



MANUFACTURER · INDIA & BHUTAN

Gabions, Wire Mesh & Fencing

Gabion boxes, revet mattresses, sack gabions, facia units and rockfall netting made to IS 16014:2024 — with the welded mesh, PVC coated wire, chain link and barbed wire from the same works.

ISO 9001:2015 certified

IS 16014:2024

Two works in West Bengal



Made in our own works, to the standard your drawing names

Agarwal Gabion Industries manufactures machine-woven gabions, hexagonal double twisted wire mesh, welded mesh, PVC coated GI wire, chain link fencing and barbed wire. We supply contractors executing government and private works across North East India, West Bengal, Bihar, Jharkhand, Odisha and Bhutan.

Gabion units are built to **IS 16014:2024** — or to the clause in your tender or BOQ — under an ISO 9001:2015 certified quality system, with raw material procured to ISI standards from verified manufacturers.

9

product lines, all
manufactured

2

works in West Bengal

IS 16014

2024 edition, gabion range

ISO 9001

2015 · Cert. No.
305024011282Q

Four engineering choices

Double twisted, not single twist

Two wires are twisted together at every junction, so a cut strand does not unravel the panel. Damage stays local and the mesh keeps sharing load.

Machine woven, not hand woven

Machine weaving holds mesh geometry and wire tension constant across every square metre, so performance is repeatable from one panel to the next.

Gabion walls, not rigid RCC

Gabion walls are flexible and free-draining. They absorb ground movement instead of cracking and need no formwork or curing.

PVC coated, not bare GI

A PVC jacket over galvanized wire adds a second, independent corrosion barrier for submerged, tidal and chemically aggressive ground.

Two works, close to where gabions are used

Works 1 — Jangalpur, Howrah

West Bengal 711411

Serves Kolkata, southern West Bengal, Bihar, Jharkhand and Odisha — close to the port and the eastern trunk routes.

Works 2 — Ethelbari, Birpara

West Bengal 735204

In the Dooars, on the route into Bhutan, Sikkim and Assam. Orders for the North East and Bhutan leave from here.

Our range at a glance

Gabion products — IS 16014:2024

Gabion Box · Revet Mattress · Sack Gabion · Facia Units · Rockfall Netting

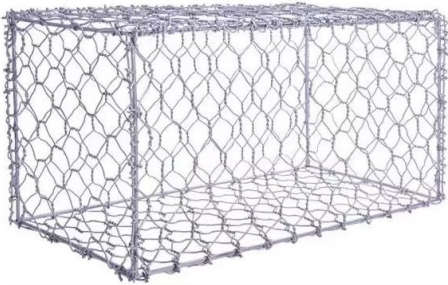
Mesh & wire

PVC Coated GI Wire · Welded Mesh

Fencing & security

Chain Link (ILC) Fencing · Barbed Wire

Gabions are heavy and bought by the truckload, so distance decides the landed price. Send the site location with your enquiry and we quote a delivered price.



Gabion Box

A rectangular cage of machine-woven double twisted hexagonal mesh, divided into cells by diaphragms and filled on site with hard stone. Stacked and laced together, boxes form flexible, free-draining gravity structures.

- ✓ Absorbs settlement without cracking

✓ No formwork or curing; local stone fill
- ✓ Relieves water pressure behind the wall

✓ GI or PVC coated wire

	GI, 2.70 mm mesh wire	GI, 3.00 mm mesh wire	PVC coated (ID/OD)
Mesh types	10×12 (D = 100 mm), 8×10 (D = 80 mm)	10×12, 8×10	10×12, 8×10
Mesh wire dia	2.70 mm	3.00 mm	2.70 / 3.70 mm
Edge / selvedge wire dia	3.40 mm	3.90 mm	3.40 / 4.40 mm
Lacing wire dia	2.20 mm	2.20 mm	2.20 / 3.20 mm
PVC coating thickness	—	—	Nominal 0.50 mm, min. 0.40 mm
Typical sizes (L × W × H)	1.5, 2, 3 or 4 m × 1 m × 1 m; 2, 3 or 4 m × 1 m × 0.5 or 0.3 m — any coating		
Diaphragms	One every 1 m of length (2 m box: 1, 3 m: 2, 4 m: 3)		
Size tolerance	L and W ±5%; H above 0.3 m ±5%, 0.3 m and below ±10%; mesh opening D ±10%		

IS 16014:2024 Table 1.



Photo: Antonio Canfora, CC BY-SA 3.0 (Wikimedia Commons). Illustrative.

Revet Mattress

A thin, wide gabion unit of 6×8 mesh, 0.17 to 0.30 m thick and 2 m wide, laid flat like a blanket over river beds, banks, canals and spillway aprons. It keeps protecting as the ground beneath settles.

- ✓ Follows uneven and settling ground

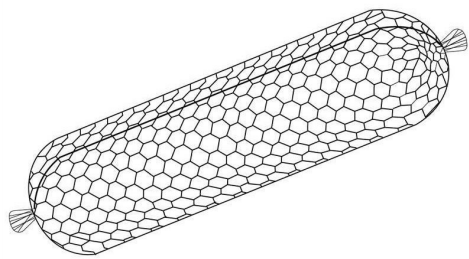
✓ Free-draining; supports vegetation
- ✓ Smaller stone than gabion boxes

✓ GI or PVC coated

	GI	PVC coated (ID/OD)
Mesh type	6×8 (D = 60 mm)	6×8 (D = 60 mm)
Mesh wire dia	2.20 mm	2.20 / 3.20 mm
Edge / selvedge wire dia	2.70 mm	2.70 / 3.70 mm
Lacing wire dia	2.20 mm	2.20 / 3.20 mm
PVC coating thickness	—	Nominal 0.50 mm, min. 0.40 mm
Typical sizes (L × W × H)	2, 3 or 4 m × 2 m × 0.17 / 0.23 / 0.30 m; diaphragms every 1 m	
Size tolerance	L and W ±5%; H ±10%; mesh opening D ±10%	

IS 16014:2024 Table 2.

Minimum zinc coating (IS 16014:2024, Table 8): 2.20 mm → 240 g/m²; 2.70 mm → 260; 3.00 mm → 270; 3.40 mm → 270; 3.90 mm → 280.



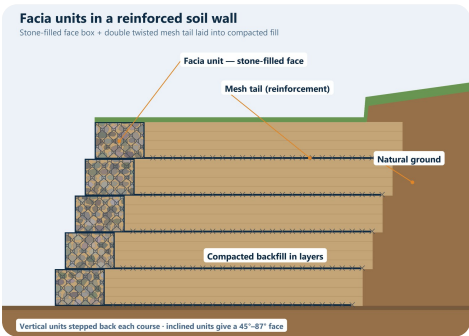
Sack Gabion

A cylinder of double twisted mesh, closed along its length with lacing wire once filled. It is filled on the bank or on a barge and lifted or rolled into place — including into flowing water, where boxes cannot be built in the dry.

- ✓ Emergency breach closure
- ✓ Same wire schedule as gabion boxes
- ✓ Conforms to a scoured bed
- ✓ GI or PVC coated

	GI, 2.70 mm mesh wire	GI, 3.00 mm mesh wire	PVC coated (ID/OD)
Mesh types	10×12 (D = 100 mm), 8×10 (D = 80 mm)	10×12, 8×10	10×12, 8×10
Mesh wire dia	2.70 mm	3.00 mm	2.70 / 3.70 mm
Edge / selvedge wire dia	3.40 mm	3.90 mm	3.40 / 4.40 mm
Lacing wire dia	2.20 mm	2.20 mm	2.20 / 3.20 mm
PVC coating thickness	—	—	Nominal 0.50 mm, min. 0.40 mm
Typical sizes (length × diameter)	1.5 × 0.74 m or 2 × 0.96 m — any coating		
Size tolerance	Length and diameter ±5%; mesh opening D ±10%		

IS 16014:2024 Table 3.



Facia Units

A gabion facing box whose base panel continues as a long mesh tail laid between layers of compacted backfill, so the soil block itself becomes the retaining structure. Vertical units build near-vertical walls; inclined units give a vegetated face at 45° to 87°. PVC coated only.

- ✓ Taller walls than gravity gabions alone
- ✓ Tolerates settlement on weak foundations
- ✓ Uses site soil as the structural mass
- ✓ Inclined units allow a green face

	10×12 (D = 100 mm)	8×10 (D = 80 mm)	6×8 (D = 60 mm)
Mesh wire dia (ID/OD)	2.70 / 3.70 mm	2.70 / 3.70 mm	2.20 / 3.20 mm
Edge / selvedge wire dia	3.40 / 4.40 mm	3.40 / 4.40 mm	2.70 / 3.70 mm
Lacing wire dia	2.20 / 3.20 mm	2.20 / 3.20 mm	2.20 / 3.20 mm
PVC coating thickness	Nominal 0.50 mm, min. 0.40 mm	Nominal 0.50 mm, min. 0.40 mm	Nominal 0.50 mm, min. 0.40 mm
Vertical units (L × W × H)	3–6 m × 2 or 3 m × 0.5, 0.8 or 1.0 m		
Inclined units (L × W × H)	3–6 m × 2 or 3 m × 0.63–0.83 m; face angle 45°–87°		
Size tolerance	L and W ±5%; H above 0.3 m ±5%; mesh opening D ±10%		

IS 16014:2024 Tables 4 and 5.



ROCK CUTTINGS ABOVE ROADS & RAILWAYS **IS 16014:2024**

Rockfall Netting

Double twisted mesh in rolls, anchored at the crest and hung down the face. Loose rock is held against the slope and guided to a catch ditch at the toe instead of bouncing onto the road below. For higher energy slopes it is combined with anchors, cables and rock bolts designed for the site.

- ✓ A cut wire does not run
- ✓ Vegetation grows through
- ✓ Rolls join edge to edge
- ✓ GI or PVC coated

	GI, 2.70 mm	GI, 3.00 mm	PVC coated	GI	PVC coated
Mesh types	10×12, 8×10	10×12, 8×10	10×12, 8×10	6×8	6×8
Mesh wire dia	2.70 mm	3.00 mm	2.70 / 3.70 mm	2.20 mm	2.20 / 3.20 mm
Edge / selvedge wire dia	3.40 mm	3.90 mm	3.40 / 4.40 mm	2.70 mm	2.70 / 3.70 mm
Lacing wire dia	2.20 mm	2.20 mm	2.20 / 3.20 mm	2.20 mm	2.20 / 3.20 mm
PVC coating thickness	—	—	0.50 nom. / 0.40 min.	—	0.50 nom. / 0.40 min.
Roll size (L × W)	25 × 2, 25 × 3 or 25 × 4 m				
Roll tolerance	Length +1.0 m / -0 m; width ±D; mesh opening D ±10%				

IS 16014:2024 Table 6.

DOUBLE CORROSION PROTECTION

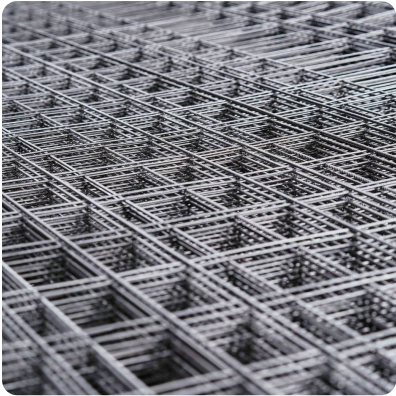
PVC Coated GI Wire

Galvanized mild steel wire with an extruded PVC jacket. The zinc guards the steel; the PVC keeps water, salts and soil chemicals away from the zinc – for submerged works, river training, tidal and coastal zones and aggressive ground.

- ✓ Two independent corrosion barriers
- ✓ Resists soil chemicals
- ✓ For submerged and coastal works
- ✓ Standard PVC colours on request



Core wire	Galvanized mild steel wire
Coating	Extruded PVC over the galvanized core
Core & finished diameter	To project specification
Colour	Standard PVC colours on request
Typical use	Gabions, revet mattresses, fencing, river training works

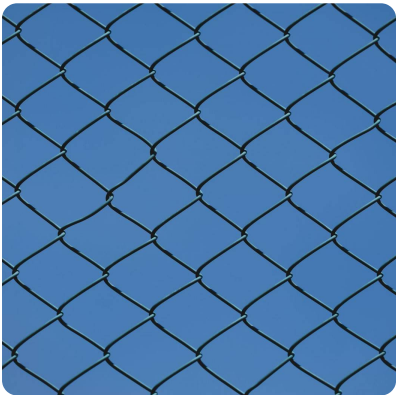


FENCING PANELS · GUARDS · ENCLOSURES

Welded Mesh

Line and cross wires laid in a grid and welded at every intersection – a flat, rigid mesh whose apertures stay square. Choose welded where the panel must stay flat and fix neatly to posts or frames.

Construction	Line and cross wires welded at every intersection
Aperture & wire dia	Square or rectangular aperture, to specification
Finish	Galvanized, or as specified
Supply form	Rolls or panels, cut to size
Typical use	Fencing panels, machine guards, partitions, poultry and livestock enclosures



ALSO CALLED INTERLINKED CHAIN (ILC) FENCING · CHAIN LINK JALI

Chain Link Fencing

Wires interwoven into a continuous diamond pattern. Quick to install over long runs, repairable in sections, and it keeps sightlines open for supervision.

Pattern	Interwoven diamond mesh
Wire	Galvanized mild steel, or PVC coated over GI
Aperture & wire diameter	To project specification
Height / roll length	Made to requirement
Typical use	Plots, factories, substations, farms, schools and sports grounds



PERIMETER DETERRENT · FENCE TOPPING

Barbed Wire

Twisted line wires carrying sharp barbs at regular intervals – an effective deterrent with very little material, on its own or as a topping over chain link.

Type	Twisted line wires with barbs at regular intervals
Wire	Galvanized mild steel
Line wire dia & barb spacing	To project specification
Packing	Coils / rolls to requirement

All products: raw material procured to ISI standards from verified manufacturers; ISO 9001:2015 certified quality system (Cert. No. 305024011282Q).

Where our gabions are used



Photo: Calum McRoberts, CC BY-SA 2.0

River & bank protection

Gabion walls hold the bank face against monsoon flows, mattresses armour the lower slope and sacks protect the toe below water.

Gabion box · Revet mattress · Sack gabion



Retaining walls on hill roads

Gravity walls that hold back hill slopes along roads and railway formations — free-draining, and flexible enough to settle without cracking.

Gabion box · Facia units



Photo: USDA NRCS, public domain

Check dams & stream control

Low gabion structures across streams and gullies slow the runoff, trap sediment and stop the bed cutting down.

Gabion box · Revet mattress



Photo: Antonio Canfora, CC BY-SA 3.0

Channel lining & scour protection

Mattresses laid flat line canals and drains, and protect river beds, bridge piers and culvert outfalls from scour.

Revet mattress · Gabion box



Rockfall protection

Netting draped over rock cuttings holds loose rock against the face and guides it down to a catch ditch, away from the road.

Rockfall netting



Flood emergencies & underwater works

Sacks filled on the bank or a barge go straight into flowing water to close breaches and fill scour holes.

Sack gabion

Also used for: reinforced soil walls and steep slopes (facia units), embankment and slope erosion control, and landscaping and boundary walls.

Where we have supplied

Assam

Arunachal Pradesh

Meghalaya

Nagaland

Manipur

Mizoram

Tripura

Sikkim

North Bengal

Kolkata & South Bengal

Bihar

Jharkhand

Odisha

Bhutan

REQUEST A QUOTATION

Send us your BOQ or drawing

We reply with pricing and lead time. To quote quickly, tell us:

1. Product and sizes, with quantity of each
2. Mesh type (e.g. 10×12) and mesh, selvedge & lacing wire diameters
3. Coating — GI or PVC coated
4. Governing standard or tender clause
5. Site location and required delivery date

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BHUTAN

We supply contractors in Bhutan from the Ethelbari works, near the Jaigaon-Phuentsholing border. Call or WhatsApp the India numbers above.

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Opp. Tantia School, Kolkata 700073, West Bengal, India

WORKS

Works 1: Jangalpur, Howrah 711411, West Bengal

Works 2: Ethelbari, Birpara 735204, West Bengal



agarwalgabions.com

Scan to send an enquiry, see full specifications and application guides.



FREE ON AGARWALGABIONS.COM

Gabion wall design guide · Gabion wall cost guide · Gabion wall vs RCC retaining wall · Gabion check dams · Gabion applications · Gabion FAQ (mesh types & IS 16014:2024 tolerances) · Full product specifications