**Gabion Basket**

**Gabion basket** consist of rectangular units, fabricated from a double twisted hexagonal mesh. Filled with stones, gabions become large, flexible and permeable elements from which a broad range of structures may be built. Gabions and mattresses are widely used for hydraulic and geo-technical control such as retaining walls, riverbank protections, weirs, channel linings etc.

**Gabion baskets** are divided into cells with diaphragms (usually spaced at 1 meter or 3’ intervals), whose function is to reinforce the structure. The mesh (except for the diaphragms) is reinforced on all edges with wires of a larger diameter to strengthen the gabions and facilitate the assembly and installation.

**Wire**

Lacing and bracing wire is the wire used to assemble and join the gabion units. Connecting wires are the internal wires used to prevent the gabions from bulging during filling.

All tests on wire must be performed prior to manufacturing the mesh. All wire should comply with ASTM A97597, style 3 coating, Galfan and PVC coated steel wire. Wire used for the manufacture of gabions and the lacing wire, shall have a maximum tensile strength of 75 000 psi (515 MPa) as per ASTM A856-03, soft temper steel.

**Features**

- Economic.
- Just fill the stone into the gabions and seal it.
- Simple installation.
· No special technology needed. Weather proof under natural destroy, corrosion resistant.
· No collapse even under big scope of deforming.
· Sludge in the stones is good for plant growing.
· Mixed to form a integrity with the natural environment. Good permeation can prevent the damage by hydrostatic.
· Less transport freight. It can be folded together for transport and further installation.

**Gabion Baskets applications**
· Control and guide of water or flood
· Flood bank or guiding bank
· Preventing of rock breaking
· **Bridge Protection**
· Water and soil protection
· Coast protection
· Seaport engineering
· Strengthening structure of soil
· Protection of road

**INTERNATIONAL STANDARD TO FOLLOW:**
**ASTM 975 standard:**
Style 1 galvanized wire as per ASTM A 641, class 3 soft temper
Style 2 style 1 and overcoated with PVC
Style 3 Zn-5Al-MM coated wire as per ASTM A 856

**EN 10223-3 standard:**
Galvanized wire meets EN 10244-2 and old BS 443
Tensile strength between 380N/mm² and 550N/mm² according to BS 1052.

**TOLERANCES:**
On the hexagonal, double-twisted wire mesh opening shall not exceed ±10% on the nominal dimension.
In order to strengthen the baskets, all the edges of structure selvedged with wire of greater diameter.
**Gabion baskets** are supplied in various lengths, widths and heights.