

KOHU KREATIONS · ENGINEERED BY NATURE

KOHU EcoGuard™ Surface Mat

Natural Fiber Land Protection System

100% COCONUT COIR FIBER · OPEN WEAVE CONSTRUCTION

High-performance, biodegradable erosion control and land stabilisation solution

Protecting Land. Restoring Nature.

The KOHU EcoGuard™ Surface Mat is an advanced, fully biodegradable land protection system manufactured from 100% natural coconut coir fibre. Engineered with an open weave construction, it delivers outstanding tensile strength while permitting water infiltration and air flow — creating ideal conditions for seed germination, root establishment, and long-term vegetation growth.

Whether deployed on eroding slopes, riverbanks, construction sites, or agricultural plantations, EcoGuard™ provides immediate protection while gradually enriching the soil as it naturally degrades over 3-5 years, leaving zero synthetic residue.

CORE BENEFITS

- 100% Natural & Renewable — made from coconut coir, a sustainable by-product
- Reduces Soil Erosion — anchors topsoil on slopes & embankments
- Supports Root Growth — promotes germination & healthy vegetation
- Retains Soil Moisture — reduces surface runoff & water loss
- Biodegradable & Eco-Friendly — enriches soil as it degrades naturally

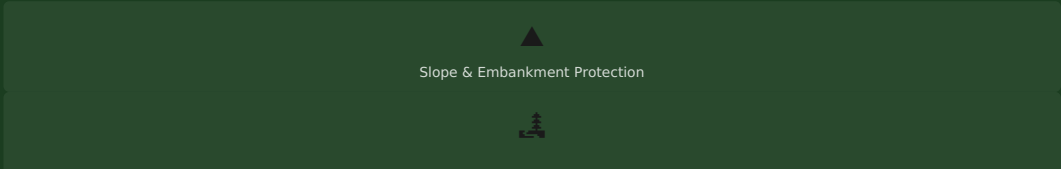
KEY FEATURES

Built for Long-Term Environmental Performance

	High Tensile Strength Exceeds ≥ 2.0 kN/m in both MD and CMD directions for lasting structural integrity.
	Water Permeable ≥ 100 L/m²/s permeability allows natural water flow while protecting the surface below.
	UV Resistant ≥ 70% UV resistance after 500-hour exposure ensures durability in open field conditions.
	Temperature Stable Performs reliably from -40°C to +60°C, suitable for all climatic zones worldwide.
	Seed Germination Open weave structure promotes germination and healthy root penetration into the soil.
	Easy Installation Simple roll-out deployment on slopes, embankments, or flat areas with biodegradable anchor pins.

TYPICAL APPLICATIONS

Versatile — For Every Environment



Riverbank & Canal Protection



Road Shoulder & Highway



Construction Site Restoration



Agriculture & Plantation Support



Landscaping & Green Spaces



KOHU EcoGuard™ Surface Mat

Specifications, Sizing & Installation · kohukreations.com

STANDARD SIZES & PACKAGING

Available Roll Configurations

Product Code	Roll Width (m)	Roll Length (m)	Area per Roll (m²)	Roll Dia. (approx.)	Weight per Roll
EGSM-1.0	1.0	20	20	0.45 m	12 – 16 kg
EGSM-1.2	1.2	20	24	0.50 m	15 – 19 kg
EGSM-2.0	2.0	20	40	0.55 m	24 – 30 kg
EGSM-2.4	2.4	20	48	0.60 m	29 – 36 kg
EGSM-3.0	3.0	20	60	0.65 m	36 – 45 kg

* Custom sizes and densities available on request.

TECHNICAL SPECIFICATIONS

Material & Performance Data

Property	Test Method	Typical Value
Material	—	100% Coconut Coir Fiber
Construction	—	Open Weave / Woven
Thickness	ASTM D6525	8 mm – 12 mm (±10%)
Mass / Unit Area	ASTM D6475	600 g/m² – 1200 g/m² (±10%)
Tensile Strength (MD)	ASTM D6818	≥ 2.0 kN/m
Tensile Strength (CMD)	ASTM D6818	≥ 2.0 kN/m
Elongation at Break	ASTM D6818	≥ 20%
Water Permeability	ASTM D4491	≥ 100 L/m²/s
Light Penetration	ASTM D6567	≥ 35%
UV Resistance	ASTM D4355	≥ 70% (500 hr exposure)
Biodegradation Time	ASTM D5511	3 – 5 Years (Typical)
pH Range	ASTM D6511	5.0 – 8.0
Temperature Resistance	—	-40°C to +60°C
Color	—	Natural Brown

* Values are indicative and subject to natural variations in raw material.

INSTALLATION OVERVIEW

Simple 4-Step Deployment

1

Prepare the surface by clearing debris and levelling the soil.

2

Roll out the mat down the slope or over the area to be protected.

3

Overlap adjacent rolls by 100-150 mm to ensure full coverage.

4

Secure the mat with wooden or biodegradable anchor pins at 15-20 mm spacing.



NATURALLY SUSTAINABLE

Made from a renewable agricultural by-product with zero synthetic inputs.



LOW ENVIRONMENTAL IMPACT

Biodegrades completely, enriching soil with organic matter.



SAFE FOR WILDLIFE

Non-toxic, chemical-free, and safe for soil organisms, plants and animals.



RETURNS TO NATURE

Leaves no waste — degrades naturally, leaving only improved soil.

KOHU™ KREATIONS

Engineered by Nature

*"Protect Today.
Restore Tomorrow."*

ENQUIRIES

info@kohukreations.com
www.kohukreations.com
Made in India