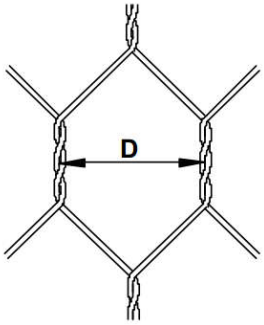
ROCKFALL PROTECTION NETTING

Rockfall protection netting consists of double twsited hexagonal steel woven wire mesh manufactured in accordance with EN10223-3.The steel wire used in the manufacture of the mesh is heavily galvanized wire or galfan coated wire or pvc coated steel wire.A pvc coating is then applied to provide added protection for use in polluted environments where soils or water are acidic:in salt or fresh water,or wherever the risk of corrosion is present.Due to the characteristics of the double twist,the rockfall protection mesh can withstand the force of the falling rocks without unraveling in the event of wire breakage.

1. ROCKFALL PROTECTION NETTING – Mesh type 60x80mm and 80x100mm

The mesh shall be in accordance with EN10223-3 have a tolorances more 16 P/C and less 4 P/C.

The tolerance on the opening of mesh 'D' being the distance between the axis of two consecutive twists, is according to EN10223-3.

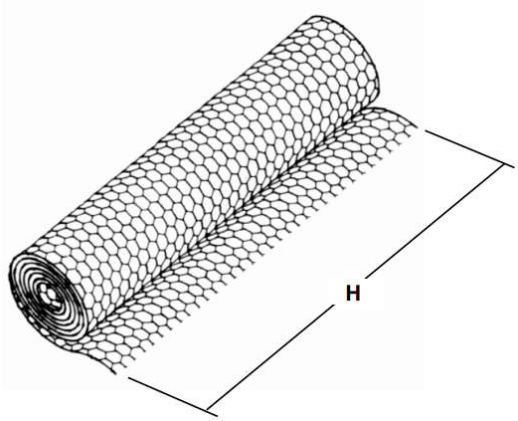


Standard mesh size		
Standard Type	D(mm)	Tolerance
60x80	60	+16% / -4%
80x100	80	+16% / -4%

2. ROCKFALL PROTECTION NETTING – Roll size

All sizes and dimensions are nominal.Tolerances of +/-1% of the length and 5% of the width shall be permitted.

Rockfall protection netting size	
W=Width(m)	L=Length(m)
2,3,4	25
2,3,4	30
2,3,4	50



3. ROCKFALL PROTECTION NETTING-Elongation and Tensile strength

the wire used for the manufacture of rockfall protection netting shall have a tensile strength between 350-550MPA and elongation shall not less than 12% as per EN10223-3

Wire elongation and tensile strength		
Standard wire	Elongation	Tensile strength
2.2mm	⩾12%	350-550MPA
2.7mm	⩾12%	350-550MPA
3.0mm	⩾12%	350-550MPA
3.4mm	⩾12%	350-550MPA
3.9mm	⩾12%	350-550MPA

4. ROCKFALL PROTECTION NETTING-Wire tolerance and zinc-coating

Wire tolerance and zinc-coating					
Wire dia.	2.2	2.7	3.0	3.4	3.9
Wire tolorances	0.06	0.06	0.06	0.07	0.1
Zinc-coating	230	245	255	265	275

5. ROCKFALL PROTECTION NETTING-Pvc coating

Pvc coating(mm)					
Wire dia.	2.2	2.7	3.0	3.4	3.9
Min. Pvc thickness	0.5	0.5	0.5	0.5	0.5

Pvc color according to customers'requirement

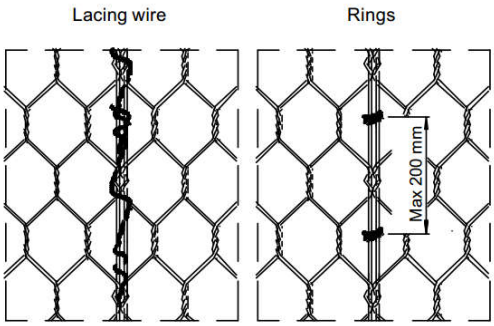
6. ROCKFALL PROTECTION NETTING-Lacing operations

Lacing perations can be made by using tools with galfan coated steel C-rings,or made by the lacing wire.

The C-ring wire diameter is 3.0mm with tensile strength 170kg/mm2.

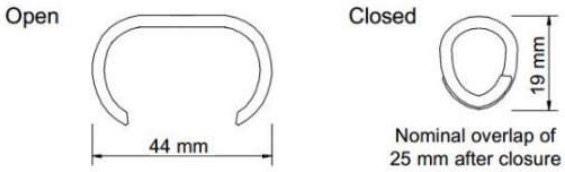
Spacing of the C-rings must not exceed 200mm.

Lacing draft



Lacing tools

C-rings



Pvc –coated lacing wire

Heavily zinc-coated lacing wire

Installation

GABIONS

Gabions are rectangular baskets fabricated from a hexagonal mesh of heavily galvanized steel wire. The baskets are filled with rock and stacked atop one another to form a gravity-type wall. Gabions depend mainly on the interlocking of the individual stones and rocks within the wire mesh for internal stability, and their mass or weight to resist hydraulic and earth forces. Gabions are a porous type of structure that can sometimes be vegetated. Gabions are considered to be a "hard" structural solution that has minimal habitat and aesthetic value.

Advantages

Some advantages of gabion walls are:

- Ease of handling and transportation
- Speed of construction
- Flexibility (Gabions tolerate movement)
- Permeability to water (Good drainage)
- Gabions offer an easy-to-use method for decreasing water velocity and protecting slopes from erosion.

Standard wire diameter

Wire tolerance and zinc-coating					
Wire dia.	2.2	2.7	3.0	3.4	3.9
Wire tolorances	0.06	0.06	0.06	0.07	0.1
Zinc-coating	*230*	*245*	*255*	*265*	*275*

Standard mesh size

Standard mesh size		
Standard Type	D(mm)	Tolerance
60x80	60	+16% / -4%
80x100	80	+16% / -4%
100x120	100	+16% / -4%

Wire enlongation and tensile strength

Wire elongation and tensile strength		
Standard wire	Elongation	Tensile strength
2.2mm	⩾12%	350-550MPA
2.7mm	⩾12%	350-550MPA
3.0mm	⩾12%	350-550MPA
3.4mm	⩾12%	350-550MPA
3.9mm	⩾12%	350-550MPA

Standard gabion