AIM INDUSTRIES

Manufacturer of Wire Mesh

AIM INDUSTRIES

Deals in

Triple Twist Hexagonal Mesh Gabions / Mattresses
Chainlink Fencing PVC Coated And G.I. Wire
G.I. Barbed Wire
Reverse Twist Hexagonal Mesh

INDEX

ABOUT US

AIM INDUSTRIES is a Wire Mesh Production Company.

We are professional producer of Wire Mesh Products in Pakistan.

The company is professionally engaged in the production of various kinds of Woven and welded wire mesh products that are used in Construction sites, Defense Systems and Decoration purposes.

Our Company incorporates different kinds of High production efficiency Weaving and welding machines having low production loss.

AIM Industries has been manufacturing and producing high quality Wire Mesh products meeting our Customer's requirements and needs while Maintaining market trends and standards.

OUR MISSION

- To achieve customer satisfaction by producing high quality products Manufactured by best and up to the mark resources.
- Providing excellent services catering to all the needs and expectations Of our clients including quality management & timely delivery.
- To be in compliance with all applicable ASTM and BS standards.

INTRODUCTION

Triple Twist Hexagonal Mesh Gabions / Mattresses

Many years ago, Gabions were used in this part of the world in the form of wicker baskets, for the fortification of military establishments to keep out military adventurers and to hold the mighty rivers in check.
These crude baskets were in fact, the forerunners of the modern *Triple Twist Hexagonal Mesh Gabions / Mattresses.*

The modern Gabions are wire cages, almost always rectangular in shape, varying in size and designed to solve, at a nominal cost, the manifold and often complex problems of river bank erosion. These rectangular cages are designed to contain low -grade or waste stones often available at the site of erection, formed into a permanent protection, buttress or support for river banks, sea walls, culverts, road bridges, railways and reservoirs.

AIM INDUSTRIES offers *Triple Twist Hexagonal Mesh Gabions / Mattresses.* for civil schemes capable of withstanding the movements of the earth without too much structural deformation.

WHAT ARE GABIONS

Gabion boxes and mattresses are made of triple twist hexagonal mesh fabric. The fabric is machine woven netting made from G.I. or PVC coated mild steel Wire. It possesses high mechanical strength and the triple twist weaving of Wire prevents unraveling.

The wire conforms to BS:4102 (annealed for tensile strength and is Galvanised By hot dip process having a zinc coating of 80-150 grams per M^2 or by Electrolyte process or PVC Coated.

The mesh panels are reinforced at all edges with wire of a larger diameter Than that used for manufacturing the mesh to strengthen them and to Facilitate construction.

ZINC COATED WIRE WITH PVC (POLY VINYL COATING)

The characteristics of the gabions manufactured from PVC coated wire are Similar to gabions manufactured from galvanised Iron Wire. PVC coated Wire have been introduce to safe guard against corrosion and other weather Effects, specially when the gabions / mattresses are used in saline or highly Polluted water.

Gabions may be divided into cells by fitting dividers which have a function Of reinforcing the structure and making assembly and erection easier.

It is of vital importance that the construction material chosen meets high Standards with regards to engineering requirement and at the same time is Environmentally friendly.

ADVANTAGES

The triple twist hexagonal mesh gabions / mattresses have following positive advantages.

- Ability to deform without cracking allowing the structures to withstand any unpredictable movement or settlement without loss of stability
- Higher resistance to natural forces due to better tensile strength.
- Simple installation procedure using natural or quarried stones obtained locally.
- Gabions / Mattresses are quickly and effectively erected by relatively unskilled labour.
- The gabions structure blends easily and harmoniously with natural Surroundings.
- The speed at which the works are carried out is unparalleled in civil Engineering, besides making it cost effective.

BASIC PRINCIPLES

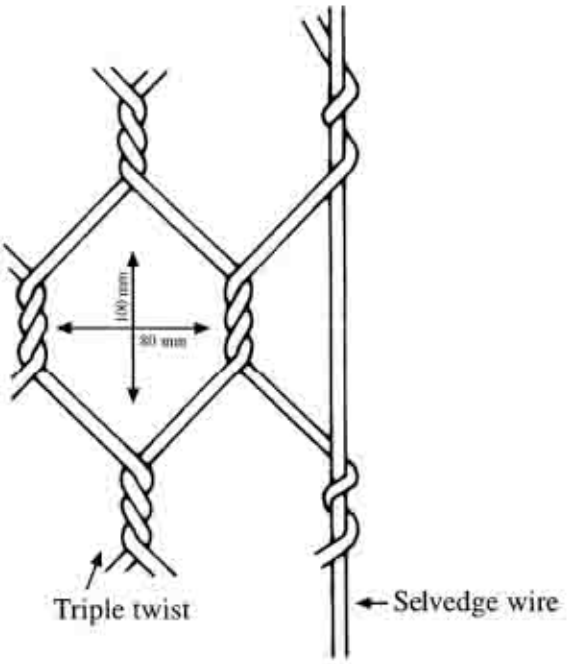
The effectiveness of a gabions structure relies on The integrity of the wire baskets throughout Their design life.

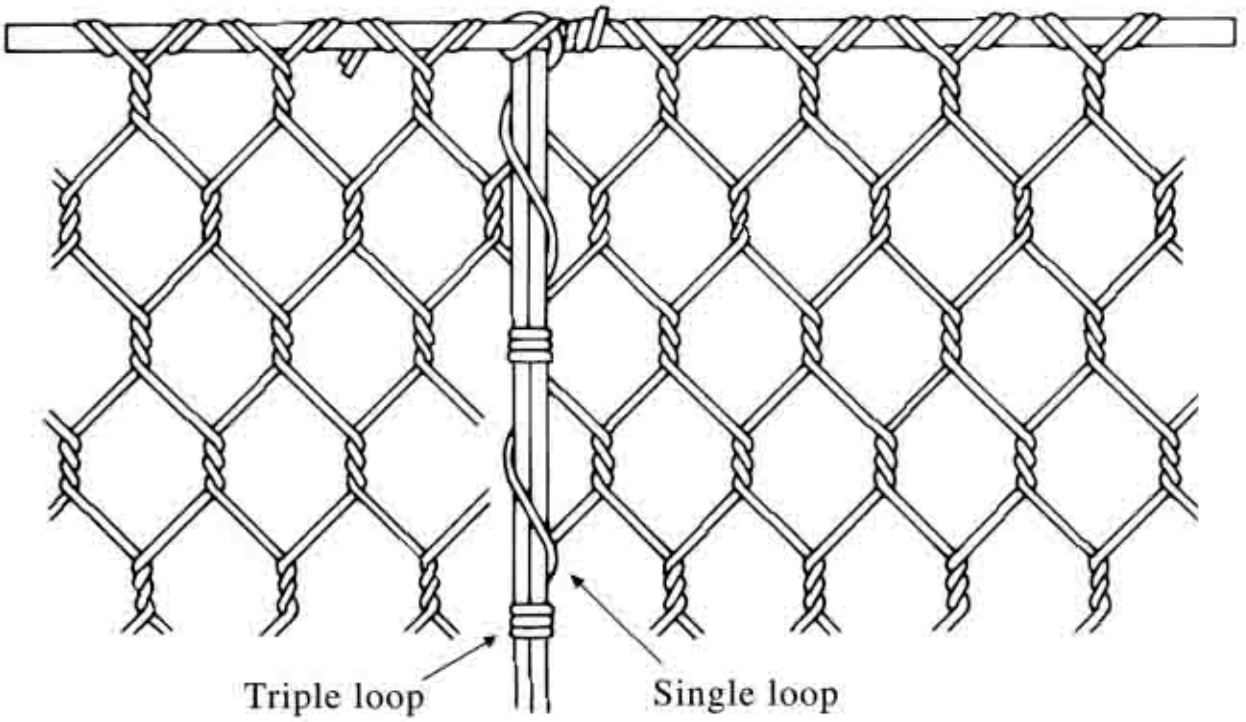
High quality wire with appropriate corrosion Protection is therefore essential.

Use of low grade mesh, selvedge wire or tie Wire is a false economy.

Cheap hand twisted mesh soon unravels And a uniforms mesh size is difficult to Achive.

The first step in the successful use of gabions Is therefore, selection of an appropriate Manufacturer / supplier





ASSEMBLY ERECTIONS FILLING OF GABIONS

a) Gabion boxes / mattresses are packed in convenient numbers per bundle, in folded flat form. This makes them easy to handle and transport from factory sites. Normally, top lids are packed and supplied separately, as they are to be secured to top only after the filling of stones is completed.

b) Individual sheets are straightened flat, without any creases, and laid to form the required boxes / mattresses (Fig 1)

c) The sheets are now connected with lacing wires in a continuous sequence.

d) The sheets are then systematically folded. Care is taken at this stage to ensure that the boxes / mattresses are rectangular, by maintaining an exact distance between each panel (Fig 2)

e) Gabions should be filled with hard natural stones. The natural or quarried stones should be of non-variable texture, weather resistant and preferably of high density. The size of the stones should be at least twice the size of the mesh so that they are retained within the mesh even at high pressure. Stones are to be packed tightly, with minimum VOIDS (space between). Care is taken to level stones at different stages, and connecting wires are used to retain original size and shape. This prevents bulging (Fig 3)

f) The bracing wires are used at regular intervals of 300 mm (as shown in Fig 4) in order to retain the original shape and prevent bulging. Where "jumbo" boxes / mattresses are required, dividers are placed and connected with tie wire at regular one metre intervals (Fig 4)

g) At the time of errection of the gabions on site, large numbers of boxes and matteresses are used. It is necessary to tie and connect them in series, so as to form one integrated structure. Tie wires are used to connect selvedge wires of adjoining gabions at regular three to four inch intervals. The loose ends of the tie wires are then fully secured to the selvedge wire, by triple loops, for full security (Fig 5 & 6)

Fig 1

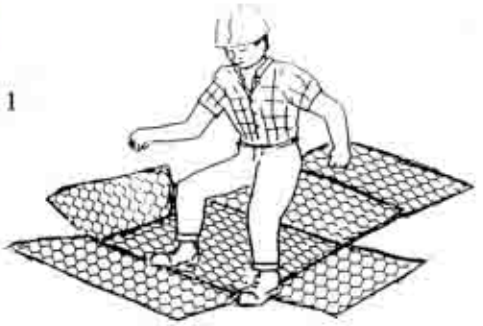


Fig 2

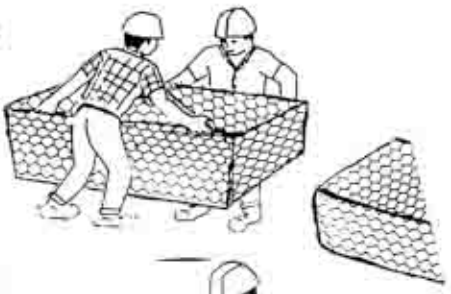


Fig 3

Fig 4

Fig 5

Fig 6

HOW TO ORDER GABIONS

We give below typical sizes and specifications of Triple Twist Hexagonal Mesh Gabions/Mattresses Manufactured by us: Alternative wire diameter or sizes of Gabions and Mattresses can be Manufactured to suit individual contract design requirements.

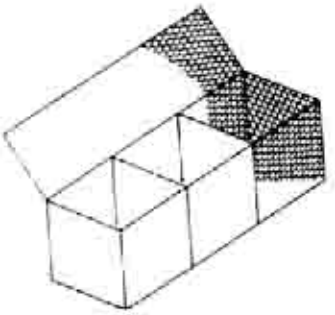
SIZES OF GABIONS MANUFACTURED BY US:

Mesh : 80 x 100 mm

Max: Wire Dia : 3.0 mm for Galvanised Wire
4.0 mm for PVC Coated Wire

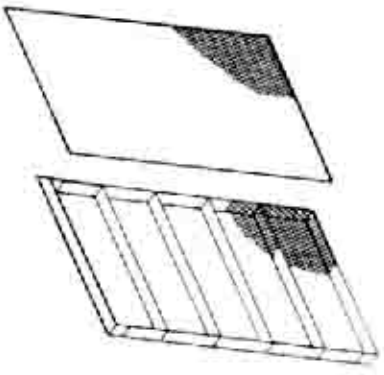
PVC Coated or Galvanised Wire Gabion

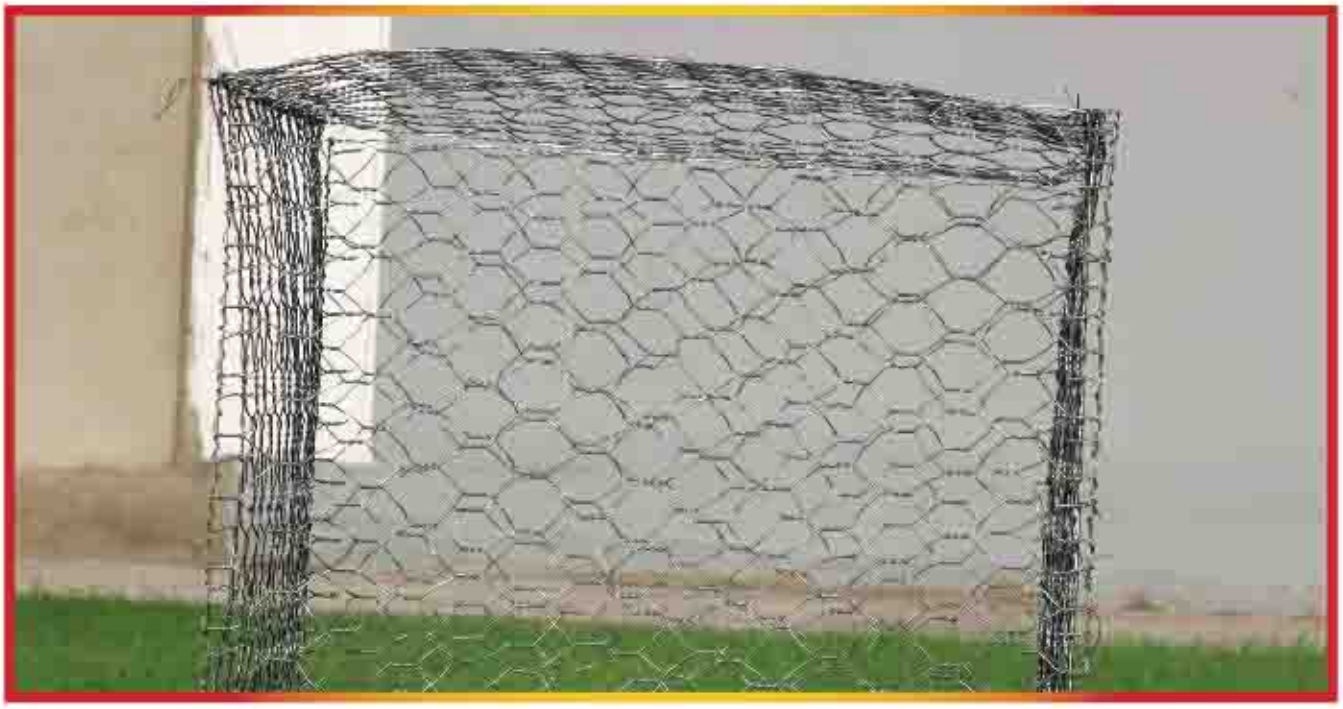
Length	Width	Height	Dividers	Capacity	Mesh
1	1	1	-	1 Cm M	6M²
1.5	1	1	-	1.5 Cm M	8M²
2	1	1	1	2 Cm M	11M²
3	1	1	2	3 Cm M	16M²
4	1	1	3	4 Cm M	21M²
3	2	1	2	6 Cm M	26M²
4	2	1	3	8 Cm M	32M²
5	2	1	4	10 Cm M	42M²



PVC Coated or Galvanised Wire Mattresses

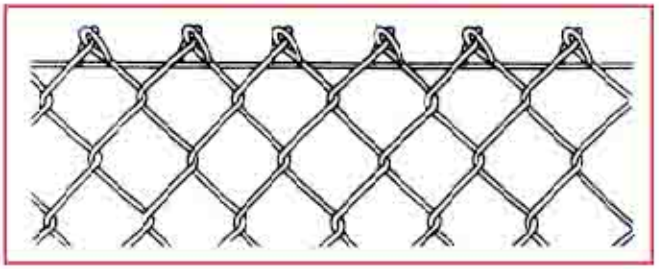
Length	Width	Height	Dividers	Capacity	Mesh
3	2	0.50	2	3 Cm M	19M²
4	2	0.50	3	4 Cm M	25M²
5	2	0.50	4	5 Cm M	31M²
6	2	0.50	5	6 Cm M	37M²
3	2	0.30	2	1.8 Cm M	16.2M²
4	2	0.30	3	2.4 Cm M	21.4M²
5	2	0.30	4	3 Cm M	26.6M²
6	2	0.30	5	3 Cm M	31.8M²



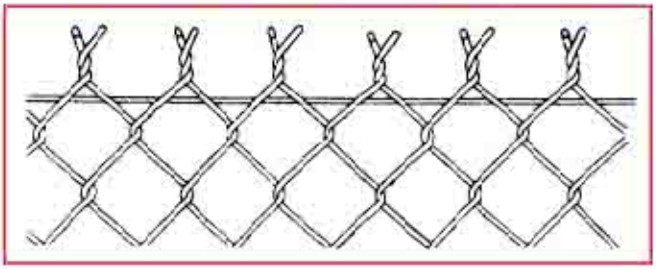


CHAINLINK FENCING PVC COATED AND G.I. WIRE

KNUCKLED EDGES



BARBED EDGES



BRITISH STANDARDS

- 1. All the chain link fencing is woven from wire which conforms to BS : 4102 (annealed) having zinc coating 80-150gm / sq.mtr
- 2. The Composition of PVC compound comply with class 3, type E1 of BS : 2571

ACCESSORIES

Chain link fencing can be erected on most types of posts including concrete, angle iron, square, rectangular and circular steel hollow sections available on request. Matching gate systems are also available.

GALVANISED

		Height Number of line wires shown in italic						
Mesh	Wire Size	900mm (35")	1.20 m (3'11")	1.40 m (4'7")	1.80 m (5'11")	2.40 m (7'11")	2.75 m (9'0")	3.60 m (11'10")
	[ ] approx	2	3	3	3	4	4	5
25 mm	2.03 [14g]	x	x	x	x	x	x	x
1"	2.65 [12g]	x	x	x	x	x	x	x
38 mm	2.65 [12g]	x	x	x	x	x	x	x
1.5"	3.25 [10g]	x	x	x	x	x	x	x
50 mm	3.25 [10g]	x	x	x	x	x	x	x
2"	3.50 [9g]	x	x	x	x	x	x	x
	4.00 [8g]	x	x	x	x	x	x	x
	4.87 [6g]	x	x	x	x	x	x	x
75 mm	3.25 [10g]	x	x	x	x	x	x	x
3"	4.06 [8g]	x	x	x	x	x	x	x
	4.87 [6g]	x	x	x	x	x	x	x
75 mm	3.00mm [10g]	x	x	x	x	x	x	x
3"	4.00mm [8g]	x	x	x	x	x	x	x

RECOMMENDED USES

	Height	Mesh	Wire Size (mm) Galplas/ Crusader Plasmesh		No. of Line Wires
HOUSE GARDEN FRONTS & DIVISIONS	900mm	50mm	2.50 3.00	2.65/2.00 2.50/1.70 3.15/2.24 3.55/2.50	2
CHILDRENS PLAYGROUND	1.20M	50mm	3.00 3.55	3.55/2.50 4.00/3.00	3
GENERAL PURPOSES	1.40M	50mm	2.50 3.00	3.15/2.24 3.55/2.50 4.00/3.00	3
		40mm	2.50 3.00	3.15/2.24 3.55/2.50	
PLAYING FIELDS RECREATION GROUNDS	1.40M	50mm	3.55	4.00/3.00	3
COMMERCIAL PROPERTY	2.40M	50mm	3.00 3.55 5.00	3.55/2.50 4.00/3.00 3.55/4.75	3
RAILWAYS & GENERAL SAFETY	1.80M	40mm	3.00	3.55/2.50	3
TENNIS COURTS	2.75M and 3.60M	45mm	2.50	3.15/2.24	5
		50mm	2.50 3.00	3.15/2.24 3.44/2.50	

PVC COATED WITH GALVANISED (INNER STEEL) CORE

		Height Number of line wires shown in italic						
Mesh	Wire Size	900mm (35")	1.20 m (3'11")	1.40 m (4'7")	1.80 m (5'11")	2.40 m (7'11")	2.75 m (9'0")	3.60 m (11'10")
	( ) approx	2	3	3	3	4	4	5
25 mm (1")	2.6 / 1.6mm (12g / 18g)	x	x	x	x	x	x	x
38 mm 1.5"	2.6 / 1.6mm (12g / 18g)	x	x	x	x	x	x	x
	3.2 / 2.03mm (10g / 14g)	x	x	x	x	x	x	x
	3.5 / 2.3 mm (9g / 13g)	x	x	x	x	x	x	x
	3.7 / 2.6 mm (9g / 12g)	x	x	x	x	x	x	x
50 mm (2")	3.2 / 2.03mm (10g / 14g)	x	x	x	x	x	x	x
	3.5 / 2.3 mm (9g / 13g)	x	x	x	x	x	x	x
	3.7 / 2.6 mm (9g / 12g)	x	x	x	x	x	x	x
	4.3 / 3.2 mm (7g / 10g)	x	x	x	x	x	x	x
	4.87 / 3.5 mm (6g / 9g)	x	x	x	x	x	x	x

CHAINLINK FENCING PVC COATED AND G.I. WIRE

PVC Coated

Galvanised

GALVANISED IRON BARBED WIRE

Manufactured from mild steel galvanised steel wire confirming to British Standard BS 4102 (Annealed), having Zinc coating of 80 - 150 grams per square meter.

Two grades of Barbed Wire are available:-

- 1. Two ply galvanised line wire of 2.6 mm or 12 SWG with four point Barbs of 2 mm dia or 14 SWG galvanised wire, 4 inch apart.

- 2. Two ply galvanised line wire of 2.0 mm or 14 SWG with four point Barbs of 2 mm dia or 14 SWG galvanised wire, 4 inch apart.

G.I. BARBED WIRE

(IN COILS OF ABOUT 12-13 KGS)

LINE WIRE GUAGE SWG	BARBING WIRE GUAGE SWG	STRAND	4-POINT BARB OF 14SWG AT	APPROXIMATE LENGTH FT. PER KG.
12	14	2	4" apart	28 Ft.
12	14	2	6" apart	30 Ft.
14	14	2	4" apart	45 Ft.
14	14	2	6" apart	50 Ft.

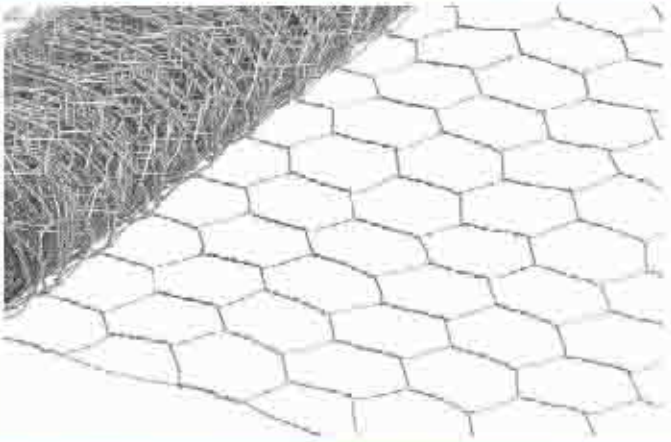
REVERSE TWIST HEXAGONAL CHICKEN MESH

Available in Mesh Sizes :- 1/2" - 3/4" - 1"

G.I. Wire Dia : 20 swg to 26 swg

Width : 1 Meter, 1.2 Meters or 1.8 Meters

Length of Roll : 30 Meters



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info@aimindustries.com.pk

www.aimindustries.com.pk

LF-36/A, Landhi Industrial Area, Scheme-3,
Main Landhi-Korangi Road, Karachi-75160