## PROTECTION AND DRAINAGE

Dimpled membranes



guttabeta® Drain/DrainV

Dimpled membrane in HDPE for drainage of underground walls and roof gardens

guttabeta® Drain/Drain V is the protective membrane par excellence in all construction sites where the technical component is important in terms of drainage capacity and mechanical strength.

## **ADVANTAGES**

- Guarantees the maintenance of high draining capacity.
- Excellent mechanical resistance.
- Perfect for dry roof gardens, as an alternative to the filtering layer.
- Light and easy to handle.





### Laying instructions

guttabeta® Drain/Drain V consists of a layer of geo-textile fabric in polypropylene and a dimpled membrane made of special high-density polyethylene (HDPE).

Thanks to special orthogonal discharge channels, it ensures excellent drainage by forming a chamber that always stays empty, thus allowing higher volumes of drained water compared to traditional dimpled membranes.

The geotextile ensures greater efficiency of the drainage system in time as it prevents the gap from clogging up with the finer soil particles.

#### Laying for the protection of foundation wall waterproofing

- 1) Unroll the rolls of guttabeta® Drain/ Drain V with the geotextile fabric facing toward the ground, overlapping the edges by at least 20 cm. For greater protection, join the two edges using waterproof bituminous strips.
- 2) Fix guttabeta® profile to the edge and nail it down using the JNH 40 plugs or steel nails.
- 3) Form a suitable water collection and drainage tube at the foot of the foundation, then fill it in with soil.
- 4) Prior to the fixing, make sure it is compatible with the waterproofing system of the wall.

#### Laying for "dry" roof gardens

1) Unroll quttabeta® Drain/Drain V on top of the waterproofing layer, overlapping the rolls by at least 20 cm. To make the overlapping edges stick better to each other, apply the bituminous strips. Turn up guttabeta® Drain/Drain V by about 20 cm along the side walls. 2) Position the finishing layer of soil or gravel.



# guttabeta® Drain/Drain V

#### Technical data

	DRAIN	DRAIN V
Membrane material	High-density polyethylene (HDPE)	
Draining material	Continuous filament polypropylene	Needle-punched polypropylene
Colour	Black	
Material thickness	approx. 0,6 mm	approx. 0,5 mm
Fabric weight	approx. 140 g/m <sup>2</sup>	approx. 110 g/m <sup>2</sup>
Resistance to compression	>300 kN/m² (30 t/m²) approx.	>230 kN/m² (23 t/m²) approx.
Dimple height	approx. 8 mm	
Number of dimples per m <sup>2</sup>	approx. 1860	
Air volume between dimples	approx. 5,5 l/m <sup>2</sup>	
Drainage capacity	approx. 4,6 l/s/m	
Thermal stability	From -40°C to +80°C	
Physical-chemical properties	Resistant to chemical agents, resistant to roots, does not pollute the water-bearing stratum, resistant to contamination from fungi and bacteria, non degradable	
Combustion class	F - DM 15/03/05	
Size (x 20 m)	2,0 x 20 m	
Dimensional tolerances	± 4%	
Packing	6 rolls	

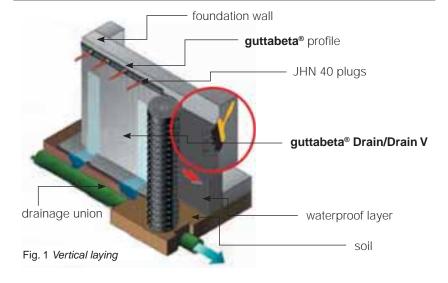




Fig. 2 Horizontal laying



