

SACK GABIONS GALVANIZED

Sack gabions are cylindrical baskets made of 8x10 double twisted steel woven wire mesh, with mechanical characteristics higher than the ones suggested from EN 10223-3 (Figs. 1, 2). Sack gabions are filled with stones at the project site to form flexible and permeable structures used in river trainings and various emergency works. Sack gabions are supplied with steel reinforcing wires inserted during the manufacturing process to facilitate closing during installation.

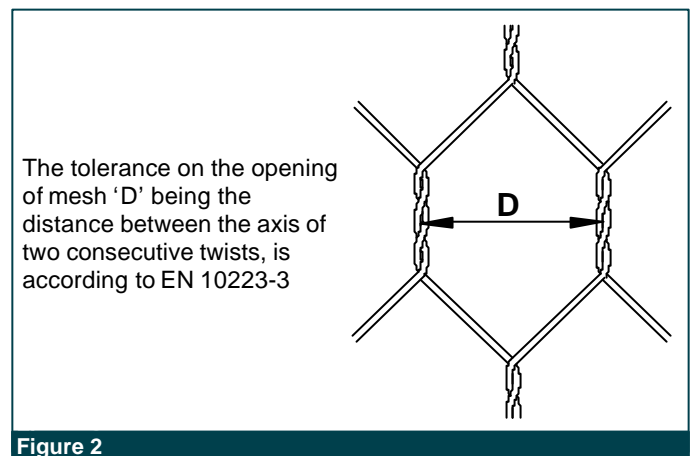
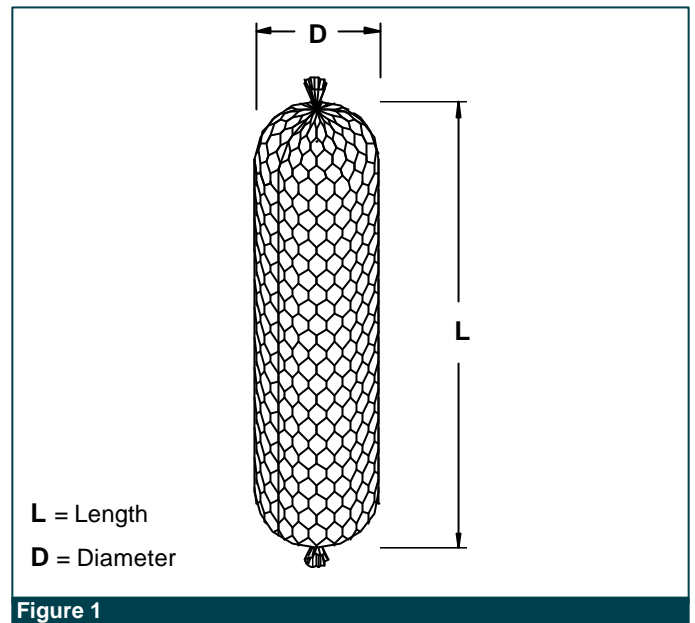
The steel wire used in the manufacture of the sack gabion is heavily galvanized soft temper steel. The standard specifications of mesh-wire are shown in Table 2.

In order to reinforce the structure, all mesh panel edges are selvaged with a wire having a greater diameter (Tables 3, 4). Dimensions and sizes of galvanized sack gabions are shown in Table 1.

Wire

All tests on wire must be performed prior to manufacturing the mesh.

- Tensile strength:** the wire used for the manufacture of gabions shall have a tensile strength between $\mathbb{3}0$ -550 N/mm² exceeding, in order to increase the tensile resistance of the finished products, what is suggested from EN 10223-3. Wire tolerances (Table 4) are in accordance with EN 10218 (Class T1).
- Elongation:** Elongation shall not be less than 10%, according to EN 10223-3. Test must be carried out on a sample at least 25 cm long.
- Zinc coating:** minimum quantities of zinc shown at Table 4 meet the requirements of EN 10244-2 (Table 1 and Class A).
- Adhesion of zinc:** the adhesion of the zinc coating to the wire shall be such that, when the wire is wrapped six turns around a mandrel having four times the diameter of the wire, it does not flake or crack when rubbing it with the bare fingers.



1. Table of sizes for sack gabions

L=Length (m)	D=Diameter (m)	Volume (m ³)
2	0.95	1.41

All sizes and dimensions are nominal. Tolerances : $\pm 5\%$ for length and diameter.

Quantity Request

When requesting a quote, please specify:

- size of units (length x diameter, see Fig.1),
- type of mesh,
- type of coating

EXAMPLE: No. 100 sack gabions 2x0.65 m - Mesh type 8x10
- Wire diam. 2.7 mm lacing wire - galvanized

2. Standard Mesh-Wire

Type	D (mm)	Tolerance	Internal Wire Dia (mm)
8x10	80	+16% / -4%	3.00

3. Standard wire diameters

	Mesh Wire	Selvedge Wire	Lacing Wire
8x10 Type of Mesh	\varnothing mm	3.0	3.9

4. Table of wire tolerances and coating

Wire diameter	mm	2.20	3.00	3.90
Wire tolerance (\pm) \varnothing mm		0.06	0.07	0.07
Min. Q.ty of zinc	gr/m ²	230	255	275

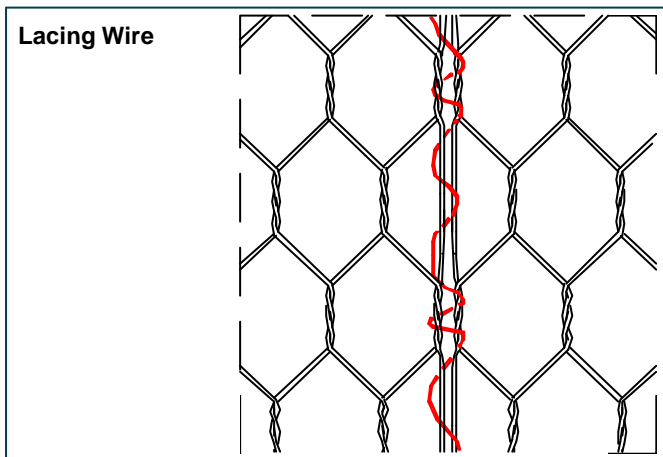


Figure 3

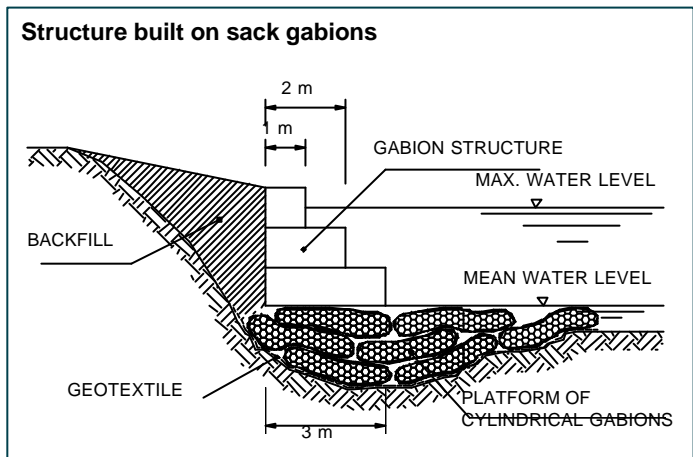


Figure 4

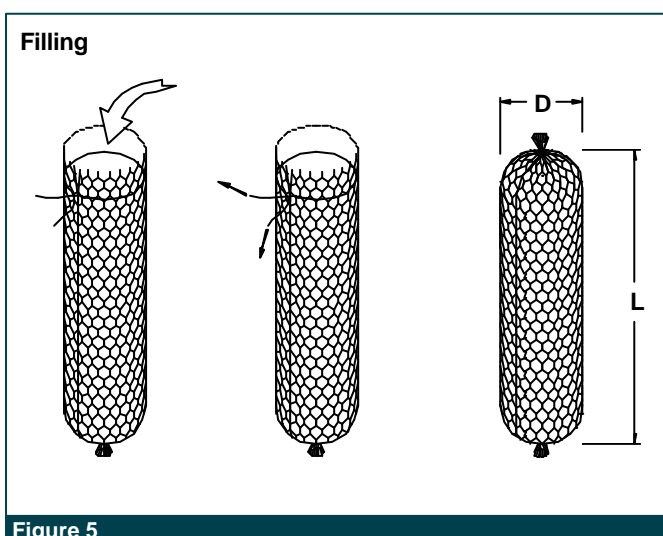


Figure 5



Figure 6

Officine Maccaferri S.p.A.

Via Agresti, 6 - P.O. BOX 396 - 40123 Bologna (Italy)

Tel. (+39) 051-6436000 - Fax (+39) 051-236507

E-mail: comes@maccaferri.com - Web site: www.maccaferri.com