

HDPE COATED WOVEN MESH ROCK NETTING

Rock Netting shall comply with the following specifications

MANUFACTURE	Rock netting supplied in rolls shall be hexagonal double twist woven wire mesh. (sometimes also referred to as triple twist)
MESH SIZE	Mesh openings shall be of nominal dimension of 80mm (mesh type referred to as 80 x 100mm or 8x10 or type 8).
CORROSION PROTECTION	Wire shall be zinc coated to BSEN 10244-1:2001 and additionally coated with an Extruded UV stabilised Grey HDPE coating of nominal radial thickness of 0.5mm HDPE coating :- Borstar HE6063 density 0.942 Bimodal high density jacketing for communication and power cables, UV Stabilised, colourable
MESH WIRE	2.70mm wire diameter core to BS 1052
JOINTING	Lacing wire 2.2mm wire diameter core of the same corrosion protection as the mesh fabric for assembly of the units. Stainless steel 'C' rings fixed with a pneumatic closing tool (1 clip every other mesh opening) can be used as an alternative to continuous lacing

Notes on Extruded HDPE v Extruded PVC Coatings

Properties of Polymer Coatings

PROPERTY	EXTRUDED HDPE COATING	EXTRUDED PVC COATING
Oxidation resistance	excellent	excellent
Heat resistance	excellent	good to excellent
Oil resistance	good to excellent	fair
Low temperature resistance	Excellent (-135 deg C)	poor to good (-40 deg C)
UV resistance	excellent	good to excellent
Ozone resistance	excellent	excellent
Abrasion resistance	excellent	fair to good
Elongation	700%	280%
Tensile Strength	Min 30kPa	Min 16kPa

Resistance to chemicals

PROPERTY	EXTRUDED HDPE COATING	EXTRUDED PVC COATING
Water	excellent	fair to good
Acid	excellent	good to excellent
Alkali	excellent	good to excellent
Fuel	good to excellent	poor

The properties and chemical resistance of the Extruded HDPE coating is superior compared to the traditional Extruded PVC coating. The application of the HDPE coating for gabions represents a significant step forward in ensuring the durability and performance of the corrosion protection afforded.

A common problem with Extruded PVC coatings on woven wire mesh is that during manufacture (when the wires are twisted together) work hardening of the PVC coating takes place combined with the inferior of elongation properties of the PVC coating splitting of the PVC coating occurs reducing the long term durability of the product.

With the Extruded HDPE this problem is considerably reduced due to the greater elongation properties of the polymer coating splitting of the Extruded HDPE