

## TERRAMESH® SYSTEM GALMAC & PLASTIC COATED

The Terramesh® System is a modular system used for soil reinforcement applications such as mechanically stabilized earth walls and slopes. Terramesh® System is fabricated soft tensile, heavily Galmac (Zn-5%Al alloy) and PVC coated double twisted steel wire mesh (Fig. 1). The wire mesh used to manufacture the Terramesh® System has mechanical characteristics higher than the ones suggested from EN 10223-3 (Fig. 2).

The facing section of the unit is formed by connecting the back panel and a diaphragm to the main unit. This creates rectangular shaped cells used for stone confinement.

Terramesh® System units are supplied in standard lengths, requiring no cuts on site.

Dimensions, tolerances and sizes are shown in Tab.1.

### Wire

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

- 1. Tensile strength:** the wire used for the manufacture of terramesh shall have a tensile strength between 380-550 N/mm<sup>2</sup> exceeding, in order to increase the tensile resistance of the finished products, as per EN 10223-3. Wire tolerances (Table 3) are in accordance with EN 10218 (Class T1).
- 2. 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.
- 3. Galmac coating:** minimum quantities of Galmac shown at Table 3 meet the requirements of EN 10244-2 (Table 2 and Class A).
- 4. Adhesion of Galmac:** the adhesion of the Galmac 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.

### P.V.C. (Polyvinyl Chloride) Coating

The technical characteristics and the resistance of the PVC to ageing meet the relevant standards. The main values for the PVC material, according to EN 10245-2, are as follows:

**Specific weight:** 1.30-1.35 kg/dm<sup>3</sup> in accordance with ISO 1183;

**Hardness:** between 50 and 60 Shore D, according to ISO 868

**Tensile strength:** higher than 21N/mm<sup>2</sup>, according to ISO 527

**Elongation at break:** not less than 200%, in accordance with ISO 527;

**Colour:** grey-RAL 7037

**UV stabilized**

**Outwearing accelerated aging test in SO<sub>2</sub>** (28 cycles) in accordance with EN ISO 6988.

**A = Main Terramesh® System unit of double twisted hexagonal mesh**  
**B = Diaphragm made with double twisted hexagonal mesh**

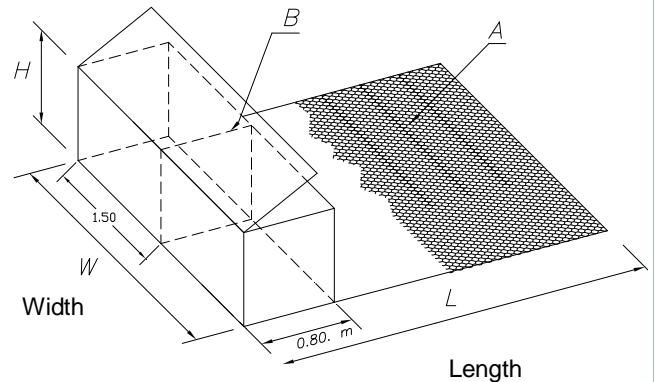


Figure 1

The tolerance on the opening of mesh 'D', being the distance between the axis of two consecutive twists, is according to EN 10223-3

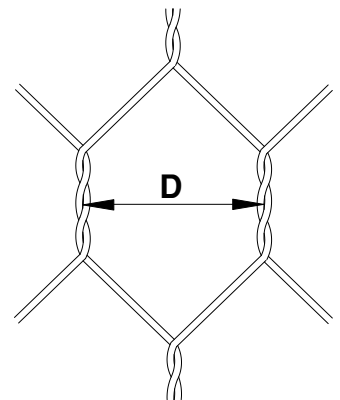


Figure 2



n° 226/001

## 1. Table of sizes for Terramesh® System

L=Length (m)	W=Width (m)	H=Height (m)
3	3	1.0/0.8
4	3	1.0/0.8
5	3	1.0/0.8
6	3	1.0/0.8

All sizes and dimensions are nominal.  
Tolerances of  $\pm 5\%$  of the weight, height, length and width of the Terramesh System shall be permitted.  
Other sizes available on demand.

## Lacing Operations

Lacing operations can be made by using the tools shown in Fig.5. Galmac coated steel rings having the following specification can be used instead of lacing wire (Figs. 3, 4):  
~ diameter: 3.00 mm  
~ tensile strength: 170 kg/mm<sup>2</sup>  
Spacing of the rings must not exceed 200 mm (Fig. 3).

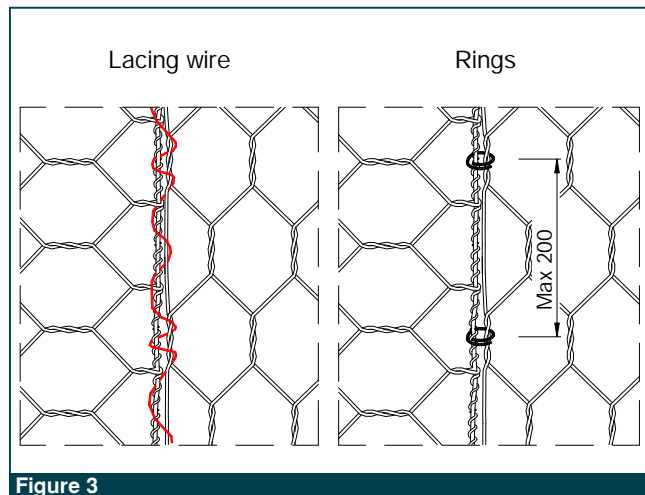


Figure 3

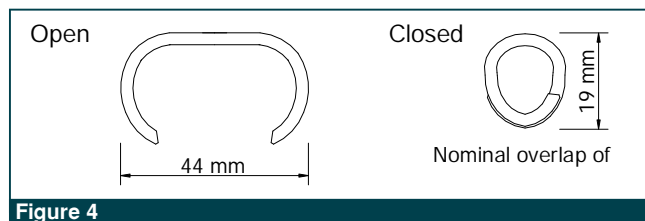


Figure 4

## 2. Standard Mesh-Wire

Type	D (mm)	Tolerance	Internal Wire Dia (mm)	External Wire Dia (mm)
8x10	80	+16% / -4%	2.70	3.70

## 3. Standard wire diameters

		Mesh Wire	Selvedge Wire
Internal Wire Diameter	ø mm	Int. 2.7/Ext. 3.7	Int. 3.4/Ext. 4.4
Wire Tolerance	(±) ø mm	0.06	0.07
Min. Q.ty of Galmac	gr/m <sup>2</sup>	245	265

## Quantity Request

When requesting a quote, please specify:  
~ size of units (length x width x height, see Fig.1),  
~ type of mesh,  
~ type of coating  
EXAMPLE: No. 100 Terramesh® System 4x3x0.8m - Mesh type 8x10 - Wire diam. 2.7 mm - Galmac + PVC coated

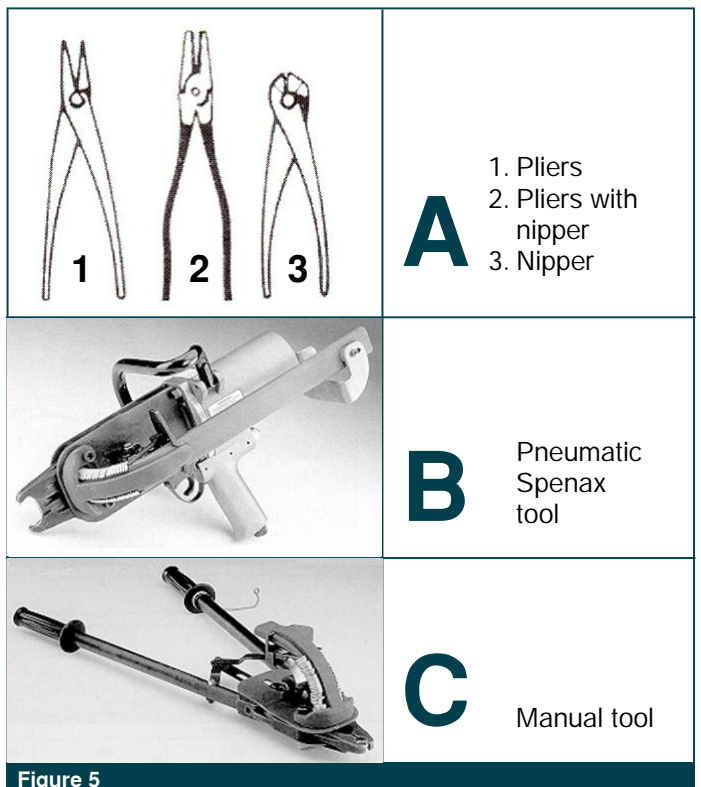


Figure 5