GROUP afitex GEOSYNTHETICS | REINFORCED EARTH

DRAINTUBE™

IN ROADWORKS AND CIVIL ENGINEERING APPLICATIONS

High-Performance and Environmentally Friendly Drainage

For years stone aggregates have been used to provide drainage for roadways. **DRAINTUBE™** offers an effective alternative to stone aggregates while at the same time offering many advantages:

Significant cost reductions,
Faster construction,
Less excavation and/or backfill,
Better performance,
Lower greenhouse gas emissions.

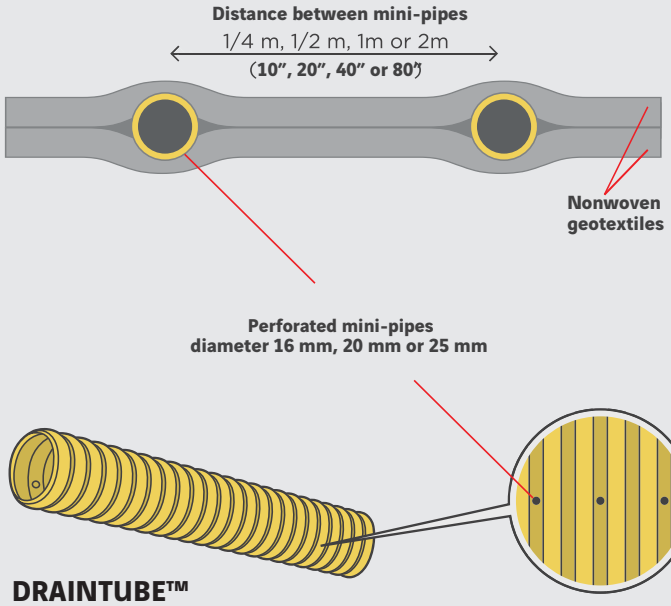
Effective drainage system helps in increasing the durability and performance of the road. **DRAINTUBE™** also helps in controlling the harmful effects of high water tables, saturated subgrades, heavy loads and freeze-thaw cycles.

DRAINTUBE™ is a combination of proven materials like various geotextile layers (filtration, separation and protection layers) and perforated mini-pipes that are needle punched together for high capacity drainage. It is manufactured as per the standard to ensure optimum performance under the most difficult conditions. Each roll performs the functions of separation, filtration and drainage essential for building better roads.

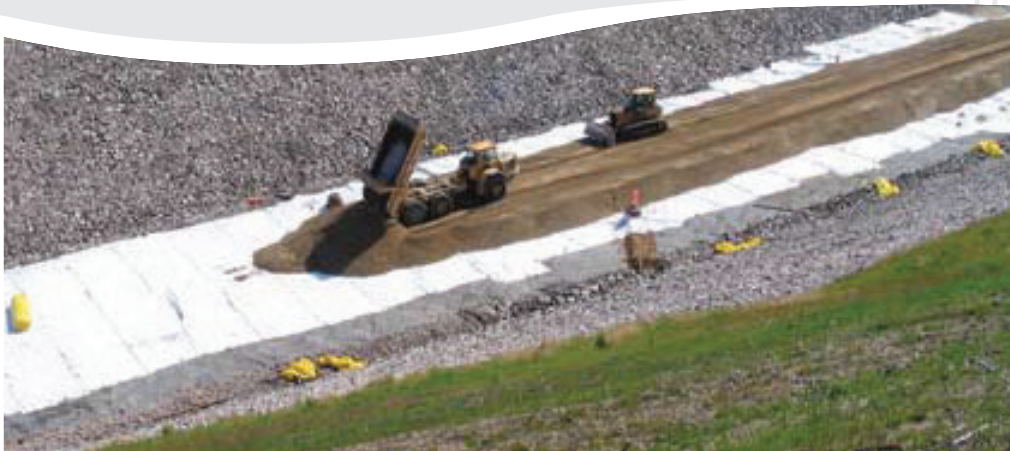
With its needle punched structure, **DRAINTUBE™** can be customized to meet project specific hydraulic, filtration and separation criteria. That's why we say that **DRAINTUBE™** is the bespoke drainage you want to. Our Lymphea software helps the designer choose appropriate performance properties to solve whatever problems they might encounter.

DRAINTUBE™ offers economic, technical and environmental advantages over granular drainage solutions in many civil engineering applications.

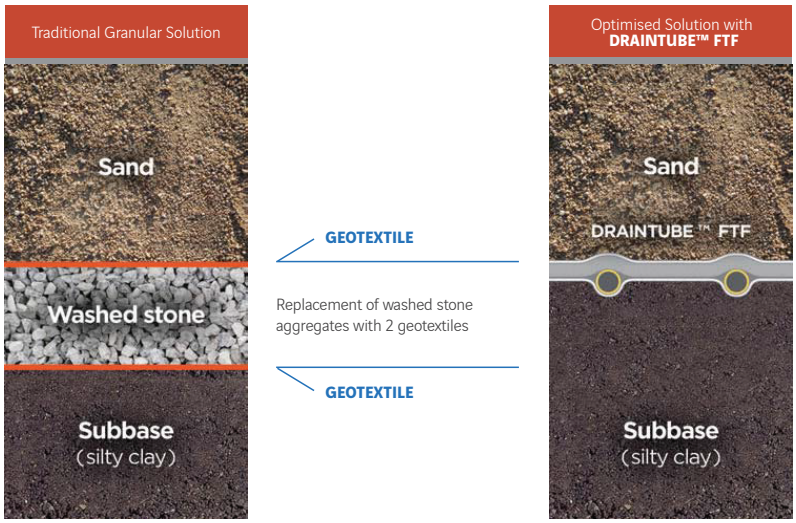
DRAINTUBE™ FTF



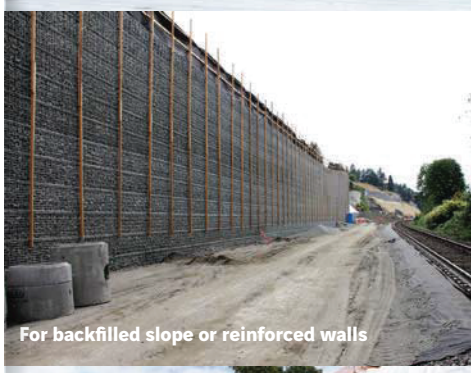
DRAINTUBE™
The Bespoke Drainage You Want!



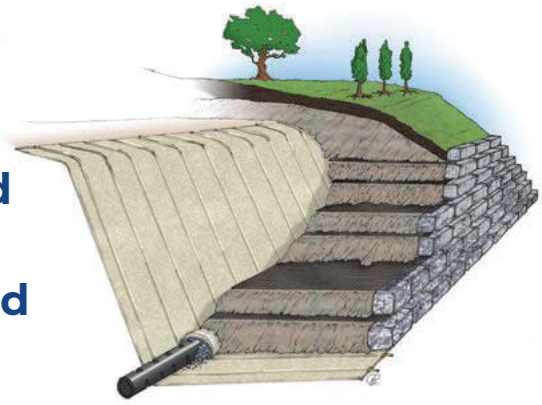
For Roadwork Engineering




For roadwork engineering


For backfilled slope or reinforced walls

For Backfilled Slope or Reinforced Walls



DRAINTUBE™ Advantages:

DRAINTUBE™ helps to do away with the need for a layer of clean stone aggregates and two geotextile separators and it saves excavation time. **DRAINTUBE™** specifically sized for the project, provides the same hydraulic capacity as a layer of clean stone aggregates.

- **Cost savings :** The financial advantage of **DRAINTUBE™** over the clean washed stone aggregates is evident.
- **Logistics :** Cutting down on the travel time also means the job can be completed sooner.
- **Construction :** It is much easier to install **DRAINTUBE™** on a low foundation than a layer of clean gravel on a geotextile separator.
- **Helping the planet :** Replacing multiple truckloads of stones by few trucks of **DRAINTUBE™** consumes much less carbon, significantly lowering the effects of greenhouse gas.

Stone Transport Savings

Many advantages

Total distance saved	Fuel quantity saved	Number of travel saved	**GHG emission saved (CO_2 equivalent metric tons)**
5,400 km (3,376 mi)	1,660 litres (438 gal)	180 round trips	**4.58**

(Figures based on a covered area of 10000 m^2 (107,640 ft^2) using as an example of a washed stone aggregates deposit situated 15 km (9.3 mi) from the construction site.)

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 x 10^{-4} to 4 x 10^{-3} m^2/s at i=0.1
No change in transmissivity up to 2500 kPa (50,000 psf)
Low creep reduction factor
No geotextile intrusion
Standard roll size: 3.98 m x 75 m (13.1’x246’)
Faster and easier to install than other types of geocomposites, no tying required!
Consistent QA/QC
Cost Optimisation

www.reco.com.au | www.afitex.com | E: info@reco.com.au