

# Coir Rolls

Coir Rolls are an excellent technique for establishing marginal vegetation around lake edges and on streams and rivers banks. Coir rolls are cost-effective, organic revetments that are suitable alternatives to hard protections in many applications

## Manufacturing

Coir Rolls are manufactured in the Srilanka to any specification, depending upon site requirements. The following are standard stock items.

0.3m diameter by 2m long roll: 9kg per linear metre dry weight.

0.3m diameter by 3m long roll: 9kg per linear metre dry weight.

## Specification (300mm diameter roll)

- The fibre rolls shall be machine manufactured in the UK from coir fibre with a mean fibre length of 150 mm  $\pm$  50 mm, compressed to a density of 110 -120 kg/m<sup>2</sup> and contained by a net of 2mm polyethylene yarn or 5mm coir yarn with a mesh size of 50 mm.
- Dry weight: 9  $\pm$ 0.5 kg/lin.m.
- Wet weight - 1 hour after removal from the water approx. 20.6 kg/lin m. 4 hours after removal from the water approx. 16.7 kg/lin.m.
- When subjected to a load of 80kg the fibre roll shall compress less than 15%. (This load approximates to an 80 kg man standing on the roll).
- Water depth: 0.1 m to 0.5m, or up to 1 metre if raised upon rock rolls/faggots
- Permissible Velocity: 3m/s or higher if used in conjunction with rock rolls, riprap or other hard toe revetment
- Wave action up to 0.3 metres

## Technical Specification

The diamond mesh size and coir fibre length are based on giving integrity to the fibre roll structure, and having enough room between the net meshes to enable planting to take place.

The density, wet weight and compressibility specifications are the optimum to allow strong plant growth and give erosion resistance. Less density and more compressibility will result in deformation and consequent risk of damage to the plants and possible erosion from behind the fibre rolls. Rolls that are too compact and do not compress when stood on, will inhibit plant growth and are therefore not appropriate.