PNEUMATIC LACING TOOL
GALMAC & STAINLESS STEEL RINGS

TECHNICAL DATA SHEET - Rev. 05, Date 01-12-2011

Geofabrics pneumatic lacing tools have been developed for use with Gabions, Castoro Reno mattresses, Terramesh and Rockfall netting. They offer an approved alternative to standard hand lacing methods as detailed in ASTM A975 - 97.

Operation

The pneumatic lacing tools are designed to operate with standard air compressors that meet the following requirements:

- Air compressor with regulator set at 100 to 105 psi (690 to 720 kPa). Never operate above 115 psi (795 kPa).
- Minimum delivery of 10 CFM and air tank capacity of at least 48 ltr
- Air line should contain a regulator with filter unit, have a diameter of 10mm and a maximum length of 30m Excess oil attracts dirt and therefore the tool should be kept clean and dry during use. A wipe down and light spray with a good non-detergent oil after use should ensure the smooth operation of the tool.

Ring Fasteners

Lacing operations can be achieved by using the tool shown in Fig.1. Two types of rings (Fig.2) are available to meet the strength and durability requirements of the wire mesh used:

1. Galmac coated wire mesh Products

Galmac (Zinc-5%Al alloy) coated rings having the following specification can be used as an alternative to Galmac coated lacing wire:

- diameter: 3.00 mm, ASTM A975, Table 1
- tensile strength: 1380-1660 MPa, ASTM A764, Table 2, Class 1
- coating thickness: 244g/m^2, ASTM A764, Table 7, Class 3

2. Galmac/PVC coated wire mesh Products

Stainless steel rings having the following specification can be used as an alternative to Galmac+PVC coated lacing wire:

- diameter: 3.00 mm, ASTM A975, Table 1
- tensile strength: 1530-1745 MPa, ASTM A313, Table 5
- stainless steel grade, Type 302, ASTM A313, Table 1

Note: Boxes of rings must be stored in a dry area

Installation

To meet the minimum strength requirements of wire mesh connections as specified in ASTM A975 - 97 the rings shall be spaced 100-150mm apart as shown in figure 3. The number of rings used is dependent on the unit size and type of work. For continuity of the joints and to meet the wire mesh connection requirement the approximate number of rings to be used is shown in Table 1.

Figure 1

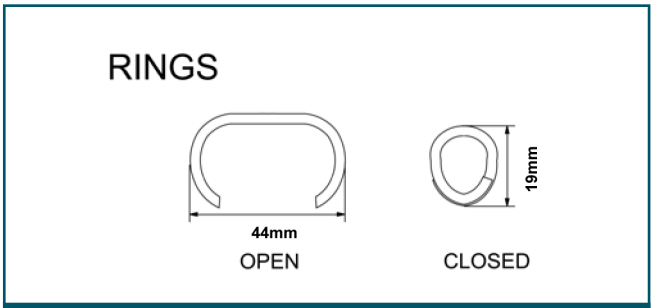

Figure 2

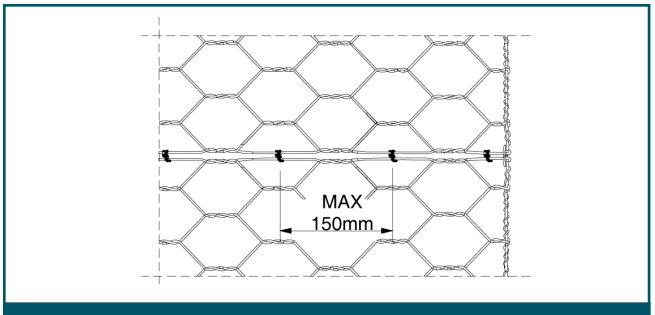

Figure 3

1. Table of approximate number of rings

	GABIONS		RENO™ MATTRESSES		
Height (m)	1.00	0.50	0.17	0.23	0.30
Number of rings/m^3 (Gabions) Number of rings/m^2 (Reno™ Mattresses)	30-40	40-60	15-18	15-18	20-25