



# RIVER MAT RM100

BIODEGRADABLE SEDIMENT ENTRAPMENT MAT



... DEVELOPING TOMORROW'S IDEAS®





## HOW DOES **RIVER MAT – RM100** WORK?

Secured to the bed of the water course and placed downstream of the disturbed area, River Mat RM100 lies flat and traps sediment be carried along the bed on the current. Being flat, the River Mat RM100 does not cause disruption of the water flow or affect the current.

Mats are staked or weighted in place. Greenfix River Mats are suitable for use in natural and artificial channels. Each roll consists of 2 layers of burlap, with both sides closed by natural thread stitching and open endings for easy overlapping of the River Mat RM100.

## **RIVER MAT – RM100** CAN HELP WITH THE CONTROL OF:

### **DOWNSTREAM SEDIMENTATION:**

A common problem resulting from civil engineering works for drainage, flood alleviation and other site run off or work on the watercourse. These can release quantities of sediment downstream of the works.

### **ENVIRONMENTAL IMPACT:**

Disturbing sediment can have a detrimental effect on wildlife and plant habitats, smothering vegetation, insects and fish.

### **WATERWAY BLOCKING AND CONTAMINATION:**

Disturbed Sediment can block drains, culverts and head-walls, and reduce the depth of pools. Sediment build up against structures can also be detrimental, for example, to the integrity of bridge and dock piers.

### **APPLICATIONS**

- Construction Site Drainage
- Catchment Management and
- Run Off Attenuation
- Agricultural & Forestry Sediment Entrapment

### **BENEFITS**

- 100% Biodegradable Coir Mat
- Reusable as Erosion Control Blanket
- Limited Maintenance Requirement
- Easy To Install & Use
- Can be Seeded or Vegetated





## INSTALLATION

River Mats should be installed downstream of the area where work is to take place, but as close as possible to that area without interfering with the work area. Attention should be paid to the current so that River Mats are not placed in areas of high water flow where sediment may pass straight over them. If this is the case then the mats should be placed in the closest area with a lower flow rate.



# STEP BY STEP

1

Unroll and stretch out mats starting from the point furthest upstream. Submerge the mats into the water.

2

Secure the upstream edge with Greenfix wooden stakes or stones sourced from the watercourse, sufficient to prevent the edge of the River Mat being lifted by the current.



3

Add further stones or stakes to the rest of the River Mat to ensure that it lays flat on the bed of the watercourse.

4

Where more than one River Mat is required to cover the full width of a watercourse, lap the edges of adjacent mats by 300mm and secure with stakes or stones.



5

Where more than one length of mats is required, overlap the downstream ends of the first row of mats with the second row.

6

Periodically check for sediment lying on the top of the River Mats which will indicate that the Mat is full and requires replacement.

7

When works are complete or River Mats are full of sediment then removal can be achieved by rolling the mat into an excavator bucket or by dragging them onto the bank.



8

If appropriate River Mats can then be used as an Embankment Stabilisation Mat.

# SEDIMENT MANAGEMENT

Silt can travel up to 1000 metres in water velocities of around 1 m/sec. Larger particles and lower water velocities will limit the distance that material can travel from a work area. River Mats can collect an estimated 20 kg of sediment per square metre. The exact weight of a saturated River Mat will vary depending on the type and particle size of deposits on each site, but a figure of up to 80 kg can be expected per mat. When removing River Mats from a watercourse this figure needs to be accounted for in planning the work.



## DON'T DISPOSE, REUSE...\*

Once works are complete, the filled River Mats can be reused as a nutrient rich biodegradable embankment stabilisation mat.

\* If the River Mat is to be reused, the contractor & client will need to assure themselves that the material is free of pollutants.

- Remove from watercourse, unroll down the embankment.
- Secure with Greenfix 300 mm timber pegs.
- Seed beneath or on top of the mat to provide stable, secure slope protection.
- This also removes the problems associated with disposal.

## TECHNICAL DATA

ITEM	VALUE
FIBRE	EXCELSIOR
FIBRE CONTENT (%)	100 %
WIDTH (m)	1.20 m
LENGTH (m)	3.000 m
AREA (sqm)	3.60 sqm
WEIGHT PER ROLL (kg)	~ 5 kg
WEIGHT / TOTAL (gr./m <sup>2</sup> )	1500 gr./m <sup>2</sup>
WEIGHT / FIBRE (gr./m <sup>2</sup> )	500 gr./m <sup>2</sup>
FUNCTIONAL LONGEVITY (months)	6 - 12 months
TOP NETTING	NATURAL - JUTE
TOP NETTING WEIGHT (gr./m <sup>2</sup> )	500 gr./m <sup>2</sup>
TOP NETTING SIZE (mm)	APPROX. 18 x 12 mm
TOP NETTING TENSILE STRENGTH DIN53857	750 (MD) / 450 (TD) daN/m
BOTTOM & SIDE NETTING	NATURAL - JUTE
BOTTOM & SIDE NETTING WEIGHT (gr./m <sup>2</sup> )	225 gr. x 2 layers gr./m <sup>2</sup>
BOTTOM & SIDE NETTING SIZE (mm)	2 x 2 mm



# Greenfix®

Since 1975. Made in Germany.

GLOBAL HEADQUARTER



SOILTEC GmbH  
Neue Finien 7a  
28832 Achim | Germany

Tel.: 04202-7670-0

Fax: 04202-7670-50

E-Mail: [geosystems@soiltec.de](mailto:geosystems@soiltec.de)

[www.greenfix.net](http://www.greenfix.net)

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eg-trading oy

[info@eg-trading.fi](mailto:info@eg-trading.fi) • [www.eg-trading.fi](http://www.eg-trading.fi) • 09 298 9924

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