



# IDROTER

CATALOGO PRODOTTI

2009

DRENAGGIO TERRENI

**IDROSAC 1.000**

*products are covered by international patent*

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## IDROSAC 1.000

The simple, lightweight and economical system to implement drainage planar horizontally

**Applications:** Hanging Gardens, waterproofing liner protection



**How it works:** polystyrene chips contained within IDROSAC give the product a good resistance to crushing and a large amount of voids that can capture water in the soil and channel it rapidly within the geocomposite into the drains. The bags of the product consists of a layer of geotextile fabric with function of filter ground-water placed on a sturdy polyethylene square mesh grid in order to allow radial inflow of water from one product to another.

**Package size:** flexible nonwoven bags shavings saturated with polystyrene

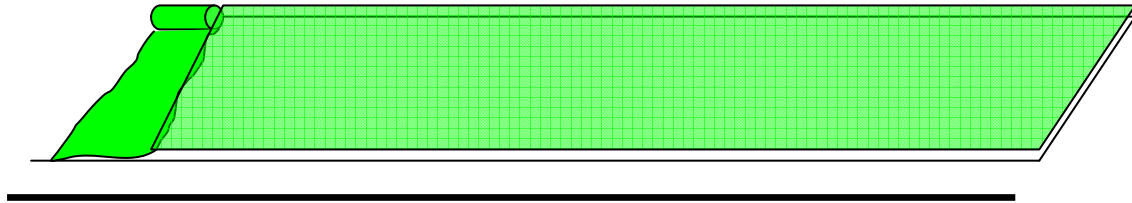
(Height = 300 mm warheads), length = 2,000 mm Width = 1.000 mm



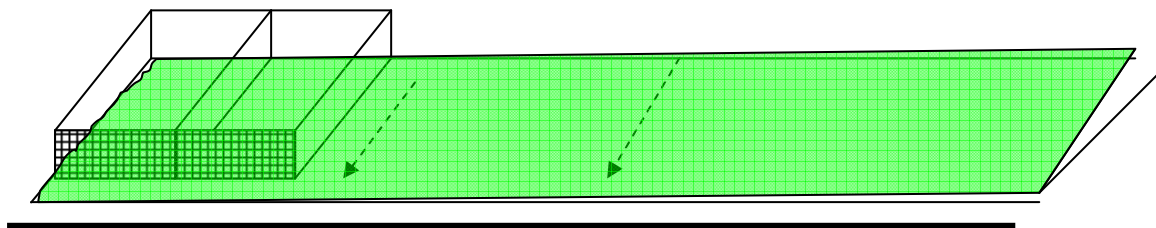
IDROTER di Martinelli Francesco  
Via Tevere 3-35030 Rubano (PD)-ITALY- phone 049/8979925 fax 049/5224306  
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## EXAMPLE OF PROTECTION AND DRAINAGE IN THE GARDEN WALL INSULATION WATERPROOF

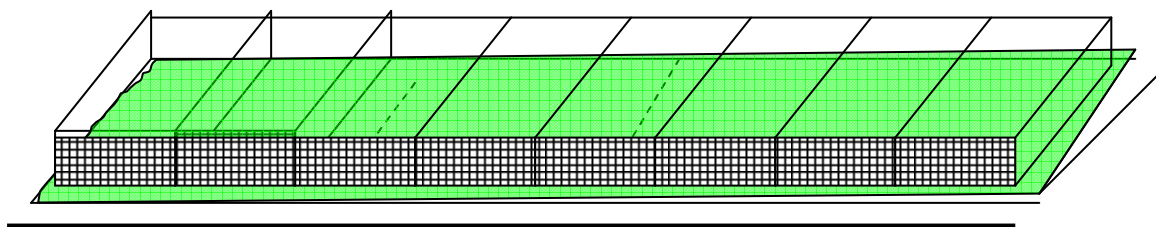
Stretches the sheath waterproof rolls in the traditional manner over the entire surface to be waterproofed (this is sheathed with bitupolimerica hot junction, or with other material HD PE, PVC)

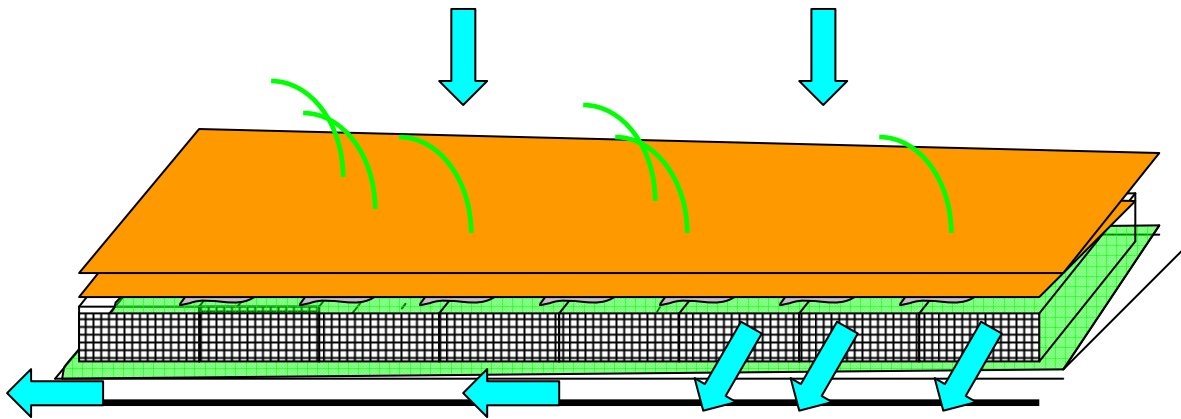
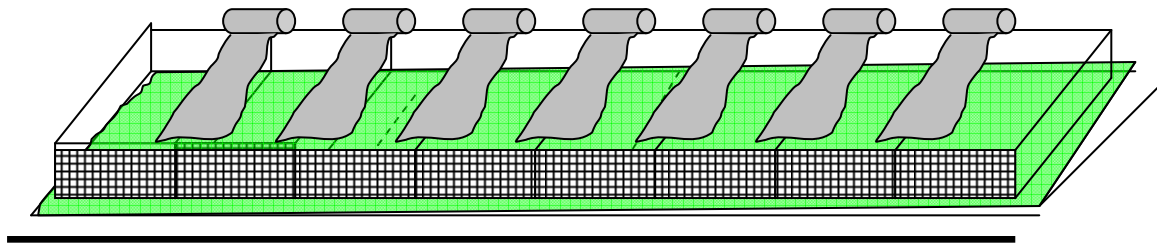


1) Prepare the laying surface, taking care to clear it from sharp objects, bricks and others that might damage the foundation-laying.



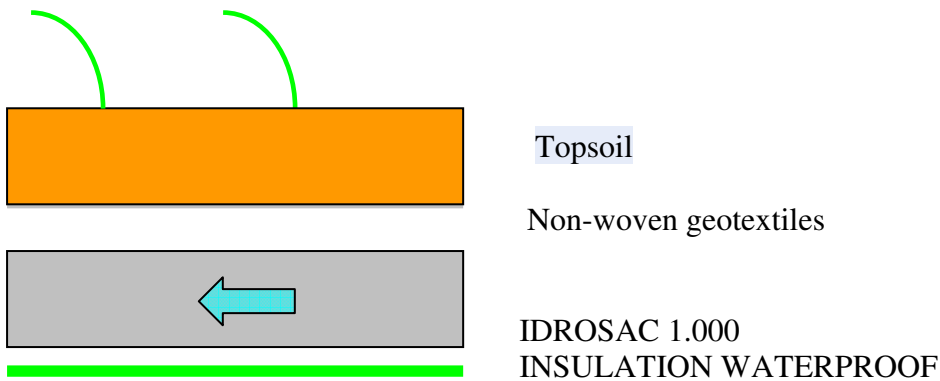
2) settle the geocomposites IDROSAC 1000 horizontally making sure to have placed the dark net perpendicular to maximum slope of the substrate, once placed all products add the backfilling with soil excavated, after stretch of an additional layer of non-woven geotextile on the junction.





3) Finally, is placed a layer of soil of about 30 -50 cm

### Stratigraphy of hanging garden



**IDROSAC 1.000**

**Geosynthetic flexible with high index planar voids for drainage**  
**Applications: green roofs, waterproof protective sheaths**

**DATA SHEET**

**Width:** 1.000 mm

**Length:** 2,000 mm

**Depth tested:** 300 mm

**Weight:** 5.0 kg

**GEOTEXTILE FOR COATING**

Type: continuous filament spunbonded needle-punched geotextile mechanically

Raw material: polypropylene

Weight: between 125 and 155 g/m<sup>2</sup>

Thickness (at 2 kPa): between 1.0 and 1.2 mm

Water permeability (at 2 kPa): 100 l/s/m<sup>2</sup> with  $\Delta h = 50$  mm

Effective diameter of pores: between 100 and 105  $\mu$ m

Tensile Strength: from 9.5 and 11.5 kN / m

Elongation (long / transverse): 90 / 75%

COVERING THE HEADS Geogrids

**BLACK COVER IN GEOGRID OF HEADS**

mesh square / rectangular with dimensions able to retain the draining plastic core

Raw material: polyethylene / polypropylene

**LINKING GEOTEXTILE/GEOGRID ON THE HEADS**

The geotextile filter is sewn to the geogrid by multifilament and monofilament polyethylene polypropylene, so as to prevent the leakage of drainage material.

**DRAINAGE CORE (BULK SHAPED ELEMENTS OF SYNTHETIC RESIN)**

**HYDRAULIC PERFORMANCE OF CORE DRAINAGE**

Hydraulic gradient ( $\Delta h/L$ )	0.35	0.75	1.5	3	6.8
Permeability K (m/s)	$2.8 \times 10^{-4}$	$4.2 \times 10^{-4}$	$5.81 \times 10^{-4}$	$7.99 \times 10^{-4}$	$1.10 \times 10^{-3}$

These permeability values are obtained through laboratory tests with permeameter cell.