20 +25)
Resistance to tearing MD / CMD	EN 12310-2 / EN 13859-1	N	120 (-20 /+30)	80 (-30/+40)	180 (-50 /+40)
				100 (-30/+60)	200 (-50 /+50)
Dimensional Stability	EN 1107-2	%	<1	<1	<2
Flexibility at low temperature	EN 1109	°C	-40	-40	-40
Resistance to penetration of air	EN 12114 / EN 13859-2	"m3 / (m 2.h.50Pa)"	<0,2	<0,2	<0,2
Working Temperature	-	°C	-40/+100	-40/+100	-40/+100
Hydrostatic pressure test	EN ISO 811	cm	>50	>50	npd



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TrioTex

Thermoisol
UV Resistant Facade Underlay

TrioTex Thermoisol, is a two layer breathing membrane resistant against UV and fire for open jointed facade systems. It consists of a Polyester nonwowen heat insulation and support layer coated with a functional breathing water proof polyurethane layer. TrioTex "Plus" type products provide easy application and price advantage with self-adhesive overlapping.

Fields Of Application and Use

Underlay should be laid tightly with at least 10 cm overlapping and overlaps should be sealed with recommended adhesive tape. Overlapping width can vary according to vertical and horizontal applications for roof and facade. The edges of underlay and other surface should be sealed with mastic or butyl tapes.
If the product is not PLUS type, TrioTex SP UNI one side acryl tape or for long term UV resistance TrioTex X Fire one side acryl tape should be applied to the overlaps top. TrioTex SP UNI is also used as repairing tape for small damage or rips and sealing for connection to brackets, ventilation shafts with short term UV resistance. TrioTex X Fire can be fixed with staple or flat tip screw to metal profiles on overlaps.
There should be an air gap between underlay and cover panels minimum 40 mm.

Rolls have a physical surface of 75 m² and area to be covered is 70 m² at ideal conditions.
The surface of product should be protected from dust and water once it is unpacked. Application of adhesives such as tapes and mastic requires clean surfaces. Underlay should be covered against sunlight in maximum 4 months. "TrioTex Roof and Facade Solutions" should be reviewed for details.

- Wooden cladding applications.
- Terra cotta, granite, basalt, ceramic facade applications.
- Glass facade applications.
- Aluminum composite panel applications.
- All facade applications requiring high UV resistance like open joint facade systems.

Advantages

- It is a product with high fire performance. The fire class is B s1 d0 according to EN 13501-1 & 11925-2. In a possible fire, it rolls over by heat and burns with low dripping probability and ends when the fire source is removed.
- It is designed especially for open joint ventilated facade systems which opening area is up to %30 of total surface.
- It has a design with particularly high mechanical properties (tensile and tearing strength).
- Effectively transmits the moisture out that is contained in the building by its breathing feature.
- Increases efficiency of the cold and warm air in the building by means of its wind barrier effect. It also prevents erosion of the heat insulation.
- It is completely water proof. It protects the outer surface of heat insulation from external rain and snow.
- Based on results of aging tests, it is a durable and long-life product against UV and heat impacts received from open joints. It is exposed to UV for 5000 hours during artificial aging test.

Advantages

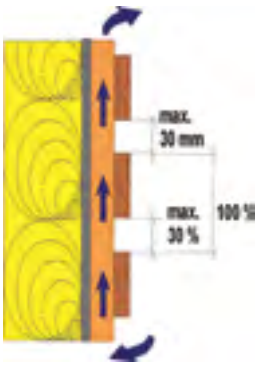
- High strength, possibility to use for a long period of time after a single application and heat loss prevention properties make TrioTex an environment friendly product.
- It is equipped with a coating that prevents disturbing light reflections.

Packaging and Storage

- It is delivered as rolls in polyethylene packaging. Roll dimensions: 1.5 x 50 m.
- Rolls should be kept on a clean surface in the storage facility either vertically or horizontally protected from sunlight.

Technical Specifications

(EN 13859-2)			Thermoisol
Mass per unit area	EN 1849-2	g/m²	210 (±20)
Reaction to fire	EN 13501 / EN 11925-2	Class	B
Water penetration	EN 1928 / EN 13111	Class	W1
Water vapour transmission properties (Sd)	EN 12572 / EN 1931	m	0,1(±0,05)
Maximum Tensile Strenght MD / CMD	EN 12311-2 / EN13859-2	N / 50 mm	380 (-60/+60)
			420 (-80/+80)
Maximum Tensile Strength After Aging (MD/CMD)	EN 13859-2 / Annex C	N / 50 mm	340 (-60/+80)
			380 (-80/+100)
Elongation at Maximum Tensile Strenght (MD/CD)	EN 12311-2 EN 13859-1	%	40 (-20/+20) 55(-25/+20)
Elongation at Maximum Tensile Strenght After Aging (MD/CD)	EN 12311-2	%	35 (-20/+20) 50 (-20/+20)
Resistance to tearing MD / CMD	EN 12310-2 / EN 13859-1	N	220 (-60+/80)
			210 (-50/+60)
Dimensional Stability	EN 1107-2	%	<1
Flexibility at low temperature	EN 1109 / EN 495-5	°C	-30
Resistance to penetration of air	EN 12114 / EN 13859-2	"m3 / (m 2.h.50Pa)"	npd
Working Temperature	-	°C	-40/+80
Hydrostatic pressure test	EN ISO 811	cm	>300



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TrioTex

High Tensile Strength
Roof and Facade Underlays

Breathing, water proof underlay is a flexible and breathing membrane that is manufactured by binding a micro porous film layer between two polypropylene spunbond textile (PP spunbond) and reinforcement mesh layers with thermal process. TrioTex "Plus" type products provide easy application and price advantage with selfadhesive overlapping.

Fields Of Application and Use

Underlay should be laid tightly stretched with at least 10 cm overlapping and overlaps should be sealed with recommended adhesive tape. Overlapping width can vary according to vertical and horizontal applications for roof and facade. The edges of underlay and other surface should be sealed with mastic or butyl tapes. If the product is not PLUS type, TrioTex DS 38 double side acryl tape should be applied to underlay overlaps in between or TrioTex SP UNI one side acryl tape should be applied to the overlaps top. TrioTex SP UNI is also used as repairing tape for small damage or rips and sealing for connection to brackets, ventilation shafts with short term UV resistance.
Rolls have a physical surface of 75 m² and area to be covered is 70 m² at ideal conditions.

The surface of product should be protected from dust and water once it is unpacked.
Application of adhesives such as tapes and mastic requires clean surfaces. Underlay should be covered against sunlight in maximum 4 months. "TrioTex Roof and Facade Solutions" should be reviewed for details.

- It is an element of system on heat insulated wall applications in mechanical cladding facades.
- It is the modern roof underlay for pitched supported or unsupported roofs with or without ventilation.
- It is used as membrane under shingles.
- It is applied under clamped metal roofs.
- It should be selected according to required technical specifications.

Advantages

- Effectively transmits the moisture out that is contained in the building by its breathing feature.
- Increases efficiency of the cold and warm air in the building by means of its wind barrier effect. It also protects heat insulation against erosion caused by wind and air ventilation.
- It is completely water proof. It protects the outer surface of heat insulation from external rain and snow.
- Based on the results of aging tests, it is a durable and long-life product against UV and temperature changes which the building is exposed to.
- High strength, possibility to use for a long period of time after a single application and heat loss prevention properties make TrioTex an environment friendly product.
- It is equipped with a coating that prevents disturbing light reflections.
- Reinforcement mesh gives high tensile capacity to underlay.

Packaging and Storage

- It is delivered as rolls in polyethylene packaging. Roll dimensions: 1.5 x 50 m.
- Rolls should be kept on a clean surface in the storage facility either vertically or horizontally protected from sunlight.

Technical Specifications

(EN 13859-1)			Armor	160 RTD
Mass per unit area	EN 1849-2	g/m²	150 (±10)	160 (-10+15)
Reaction to fire	EN 13501 EN 11925-2	Class	E	E
Water penetration	EN 1928 EN 13111	Class	W1	W1
Water vapour transmission properties (Sd)	EN 12572 EN 1931	m	0.02 (-0.01/+0.015)	0.02 (-0.01/+0.015)
Maximum Tensile Strenght MD / CMD	EN 12311-2 EN 13859-2	N / 50 mm	380 (-50/+70) 380 (-80/+40)	420 (-70/+50) 420 (-120/+120)
Elongation at Maximum Tensile Strenght (MD/CD)	EN 12311-2 EN 13859-1	%	30 (-10/+20) 20 (-10/+20)	25 (-10/+15) 20 (-10/+15)
Resistance to tearing MD / CMD	EN 12310-2 EN 13859-1	N	360 (-70/+90) 340 (-70/+70)	390 (-80/+80) 360 (-60/+70)
Dimensional Stability	EN 1107-2	%	< 2	< 2
Flexibility at low temperature	EN 1109 EN 495-5	°C	-20	-20
Resistance to penetration of air	EN 12114 EN 13859-1;2	m³/m².h.50Pa	<0.02	<0.02
Working Temperature		°C	-40 /+80	-40 /+80
Water Column	EN 20811	cm	>400	>500
Change after artificial ageing Resistance to water penetration Max. Tensile Force Elongation at max. tensile force	EN 1297	Class % %	W1 < 20 < 35	W1 < 20 < 35

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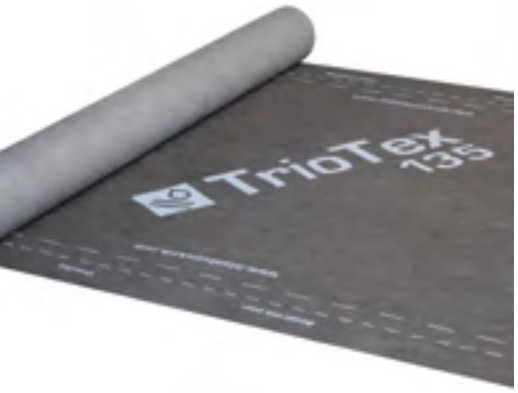

TrioTex

Breathing Roof and
Facade Underlays

Breathing, water proof underlay is a flexible and breathing membrane that is manufactured by binding a micro porous film layer between two polypropylene nonwoven textile (PP spunbond) layers with thermal process. TrioTex "Plus" type products provide easy application and price advantage with self-adhesive overlapping.

Fields Of Application and Use

Underlay should be laid tightly with at least 10 cm overlapping and overlaps should be sealed with recommended adhesive tape. Overlapping width can vary according to vertical and horizontal applications for roof and facade. The edges of underlay and other surface should be sealed with mastic or butyl tapes. If the product is not PLUS type, TrioTex DS 38 double side acryl tape should be applied to underlay overlaps in between or TrioTex SP UNI one side acryl tape should be applied to the overlaps top. TrioTex SP UNI is also used as repairing tape for small damage or rips and sealing for connection to brackets, ventilation shafts with short term UV resistance.

Rolls have a physical surface of 75 m² and area to be covered is 70 m² at ideal conditions.

The surface of product should be protected from dust and water once it is unpacked.
Application of adhesives such as tapes and mastic requires clean surfaces. Underlay should be covered against sunlight in maximum 4 months. "TrioTex Roof and Facade Solutions" should be reviewed for details.

- It is an element of system on heat insulated wall applications in close joint mechanical cladding facades.
- It is the modern roof underlay for pitched supported or unsupported roofs with or without ventilation.
- It is used as membrane under shingles.
- It is applied under clamped metal roofs.
- It should be selected according to required technical specifications.

Advantages

- Effectively transmits the moisture out that is contained in the building by its breathing feature.
- Increases efficiency of the cold and warm air in the building by means of its wind barrier effect. It also protects heat insulation against erosion caused by wind and air ventilation.
- It is completely water proof. It protects the outer surface of heat insulation from external rain and snow.
- Based on the results of aging tests, it is a durable and long-life product against UV and temperature changes which the building is exposed to.
- High strength, possibility to use for a long period of time after a single application and heat loss prevention properties make TrioTex an environment friendly product.
- It is equipped with a coating that prevents disturbing light reflections.

Packaging and Storage

- It is delivered as rolls in polyethylene packaging. Roll dimensions: 1.5 x 50 m.
- Rolls should be kept on a clean surface in the storage facility either vertically or horizontally protected from sunlight.

Technical Specifications

(EN 13859-1;2)			135	155	195F RTD
Mass per unit area	EN 1849-2	g/m²	132(±10)	150(±10)	200(-15 +20)
Reaction to fire	EN 13501 EN 11925-2	Class	E	E	E
Water penetration	EN 1928 EN 13111	Class	W1	W1	W1
Water vapour transmission properties (Sd)	EN 12572 EN 1931	m	0.02(-0.01+0.015)	0.02 (-0.01/+0.015)	0.02 (-0.01/+0.02)
Maximum Tensile Strenght MD / CMD	EN 12311-2 EN 13859-2	N / 50 mm	285 (-30+55) 200 (-30+55)	310 (-40/+40) 215 (-30/+30)	350 (-40/+60) 250 (-30/+50)
Elongation at Maximum Tensile Strenght (MD/CD)	EN 12311-2 EN 13859-1	%	55 (-30+30) 80 (-30+45)	45 (-15/+35) 80 (-25/+40)	70 (-30/+20) 90 (-30/+30)
Resistance to tearing MD / CMD	EN 12310-2 EN 13859-1	N	145 (-40+75) 175 (-50+75)	165 (-40/+45) 190 (-35/+75)	260 (-50/+50) 330 (-70/+60)
Dimensional Stability	EN 1107-2	%	< 2	< 2	< 2
Flexibility at low temperature	EN 1109 EN 495-5	°C	-30	-20	-20
Resistance to penetration of air	EN 12114 EN 13859-2	m³/ m².h.50Pa	< 0.02	< 0.02	< 0.02
Working Temperature		°C	-40 /+80	-40 /+80	-40 /+80
Water Column	EN 20811	cm	>280	>280	>400
Change after artificial ageing Resistance to water penetration Max. Tensile Force Elongation at max. tensile force	EN 1297	Class % %	W1 < 20 < 35	W1 < 20 < 35	W1 < 20 < 35

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TrioTex

Breathing Facade Underlays

Breathing, water proof underlay is a flexible and breathing membrane that is manufactured by binding a micro porous film layer between two polypropylene nonwoven textile (PP spunbond) layers with thermal process. TrioTex Plus products provides easy application and price advantage with self-adhesive overlapping.

Fields Of Application and Use

Underlay should be laid tightly with at least 10 cm overlapping and overlaps should be sealed with recommended adhesive tape. Overlapping width can vary according to vertical and horizontal applications for roof and facade. The edges of underlay and other surface should be sealed with mastic or butyl tapes. If the product is not PLUS type, TrioTex DS 38 double side acryl tape should be applied to underlay overlaps in between or TrioTex SP UNI one side acryl tape should be applied to the overlaps top. TrioTex SP UNI is also used as repairing tape for small damage or rips and sealing for connection to brackets, ventilation shafts with short term UV resistance.
Rolls have a physical surface of 75 m² and area to be covered is 70 m² at ideal conditions.

The surface of product should be protected from dust and water once it is unpacked.
Application of adhesives such as tapes and mastic requires clean surfaces. Underlay should be covered against sunlight in maximum 4 months. "TrioTex Roof and Facade Solutions" should be reviewed for details.

- It is an element of system on heat insulated wall applications in mechanical cladding facades.
- It is used as membrane under sidings.
- It is used as membrane under shingles and roof tiles.
- It should be selected according to required technical specifications.

Advantages

- Effectively transmits the moisture out that is contained in the building by its breathing property.
- Increases efficiency of the cold and warm air in the building by means of its wind barrier effect. It also protects heat insulation against erosion caused by wind and air ventilation.
- It is completely water proof. It protects the outer surface of heat insulation from external rain and snow.
- Based on the results of aging tests, it is a durable and long-life product against UV and temperature changes which the building is exposed to.
- High strength, possibility to use for a long period of time after a single application and heat loss prevention properties make TrioTex an environment friendly product.
- It is equipped with a coating that prevents disturbing light reflections.

Packaging and Storage

- It is delivered as rolls in polyethylene packaging. Roll dimensions: 1.5 x 50 m.
- Rolls should be kept on a clean surface in the storage facility either vertically or horizontally protected from sunlight.

Technical Specifications

(EN 13859-1;2)			F-90	120
Mass per unit area	EN 1849-2	g/m²	92(-5+10)	120(±10)
Reaction to fire	EN 13501 EN 11925-2	Class	E	E
Water penetration	EN 1928 EN 13111	Class	W1	W1
Water vapour transmission properties (Sd)	EN 12572 EN 1931	m	0.02 (-0.01/+0.015)	0.02 (-0.01/+0.015)
Maximum Tensile Strenght MD / CMD	EN 12311-2 EN 13859-2	N / 50 mm	220 (-30/+40) 125 (-25/+35)	260 (-25 +70) 180 (-30+40)
Elongation at Maximum Tensile Strenght (MD/CD)	EN 12311-2 EN 13859-1	%	50 (-20/+20) 70 (-20/+30)	50 (-20 +40) 80 (-30 +50)
Resistance to tearing MD / CMD	EN 12310-2 EN 13859-1	N	80 (-20/+30) 90 (-20/+30)	120 (-30 +50) 140 (-35 +55)
Dimensional Stability	EN 1107-2	%	< 2	< 2
Flexibility at low temperature	EN 1109 EN 495-5	°C	-30	-30
Resistance to penetration of air	EN 12114 EN 13859-1	m³/m².h.50Pa	<0.02	<0.02
Working Temperature		°C	-40 /+80	-40 /+80
Water Column	EN 20811	cm	>150	>280
Change after artificial ageing Resistance to water penetration Max. Tensile Force Elongation at max. tensile force	EN 1297	Class % %	W1 < 20 < 35	W1 < 20 < 35

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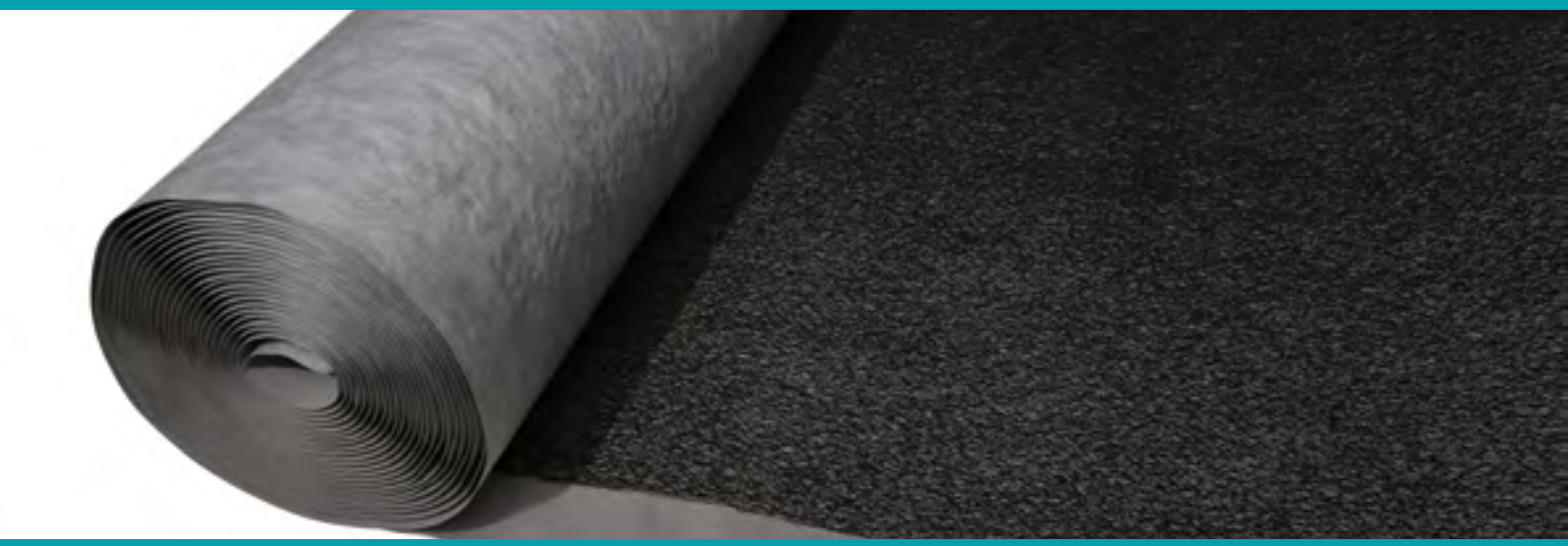


TrioTex

Separator
Metal Roof Underlay

TrioTex Separator is a high performance metal roof underlay with separation layer that has high vapour transmission, drainage, insulation and acoustic properties. It is designed for stainless steel, copper, titanium and zinc alloy metal roofs and facades.

Fields Of Application and Use

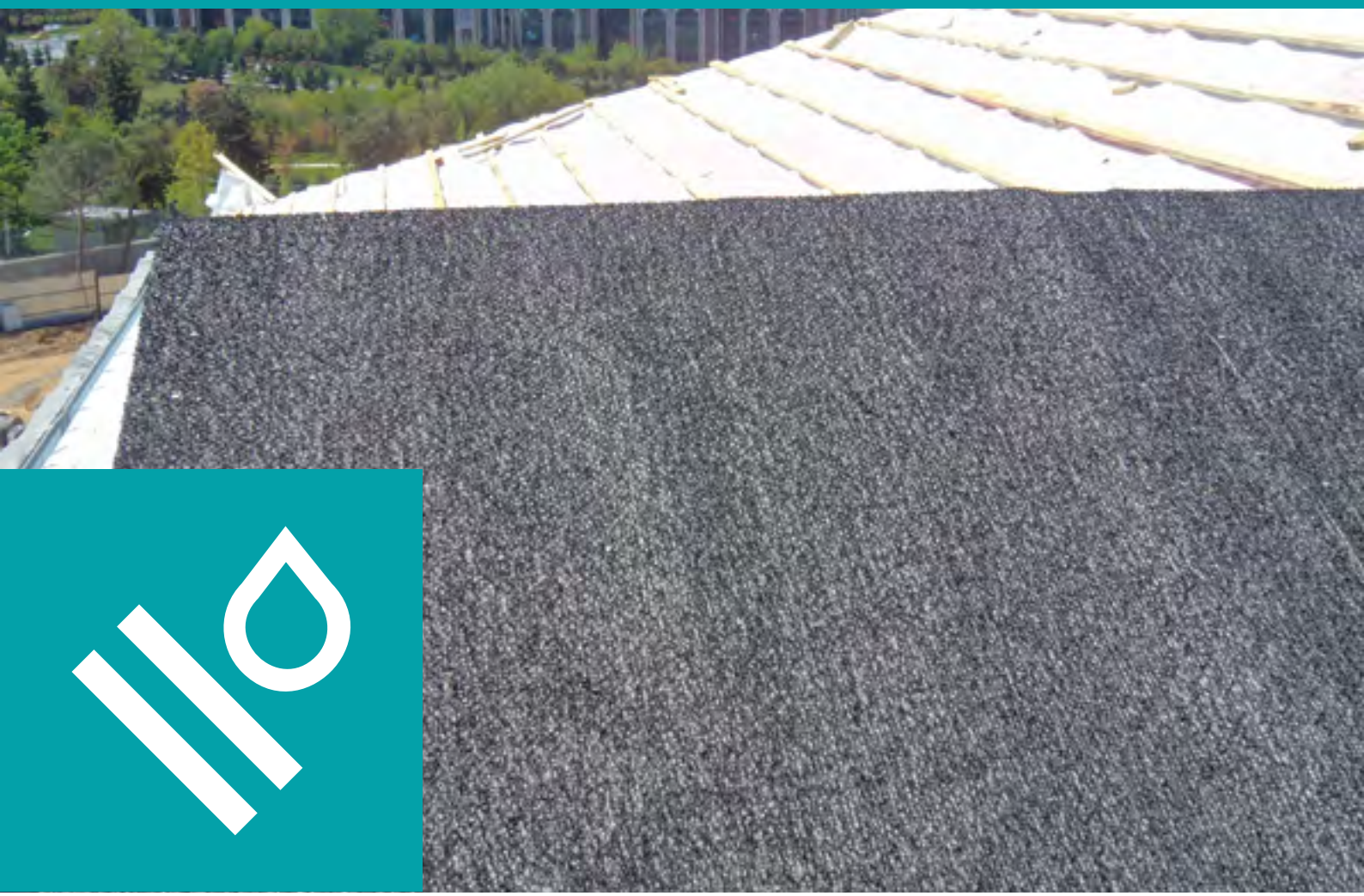
Underlay should be laid by being stretched with at least 10 cm overlapping and overlaps should be sealed with recommended adhesive tape. Overlapping width can vary according to vertical and horizontal applications for roof and facade. According to surface details overlap width should be provided for all joints between underlays by cutting separation layer. The edges of underlay and other surfaces should be sealed with mastic or butyl tapes. If the product is not PLUS type, TrioTex DS 38 double side acryl tape or butyl tape should be applied to underlay overlaps in between. Rolls have a physical surface of 37,5 m^2 and area to be covered is 35 m^2 at ideal conditions. The surface of product should be protected from dust and water once it is unpacked.

Application of adhesives such as tapes and mastic requires clean surfaces. Underlay should be covered against sunlight in maximum 4 months. "TrioTex Roof and Facade Solutions" should be reviewed for details.

- Titanium alloyed clamped metal roofs and facades.
- Zinc alloyed clamped metal roofs and facades.
- Copper alloyed clamped metal roofs and facades.
- Aluminum alloyed clamped metal roofs and facades.
- Stainless Steel clamped metal roofs and facades.
- Painted galvanized clamped metal roofs and facades.

Advantages

- It prolongs the life of the system: in metal roofs, top coating transfers heating and cooling to lower layers quickly. In cases where the clamped roof is in direct contact with the underlay, heat fluctuations between night and day or overheating causes the breathing membrane aging faster. However, in roofs where TrioTex Separator is used, 8 mm air circulation gap effectively removes the moist a way. Thus metal coating is prevented from damage by corrosion.
- Disturbing noises are absorbed: Unwanted noises such as heavy rains, hailstorms and jet engine noises are absorbed to a certain level and thus assist sound insulation.
- It's easy to apply: it is a highly pliable construction material. This enables easy application despite irregularities in wooden plates or heat insulation plates.



Packaging and Storage

- It is delivered in rolls in polyethylene packaging.
- Roll dimensions: 1.5 x 25 m.
- Rolls should be kept on a clean surface in the storage facility either vertically or horizontally protected from sunlight.

Technical Specifications

(EN 13859-1)			Separator
Mass per unit area	EN 1849-2	g/m²	430 (±50)
Reaction to fire	EN 13501 EN 11925-2	Sınıf	E
Water penetration	EN 1928 EN 13111	Sınıf	W1
Water vapour transmission properties (Sd)	EN 12572 EN 1931	m	0.02 (-0.01/+0.02)
Maximum Tensile Strenght MD / CMD	EN 12311-2 EN 13859-2	N / 50 mm	310 (-40/+40) 215 (-30/+30)
Elongation at Maximum Tensile Strenght (MD/CD)	EN 12311-2 EN 13859-1	%	45 (-15/+15) 70 (-15/+15)
Resistance to tearing MD / CMD	EN 12310-2 EN 13859-1	N	170 (-30/+80) 190 (-35/+75)
Dimensional Stability	EN 1107-2	%	< 2
Flexibility at low temperature	EN 1109 EN 495-5	°C	-20
Resistance to penetration of air	EN 12114 EN 13859-1	m³/m².h.50Pa	< 0.02
Working Temperature		°C	-40 /+80
Water Column	EN 20811	cm	>280
Change after artificial ageing Resistance to water penetration Max. Tensile Force Elongation at max. tensile force	EN 1297	Sınıf % %	W1 < 20 < 40

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TrioTex

Reflective Vapour Barriers

TrioTex R-FX is a reflective three layer vapour barrier underlays reflecting heat energy and providing extra insulation. It consists of polyethylene foil, polypropylene reinforcement mesh and aluminized polyethylene layers.
With self-adhesive overlapping parts TrioTex "Plus" type products provide easy application and price advantage with self-adhesive overlapping.

Fields Of Application and Use

Underlay should be laid by being stretched with at least 10 cm overlapping and overlaps should be surely sealed with recommended adhesive tape. Overlapping width can vary according to vertical and horizontal applications for roof and facade. "TrioTex Roof and Facade Solutions" should be reviewed for details.
The edges of underlay and other surface should be sealed with mastic or butyl tapes. If the product is not PLUS type, TrioTex DS 38 double side acryl tape should be applied to underlay overlaps in between or TrioTex SP AL one side acryl tape should be applied to the overlaps top.

A piece of underlay can be patched or TrioTex SP AL is also used as repairing tape for small damage or rips. Rolls have a physical surface of 75 m² and area to be covered is 70 m² at ideal conditions.
The surface of product should be protected from dust and water once it is unpacked. Application of adhesives such as tapes and mastic requires clean surfaces.

- It can be used in roofs with or without air ventilation.
- When used in attic on the interior of the roof, it prevents heat loss through convection. It provides appropriate climate conditions.
- It is applied over trapezoidal sheet metal in clamped metal roofs.

Advantages

- It is completely water vapor proof. It provides extra vapor and wind insulation.
- It provides an insulation wall against water, moisture and wind.
- It is designed for living spaces in attic.
- It is pliable and easy to apply.
- It prevents heat loss caused by free air circulation.
- It has high tearing strength by its reinforcement layer in the middle.
- High strength and ability to use for a long time with single application, makes TrioTex R-FX an environment friendly product.

Packaging and Storage

- It is delivered in rolls in polyethylene packaging.
- Roll dimensions: 1.5 x 25 m.
- Rolls should be kept on a clean surface in the storage facility either vertically or horizontally protected from sunlight.

Technical Specifications

(EN 13984)			R-FX 90	R-FX 120	R-FX 180
Mass per unit area	EN 1849-2	g/m²	85 (±10)	120 (±10)	170 (±10)
Reaction to fire	EN 13501 EN 11925-2	Class	E	E	E
Water penetration	EN 1928	-	Conforming	Conforming	Conforming
Water vapour transmission properties (Sd)	EN 12572 EN 1931	m	130 (±60)	130(-80/+60)	200 (±70)
Maximum Tensile Strenght MD / CMD	EN 12311-2 EN 13859-2	N / 50 mm	>200 >200	>200 >230	>290 >260
Elongation at Maximum Tensile Strenght (MD/CD)	EN 12311-2 EN 13859-1;2	%	>15 >10	>10 >10	>15 >15
Resistance to tearing MD / CMD	EN 12310-2 EN 13859-1;2	N	>100 >100	>110 >110	>180 >180
Impact Resistance	EN 12691		npd	npd	npd
Joint Strength	EN 12317-2	N	npd	npd	npd
Deformation Strength under Load	EN 13984	-	npd	npd	npd
Alkali Resistance	EN 13984 EN 12311-2	-	npd	npd	npd
Thickness	EN 1849-2	mm	0.20 (±0,05)	0.20(-0,10/+0,15)	0.30(±0,05)
Vapor Permeability Resistance after Aging	EN 1296 EN 1931	-	Conforming	Conforming	Conforming

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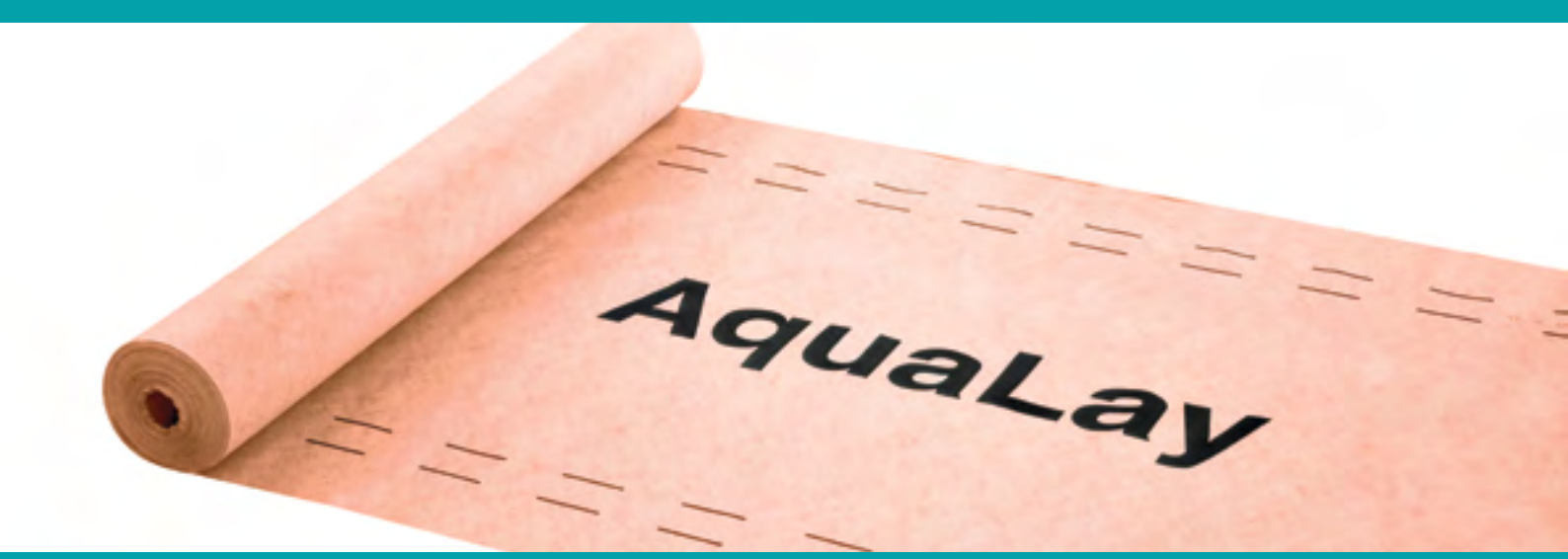


AquaLay

Wet Area Membrane

AquaLay Wet Area Membrane is an easy-to-apply four-layer new generation waterproof membrane. It consists of two layers and coated on two sides with non-woven geotextile. Thanks to the geotextile surfaces, it provides very good adhesion and compatibility with tile adhesives both on horizontal floors and vertical walls.

Fields of Application

- It is used as a water impermeable layer under wet surfaces covered with materials such as tiles, tiles and marble.
- The application surface must be solid, smooth, cleaned and sloped.
- Mastic or butyl tape is used for sealing pipe connections and critical connections.
- It can be easily cut and sized according to the area to be covered. Chamfer tape 30 tape provides practical application solutions.
- It should be laid by overlapping. Overlaps should be 5-10 cm on the floor and 10-15 cm on the wall.
- There is a 7.5 cm overlap line on the rolls,
- C2 cement based tiles to be applied on the leveling screed are laid on the adhesive.
- For sealing the overlaps, butyl tape, mastic or elastic cement based adhesive can be used respectively.
- At wall-floor joints, chamfer tape 14 or WS chamfer tape 30 should be chamfered so that the tape is centered on the corner.
- Internal Corner or External Corner elements are applied on top of the chamfer band at the corners with suitable adhesive. For pipe outlets, Pipe Flange is tightly fitted around the pipe and sealed with mastic.
- Especially the sealing joints of critical points such as joints with other materials and corners should be checked.
- C2 tile adhesive is applied again on the membrane and the top coating is laid.
- In renovation works, it can be applied on suitable adhesive that can adhere to the existing surface. Thanks to its thin structure, the insulation problem is solved by re-coating without increasing the total thickness too much.
- The bonding method to be used in the joint should be selected according to the movement character of the building, whether it is indoor or outdoor.
- In wet areas such as bathrooms, toilets and baths,
- Tiled terrace roofs, balconies,
- Existing terraces or pools with leakage problems,
- In areas with high humidity,
- In prefabricated structures or wet rooms with plasterboard partition walls, with parts that can move differently during their working life,
- It is used for fast overhead repair of old water leaking coating.

Advantages

- It is very thin. Does not create extra thickness on the applied surface
- It is very elastic. It is easily shaped during application and adapts to the surface shape.
- Waterproof due to the special structure of the material. It provides perfect sealing at the connection points with special joint solutions and correct application.
- It has very little extra labor in relation to the insulation benefits it provides.
- It is applied very easily and quickly with its elastic structure, special roll sizes and auxiliary products. Ideal for fast sealing of large areas.
- It is easy to transport and workmanship since its unit weight is quite low.
- It is long lasting.
- The application method is quiet, clean and harmless to the environment.

Advantages

- It is not affected by small cracks caused by joints and building movements and maintains water tightness.
- It is resistant to the effects of temperature changes.
- It is a product that has proven itself with certificates and quality management.

Packaging and Storage

- Delivered in rolls and polyethylene packaging.
- Roll sizes: 1 x 5 m, 1 x 30 m, 2 x 20 m.
- Rolls should be stored horizontally or vertically on a clean floor in the storage area and especially protected from the sun.

Technical Specifications

(EN 13956;2013)			AquaLay
Unit Weight	EN 1849-2	g/m²	270
Roll Weight 1x5/1x30/2x20		kg	1,7 / 8,7 / 11,5
Thickness	EN 1849-2	mm	0,57
Tensile Strength at Break(MD/CMD)	EN 12311-2 (A)	N / 50 mm	≥200 / ≥200
Elongation at Break(MD/CMD)		%	≥20 / ≥10
Tear Strength	EN 12310-2	N	≥75 / ≥100
Puncture Strength	EN 12961 (A)	mm	≥500
Overlap Strength	EN 12317-2	N/50	≥230
Waterproofing Class	EN 1928		Passed
Flexiblity at low Temperature	EN 495-5	°C	-20
Fire Class	EN 13505-1	Class	E
Vapor Difussion Rate (Sd)	EN 1931 (B)	m	3,2
Vapor Difussion Resistance (Z)		MN.s/g	16
Vapor Resistance According to CTE - DB HS 1 (Z>10MN.s/g)			
Service Temperature		°C	-20 or +80
Bonding with C2 Class Cement Based Adhesive in 28 days (14 days at 70 degrees Celsius in Lab Condition)			
Strength	EN 1348	N/mm²	≥0,7
Skid	EN 1324	N/mm²	≥1
Water Resistance at Overlap (C2 Cement)	Water Column	1m/24 Hours	Waterproof

Corner Elements

Chamfer Tape

TrioTex

Auxiliary Products

TrioTex SP UNI Acryl Tape

It is a polyethylene tape containing acrylic adhesive with one side reinforced with polyester fibers. It is used in assembly, joints and repair of TrioTex brand products. It is used in connection of the underlays with constructions elements. It is also used in connecting clean wood, concrete, tile, OSB surfaces to underlay.
Heat Resistance: -40 °C to +80 °C
Application Temperature: +5 °C to +40 °C
Storage Temperature: +5 °C to +25°C
Thickness: 0.34 mm
UV resistance : 4 months
Packaging: 60 mm x 25 m rolls, 10 rolls/box and white/or logo printed
Tensile strength: >50 N/25 mm

TrioTex DS 38 Acryl Tape

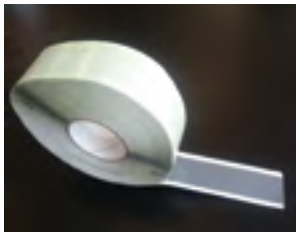
It is a double sided tape containing acrylic adhesive reinforced with polyester fibers. It's used in overlaps of TrioTex brand underlays. It is used only for adhesive purposes not under mechanical load.
Heat Resistance: -40 °C to +100 °C
Application Temperature: -10 °C to +40 °C >5 °C recommended.
Storage Temperature: +5 °C to +25°C
Adhesive Strength: 30 -50 N/25 mm
Adhesive density: 240 g/m²
Packaging: 38 mm x 50 m rolls, 16 rolls/box

TrioTex X Fire Acryl Tape

It's a tape with one side of acrylic adhesive polyethylene and one side of Triotex X Fire coat. It is used in connection points, assembly and repair of TrioTex X Fire brand coats. Its UV resistance presents same features with TrioTex X Fire coat and it has passed through 5000 hours of UV test. For that reason it is used for sealing of underlay connections and repairing underlay in open joint facade applications. Initial adhesion of the tape is weak, however its adherence is very good following 24 hours of curing period. Therefore it is not used for mechanical fastening.
Heat Resistance: -40 °C to +100 °C
Packaging: 60 mm x 25 m rolls, 8 rolls/box

TrioTex Butyl Tape

It's used in assembly and connection of TrioTex brand underlays. Used for adhering underlay to metal and plastic surfaces TrioTex Butyl Tape is also used in tile roof applications, for adhering vertical and horizontal battens to the underlay, before nailing. It provides impermeability in driven points of the nail.
Heat Resistance: -30 °C to +80 °C
UV resistance: 3 months
Packaging:
1.0 mm x 30 mm x 60 m rolls
1.0 mm x 30 mm x 30 m rolls
1.0 mm x 40 mm x 30 m rolls

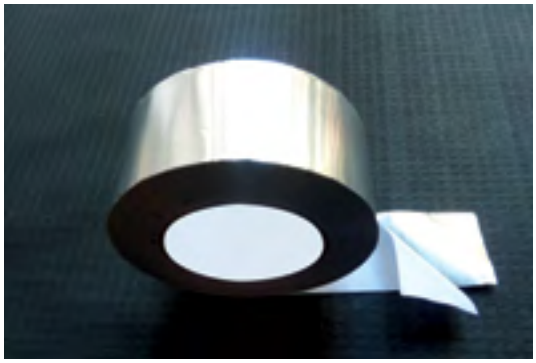


TrioTex

Auxiliary Products

TrioTex SP AL

It's a tape with one side of rubber adhesive and one side of aluminum foil. It is used in connections, assembly and repair of TrioTex R-FX coats. UV resistance is high and life cycle>20 years.
Heat Resistance: -40 °C to +65 °C
Application Temperature: +5 °C to +40 °C
Storage Temperature: Up to 20°C for 1 year.
Thickness: 0.08 mm
Packaging:
48 mm x 50 m, 100 mm x 50 m,
150 mm x 50 m 24 rolls/box



TrioTex		Safer Buildings against fire	Open Joint Facade cladding	Ventilated facade cladding, various types of tiles	PVC, Wooden siding	Inclined, pitched roof, Shingle roof		Metal Roofs
						Warm	Cold	
Breathing Membranes	X Fire	●●●	●●●	●●●				
	X Fire WB 20	●●●	●●●	●●●				
	Fire Mono Easy	●●●	●●●	●●●				
	Thermoisol	●●	●●●	●●●				
	160 RTD			●●		●●●	●●●	●●●
	Armor			●●●		●●●	●●●	●●●
	195F RTD			●●		●●●	●●●	●●●
	155			●●●		●●●	●●●	●●●
	135			●●●	●	●●	●●	●●
	120			●	●●●	●		●
	F90			●	●●●			●
	Separator							●●●
Vapour Barriers	R-FX 180	●●	●		●	●●	●●	●●●
	R-FX 120	●●	●		●	●●	●●	●●●
	R-FX 90	●	●		●	●●	●●	●●●

Useful ●
Suitable ●●
Most Suitable ●●●

TekFix
Fixing Dowels

TekFix Fixing Dowels are used for fixing insulation boards, one of the sheathing system components, to brick walls or concrete surfaces.

TekFix Products and Usage Areas

- TekFix wide head TekFix dowels with the most suitable technical and physical properties for all brick, aerated concrete and concrete masonry elements are manufactured for the most demanding construction site application conditions.

TekFix Brick Dowel

Dowels with nails that can be attached to at least 2-3 chamber walls in perforated brick walls.
Dowel Length: 9.50 / 11.50 / 13.50 or 15.50 cm
Number of Dowels in Package: 1,000 pcs / box (for 10, 12 and 14 cm)
800 pcs / carton (for 16 cm)

TekFix Concrete Dowel

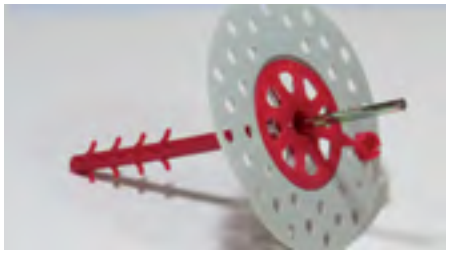
These dowels are produced for exposed concrete, columns and beams, with steel or plastic nails according to technical requirements. It should be sized so that at least 5 cm of it remains in the concrete after application.
Dowel Length: 9.50 / 11.50 / 13.50 or 15.50 cm
Number of Dowels in Package: 500 pcs/box (for 9.50, 11.50 and 13.50 cm)
400 pcs/box (for 15.50 cm)

TekFix Aerated Concrete Dowel

They are dowels with at least 8 mechanical nails on them, which are produced for situations where the adhesion of the aerated concrete wall or wall surface is not reliable and ensure full adhesion to the wall.

Dowel Length: 9.50 / 11.50 / 13.50 or 15.50 cm
Number of Dowels in Package: 500 pieces/box (for 11.50 and 13.50 cm)
400 pieces/box (for 15.50 cm)

Rock Wool Header



Used in rock wool or glass wool applications. It is designed to ensure that the dowel adheres to a wider surface. It can be applied together with all dowel types. Since rock wool is not fully integrated with each other due to its structure, it is especially recommended to use a cap.

Dimensions
90 mm 2000
120 mm 1000

PowerFix Brick Dowel

Dowels with nails that can be attached to at least 2-3 chamber walls in perforated brick walls.
Dowel Size: 9.5 cm - 11.5 cm - 13.5 cm - 15.5 cm
Number of Dowels in Package: 1000 pcs / bag

Advantages

Attachment
- The V-shaped wing and tabs prevent the dowel from coming back out.
- The space between the nails creates a reservoir for dust in the hole.
- The possibility of slipping when driving the nail is prevented by the S-shaped cheeks.

Header cross-section
- More durable with reinforced cross-section and increased strength.
- Provides stronger adhesion of the dowel to the thermal insulation plate.

Headboard pattern
- Excellent bonding with plaster and stronger adhesion to the plaster.

Raw material
- 100% original PE raw material is used in anchors.
- Glass fiber additive to prevent easy breakage of nails.

Nail Raw Material
- PP (polypropylene, brick dowel nails)
- Glass fiber reinforced PP (concrete and aerated concrete dowel nails)
- Steel (anti-corrosion janjan coated, all wall type anchors nails)

Logo and brand
- Possibility to produce dowels in desired color with customer logo and brand.

Technical Specifications

Plate Thickness / cm	Brick / cm	Concrete / cm	Gas Concrete / cm
3	10	9,5	9,5
4	12	11,5	11,5
5	12	11,5	11,5
6	14	13,5	13,5
7	14	13,5	13,5
8-10	16	15,5	15,5

Packaging and Storage

- Shipped in parcels. The number of dowels in the parcel content is given in detail next to the product groups above. It can also be shipped in the requested logo, color and packaging in accordance with the terms of the contract with the customer.

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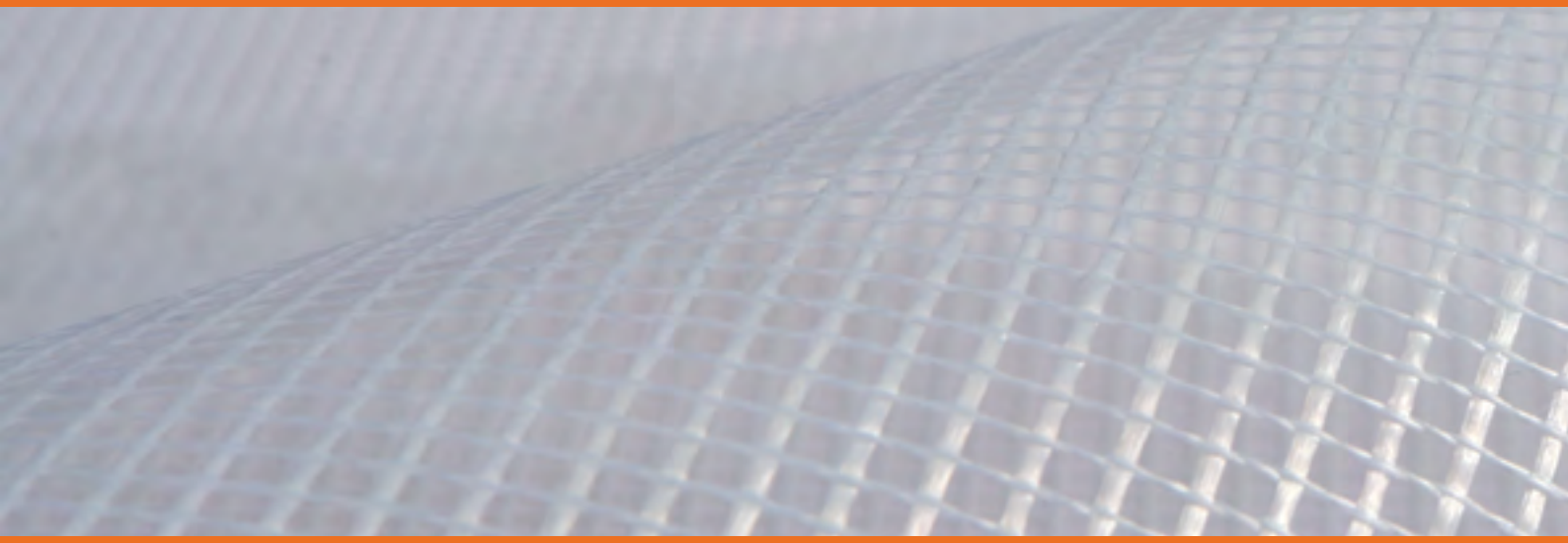
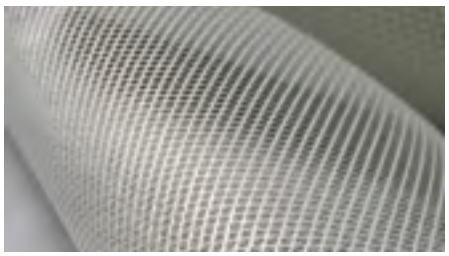


FileTex

Plaster and Reinforcement Mesh

FileTex Plaster and Reinforcement Mesh is a plaster reinforcement mesh produced from the purest glass (E-Glass) fiber with high strength in order to make the plaster mesh used in jacketing applications resistant to cement-based plaster containing high alkali, that is, alkali, and at the same time sufficiently finished.

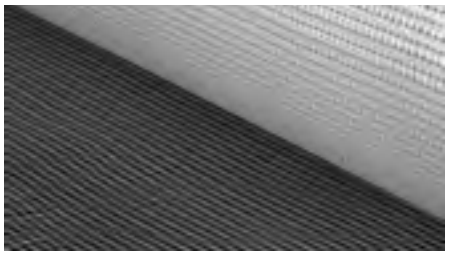
Mesh Types and Usage Areas



FileTex 160 Premium Plaster Mesh
It is a reinforcement mesh recommended for sheathing applications and indoor and outdoor plastering applications.

FileTex 160 Premium Plaster Mesh has 4 x 4 mm mesh spacing and unit weight of at least 160 g/m² with high and real alkali resistance.

Packaging: The nets are shipped in rolls of 1 x 50 m length.



FileTex 110 Insulation Reinforcement Mesh
These nets are used as intermediate reinforcement in non-cement-based, sliding waterproofing applications and epoxy floor coatings in the interior and exterior of buildings.

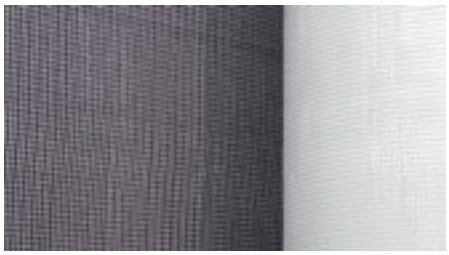
FileTex 110 Insulation Reinforcement Mesh, the unit weight of these soft nets without finishing is 132 g/m2 and the mesh size is 4x4 mm.

Packaging: The nets are shipped in 1 x 200 m long rolls.

FileTex 75 Standard Reinforcement Mesh
It is used as reinforcement mesh in gypsum plaster and heat and water insulation applications on interior facades.

FileTex 75 Standard Reinforcement Mesh has 4 x 4 mm mesh spacing and unit weight of at least 75 g/m² with high alkali resistance.

Packaging: The nets are shipped in rolls of 1 x 50 m length.



FileTex 60 Standard Reinforcement Mesh
Recommended as reinforcement mesh in sliding based waterproofing applications. Suitable for use with all kinds of waterproofing materials. It is a thin and soft mesh with high mechanical strength that can be easily covered with much less material, which should be preferred especially when it is desired to create a thin layer with cement-based, sliding-based waterproofing application.

FileTex 60 Standard Reinforcement Mesh has a mesh size of 2.8 x 2.8 mm and a unit weight of 60g/m² with high and real alkali resistance.

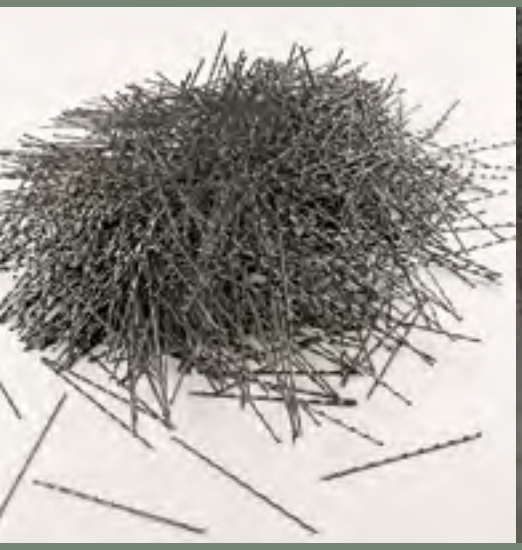
Packaging: The nets are shipped in rolls of 1 x 100 m length.

Advantages

- Special products according to application
- Roll winding in desired length and width
- Information support and experience sharing
- Mesh production in desired color
- Delivery from stock and fast service
- Possibility of printing on the mesh with customer brand and logo
- The tests conducted at the Istanbul Technical Laboratory ensure the continuity and quality repetition of product technical specifications.

Packaging and Storage

- 1 x 50 m roll wrapped in FileTex branded bag packaging, shipped as a set of four in a box or 1500 m² palletized.
- It can also be shipped in the requested logo, color and packaging in accordance with the terms of the contract with the customer.



FiberCon

MF Concrete Reinforcement Fiber

FiberCon MF, is a concrete reinforcement fiber with superior physical and chemical properties designed with ribbed surface structure and provides the concrete ballistic property and improves its energy absorbtion capabilities.

Fields Of Application

FiberCon MF is the most recent and technical product used at the concrete fiber reinforcement systems.

- It is recommended to use FiberCon MF;
- At the plant, warehouse and industrial floor concrete
- At wet and dry shotcrete applications
- At underground structures, tunnels and galery concrete
- At military structures, shelters and ammunition depots
- At concrete roads and sliding form barriers
- At precast and prefabricated elements
- At the parking lot and ramp concrete
- At concrete channel, canalette and irrigation structures
- At water reservoirs, swimming pools and coastal structures
- Everywhere where required as auxiliary reinforcement
- At sports field concrete

The consumption quantity varies in the range of 3-9 Kg/m³.
Note: The structural reinforcement requirement CAN NOT be reduced by use of synthetic fiber and steel fiber addition.

Advantages

- The product significantly reduces shrinkage and settlement cracks of the plastic concrete.
- The product is an effective alternate to the welded wire fabric where uses as secondary reinforcement.
- The products reduces rebounding problem of shotcrete (spray concrete) applications.
- The products reduces segregation at vertical concreting operations (such as Shear Wall, column etc.).
- The product improves fracture and disintegration resistance of the edges-corners at the joints and concrete terminations.
- The product improves fracture and spalling resistance of the joint edges and corners.
- It is not necessary to modify the design properties of concrete mixtures.
- The product provides a ductile structure to brittle concrete.
- The product does not damage the machinery, equipment and devices during application.
- Logistics, supply and procurement process is short and economic.
- The product improves durability of the concrete.

Technical Specifications

Density	0.95 g/cm³
Fiber Length	40 / 50 / 60 mm
Type	Macro Bar Chip
Strength	750 - 900 Mpa
Elongation	>%15
Young Module	>5500 Mpa
Chemical Resistance	High Resistant
Water Absorbtion	None
Melting Point	180 - 200 °C

Packaging And Storage

The product is dispatched in cardboard as 4 kg.
The product must be stored at well-ventilated spaces free of humidity.
The product must be protected against frost.
The product becomes brittle at Tg < -18 °C . The products remaining in the opened package can be reused if the package is sealed tightly. Shelf life of the product is 24 months as from the date of manufacture.

FiberCon

MLF Concrete Reinforcement Fiber

Fibercon MLF, is 100% polypropylene based concrete fiber reducing shrinkage and settlement cracks at the cement-based products and improveing freeze-thawing, fire, impact and abrasion resistance. It is very efficiently used in shotcretes for tunnels, and distributed homogenously in the concrete mixture without balling. FiberCon MLF is used in tunnels to reduce the affects of fire on concrete.

Fields Of Application

FiberCon MLF is a universal product used at concrete, screed, precast elements and plaster mortar. FiberCon MLF is used at the following for preventing the crack formation;

- At screed concrete
- At precast concrete element used at the tunnels as passive fire protection
- At cement-based mortars used for repairs, plastering, grading and insulation purposes
- At thin floorings
- At precast and prefabricated elements
- At the concrete to be subjected to thermal stress
- At the parking lot and ramp concrete
- At sports field concrete
- At suspended floor, hollow core slab and cartridge form
- systems.

The consumption quantity varies in the range of 450-1200 g/m³.
Note: The structural reinforcement requirement CAN NOT be reduced by use of synthetic fiber and steel fiber addition.

Advantages

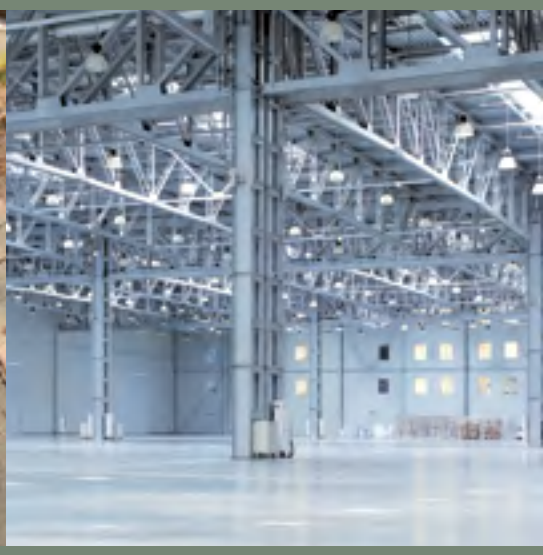
- The product significantly reduces shrinkage and settlement cracks of the plastic concrete.
- The product improves adherence at the at the mortars.
- The product serves as passive fire protection at indoor spaces such as tunnels, at the refractor industry, at high temperatures and at reinforced concrete structures with a risk of fire.
- The product also serves as micro reinforcement when mixed to dry mortar and premix products.
- The product improves fracture and and spalling resistance of the joint edges and corners.
- As the product prevents formation of capillary zones, it reduces permeability of the concrete.
- The product improves freezing-thawing resistance of the concrete.
- The product delays corrosion of the reinforcement.

Technical Specifications

Density	0.91 g/cm³
Fiber Length	6 / 12 / 18 / 24 mm
Type	Soft/Multifilament Form
Strength	380 - 650 Mpa
Elongation	>%15
Young Module	>3400 Mpa
Chemical Resistance	High Resistant
Water Absorbtion	None
Melting Point	160 - 180 °C

Packaging And Storage

The product is dispatched in 600 gram or 900 gram water soluble paper bags.
The product must be stored at well-ventilated spaces free of humidity.
The product must be protected against frost.
The product becomes brittle at Tg < -18 °C . The products remaining in the opened package can be reused if the package is sealed tightly. Shelf life of the product is 24 months as from the date of manufacture.



FiberCon

FF Concrete Reinforcement Fiber

Fibercon FF, is a polymer based concrete fiber reducing shrinkage and settlement cracks. FiberCon FF produced from %100 polypropylene monotape fibrillated yarn and has net like shape. It is distributed homogenously in plastic concrete or wet mix shotcrete easily without balling.

Fields Of Application

FiberCon FF is a universal product used at concrete, screed, precast elements and special concrete applications.
FiberCon FF is used at the following as a non-load bearing reinforcement.

- At sports field concrete
- At the plant, warehouse and industrial floor concrete
- At suspended floor, hollow core slab and cartridge form
- systems
- At concrete roads and sliding form barriers

At concrete channel, canalette and irrigation structures
At lightweight prefabricated elements with non- load bearing properties

- At floating screed thin floorings
- At the parking lot and rampconcrete
- At lightweight concrete (CLC-Cellular Light Concrete)
- applications
- At precast and prefabricated elements
- At wet shotcrete applications
- At water reservoirs, swimming pools and coastal structures
- At the concrete to be subjected to thermal stress.

The consumption quantity varies in the range of 750-1800 g/m³
Note: The structural reinforcement requirement CAN NOT be reduced by use of synthetic fiber and steel fiber addition.

Advantages

- The product reduces shrinkage and settlement cracks of the plastic concrete.
- The product reduces segregation at vertical concreting operations (such as Shear Wall, column etc.).
- The product improves impact resistance of the concrete.
- The product provides a ductile structure to brittle concrete.
- The product improves durability of the concrete.
- The product improves fracture and and spalling resistance of the joint edges and corners.
- As the product prevents formation of capillary zones, it reduces permeability of the concrete.
- The product improves freezing-thawing resistance of the concrete.
- The product delays corrosion of the reinforcement.
- It is not necessary to modify the design properties of concrete mixtures.

Technical Specifications

Density	0.91 g/cm³
Fiber Length	9 / 12 / 18 mm
Type	Fibrillated
Strength	450 - 700 Mpa
Elongation	>%15
Young Module	>3800 Mpa
Chemical Resistance	High Resistant
Water Absorbtion	None
Melting Point	160 - 180 °C

Packaging And Storage

The product is dispatching in 900 gram water soluble paper or 1 kg PE plastic bags.
The product must be stored at well-ventilated spacess free of humidity.
The product must be protected against frost.
The product becomes brittle at Tg < -18 °C . The products remaining in the opened package can be reused if the package is sealed tightly. Shelf life of the product is 24 months as from the date of manufacture.

Notes:

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