



PRODUCT BROCHURE · IS 16014:2024

PVC Coated GI Wire

Galvanized mild steel wire in an extruded PVC jacket — two independent barriers between the steel and everything a river, a coastline or the ground can throw at it.

10 → 120+

years: bare zinc vs PVC over zinc-aluminium, same site (IS 16014:2024)

5–10×

the life of the same wire left bare — our estimate for heavy-galvanized cores

0.50 mm

nominal PVC jacket (0.40 mm min.) over Table 8 zinc



- PVC coating
- Zinc coating
- MS wire

From 10 years to more than 120

What IS 16014:2024 itself says the PVC jacket is worth. Annex B rates every coating system by how corrosive the site is, using the ISO 9223 categories C2 to CX.

Bare heavy-galvanized wire

10 years

medium-corrosivity site (C3)

→

PVC over zinc–aluminium wire

120+ years

the same site, the same standard

12×

the life – and the only system IS 16014 lists at C5 and CX sites

IS 16014:2024 — assumed working life (Annex B, Table B-1)

Site category	Bare, heavy zinc	Bare, zinc–aluminium	PVC over zinc–aluminium
C2 · low Rural areas and small towns, dry or cold zones	25 years	over 50 to over 120 years	—
C3 · medium Towns; tropical sites with low pollution; coast with little salt	10 years	25 to over 50 years	over 120 years
C4 · high Industrial areas; coastal sites without salt spray; tropics with medium pollution	not offered	10 to 25 years	120 years or more
C5 · very high Heavy industry; coastline and sheltered shore positions	not offered	not offered	120 years or more
CX · extreme Very wet tropics with heavy pollution; coastal and offshore, salt spray	not offered	not offered	over 120 years (zinc–10% aluminium core)

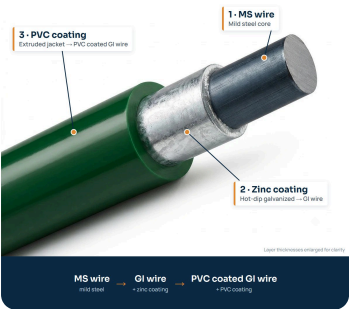
Not offered: the standard lists no bare-wire option for that category. Working life as IS 16014 defines it assumes properly designed and built works with normal maintenance. Permanently submerged and abrasive river works are not tabulated — life there is agreed for the project, and PVC is the usual answer.

Our own chart — heavy-galvanized core, bare vs PVC coated

Wire	Bare GI — est. life	With PVC	PVC coated — est. life
2.70 mm core Hot-dip galvanized, 260 g/m² zinc	15–20 years	2.70 / 3.70 mm, galvanized + PVC	30–60 years

Agarwal Gabions estimates for typical conditions — not IS 16014 values. Longer still where the wire is inspected and the jacket repaired.

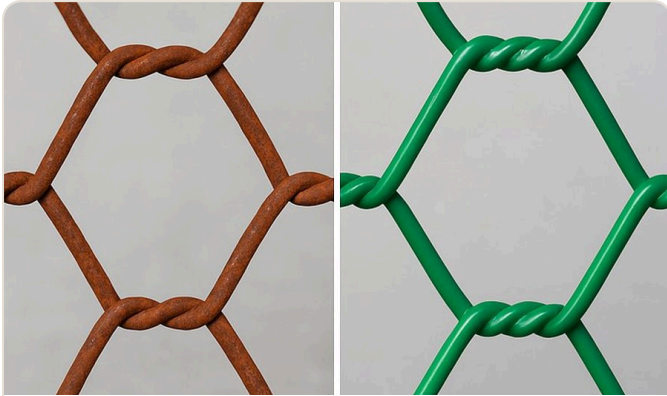
Two coatings on one steel wire



- MS wire.** Mild steel wire, drawn to size — the strength of the mesh.
- Zinc coating → GI wire.** Hot-dip galvanized to IS 16014 Table 8 — 260 g/m² on 2.70 mm, with no thinner zinc hidden under the PVC. It protects the steel electrochemically, even at a scratch.
- PVC coating → PVC coated GI wire.** An extruded jacket, nominal 0.50 mm, that keeps water, salts and soil chemicals off the zinc so it is not used up.

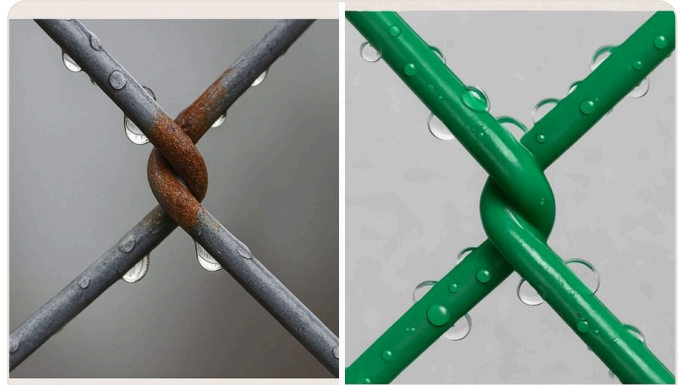
Six reasons to jacket the wire

What the jacket does that zinc alone cannot — for river, slope, coastal and fencing work.



Corrosion held off for decades

The PVC jacket keeps water, oxygen and salts off the zinc, so the zinc is not consumed. Bare GI wire can show rust within 5–10 years; the jacketed wire keeps it out.



Water runs off, not in

On bare wire, water collects at the twists and joints and rust starts there first. The smooth sheath sheds rain and humidity from every link.



Barrier against soil chemicals & acids

PVC resists chemical attack in buried and submerged ground — the reason it is the usual choice for river training work, especially in Assam.



UV resistant

A stabilised compound that does not crack or weaken in the sun. In a filled gabion most of the mesh is shaded by stone anyway.



Repairable on site

A cut or scuffed sheath can be repaired in the field before corrosion starts — no replacement needed.



Your colour, safe to touch

Green, grey, brown, blue and more. No sharp edges or snags; cooler than bare steel in strong sun and no cold-burn in winter — right for fencing near people.

Where the PVC jacket earns its cost

Anywhere the wire will be wet for good, meets salt or chemicals, or cannot be reached again once the job is built.

River training and bank protection

Gabions, revet mattresses and sack gabions that sit in flowing water and moving bed load. Submerged zinc is consumed far faster than zinc in air, which is exactly what the jacket stops.

Launching aprons, spurs and scour protection

Units that are meant to stay under water for their whole life and cannot be inspected once the river is back.

Coastal, estuarine and brackish works

Salt water is the most aggressive condition these products meet. On the coast it is PVC over galvanized wire every time, and at C5-CX sites IS 16014 offers nothing else.

Industrial, mining and ash-pond sites

Polluted air, acidic mine water and chemical run-off attack bare zinc quickly. The standard offers no bare-wire option at the most aggressive categories.

Buried and backfilled faces

Reinforced soil facia units and walls in contact with wet fill, lime-stabilised soil or concrete, where the wire cannot be seen or reached again.

Fencing near people

PVC chain link for homes, schools, parks, tea gardens and resorts: longer-lived, safe to touch, and in the colour you want.

Landscape and architectural gabions

Green or grey sheathing that recedes into planting and stone, on walls that are meant to be looked at for decades.

Hot plains and high, cold sites

The sheath insulates: cooler to the touch in plains summers, and no cold-burn from bare steel on high-altitude sites in Sikkim, Arunachal and Bhutan.

Specifications

Standard	IS 16014:2024 requirements for gabion wire
Core wire	Heavy-galvanized mild steel, zinc to Table 8; zinc-aluminium core on request
Coating	Extruded PVC, nominal 0.50 mm, minimum 0.40 mm
Diameters	Core 2.00–3.90 mm as standard, e.g. 2.70 / 3.70 mm
Colour	Green, grey and other standard colours on request
Typical use	Gabions, revet mattresses, fencing, river training works
Quality	ISO 9001:2015, Cert. No. 305024011282Q

Send us the BOQ item

Tell us the environment – submerged, tidal, coastal, buried – and the governing clause. We confirm the core, coating and schedule before quoting.

+91 98300-95187

+91 98300-72355

agarwalgabions@gmail.com



agarwalgabions.com
Scan for the full service-life table and specifications.