

**our engineering  
structure solutions**



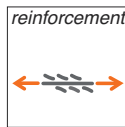
# Storage cells, compartments

## Our products

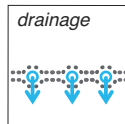
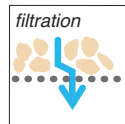
- **bontec® force HS or SG**  
p.50, 51
- **teradrain® FDF300-T**  
p.55



## Stabilizing and draining the clay foundations of the cell



**Polyester or polypropylene woven:**  
**bontec® force HS or SG** ● reinforcement



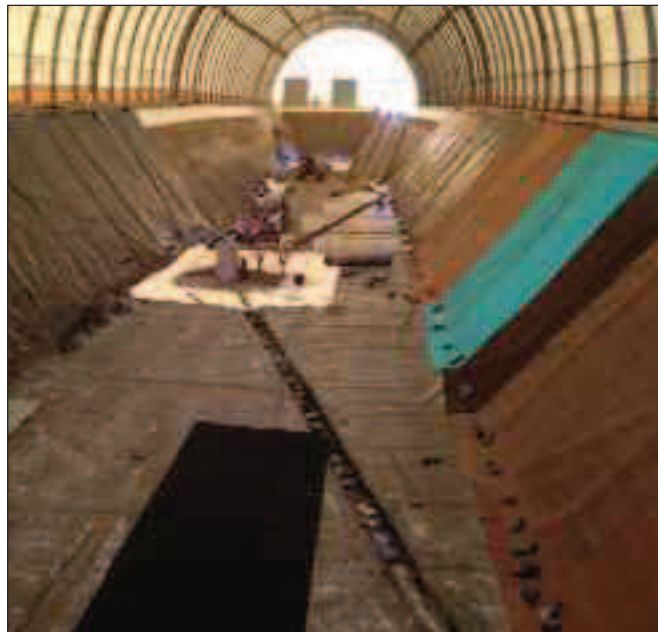
**Sheets and screens made of  
a needle-punched nonwoven composite with a  
network of mini-drains:**  
**teradrain® FDF300-T** ● filtration  
● drainage

## Our specifications

- ▲ **bontec® force HS or SG**  
p.104
- ▲ **teradrain® FDF300-T**  
p.105



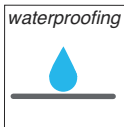
The soils supporting geomembrane sealing systems must be stable and drained to prevent any damage. The stability of the bottom of excavations in land with poor loadbearing qualities or a risk of collapse can be achieved by any conventional technique or advantageously and economically with **bontec® Force HS** or **SG** reinforcing sheets. Draining bases, drainage trenches, facing membranes and trench drains can be executed easily and quickly with sheets and screens made of a needle-punched nonwoven composite with a network of mini-drains: **teradrain® FDF300-T**.



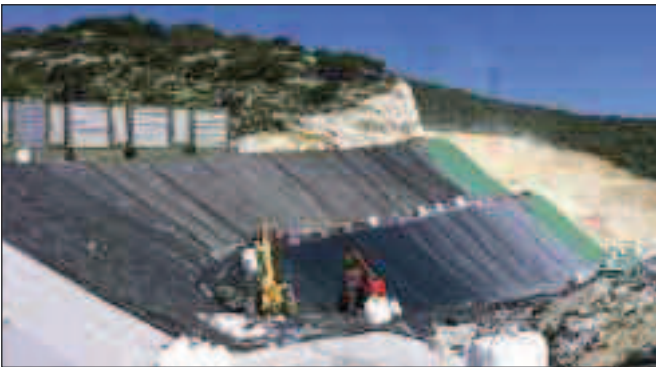


## Storage cells, compartments

### Cell waterproofing



- Puncture-resistant bentonite geocomposite:**
- passive waterproofing
- Heat-sealable geomembrane:**  
**teraline® HDPE**
- active waterproofing



Waterproofing is a demanding function which allows no approximation. A hole the size of a one euro coin will let through about one cubic metre of water per hour.

The system design, choice of product, laying method and quality of the installation team are decisive.

**teraline® PVC** and **HDPE** geomembrane liners are heat-sealable products allowing exhaustive quality control of sealing:  
**teraline® PVC and HDPE.**

#### Our products

- **teraline® HDPE**  
p.71
- **teradrain® D800-T**  
p.55



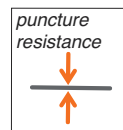
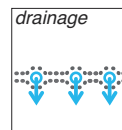
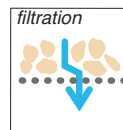
#### Our specifications

- ▲ **teraline® HDPE**  
p.105
- ▲ **teradrain® D800-T**  
p.106



### Protection of the geomembrane liner under bottom drainage

- Sheets made of a needle-punched nonwoven composite with a network of mini-drains:**  
**teradrain® D800-T**
- filtration
  - drainage
  - puncture resistance



The geomembrane liner must be protected from the draining base at the bottom of the compartment by a thick, needle-punched, nonwoven puncture-resistant geotextile, **bontec® protec VNW** 600 g to 2000 g, with a non-destructive earthworks technique.

Puncture resistance and part of the draining base can be advantageously and economically implemented with a sheet in needle-punched nonwoven composite with a network of mini-drains:

**teradrain® D800-T.**



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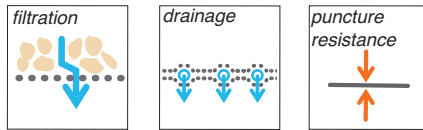


# Storage cells, compartments

## Protection of the geomembrane on embankments

### Our products

● teradrain®  
D800-T UV  
p.55



**Sheets made of a needle-punched nonwoven composite with a network of mini-drains:**  
**teradrain® D800-T UV**

- filtration
- drainage
- puncture resistance

On embankments, puncture resistance and part of the draining base can be advantageously and economically implemented with a sheet in needle-punched nonwoven composite with a network of mini-drains:  
**teradrain® D800-T UV.**

### Our specifications

▲ teradrain®  
D800-T UV  
p.106  
▲ joints on  
concrete  
p.106



## Joining the geomembrane liner to structures

**Foam and stainless steel joint fastening kit:**  
60 x 4 mm joint, 40 x 4 mm stainless steel rule,  
studs of diameter 8 or 10 mm every 12.5 cm.

This is a sensitive point, and good joining must be made possible beforehand by appropriate design of the concrete

structures and execution appropriate to the product type. Neoprene foam joint, stainless steel rules and studs.

