

## ROCKFALL PROTECTION NETTING GALMAC COATED

Steel woven wire mesh is used as a drapery system to prevent rocks and debris from falling onto roads and railways. The mesh consists of Galmac coated double twisted steel woven wire with mechanical characteristics higher than the ones suggested from EN10223-3. The steel wire used in the manufacture of the mesh is heavily galvanized with Galmac, a Zn-5%Al alloy.

Due to the characteristics of the double twist, the steel wire mesh can withstand the force of falling rocks and without unraveling in the event of wire breakage.

The nominal tensile strength of the mesh shall be as per Table 2; test done in compliance with EN 15381, Annex D.

The standard specifications for the wire-mesh are shown in Tables 2, 3, 4.

### Wire

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

- 1. Tensile strength:** the wire used for the manufacture of rockfall protection 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, what is suggested from EN10223-3. Wire tolerances (Table 4) are in accordance with EN10218 (Class T1).
- 2. Elongation:** Elongation shall not be less than 10%, according to EN10223-3. Test must be carried out on a sample at least 25 cm long.
- 3. Galmac coating:** minimum quantities of Galmac shown at Table 4 meet the requirements of EN10244-2 (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, in accordance with EN 10244.
- 5. Outwearing accelerated aging test** in a general condensation of moisture containing sulfur dioxide (28 cycles) according to EN ISO 6988 (without showing signs of red rust).

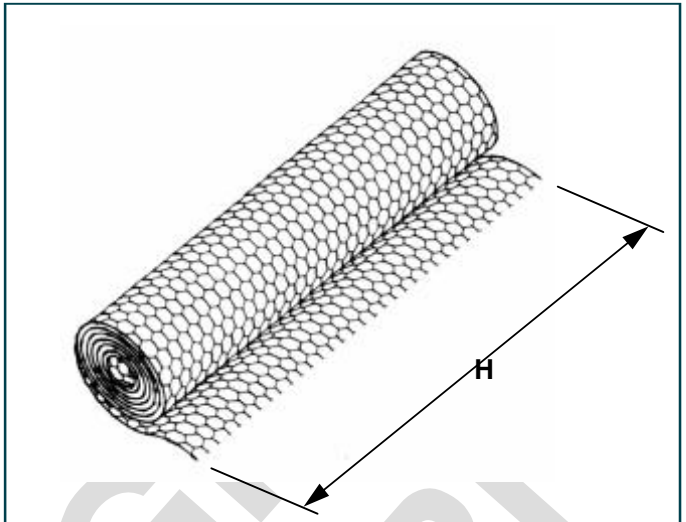


Figure 1

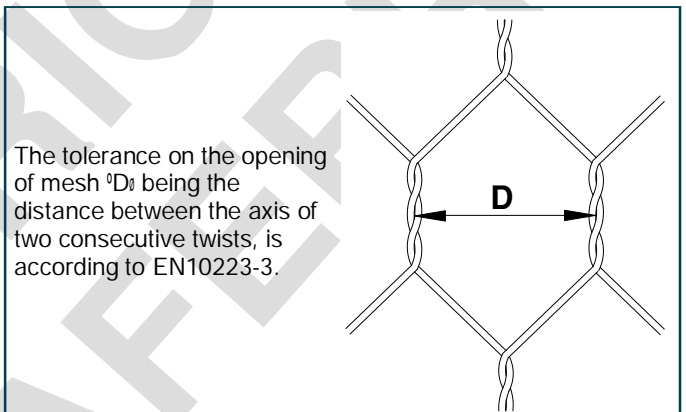


Figure 2



Example of Rockfall protection netting



Example of Rockfall protection netting



n° 226/001

## 1. Table of sizes for gabions

L=Length (m)	H=Height (m)
25	2, 3, 4
50	2, 3, 4
100	2, 3, 4

All sizes and dimensions are nominal.

Tolerances of 0/+1 m of the length, and  $\pm$  D of the height shall be permitted

## 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)

## Quantity Request

When requesting a quote, please specify:

~ size of rolls (length x height, see Fig.1),

~ type of mesh,

~ type of coating

EXAMPLE: No.100 rolls Length=25m, Height=4m - Mesh type 8x10 - Wire diam. 2.70 mm - Galmac coated

## 2 e 3. Standard Mesh Wire

Mesh			Ø Filo (mm)		
Type	D (mm)	Tolerance	Mesh	Selvedge	Mesh Tensile Strength (kN/m)
6x8	60	+16% - 4%	2.7	3.4	58
8x10	80		2.7 3.00	3.4 3.9	50 60

## 4. Table of wire tolerances and coating

Wire diameter	mm	2.20	2.40	2.70	3.00	3.40	3.90
Wire tolerance	( $\pm$ ) $\varnothing$ mm	0.06	0.06	0.06	0.07	0.07	0.07
Min.Q.ty Galmac	gr/m <sup>2</sup>	230	230	245	255	265	275

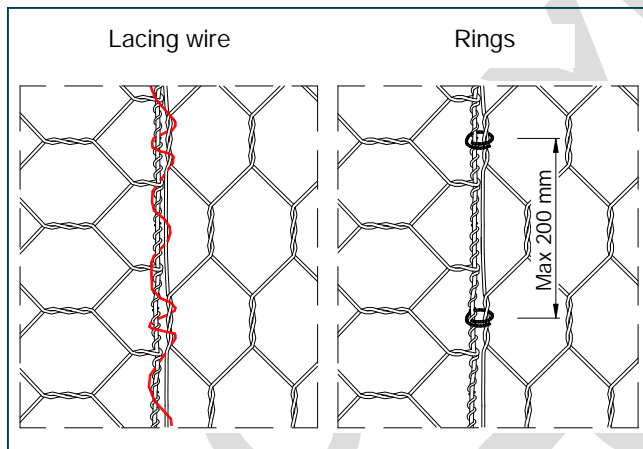


Figure 3

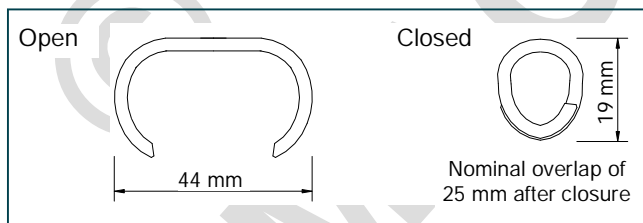


Figure 4

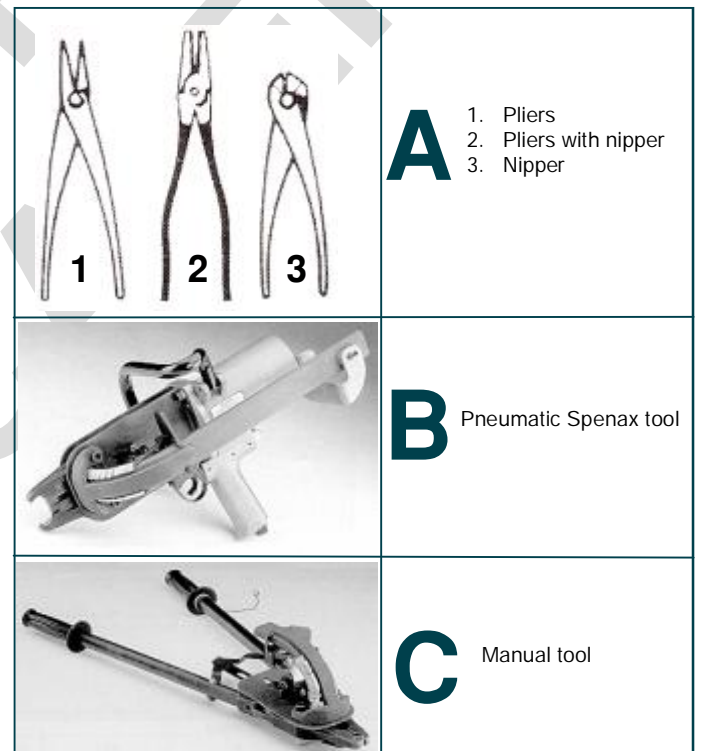


Figure 5

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