Erosamat Types 1, 2 and 4

These instructions should be read in conjunction with the contract specification and drawings. They are intended to provide guidance in normal installation situations and are addressed to the installer on site. They do not seek to address design matters; they do not seek to address unusual installation circumstances. If in doubt, consult ABG for further advice.

Description and storage requirements

Erosamat Types 1, 2 and 4 are biodegradable mats intended to protect soil surfaces from erosion while vegetation becomes established. Depending on the product, the service lives vary from one to five years. For permanent erosion protection, ABG Erosamat Type 3 is available.

Erosamat Types 1, 2 and 4 are surface erosion control products and are not intended to stabilise slopes that are unstable at depth or to retain considerable thicknesses of topsoil on slopes. ABG will be pleased to advise regarding slope stabilisation systems if required.

Erosamat Type 1 and 1A are intended for use over topsoiled and seeded areas to provide short-term protection from rain bombardment. Type 1 may alternatively be hydroseeded after laying.

Erosamat Type 2 is a longer life product, available in a range of weights to suit a variety of soil and exposure conditions and is also suitable for hydroseeding.

Erosamat Type 4 is a straw, coir or straw/coir blanket, available unseeded or pre-seeded, for initial protection of areas subject to possible surface erosion prior to the establishment of vegetative cover. A separate data sheet is available detailing grass seed mixes recommended for use with Erosamat Type 4 in a variety of situations – please enquire. Hydroseeding may also be used. During transportation and storage, Erosamat should be kept dry, in well-ventilated conditions, clear of the ground, and covered to prevent light exposure which will discourage premature organic growth. Pre-seeded blankets are made to order and must be installed within one month of delivery.

Please refer to data sheets for specific recommendations regarding applications. ABG will be pleased to advise on installation details for specific sites – if in doubt, please enquire.

Surface preparation

Intimate contact between Erosamat and the underlying soil surface is essential. Surfaces to be covered should be shaped to smooth profiles using a grading bucket or blade. Protruding stones or clods should be tamped flush with the surface or removed by hand.

Where topsoil is required on slopes steeper than approximately 1 in 3 (18°), the surface beneath the topsoil should be roughened to resist slipping of the topsoil. Slopes of 1 in 1.5 (34°) or steeper may require shallow benching. The thickness of topsoil should not exceed 100 mm except on gentle slopes or flat areas, otherwise it may slump when saturated.

Unless hydroseeding is specified, seeding with an appropriate grass or wild flower seed mix must be carried out prior to laying Erosamat Types 1, 2 and 4.
Erosamat Types 1, 2 and 4

Preparing Slope and Excavation of Anchor Trenches

The slope should be properly compacted, free from existing vegetation, roots and stones and able to sustain vegetative growth. Voids, where possible, should be filled to offer a flat and even profile. Excavate anchor trenches at the toe, crest and sides of the slope not less than 200mm deep or as specified on the drawings. For alternative options for anchoring the top, bottom or sides of the Erosamat in various applications, see illustration below:

![Diagram of anchor trenches]

Laying of Erosamat

Erosamat should generally be laid with its sheet or roll length running down slope, with overlaps at ends or edges laid in ‘tile fashion’ to suit the direction of any water flow. However, in channels or where the slope length requiring protection corresponds to a roll width, it is preferable to lay Erosamat across the slope in order to minimise cutting and lapping. The materials should preferably be unrolled in their final position; excessive dragging must be avoided or damage may occur. Sheets should be pulled out flat but not excessively tight. This is particularly important at concave breaks in slope, where otherwise surface contact would be lost. Laps of 50 to 100 mm at sheet edges and ends are generally appropriate.

Place Erosamat down the side and along the base of the anchor trench at the top of the slope, pin at 1m centres or as specified on the drawings. Ensure that the Erosamat is in direct contact with the ground IN ALL PLACES by adding additional pins in any hollows or undulating ground. Avoid walking on the surface unnecessarily.

Cut Erosamat to length and pin to bottom trench (and side trench where required) as per the top trench or as specified on the drawings. Backfill trenches with excavated material or as specified on the drawings.

Pinning

Standard pins for fixing Erosamat are 300 mm long, 4 mm diameter ‘J-pins’. Other types of pins may be required for loose soils, hard or stony subsoils or other unusual conditions.

For pinning guidance on the Erosamat range of products please refer to the ‘ABG Pinning Erosamat to a slope TECH NOTE’ document.