

ColbondDrain[®]

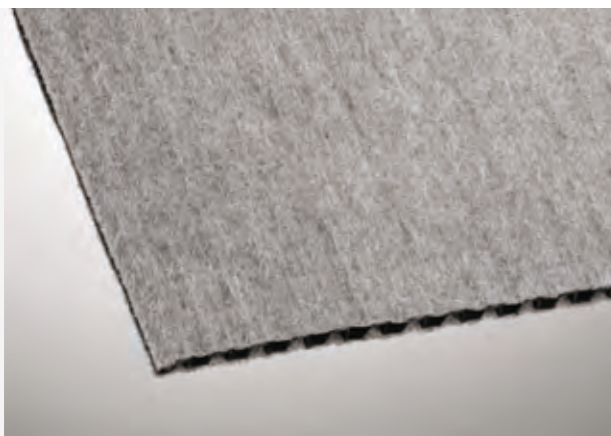
Prefabricated vertical drain



Colbondrain®

High quality Prefabricated Vertical Drain (PVD)

Colbondrain is a high quality Prefabricated Vertical Drain (PVD) which is usually installed with a purpose built installation rig mounted on a hydraulic excavator. Colbondrain was developed in partnership with leading European consultants, laboratories and geosynthetics specialists to create a highly effective solution for a major engineering challenge. The design of Colbondrain is based on a unique extrusion and shaping technique which creates a tough geocomposite.



Functions

- Vertical drainage

Application areas

- Soft clays
- Weak soils
- Marshland areas

Features and benefits

- Unique combination of patented core structure and nonwoven filter bonded to core increases water flow capacity

- Core: hydraulic channel profile (core) ensures laminar flow for optimum performance
- Nonwoven filter layers deliver optimum filtration, permeability and strength.
- Can be used to depths up to 100 m
- High tensile strength allows usage on all installation rig types
- Suitable for use in all soil types
- Roll length of 280 m reduces number of connections on site
- Efficient packaging allows high

- transport loads and reduced storage time on site
- Thermal bonding of the filter to the entire surface of the core structure ensures that the filter is kept taut across the flow channels
- Filter cannot tear or become separated from the core when passing over the pulleys at the top rig or during soil consolidation

It can take up to 25 years to achieve 90% consolidation of soils and soft clays such as can be found in marshland areas. Colbondrain assures a significant acceleration of the consolidation of soft soils before construction, reducing this timescale to months rather than years, improving safety and drastically reducing cost. Colbondrain forms an upward path for excess pore-water created by the overburden. Water is drained off to the surface resulting in a stable subgrade on which construction can take place

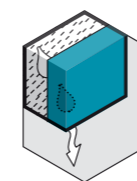
Technical details

Colbondrain is a Prefabricated Vertical Drain which should be installed with a purpose built installation rig

mounted on a hydraulic excavator. If the compressible clay is very deep and/or contains gravel bands, special techniques such as vibrators and heavy mandrels may be required.

- Colbondrain is 10 cm wide with a robust polymer core, covered on both sides with a strong and permeable filter fabric
- The outer filter fabric of Colbondrain is bonded to the core structure over its entire surface to form a homogenous geocomposite
- Rolls come in lengths of 280 linear metres

Product functions



VERTICAL DRAINAGE

