

# Rock rolls

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**Rock Rolls** are a tubular revetment consisting of small stones retained within a high strength polyethylene net. Rock Rolls are used in all areas where vegetation alone will not provide sufficient erosion control. Salix Rock Rolls have been designed to provide invertebrate habitat and to accrete fine sediment to enable vegetation establishment within the Rock Roll. Rock Rolls can be combined with bioengineering solutions to create fully vegetated revetment

Rock Rolls have been developed in partnership with the European Soil & Water Engineering Group (ESWEG).

## NET SPEC

**Net Material:** 3mm Synthetic Polyethylene braided knotted nets

**Net Apertures:** 45mm

**Net Yarn Thickness:** 3mm

**Single Mesh Tensile Strength:** 152,4 kg = 1,495 kN/mesh

U.V. treated 350 Kly

**Colour:** black

## UNIT SIZES

Standard sizes are shown although Rock Rolls can be made different lengths.

**Standard Length:** 2 metres **Diameter:** 250mm, 300mm or 400mm **Weight per Metre:**

250mm diameter: 100 kg/metre

300mm diameter: 120 kg/metre

400mm diameter: 180 kg/metre

## STONE SPEC

Weather and frost resistant rock

**Grading:** 50 to 11



Rock Rolls have been tested at the University of Dresden, Germany.

Rock Roll Performance

Maximum permissible flow velocity: 6m/s

Maximum wave height: 0.6 m

- Maximum Shear Stress: 800N/m<sup>2</sup>



Rock Rolls used with Coir Rolls on a cobble bed stream



SUMMARY OF ROCK ROLL BENEFITS

- Uses smaller stones than gabions which increase invertebrate habitat and increase sediment deposition
- Allow vegetation establishment
- Flexible over uneven ground
- Length and diameter can vary
- If used in front of a pre-established coir roll the Rock Roll protects the coir roll from abrasion. This allows vegetation to be established in high energy areas.
- Netting not liable to abrasion of coating followed by rusting and failure like wire mattress

