



ENVIROMESH

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WELDED MESH GABION SPECIFICATION Trapezoidal Gabion 27 System – 3.00mm / 4.0mm Wire Diameter – Hot Dip Galvanised

Gabions shall comply with the following specifications

- MANUFACTURE:** Gabions shall be manufactured from a hard drawn steel wire formed into a bi-axial mesh grid by electrically welding the cross wires at every intersection. The weld strength is to be 70% of the ultimate tensile strength of the wire. Gabions are to be factory assembled with stainless steel clips (minimum one every third mesh opening) connecting face and rear panels to the base panel and the lid to the face panel where required. Welded A-Frames to a maximum width of 1.0m are to be manufactured to the required shape (one frame per 0.686m cell to be provided for installation on site).
- MESH SIZE:** The mesh openings shall be square and of a nominal dimension of **76.2mm** on the grid.
- MESH WIRE:** The nominal wire diameter shall be 3.0mm for the base, ends, lids and diaphragms where required and 4.0mm for the front and rear panels all in accordance with BS EN 10218-2 1997. The tensile strength falls within a range of 540-770 N/mm².
- FRAME WIRE:** The A-Frames are to be manufactured from 10mm mild steel bar.
- CORROSION:** All Wires for the mesh and A-Frames shall be Hot Dip Galvanised in accordance with BS EN ISO 1461.
- JOINTING:** Gabions shall be provided with Galfan coated (95% Zinc / 5% Aluminium) helicals manufactured from 3.0mm wire diameter and Galfan coated lacing wire manufactured from a minimum wire diameter of 2.0mm for final jointing.
- ROCKFILL:** Gabion fill shall be a hard durable and non frost susceptible (rock or stone type) having a minimum dimension not less than the mesh opening and a maximum dimension of 200mm.
- CONSTRUCTION:** All rock fill shall be packed tightly to minimize voids and the rock fill on the exposed face of the gabions is to be hand packed.
Internal windlass bracing ties are to be positioned at 1 per face cell at midpoint on 0.686m high units and at mid point and third heights on 1.0m high units.
Adjacent units are to be jointed with full-length helicals on all vertical joints and laced horizontally with lacing wire through every mesh space at the front and rear of each course. Units shall be filled such that the mesh base of the unit above bears down onto the rock fill. The lid shall be wired down on all joints and across the diaphragms.

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