



PRODUCT CATALOGUE · 2026

Sun Steel (Private) Limited

Roll-formed steel sheet profiles and cold drawn wire — roofing, frames, shelving, enclosures and wire in twenty-three gauges.

Sun Steel (Private) Limited manufactures roll-formed steel sheet profiles and cold drawn wire. The works stand at Sakhakot in Tehsil Dargai, District Malakand, Khyber Pakhtunkhwa. Two lines, run properly, rather than a long list run occasionally.

Sheet is worked in three materials from 0.12 mm to 20 mm and in widths to 1500 mm — cold rolled to 3.00 mm, hot rolled above that. Plain mild steel where the surface will be painted or hidden; hot-dip galvanized where it has to stand weather bare, in zinc coatings from Z40 to Z275; and pre-painted galvanized — PPGI — in polyester, SMP, HDP and PVDF to RAL colours, where the finish arrives finished and needs nothing on site.

Flat sheet leaves as 4×8 ft as standard, with 1250 × 2500 mm and 1500 × 3000 mm cut to order. Profiled sheet is rolled corrugated, trapezoidal, IBR and tile to any length the transport will take, which is what removes end laps from a long roof run. Order on cover width rather than overall width — the difference is lap you pay for and do not cover with, and the charts set both out.

Roll-formed sheet profiles are the other half of the works. The same line that rolls roofing sheet also produces door and window frames, heavy duty shelving and racking, machine guarding and frames, electrical cabinets and enclosures, storage tanks and bins, and shipping container panels — plain, galvanized or colour-coated depending on whether the finish will be seen, painted or weathered.

Cold drawn wire is drawn in twenty-three gauges, 2 SWG at 7.01 mm down to 24 SWG at 0.56 mm, in three tempers. Hard drawn keeps the strength the drawing puts in and goes to welded mesh, nails, fasteners and light springs. Annealed is softened afterwards — the black binding wire that ties reinforcement on site, soft enough to twist by hand and hold. Galvanized is drawn then zinc coated, electro or hot dip, for fencing, tying and anything that lives outdoors.

Material goes into roofing and cladding, door and window frames, heavy duty shelving and racking, machine guarding, electrical cabinets, storage tanks and bins, shipping container panels, mesh and fencing, nails and fasteners, and site reinforcement.

Where a project calls for a specification outside our standard range — JIS, DIN, EN, BS, ISO or PS — we manufacture against it on enquiry, and confirm in writing what we can certify to before the order is accepted. Third-party inspection is accommodated where the project requires it.

Certification

- ISO 9001
- ASTM A653
- ASTM A510

Sheet Profiles — MS, GI & PPGI

Plain, galvanized and colour-coated sheet, flat or roll-formed

Three materials, one line. Plain mild steel sheet where the surface will be painted or hidden; hot-dip galvanized where it has to stand weather bare; and pre-painted galvanized — PPGI — where the finish is the finish, delivered in colour and needing nothing on site.

All three start as coil and are cut to length or fed straight into the roll-former. Flat sheet leaves as 4×8 ft as standard, with 1250 × 2500 and 1500 × 3000 mm cut to order. Profiled sheet is rolled to any length the transport will take, which is what removes end laps from a long roof run.

Two things decide what a sheet actually costs you, and neither is the headline thickness. On galvanized, it is the zinc: ASTM A653 and EN 10346 both define the ordered thickness as INCLUDING the coating, so a 0.50 mm G90 sheet is carrying about 0.46 mm of steel. On profiled sheet, it is cover width rather than overall width — the difference is lap you pay for and do not cover with. Both are set out in the charts below.

Applications

- Roofing sheets and wall cladding
- Door and window frames
- Heavy duty shelving and racking
- Machine guarding and frames
- Electrical cabinets and enclosures
- Storage tanks and bins
- Shipping container panels
- Industrial sheds and warehouses
- Ducting and ventilation
- Partitions, false ceilings and trunking
- Furniture and white goods pressings
- General fabrication and pressing



SIZE RANGE

0.12 mm to 20 mm, widths to 1500 mm

GRADES

MS — CS Type B, DC01, SPCC, S235JR, GI — DX51D+Z, SGCC, CS Type B, PPGI — CGCC, DX51D+Z, S220GD

STANDARDS

ASTM A1011 / A1008, ASTM A653/A653M, EN 10346, EN 10169, JIS G3302, JIS G3312, IS 277, ISO 9001

Salient features

- Plain, galvanized and colour-coated from one line
- Zinc from Z40 to Z275, quoted total both faces
- PPGI in polyester, SMP, HDP and PVDF to RAL colours
- Corrugated, trapezoidal, IBR and tile profiles
- Profiled sheet rolled to any length in one piece
- Coil or cut length, slit to width on order

Supply and packing

- Coil or cut length
- Profiled sheet rolled to any length in one piece
- Coil inside diameter 508 mm
- Interleaved and edge-protected
- Strapped on timber bearers

MS Sheet — thickness and weight [ASTM A1011 / A1008](#), [JIS G3131 / G3141](#), [EN 10025-2 / EN 10130](#)

THICKNESS MM	GAUGE SWG	WEIGHT	
		KG/M ²	KG PER 4×8 FT SHEET
0.50	25	3.93	11.66
0.60	23	4.71	14.00
0.80	21	6.28	18.66
1.00	19	7.85	23.33
1.20	18	9.42	28.00
1.50	17	11.78	34.99
2.00	14	15.70	46.66
2.50	12	19.63	58.32
3.00	11	23.55	69.99
4.00	8	31.40	93.32
5.00	6	39.25	116.65
6.00	4	47.10	139.98
8.00		62.80	186.64
10.00		78.50	233.29
12.00		94.20	279.95
14.00		109.90	326.61
16.00		125.60	373.27
18.00		141.30	419.93
20.00		157.00	466.59

Thickness 0.50 mm to 20 mm: cold rolled 0.50 mm to 3.00 mm, hot rolled 1.5 mm and heavier. Weights are for plain uncoated steel. Sheet weight is for a 4×8 ft (1219 × 2438 mm) sheet — pro-rata for 1250 × 2500 mm or 1500 × 3000 mm.

GI Sheet — thickness and weight [ASTM A653/A653M](#), [EN 10346](#), [JIS G3302](#), [IS 277](#)

THICKNESS MM	GAUGE SWG	WEIGHT	
		KG/M ²	KG PER 4×8 FT SHEET
0.12	40	0.94	2.80
0.16	38	1.26	3.73
0.20	36	1.57	4.67
0.25	33	1.96	5.83
0.30	31	2.36	7.00
0.40	27	3.14	9.33
0.50	25	3.93	11.66
0.60	23	4.71	14.00
0.80	21	6.28	18.66
1.00	19	7.85	23.33
1.20	18	9.42	28.00
1.50	17	11.78	34.99
2.00	14	15.70	46.66

Weights are BASE STEEL only. Note that ASTM A653 and EN 10346 both define the ordered thickness as INCLUDING the zinc — a 0.50 mm G90 sheet carries about 0.46 mm of steel. Order to ASTM A653 Supplementary Requirement S1 if you need the thickness to mean base metal. Zinc adds its own coating mass on top: Z275 = 275 g/m² = 0.275 kg/m² across both faces.

PPGI Sheet — thickness and weight [EN 10169](#), [ASTM A755/A755M](#), [JIS G3312](#), [IS 14246](#)

THICKNESS MM	GAUGE SWG	WEIGHT	
		KG/M ²	KG PER 4×8 FT SHEET
0.12	40	0.94	2.80
0.16	38	1.26	3.73
0.20	36	1.57	4.67
0.25	33	1.96	5.83
0.30	31	2.36	7.00
0.35	29	2.75	8.17
0.40	27	3.14	9.33
0.45	26	3.53	10.50
0.50	25	3.93	11.66
0.60	23	4.71	14.00
0.80	21	6.28	18.66
1.00	19	7.85	23.33

Weights are base metal thickness (BMT), excluding zinc and paint. Total coated thickness (TCT) runs 0.04–0.09 mm above BMT once the zinc and the paint system are counted — always confirm which basis a quotation is written on.

PROFILE	WIDTH		RIB DEPTH MM	RIB PITCH MM
	COVER MM	OVERALL MM		
Corrugated 76/18	762	914	18	76
Trapezoidal 25/210	840	900	25	210
Trapezoidal 30/200	1000	1060	30	200
IBR 37/171	686	762	37	171
Trapezoidal 45/250	1000	1070	45	250
Tile profile 28/200	1000	1090	28	200

Order on COVER width, never overall width. Cover is what one sheet actually covers once side-lapped; the difference is the lap you are paying for but not covering with. Corrugated cover assumes a two-corrugation side lap, which is what high-wind and monsoon exposure calls for — a one-corrugation lap gains about 76 mm of cover and loses weather resistance.

Applications in use

What the sheet becomes once it leaves the roll-former



Roofing sheets and wall cladding

Fasteners go through the crown on a roof and through the pan on a wall, since nothing walks on a vertical sheet and a pan fixing pulls the panel flat. On the yellow, the paint system is the specification — polyester chalks under strong sun, PVDF holds colour longest and is priced for it.



Door and window frames

Door leaves are plain mild steel, painted after welding — zinc would burn back at every seam and have to be made good. Skins of 1.5 to 2.0 mm leave enough metal to grind a weld flat, and below that a panel this wide ripples between the stiles: hence the corrugated pair on the left.



Heavy duty shelving and racking

Upright perforations are punched into flat strip before it goes through the rolls; punch a formed section and the flanges pull out of square, so the beam connector will not seat. Beams are sized on deflection rather than collapse — a gauge light and a loaded pair sags past $L/180$ long before anything tears.



Machine guarding and frames

Mesh panels are cold drawn wire, typically 4 to 5 mm, resistance-welded on a grid and captured in a folded sheet-steel channel. Aperture and standoff go together — the smaller the square, the closer the panel may stand to the arm, so opening the mesh up pushes the whole enclosure back.



Electrical cabinets and enclosures

Louvres are lanced and formed in the same press stroke that blanks the door, so there is no cut edge to corrode and no insert to line up. Powder coat insulates, which is why every door in a row like this carries a bonding strap — the hinge is not an earth path.



Storage tanks and bins

Those ring-course seams mark a change of thickness, not just a joint: the bottom course carries the full head of liquid and the top almost none, so a shell is three or four gauges rather than one. Tanks fail on vacuum before pressure — an undersized vent folds a shell inward as it empties.



Shipping container panels

Corrugations run vertically so water leaves the trough rather than standing on the bottom rail welds, and the folds let a 1.6 mm wall take a stacking load flat sheet of the same weight would buckle under. The door end runs nearer 2 mm, where the locking bars load it at four points.



Industrial sheds and warehouses

Rib depth rather than gauge is what spans; a deeper trapezoidal profile carries the same 0.5 mm sheet over wider purlin centres. The translucent rooflights are the short-lived part of this roof, since GRP yellows and goes brittle decades before the steel around it.



Ducting and ventilation

Spiral duct is wound from galvanized strip and locked, never welded, so the zinc runs unbroken end to end and the helical seam doubles as the stiffener. Gauge follows diameter rather than habit — 0.6 mm to about 500 mm, 0.8 mm above — and drawband joints keep the run demountable for cleaning.



Partitions, false ceilings and trunking

Tray and trunking are punched flat and then folded, so every slot and every sheared edge is bare steel. Pre-galvanized coil is used anyway: zinc protects a cut edge sacrificially across a millimetre or so. That is enough in a dry ceiling void, and an argument for hot-dipping where a plant room runs damp.



Furniture and white goods pressings

Locker doors are 0.8 mm cold rolled, and the recessed handle is the part that decides the grade: DC01 will take a fold, but a drawn pocket splits at the corner radius unless the coil is ordered DC04 to EN 10130. The returned flange is what stops a slammed door dishing.



General fabrication and pressing

Air bending sets the inside radius by the die opening rather than the punch — a vee about eight times material thickness lands near one thickness, which is as tight as galvanized goes before the zinc powders. Pre-painted sheet is bend-rated 2T or 3T to EN 10169; folded tighter, the paint crazes.

Cold drawn mild steel wire, drawn down from our own rod and coil stock across the full commercial range: 7.01 mm at 2 SWG through to 0.56 mm at 24 SWG. Drawing is done in successive passes rather than one, which is what holds the diameter along the length of the coil instead of only at the ends.

Three tempers come off the same line. Hard drawn wire keeps the strength the drawing puts into it and goes to welded mesh, nails, fasteners and light springs. Annealed wire is softened afterwards — this is the black binding wire that ties reinforcement on site, soft enough to twist by hand and hold. Galvanized wire is drawn then zinc coated, for fencing, tying and anything that lives outdoors.

The gauge decides the job. The heavy end, 2 to 8 SWG, is drawn for mesh, fencing and wire rope core; the middle, 10 to 16 SWG, for nails, fasteners and light mesh; the fine end, 18 to 24 SWG, for binding, tying and stitching wire. Every gauge in between is drawn — the table below lists all twenty-three.

Wire is ordered by gauge but made to a diameter, so the millimetre governs and the gauge is the shorthand. Coils are supplied to weight, and the running weight in the table converts between the two: at 18 SWG a kilogram is 109 metres, at 2 SWG it is barely three.

Applications

- Binding wire for reinforcement
- Welded mesh and wire fencing
- Nail and fastener manufacture
- Chain link and chicken mesh
- Light springs and clips
- Wire rope core
- Baling, tying and stitching wire
- General fabrication



SIZE RANGE

**2 SWG to 24 SWG (7.01 mm – 0.56 mm),
23 gauges**

STANDARDS

**ASTM A510/A510M, ISO 16120, BS 1052,
ISO 9001**

Salient features

- Twenty-three gauges, 2 to 24 SWG
- Hard drawn, annealed or galvanized
- Drawn in successive passes for gauge consistency
- Consistent diameter along the coil
- Tensile agreed at order
- Coil weight to requirement

Supply and packing

- Coils to requirement, typically 50–500 kg
- Hard drawn, annealed or galvanized
- Plain, oiled or waxed
- Strapped and tagged per coil
- Mill certificate on request

Cold drawn wire — gauge, diameter and running weight **ASTM A510/A510M, ISO 16120, BS 1052**

GAUGE SWG	DIAMETER MM	RUNNING WEIGHT	
		KG PER 100 M	M PER KG
2	7.01	30.30	3.3
3	6.40	25.26	4.0
4	5.89	21.41	4.7
6	4.88	14.66	6.8
8	4.06	10.18	9.8
10	3.25	6.52	15.3
12	2.64	4.30	23.2
14	2.03	2.55	39.3
16	1.63	1.63	61.3
18	1.22	0.92	109.2
20	0.91	0.52	194.2
22	0.71	0.31	320.8
24	0.56	0.19	519.1

Gauge numbers are Standard Wire Gauge and are trade shorthand, not a tolerance — order on the millimetre. Running weights are nominal, calculated at 7.85 g/cm³; the coil is supplied to weight, so length per coil follows from the gauge.

In-House Testing

Every rig on site, so a consignment is proved and released in the same week it is rolled



Gauge and thickness

Sheet thickness is taken with a digital micrometer across the width and through the coil, not once at the head end. On coated stock the reading is the ordered thickness, which includes the zinc — the base metal underneath is thinner, and the charts say by how much.



Zinc coating mass

Coating weight is proved by the standard methods rather than taken on trust: copper sulphate for adherence and uniformity, and mass by weight across both faces. Coatings run Z40 to Z275 and are quoted as the total of the two surfaces.



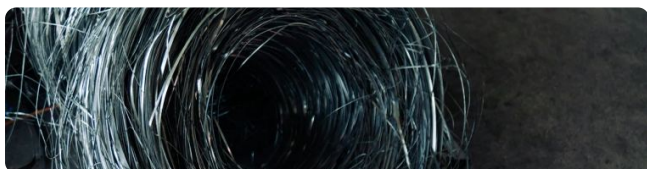
Bend and adhesion

Pre-painted sheet is bent through a T-bend and the coating checked for cracking or lift at the radius. A paint system that fails here fails on site the first time a fabricator folds a flashing.



Cover width and profile

Rolled sections are measured on cover width, not overall width, and the rib height checked against the profile drawing. Cover is what a sheet actually covers once side-lapped, and it is what a roof is quoted on.



Wire diameter and tensile

Drawn wire is gauged along the coil and pulled to destruction for tensile and elongation. Gauge is trade shorthand — the millimetre is what is measured, and what the coil is certified to.



Lux at the inspection station

A lux meter checks light levels where dimensional and surface checks are made. A gauge reading and a surface inspection are only as good as the light they are made under, so the light is measured too.



Contact

Sun Steel (Private) Limited

Works

Haji Fazal Kabir Korona, Jahazono Dag
Sakhakot, Tehsil Dargai
District Malakand, KPK
Sakhakot, Pakistan