

Perforge

Perforated Sheeting | Expanded Mes Platform and Balustrade Systems

SAFE FLOORING SOLUTIONS

HANDRAIL











Locker Safety Rail

Tubular Ball Handrail System

Locker Group's tubular ball handrail system is a safe, strong simple barrier solution. The complete system lends itself to be quickly and economically erected in either a workshop or on site.

Manufactured in accordance with AS1657 and used extensively throughout the mining, petro-chemical, mineral processing and heavy industries, the system is equally suited in commercial, local government and general applications.

Locker Group handrail is available in component form. eg. stanchions, bends, pipe and kickplate or can be supplied in fully fabricated panels for even quicker site installation.

Benefits

- Sold in components for installation on site
- Supplied fabricated into panels
- Economical
- Quick to install
- Light weight

Styles

- Standard Two rail (handrail and knee rail)
- Multi-Rail Three to six rails. Manufactured to order.
- Balustrade Top and bottom rail complete with 12mm diameter rod at 100mm centres.
 Made to order. (refer page 5)

Materials

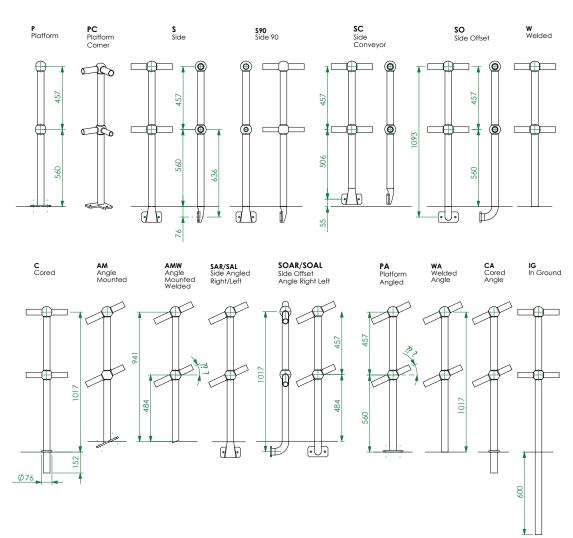
- Mild Steel Most common, available in 3.2mm (medium duty) or 4.0mm (heavy duty) wall.
- Aluminium for areas were corrosion is a factor, such as water treatment plants and coastal environments

Finishes

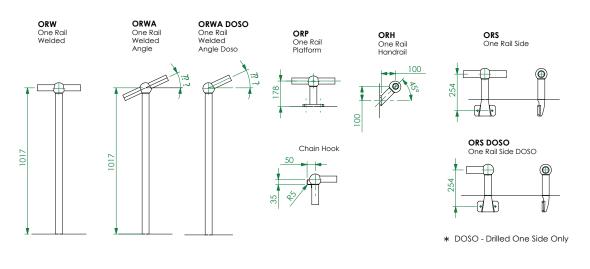
- Mill finish/Black no coating.
- Galvanised Hot dipped galvanised to Australian Standard AS/NZS 4680
- Painted Wet or Dry (powder) coated to your specification and colour

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Standard Stanchions



One Rail Stanchions









Product Weights

Туре	Product Code	Description	Med Duty MS Galv	Heavy Duty MS Galv	Alum	UOM
Stanchions	Р	Stanchion Type P	4.8 kg	5.25 kg	2.05 kg	ea
	PA	Stanchion Type PA	4.8 kg	5.25 kg	2.05 kg	ea
	С	Stanchion Type C	4.9 kg	5.35 kg	2.08 kg	ea
	CA	Stanchion Type CA	4.9 kg	5.35 kg	2.08 kg	ea
	W	Stanchion Type W	3.9 kg	4.45 kg	1.67 kg	ea
	WA	Stanchion Type WA	3.9 kg	4.45 kg	1.67 kg	ea
	AMW	Stanchion Type AMW	3.9 kg	4.45 kg	1.68 kg	ea
	S	Stanchion Type S	5.05 kg	5.65 kg	2.2 kg	ea
	SC	Stanchion Type SC	4.9 kg	5.45 kg	2.1 kg	ea
	SO	Stanchion Type SO	5.4 kg	5.9 kg	2.5 kg	ea
	SAL	Stanchion Type SAL	4.9 kg	5.45 kg	2.1 kg	ea
	SAR	Stanchion Type SAR	4.9 kg	5.45 kg	2.1 kg	ea
	SOAL	Stanchion Type SOAL	5.35 kg	5.65 kg	2.3 kg	ea
	SOAR	Stanchion Type SOAR	5.35 kg	5.65 kg	2.3 kg	ea
	AM	Stanchion Type AM	4.5 kg	5.05 kg	1.68 kg	ea
	ORP	Stanchion Type ORP	1.7 kg	1.95 kg	0.7 kg	ea
	ORS	Stanchion Type ORS	2 kg	2.35 kg	0.88 kg	ea
	ORH	Stanchion Type ORH	1.5 kg	1.65 kg	0.59 kg	ea
Bends	RB32	Rail Bend 32NB	1.73 kg	2.28 kg		ea
	RB25	Rail Bend 25NB	1.34 kg	1.76 kg		ea
	RB46	Rail Bend 460D			0.8 kg	ea
	RB38	Rail Bend 380D			0.6 kg	ea
	CBA	Closure Bends Angled	2.79 kg	3.42 kg	1.2 kg	ea
	CBH	Closure Bends Horizontal	2.82 kg	3.76 kg	1.2 kg	ea
Pipe	P32	Pipe 32NB	3.1 kg	3.8 kg		mt
	P25	Pipe 25NB	2.41 kg	2.94 kg		mt
	P46	Pipe 46 OD			1.3 kg	mt
	P38	Pipe 38 OD			0.97 kg	mt
Kickplate	K1006	Kickplate 100x6	5.32 kg		1.6 kg	mt

Specifications

Stanchions

Medium Duty (Standard)

- 48.3 OD 40mm NB
- 3.2mm Gauge
- 76mm OD Ball

Aluminium

- 50mm OD
- 42mm ID
- 76mm OD Ball

Heavy Duty

- 48.3 OD 40mm NB
- 4.0mm Gauge
- 76mm OD Ball

Stanchions are drilled to suit rail (below). Custom drilling available on request.

Rails

Standard Handrail

- 32mm NB
- 42.4mm OD
- 3.2mm Gauge

Standard Kneerail

- 25mm NB
- 33.7mm OD
- 3.2mm Gauge

Heavy Duty Handrail

- 32mm NB
- 42.4mm OD
- 4.0mm Gauge

Heavy Duty Kneerail

- 25mm NB
- 33.7mm OD
- 4.0mm Gauge

Aluminium Handrail

- 46mm OD
- 39mm ID

Aluminium Kneerail

- 38.1mm OD
- 34.1mm ID

Kick Plate Mounting Brackets:

40 mm x 85 mm x 5 mm

Base Plates:

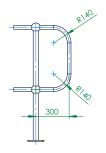
Standard: 75 mm x 146mm x 10mm **Angle Mounted:** 65mm x 172mm x 10mm

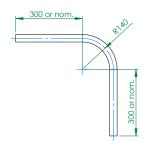
Corner: 150mm x 150mm x 10mm

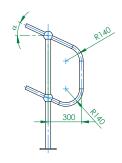
(88mm hole centres)

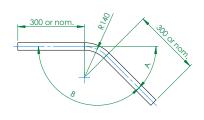
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Bends









Horizontal Closure Bends:

Horizontal closure bends have a wall thickness of 3.2 mm. A standard 90° closure bend has a 140mm radius. Bends have 300 / 260 mm legs at 457mm centres.

Standard & Non Standard 90° Bends

A standard 90° bend has a 140mm radius with 300mm legs. A non-standard 90° bend has a 140mm radius with nominated leg lengths to enable ease of erection.

Angle Closure Bends

Angle closure bends have 140mm radius bends, with 300 / 200 mm legs at 457mm centres. Angle closure bends are made to order to the nominated angle, between 1° and 45°.

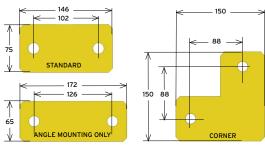
Standard & Non-Standard Bends

Special angles are made to suit customer's requirements. Always specify angles as shown, either A or B. *Please note: Locker Group product codes denote the 'A' angle.

- Standard length and angle bends in stock
- Non standard length and specific angle bends made to order

Offsets

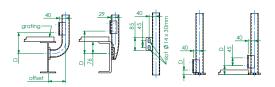
Base Plates

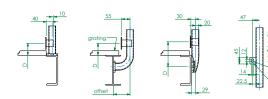


ALL BASE PLATES 10mm MATERIAL HOLE SIZE Ø17.5 TYPICAL NB: ALL BASE PLATES HAVE PRE-DRILLED DRAIN HOLES.

CHANNELS UNIVERSAL BEAMS SIZE **OFFSET** SIZE **OFFSET** 150 x 75 110 mm 200 UB 110 mm 180 x 75 110 mm 250 UB 110 mm 200 x 75 110 mm 310 UB 110 mm 230 x 75 110 mm 360 UB 115 mm 250 x 90 115 mm 410 UB 125 mm 300 x 125 125 mm 115 mm 460 UB 380 x 100 125 mm 530 UB 135 mm

Kick Plate





Kickplate Mounting Bracket - Option 1

Dimension 'D' for various stanchion types

Grating Height (mm)	Nil	20, 25, 32	40, 45, 50	60, 65	
P, W, C	D=40	D=65	D=80	D=100	
S & SO	D=115	D=140	D=160	D=175	

Kickplate Mounting Bracket - Option 2

Dimension 'D' for various stanchion types

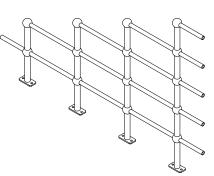
Grating Height (mm)	Nil	20, 25, 32	40, 45, 50	60, 65
P, W, C	D=60	D=85	D=100	D=120
S & SO	D=135	D=160	D=180	D=195

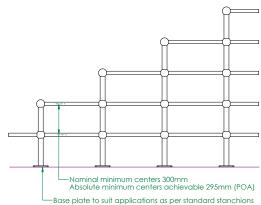




Multi Rail Applications

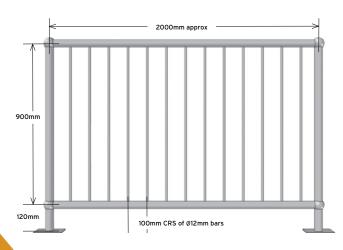
- Multi ball stanchions are available.
- Made to order for any application/specification.
- Please note minimum ball centres of 295mm.





Balustrade

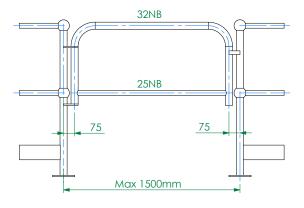
- Compliant with the building codes of Australia (BCA2010) & New Zealand.
- The 12mm vertical bars at 100mm centres are designed to prevent children from climbing or falling through the panel.
- Fabricated to exact project specifications.

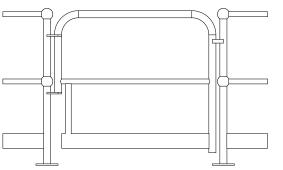


Self Closing Gates

Gate types

- HGATE single gate no kickplate
- HGATEKP single gate with kickplate
- HGATED double gate (up to 3000mm stanchion centre)

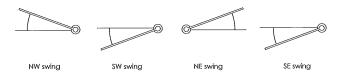




Self Closing Gates

When ordering a self closing gate the following information is required.

- Gate type
- Swing direction
- Stanchion type
- Stanchion centres
- Plan view of gate in-situ showing rail direction
 Eg. HGATE SE swing Type P at 1200mm (stanchion centres)



Panelisation

Locker Group handrail can be supplied in panels, manufactured to suit your exact requirements.

Benefits

- Fast and efficient onsite installation
- Reduced site labour costs
- Professional finish

Weld Options

- Fully welded and galvanised after fabrication
- Tack welded and galvanised after fabrication
- Galvanised components, tack welded and cold galved after fabrication

Finish options

- Galvanised
- Galvanised and painted** (wet or dry)
- Untreated (black)
- Untreated and painted** (wet or dry)
 - ** Painted to your specification





Installation tips

Stanchion Centres

- Steel -2000mm recommend maximum centres for standard 32 mm medium duty stanchions
- Aluminium 1800mm recommend maximum centres (Side offset stanchions should be spaced at no greater than 1200mm centres)

Welding

- Steel one 20mm tack weld to each side of the underside of ball
- Aluminium full circumferential weld to each side of ball

Slip Joints

- Steel supplied galvanised complete with tapered pins, (hole size for taper pins should be 5mm)
- Aluminium supplied stainless steel locking screw or pop rivets

General Tips

- Join rails whenever possible inside balls to hide joints
- Bolt the first stanchion rigidly in place first
- **Do not** bolt the other stanchions rigidly in position and attempt to feed pipe through stanchions.
- Start stair and sloping runs at the bottom and work up.
- Closure bends are designed so that the top rail is to join inside the top ball and the lower leg of the bend stops on the outside of the knee rail ball with the knee rail sliding inside the bend.

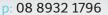












e: admin@perforge.com.au



2 /11 Toupein Road, Yarrawonga NT 0830