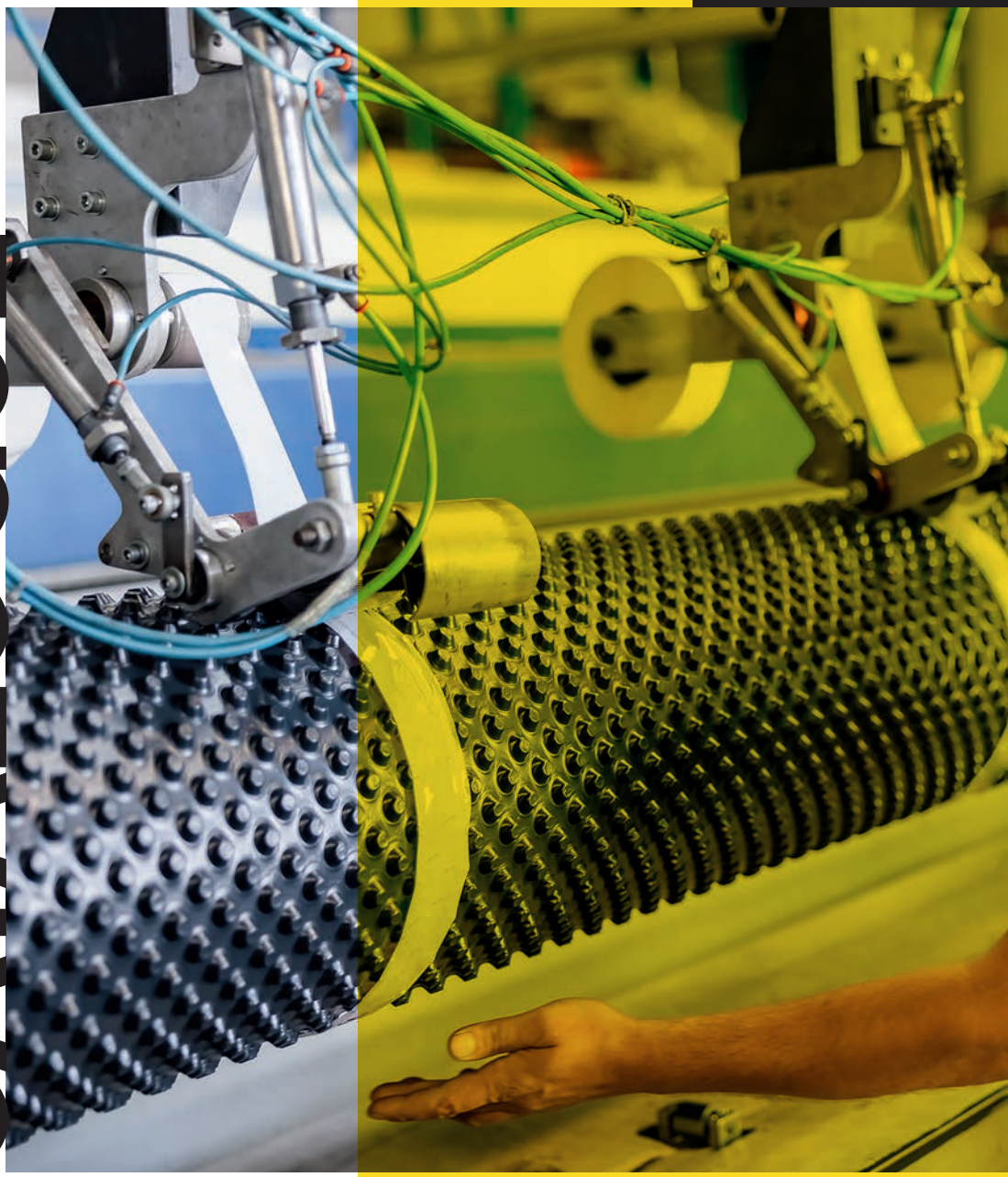
GRILTEX®

PRODUCT CATALOGUE



EXPERT IN INSULATION

GRILTEX.COM

EXPERT IN INSULATION

10 000 000 m²
of lain geomembranes all over the world

60 years
experience in plastics processing

25 years
activity in Poland

We have been building our success since 1962, concentrating our activity on the production and sale of plastic building materials as well as assembly of insulation and seals of hydrotechnical structures.

Owing to our experience as well as the production and distribution of the highest quality materials, we are able to execute even the most challenging projects.

We focus on development, that is why at Griltex, we are continuously implementing systems improving our production and service, and the ISO 9001 certificate is proof of our modern ways of managing the enterprise and the highest quality customer service.

Its leading position in insulation Griltex owes to its constant improvement as well as the expert knowledge of its employees. Griltex's power is a continuous work towards implementing non-standard innovative solutions, and the close cooperation with experienced scientific researchers allows us to pride ourselves on the expert position in the field.

GRILTEX®

PRODUCT CATEGORIES

1 INSULATION FOILS

2 GREEN ROOFS

3 GEOCOMPOSITES

4 GEOSYNTHETICS

5 SEALING GEOSYNTHETICS

6 IMPLEMENTATION DEPARTMENT

INSULATION FOILS

VERTICAL INSULATION OF FOUNDATIONS

GXP® PLUS
GXP® PLUS N10
GXP® PLUS FIX
GXP® PLUS B
GXP® PLUS 20
GXP® PLUS 20 P PERFORATED
GXP® PLUS 5+5
GXP® GRID

VERTICAL LINEAR DRAINAGE

BOR PE
BOR PVC
BOR PROTECT

INSULATION UNDER TERRACES AND BALCONIES

GXP® 3W

INTERNAL INSULATION

DL FOIL

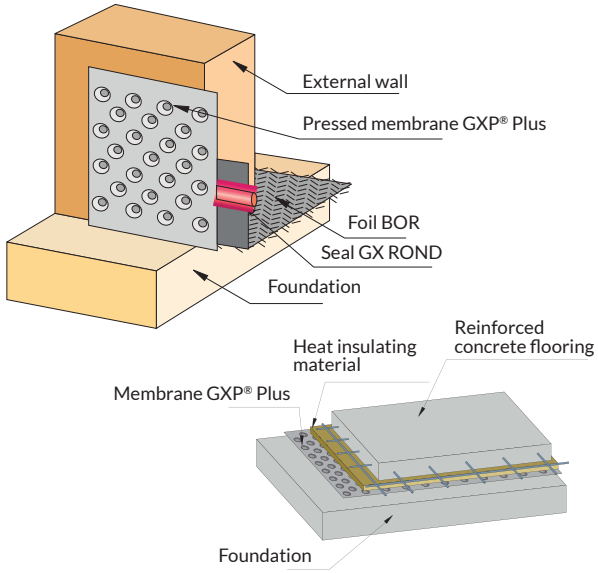
GRILTEX®

GXP® PLUS

INSULATION AND PROTECTION OF FOUNDATON WALLS

APPLICATIONS

The GXP® PLUS membrane made of high density polyethylene (HDPE), basis weight 400-1200 g/m², which is perfect at protecting, insulating and securing the underground sections of foundations and walls as well as eliminating the capillary rising of water.



ADVANTAGES

- high compressive and tear strength
- moisture management of the foundations through air circulation
- effective protection of the existing insulation
- additional heat insulation of the foundations
- it also constitutes waterproofing (elevated tightness class W1)
- possibility of producing rolls of up to 70 mm in length
- easy assembly owing to a wide range of accessories

- EASY, EFFECTIVE AND FAST ASSEMBLY
- MAINTAINED LINEARITY
- 100% JOINT LEAKTIGHTNESS

PATENTED INNOVATIVE JOINT SYSTEM

An innovative joining system, the so-called snap lock, which has been patented and introduced into the market by Griltex Poland, improves the effectiveness and functionality of pressed foils, increasing their range of applications in the building industry.

ACCESSORIES

Nails and pads

Mounting profile 2 m

Butyl tape

Dowels for slats – mounting for EPS

Dowels for EPS

CHEMICAL RESISTANCE

It is resistant to chemical substances, fungi, roots and bacteria present in the ground. It is completely neutral to the natural environment.

TECHNICAL DATA

	0,4	0,5	0,6	0,8	1,0	1,2
Weight m²	400 g/m²	500 g/m²	600 g/m²	800 g/m²	1000 g/m²	1200 g/m²
Material thickness	400 µm	500 µm	600 µm	800 µm	1000 µm	1200 µm
Compression strength	120 kN/m²	230 kN/m²	300 kN/m²	400 kN/m²	500 kN/m²	600 kN/m²
Embossing height	8 mm	8 mm	8 mm	8 mm	8 mm	8 mm
Number of embossings	1860/m²	1860/m²	1860/m²	1860/m²	1860/m²	1860/m²
Air volume between textile and membrane	5,3 l/m²	5,3 l/m²	5,3 l/m²	5,3 l/m²	5,3 l/m²	5,3 l/m²
Temperature resistance	-40 to +80°C	-40 to +80°C	-40 to +80°C	-40 to +80°C	-40 to +80°C	-40 to +80°C
Maximal width	4,0 m	4,0 m	4,0 m	4,0 m	4,0 m	4,0 m
Standard roll sizes	1,0 x 20 m 1,5 x 20 m 2,0 x 20m 4,0 x 20m	1,0 x 20 m 1,5 x 20 m 2,0 x 20m 4,0 x 20m	2,0 x 20m 4,0 x 20m	2,0 x 20m 4,0 x 20m	2,0 x 20m 4,0 x 20m	2,0 x 20m 4,0 x 20m

VERTICAL INSULATION OF FOUNDATIONS

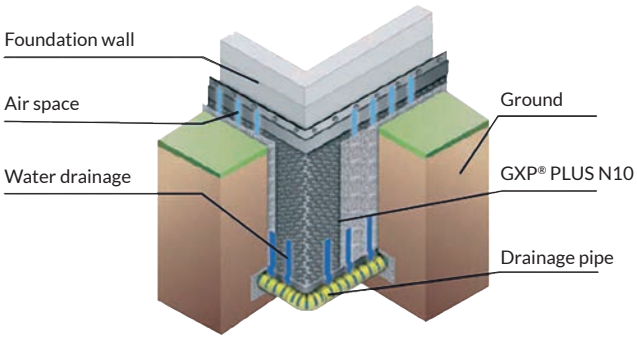
GXP® PLUS N10

THE STRONGEST IN ITS CATEGORY

APPLICATIONS AND ADVANTAGES:

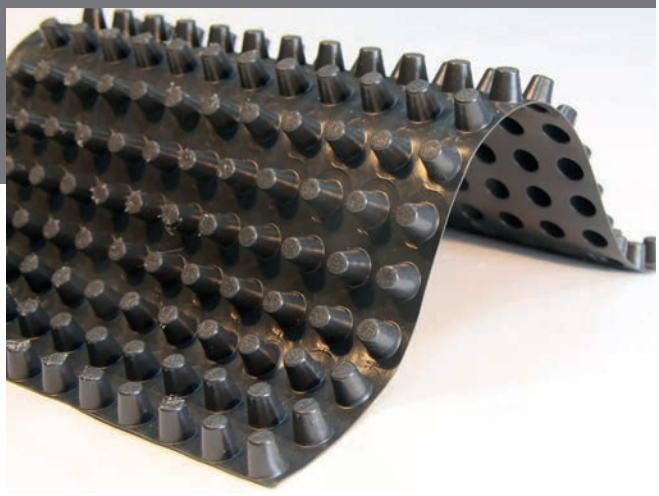
APPLICATIONS

The geomembrane GXP® Plus N10 made from high density polyethylene (HDPE) provides the optimal control of humidity and ventilation of covered surfaces of foundation walls, which is ensured by embossing with the compaction of over 3300 items/m² . It is especially useful in areas exposed to high ground pressures (e.g. deep foundations, access roads over underground garages).



ADVANTAGES

- increased compression strength and breakdown strength
- high ventilation capacity
- it facilitates breathing of walls and underground structures and increases heat insulation effectiveness
- it enables a uniform distribution of loads caused by ground pressure
- it is applied in fire roads



TECHNICAL DATA

Material	Pressed foil HDPE (high density polyethylene)
Roll width	2,0 m
Surface mass	600 g/m²
Embossing height	20 mm
Number of embossings	approx. 3360 /m²
Compression strength	400 kN/m²
Temperature resistance	-40 to +80°C
Air space between buckets	7,9 l/m²
Drainage capacity (if it's connected with the geotextiles)	4,8 l/s/m 288 l/min/m 17 280 l/h/m

CHEMICAL RESISTANCE

It is resistant to chemical substances, fungi, roots and bacteria present in the ground. It is completely neutral to the natural environment.

GXP® PLUS FIX

INNOVATIVE GEOMEMBRANE WITH INTEGRATED MOUNTING BELTS

APPLICATIONS AND ADVANTAGES:

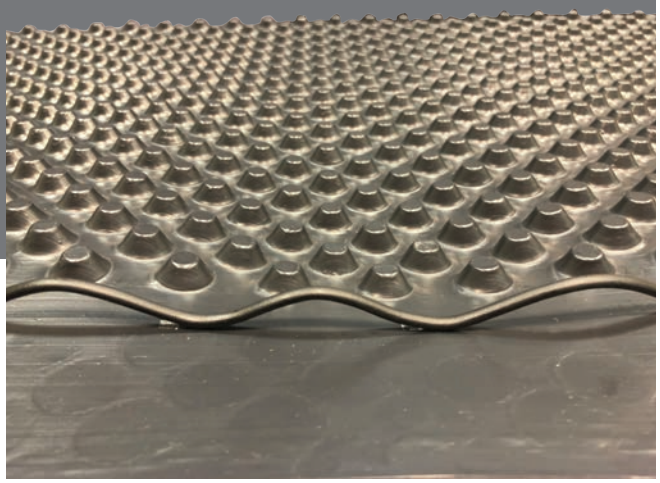
APPLICATIONS

The membrane GXP® Plus Fix, made of high density polyethylene (HDPE), with the basis weight of 800 - 1200 g/m^2, integrated with the mounting belts, is assigned to be joined with another geosynthetic, such as: geogrid, geomesh, geograte, geomat, etc.

The foil's embossings constitute a natural protection for the geograte against sliding on the (flat) foil. The geomembrane equipped with integrated mounting belts not only guarantees tightness, strength and quick assembly, but it also secures the humus layer in case of out-of–ordinary precipitation.

ADVANTAGES

- durable and effective mounting – it prevents embankment landslides
- no necessity of geomembrane perforation during mounting – maintained hydroinsulation
- shorter mounting time
- smaller involvement of human labour
- it enables the recipient to develop a competition advantage on the market of construction works contracting.



TECHNICAL DATA

		0,8	1,0
8mm	Weight	800 g/m^2	1000 g/m^2
	Thickness	800 µm	1000 µm
	Compression strength	400 kN/m^2	500 kN/m^2
	Embossing height	8 mm	8 mm
	Width	4 m	
	Temperature resistance	-40 to +80°C	
2x5 mm	Weight	800 g/m^2	1000 g/m^2
	Thickness	800 µm	1000 µm
	Compression strength	400 kN/m^2	500 kN/m^2
	Embossing height	10 mm	10 mm
	Width	4 m	
	Temperature resistance	-40 to +80°C	
20mm	Weight	800 g/m^2	1000 g/m^2
	Thickness	800 µm	1000 µm
	Compression strength	160 kN/m^2	200 kN/m^2
	Embossing height	20 mm	20 mm
	Width	4 m	
	Temperature resistance	-40 to +80°C	

CHEMICAL RESISTANCE

It is resistant to chemical substances, fungi, roots and bacteria present in the ground. It is completely neutral to the natural environment.

VERTICAL INSULATION OF FOUNDATIONS

GXP® PLUS B

INNOVATIVE GEOMEMBRANE WITH AN INTEGRATED BUTYL SEAL

APPLICATIONS AND ADVANTAGES:

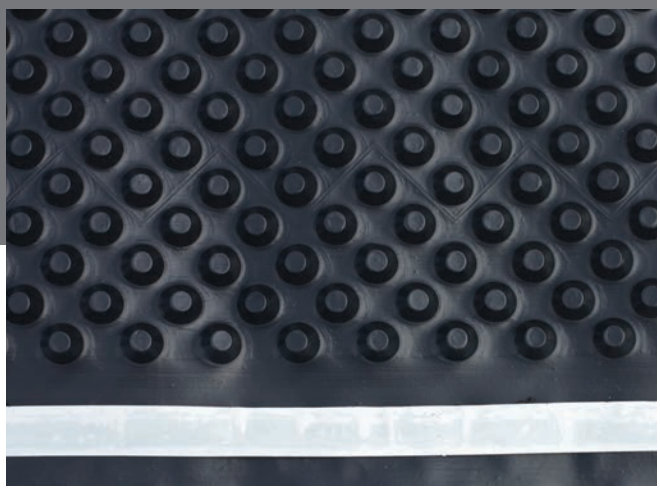
APPLICATIONS

GXP® Plus B membrane, made of high density polyethylene (HDPE), with the basis weight of 500 - 1000 g/m² , integrated with a butyl seal already at the production stage.

The solution consists in producing the geomembrane in a process integrated with the process of longitudinal sticking of the butyl seal to the geomembranes, aiming at tightening the geomembrane joints and recesses as well as shortening the mounting time at the place of application. Elimination of the process of sticking the seal during the geomembrane assembly at the construction site.

ADVANTAGES

- improved tightness owing to a machine integration of the seal at the production stage instead of a manual one at the place of assembly
- availability in a wide range of parameters – embossing depth – 8, 5+5 or 20 mm.
- a shorter assembly time
- a lower involvement of human labour
- it enables the recipient to develop a competition advantage on the construction works market



TECHNICAL DATA

		0,5	0,6	0,8	1,0
8mm	Weight	500 +butyl g/m²	600 +butyl g/m²	800 +butyl g/m²	1000+butyl g/m²
	Material thickness	500 µm	600 µm	800 µm	1000 µm
	Compression strength	230 kN/m²	300 kN/m²	400 kN/m²	500 kN/m²
	Embossing height	8 mm	8 mm	8 mm	8 mm
	Width	4,0 m			
	Temperature resistance	-40 to +80°C			
25 mm	Weight	500 g/m²	600 g/m²	800 g/m²	1000 g/m²
	Material thickness	500 µm	600 µm	800 µm	1000 µm
	Compression strength	230 kN/m²	300 kN/m²	400 kN/m²	500 kN/m²
	Embossing height	10 mm	10 mm	10 mm	10 mm
	Width	4,0 m			
	Temperature resistance	-40 to +80°C			
20mm	Weight			800 g/m²	1000 g/m²
	Material thickness			800 µm	1000 µm
	Compression strength			160 kN/m²	200 kN/m²
	Embossing height			20 mm	20 mm
	Width	4,0 m			
	Temperature resistance	-40 to +80°C			

CHEMICAL RESISTANCE

It is resistant to chemical substances, fungi, roots and bacteria present in the ground. It is completely neutral to the natural environment.

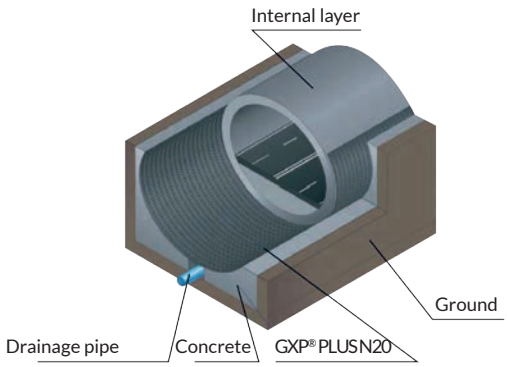
GXP® PLUS 20

VERY DURABLE MEMBRANE

APPLICATIONS AND ADVANTAGES:

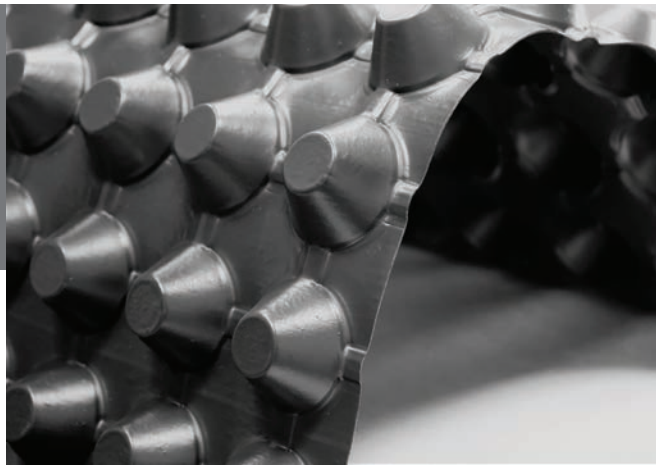
APPLICATIONS

The GXP® Plus 20 membrane produced from high density polyethylene (HDPE), with the basis weight of 800 – 1200 g/m² , is assigned for green roofs, as well as mechanical and hydraulic protection of tunnels or other underground constructions with an increased water flow.



ADVANTAGES

- very resistant to compression and puncture owing to buckets in the shape of a truncated cone
- enables uniform distribution of loads owing to high densification of buckets (400 items/m²)
- increased air space between embossings improves thermal insulation
- during horizontal installation, limits capillary water rising, directs and removes water from downpipes (of the collector)



TECHNICAL DATA

	800	1000
Weight	800 g/m²	1000 g/m²
Material thickness	0,8 mm	1,0 mm
Compression strength	160 kN/m²	200 kN/m²
Embossing height	20 mm	20 mm
Number of embossings	400 per m²	400 per m²
Air space between buckets	14 l/m²	14 l/m²
Drainage capacity (if it's connected to the geotextile)	8 l /s /m 480 l /min /m 28800 l /h /m	8 l /s /m 480 l /min /m 28800 l /h /m
Width	2,0 m i 4,0 m	2,0 m i 4,0 m
Temperature resistance	-40 to +80°C	-40 to +80°C

CHEMICAL RESISTANCE

It is resistant to chemical substances, fungi, roots and bacteria present in the ground. It is completely neutral to the natural environment.

VERTICAL INSULATION OF FOUNDATIONS

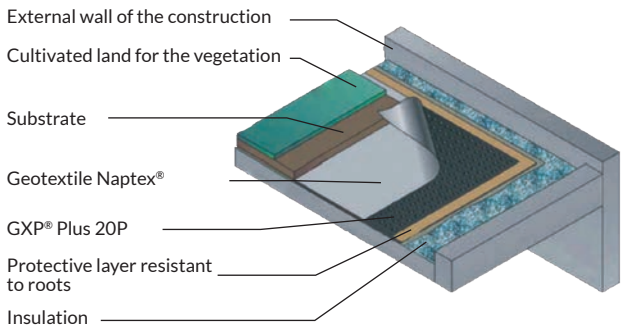
GXP® PLUS 20P PERFORATED

WATER RESERVOIR FOR ROOFS AND TERRACES

APPLICATIONS AND ADVANTAGES:

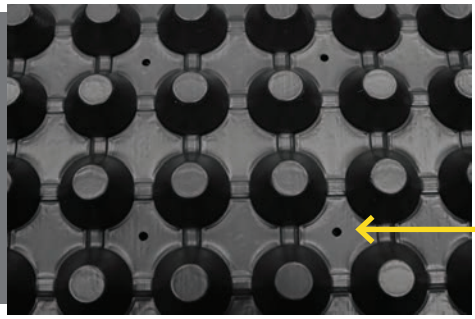
APPLICATIONS

The membrane GXP® Plus 20 P is produced from high density polyethylene (HDPE), with the basis weight of 1000 g/m² . It is created especially for flat surfaces covered with vegetation. The membrane ensures unique properties when the buckets are directed with their apertures up, owing to which they play the role of micro-containers regulating the accumulation of water in the rooting system (in a plant-covered ground), and at the same time increasing the heat insulation of the system and limiting the heat accumulation.



ADVANTAGES

- high resistance to compression and puncture
- simultaneous water accumulation and controlled drainage
- increased heat insulation
- limited accumulation of heat
- cost-efficient



PERFORATION

Laying the NAPTEX® or TYPAR® geotextile between the GXP® Plus 20 membrane and the vegetation-covered ground protects from penetration of humus (grit layer) into the chambers and limits the root growth.

TECHNICAL DATA	
Weight	1000 g/m²
Material thickness	1,0 mm
Compression strength	200 kN/m²
Embossing height	20 mm
Number of emnbossings	400 per m²
Diameter of perforation apertures	4,5 mm
Temperature resistance	-40 to +80°C
Air space between buckets	14 l/m²
Colour	black
Roll dimensions	2,0 x 20 m 4,0 x 20 m
Sheet size	2,5 x 1,2 m
Water accumulation capacity	6 l/m²
Drainage capacity	10 l/m/s

CHEMICAL RESISTANCE

It is resistant to chemical substances, fungi, roots and bacteria present in the ground. It is completely neutral to the natural environment.

GXP® PLUS 5+5

INSULATION AND PROTECTION OF SLOPES AND DITCHES

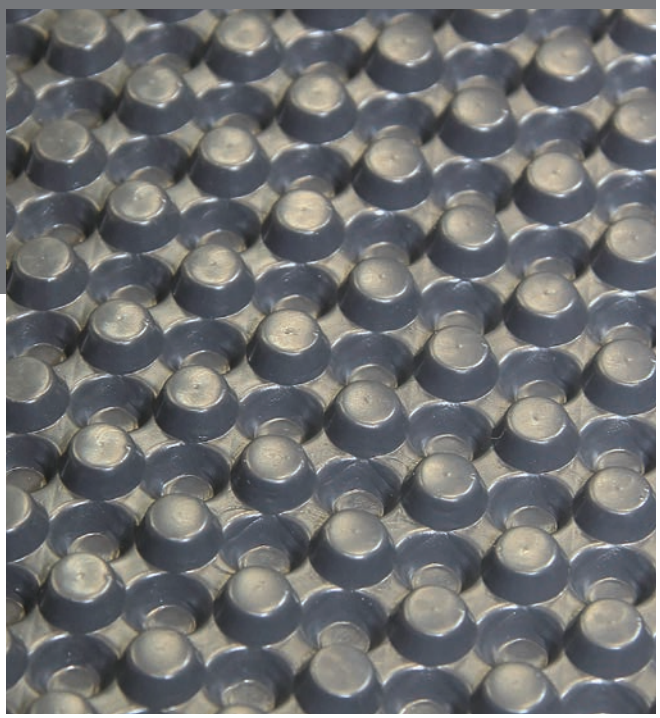
APPLICATIONS AND ADVANTAGES:

APPLICATIONS

The membrane GXP® Plus 5+5, made from high density polyethylene (HDPE), owing to its structure of double embossings, ensures an increased friction angle of the ground on both sides. It is especially useful in areas with a high inclination angle, such as ditches, tanks, etc. and because of its two-side high ventilation capacity as an air gap between 2 concrete walls.

ADVANTAGES

- increased friction angle of the ground on both sides
- high two-side ventilation capacity
- increased compression and breakdown strength
- it enables a unifrom distribution of loads caused by ground pressure



TECHNICAL DATA

Material	pressed foil HDPE (high density polyethylene)
Roll width	2,0 m i 4,0 m
Surface mass	650-1000 g/m²
Embossing height	10 mm
Temperature resistance	-40 to +80°C
Drainage capacity (if it's connected to the geotextiles)	4,8 l/s/m 288 l/min/m 17 280 l/h/m
Standard dimensions	2 x 20 m 4 x 20 m *other sizes on request

CHEMICAL RESISTANCE

It is resistant to chemical substances, fungi, roots and bacteria present in the ground. It is completely neutral to the natural environment.

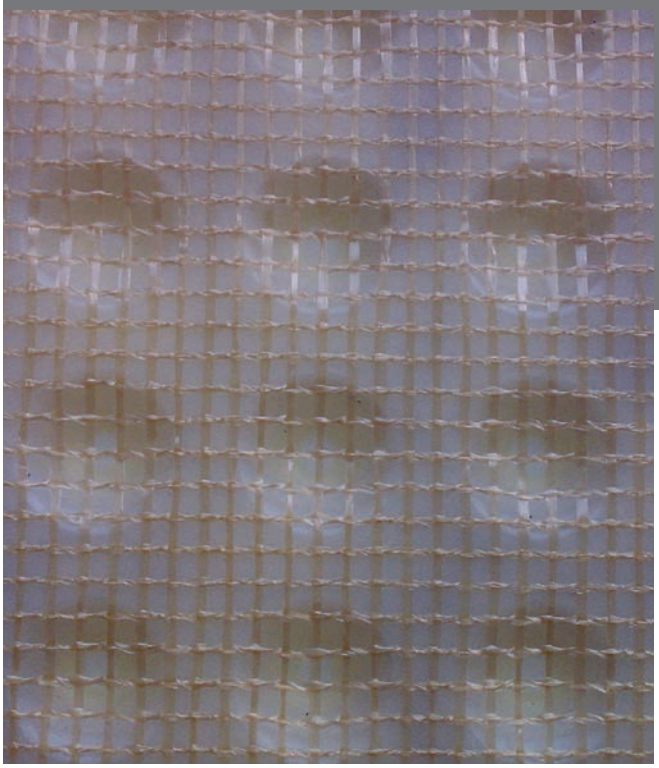
GXP® GRID

INSULATION AND VENTILATION OF DAMP WALLS

APPLICATIONS AND ADVANTAGES:

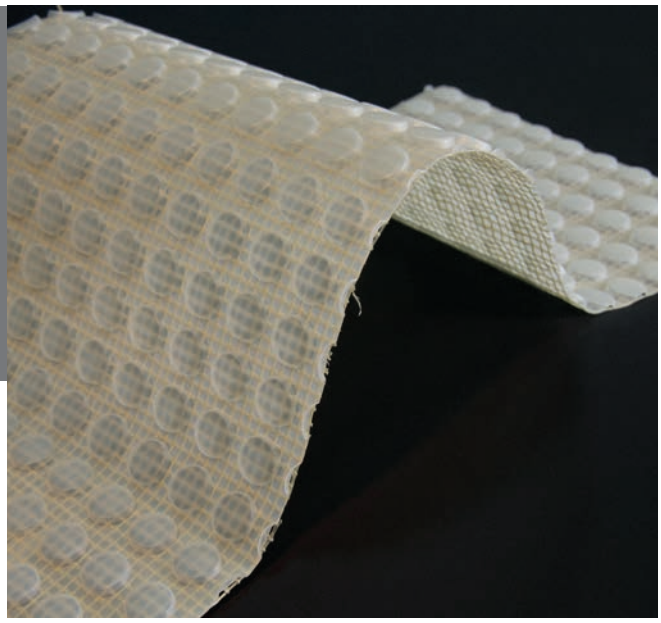
APPLICATIONS

The pressed membrane made of high density polyethylene (HDPE), with the basis weight of 600 g/m², with a stuck-on grid, basis weight of 50 g/m², is assigned to control the dampness of basements and enables their maintenance. The structure of embossings facilitates breathing of damp walls, providing a tight barrier and dry plaster (finishing).



ADVANTAGES

- very high compression strength (15 t/m²) and breakdown strength
- limits plaster cracking over time
- facilitates breathing of damp walls
- the transparency of the foil makes it possible to see the wiring system underneath the layer



TECHNICAL DATA	
Composite weight	650 g/m²
Material	HDPE
Compression strength	150 kN/m²
Embossing height	8 mm
Number of embossings	1150 per m²
Air space between buckets	5,51 l/m²
Temperature resistance	-40 to +80°C
Membrane thickness	600 µm

CHEMICAL RESISTANCE

It is resistant to chemical substances, fungi, roots and bacteria present in the ground. It is completely neutral to the natural environment.

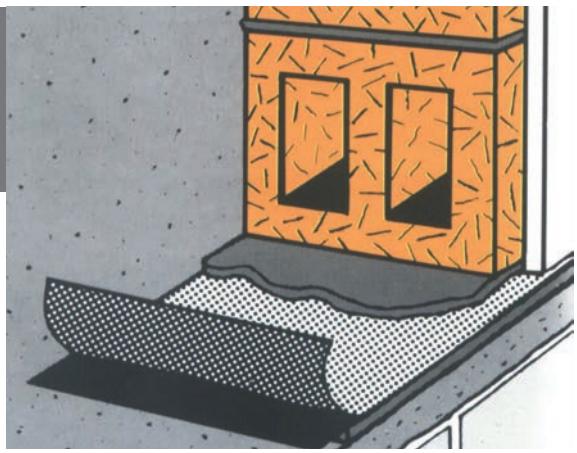
BOR PE, BOR PVC, BOR EPDM

PERFECT ANTI-DAMPNESS INSULATION

APPLICATIONS AND ADVANTAGES:

APPLICATIONS

The BOR insulation foils provide a lasting and effective protection of bearing walls and foundations against capillary moisture rising. They are assigned for anti-dampness and anti-water protections of foundations and walls of underground sections of buildings.



ADVANTAGES

- very strong and durable, does not undergo biodegradation
- very high insulation parameters
- application both horizontally and vertically
- ensures clean and easy assembly
- less expensive than traditional solutions
- wide range of roll sizes

TECHNICAL DATA

	PE	PVC
Weight PN=EN 1849-2	275 g/m²	1700 g/m²
Material thickness	0,3 mm	1,0 mm
Water resistance (2KPa 24h) (PN-EN-1928)	water resistant	
Roll length	50 m	30 m
Roll width	0,21; 0,25; 0,3; 0,365; 0,4; 0,5; 0,6; 1,0 m	0,25; 0,3; 0,4; 0,5; 0,6; 1,0 m

*other sizes on request

BOR PE FOIL

- produced from high quality polyethylene foil
- a clear waffle structure strengthens, as well as minimizes the risk of tear
- light and easy to arrange
- inexpensive and durable

BOR BOR PVC

- produced from polyvinyl chloride
- perfectly adheres to the foundation walls
- easy to arrange
- strong and durable (three times thicker than the traditional version)

BOR BOR EPDM

- full water-resistance, no water penetrability with pressure 0,2 MPa and time 24h
- easy to mount and join into all surfaces
- high tensile strength (9,5 Mpa)
- capability of high elongations during tension (relative elongation up to 400%)
- resistant to low temperatures, described by flexibility at -30°C
- resistant to elevated temperatures of up to +80°C
- exhibits "material memory", always returns to the original
- does not spall or harden
- dimensional stability

CHEMICAL RESISTANCE

It is resistant to chemical substances, fungi, roots and bacteria present in the ground. It is completely neutral to the natural environment.

VERTICAL LINEAR DRAINAGE

BOR PROTECT

ANTI-DAMPNESS INSULATION IN SKELETON CONSTRUCTIONS

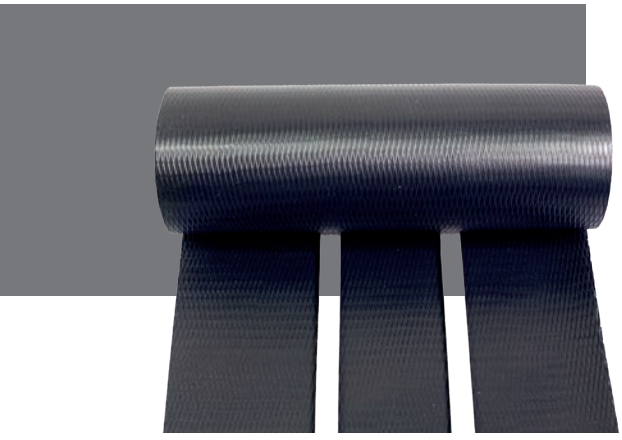
APPLICATIONS AND ADVANTAGES:

APPLICATIONS

The membrane BOR PROTECT was designed especially for skeleton constructions made of wood, in order to create a barrier protecting from capillary moisture rising on joints between the wooden wall base and the continuous footing. BOR PROTECT is a combination of a polyethylene membrane with two sealing tapes type 600/BG1, which constitutes the best barrier against air flow from the outside into the inside of a building, and the application of a roughened surface minimizes the risk of slipping and improves adhesion..

ADVANTAGES

- waterproof
- very resistant to compressions and especially resistant to tears
- resistant to weather conditions and UV rays
- elastic even at low temperatures
- application of sealing tapes ensures perfect windproofness
- adjusts to the shrinking and relaxation of wood depending on atmospheric conditions
- easy to assemble



TECHNICAL DATA	
Thickness	300 µm + 4/20 mm
Dimensions	0,25 /0,365 x 24 m
Components	LDPE (low density polyethylene) + impregnated sponge

CHEMICAL RESISTANCE

It is resistant to chemical substances, fungi, roots and bacteria present in the ground. It is completely neutral to the natural environment.

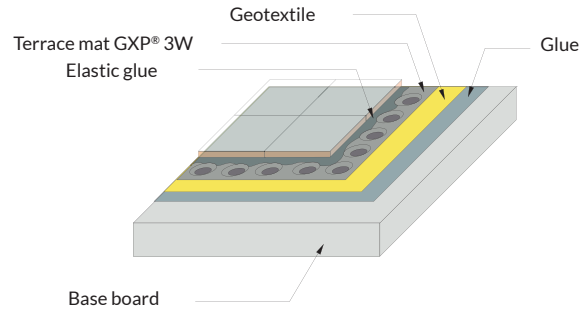
GXP® 3W

FAILPROOF BASE UNDER FLOOR AND TERRACE TILES

APPLICATIONS AND ADVANTAGES:

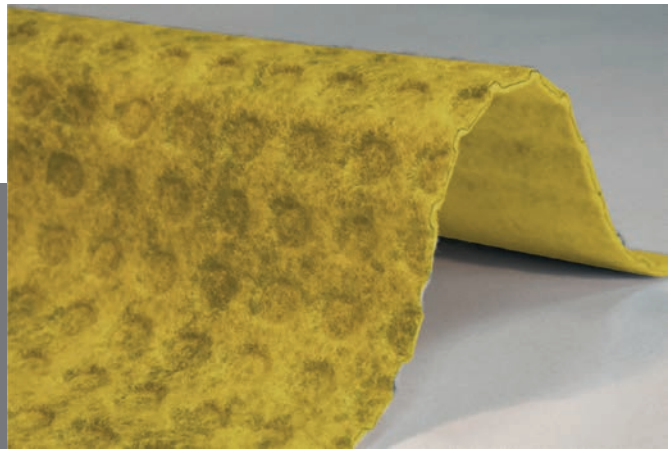
APPLICATIONS

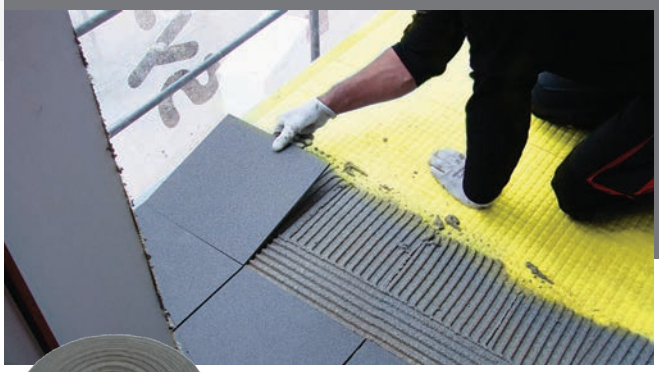
GXP® 3W is a technologically advanced mat ensuring safe and durable installation of finishings of floors and terraces with flooring. The application of a pressed core made from HDPE, joined on both sides with textiles, limits local cracking and prevents its propagation on the base.



ADVANTAGES

- distributes and reduces local shrinkages and relaxations of floorings
- protects floor tiles against migration of moisture from the base owing to a ventilations system
- constitutes a bridge between the flooring and the tiles the cracks and base movements are minimized and not transferred further onto the tiles
- forms a strong joint with the glue owing to its easy penetration into the textile and the cavities
- constitutes a barrier against water penetration into the base as well as an element of control and evacuation of water vapouri





For longitudinal and transverse joints on the mat, we recommend the use of a special sealing and dilatation tape.
For walls and corners, we also recommend the application of sealing tapes.

TECHNICAL DATA

Material: - pressed foil - geotextile	HDPE (high density polyethylene) PP (polypropylene)
Thickness: - pressed foil - geotextile basis weight	0,5 mm 40 g/m²
Roll size	1,0 x 30 m
Surface mass	550 g/m²
Embossing height	3 mm
Number of embossings	2500 / m²
Air gap between embossings	1,56 l/m²
Compression strength	350 kN /m² 35 tons/m²
Tensile strength	610 N / 5 cm
Temperature resistance	-40 to +80°C
Other properties	neutral to drinking water

CHEMICAL RESISTANCE

It is resistant to chemical substances, fungi, roots and bacteria present in the ground. It is completely neutral to the natural environment.

DL FOIL

EFFECTIVE ANTI-MOISTURE PROTECTION

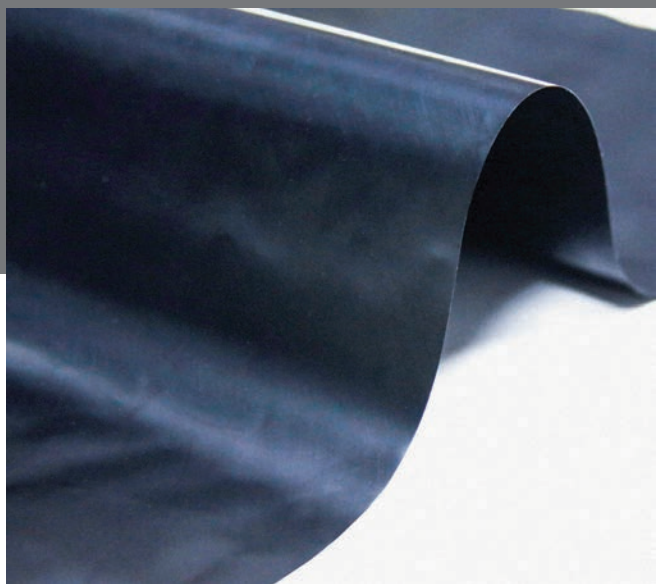
APPLICATIONS AND ADVANTAGES:

APPLICATIONS

Flooring foils durably insulate concrete flooring against capillary water rising. They exhibit high mechanical, water and water vapour resistance.

ADVANTAGES

- made from 100 % LDPE polyethylene
- high mechanical strength
- appropriate for all types of constructions



TECHNICAL DATA

	DL150	DL200	DL300	DL500
Colour	black	black	black	black
Thickness	150 µm	200 µm	300 µm	500 µm
Elongation at rupture	150%	170%	260%	380%
Surface mass	138 g/m²	167 g/m²	265 g/m²	443 g/m²
Breaking strength	60 N/5cm	70 N/5cm	110 N/5cm	165 N/5cm
Dimensions		6 x 33 m		6 x 25 m*

*other dimensions on request

CHEMICAL RESISTANCE

It is resistant to chemical substances, fungi, roots (DL500) and bacteria present in the ground. It is completely neutral to the natural environment.

GREEN ROOFS

INSULATION OF GREEN ROOFS

GXP® DREN 20
GXP® DREN 20 P
GXP® DREN 40

GRILTEX®

GXP® DREN 20

HIGH DRAINAGE CAPACITY

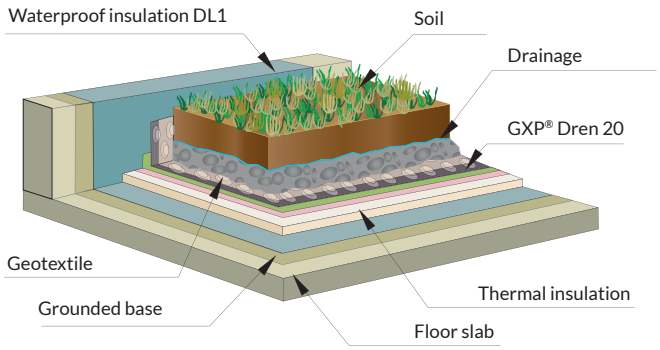
APPLICATIONS AND ADVANTAGES:

APPLICATIONS

The new membrane GXP® Dren 20, produced from high density polyethylene (HDPE), thermally welded with high quality textile TYPAR®, demonstrates a very high drainage capacity, 10 l/s/m, owing to which it is universally used in construction. It can constitute protection and dehydration of foundations as well as be applied at waste dumps or in road construction. It is most commonly used in the construction of green roofs with irrigation installations and in green areas located over underground garages.

ADVANTAGES

- high drainage capacity 10 l/s/m
- universal use in construction
- certified material complying with the norm PN EN 13252
- waterproof and water vapour resistant
- the integration with textile TYPAR® saves time at the construction site devoted to unfolding and joining with the consecutive layer
- the foil resistant to root overgrowth



TECHNICAL DATA		
Weight	900 g/m²	1100 g/m²
Material thickness	0,9 mm	1,0 mm
Compression strength	160 kN/m²	200 kN/m²
Embossing height	20 mm	20 mm
Number of embossings	400 per m²	400 per m²
Roll width	2,0 x 12,5 m	2,0 x 10 m
Temperature resistance	-40 to +80°C	-40 to +80°C
Air gap between buckets	14 l/m²	14 l/m²
Drainage capacity (if it's connected to the geotextile)	8 l /s /m 480 l /min /m 28800 l /h /m	8 l /s /m 480 l /min /m 28800 l /h /m

CHEMICAL RESISTANCE

It is resistant to chemical substances, fungi, roots and bacteria present in the ground. It is completely neutral to the natural environment.

GXP® DREN 20 P

WATER RESERVOIR FOR ROOFS AND TERRACES

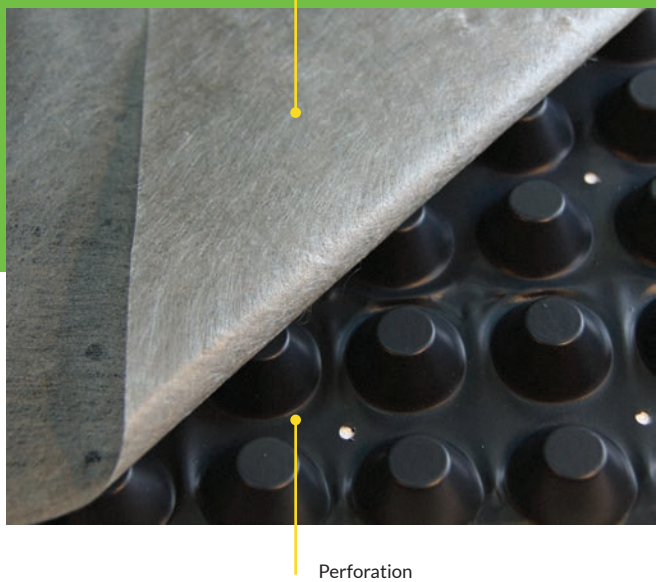
APPLICATIONS AND ADVANTAGES:

APPLICATIONS

GXP® Dren 20 P is a combination of a perforated bucket membrane with geotextile DuPont™ TYPAR®, which constitutes an ideal drainage layer on extensive green roofs, at the same time serving as a filter, a water accumulating tank and a dehydration layer. A durable joint of the perforated bucket membrane with the thermowelded geotextile ensures high easiness during installation at sites as well as accelerates the works.

ADVANTAGES

- ensures water accumulation for plants (intensive vegetation)
- very resistant to compression and breakdowns
- high densification of embossings 400 items/m²
- increased thermal insulation
- limited heat accumulation
- optimal dehydration capacity
- certified material compliant with norm PN - EN 13252



DANE TECHNICZNE		
Weight	900 g/m²	1100 g/m²
Material thickness	0,9 mm	1,0 mm
Compression strength	160 kN/m²	200 kN/m²
Embossing height	20 mm	20 mm
Number of embossings	400 per m²	400 per m²
Roll width	2,0 x 12,5 m	2,0 x 10 m
Temperature resistance	-40 to +80°C	-40 to +80°C
Air gap between buckets	14 l/m²	14 l/m²
Drainage capacity (if it's connected with the geotextile)	10 l /s /m 600 l /min /m 36000 l /h /m	10 l /s /m 600 l /min /m 36000 l /h /m
Water accumulation capacity	6 l/m²	6 l/m²

CHEMICAL RESISTANCE

It is resistant to chemical substances, fungi, roots and bacteria present in the ground. It is completely neutral to the natural environment.

GXP® DREN 40

HIGH DRAINAGE CAPACITY

APPLICATIONS AND ADVANTAGES:

APPLICATIONS

The new membrane GXP® Dren 40 is a retention and drainage module (HDPE) with high water accumulation and load capacity. For applications in intensive green roof systems. The innovative shape and properly selected mixture of hardened polyethylene HDPE ensure extraordinary retention parameters within its class. It is characterized by a very high compression strength, approx. 400 kN/m² (approx. 850 kN/m² after filling with aggregate) as well as extraordinary water accumulation, approx. 15 liters per square meter.

ADVANTAGES

- ensures very high water accumulation for plants (intensive vegetation)
- very high compression strength and breakdown strength
- increases thermal insulation
- limits heat accumulation
- optimal dehydration capacity

TECHNICAL DATA	
Material	HDPE
Embossing height	40 mm
Basis weight	2,3 kg/m²
Material thickness	1,4 mm
Water capacity	15 l/m²
Number of embossings on the panel	162
Maximal load without filling	400 kN/m²
Tensile strength	21 kN
Panel dimensions	2 x 1 m / 2 m²

CHEMICAL RESISTANCE

It is resistant to chemical substances, fungi, roots and bacteria present in the ground. It is completely neutral to the natural environment.

GEO COMPOSITES

INSULATION AND DRAINAGE MEMBRANE

GXP® DREN
GXP® DREN N10
GXP® DREN 1200 DUO

VERTICAL LINEAR DRAINAGE

GXP® DREN 5+5
GXP® DREN 5+5 DUO

DRAINAGE GRID MATS

B 1000
B 2000
B 1000-F

GRILTEX®

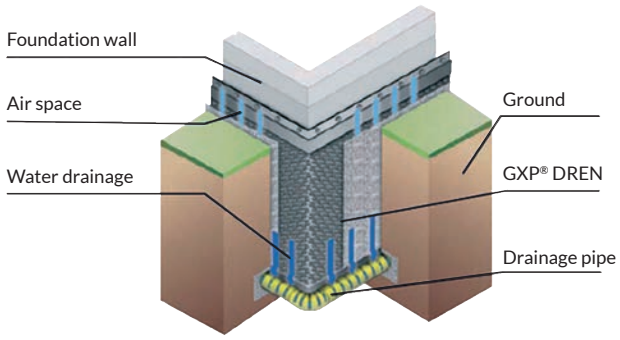
GXP® DREN

INSULATION AND DRAINAGE MAMBRANE

APPLICATIONS AND ADVANTAGES:

APPLICATIONS

The foil pressed from high density polyethylene (HDPE), combined with thermally welded polypropylene geotextile Typar® SF, is assigned for mechanical protection and optimal drainage of foundation walls. The geocomposite GXP® DREN is also perfectly fit for various applications in civil engineering (underground car parks, bridge abutments, terraces, foundations, retaining walls, etc.) as well as for drainage of building constructions.



ADVANTAGES

- the combination of a bucket membrane with a geotextile provides an excellent drainage layer
- the reserve of geotextile 5 cm over the membrane prevents penetration of the filling into the system and facilitates overlapping during a horizontal and vertical use.
- possibility to produce rolls with the length of up to 35 m
- a properly selected geotextile ensures optimal hydraulic capacity as well as optimal puncture resistance
- the structure and the embossing densification ensures very good compression strength

- EASY AND FAST INSTALLATION
- MAINTAINED LINEARITY
- 100% JOINT LEAKTIGHTNESS

TECHNICAL DATA

	5	6	7	8
Geocomposite weight	600 g/m²	700 g/m²	800 g/m²	900 g/m²
Compression strength	230 kN/m²	300 kN/m²	350 kN/m²	400 kN/m²
Emsbossing height	8 mm	8 mm	8 mm	8 mm
HDPE membrane thickness	500 µm	600 µm	700 µm	800 µm
HDPE surface mass	500 g/m²	600 g/m²	700 g/m²	800 g/m²
Air volume between textile and membrane	5,3 l/m²	5,3 l/m²	5,3 l/m²	5,3 l/m²
Drainage capacity	2,1 l/s/m 125 l/min/m 7560 l/h/m			
Width	2,0 m, 4,0 m	2,0 m, 4,0 m	2,0 m, 4,0 m	2,0 m, 4,0 m
Temperature resistance	-40 to +80°C			

CHEMICAL RESISTANCE

It is resistant to chemical substances, fungi, roots and bacteria present in the ground. It is completely neutral to the natural environment.

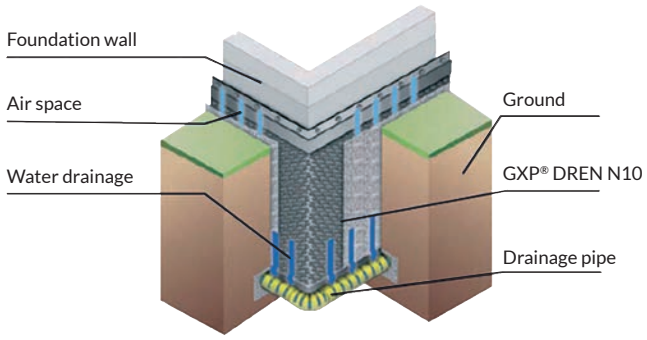
GXP® DREN N10

COMPACT DRAINAGE SYSTEM

APPLICATIONS AND ADVANTAGES:

APPLICATIONS

A pressed waterproof foil made from high density polyethylene (HDPE), with the thickness of 0,6 mm and embossing height of 10 mm, thermally joined with filtration geotextile TYPAR® SF, ensures excellent drainage and mechanical protection for underground foundation sections. The compact drainage system GXP® Dren N10 proves ideal in a broad range of applications, such as basements, underground car parks, roads and green roofs.



ADVANTAGES

- excellent compression strength > 400 kN/m²
- outstanding drainage properties, 50 % higher than in the GXP® DREN variant
- excellent filtration of fine ground particles through the geotextile, without the risk of silting-up
- ensures increased ventilation through a constant empty space
- the reserve of geotextile 5 cm over the membrane prevents penetration of the filling into the system
- perfectly fit for various solutions in civil engineering and for drainage of building constructions

GXP N10 DREN PLUS

A variant integrated with the PE foil, with the thickness of 0,2 mm. Assigned for drainage and protection of foundation walls, when bituminous self-adhesive membrane insulation is applied. GXP Dren N10 ensures the possibility of moving the protective drainage mat, without the risk of it being torn from the wall.

TECHNICAL DATA	
Composite weight	736 g/m²
Compression strength	400 kN/m²
Embossing height	10 mm
Membrane thickness	600 µm
HDPE membrane surface mass	600 g/m²
Air volume between textile and membrane	7,9 l/m²
Drainage capacity	3,5 l/m/s
Width	2,0 x 12,5 m
Temperature resistance	-40 to +80°C

CHEMICAL RESISTANCE

It is resistant to chemical substances, fungi, roots and bacteria present in the ground. It is completely neutral to the natural environment.

GXP® DREN 1200 DUO

NEW INSULATION AND DRAINAGE MEMBRANE

APPLICATIONS AND ADVANTAGES:

APPLICATIONS

GXP® Dren 1200 Duo is a waterproof membrane extruded from high density polyethylene (HDPE), 1,2 mm thick, thermally joined with polyethylene geotextile made from continuous fibres 140 g/m² on the top side and polypropylene or polyester geotextile 250 gm² on the bottom side.

Used as:

an insulation and drainage layer for retaining and foundation walls, bridge abutments, waste dumps, ash collection tanks, floor slabs, tunnels, draining channels, green roofs,

a separation and drainage shield in road, railway and airport foundation constructions,

An increased friction angle between the base and the geocomposite prevents skidding of the geocomposite from slopes under the pressure of the ground.

ADVANTAGES

- a layer protecting against mechanical damage of insulation layers
- a draining layer for high loads
- an anti-root layer
- a sealing and degassing layer for:
  - rubbish dumps
  - waste collection sites
  - industrial tanks

TECHNICAL DATA

Geocomposite weight	1500 g/m²
Compression strength	1500 kN/m²
Embossing height	8 mm
HDPE membrane thickness	1200 µm
HDPE membrane surface mass	1500 g/m²
Air volume between textile and membrane	5,30 l/m²
Drainage capacity	2,10 l/s/m
Width	4 x 10 m* 4 x 20 m*
Temperature resistance	-40 to +80°C

* other sizes on request

CHEMICAL RESISTANCE

It is resistant to chemical substances, fungi, roots and bacteria present in the ground. It is completely neutral to the natural environment.

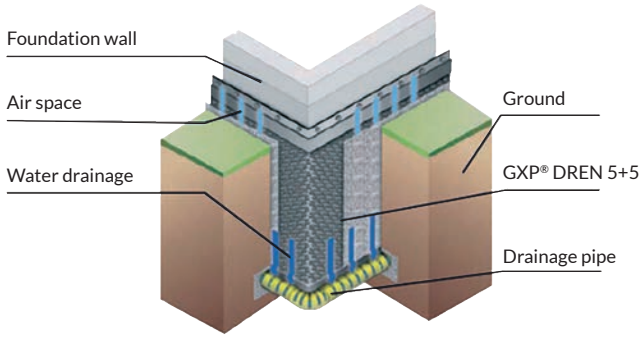
GXP® DREN 5+5

DRAINAGE GEOCOMPOSTE AND FOUNDATION WALL VENTIALTION

APPLICATIONS AND ADVANTAGES:

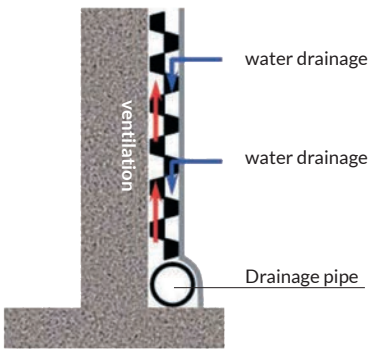
APPLICATIONS

GXP® DREN 5+5 is a combination of a membrane pressed from high density polyethylene (HDPE) with a welded polypropylene geotextile (ref. no. Typar®SF32-40). The geocomposite forms a space constituting a perfect drainage layer and the reserve of geotextile 5 cm over the membrane prevents penetration of the filling into the upper section of the system. A structure of double embossings enables a combination of ventilation functions with water drainage, that is, it ensures optimal ground drainage as well as control of moisture and aeration of the covered surfaces of foundation walls. GXP® DREN 5+5 is applied in civil engineering as well as for drainage of building constructions.



ADVANTAGES

- very resistant to puncture, compressions and tears
- high hydraulic capacity
- facilitates breathing of covered walls
- increases effectiveness of thermal insulation
- the high densification of buckets enables a uniform distribution of loads
- replaces two layers: insulation and drainage, purchased separately



TECHNICAL DATA	
Geocomposite weight	740 g/m²
Compression strength	300 kN/m²
Embossing height	2 x 5 mm
PEHD membrane thickness	600 µm
PEHD membrane surface mass	600 g/m²
PP geotextile surface mass	136 g/m²
Drainage capacity	1,24 l/s/m 86,4 l/min/m 5184 l/h/m
Width	2,0 m, 4,0 m
Temperature resistance	-40 to +80°C

CHEMICAL RESISTANCE

It is resistant to chemical substances, fungi, roots and bacteria present in the ground.It is completely neutral to the natural environment.

VERTICAL LINEAR DRAINAGE

GXP® DREN 5+5 DUO

NEW: LONGITUDINAL DRAINAGE (STREETS, HIGHWAYS, ARTERIAL ROADS, FOUNDATIONS)

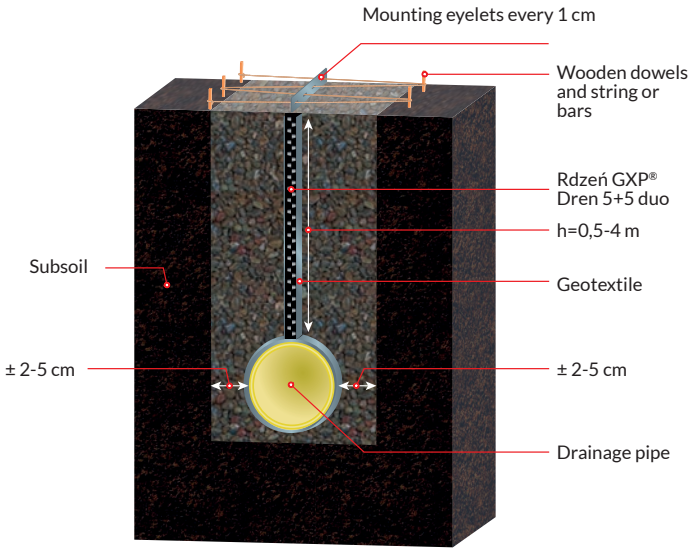
APPLICATIONS AND ADVANTAGES:

APPLICATIONS

The GXP® Dren 5+5 Duo membrane is an innovative product created through welding of a bucket foil with a structure of double embossings with geotextile DuPont™ TYPAR® from continuous polypropylene fibres, welded thermally. This provides the same properties on both sides of the mat and allows an effective longitudinal drainage with the use of pipes of different diameters. In its lower section, the mat is equipped with a special sleeve made of geotextile, used to place and fix the drainage pipe.

ADVANTAGES

- two-side drainage system
- combines surface and vertical drainage as well as a linear water removal system
- combines surface and vertical drainage as well as a linear water removal system
- enables removal of large amounts of water without the necessity of building wider ditches
- ideal for drainage of foundations in vertical systems



TECHNICAL DATA		
	600	**800**
Composite weight	820 g/m²	1020 g/m²
Compression strength	300 kN/m²	400 kN/m²
Embossing height	2 x 5 mm	
Membrane thickness	600 µm	800 µm
HDPE membrane surface mass	600 g/m²	800 g/m²
PP geotextile surface mass	2 x 110 g/m²	
Drainage capacity	3,30 l/m/s	
Widths	1,0 m/ 1,20 m/ 1,50 m/ 2,0 m	
Temperature resistance	-40 to +80°C	

The sleeve for the installation of a drainage pipe with perimeters adjusted to the pipe diameters 50-200 mm.

CHEMICAL RESISTANCE

It is resistant to chemical substances, fungi, roots and bacteria present in the ground. It is completely neutral to the natural environment.

B 1000; B 2000; B1000-F

REINFORCEMENT AND DRAINAGE WITH HIGH WATER FLOWS

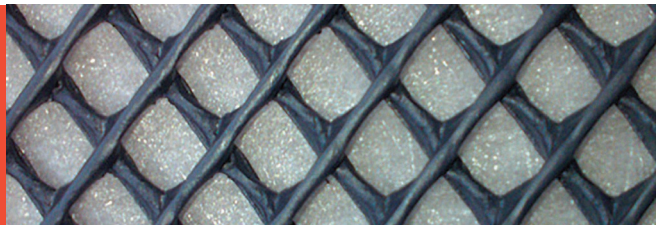
APPLICATIONS AND ADVANTAGES:

APPLICATIONS

Mats facilitating the water flow, securing and stabilizing the work during earthworks. Resistant to chemicals, bacteria and fungi existing in the soil. Characterize in high drainage capacity with high continuous loads.

B 1000

Composition: grid + geotextile
Grid: HDPE material
Surface mass: from 580 g/m²
Geotextile: Typar® SF37 (125 g/m²) or needle punched geotextile, from non-woven material, 100 % polypropylene



B 1000 APPLICATIONS

- retaining walls,
- foundations,
- bridge abutments,
- scarps and slopes

B 1000-F

Composition: geotextile + grid + PE foil
Grid: HDPE material
Geotextile: Typar® SF37 (125 g/m2), non-woven material, 100% polypropylene or needle punch geotextile
LDPE foil, 0,3 mm thick

B 1000-F APPLICATIONS

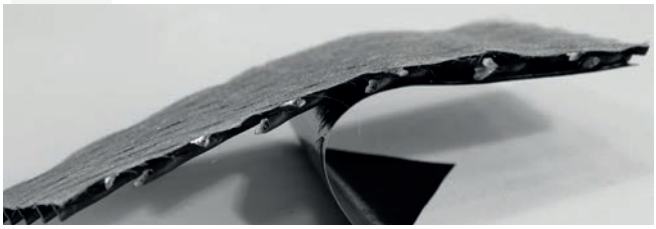
Sealing of draining channels in highway engineering under concrete boards, foundation wall drainage with self-adhesive bituminous insulation.

B 2000

Composition: grid + 2 x geotextile
Gird: HDPE material
Surface mass: from 700 g/m²
Geotextile: 2x Typar® SF37 (125 g/m²) or needle punched geotextile, non-woven material, 100 % polypropylene

B 2000 APPLICATIONS

- drainage under airport aprons,
- earth embankments and dykes,
- surfaces sown with grass,
- dams, green roofs and terraces,
- drainage of roads and highways,
- drainage in pools and ground reservoirs,
- drainage in waste dumps



CHEMICAL RESISTANCE

It is resistant to chemical substances, fungi, roots and bacteria present in the ground. It is completely neutral to the natural environment.

GEO SYNTHETICS

ANTI-ROOT BLOCAKDE

NAPTEX®
NAPTEX® 100

NEEDLE PUNCHED GEOTEXTILES

POLYPROPYLENE GEOTEXTILES
POLYESTER GEOTEXTILES

DRAINAGE AND GRID MATS

GEOGRIDS AND GEOTEXTILES
GEOGRATE
GROUND GRID

GRILTEX®

NAPTEX®

EXCELLENT HIGH QUALITY GEOTEXTILE

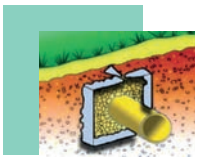
APPLICATIONS AND ADVANTAGES:

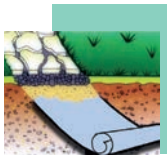
APPLICATIONS

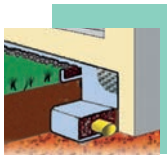
Naptex® is a non-woven geotextile, thermally welded, 100 % propylene. It is a material of a wide application range. Owing to an excellent combination of high initial modulus and high elongation (up to 50 %), as well as a unique structure, it demonstrates superlative mechanical properties in all directions.

FUNCTIONS

Separation
Filtration
Drainage
Protection







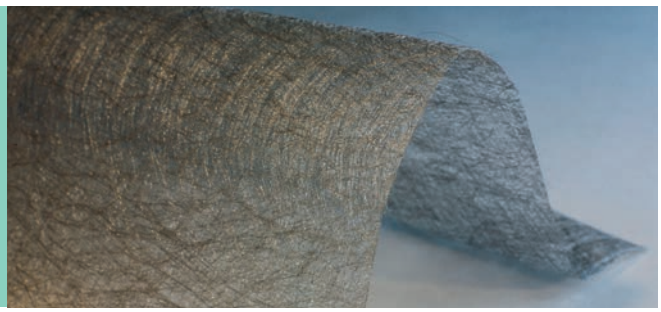
NAPTEX® GEOTEXTILE

Irreplaceable at construction sites.
Ideal in the construction, installation and drainage of:

flat roofs
sports pitches
paving stones and slabs
pavements and paths
in pipe drainage

ADVANTAGES

- high energy absorption capacity
- high initial rigidity modulus
- high elongation at rupture (up to 50%)
- long lasting filtration (resistance to clogging)
- high material structure homogeneity



PRACTICAL INFORMATION:

The production technique of Naptex® geotextile (thermal welding of continuous fibres) provides a lot of possibilities:

- it lowers the size of rolls and transport costs
- it facilitates the manipulation and installation owing to ideal dimensions
- it improves the material processing and cutting (with the use of scissors, a knife or a saw)
- it does not absorb water (which makes it easy to handle the textile even during rain or frost).

TECHNICAL DATA	
Weight	90 g/m²
Material	polipropylen
Breaking strength (EN ISO 103019)	4,7 / 5,3 kN/m²
Dynamic breakdown strength (EN 13433)	45 mm
Static breakdown strength (CBR test) (EN ISO 12236)	0,8 kN
Filtration opening (EN ISO 12956)	175 µm
Water flow speed index (EN ISO 11058)	0,100 m / s

CHEMICAL RESISTANCE

It is resistant to chemical substances, fungi, roots and bacteria present in the ground. It is completely neutral to the natural environment.

ANTI-ROOT BLOCAKDE

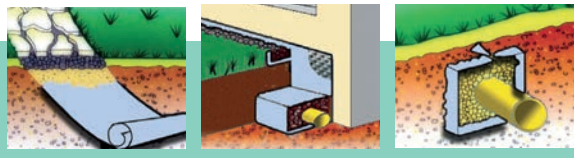
NAPTEX® 100

DURABLE NEEDLE PUNCHED TEXTILE

APPLICATIONS AND ADVANTAGES:

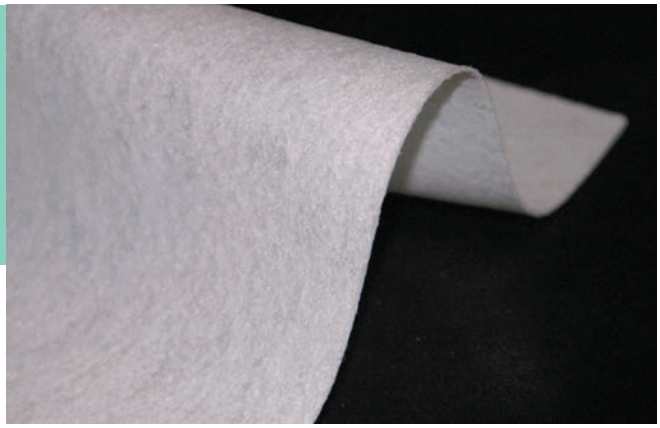
APPLICATIONS

Naptex® 100 is a non-woven geotextile, produced by the method of needle punching, partially thermally hardened, made 100% from polypropylene. Owing to its properties, Naptex® 100 characterizes in multifunctionality and has a wide range of applications, mostly for separation, filtration, reinforcement and stabilization of the ground.



ADVANTAGES

- reinforces the substructure and ensures stability of roads, pavements, drives and car parks
- used under paving stones and slabs For stabilization of the ground with maintained water filtration
- protects the drain, filtrates the water and separates the aggregate around the draining pipe
- in perimeter drainage of foundations, protects the insulation from damage, and the drainage system from clogging
- separates the thermoinsulation layer from the gravel backfilling, at the same time stabilizing the terrace and roof flooring



TECHNICAL DATA	
Weight	90-110 g/m²
Material	polypropylene
Breaking strength (EN ISO 103019)	7,2 / 7,4 kN/m²
Dynamic breakdown strength (EN 13433)	30 mm
Static breakdown strength (CBR test) (EN ISO 12236)	1,1 kN
Filtration opening (EN ISO 12956)	175 µm
Water flow speed index (EN ISO 11058)	0,11 m / s

CHEMICAL RESISTANCE

It is resistant to chemical substances, fungi, roots and bacteria present in the ground. It is completely neutral to the natural environment.

NEEDLE PUNCHED GEOTEXTILES

POLYPROPYLENE AND POLYESTER

APPLICATIONS AND ADVANTAGES:

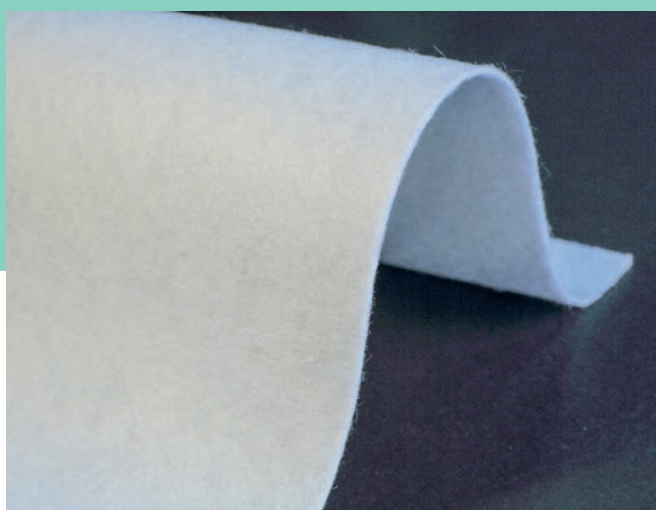
APPLICATIONS

Needle punched geotextiles are irreplaceable for ground stabilization, preventing material mixing as well as filtration and stabilization of the ground and the structure. The ones mostly used are polypropylene textiles (PP), as they are 2 to 6 times stronger than polyester geotextiles (PES).

ADVANTAGES

- forms a barrier between particular ground layers, prevents their mixing
- ensures a maintained stability and load capacity of the ground and the structure
- owing to its hydraulic properties, it is applied in ground structure drainage
- reinforces a low-bearing soil and stabilizes the ground

It is additionally used as a material protecting the geomembranes from puncture and damage



TECHNICAL DATA

	polypropylene	polyester
Weight	90-1200 g/m²	100-1200 g/m²
Material	100% polypropylene	100% polyester
Tensile strength (EN ISO 103019)	8-70 kN/m² 8,2-75 kN/m²	1,3-11,8 kN/m² 1,9-12,7 kN/m²
Filtration opening (EN ISO 12956)	110-70 µm	50-40 µm
Dynamic perforation strength (EN 13433)	28-0 mm	49-8,0 mm
Length	min. 50 m, max 200 m	
Width	min. 1 m, max 6,2 m	

CHEMICAL REISTANCE

It is resistant to chemical substances, fungi, roots and bacteria present in the ground. It is completely neutral to the natural environment.

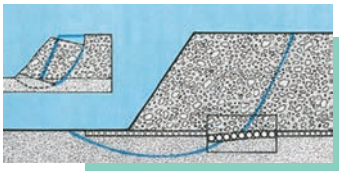
GEOFABRICS AND GEOGRIDS

INEXPENSIVE SOIL STABILIZATION TECHNIQUE

APPLICATIONS AND ADVANTAGES:

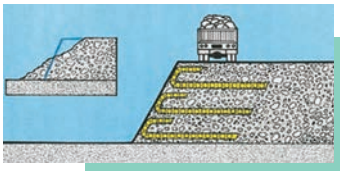
MORE EFFECTIVELY:

- increase the embankment height
- enable the formation of more steep embankments
- no surface irregularities after installation
- immediate effect and efficiency



EASIER:

- comfortable and precise calculations of the earthworks
- simple unwinding from the rolls
- easy manipulation and arrangement
- damping of vibrations during and after arrangement
- possibility to build in areas hard to realize by means of traditional materials



CHEAPER:

- comfortable and precise calculations of the earthworks
- reduced need for natural resources (aggregates)
- simple unwinding from rolls
- easy manipulation and arrangement
- damping of vibrations during and after arrangement
- possibility to build in areas hard to realize by means of traditional materials

APPLICATIONS

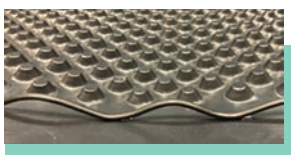
Reinforcing geofabrics and geogrids are used for the construction of slopes and stabilization of embankments and banks on weak soils in an effective, easy and inexpensive way. The reinforcement effect is achieved through stopping and limiting the aggregate shift.

REINFORCING GEOFABRICS ARE APPLIED IN:

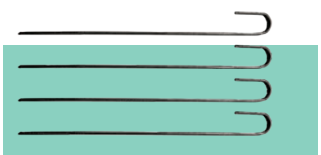
- construction and reinforcement of slopes
- stabilization of embankments
- construction and reinforcement of roads on low-bearing terrains
- reinforcement of foundations in areas with low bearing capacity
- construction of platforms
- reinforcement of airstrips in airports

ACCESSORIES

GXP® Plus Fix



Mounting pins



GEOGRATE

EROSION PROTECTION OF SLOPES

APPLICATIONS AND ADVANTAGES:

APPLICATIONS

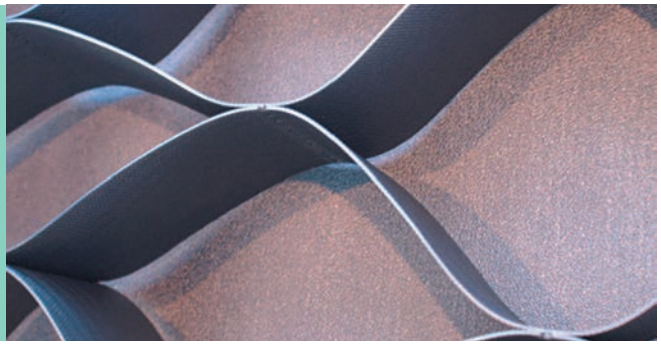
Geograte protect and secure the slopes from erosion; a cellular system in the geograte solves problems connected with maintaining the soil on slopes, stops erosion, protects scarps and quays. The cells of the geograte protect the soil from sliding down. They are also used in the construction of technological, access, dirt and forest roads.

ADVANTAGES

- easy and fast arrangement technique
- very high chemical resistance
- replaces concrete boards, without the “curling” effect

ACCESSORIES

- steel anchoring pins
- galvanized anchoring pins
- band clips
- mounting frame

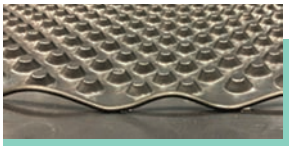


GEOGRATE TYPES

- heights 5 - 30 cm
  - with a small mesh cell 0,16 x 0,16 m
  - with a medium mesh cell 0,25 x 0,35 m
  - with a big mesh cell 0,40 x 0,50 m
- with perforated, full or incised walls

ACCESSORIES

GXP® Plus Fix



CHEMICAL REISTANCE

It is resistant to chemical substances, fungi, roots and bacteria present in the ground. It is completely neutral to the natural environment.

SEALING GEOSYNTHETICS

HDPE GEOMEMBRANE

PVC GEOMEMBRANE

GRILTEX®

GEOMEMBRANE HDPE

STRONG AND DURABLE INSULATION

APPLICATIONS AND ADVANTAGES:

APPLICATIONS

The HDPE geomembrane is made from high density polyethylene and constitutes a hydroinsulation protection of the soil. It is used in waterproof and gas proof shields.

ADVANTAGES

- UV resistant
- fully resistant to most chemical compounds and alkalies
- the low weight and big width of the rolls enable an efficient performance of the works
- perfect for protection from aggressive chemicals, including petroleum and animal compounds
- very resistant to tearing
- does not biodegrade
- environment-friendly
- long durability – once applied, it works for many years

APPLICATIONS

- Building insulation
  - foundations and basements
  - terraces and balconies
  - transitions of pipes and other conduits in foundations
- Insulation engineering structures
  - water tanks
  - fire tanks
  - oil tanks
  - retention tanks
- Insulation in environment protection
  - evaporation tanks
  - sewage treatment plants
  - waste dumps
  - gas stations
  - water dams
  - flood banks

A list of the chemical compounds to which the HDPE membrane is resistant is available on request.

SEALS

The joining of the geomembrane bands takes place through welding by means of specialized equipment, and the tightproofness of the welds is verified with the use of pressure tests or vacuum shades.

TECHNICAL DATA

	1	1,5	2	2,5
Thickness (PE EN 1849-2) (mm)	1,0 mm	1,5 mm	2,0 mm	2,5 mm
Basis weight (g/cm³)	≥ 0,94			
Strength at elasticity limit (EN ISO 527) (MPa)	> 24,7 21,9	> 22,8 22,3	> 24,7 23,4	> 24,2 23,4
Tensile strength (EN ISO 527) (MPa)	> 29,6 28,8	> 27,6 30,7	> 30,8 31,5	> 230,8 31,5
Unit elongation (EN ISO 527) (MPa)	> 800 %			

CHEMICAL RESISTANCE

It is resistant to chemical substances, fungi, roots and bacteria present in the ground. It is completely neutral to the natural environment.

GEOMEMBRANE PVC

DURABLE AND ELASTIC INSULATION

APPLICATIONS AND ADVANTAGES:

APPLICATIONS

The PVC geomembrane is a synthetic foil made of polyvinyl chloride, used in civil and water engineering as well as in environment protection as a barrier or a barrierelement preventing water (or other liquid) rising or penetration.

ADVANTAGES

- high elasticity
- very good adhesion of the substrate
- resistant to non-uniform ground settlement or deformation
- owing to high specific gravity, it is ideal for water tank insulation
- owing to its high elasticity, it gives the possibility to prepare large size sheets beforehand to be directly arranged at the site

SEALS

The joining of the geomembrane bands takes place through welding by means of specialized equipment, and the tightproofness of the welds is verified with the use of pressure tests or vacuum shades.

USES:

- Building insulation
  - foundations and basements
  - terraces and balconies
  - transitions of pipes and other conduits in foundations
- Insulation engineering structures
  - water tanks
  - fire tanks
  - oil tanks
  - retention tanks
  - drainage tanks
- Insulation in environment protection
  - evaporation tanks
  - sewage treatment plants
  - waste dumps
  - gas stations
  - water dams
- Recreation, gardening, sport
  - fish ponds
  - garden ponds
  - swimming pools
  - fountains

A list of the chemical compounds to which the PVC membrane is resistant is available on request.

TECHNICAL DATA

		0,8	1	1,5	2
Thickness (PE EN 1849-2) (mm)		0,8 mm	1,0 mm	1,5 mm	2,0 mm
Basis weight (kg/m²)		1,3 kg/m²	1,6 kg/m²	2,4 kg/m²	3,2 kg/m²
Max. tensile force (PN-EN ISO 12311-2)	N / 50mm	≥250 ≥250	≥250 ≥250	≥500 ≥500	≥1000 ≥1000
Elongation at rupture (PN-EN ISO 12311-2) (%)	along across	≥100 ≥150	≥100 ≥150	≥100 ≥180	≥100 ≥200
Tensile strength (PN-EN ISO 527 1/3) (MpA)	along across	≥15			

CHEMICAL RESISTANCE

It is resistant to chemical substances, fungi, roots and bacteria present in the ground. It is completely neutral to the natural environment.

IMPLEMENTATION DEPARTMENT

BET ON QUALITY AND ENJOY IT FOR YEARS

The excellent quality of our services is an effect of cooperation between installation and welding specialists and the design office as well as a qualified engineering staff.

We make seals by means of all kinds of geosynthetics, owing to which we can offer solutions for most geotechnical problems. Our executive department realizes complex orders: from necessary preparatory works to scrupulous tests, examinations and certificates of compliance after the completion of the project.

GRILTEX®

SERVICES

ENRIRONMENT PROTECTION AND INFRASTRUCTURAL BUILDING ENGINEERING

ENVIRONMENT ENGINEERING

In infrastructural building engineering, we can take advantage of our expert knowledge and many year experience in order to select optimal solutions for the changing geological and space conditions. We think about the future and undertake actions aiming at maintaining the natural environment in a state of balance. Environment engineering is concerned with the next generations – we support a conscious use of the resources of nature and maintaining its ability to self-regenerate and self-purify.

Waste dumps

We offer our clients solutions which facilitate the proper and safe utilization of waste. The modern materials effectively separate the dump from the earth, subterranean waters and ground waters.

Water tanks

Sealing water tanks with highest quality materials ensures retention of rain water as well as limits the penetration of polluted water into the soil.

Protection of ditches

We properly secure the road constructions, which in the future will protect them from damage, such as landslide or collapsing of earth.

Flood banks

Flood banks are constructions which surround terrains exposed to flooding. In newly-created as well as already existing banks, sealing is applied. The technology choice depends mostly on the ground conditions.

INFRASTRUCTURAL BUILDING ENGINEERING

In infrastructural building engineering, we can take advantage of our expert knowledge and many year experience in order to select optimal solutions for the changing geological and space conditions.

Storage reservoirs

Storage reservoirs used for retention of precipitation and snowmelt waters are insulated by us in a way which prevents flooding and limits the effects of drought.

Ditch protection

The proper protection secures the road construction against damage, such as landslide or collapse of earth layers.

Car park and square protection

The properly selected protection increases the strength of the surface and as well as its resistance to vehicle mass, which prevents deformations and prolongs the life of the construction.

Water and fire tanks

Fire tanks ensure an emergency access to the proper amount of extinguishing water in a short time. We guarantee that the seals made by us are in agreement with all the quality and safety norms.

AGRICULTURE

Agriculture has a big effect on the formation of the natural environment, as it directly uses its resources in production processes. Animal production manufactures large amounts of natural fertilizers rich in nitrogen and phosphorus, which, inappropriately stored, can constitute the source of environment pollution, especially its waters. That is why we should devote a special attention to the performed insulations. Due to this significant effect of agriculture on the natural environment, we offer our clients solutions which will facilitate the proper and safe utilization and storage of waste.

Biogasworks

The aim of the existence of agricultural biogasworks is mostly reduction of the methane emission and utilization of waste, and at the same time production of biogas. The tanks made of very durable membranes are used for biogas storage. Usually, they are applied as a buffer for devices using biogas as fuel. The many-year experience as well as pioneering realizations of biogasworks insulation in Poland lets us offer our clients the best and most innovative solutions in the field.

Manure pits - Lagoons

Lagoons are a kind of ground tanks made on the terrain surface in the form of a trough resembling open fire pools. The most important and necessary element of a lagoon is tight proof insulation, which completely cuts off the tank from the ground, protecting the soil from contamination. The lagoons built by us are of the highest quality and they fulfil all the necessary norms for the applied materials, and the many-year experience as well as the leading position in the insulation field allows us to offer our clients the best and most innovative solutions in the field.

Water tanks

Sealing water tanks with highest quality materials ensures retention of rain water as well as limits the penetration of polluted water into the soil.

SERVICES

ENRIRONMENT PROTECTION AND INFRASTRUCTURAL BUILDING ENGINEERING

SPORT AND RECREATION

Griltex offers a range of solutions for sport and recreation building engineering to be used in urban and landscape projects. Our solutions focus on the creation of perfect drainage, filtration and stabilization in order to maintain the optimal conditions with a simultaneous reduction of the building and maintenance costs.

Golf courses

Supplying the irrigation installation with water is the most important issue connected with the construction of a golf course. Sealing of water tanks with highest quality materials ensures rain water retention as well as limits the penetration of **polluted water into the soil.**

Sport pitches

Our solutions focus on the creation of perfect drainage, filtration and stabilization in order to maintain the optimal conditions with a simultaneous reduction of construction and maintenance costs.

Parks

Geosynthetics play an important role in the realization of landscape formation projects, regardless of whether they concern erosion control, tree root protection, ground stabilization, permeable pavements, green roofs or draining ponds and embankments. Taking advantage of the experience of Griltex, its knowledge as well as products developed at the leading position in other market sectors, we have created the best team supporting the executive activities with the use of geosynthetics on the landscape architecture market.

Horse ranches

The ground reinforcement performed though welding of geosynthetics with very high durability as well as their exceptional energy absorption allow a long term use under such extreme conditions. At a horse ranch hall, the geotextile is welded band onto band, leaving no free areas, where the material could shift under the effect of the beats of horse hooves. The welding of geotextile layers also eliminates the risk of the material's tucking during a shift of the fill material in the form of quartz four.

HOUSING

We make sure that our solutions for housing are not only effective and safe but that they also fulfill the esthetic requirements and increase the quality of life as well as comfort of the tenants.

Green roofs

Extensive and intensive green roofs recreate the biologically active surface – we provide the vegetation with optimal conditions of growth owing to the applied solutions and materials.

Flat roofs

The choice of a flat roof brings many advantages: from bigger utilitarian surfaces to the possibility of creating an environment-friendly green roof. A properly installed hydroinsulation and a water drainage system make it possible to avoid the later occurring defects and reparations.

Balconies

Insulation under ceramic tiles prevents water migration, forming a barrier against its penetration into the ground. In this way, we protect the flooring construction from cracking and our client – from costly repairs.

Foundations

A properly installed waterproof insulation of the foundations prevents problems related to humidity. A contractor experienced in executive works is a guarantee of a thought-up concept and project of the sealing construction.

INDUSTRIAL BUILDING ENGINEERING

We offer our clients from the industrial sector the realization of even the most demanding investments, and the high level of experience possessed by our sealing department can be verified by the references from the most difficult project executions in Europe.

Flat roofs

A flat roof is a practical and economical solution but only with a perfectly installed hydro- and thermoinsulation. The sealing section carefully chooses the technology and high quality materials, which will work best with the client's investment.

Water and fire tanks

Fire tanks provide industrial plants with an emergency access to the proper amount of extinguishing water in a short period of time. We guarantee that the seals performed by us are in agreement with all the norms of quality and safety.

Fuel tanks

We provide an effective protection of fuel tanks so that they fulfill the most severe technical norms. Our modern solutions prevent the hazard for people as well as thenatural environment which can be caused by uncontrolled fuel leaks.

GRILTEX® Polska Sp. z o.o.

ul. Obornicka 7
Złotkowo
62-002 Suchy Las

tel. +48 61 655 37 51
tel. kom. +48 600 078 283
sealing department: +48 600 078 290

Sealing: serwis@griltex.pl
Sales department: biuro@griltex.pl
Export: export@griltex.com

www.griltex.pl
www.griltex.com