

AFRIHUB

PROCUREMENT



Sourced for Africa- Built for Result's



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- + 27 10 035 2803

AFRIHUB PROCUREMENT

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AFRIHUB PROCUREMENT

Industrial Grating • Stair Treads • Handrails • Trench Covers
Engineered for strength. Built for performance.

AFRIHUB PROCUREMENT (Pty) Ltd.

AfriHub Procurement supplies high-quality steel grating and access solutions designed for demanding industrial environments. Our product range includes open grid flooring, stair treads, handrails, and trench cover systems manufactured to meet strict operational and safety requirements.

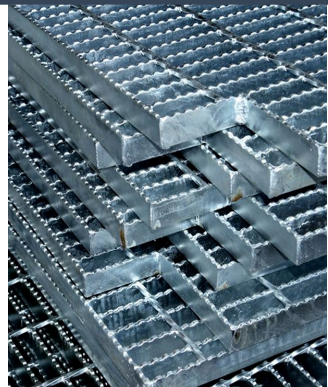
Our solutions are trusted across sectors such as:



Mining Operations
Oil & Gas Refineries
Petrochemical Facilities
General & Light Industry



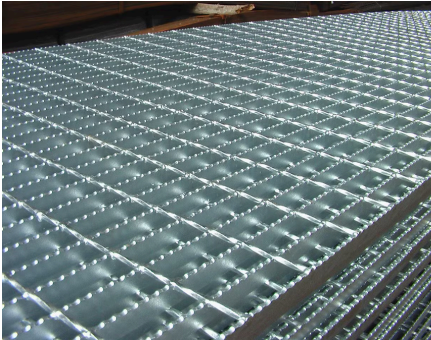
Afrihub Procurement is a trusted supplier of high-quality steel and industrial solutions, serving clients across Africa with reliability and precision. We specialise in staircases, steel and fibre grating, trench covers, clearview fencing, handrailing systems, and a wide range of industrial and general steel products. Our focus is on delivering durable, compliant, and cost-effective solutions backed by friendly, responsive service. With a commitment to quality, safety, and competitive pricing, Afrihub Procurement is built to support projects that demand strength, performance, and long-term value.



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Procurement Information



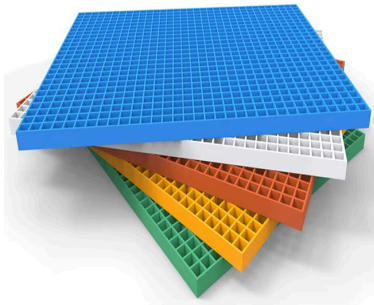
Open Steel Flooring

- Depth and thickness of the bearer bars
- Required panel size(s), with the first dimension indicating the direction of the bearer bars
- Required hole centres
- Surface type: smooth, serrated, or non-slip
- Type of finish
- Full details and drawings/sketches of any custom-fabricated panels or
- Complete floor layout requirements



Stair Treads

- Overall length and width of the stair tread
- Bearer bar size
- Surface type: smooth or serrated
- Side-plate mounted configuration
- Type of finish



Fibre Glass Grating Flooring

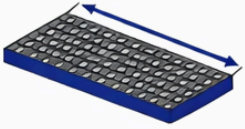
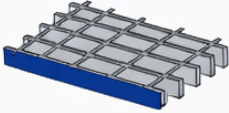
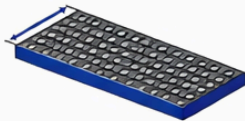
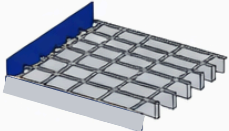
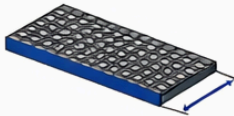
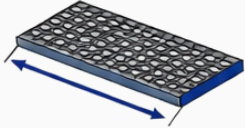
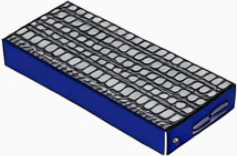
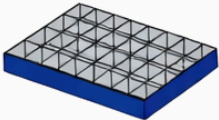
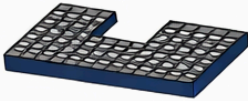
- Grating type (moulded or pultruded)
- Panel size(s) and quantity
- Bearing bar direction and size
- Mesh/opening size
- Load rating or intended use
- Surface type (smooth, grit/non-slip, or serrated)
- Resin type (e.g. polyester, vinyl ester, phenolic)
- Color
- Finish or UV protection
- Any cut-to-size, banding, or fixing requirements

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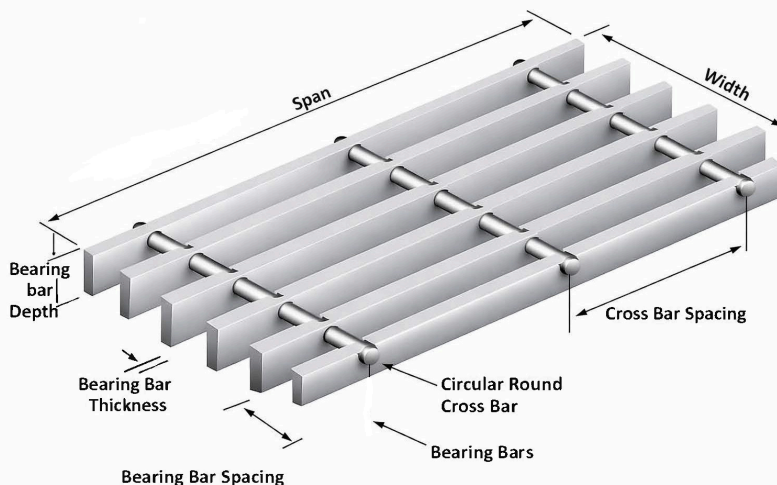
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Grating Terminology

Length/Direction of span: Span is the direction at which the bearer bars run		Unbanded/Open Ended: Grating which is open at all ends	
Width: Measured parallel to, and in the same direction as, the transverse bar.		Kick Flat / Kick Plate / Toe Plate: A larger flat bar with greater depth than the bearer bar, welded around the perimeter of the grating to prevent objects from falling off.	
Bearer Bar / Load Bar / Flat Bar: Measured parallel to, and in the same direction as, the transverse bar.		Side Plate / End Plate: A plate welded to the side of a stair tread for attachment to a stringer (the structural support member).	
Transverse Bar / Round Bar: Measured parallel to, and in the same direction as, the transverse bar.		Nosing / Non-slip Nosing: A slip-resistant element welded to the leading edge of stair treads or landing gratings to enhance traction and prevent slips.	
Banding: A bar fixed to the edges of the grating, with depth and thickness similar to the bearer bar.		Cut-out: An opening in the grating created to allow structural elements to pass through or to clear obstructions.	

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Unbanded Standard Panels



Pitch of Openings

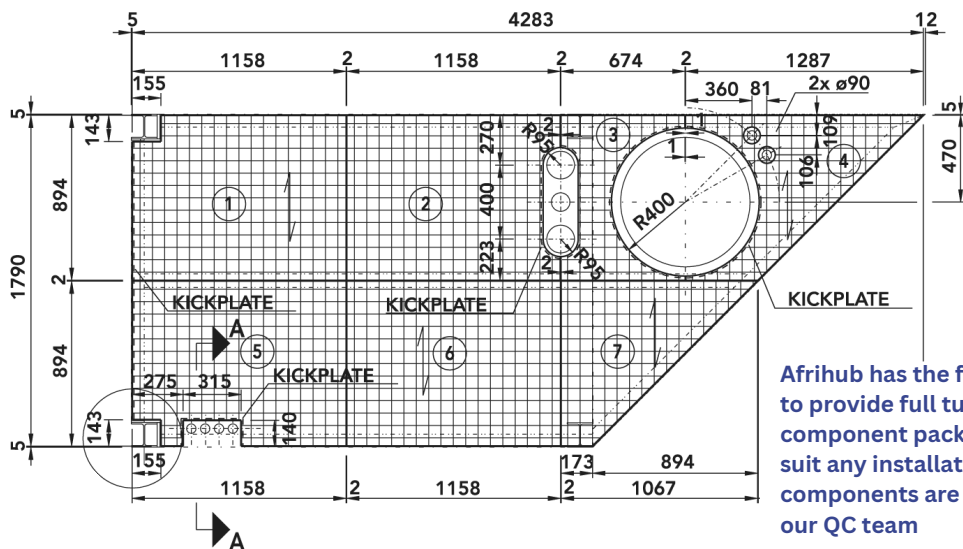
- SG43/50
- SG43/40
- SG45/50
- SG45/40
- SG40/40

Length x Span

(First dimension being the direction of bearer bar)

- 1 200mm x 1 200mm
- 2 400mm x 1 200mm
- 3 000mm x 1200mm

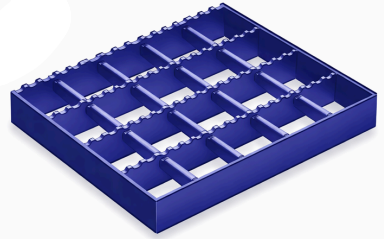
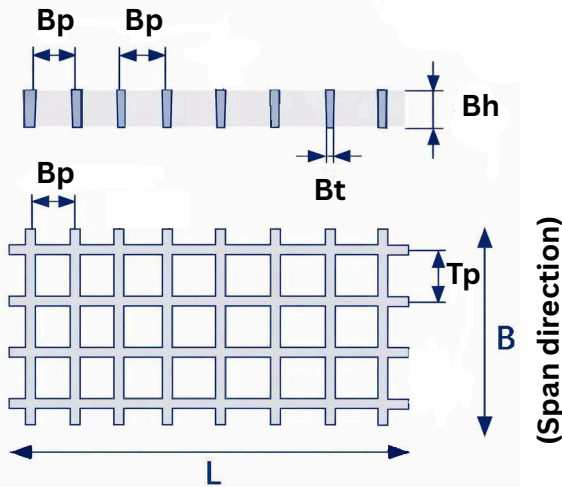
Custom Tailored Grating



PLAN OF GRATING DECK

Afrihub has the facilities to provide full turnkey component packages to suit any installation and all components are QC with our QC team

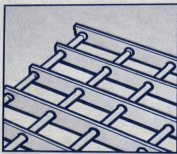
Standard Types of Grating



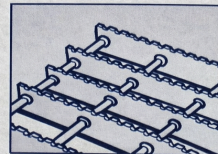
Key

- Bp=Bearer bar pitch
- Bh=Bearer bar Height
- Bt=Bearer bar thickness
- Tp=Transverse Bar Pitch

Smooth Surface



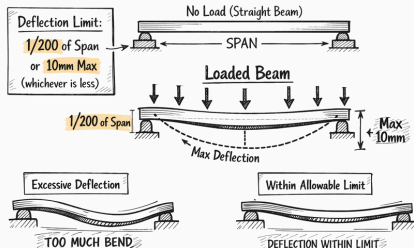
Serrated Surface



Grating type	Bearer bar	Transverse Bar	Mass Per Std.Panel(2400mm x 1200mm)	
			Uncoated / Black Bitumen Dipped	Galvanised
SG 43/50	25 x 4,5mm	6mm	70,60 Kg	77,70 Kg
		7,6mm	79,50 Kg	87,38 kg
	30 x 4,5mm	6mm	82,50 Kg	89,90 Kg
		7,6mm	91,50 Kg	99,55kg
	40 x 4,5mm	6mm	106,50 Kg	115,00 Kg
SG 43/40		7,6mm	115,00 Kg	124,04 Kg
	50 x 4,5mm	7,6mm	139,00 Kg	150,16 Kg
	25 x 4,5mm	7,6mm	84,72 Kg	92,88 Kg
	30 x 4,5mm	7,6mm	96,72 Kg	105,05 Kg
	40 x 4,5mm	7,6mm	120,22 Kg	129,55 Kg
SG 45/50		7,6mm	144,22 kg	155,66 Kg
	25 x 4,5mm	7,6mm	76,50 Kg	82,60 Kg
	30 x 4,5mm	7,6mm	88,10 Kg	95,20 Kg
	40 x 4,5mm	7,6mm	111,50 Kg	120,40 Kg
	50 x 4,5mm	7,6mm	134,80 Kg	145,60 Kg
SG 45/40	25 x 4,5mm	7,6mm	81,46 Kg	82,60 Kg
	30 x 4,5mm	7,6mm	93,12 Kg	100,57 Kg
	40 x 4,5mm	7,6mm	116,45 Kg	125,76 Kg
	50 x 4,5mm	7,6mm	139,78 Kg	150,96 Kg

Grating Safe Load Tables

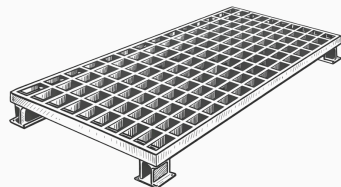
Loads Determined by Max Deflection



*Loads determined by Max Deflection
(1/200 of span or 10mm max)

U = Uniformly distributed load in Kg per m²

C = Concentrated Load in Kg/m



SG 43/50 & SG 43/40

Span(mm)

Bearer bar Size	500 mm	750 mm	1000 mm	1250 mm	1500 mm	1750 mm	2000 mm
25 x 4.5mm U	6050 Kg	2685 Kg	1140 Kg	580 Kg	309 Kg		
C	1510 Kg	1000 Kg	756 Kg	432 Kg	295 Kg	-	-
30 x 4.5mm U	8700 Kg	3870 Kg	1980 Kg	1015 Kg	535 Kg	338 Kg	
C	2180 Kg	1450 Kg	1090 Kg	870 Kg	518 Kg	369 Kg	-
40 x 4.5mm U	15 485 Kg	6880 Kg	3870 Kg	2475 Kg	1270 Kg	800 Kg	528 Kg
C	3875 Kg	2580 Kg	1935 Kg	1548 Kg	1290 Kg	873 Kg	672 Kg
50 x 4.5mm U	24 190 Kg	10 752 Kg	6048 Kg	3870 Kg	2688 Kg	1560 Kg	1025 Kg
C	6048 Kg	4032 Kg	3027 Kg	2415 Kg	2016 Kg	1728 Kg	1305 Kg

SG 45/50 & SG 45/40

Span(mm)

Bearer bar Size	500 mm	750 mm	1000 mm	1250 mm	1500 mm	1750 mm	2000 mm
25 x 4.5mm U	5658 Kg	2519 Kg	1070 Kg	543 Kg	290 Kg		
C	1417 Kg	938 Kg	708 Kg	405 Kg	255 Kg	-	-
30 x 4.5mm U	8165 Kg	3632 Kg	1858 Kg	952 Kg	501 Kg	317 Kg	
C	2047 Kg	1359 Kg	1021 Kg	817 Kg	485 Kg	345 Kg	-
40 x 4.5mm U	14 536 Kg	6458 Kg	3632 Kg	2323 Kg	1191 Kg	750 Kg	495 Kg
C	3636 Kg	2420 Kg	1817 Kg	1451 Kg	1210 Kg	819 Kg	630 Kg
50 x 4.5mm U	22 708 Kg	10 092 Kg	5676 Kg	3632 Kg	2523 Kg	1463 Kg	961 Kg
C	5676 Kg	3882 Kg	2951 Kg	2266 Kg	1891 Kg	1622 Kg	1224 Kg

SG 40/40

Span(mm)

Bearer bar Size	500 mm	750 mm	1000 mm	1250 mm	1500 mm	1750 mm	2000 mm
25 x 4.5mm U	6307 kN	2718 kN	1147 kN	587 kN	340 kN	214 kN	143 kN
C	1577 kN	1051 kN	717 kN	459 kN	319 kN	234 kN	179 kN
30 x 4.5mm U	9083 kN	4037 kN	1982 kN	1015 kN	587 kN	370 kN	248 kN
C	2271 kN	1514 kN	1135 kN	793 kN	550 kN	404 kN	310 kN
40 x 4.5mm U	16147 kN	7176 kN	4037 kN	2405 kN	1392 kN	876 kN	587 kN
C	4037 kN	2691 kN	2018 kN	1615 kN	1305 kN	959 kN	734 kN
50 x 4.5mm U	25229 kN	11213 kN	6307 kN	4037 kN	2718 kN	1712 kN	1147 kN
C	6307 kN	4205 kN	3154 kN	2523 kN	2102 kN	1802 kN	1433 kN

NOTE: All load values are in kN for SG40/40 (kilonewtons). Spans are in metres (m).

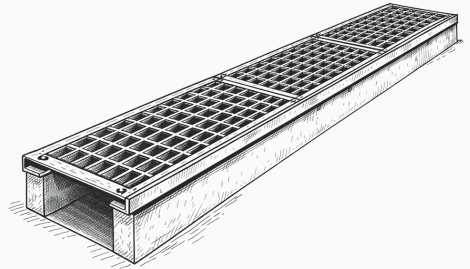
Standard & Flanged Trench Covers

All trench covers are manufactured from SG43/50 grating with a 50 mm pitch and are supplied either uncoated, hot-dip galvanised & black bitumen.

The sizes listed below are our standard range; alternative sizes can be provided upon request.

Bearer bar Size	Width (mm)	Length (mm)
25 x 4,5mm	250,300,325,500	1000
30 x 4,5mm	250,300,325,500	1000
40 x 4,5mm	250,300,325,500	1000
50 x 4,5mm	250,300,325,500	1000

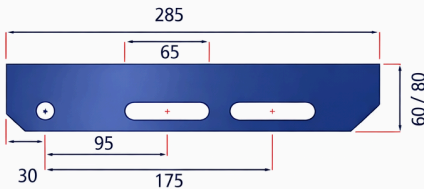
Trench Covers



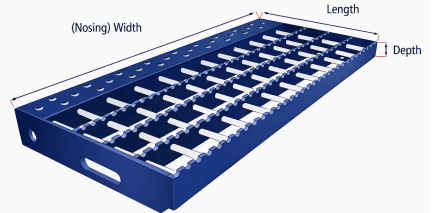
Stair Treads



Stair Tread Side Plate Dimensions (mm)



Length (mm)	Width (mm)	Hole centres (mm)	Bearer bar Size
500	205	115	25 x 4,5mm
	245	150, 115	
600	205	115	25 x 4,5mm
	245	150, 115	
750	205	115	25 x 4,5mm 30 x 4,5 / 40 X 4,5mm
	245	150, 115	
	285	180,150,115	
900	205	115	30 x 4,5mm 40 x 4,5mm
	245	150, 115	
	285	180,150,115	
1000	205	115	30 x 4,5mm 40 x 4,5mm
	245	150, 115	
	285	180,150,115	



Stair Tread Tolerance

+5mm on width, +0 -2mm on length

40mm Bearer Bar stair treads are supplied with 80mm high side plates

750mm long, supplied in 25mm or 30mm bearer bars

750-1000mm and above are supplied in 30mm or 40mm bearer bar size

Fibreglass Grating

Fiberglass (FRP) grating is lightweight, corrosion-resistant, and electrically non-conductive. It performs exceptionally well in harsh chemical or marine environments where steel would rust, pit, or require constant maintenance. Its high strength-to-weight ratio makes installation faster and safer, and its natural slip resistance is a quiet hero in wet or oily conditions.

Common industries:

Chemical processing, water & wastewater treatment, marine and offshore facilities, food & beverage processing, pulp & paper.

Types of Fibre Grating

Moulded Grating (most common in SA):

- 38 × 38 mm ($\approx 1\frac{1}{2}" \times 1\frac{1}{2}"$)
General-purpose industrial walkways, platforms, and stairs.
- 38 × 19 mm
Better small-object retention; popular in chemical plants.
- 25 × 25 mm
Anti-drop applications, food processing, pedestrian-heavy areas.
- 50 × 50 mm
Lightweight walkways, low-load areas.
- 50 × 25 mm
Compromise between openness and safety.

Common Colours Available

- Grey – Most common industrial standard
- Dark Green – Very popular in plants and coastal installations
- Yellow – High-visibility walkways and safety zones
- Black – UV-stable, often used outdoors
- Red / Blue – Less common, usually project-specific or made to order
- Custom colours – Possible but typically require lead time and volume



Fiber Glass Load tables and Resin Systems

Resin Code	Resin Base	Description	Corrosion Resistance	Flame Spread Rating
VEFR-25	Vinyl Ester	Superior corrosion resistance and fire retardant properties	Excellent	Class 1 -25 or less
IFGR-30	Isophthalic Polyester	High corrosion resistance and fire retardant properties	Very Good	Class 1 -25 or less

Dimensions Available

Panel Size (mm)	Thickness (mm)	Notes
1220mm x 2440mm	25 / 30 / 38 / 50	Standard
1220mm x 3660mm	25 / 30 / 38	Standard
Custom Sizes	-	Cut-to-size Available

Fiber Grating Loading Tables

25 mm Thick Moulded Grating (ISO / Vinyl Ester resin – typical values)			
Clear Span (mm)	25×25 mm Opening	38×19 mm Opening	38×38 mm Opening
400	50 kN/m ²	45 kN/m ²	40 kN/m ²
600	21 kN/m ²	19 kN/m ²	17 kN/m ²
800	12 kN/m ²	10 kN/m ²	9 kN/m ²
1000	7 kN/m ²	6 kN/m ²	5 kN/m ²
1200	4 kN/m ²	3.5 kN/m ²	3 kN/m ²

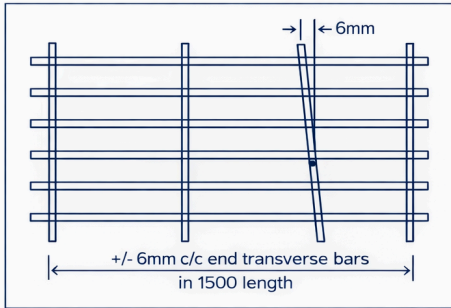
38 mm Thick Moulded Grating (ISO / Vinyl Ester resin – typical values)			
Clear Span (mm)	25×25 mm Opening	38×19 mm Opening	38×38 mm Opening
400	120 kN/m ²	105 kN/m ²	93 kN/m ²
600	50 kN/m ²	43 kN/m ²	37 kN/m ²
800	30 kN/m ²	26 kN/m ²	23 kN/m ²
1000	18 kN/m ²	16 kN/m ²	14 kN/m ²
1200	12 kN/m ²	10 kN/m ²	9 kN/m ²

Notes

- Loads shown are uniformly distributed loads (UDL)
- Values are safe working loads, not ultimate strength
- Smaller openings slightly improve load capacity due to increased glass content
- Deflection often governs design before strength—especially above 1000 mm span
- Always confirm against the specific supplier's datasheet for final sign-off

Grating Tolerances

Transverse Bar Alignment & Spacing



Transverse Bar Tolerances - Gripweld

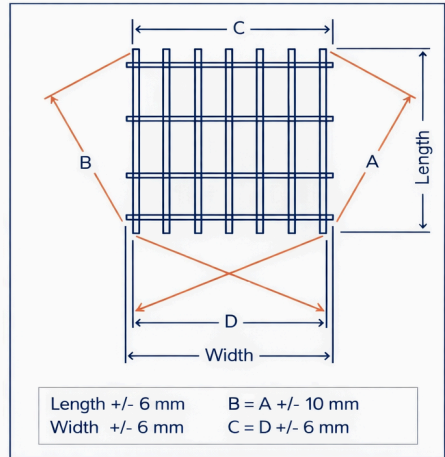


Transverse Bow



Transverse Bow

Squareness Tolerances & Dimensions



Length +/- 6 mm

Width +/- 6 mm

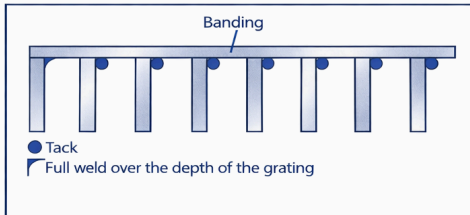
B = A +/- 10 mm

C = D +/- 6 mm

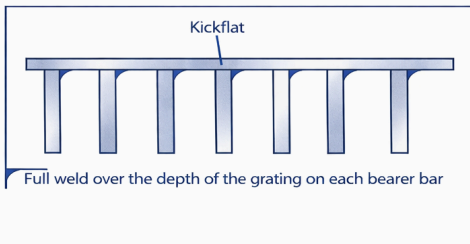
D = C +/- 6 mm

Welding Specifications

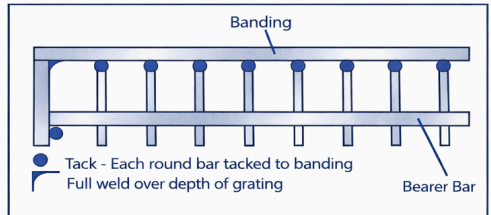
Bearer Bars to Banding -Grating Panels



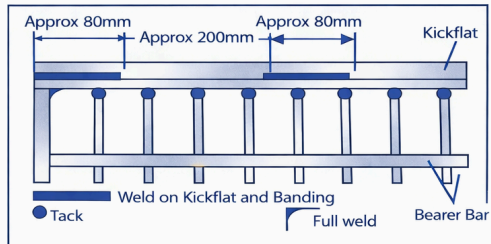
Bearer Bars to Kickflat of Grating Panels and Bearer Bars to Sideplates of Stairtreads



Round Bars to Banding Grating Panels



Round Bars and Banding to Kickflat of Grating panels



Bearer Bars to Kickflat of Grating Panels and Bearer Bars to Sideplates of Stairtreads

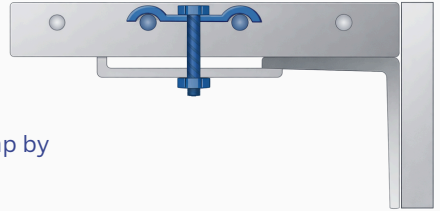
Round Bars and Banding to Kickflat of Grating panels

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Grating fastening Methods

Saddle Clamp, Bracket, Bolt, Nylock Nut and washer

The saddle engages over two transverse bars and is fastened against an L-Bracket, Banana Clamp, or J-Clamp by means of a bolt, washer, and Nylock nut.



Saddle and L-Bracket is only suited for SG43/50 or SG45/50

Banana and J-Clamp are universal to all Grating Center's



L-Bracket



Banana Clamp

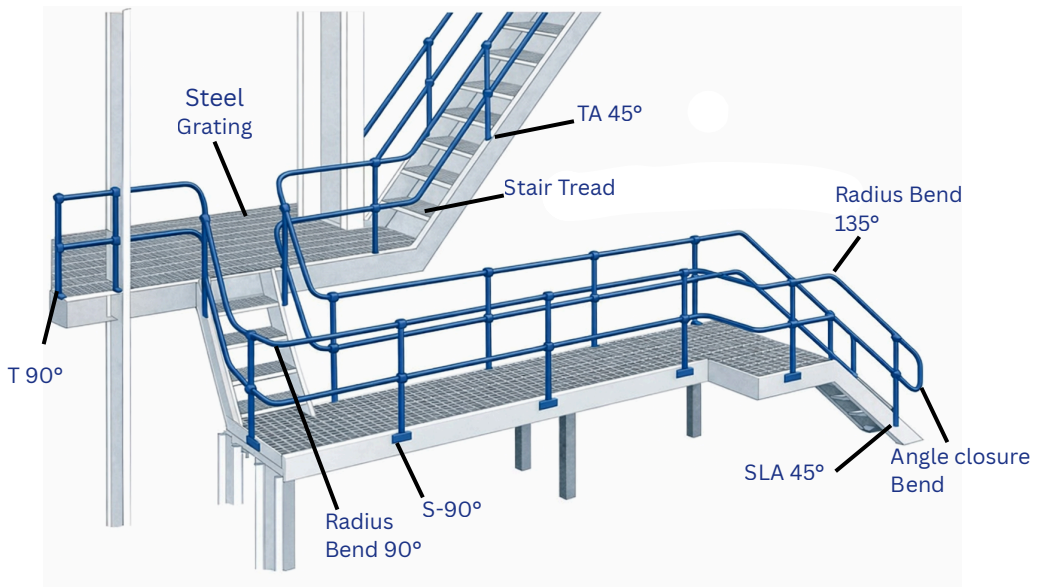


J-Clamp

J-Clamp is top fastening which means it can be tightened from the top only as the nylock nut is held in place by the J-Clamp.

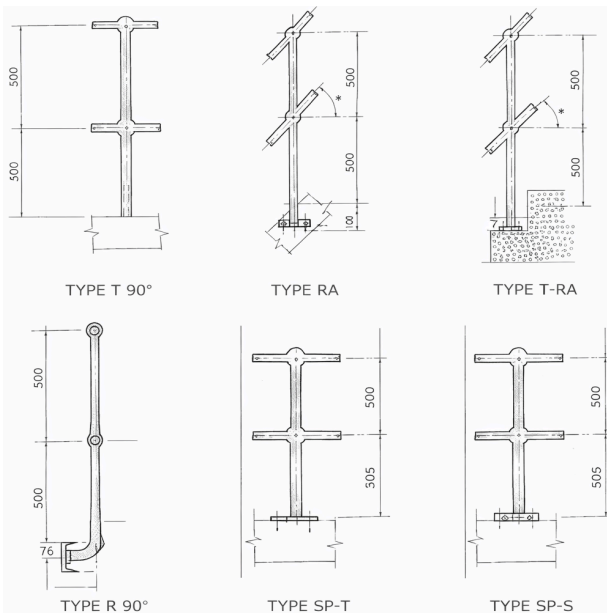


Stanchions & Handrailing

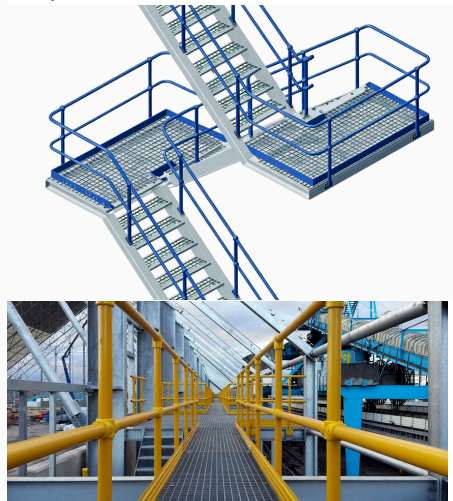


The stanchions and handrails are supplied with an industrial primer as standard. A hot-dip galvanised finish is also available, and uncoated options can be provided. Alternative specifications can be accommodated by discussion.

Ball Type Stanchions

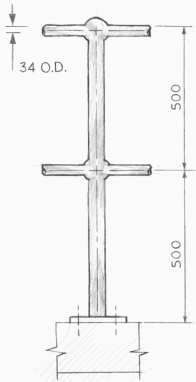


Standard stock angles are 40° and 45°. Additional angles from 5° to 50°, in 5° increments, are available upon request.

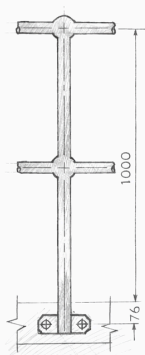


Ball Type Stanchions

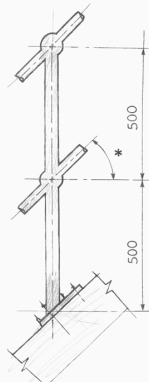
Standard stock angles are 40° and 45°. Additional angles from 5° to 50°, in 5° increments, are available upon request.



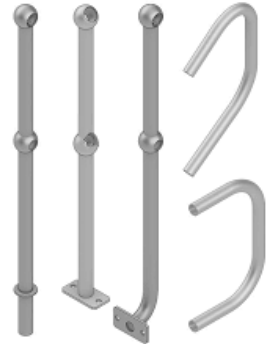
TYPE T 90°



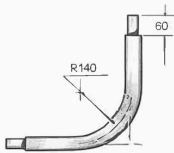
TYPE S 90°



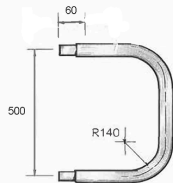
TYPE TA



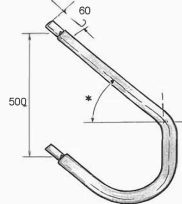
Bends & Closures



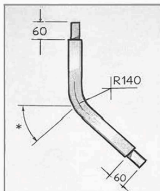
90° LONG RADIUS BEND



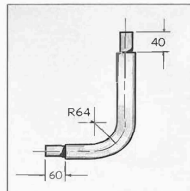
90° STRAIGHT CLOSURE BEND



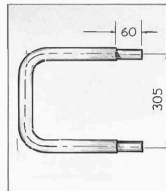
ANGLE CLOSURE BEND



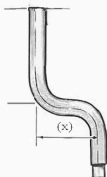
RADIUS BEND



90° SHORT RADIUS BEND

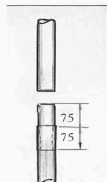


90° STRAIGHT CLOSURE BEND, 305 CRS



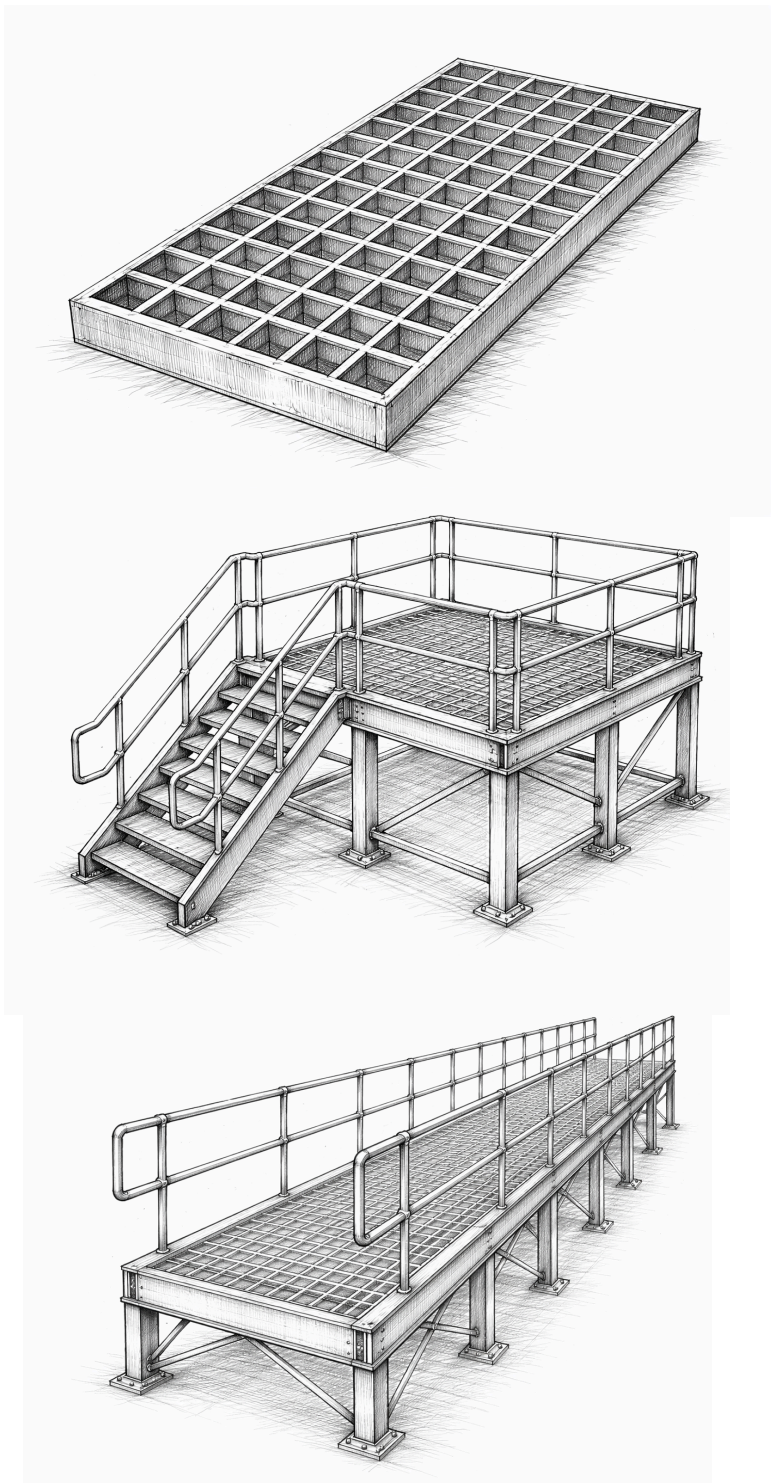
KINK BEND

Kink bends are made up on site using two 90° Short Radius Bends



SLIP JOINT FOR Ø 34 HANDRAILING







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