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TECHNICAL DATA SHEET

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GREEN TERRAMESH®SYSTEM

GALVANIZED & PVC COATED

Product Description

The Green Terramesh® is an environmental friendly modular system used for Reinforced Soil Slope embankments.

Green Terramesh® units are pre-assembled, made of double twisted wire mesh, a geosynthetic or biodegradable erosion control blanket, a welded mesh panel, 4 pre-formed steel struts, and 2 steel triangular brackets (Fig. 1). The Green Terramesh® is fabricated from soft tensile, heavily galvanized and PVC coated steel wire. The facing element of the unit is reinforced at top and bottom with additional PVC coated steel rods inserted through the twists during the manufacturing process (Fig.1). The steel wire mesh used in the fabrication of the Green Terramesh® is in accordance with ASTM A975-97 (Fig. 2). The facing retains the backfill, and permits vegetative cover to establish rapidly. Attached behind the woven wire mesh is an erosion control blanket made of a geosynthetic three-dimensional geomat or a biodegradable fiber biomat, and welded wire mesh panel. The erosion control blanket is used to retain the vegetative soil. Green Terramesh® units are supplied in standard lengths, requiring no cuts on site.
The four steel struts and two triangular brackets, having a diameter of 0.309 in. (7.85 mm) are used to maintain the required slope angle (60° & 70°) of the units during construction. Dimensions, tolerances, and sizes are shown in Tables 1 and 2.

Wire

All tests on wire must be performed prior to manufacturing the mesh. All wire should comply with ASTM A975-97, style 3 coating, galvanized and PVC coated steel wire. Wire used for the manufacture of Green Terramesh® and the lacing wire, shall have a maximum tensile strength of 75,000 psi (515 MPa) as per ASTM A641/A641M-03, soft temper steel.

Woven Wire Mesh Type 8x10

The mesh and wire characteristics shall be in accordance with ASTM A975-97 Table 1, Mesh type 8x10 and PVC coated. The nominal mesh opening, D = 3.25 in. (83 mm) as per Fig. 2.
The minimum mesh properties for strength and flexibility of Green Terramesh® (2.7/3.7 mm wire mesh) should be in accordance with the following:

- *Mesh Tensile Strength* shall be a minimum of 3425 lb/ft (50.0 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 A975-97 section 8.2.
Prior to UV and abrasion degradation, the PVC polymer coating shall have a projected minimum durability of 60 years when tested in accordance with *UL 746B Polymeric Material-Long Term Property Evaluation for heat aging test.*

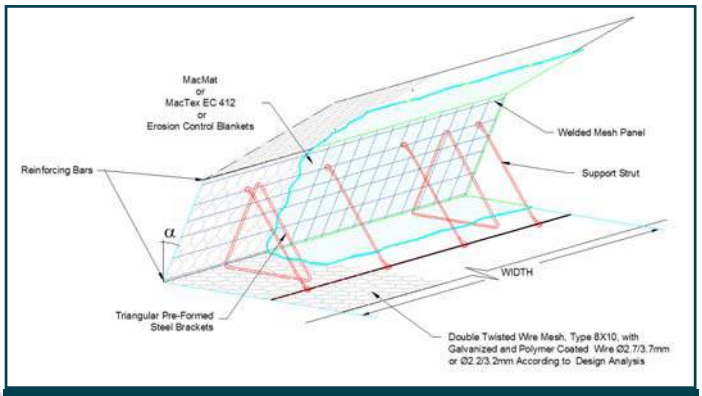

Figure 1.

Lacing, Assembly and Installation

Lacing operations to assemble and connect Green Terramesh® units are made by using lacing wire specified in Table 3 and described in Fig. 3. Stainless steel ring fasteners can be used instead of lacing wire (Fig. 4).
Stainless steel rings for PVC coated Green Terramesh® shall be in accordance with ASTM A975-97 section 6.3.
Spacing of the rings shall be in accordance with ASTM A975-97 Table 2, Panel to Panel connection, Pull-Apart Resistance. In any case, ring fasteners spacing shall not exceed 6 in. (150 mm) (Fig. 3). The rings can be installed using pneumatic or manual tools (Fig. 5).

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

The tolerance on the opening of mesh 'D' being the distance between the axis of two consecutive twists, is according to ASTM A975-97

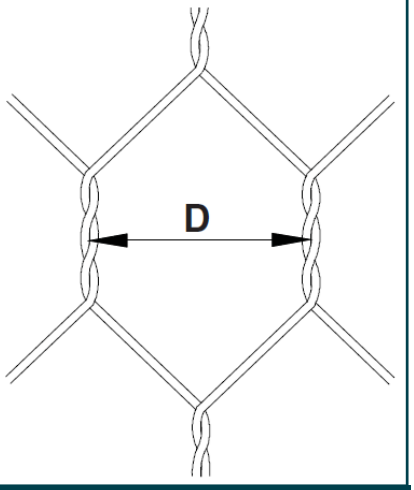

Figure 2.

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Table 1 - Sizes for Green Terramesh®

L=Length m(ft)		W=Width m(ft)	H=Height m(ft) / (Slope Angle)
Green Terramesh®	Green Terramesh® Light		
-	2 (6.5)	3 (9.8)	0.7 (2.3) / (60°)
-	2.5 (8.2)		
3 (9.8)	3 (9.8)		
4 (13.1)	-		
5 (16.4)	-		

All sizes and dimensions are nominal. Other slope angles available. Tolerances of ± 5% of the width, height, and length of the Green Terramesh® shall be permitted.

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

Table 2 - Standard Mesh Wire

Unit Type	Mesh Type	D in. (mm)	Tolerance	Internal Wire Dia in. (mm)	External Wire Dia in. (mm)
Green Terramesh®	8x10	3.25 (83)	±10%	0.106 (2.7)	0.146 (3.7)
Green Terramesh® Light	8x10	3.25 (83)	±10%	0.087 (2.2)	0.127 (3.2)

Table 3 - Wire Tolerances and Coating

Internal Wire Dia ø in. (mm)	0.087 (2.20)	0.106 (2.70)	0.134 (3.40)
Wire Tolerance (±) ø in.	0.004 (0.10)	0.004 (0.10)	0.004 (0.10)
Minimum Quantity / Zinc oz/ft2 (g/m2)	0.70 (214)	0.8 (2.44)	0.85 (260)
Wire + PVC Diameter in. (mm)	0.127 (3.20)	0.146 (3.70)	0.174 (4.40)

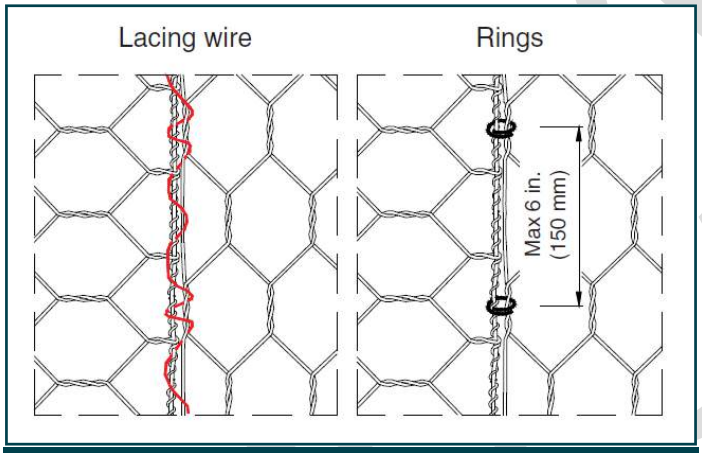

Figure 3.

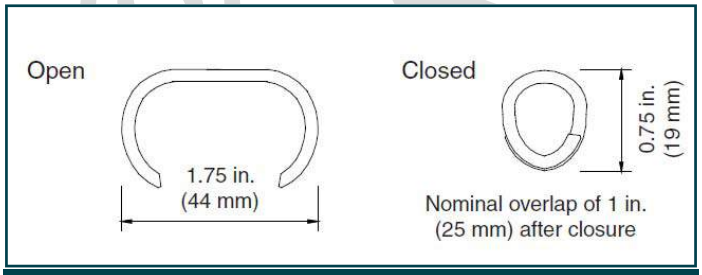

Figure 4.

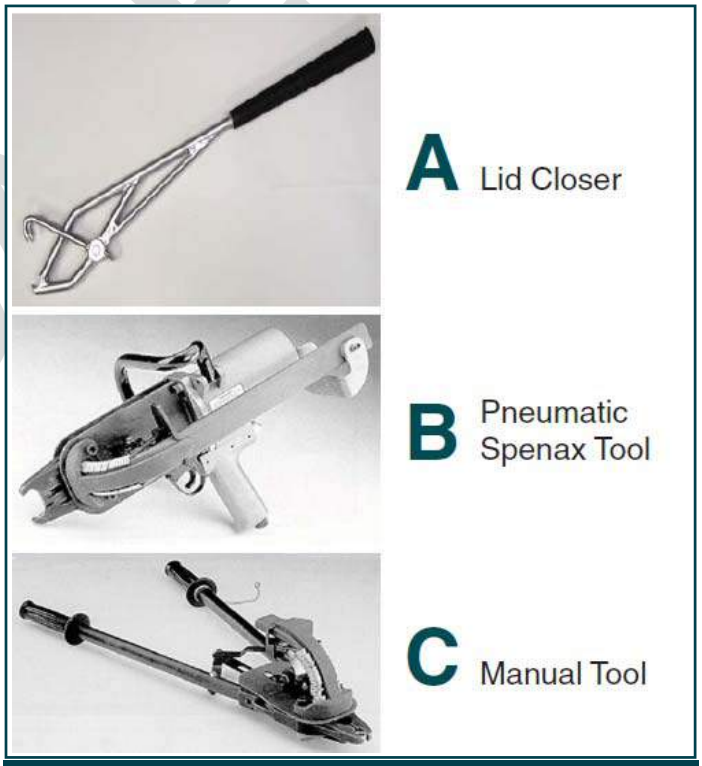

Figure 5.

Maccaferri, Inc.
10303 Governor Lane Blvd., Williamsport, MD 21795
Tel. (800) 638-7744 - Fax (301) 223-4590
E-mail: info@maccaferri-usa.com - Web site: www.maccaferri-usa.com