



ROCKFALL NETTING

GALFAN GALVANISED & PVC-GALFAN GALVANISED

Steel woven wire mesh netting is used as a drapery system to prevent rocks and debris from falling onto roads and railways. The mesh consists of galfan coated double twisted steel woven wire in accordance with BS EN10223-3. The steel wire used in the manufacture of the mesh is heavily galvanized with Galfan, a Zn-5%Al-MM (mischmetal) alloy.

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

Encapsulating vegetative soil pockets under the drapery system permits the establishment of vegetation if conditions permit. The standard specifications for the wire-mesh are shown in Tables 2, 3.

Wire

All tests on wire are performed prior to manufacturing the mesh.

1. **Tensile strength:** the wire used for the manufacture of Rockfall Netting have a tensile strength between 350-500 N/mm² according to BE EN10223-3. Wire tolerances (Table 3) are in accordance with BE EN10223-3.
2. **Elongation:** Elongation is greater than 10%, in accordance with BE EN10223-3.
3. **Galfan galvanising:** the minimum quantities of Galfan shown in Table 3 meet the requirements of BS EN10244-2 Class A (2.7mm diameter = 245 g/m²; 2.4mm diameter = 230 g/m²).
4. **Adhesion of Galfan:** the adhesion of the Galfan coating to the wire is such that, when the wire is wrapped six turns around a mandrel having four times the diameter of the

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 are as follows:

- The initial property of the PVC coating are in compliance with ASTM A975-97 section 8.2.
- The PVC polymer has a minimum durability of 60 years when tested in accordance with *UL 746B Polymeric Material Long Term Property Evaluation* for heat aging test.

Lacing Operations

Lacing operations to join panels of netting and connect are made by using lacing wire specified in Table 2 and described in Fig. 3.

Galfan or Stainless steel ring fasteners may be used instead of lacing wire for Galfan coated Rockfall Netting or PVC coated Rockfall netting respectively. (Fig. 4 and Fig. 5). Wire for galfan coated rings are in accordance with BS EN10223-3 & BS EN 10244-2. Stainless steel rings for PVC coated Rockfall Netting are 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. Ring fasteners spacing should not exceed 200 mm (Fig. 3).

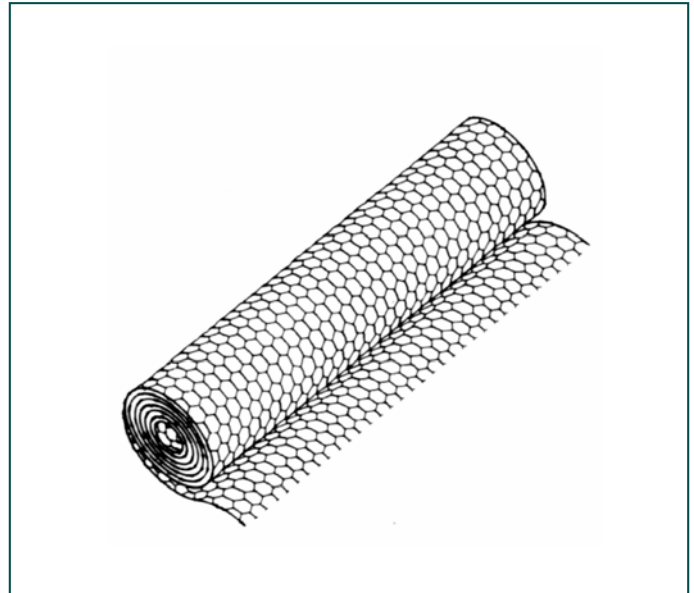


Figure 1

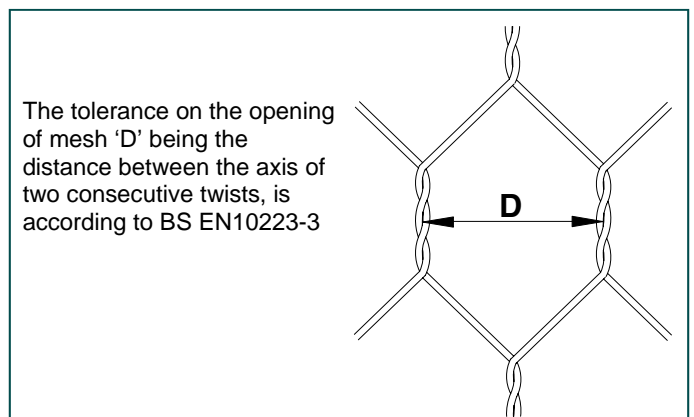


Figure 2



Rockfall protection netting during construction

1. Table of sizes & availability for Rockfall netting

Length (L) m	Width (W) m	Galfan	
		PG8/2.7	G8/2.4
25	2	•	•
25	3	•	

All sizes and dimensions are nominal.

Assembly and installation

Lacing operations can be made by using lacing wire or stainless steel fasteners. With stainless steel fasteners, the rings can be placed using automatic or manual tools (Fig. 5.). The maximum spacing of the fasteners is determined by ASTM A975 Table 2, Pull Apart Resistance test.

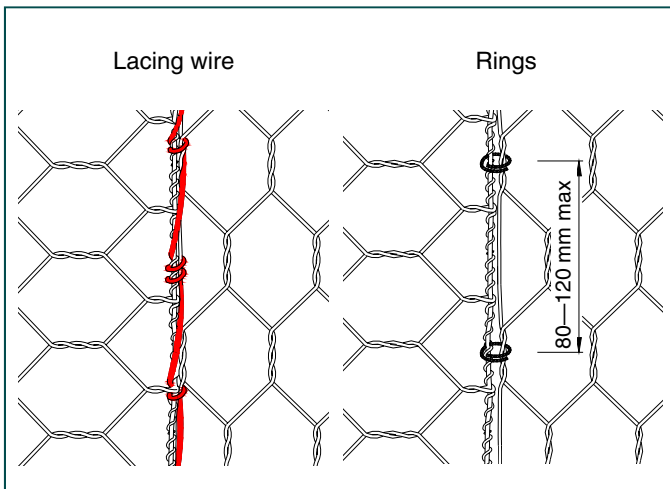


Figure 3

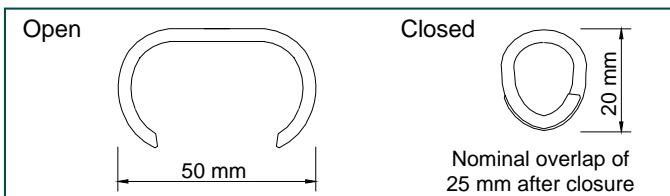


Figure 4

2. Standard Mesh-Wire

Type	D (mm)	Mesh Tolerance	Mesh Wire (mm)	Selvedge Wire (mm)	Lacing Wire (mm)
8x10/Galfan	80	+16% - 4%	2.40	3.00	2.20
8x10/Galfan+PVC	80	+16% - 4%	2.70	3.40	2.20

3. Standard wire diameters

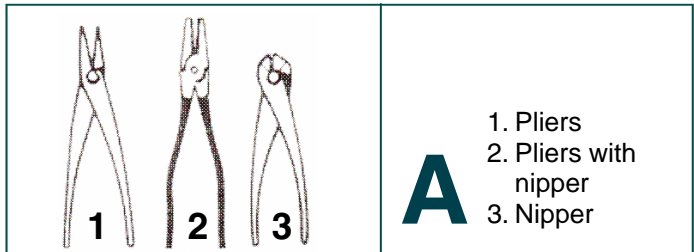
Wire Diameter	ø mm	2.2	2.4	2.7	3.0	3.4
Wire Tolerance (±) ø mm		0.06	0.06	0.06	0.07	0.07
Min. Galfan	g/m ²	230	230	245	255	265

Quantity Request

When requesting a quotation, please specify:

- No. of units,
- size of units (length x width x height, see Fig.1),
- type of mesh,
- type of coating.

EXAMPLE: No. 100 gabions 2x1x1 m - Mesh type 8x10 - Wire diameter 3.0 mm - PVC-Galfan.



A

1. Pliers
2. Pliers with nipper
3. Nipper



B

Pneumatic Spenax tool

Figure 5

Maccaferri Hexagonal mesh is BBA certified. Agreement Certificate No 95/3141



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