

# DRENTEX PROTECT PLUS

DRENTEX PROTECT PLUS is a sheet drain made up of a three-dimensional high density polyethylene (HDPE) strcture with a polypropilene geotextile mat on one side.

#### **ADVANTAGES**

- The non-woven propylene textile acts as a water filter to prevent soil from blocking drainage, while the polyethylene dimples guide and drain off water. The entire system drains off water and protects the waterproofing on walls.
- A stable and reliable, rot, root and fungi-proof drainage system
- Because all the dimples of the structure are connected directly to the geotextile mat, high compressive strength is provided to ensure the drainage volume is not reduced by pressure from the soil.
- Easy to transport and install



#### **APPLICATION**

· Wall drainage, low water collection.

### **REGULATIONS**

• Quality Management System according to the requeriments of ISO 9001:2008 standard.

## **Drainages Protection Membranes HDPE**



#### **INSTALLATION**

- SUBSTRATE: must be firm, even, clean and free from loose materials or any construction debris on surface.
- Prior to application, the wall should be protected with an Emufal TE- type bituminous paint (in areas with low humidity) or waterproofed (e.g with Texself self-afhesive membranes, in areas with greater water build-up), given that the drainage system filters and channels water, but does not waterproof.
- DRENTEX PROTECT PLUS rolls are overlapped by unsticking some 10 cm of geotextile mat from both edges, nesting the dimples, i.e. fitting one into the other, and then reprotecting with thw unstuck geotextile mat.
- WALLS INSTALLATION:
- The roll can be applied horizontally or vertically.
- Horizontal Application: Star application at the bottom of the wall. Fill in with soil as the Drentex Protec Plus sheet is installed.
- Vetical Application: The overlap should be applied in the opposite direction to runoff. In this way, water leakage is minimised behind the drainage system.
- On the top the sheet must be mecahnically fixed by a profile like DRENTEX PERFIL or single fixations DRENTEX FIJACION The profile DRENTEX PERFIL avoids contamination on the chamber created by the DRENTEX PROTECT PLUS
- On the bottom of the wall it will be advisable to install a drainage pipe.
- Lastly, compact the surrounding soil to te ensure optimun and correct drainage.



## **Drainages Protection Membranes HDPE**



## PACKAGING AND STORAGE

	DRENTEX PROTECT PLUS	
Colour	Black	
g/sqm	600	
Dimples height at 2 kPa (mm)	7,5	
Length (m)	20	
Width (m)	2	
sqm/rollo	sqm/rollo 40	
sqm/pallet	240	
Roll weight (kg) 24		

Storage: Must be stored on its original packaging in a dry place and protected from the weathering.

## **Drainages Protection Membranes HDPE**



## **TECHNICAL PROPERTIES**

PROPERTIES OF HDPE DIMPLE MEMBRANE				
PROPERTIES	UNIT	Test Method	DRENTEX PROTECT PLUS	
Compressive strength	KN/m²	-	120 ± 30	
Weight	kg	EN ISO 9864	400 ± 50	
Dimples height at 2 kPa	mm	EN ISO 9863-1	7,5 ± 1	
Tensile strength (LxT)	KN/m	EN ISO 10319	9 -2 / 9 -2	
Elongation	%	EN ISO 10319	50 ± 15 / 55 ± 15	
PROPERTIES OF THE POLIPROPYLENE GEOTEXTILE				
PROPERTIES	UNIT	Test Method	DRENTEX PROTECT PLUS	
Weigth	g/m²	EN ISO 9864	100 ± 10	
Tensile strength (LxT)	kN/m	EN ISO 10319	6 -2 / 6 -2	
Elongation (LxT)	%	EN ISO 10319	45 ± 30 / 45 ± 30	
Static Puncture Resistance CBR	N	EN ISO 12236	1000 -175	
Dynamic Puncture Resistance (Cone)	mm	EN ISO 13433	38 +8	
Water permeability	mm/s	EN ISO 11058	100 -35	
Opening size O90	mm	EN ISO 12956	90 ± 35	
Durability		EN ISO 12224	To be covered in 14 days after installation	
HYDRAULIC PROPERTIES				
PROPERTIES	UNIT	LOAD	DRENTEX PROTECT PLUS	
Vertical drainage i = 1	I/m⋅s	A 20 kN/m <sup>2</sup>	1.45	
Vertical drainage i = 1	I/m⋅s	A 50 kN/m <sup>2</sup>	1.2	
Vertical drainage i = 1	I/m⋅s	A 100 kN/m <sup>2</sup>	0.5	
Horizontal drainage i =0,1	I/m⋅s	A 20 kN/m <sup>2</sup>	0.4	
Horizontal drainage i =0,1	I/m⋅s	A 50 kN/m <sup>2</sup>	0.25	
Horizontal drainage i =0,1	I/m⋅s	A 100 kN/m <sup>2</sup>	0.15	
Horizontal drainage i =0,04	I/m⋅s	A 20 kN/m <sup>2</sup>	0.2	
Horizontal drainage i =0,04	I/m⋅s	A 50 kN/m <sup>2</sup>	0.15	
Horizontal drainage i =0,04	I/m⋅s	A 100 kN/m <sup>2</sup>	0.1	

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