

## Project reference

### P + R car park with permeable pavement

**Place:** Meestad (Groningen) – The Netherlands

**Application:** Direct infiltration of rain water through a permeable pavement

**Cleaning solution:** Oil-biodegrading TenCate GeoClean® Origin aquatextile

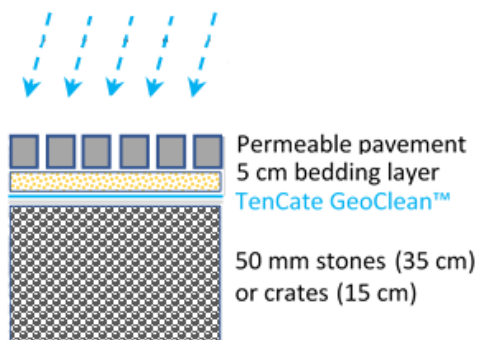
**Function:** Catch and break hydrocarbons under the parking area

**Context:** The creation of a new Park and Ride car park of 10.000 m<sup>2</sup> with a permeable pavement to infiltrate locally rain water into the sandy ground requires both to infiltrate strong rainfall and to clean the runoff water from the hydrocarbons to prevent soil pollution.

**Design:** The low speed traffic in this parking area mainly occupied by cars or vans makes the risk of accident very low. The main source of hydrocarbons is therefore the oil leaks from the vehicles. Furthermore, it is localised in an urbanised area. Finally, the permeable pavement made of concrete slabs is chosen to allow direct infiltration.

These project parameters lead to choose the **TenCate GeoClean® Origin** aquatextile as water cleaning solution and to protect the whole park area. The aquatextile is laid on top of the compacted natural sandy subsoil and covered by a sandy bedding layer before the installation of the concrete slabs. Rain water polluted with hydrocarbon leaks infiltrates through the permeable pavement structure, flows instantaneously through the aquatextile due to its high permeability larger than 10 mm/s (or 10 l/s/m<sup>2</sup>) by releasing more than 99% of the oil pollution in contact with the oleophilic continuous filaments of the aquatextile. The caught hydrocarbons are progressively biodegraded by the microorganisms population that quickly colonises the open structure of the aquatextile helped by the growth activator released from the blue filaments of the aquatextile.

As a result, the residual hydrocarbon (TPH) content into the percolating water is less than 2 mg/l.



TenCate GeoClean® is an **eco-friendly** and **sustainable** solution for **cleaning oil-polluted runoff water**.

TENCATE  
GeoClean®

TenCate GeoClean®  
houses a natural ecosystem

It is a bicolour two-layer aquatextile with a unique structure that naturally traps and biodegrades oil from runoff water, to protect aquifers and ensure that only clean water infiltrates the natural soil.

Aquatextile  
A textile for managing water quality in the soil.

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TENCATE  
**GeoClean®**

For more information on projects, installation of the aquatextile and the savings, please contact us:

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Cleaning Water.  
**Naturally**

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