



## INTRODUCTION

**SAMAFE** manufacture and distribute high quality construction and hardware materials since 1974. Based in Houston, TX, **SAMAFE USA**, a division of Samafe, S.A and Le Group Industries specializes in the distribution of gabion baskets and mattresses made of heavily galvanized and PVC coated wire. Our gabions meet or exceed ASTM and other international standards. We follow rigorous quality procedures and inspections thorough the production process.

## GABIONS DESCRIPTION

**GABIONS** (Greater than 1' in height) and **MATTRESSES** (Less than 1' in height) consist of rectangular units, fabricated from a double-twisted hexagonal mesh. Filled with stones, gabions become large, flexible and permeable elements from which a broad range of structures may be built. Gabions and mattresses are widely used for hydraulic and geo- technical control such as retaining walls, riverbank protections, weirs, channel linings etc.

**GABIONS or MATTRESSES** are divided into cells with diaphragms (usually spaced at 1 meter or 3' intervals), whose function is to reinforce the structure. The mesh (except for the diaphragms) is reinforced on all edges with wires of a larger diameter to strengthen the gabions and facilitate the assembly and installation.

## SPECS:

- 1) **Zinc-Coated Steel Wire as per ASTM a 641, Class 3 Coating, soft temper.**
- 2) **PVC (Polyvinyl Chloride) Coated, Electro Galvanized First.**
- 3) **Zn - 5Al - MM Coated Steel Wire as per ASTM A 856/A 856M, Class 3 coating, soft temper**

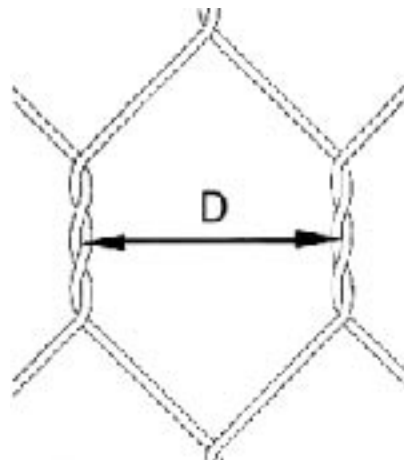
## DOUBLE-TWISTED HEXAGONAL MESH:

A double-twisted wire mesh is a non-raveling mesh made by twisting continuous pairs of wires through three one half ( $\frac{1}{2}$ ) turns (commonly called double-twisted) to form hexagonal shaped openings which are then interconnected to adjacent wires to form hexagonal openings. We can supply double-twisted hexagonal mesh in rolls of 1 x 50mtrs, 2 x 50mtrs, the widest can be 2.3mtrs. The wire mesh can be used to protect rock fall.

## TOLERANCES:

On the hexagonal, double-twisted wire mesh opening shall not exceed  $\pm 10\%$  on the nominal dimension D values (see figure), as follows:

Mesh Type	Nominal Dimension D Values
<b>6 x 8</b>	<b>64mm (2.50 in.)</b>
<b>8 x 10</b>	<b>83mm (3.25 in.)</b>



### WIRE THICKNESS SPECS

Characteristics	M e t a l l i c Coated	PVC Coated	Metallic Coated	PVC Coated
Mesh Type	8 x 10cm		6 x 8cm	
Mesh Openings	83mm x 114mm 8 x 10	83mm x 114mm 8 x 10	64mm x 83mm 8 x 10	64mm x 83mm 8 x 10
Mesh Wire	2.7mm (0.106 in.)	3.05mm (0.120 in.)	2.2mm (0.087 in.)	2.2mm (0.087 in.)
Selvedge Wire	3.5mm (0.134 in.)	3.8mm (0.150 in.)	2.7mm (0.105 in.)	2.7mm (0.105 in.)
Lacing Wire	2.2mm (0.087 in.)	2.2mm (0.087 in.)	2.2mm (0.087 in.)	2.2mm (0.087 in.)

### SIZE OF GABION & MATTRESS SPECS

Typical Gabion Sizes (SI Units)					Typical Gabion Sizes (Inch - Pound Units)				
Length	Width	Height	No. Of Cells	Volume	Length	Width	Height	No. Of Cells	Volume
Meter	Meter	Meter	Each	Cu. Meter	Feet	Feet	Feet	Each	Cu. Yard
2.0	1.0	1.0	2.0	2.0	6.0	3.0	3.0	2.0	2.0
3.0	1.0	1.0	3.0	3.0	9.0	3.0	3.0	3.0	3.0
4.0	1.0	1.0	4.0	4.0	12.0	3.0	3.0	4.0	4.0
2.0	1.0	0.5	2.0	1.0	6.0	3.0	1.5	2.0	1.0
3.0	1.0	0.5	3.0	1.5	9.0	3.0	1.5	3.0	1.5
4.0	1.0	0.5	4.0	2.0	9.0	3.0	1.5	3.0	1.5
2.0	1.0	0.3	2.0	0.6	12.0	3.0	1.5	4.0	2.0
3.0	1.0	0.3	3.0	0.9	6.0	3.0	1.0	2.0	0.67
4.0	1.0	0.3	4.0	1.2	12.0	3.0	1.0	4.0	1.33

Typical Mattress Sizes (SI Units)					Typical Mattress Sizes (Inch - Pound Units)				
Length	Width	Height	No. Of Cells	Area	Length	Width	Height	No. Of Cells	Area
Meter	Meter	Meter	Each	Sq. Meter	Feet	Feet	Feet	Each	Sq.Yard
3.0	2.0	0.17	3.0	6.0	9.0	6.0	0.5	3.0	6.0
4.0	2.0	0.17	4.0	8.0	12.0	6.0	0.5	4.0	8.0
3.0	2.0	0.23	3.0	6.0	9.0	6.0	0.75	3.0	6.0
4.0	2.0	0.23	4.0	8.0	12.0	6.0	0.75	4.0	8.0
3.0	2.0	0.3	3.0	6.0	9.0	6.0	1.0	3.0	6.0
4.0	2.0	0.3	4.0	8.0	12.0	6.0	1.0	4.0	8.0

**Packing:**

For easy handling and shipping, the gabions are supplied folded flat. A color stripe applied on the side of each folded gabion identifies the size.



**SAMAFE USA**

