

MACCAFERRI

TECHNICAL DATA SHEET

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TERRAMESH® SYSTEM GALVANIZED & PVC COATED

Product Description

The Terramesh® System is a modular system used for soil reinforcement applications such as mechanically stabilized earth walls and slopes. Terramesh® System is fabricated using soft tensile, heavily galvanized and PVC coated double twisted steel wire mesh (Figure 1). The wire mesh used to manufacture the Terramesh® System is in accordance with ASTM A975 (Figure 2).

The lid, facing, base and tail are made from a continuous mesh panel. The gabion unit is formed by connecting the back panel and diaphragms to the main unit's lid, facing and base. 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 Table 1.

Wire

All tests on wire must be performed prior to manufacturing the mesh. All wire should comply with ASTM A975, style 3 coating, galvanized and PVC coated steel wire. Wire used for the manufacture of Terramesh® System and the lacing wire, shall have a maximum tensile strength of 75,000 psi (515 MPa) as per ASTM A641/A641M, soft temper steel.

Woven Wire Mesh Type 8x10

The mesh and wire characteristics shall be in accordance with ASTM A975 Table 1, Mesh type 8x10 and PVC coated. The nominal mesh opening, $D = 3.25$ in. (83 mm) as per Figure 2.

The minimum mesh properties for strength and flexibility should be in accordance with the following:

- *Mesh Tensile Strength* shall be a minimum of 2900 lb/ft (42.3 kN/m) when tested in accordance with ASTM A975 section 13.1.1.
- *Punch Test* resistance shall be a minimum of 5300 lb (23.6 kN) when tested in compliance with ASTM A975 section 13.1.4.
- *Connection to Selvedges* shall be 1200 lb/ft (17.5 kN/m) when tested in accordance with ASTM A975.

P.V.C. (Polyvinyl Chloride) Coating

The technical characteristics and the resistance of the PVC to aging should meet the relevant standards. The main values for the PVC material are as follows:

- The initial property of the PVC coating shall be in compliance with ASTM A975 section 8.2.
- Prior to UV and abrasion degradation, the PVC polymer coating shall have a projected minimum durability of 69 years when tested in accordance with *UL 746B Polymeric Material—Long Term Property Evaluation* for heat aging test.

Lacing, Assembly and Installation

- Terramesh® System units are assembled and connected to one another using lacing wire specified in Table 3 and described in Figure 3. MacTie preformed stiffeners or lacing wire can be used as internal connecting wires when a structure requires more than one layer of Terramesh® System units to be stacked on top of each other. Internal

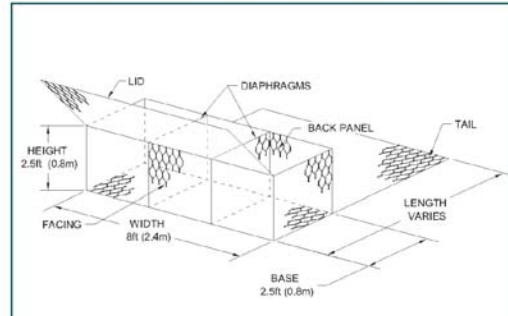


Figure 1

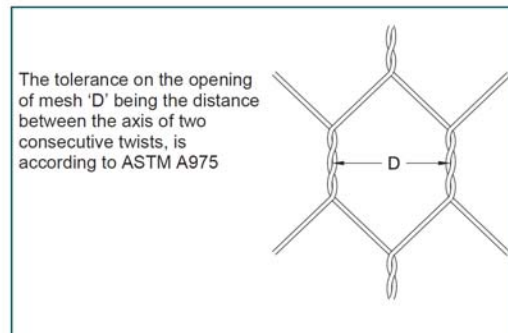


Figure 2

connecting wires with lacing wire shall connect the exposed face of a cell to the opposite side of the cell. Internal connecting preformed stiffeners shall connect the exposed face of a cell to the adjacent side of the cell. Preformed stiffeners are installed at 45° to the face/side of the unit, extending an equal distance along each side to be braced (approximately 1 ft. (300 mm)). An exposed face is any side of a Terramesh® System cell that will be exposed or unsupported after the structure is completed.

Stainless steel ring fasteners can be used instead of, or to complement, the lacing wire (Figure 4).

Stainless steel rings for PVC coated Terramesh® System shall be in accordance with ASTM A975 section 6.3.

Spacing of the rings shall be in accordance with ASTM A975 Table 2, Panel to Panel connection, Pull-Apart Resistance. In any case, ring fasteners spacing shall not exceed 6 in. (150 mm) (Figure 3).

The rings can be installed using pneumatic or manual tools (Figure 5).

For full details, please see the Terramesh® System Product Installation Guide.

The average maximum resistance of the fasteners from the field shall not be lower than 90% of the resistance provided in the certification.

EROSION CONTROL – GEOSYNTHETICS – POROUS PAVEMENT
SEDIMENT CONTROL – STORM WATER MANAGEMENT

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Maccaferri reserves the right to amend product specifications without notice and specifiers are requested to check as to the validity of the specifications they are using.

L=Length ft (m)	W=Width ft (m)	H=Height ft (m)
9 (2.7)	8 (2.40)	2.5 (0.76)
12 (3.7)	8 (2.40)	2.5 (0.76)
15 (4.6)	8 (2.40)	2.5 (0.76)
18 (5.5)	8 (2.40)	2.5 (0.76)

All sizes and dimensions are nominal. Tolerances of ± 5% of the width, height, and length of the Terramesh® System shall be permitted. Additional sizes may be available upon request.

Type	D in. (mm)	Tolerance	Internal Wire Dia in. (mm)	External Wire Dia in. (mm)
8x10/ ZN+PVC	3.25 (83)	±10%	0.106 (2.70)	0.146 (3.70)

	Lacing Wire	Mesh Wire	Selvedge Wire / Preformed Stiffeners
Wire Diameter ø in. (mm)	0.087 (2.20)	0.106 (2.70)	0.134 (3.40)
Wire Tolerance (±) ø in. (mm)	0.004 (0.10)	0.004 (0.10)	0.004 (0.10)
Minimum Quantity/Zinc oz/ft ² (g/m ²)	0.70 (214)	0.80 (244)	0.85 (259)
Wire + PVC Diameter in. (mm)	0.127 (3.20)	0.146 (3.70)	0.174 (4.40)

Quantity Request

When requesting a quotation, please specify:

- number of units,
- size of units (length x width x height, see Table 1),
- type of mesh,
- type of coating.

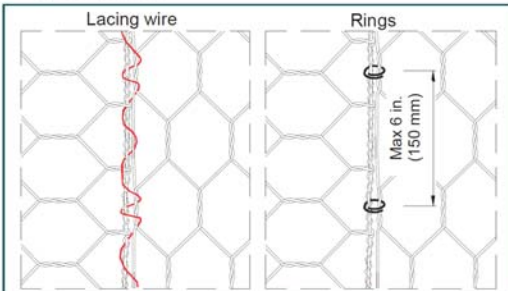


Figure 3

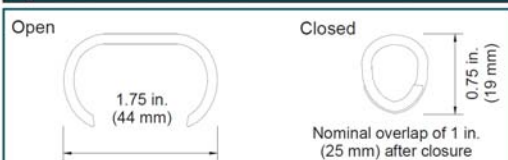


Figure 4

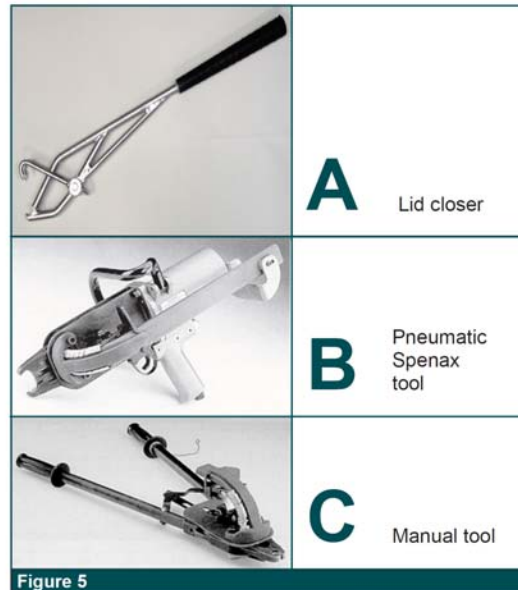


Figure 5

EROSION CONTROL – GEOSYNTHETICS – POROUS PAVEMENT
SEDIMENT CONTROL – STORM WATER MANAGEMENT