

ECOMAT[®]

Robust and sustainable erosion control matting

What is ECOMAT[®] K400?



Ecomat[®] K400 is a completely biodegradable biaxial woven erosion-control matting made from Cocos yarns, woven into an open textile structure.

Because of the extremely high tensile strength in both length and width direction, the material can be installed either in length or width direction.

Ecomat[®] K400 can easily be installed manually. As there is no heavy equipment required, the material can be installed very quickly in comparison with other erosion control blankets (more than 1,500 m² / 8 hours with 2 workers).

For optimal connection with the slope and accelerated ease of installation, special pins (length 300 – 500 mm) can be used. In “wet” applications, 3 pins per running meter are advised. In “dry” applications, good connection should be secured at both top and bottom.

Application:

- ✔ Dry slopes.
- ✔ Wet slopes.
- ✔ Shore lines.
- ✔ Embankments.
- ✔ WADI's.
- ✔ Channels.
- ✔ Ditches.

Advantages:

- ✔ Manual installation.
- ✔ Flexible; follows contours sub base.
- ✔ High installation speed.
- ✔ Full vegetation.
- ✔ Easy to grow through.
- ✔ Holds root structure.
- ✔ Excellent water permeability.
- ✔ Environment friendly.

Instructions of using Ecomat[®] K400

Storage

In case Ecomat[®] K400 is stored outside, it should be covered with a tarp. In case of rainfall, the material can gain weight as it might absorb rain water.

Transport

Ecomat[®] K400 is transported in trucks. The rolls can be placed on top of each other. Unloading can be done without any additional devices.

Roll dimensions

Ecomat[®] K400 standard size is 1,5m x 10m. The material can be installed in both length and width direction, as the material has extremely high strength in both length and width direction.

Installation guidelines

Ecomat[®] K400 should not be installed below 0° Celsius. When installed in water, rolls against direction of stream installation. Overlap also against stream direction.

Sub base

The sub base, on which the Ecomat[®] is installed should be smooth. Large boulders or rocks should be taken away. The macro stability of the slope should be checked. For slopes steeper than 1:1, more pins should be used.

Installation speed

A quantity of 1,500 m² can be installed per day by 2 workers.

Installation steps

1. Equalize slope.
2. Pin upper part Ecomat[®] K400.
3. Roll out Ecomat[®] K400 (top down).
4. Install pins on slope.
5. Small overlap required (butt joint also possible).

Technical Specifications

General	
Type Ecomat [®] 4.0	Cocos yarns, woven into a bi-axial matting
Thickness	≈ 40 mm
Tensile strength length direction	≥ 60 kN/m (EN ISO 10319)
Tensile strength width direction	≥ 50 kN/m (EN ISO 10319)
Environmental harmlessness	Completely uncritical (M Geok E – 2016)
Microbiological resistance	≥ 35% remaining strength (DIN EN 12225)
Roll width	150 cm (adjustable on request)
Roll length	10 m (adjustable on request)

*All data is subject to change without prior notice by the manufacturer.

Product Gallery

