Mone Partners Engineering

Geosynthetics Catalog

MONE

Mone Partners Engineering

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About us.

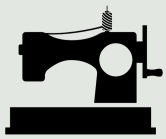
As Mone Partners, we offer reliable and innovative solutions for your projects with our identity as a construction and infrastructure projects solution partner. While successfully bringing your projects to life, our expert team prioritizes quality at every stage, adding value to you through sustainable and effective collaborations. Thanks to our international experience, we execute projects in various regions around the world and provide services that meet global standards.

Additionally, by offering comprehensive consultancy services for railway and highway projects, we provide expert support at every stage of your projects. With our experience and industry knowledge, we assist you in completing your projects with the highest efficiency and success.

Why choose us?

Wide Product Range

A comprehensive selection of geosynthetic materials, ensuring a solution for every project need.



Customization

Tailored geosynthetic products designed to meet the specific requirements of unique projects, providing flexibility and optimal performance.

Technical Expertise and Support

In-depth knowledge and hands-on guidance from industry experts, offering support from product selection to installation and beyond.

Sustainability and Eco-friendliness

Commitment to environmentally responsible practices by offering eco-friendly products that reduce environmental impact while maintaining high performance.

Cost-Effectiveness

Competitive pricing combined with durable, high-quality products, delivering long-term value and minimizing operational costs.

Strong Customer Service

Exceptional, responsive customer support that ensures smooth project execution, with ongoing assistance before, during, and after product installation.

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02

Our products.

Explore our extensive range of products.

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Geosynthetics

PVC Geomembrane

Mone PVC Geomembranes are geosynthetic liners manufactured from PVC resin and other synthetic raw materials and used in waterproofing applications.

Usage Areas

- Building Foundations
- Dams, transmission tunnels
- Roofs and terraces
- Parking lots
- Treatment plants
- Pools
- Ponds for agricultural irrigation
- Drinking water reservoirs
- Underpasses
- Highway and railway tunnels
- Metro stations and tunnels
- Irrigation canals

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PVC Geomembrane

Product Features

- Resistant to plant roots.
- Recyclable.
- Resistant to temperatures from -40 to +70 degrees.
- Joints are welded using dual-channel seam welding robots.
- Prevents corrosion and is resistant to aging.
- Classified as fire-resistant class E and non-flammable.
- Long-lasting.
- High resistance to mechanical impacts.
- High tensile strength and elongation resistance.
- Remains flexible in cold temperatures, does not crack or break.
- Can be produced with signal layers, UV resistance, and geotextile reinforcement if desired.
- Minimally affected by vibrations in structures due to free laying techniques.
- Available in different colors and sizes.

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PVC Geomembrane

Tunnel-type Signal Layer PVC Geomembrane
UV Resistant PVC Geomembrane
Flat Type PVC Geomembrane
Antibacterial PVC Geomembrane

PVC Geomembrane Types

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PVC Geomembrane

Tunnel-type Signal Layer PVC Geomembrane

With a special formulation containing PVC, the tensile strength and elongation resistance are increased, featuring a signal layer. It is primarily used in highway, metro, and railway tunnels. If there is any perforation or wear on the yellow or gray signal layer, the black color of the base layer will become visible, indicating the need for repair in that area during application. It can be produced in yellow-black, gray-black, or any desired color.

Mone geomembranes can be produced in thicknesses of 1 mm, 1.2 mm, 1.5 mm, 2 mm, 2.5 mm, and 3 mm. They are available in standard dimensions of 2.20 m in width and 25m in length, and can also be produced in custom lengths based on the application requirements.

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PVC Geomembrane

Flat Type PVC Geomembrane	Made of PVC, it has the standard properties of PVC geomembranes. It is particularly produced with strong resistance to plant roots. It can be manufactured in desired colors.

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PVC Geomembrane

UV Resistant PVC Geomembrane

Made of PVC, it is produced with UV resistance, which is why it is referred to as Pond Type. It has the general properties of PVC geomembranes. Thanks to the UV additive, it can withstand sunlight for many years. It can be used without covering in applications. It can be produced in gray, blue, and yellow colors.

Mone Geomembranes can be produced in thicknesses of 1 mm, 1.2 mm, 1.5 mm, 2 mm, 2.5 mm, and 3 mm. They are available in standard dimensions of 2.20 m in width and 25 m in length, and can also be produced in custom lengths depending on the application. Typically, they are produced in light gray (single color).

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PVC Geomembrane

Antibacterial PVC Geomembrane	Primarily used in drinking water reservoirs. Produced with special nanotechnology additives during the manufacturing process, the surface is designed to prevent bacterial growth, ensuring the desired outcome in the application areas. Typically, these geomembranes are produced in blue or gray colors.

PVC Geomembrane

Material Specifications and Testing Standards For PVC Geomembrane

Feature	Specification Limits	Standard Test Method
Thickness	2,00 mm min	DIN 53370
Tensile Strength	15 N/mm² min	DIN 53455
Elongation at Break	%250 min	DIN 53455
Break Resistance at 20% Unit Elongation	2,5 N/mm²	DIN 53454
Tear Propagation Strength	100 N/mm min	DIN 53363
Resistance under Water Pressure	At 10 Bar For 10 Hours	DIN 16726
Welded Joint Strength	13,5 N/mm² min	DIN 16726
Dimensional Stability After Rapid Aging	±%2 max	DIN 16726
Material Properties During and After Storage at 80 °C:		DIN 16726
a. General Appearance	No Bubbles	
b. Dimensional Stability, Longitudinal and Transverse	<-%3	
c. Change in Tensile Strength, Longitudinal and Transverse	<±%20	
d. Change in Elongation at Break, Longitudinal and Transverse	<±%20	
e. Folding at -20 °C	No Cracks	
Behavior After Storage in Acid and/or Alkaline Solutions:		DIN 16726
a. Change in Tensile Strength, Longitudinal and Transverse	<±%20	
b. Change in Elongation at Break	<±%20	
c. Folding at -20 °C	No Cracks	
Shear Strength, Bitumen Joint	100 N / 50 mm	DIN 16726
Behavior During Punching Test	No Punching at 750mm Height	DIN 50014

PVC T-Lock Geomembrane

Manufactured from PVC, it is referred to as T-Grip due to the continuous, uninterrupted T-shaped ribs running longitudinally along its entire length. These ribs enable the product to lock firmly into the concrete it is used with, ensuring a secure bond and preventing detachment. It possesses the general properties of PVC geomembranes, with enhanced chemical resistance and an extended lifespan.

Application and Used Equipment	It is joined using the fusion welding (double seam test gap welding) system and laid with a 6-10 cm overlap using the free laying technique. Depending on the application requirements, it is fixed at the ends with pressure profiles.

Usage Areas

- Concrete pipes
- Irrigation channels
- Collector shafts
- Roofs
- Building foundations
- Tunnels
- Dams
- Waste sites

PVC T-Lock Geomembrane

Product Features

- The only feature that distinguishes T-Lock Geomembranes from other geomembranes is the ribs on their surface. Thanks to these ribs, T-Lock Geomembranes cannot move within the concrete and prevent damage to the concrete from vibrations.
- Resistant to plant roots.
- Recyclable and reusable.
- Heat resistant from -40°C to +70°C.
- Joints are fused using double-channel seam welding robots.
- Prevents corrosion and is resistant to aging.
- Fire resistant, classified as E. They do not ignite.
- Long-lasting (minimum 40 years).
- High resistance to mechanical impacts.
- High tensile strength and elongation resistance.
- Flexible in cold temperatures, does not crack or break.
- Can be produced with a signal layer, UV resistance, and geotextile reinforcement upon request.
- Joints are fused using the fusion welding system.
- Since they are applied using the free laying technique, they are minimally affected by vibrations in structures.

Product Specifications for PVC T-Lock Geomembrane	
Name of Product	PVC T-Lock
Product Content	Polyvinyl Chloride
Width-Length	2,2 m (Expandable with welding) -Desired lengths
Thickness	Between 1-3 mm
Packing	In nylon packing-Tracked
Color	Black (Desired colors)
Standart No	TS EN 13967-13361-13362-13491-13492-13493

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PVC T-Lock Geomembrane

Product Quality and Performance Test Results for PVC T-Lock Geomembrane			
Feature	**Standard**	**Requirement**	**Test Result**
Visible Defects (Cracks, scratches, tears, deformation)	TS EN 1850-2	Shouldn't be visible defects	no visible defects.
Length	TS EN 1848-2	Should be between registered tolerances	Registered values
Width	TS EN 1848-2	Should be between registered tolerances	Registered values
Thickness	TS EN 1849-2	Should be between registered tolerances	Registered values
Mass per unit area	TS EN 1849-2	Should be between registered tolerances	Registered values
Density (g /cm3)	TS 1320	Between 1,25-1,27	1,27
Waterproofing (0.15 Bar Pressure)	EN 14150	Must be waterproof	Waterproof
Tensile Strength (N/mm2), Min.	EN ISO 527	Min. 15 N	17,5
Elongation Rate at Break (%), Min.	EN ISO 527	Min. %250	280
Resistance to Weather Conditions (%)	EN 12224	Between 1-10	6%
Resistance to Oxidation (%)	EN 14575	Max. %5	3%
Gas Tightness	ASTM D 1434	NPD	NPD
Tear Strength (kN/m)	ISO 34-1	Between 80-100	90
Resistance Against Hot and Cold (Wai- ting 10 min. At 80 °C and -30 °C)	DIN 53361	No cracks and tears	There is no tearing and cracking.
Combustion Class	TS EN 13501	Classification	Class E
Flexibility in the cold	EN 495-5	No break and crack	There is no breaking or cracking.

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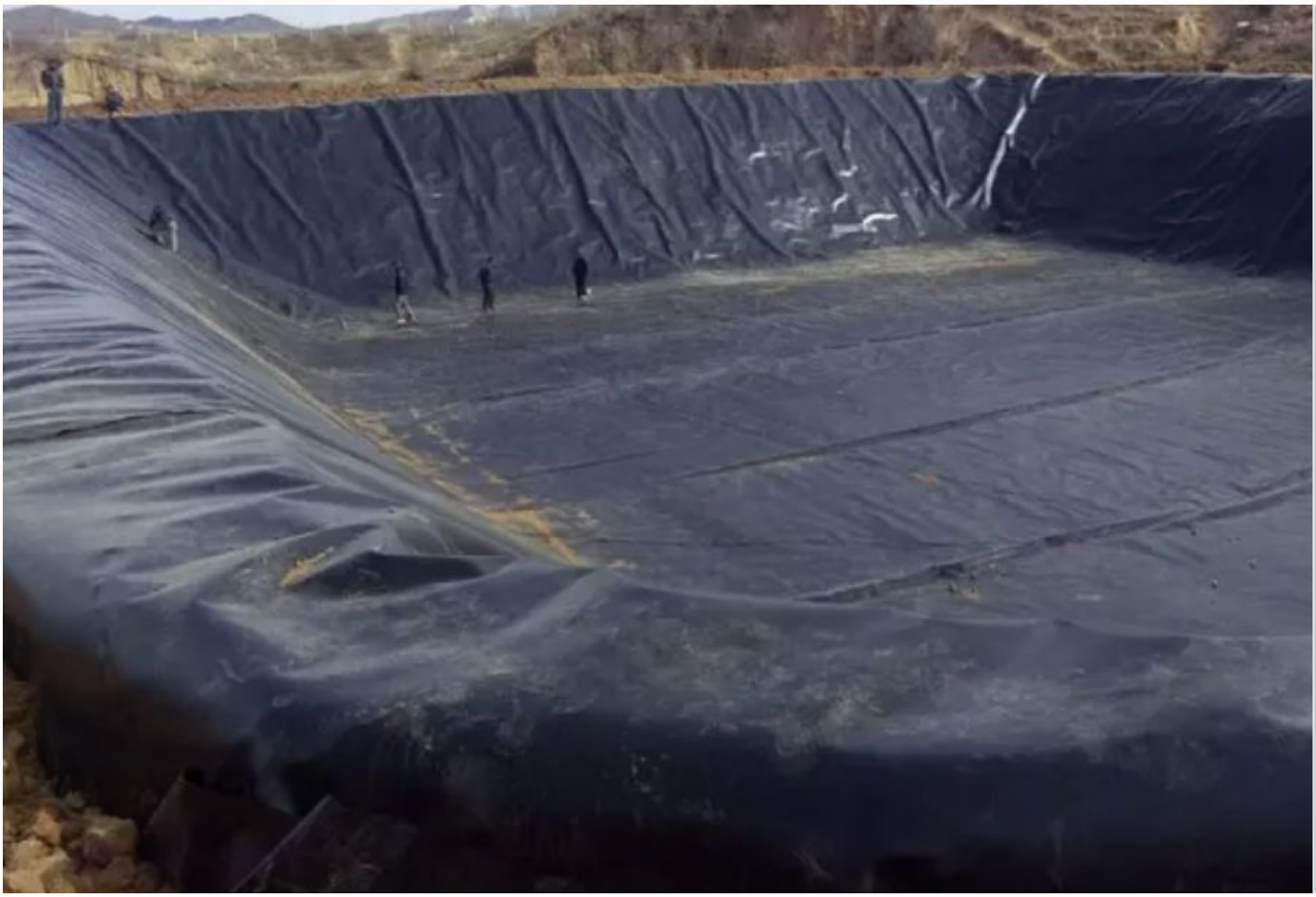
Polyethylene Geomembrane

Polyethylene (PE) gets its name from the monomer ethylene. It becomes polyethylene through the polymerization of ethylene using various methods. Mone PE Geomembrane is a geosynthetic material formed by extruding low or high-density polyethylene through extruders and shaping it homogeneously via a calendaring system. It can be used in any project where an impermeable layer is required, especially in waste disposal sites.



Usage Areas

- Solid waste disposal sites
- Liquid waste collection and treatment stations
- Leachate collection ponds for gold and other mines
- Insulation of oil tanks and oil fields
- Settling ponds
- Fertilizer pits
- Foundation waterproofing for buildings (if required)
- Ponds
- Tunnels
- Irrigation channels
- Biogas production facilities

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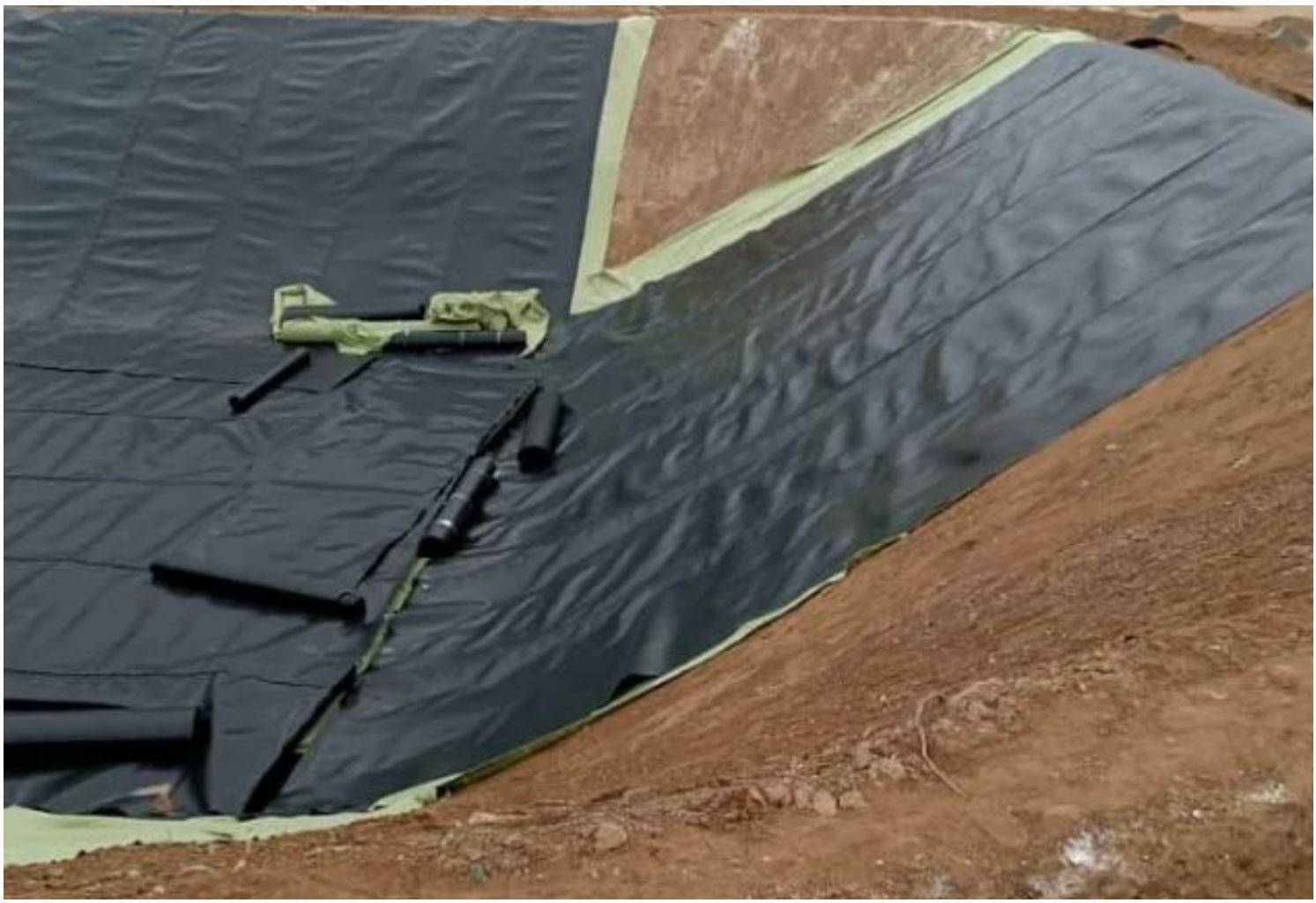
Polyethylene Geomembrane

Product Features

- Highly resistant to chemical substances
- UV resistant
- Reduced friction due to the textured surface
- High resistance to organic and inorganic solutions
- Extremely resistant to cracking
- Durable under natural conditions
- Resistant to punctures and cracks
- Low permeability
- High tensile strength



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Polyethylene Geomembrane

HDPE smooth geomembranes
HDPE single-sided textured geomembranes
HDPE double-sided textured geomembranes
LDPE geomembranes
LLDPE geomembranes
VLDPE geomembranes
HDPE T-Grip geomembranes
HDPE staggered T-Grip geomembranes
HDPE geomembranes laminated with geotextile on one side

PVC Polyethylene Types

MONE

Polyethylene Geomembrane

HDPE	A type of geomembrane made from high-density polyethylene raw material, commonly used in waste and chemical storage areas. The material has a rigid yet non-brittle structure. Available in thicknesses of 1 mm, 1.2 mm, 1.5 mm, 2 mm, 2.5 mm, and 3 mm in desired colors. The width ranges from 2.10 meters to 7.00 meters, and the length can be 50 meters, 100 meters, or custom lengths based on requirements.
LDPE	A type of geomembrane made from low-density polyethylene raw material, commonly used in liquid waste storage sites and irrigation ponds. These membranes have a softer structure compared to HDPE membranes. Available in thicknesses of 1 mm, 1.2 mm, 1.5 mm, 2 mm, 2.5 mm, and 3 mm in desired colors. The width ranges from 2.10 meters to 7.00 meters, and the length can be 50 meters, 100 meters, or custom lengths based on requirements.
LLDPE	A type of geomembrane made from very low-density polyethylene raw material, commonly used in decorative ponds and irrigation channels. It is one of the softest polyethylene grades. Available in thicknesses of 1 mm, 1.2 mm, 1.5 mm, 2 mm, 2.5 mm, and 3 mm in desired colors. The width ranges from 2.10 meters to 7.00 meters, and the length can be 50 meters, 100 meters, or custom lengths based on requirements.
VLDPE	A type of geomembrane is made from low-density polyethylene (LDPE) and is commonly used in ponds and water reservoirs. It comes in a range of optional colors and thicknesses, including 1.00 mm, 1.20 mm, 1.50 mm, 2.00 mm, 2.50 mm, and 3.00 mm.

Polyethylene Geomembrane

Material Specifications and Testing Standards For HDPE Polyethylene Geomembrane							
Features	**Standard Test Method**	**Unit**	**Test Results**				
Thickness	EN 1849-2	mm	1,0 mm	1,5 mm	2,0 mm	2,5 mm	3,0 mm
Density	EN ISO 1183-1	gr/m³	0,935-0,965	0,935-0,965	0,935-0,965	0,935-0,965	0,935-0,965
Mass per unit area	EN 1849-2	gr/mS	940	1410	1880	2350	2820
Tensile Strength of Fluxing	EN ISO 527	N/mmS	>16	>16	>16	>16	>16
Elongation at Fluxing	EN ISO 527	%	>12	>12	>12	>12	>12
Tensile Strength at Break	EN ISO 527	N/mmS	>26	>26	>26	>26	>26
Elongation Rate at Break	EN ISO 527	%	>700	>700	>700	>700	>700
Static Puncture	EN ISO 12236	N	2400	3700	4900	6050	7200
Tear Strength	ISO 34-1	N/mm	>130	>140	>140	>140	>140
Shear Strength	ASTM 6392	N/25mm	350	525	701	876	1050
Peel Strength	ASTM 6392	N/25mm	263	398	530	661	793

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Polyethylene Geomembrane

Material Specifications and Testing Standards For HDPE Polyethylene Geomembrane							
Features	**Standard Test Method**	**Unit**	**Test Results**				
Water Tightness	EN 14150	m3/(m2.d)	$<1.0 \times 10^{-6}$	$<1.0 \times 10^{-6}$	$<1.0 \times 10^{-6}$	$<1.0 \times 10^{-6}$	$<1.0 \times 10^{-6}$
Carbon Black Content	AST D1603	%	2-3	2-3	2-3	2-3	2-3
Carbon Black Dissipation	ASTM D 5596	Category	1/2b	1/2b	1/2b	1/2b	1/2b
Melt Flow Index	EN ISO 1133	gr/10 min	2.16 kg at 190°C; <1 5.0 kg at 190°C; <3	2.16 kg at 190°C; <1 5.0 kg at 190°C; <3	2.16 kg at 190°C; <1 5.0 kg at 190°C; <3	2.16 kg at 190°C; <1 5.0 kg at 190°C; <3	2.16 kg at 190°C; <1 5.0 kg at 190°C; <3
Determination Of The Resistance To Weathering	EN 12224	%	<25	<25	<25	<25	<25
Resistance To Oxidation	EN 14575	%	<25	<25	<25	<25	<25
Resistance To Static Load	EN 14576 ASTM D 5397	h	>200	>200	>200	>200	>200
Oxidative Induction Time	ASTM D 3895	>100	>100	>100	>100	>100	>100
Combustion Class	EN ISO 11925-2	-	Class E	Class E	Class E	Class E	Class E
Determination Of Resistance To Solid-Liquid Extraction	EN 14415	%	Method A,B; <5 Method C; <25	Method A,B; <5 Method C; <25	Method A,B; <5 Method C; <25	Method A,B; <5 Method C; <25	Method A,B; <5 Method C; <25

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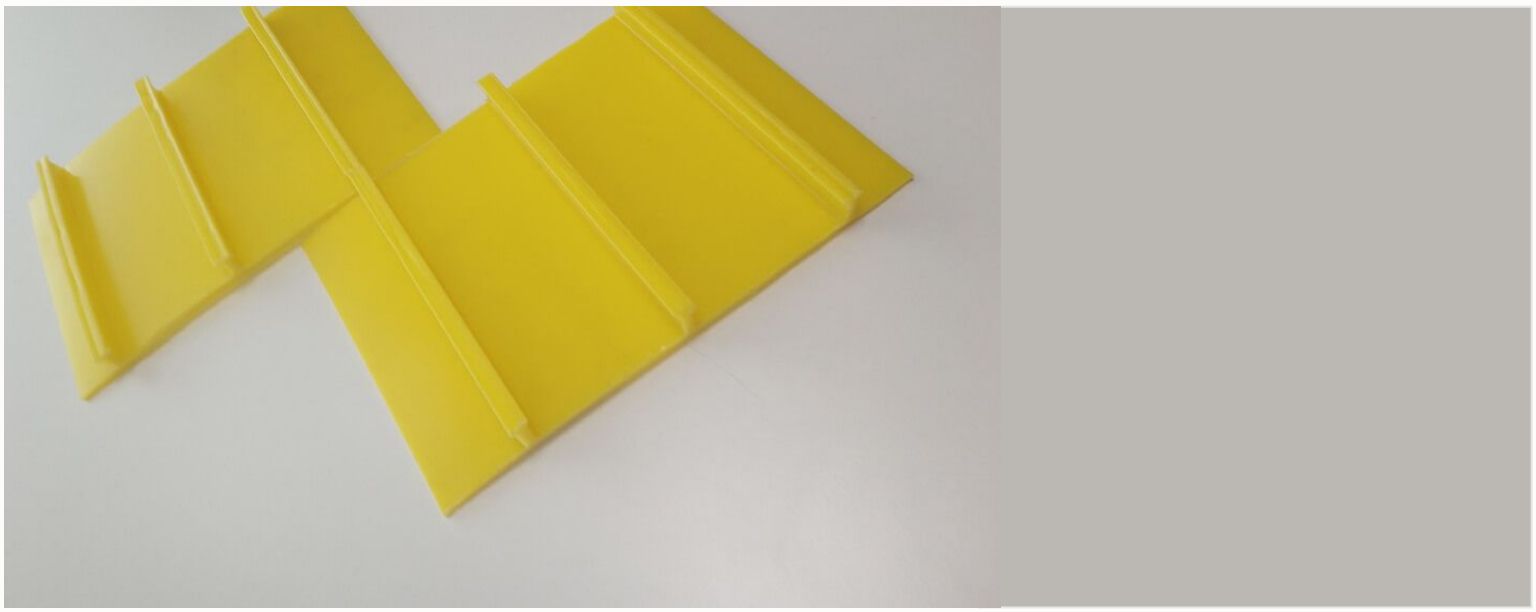
HDPE T-Lock Geomembrane

Made of HDPE, the product is referred to as T-Lock due to the continuous T-shaped ribs running along its entire length. These ribs enable the product to securely lock into the concrete, ensuring it does not detach. The material exhibits the general properties of HDPE geomembranes, including enhanced resistance to chemicals and an extended service life against aging.

Application Methods and Equipment Used	It is joined using the fusion welding (double seam test gap welding) system and laid using the free laying technique with an overlap of 6-10 cm. Depending on the requirements of the application, it is fixed at the end points using pressure profiles.



Usage Areas

- Concrete pipes
- Irrigation channels
- Collector shafts
- Roofs
- Building foundations
- Tunnels
- Collector shafts
- Dams
- Waste disposal areas

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HDPE T-Lock Geomembrane

Product Features

- The only feature that distinguishes T-Lock Geomembranes from other geomembranes is the ribs on their surface. Thanks to these ribs, T-Lock Geomembrane cannot move within the concrete and prevents damage to the concrete from vibrations.
- High resistance to chemical substances.
- UV resistant.
- Very high tensile strength.
- Low permeability.
- Extremely resistant to punctures and cracks.
- Provides superior protection against leaks.
- Resistant to natural conditions.
- High resistance to both organic and inorganic solvents.
- Can be easily applied to all types of surfaces.
- Optionally reinforced with geotextile.
- Recyclable and can be reused.

HDPE T-Lock Product Specifications	
Name of Product	HDPE T-Lock
Product Content	High Density Polyethylene
Width-Length	2,2 m - 7 m (Desired dimensions)
Thickness	Between 1-3 mm
Packing	In nylon packing-Tracked
Color	Black (Desired colors)
Standart No	TS EN 13967-13361-13362-13491-13492-13493

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HDPE T-Lock Geomembrane

Product Quality and Performance Test Results for HDPE T-Lock Geomembrane			
Feature	**Standard**	**Requirement**	**Our Result**
Visible Defects (Cracks, scratches, tears, deformation)	TS EN 1850-2	Shouldn't be visible defects	no visible defects.
Length	TS EN 1848-2	Should be between registered tolerances	Registered values
Width	TS EN 1848-2	Should be between registered tolerances	Registered values
Thickness	TS EN 1849-2	Should be between registered tolerances	Registered values
Mass per unit area	TS EN 1849-2	Should be between registered tolerances	Registered values
Density (g /cm3)	TS 1320	Between 0.91-1.05	0.94
Waterproofing (0.15 Bar Pressure)	EN 14150	Must be waterproof	Waterproof
Tensile Strength (N/mm2), Min.	EN ISO 527	Min. 26 N	27
Elongation Rate at Break (%), Min.	EN ISO 527	Min. %700	750
Resistance to Weather Conditions (%)	EN 12224	Between 1-10	4%
Resistance to Oxidation (%)	EN 14575	Max. %5	2%
Gas Tightness	ASTM D 1434	NPD	NPD
Tear Strength (kN/m)	ISO 34-1	Between 166-220	190
Resistance Against Hot and Cold (Waiting 10 min. At 80 ° C and -30 °C)	DIN 53361	No cracks and tears	No tearing and cracking.
Combustion Class	TS EN 13501	Classification	Class E
Flexibility in the cold	EN 495-5	No break and crack	No breaking or cracking.

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EPDM Geomembrane

Mone EPDM Geomembrane is a water insulation material made from ethylene and propylene diene monomer, enhanced for increased elasticity. It can be used in all projects requiring an impermeability layer.

Usage Areas

- Terraces and roofs
- Landscaping areas
- Artificial ponds, fire pools, and other pools
- Building foundation waterproofing systems
- Water tanks and irrigation channels
- Tunnels
- Dams
- Cut-and-cover tunnels
- Waste disposal areas

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EPDM Geomembrane

Product Features

- Applied in a single layer
- Installed using hot air welding robots
- Resistant to UV rays
- Resistant to plant roots
- Prevents corrosion and is resistant to aging
- Offers high flexibility and excellent elongation performance
- Highly resistant to many chemical substances
- Environmentally friendly and recyclable
- Long-lasting
- Resistant to extreme cold conditions (-40°C to +120°C)
- Minimally affected by sudden temperature changes

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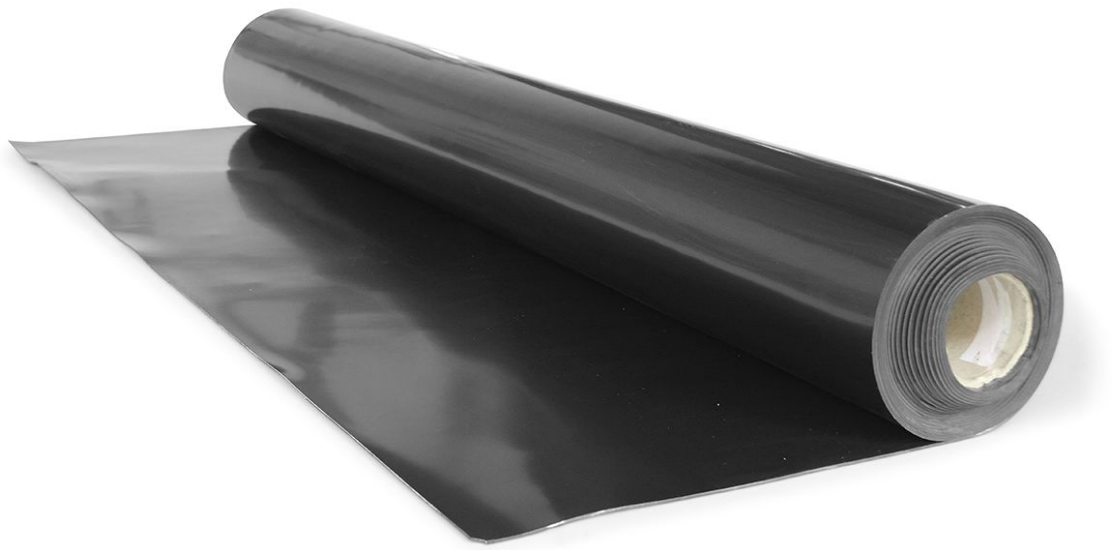
EPDM Geomembrane

A / EPDM	Produced in thicknesses ranging from 1, 1.2, 1.5, 2.0, 2.5, to 3 mm. Used in building foundations, terraces, ponds, channels, reservoirs, and pools. Manufactured with UV resistance upon request. The product width is 2.05 meters. Length can be customized as desired.
A / EPDM - KL	Specially manufactured membrane laminated with felt on the back. It is used to save additional time required for laying geotextile felt during application. Suitable for use in all areas where non-felt membranes are applied. Produced with felt laminated in the desired weight. Manufactured with UV resistance upon request. The product width is 2.05 meters, and the length can be customized as needed.



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EPDM Geomembrane

Product Quality and Performance Test Results for EPDM Geomembrane

Feature	Standard	Requirement	Our Result
Visible Defects	TS EN 1850-2	Should Not Exist Any Visible Defects	No Visible Defects
Length	TS EN 1848-2	Should be within the declared tolerances	Within declared value: 25 m.
Width	TS EN 1848-2	Should be within the declared tolerances	Within declared value: 2.2 m.
Thickness	TS EN 1849-2	Should be within the declared tolerances	Within declared value 1-,1,2-1,5-2-3 mm
Mass per Unit Area	TS EN 1849-2	Should not be outside the range of the declared value, along with the manufacturer's tolerance.	Within declared value
Water-tightness	TS EN 1928 (Method B) EN 14150	Should Be Water-Tight After The Test	No water leakage
Resistance to Impact	TS EN 12691	Minimum Diameter Which The Material Is Resistant To Should Be ≤ Manufacturer's Boundary Value	Min. 300 mm
Resistance	TS EN 1296 TS EN 1928 (Method B)	After The Material Is Exposed To Aging, It Still Should Be Tight	Tight Still
Resistance to Chemicals	TS EN 1847 TS EN 1928 (Method B)	Should remain waterproof after long-term exposure to diluted alkali (2 kPa–60 kPa)	Tight Still
Tear Resistance	TS EN 12310-1	≥Manufacturer's Boundary Value	Transverse: 175 N Longitudinal: 181 N
Welded Joint Resistance	TS EN 12317-2	≥Manufacturer's Boundary Value	279 N
Resistance to Static Loads	TS EN 12730 (Method B)	≥Manufacturer's Boundary Value	25 Kg
Tensile Properties	TS EN 12311-2	≥Manufacturer's Boundary Value	Transverse: 353 N/50 mm Longitudinal: 452 N/50 mm
Elongation at Break	TS EN 12311-2	≥Manufacturer's Boundary Value	%367
Tensile Strength	EN ISO 527	≥Manufacturer's Boundary Value	10,3 N/mm²- % 450
Resistance to Static Punching	EN ISO 12236	≥Manufacturer's Boundary Value	1,1 KN
Resistance to Weather Conditions	EN 12224	≥Manufacturer's Boundary Value	Change in Tensile -7%, Change in Elongation -8%
Resistance to Oxidation	EN 14575	≥Manufacturer's Boundary Value	Change in Elongation and Tensile %-1,-2
Gas Tightness	ASTM D 1434	NPD	NPD
Resistance to Peeling	TS EN 12317-2	≥Manufacturer's Boundary Value	Min .2,00 N/mm
Resistance to Alkalis	TS EN 1847 TS EN 1928	Water Tightness Should Continue	Tight Still
Combustion Class	TS EN 13501	Classification	Class E
Water Vapour Permeability Feature	TS EN 1931	≥Manufacturer's Boundary Value	10560 kg/ms

PVC Waterstops

Produced by processing a mixture of PVC resin, various catalysts, stabilizers, colorants, hardeners, and plasticizers under appropriate temperature and pressure in extruders.

Usage Areas

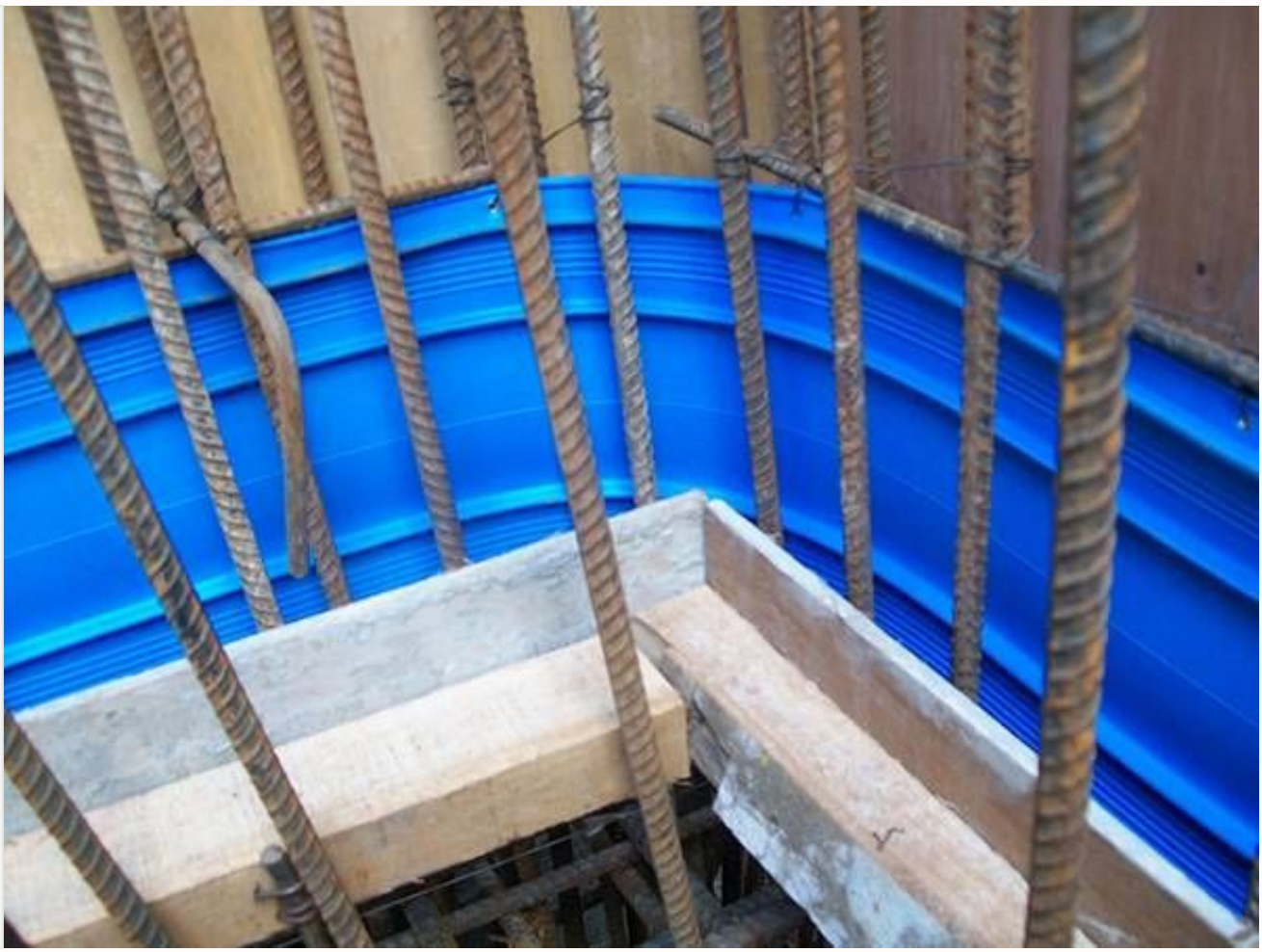
In reinforced concrete structures, expansion joints are required to prevent deformation from volume reduction as the cement sets. Construction joints are placed perpendicular to pressure stresses, while contraction joints are caused by ground movements. Mone PVC Waterstops are used to prevent deformations and ensure waterproofing in these areas.

- Dams
- Tunnels
- Regulators
- Water tanks
- Treatment plants
- Swimming pools
- Channels
- Bridges
- Subways
- Sewer systems
- Irrigation channels
- Quays
- Conveyance tunnels
- Hydroelectric power plant projects
- Viaducts
- Retaining walls
- Ground-supported slabs and foundations
- Industrial structures

PVC Waterstops

Product Features

- *Prevents water leakage from concrete joints.*
- *Is recyclable and environmentally friendly.*
- *Resistant to temperatures ranging from -40°C to +70°C.*
- *Joint ends are welded together using a special welding machine.*
- *Prevents corrosion and is resistant to aging.*
- *Has a long service life.*
- *Classified as Class E in terms of combustibility.*
- *Exhibits high tensile and elongation strength.*



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PVC Waterstops

PVC Waterstops Technical Specifications

Requirements	Test Results
Specific Gravity	1,27 (0,03) g/cm
Tensile Strength	20 kN
Elongation Rate	%295 avg, %225 min.
Ash Rate	%5 (max) in weight
Water Absorption Rate	%1 (max) in weight
Hardness ASTM D 2240	75(±5) Shore "A"
Service Temperature	(-15 °C / +50 °C)

type		Width (cm)	15	15	15	20	20	20	20	23	23	25	25	25	25	30	30	30	30	35	50	50
A		Thickness (mm)	4	5	7	5	6	7	10	7	10	5	6	8	10	6	7	9	10	8	8	10
type		Width (cm)	15	15	15	15	20	20	20	20	20	20	23	25	25	25	25	25	30	30	30	
B		Thickness (mm)	5	7	8	10	4	5	6	7	8	10	10	5	6	8	9	10	6	8	10	
type		Width (cm)	15	15	15	20	20	20	20	25	25	25	25	30	30	30	30	30	32			
I		Thickness (mm)	3	4	5	4	5	6	8	4	5	6	8	4	5	6	7	8	6			
type		Width (cm)	20	22	25	25	25	25	30	30	30	32	35	35	50	50						
OL		Thickness (mm)	5	4	5	6	7	8	7	8	9	8	8	10	8	10						
type		Width (cm)	20	25	25	25	25	30	30	30	40											
M		Thickness (mm)	8	5	6	8	10	6	7	8	10											
type		Width (cm)	15	15	15	20	20	20	20	20	20	25										
V		Thickness (mm)	3	4	5	3	4	5	6	7	8	4										
type		Width (cm)	20	20	20	25	25	25	25	30	30	30	35	35	35	50						
Y		Thickness (mm)	3	4	5	3	5	6	8	4	6	8	6	8	10	4						
type		Width (cm)	20	20	20	25	25	25	25	30	30	30	35	35	35	50						
YO		Thickness (mm)	3	4	5	3	5	6	8	4	6	8	6	8	10	4						
type		Width (cm)	20	20	20	25	25	25	25	30	30	30	35	35	35	50						
YI		Thickness (mm)	3	4	5	3	5	6	8	4	6	8	6	8	10	4						
type		Width (cm)	15	15	15	20	20	22	25	26	30	32										
O		Thickness (mm)	3	4	5	4	5	4	5	5	5	6										
type		Width (cm)	20	20	20	20	24	24														
AK		Thickness (mm)	2	2.5	3	4	3	4														

Geotextiles

Product Features

Mone Geotextile is a permeable textile product used on foundations, soils, rocks, and earth materials. It is made of polyester. The most notable feature of Mone Geotextile is its continuous surface used to separate two different types of soil. The fiber structure of the geotextile allows it to distribute concentrated forces. Additionally, it resists tensile forces distributed within the soil mass and acts as a reinforcement element. Due to its filtration properties, geotextile can be used for pollution control. While it prevents the passage of solid particles, it remains sufficiently permeable to liquids (water) and gases (air). Under certain conditions, these products can carry significant amounts of water along their surface and thus behave like a drainage element. In short, geotextile functions at both hydraulic and mechanical levels. Its 5 main functions are:

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

MONE

Geotextiles

Usage Areas

- Tunnels
- Drainage of groundwater
- Areas where penetration of insulation material is not desired
- Slope management
- To prevent contact between two materials with its separation feature

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Geotextiles

Geotextile Products Performance Metrics

	Weight	Thickness	Tensile Strength	Break Resistance	Static Puncture	Dynamic Puncture	Water Permeability	Mesh
Standard	TS EN ISO 9864	TS EN ISO 9863-1	TS EN ISO 10319		TS EN ISO 12236	TS EN ISO 13433	TS EN ISO 11058	TS EN ISO 12956
UNIT	gr/m2	mm	kN/m	%	N	mm	m/sn	mm
GEO100	100	1	6--7	50-80	1500	28	0,09	0,14
GEO150	150	1,5	8--10	50-80	2000	26	0,08	0,13
GEO200	200	1,5	11--13	50-80	2500	24	0,07	0,13
GEO250	250	2	13-15	50-80	3000	20	0,06	0,12
GEO300	300	2,3	17-19	50-80	3400	16	0,05	0,12
GEO350	350	2,6	19-21	50-80	3800	12	0,042	0,11
GEO400	400	3	21-23	50-80	4300	8	0,035	0,11
GEO450	450	3,3	23-25	50-80	4800	4	0,03	0,1
GEO500	500	4	27-40	50-80	5500	3	0,036	0,08
GEO600	600	4,7	31-33	50-80	6000	2	0,02	0,09
GEO700	700	5,4	35-37	50-80	6500	1	0,015	0,09
GEO800	800	6,1	39-41	50-80	7700	0,5	0,001	0,08
GEO1000	1000	6,5	45-49	50-80	9200	0,4	0,006	0,07
GEO1200	1200	7,1	51-55	50-80	10900	0,35	0,004	0,06

Geocell

Mone Geocell is a geosynthetic product made from low or high-density polyethylene. These three-dimensional layers are expanded and used in cellular filling systems. They are produced from high-density polyethylene (HDPE) and are lightweight and flexible in structure.

Usage Areas

- Railway track base reinforcement
- Road and highway soil reinforcement
- Dam embankments for concrete or earth retention
- All sloped surfaces
- Irrigation channels
- Road landscaping
- Building foundation reinforcement

MONE

Geocell

Product Features

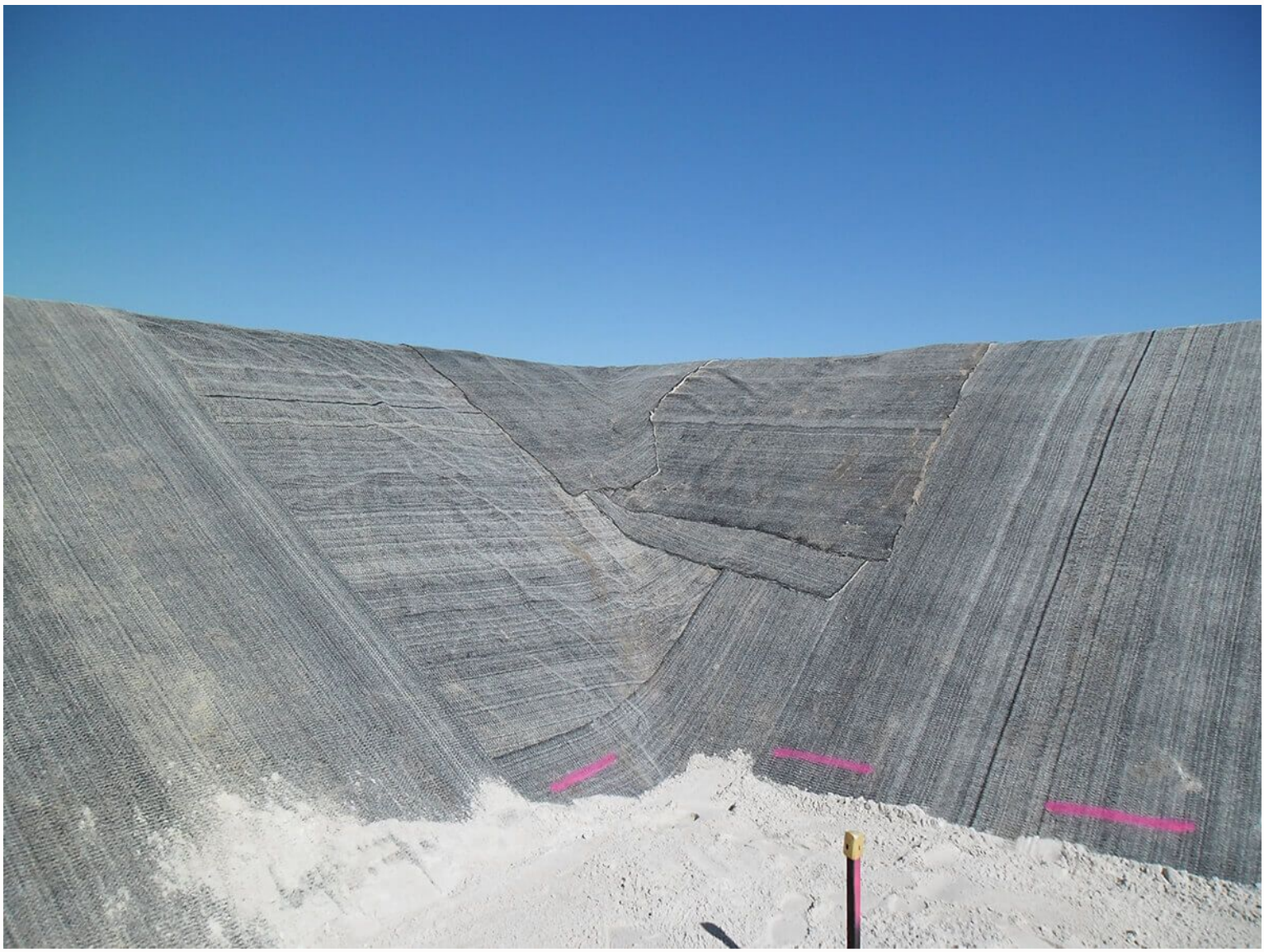
- Highly resistant to chemicals
- Shows high resistance to organic and inorganic solvents
- Extremely resistant to cracking
- Resistant to natural conditions
- Resistant to punctures and cracks

Geocell Product Specifications	
Name of Product	Geocell
Product Content	High Density Polyethylene
Width-Length	6.20 m / 3.10 m
Thickness	Between 1-3 mm
Packing	In nylon packing
Color	*Can be produced in the desired color.*
Standart No	TS EN 13361, ASTM D 1004, ASTM D 4833, ASTM D 4218, ASTM D 5596, ASTM D 5321, ASTM D 3895, ASTM D 5885, ASTM D 5721, ASTM D 3895, ASTM D 5885, ASTM D 7238, ASTM D 3895, ASTM D 5885, EN ISO 1183-1/A, ASTM D 1603, EN ISO 9863-1, EN ISO 10319, EN ISO 13426-1 (Method A)
Storage	Mone Geocell is thoroughly quality-checked for each pallet, with final inspections and labeling performed before being prepared for shipment by our experienced personnel. The materials are stacked in a way that prevents damage during transportation. They should be stored in their original packaging, protected from tearing, puncturing, and environmental factors such as rain, mud, etc. They should be kept in a clean, dry, and flat area.

MONE

Geosynthetic Clay Liner

Geosynthetic clay liners, produced by encapsulating bentonite-based raw material between woven and non-woven geotextiles, are used to provide impermeability. They can be manufactured in powder or granular form. These liners have high impermeability and are commonly used in artificial pond applications, building foundation waterproofing, and landfill sites.



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Geosynthetic Clay Liner

Geosynthetic Clay Liner Product Specifications

Tested Item	Test Method	Technical Index
Expansion Coefficient	ASTM D 5890	≥27ml/2g
Liquid Loss	ASTM D 5891	≤18ml
Per Unit Area Of Bentonite Quality	ASTM D 5993	≥4.8kg/m^2
Tensile Strength	ASTM D 4632	≥400N
Peel Strength	ASTM D 4632	≥75N
Flow Index	ASTM D 5887	≤1*10-8m^3/m^2/sec
Permeability	ASTM D 5887	≤5*10-9cm/sec
Tension Strength After Wetting	ASTM D 5321	≥24Kpa typical

MONE

Geogrid

Mone PE Geogrids are geosynthetic materials made from high-density polyethylene, offering high strength and low creep properties.

Usage Areas

- Road fillings
- Basic strengthening
- Weak floor improvementing
- Reinforced walls
- Erosion zones
- Pile caps platforms

MONE

Geogrid

Product Features

- High-strength, low-sliding materials.
- Resistant to chemicals, especially acids and sulfates.
- Minimally affected by adverse application conditions.
- Can be produced with one side or both sides covered with geotextile if desired.
- Carrying capacity can be increased up to 160 kN/m in production if needed.
- UV resistant.
- Quality-checked, undergo final inspections, and are labeled before being made ready for shipment by our experienced personnel. Stacked in a way that prevents damage and shipped accordingly. The material should be stored in a flat, clean area.

Size Chart

Thickness	Mesh Size	Unit Weight	Roll Width	Roll Length
4 mm	5 cm - 5 cm	500 gr/m²	2 m	can be provided as desired

Complementary Products for Geosynthetic Applications

MONE

PVC Drainage Pipe

A drainage pipe is a perforated pipe made of rigid PVC (PVC-U) without softeners, used to remove underground water from an area. It is produced in diameters ranging from 50 to 200 mm. It is used to remove unwanted water from both above and below the ground. It is durable and easy to install. It can be produced without holes if needed.

Usage Areas

- Removing unwanted water in the building foundation
- The reclamation of muddy and clay lands
- The reclamation of highways shoulder
- Removing harmful water on agricultural land

MONE

PVC Drainage Pipe

PVC Drainage Pipe Technical Properties				
Nominal Diameter	**Outer Diameter**	**Outer Diameter Tolerance**	**Inner Diameter**	**Coil Winding Diameter(Min)**
50 mm	50 mm	+0,5 -0,5 mm	44 mm	500 mm
65 mm	65 mm	+0,5 -0,5 mm	58 mm	500 mm
80 mm	80 mm	+0,5 -0,5 mm	71,5 mm	600 mm
100 mm	100 mm	+0,5 -0,5 mm	91 mm	700 mm
125 mm	125,5 mm	+0,5 -1 mm	115 mm	750 mm
160 mm	159,5 mm	+0,5 -1 mm	144 mm	1000 mm
200 mm	199,5 mm	+0,5 -1 mm	182 mm	1000 mm

MONE

PVC Vane Groove

UV-resistant PVC-based material used in roof applications and ridge solutions. It is an alternative to zinc and similar materials in roofs, ensuring controlled and efficient removal of rainwater without damaging the underlying roof structure.

Application Details

- Placed along the valley gutter line, aligned with the edge of the gutter.
- It is important that the angle of the inner corner of the existing rain gutter matches and that it extends about 3 cm into the gutter.
- Starting from the edge board, it is secured along the valley gutter line using stainless steel nails placed every 40 cm.
- This process continues to the ridge area. If an extension is needed, at least 20 cm overlap should be made.
- The covering material should be secured with a slight overlap on the valley gutter. If possible, excess material should be neatly trimmed.

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PVC Vane Groove

Product Features

- Practical to apply and provides labor savings.
- Stainless, corrosion-resistant.
- Does not require maintenance and is unaffected by external weather conditions.
- High resistance to ultraviolet rays and temperature variations due to reinforced additives.
- Specially designed capillary channels allow controlled rainwater drainage, preventing rainwater from entering beneath the tiles due to wind effect.
- Available in various colors, providing an aesthetically pleasing appearance that matches the covering.

Technical Properties	
Material	Uv Resistant PVC
Dimensions	Width: 50 cm, Length: 10 m
Packing	10 Metre
Color	Rose-colored, black, brown, can be produced in any desired color and size.

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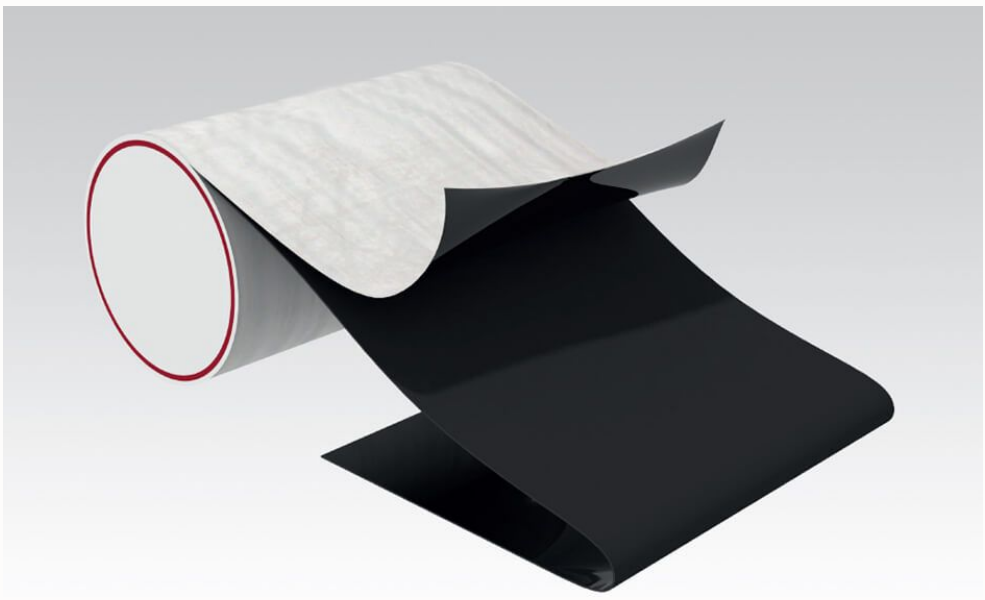
PVC Dilatation Tapes

Product Features

- Easy to apply
- High elasticity formulation
- High adhesion strength (can adhere to dry or slightly damp concrete)
- Environmentally friendly
- Long-lasting
- Resistant to cold and hot weather conditions
- Minimally affected by sudden temperature changes
- UV resistant
- Corrosion-resistant
- High resistance to many chemicals
- Resistant to plant roots



Usage Areas

- Tunnels
- Dams
- Water Reservoirs
- Wastewater Treatment Plants
- Drinking Water Treatment Plants
- Pools
- Foundations and Walls
- Industrial Buildings
- Building Joints
- Culverts

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PVC Dilatation Tapes

Technical Specifications and Test Results of PVC Dilatation Tapes			
Features	**Standard**	**Unit**	**Test Results**
Visible Defects (Cracks, scratches, deformation)	TS EN 1850-2	-	No visible defects.
Width		cm	Registered values
Thickness		mm	2.00 - 5.00
Tensile Strength (min.)	TSE 3078 ASTM D 412	(N/mm²)	> 13
Elongation Break	TSE 3078 ASTM D 412	%	> 240
Water absorption	TSE 3078 ASTM D 412	%	% 1 , (max.) weight
Ash Residue	TSE 3078	%	% 5 , (max.) weight
Service Temperature		°C	-15°C - 50 °C
Hardness	TSE 3078 ASTM D 2240	Shore A	75 (±5)
Density	TSE 3078 ASTM D 792	g/cm^3	1,27 (± 0,04)
Resistance to Chemicals	-	-	Good

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EPDM Dilatation Tapes

Product Features

- Easy application
- High elasticity
- High adhesion strength (Adheres to dry or slightly damp concrete)
- It is not harmful to the environment
- Long-lived
- Resistant to cold and hot weather
- It is minimally affected by changes in temperature
- UV resistant
- Corrosion inhibitor
- Highly resistant against chemicals
- Resistant to plant roots

Usage Areas

- Tunnels
- Dams
- Water Tanks
- Wastewater Treatment Plants
- Drinking Water Treatment Plants
- Pools
- Temellerde ve Perdelerde
- Industrial Buildings
- Combination of the Building

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EPDM Dilatation Tapes

Technical Specifications and Test Results of EPDM Dilatation Tapes			
Features	**Standard**	**Unit**	**Test Results**
Visible Defects Cracks, scratches, deformation)	TS EN 1850-2	-	no visible defects.
Width	-	cm	Registered values
Thickness	-	mm	0.80 - 3.00
Tensile Strength (min.)	EN ISO 527	(N/mm²)	> 8
Elongation Break	EN ISO 527	%	500
Resistance to Weather Conditions	EN 12224	%	7
Resistance to Oxidation	EN 14575	%	1
Gas Tightness	ASTM D 1434	NPD	NPD
Ash Residue	TSE 3078	%	% 5 , (max.) weight
Service Temperature	-	°C	-15°C - 50 °C
Hardness	TSE 3078 ASTM D 2240	Shore A	75 (±5)
Density	EN ISO 1183-1	g/cm^3	1.15
Combustion Class	TS EN 13501	Classification	Class E

TPE Dilatation Tapes

Product Features

- Easy application
- High elasticity
- High adhesion strength (Adheres to dry or slightly damp concrete)
- It is not harmful to the environment
- Long-lived
- Resistant to cold and hot weather
- It is minimally affected by changes in temperature
- UV resistant
- Corrosion inhibitor
- Highly resistant to chemicals
- Resistant to plant roots

Usage Areas

- Tunnels
- Dams
- Wastewater Treatment Plants
- Pools
- Combination of the Building

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TPE Dilatation Tapes

Mechanical and Chemical Properties			
Features	**Standard**	**Unit**	**Test Results**
Visible Defects (Cracks, scratches, deformation)	TS EN 1850-2	-	No visible defects.
Width	-	cm	Registered values
Thickness	-	mm	1.50 - 4.00
Tensile Strength (min.)	ASTM D 412	(N/mm²)	> 12
Elongation Break	ASTM D 412	%	> 300
Resistance Against Water Pressure	TS EN 1978	Bar	> 8
Heat Source Temperature	TSE 3078	°C	250°C - 450 °C
Service Temperature	-	°C	-15°C - 50 °C
Hardness	ASTM D 2240	Shore A	70 (±5)
Density	ASTM D 792	g/cm^3	1,18 (± 0,05)
Resistance to Chemicals	-	-	Good

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Additional Complementary Products for Geosynthetic Applications

MONE

Welding Machine

PVC Washer/Rondella

PVC Drain

Neoprene Sponge Cord

Welding Rod

Plastomeric Waterproofing Membranes

MONE

PVC Connection Parts

Rubber Bitumen Emulsion

Onduline Roof Sheet

Liquid Membrane

Galvanized Steel

Wire Plaster Mesh

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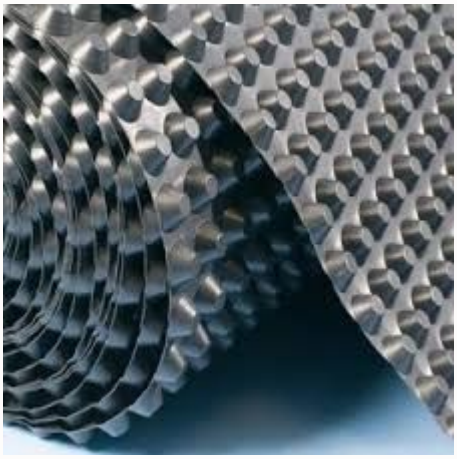
Construction Chemicals



Dimpled Sheet

Oriented Strand Board

Extruded Polystyrene (XPS) Foamboard

Shingle

Stone Wool

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Mone Partners Engineering

Thanks.

Do you have any questions?

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