

# ***DRAINTUBE™***



**For environmental  
applications**



# Geocomposite drainage performance you can count on

Many drainage systems have been used successfully in the waste industry for decades but DRAINTUBE™ from AFITEX-TEXEL is the most predictable, reliable and effective of all. DRAINTUBE™ offers the advantages of other types of drainage geocomposites while overcoming most of their limitations. Gone are concerns about long term creep, geotextile intrusion, delamination, perimeter tying, etc.

DRAINTUBE™ combines standard pipe and geosynthetic technology into a unique package offering superior long term drainage capacity and performance.

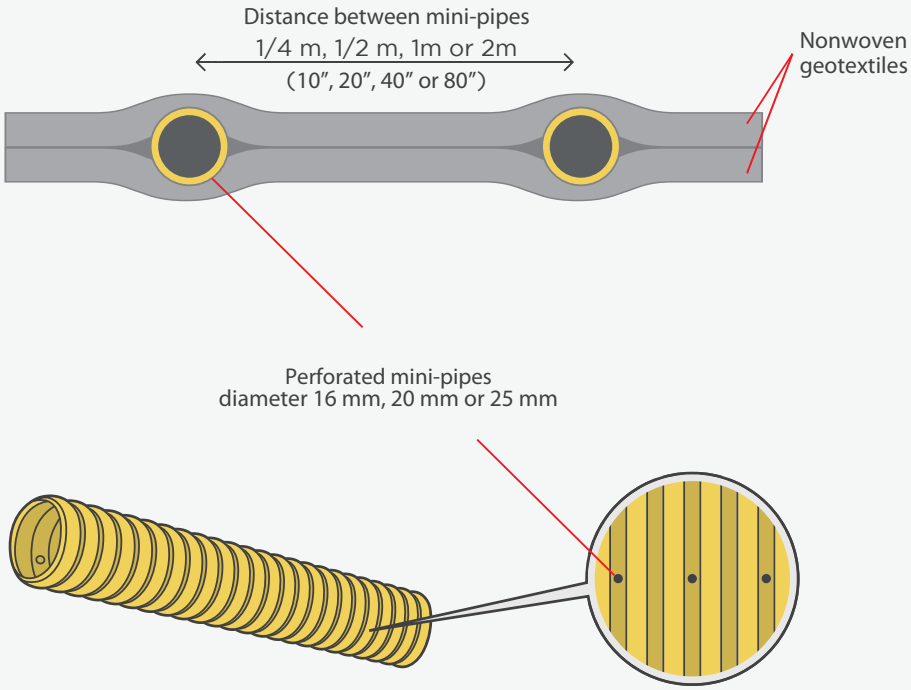
DRAINTUBE™ drainage geocomposites allow geomembrane leak detection surveys using standard geoelectrical methods.

Standard 300 m² (3,200 sf) rolls coverover 30% more area than other products and are installed very much like standard geotextiles. With no nets to tie together and using normal geotextile seaming methods, installation is a snap.

Our Lympha design software, plus our talented professionals are available to help make your project a success from concept to completion.

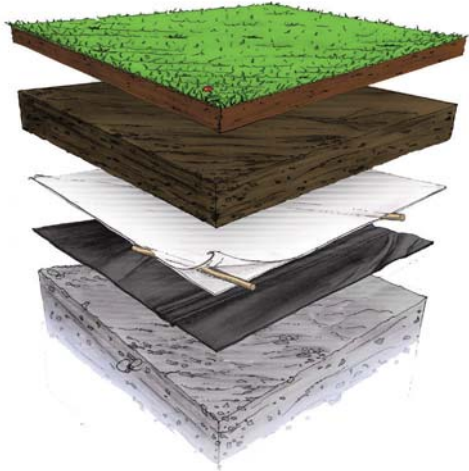
DRAINTUBE™  
The drainage you want!

## DRAINTUBE™



## Water drainage for landfill closures

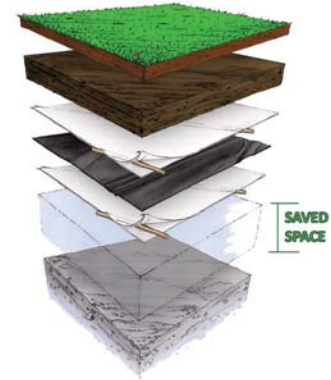
Rainfall infiltrating through the cover soil layer may generate significant water pressure on the barrier layer (geomembrane or clay) if not properly drained. That water head increases infiltration into the waste and can cause instability in the cap. Placed directly on the barrier layer, DRAINTUBE™ filters the top soil, drains the infiltrated rainfall and protects the geomembrane (if present) against puncture. It also increases the overall stability of the cap thanks to its high interface friction angle. Because to its perforated mini-pipes, DRAINTUBE™ collects water and evacuates it faster than a homogeneous drainage layer, even if the slope is mild. Moreover, it limits the risk of water accumulation due to differential settlement.



## Landfill gas drainage

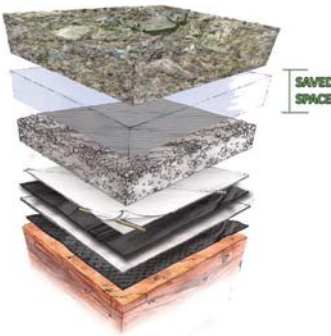
Below a geomembrane, DRAINTUBE™ collects the gas and evacuates it to the main gas collection system. It protects also the liner from puncture from the subgrade.

Into the waste mass, DRAINTUBE™ replaces also the LFG trenches. This solution permits to save a big volume of waste and to cut considerably the cost of the works. DRAINTUBE™ keeps its drainage capacities under high compressive loads (2500 kpa).



## Leachate collection system

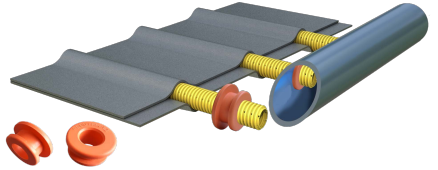
At the bottom of a landfill, DRAINTUBE™ replaces a part of the granular layer and also the protective geotextile. It allows control of the leachate head above the geomembrane and drains it rapidly to the collector pipe network.



## Quick Connect System™

For liquids, the mini-pipes in DRAINTUBE™ can be positively connected to interceptor drains without trenches.

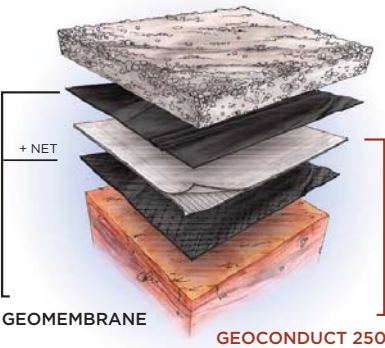
For LFG drainage, the Quick Connect System allows a positive connection of DRAINTUBE™ to a collector drain for vacuum applications.



## Leak detection and geomembrane protection

A double liner system using geomembranes allows for an increase in overall system safety against environmental risks.

Leak detection through geoelectrical methods post installation insures that even the smallest leaks can be discovered and repaired to maintain the impermeability of the system. GEOCONDUCT 250-550 allows geoelectrical detection of leaks while also providing puncture protection to the geomembrane.







## DRAINTUBE™ offers:

- ▶ 3 perforated pipes size options: 16, 20 and 25 mm
- ▶ 4 perforated pipe spacing options: 2 m, 1 m, 1/2 m, 1/4 m (80", 40", 20", 10")
- ▶ Multiple geotextile options
- ▶ Available transmissivity between  $2.5 \cdot 10^{-4}$  to  $4 \cdot 10^{-3} \text{ m}^2/\text{s}$  at  $i=0.1$
- ▶ No change in transmissivity up to 2 500 kPa (50,000 psf)
- ▶ Low creep reduction factor
- ▶ No geotextile intrusion
- ▶ Standard roll size: 3.98 m x 75 m (13.1' x 246')
- ▶ Faster and easier to install than other types of geocomposites, no tying required!
- ▶ Consistent QA/QC
- ▶ Competitively priced!

Produced by

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