



ARMORFLEX Erosion Control System

Six Easy Steps to Site Assembled ARMORFLEX Mats

Step 1. Site preparation, excavation, trimming and compaction.

Prior to laying Armorflex, the base material must be profiled to line and level and should be compacted to a firm and even finish. Obstructions, such as roots and projecting stones should be removed, as the quality of the preparation will be reflected in the finished surface. The steepness of the embankment must not exceed the natural angle of repose. The maximum desired slope is 1 : 1.5.

Step 2. Handling and placing by manual labour.

A highly permeable geofabric should be placed on the prepared area, with overlaps of 500mm. It is advisable to allow the geotextile to extend approximately 500mm beyond the area to be surfaced by the Armorflex. Armorflex blocks should be placed on the geotextile in a stretcherbond pattern to achieve mechanical interlock. Normally the greatest length of the block is placed in the direction of the flow. At concrete termination, like culverts and beams, the blocks must be placed to allow access to the cable ducts.

Step 3. Wiring up in situ.

The wire is easily fed through the cable ducts in the blocks and secured by tightly twisting the wire over a minimum of 100mm. The choice of the wire may depend on the application and loading. A 3.15mm diameter mild steel galvanized fencing wire or a 5mm diameter polyester rope may be used. In certain application it may not be necessary to wire up the Armorflex. Very often the direction of the wire is taken perpendicular to the direction of the flow.

4. A final twist to the wire.

The galvanized wire may be twisted across the block joint or a suitable knot may be applied when using a polyester rope.

5. Anchorage

Armorflex on steep slopes may slide when severely loaded by excessive shear forces. Temporary or permanent anchorage can be achieved with steel rods (fencing standards) or timber pegs through the cable loops or through the vertical holes in the Armorflex blocks.

6. Finishing.

Finally the Armorflex is filled with topsoil to enable vegetation to take hold. Where Armorflex is subjected to continuous flow or wave attack it may be advisable to fill the voids with a sand-gravel mix. It is essential to fill the voids to protect the geo fabric from UV radiation.

If Armorflex needs to be placed under a permanent water surface, like in a dam or on a beach, prefabricated Armorflex mats need to be used. These are normally assembled on site to suit the capacity of the crane and the application. The wire used will than be either 3.0mm galvanized steel wire rope or a 12mm Polyrene rope. A lifting beam may be made available from Inca Concrete Products.