

BIOMAC® CC45

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BioMac® is a biodegradable coir mat manufactured from randomly arranged coconut husk fibres layered between photosensitive polypropylene netting. BioMac®'s three-ply composite provides immediate erosion control and a stable medium to support healthy plant growth. The closely arranged fibres intercept the energies of impacting raindrops and water scour, keeping the underlying soil in place. The dense mat acts as mulch, creating a localised water reservoir for the soil below. With time, the coir material biodegrades, enhancing the soil fertilisation and the cohesive strength of the root systems. At this point the flexible nature of the plants become the primary stabilising and protecting element. BioMac® provides nature with a helping hand at erosion control and vegetation generation. In certain instances BioMac® may be used in conjunction with double twist wire mesh reinforcement.

BioMac® is used for short term erosion control and revetment protection to assist in the establishment of vegetation on:

- Steep slopes and embankments up to 1:1;
- Areas exposed to high rainfall;
- Ditches and water courses with low energy flows.

BioMac® provides 100% soil cover, providing immediate soil protection against water and wind erosion. The blanket further insulates the soil and seed against extremes of temperature, thus ensuring a higher germination rate. Newly planted seeds are protected against wind, rain and birds. Rain water run-off is minimised and soaks through the blanket, permitting soaking of the underlying soil. Prolonged capillary storage improves seed germination. Decomposition of the natural fibres within the blanket ultimately improves the soil organic content, permeability and moisture retention ability. BioMac® rolls are easily cut and shaped by unskilled labour to accommodate existing topographical conditions.

Storage & Handling

During transportation and prior to installation on site, BioMac® should be kept dry and retained in its original wrapping out of sunlight, in dry ventilated conditions.

Installation Equipment

Where joining is required, the blanket shall be overlapped by a minimum 100mm. BioMac® shall be fastened to the ground using suitable pegs (Figure 3). The material may be cut using conventional scissors or a utility knife. For further information on the installation of BioMac® and for peg spacing and density please refer to Maccaferri Africa Installation Guidelines for BioMac®: IG-ZA-Erosion Control Blankets-Rev08-Feb17

Vegetation Cover

BioMac® is used for short term erosion control and relies on vegetation for a permanent solution. BioMac® may be vegetated by hydroseeding or with cuttings. The choice of vegetation depends on a number of factors. Contact a local nursery or horticulturist for appropriate advice on local plant mixture / selection. For further information, refer to the Maccaferri Africa Soil Bio-Engineering Manual : Soil Bioeng Manual-Eng-Rev01

BIOMAC® SPECIFICATIONS

| | |
|-------------------|------------------------------------|
| Composition | Untreated 100% Coconut Husk Fibres |
| Netting | UV stabilised polypropylene |
| Weight | 450g/m ² |
| Strength | 3,7kN/m ² |
| Roll Size | 25m x 2m (50m ²) |
| Roll Diameter | 0,30m– 0,40m |
| Mass per roll | 25kg |
| Normal functional | Up to 2 years |

Table 1



Figure 1



Figure 2

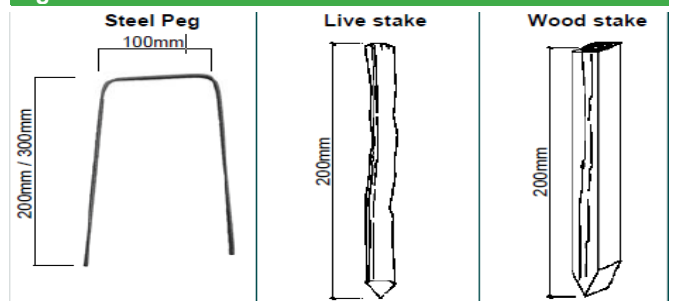


Figure 3 - Peg Types

As part of our partners' ISO 9001 Management Systems and guided research and development programmes, information contained herein is continuously updated. Above technical values are mean values and are indicative. The right is reserved to make changes without notice at any time. Please confirm with African Gabions the latest version of the product specification available.