

## PROJECT CASE

### Earth retention in infiltration ponds RICHWILLER (68)

**Date**

April 2019

**Surface area**

600 to 800 m<sup>2</sup>

**Product(s)**

ALVEOTER AT30-15

**Company**

GEO-RESINE de L'EST

**External validation**

GEOROUTE

### Issue(s)

After treatment in a watertight pond, the water had to be returned to an infiltration pond for discharge and groundwater recharge purposes. One of the project owner's requirements was revegetation, which was impossible with the material in place. In addition, as softening the slopes was not an option due to the location of the structure, all gradients were 1:1 (45°), making earth retaining impossible under traditional conditions.

### Solution(s)

To enable earth retention to a depth of 15 cm, the ALVEOTER solution was selected and implemented on the slopes of the infiltration pond. This solution, combined with an anchor trench and anchors on the slopes, facilitates load bearing and earth retention for long-term revegetation.

- Stress and anchor calculation by AFITEXINOV's technical department
- External validation by the GEOROUTE consulting firm
- Installation assistance at the client's request



*Preparation of the anchor trench*



*Deployment of the layers in the slope*

## Description and purpose of the product

The alveolar geotextile consists of 100% PET non-woven needled geotextile strips, with a tensile strength of 15 kN/m. The strips are sewn together by triple threads over 10 mm. The strip is sewn from the centre of the seam to prevent weak points at the ends of the seam.

## Packaging

The great strength of the solution lies in its packaging on pallets, which can contain up to 1,600 m<sup>2</sup> of surface area per pallet. The entire surface area of this project was shipped on a single pallet, which wasn't even filled to capacity!



Packaging of an 800 m<sup>2</sup> surface area

## Work progress



Deployment in slopes and anchor trenches



Adjustment and installation of anchor pegs according to design calculations

## Advantages of the proposed solution

This solution helps:

- Retain earth and vegetate slopes with a gradient of up to 1:1
- Receive an earth retention solution on site with optimised packaging and delivery

## Contact

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