



first time  
fabrication

# Handrail Catalogue



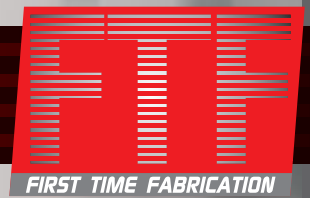


# **FTF MANUFACTURING** **“SPECIALIST FABRICATION SERVICES TO INDUSTRY”**

FTF can assist you in your next engineering project with our:

- **Extensive product knowledge** – We have over 20 years involvement in the structural/grating fabrication industry
- **Large Stock Inventory Levels** – We carry an extensive stock range in grating, stanchions and stair treads, all available from our Perth Factory.
- **Fast Project Turnaround Times** – When you are on a tight project schedule FTF is able to deliver a prompt production service which consistently out performs our competitors.
- **Personalized Service** – At FTF your initial contact oversees the whole project, from the quotation through to fabrication, delivery and documentation.
- **General Fabrication** – FTF can also provide light to medium General fabrication works and processing involving highly repetitive type works.
- **Rolling & Bending** – Talk to your FTF Rep about our rolling & bending capabilities to see if we can be of service to you.





Contents	Page
System Specifications	4
Ordering	5
Stanchion Specifications	6
Stanchion Options	7
Stanchions	8-9
One Ball Stanchions	10
Handrail Options	11
Architectural Balustrading	12
Photo Gallery	13
Other Services	14
Capabilities	15



## TUBULAR HANDRAIL SYSTEM SPECIFICATIONS

First Time Fabrication's tubular handrail systems are manufactured to comply With Australian Standards AS1657-1992

### General

Australian Standard AS1657-1992 recommends a maximum pitching of no more than 2000mm. Please Note this is a guide only and greater spacings can be achieved while still conforming to the code.

Handing of stanchions is ascertained by standing on the walkway and Facing the stanchion. Holes or KPMB's on the right side of the stanchions are designated to be on the right and those on the left are designated left.

### Finish

Either Mill/Untreated or Hot Dipped galvanised finish is available.

Galvanising is finished in accordance with AS/NZS 4680:1999

### Base Plates

All base plates other than AM type stanchions are manufactured from 145mm x 75mm 10mm Flat Bar with 2 x 18mm holes at 102mm centres. AM Base plates are manufactured from 170mm x 65mm 10mm Flat Bar with 2 x 18mm holes and 125mm centres.

### Standard Duty vs Heavy duty Stanchions

Standard Duty Stanchions are made from 40nb Pipe (48.3 O.D.) with a 3.2mm wall thickness

Heavy Duty Stanchions are made from 40nb Pipe (48.3 O.D.) with a 4.0mm wall thickness

### Railing

Drill holes for standard stanchion are as follows

Handrail: 32nb pipe (42.4mm O.D.)

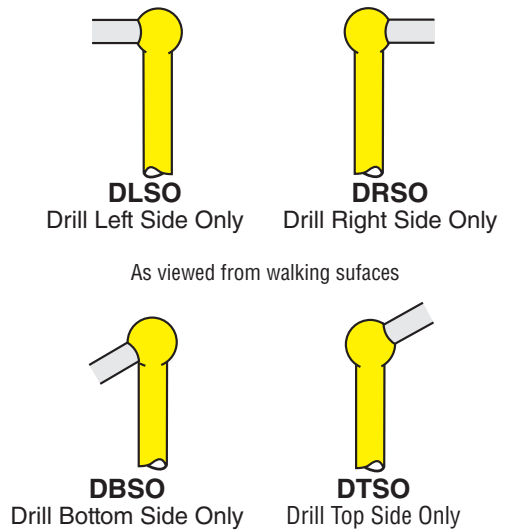
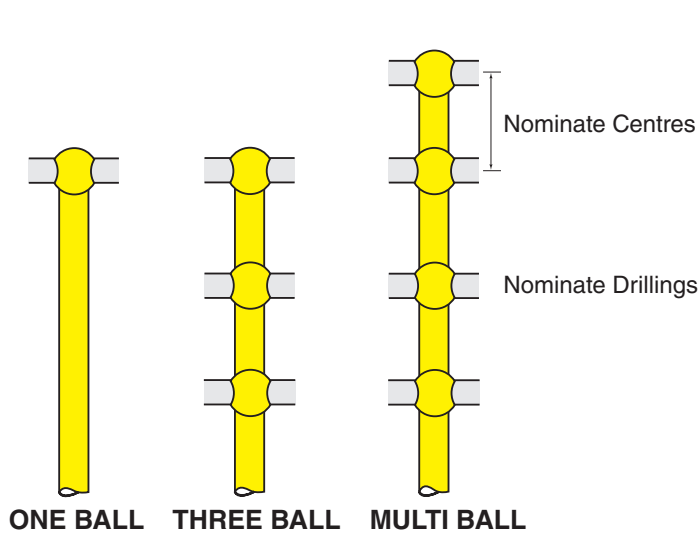
Kneerail: 25nb pipe (33.7mm O.D.)

### Kickplate mounting bracket

Manufactured form 40x40x5 Angle 85mm long, with 2 slots 14mm x 21mm long to suit 100mm kickplate.

### Specials

Non standard stanchions are available to suit your requirements.



## MATERIAL

Mild Steel  
Stainless Steel  
Aluminium

## TREATMENT - FINISHES

Untreated - Mill Finish/Black  
Galvanised  
Painted

## STANCHIONS

1. Choose a type from page 8-9.
2. Choose a material type.
3. Choose a treatment.
4. Nominate a kickplate bracket height.
5. Nominate an offset if SO type stanchion.
6. Nominate an angle if an angle type stanchion.
7. Nominate the required options.
8. Enclose a sketch if needed to explain specials.

Examples:

PGalv ..... Platform Galvanised  
WMill ..... Welded Mill Finish  
PAlI ..... Platform Aluminium  
SO 110 Galv ..... SO Galvanised 110 offset  
AM45 Mill ..... Angle Mount 45 Degree Mill Finish

## CLOSURES AND BENDS

1. Choose a type from page 11.
2. Choose a material.
3. Choose a treatment.
4. Choose a leg length if not standard.
5. Choose a pipe size.
6. Choose an angle if an ACB or RB.

Examples:

ACB45° Galv ..... Angle Closure Bend Galvanised 45°  
HCB 32 B ..... Horizontal Closure Bend Mill  
RB 25 G 90..... Rail Bend 25NB Galvanised 90°

## GATES/DROP BARRIERS

1. Choose a type from page 11.
2. Choose the stanchion type from page 8-10.
3. Choose material.
4. Choose a treatment.
5. Nominate a kickplate if required.
6. Nominate the swing direction.
7. Nominate the centre to centre dimension of the stanchions .... or advise if other.
8. Photocopy the sketch on page 23 and fill in the details if needed.

Examples:

Gate with two PG stanchions. Galvanised No Kickplate.  
1250 centres. NW swing.

Gate without stanchions. Galvanised. With Kickplate.  
1000 centres of SW swing.

Drop bar. Painted yellow. 700 centres.

# STANCHION SPECIFICATIONS

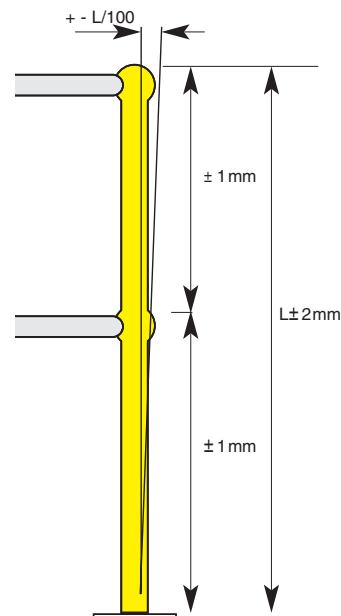
## STANCHION SPECIFICATIONS

TYPE	STANDARD		
	Mild Steel	Stainless Steel	Aluminium
<b>Material</b>			
<b>Grade</b>	250	316L	6063-T6
<b>STANCHION - STANDARD</b>			
NB	40		
OD	48.3mm	48.26mm	50mm
Wall Thickness	3.2mm	2.77 sched 10	4.0mm
<b>STANCHION - HEAVY</b>			
NB	40		
OD	48.3mm	48.26mm	
Wall Thickness	4.0mm	3.68mm sched 40	
<b>BALL OD</b>	76mm	76mm	76mm
<b>RAILS - STANDARD - HAND</b>			
NB	32		
OD	42.4mm	42.16mm	46mm
Wall Thickness	3.2mm	2.77mm	3.5mm
Weight	3.17kg	2.73kg	1.27kg
<b>RAILS - STANDARD - KNEE</b>			
NB	25		
OD	33.7mm	33.40mm	40mm
Wall Thickness	3.2mm	2.77mm	3.0mm
Weight	2.46kg	2.11kg	0.95kg
<b>RAILS - SPECIALS</b>			
- HAND & KNEE			
NB	25 to 40		
OD	33.7mm to 48.3mm		
Wall Thickness	3.2mm to 4.0mm		
<b>PIPE</b>			
OD = < 50mm	+/-0.2mm	+/-0.2mm	+/-0.2mm
OD > 50mm & = < 75mm	-	-	-
Thickness Variation	+/-10%	+/-10%	+/-10%
Base Plates	+/-1mm	+/-1mm	+/-1mm
Spheres Drilling	2 - 4mm oversize	2 - 4mm oversize	2 - 4mm oversize
Spheres Hole Angle	+/-1° any horizontal axis 0.5° in slope	+/-1° any horizontal axis 0.5° in slope	+/-1° any horizontal axis 0.5° in slope
<b>SPACING</b>			
AS1657	2000mm	2000mm	1800mm
AS1657 App.B			
Stanchion P	3000mm	3000mm	1800mm
Stanchion S	2700mm	2700mm	1800mm
Stanchion W	3000mm	3000mm	-
Stanchion SO	3000mm	3000mm	1300mm
Stanchion C	-	-	1800mm

## STANCHIONS WEIGHT

TYPE	Steel		Aluminium
	3.2mm WT	4.0mm WT	
PC, C, CA	4.86kg	5.33kg	2.12kg
P, PA	4.74kg	5.25kg	2.07kg
W, WA, AMW	3.90kg	4.42kg	1.68kg
S	5.00kg	5.64kg	2.20kg
SO	5.37kg	5.87kg	2.54kg
SOAL/SOAR	5.33kg	5.65kg	2.31kg
AM	4.46kg	5.00kg	1.95kg
IG, IGA	6.00kg	7.00kg	2.65kg

## MANUFACTURING TOLERANCES

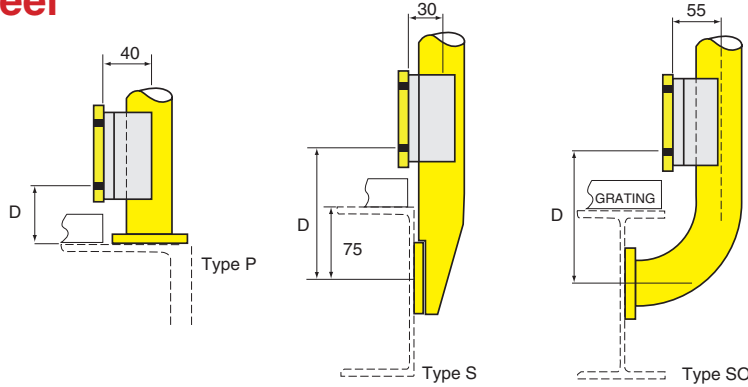


# STANCHION OPTIONS

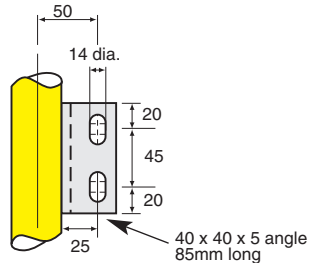


## KICK PLATE MOUNTING BRACKETS

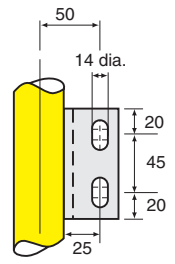
### Steel



TYPICAL ELEVATION



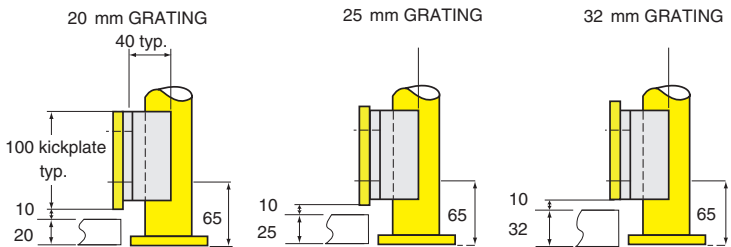
TYPICAL ELEVATION



DIMENSION 'D' FOR VARIOUS STANCHION TYPES				
Grating height mm	nil	20,25,32	40,45,50	55,60,65
P, W, C	D = 40	D = 65	D = 80	D = 100
S & SO	D = 115	D = 140	D = 160	D = 175

Slot allows 7mm up/down adjustment to kickplate. All kickplate brackets are mounted right side when viewed from walking surface.

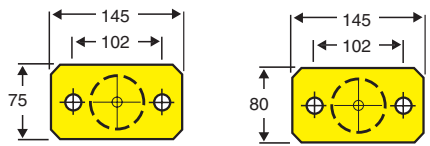
## BASE PLATES



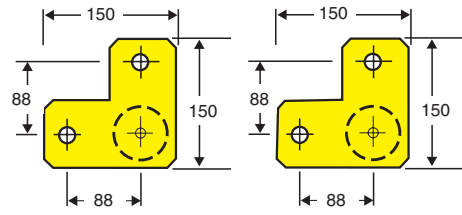
### Steel

### Aluminium

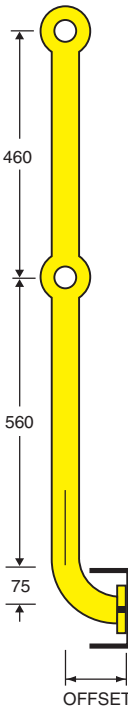
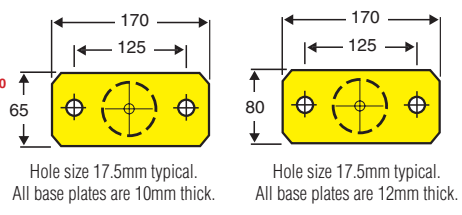
STANDARD & ANGLE MOUNTED From 0° - 14°



CORNER



ANGLE MOUNTED ONLY From 15° - 45°



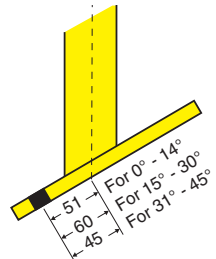
KICKPLATE POSITIONS

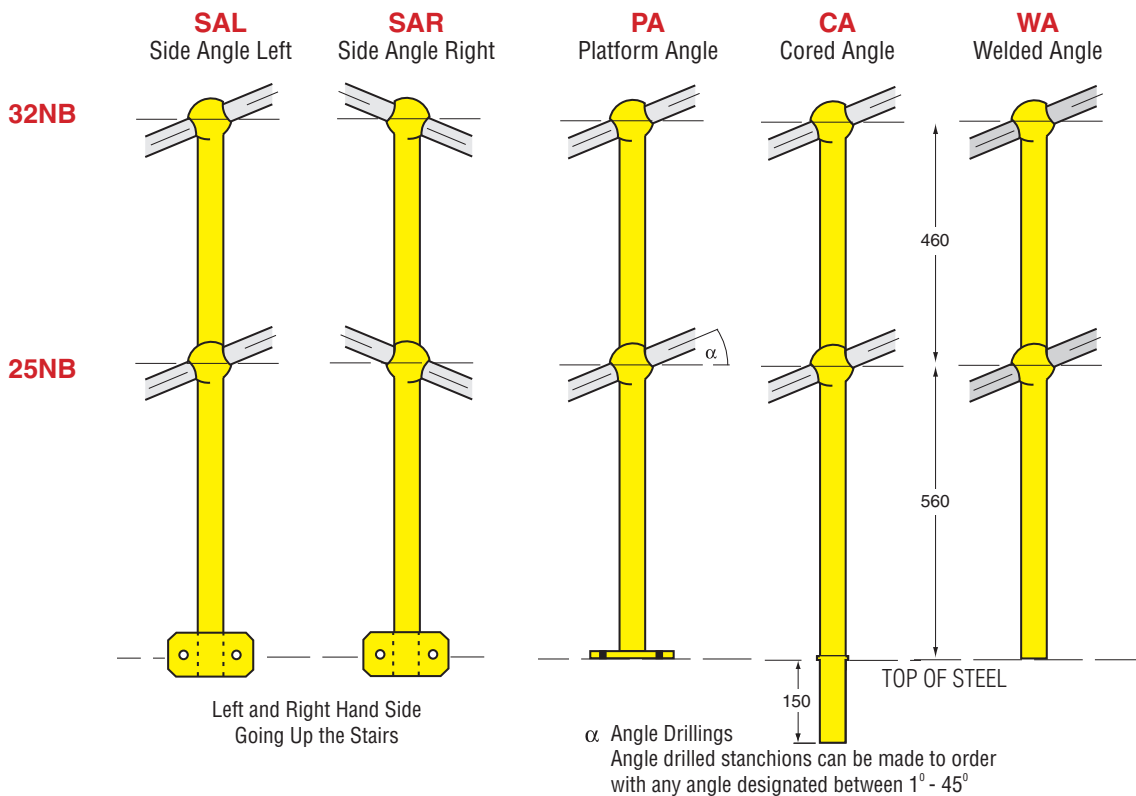
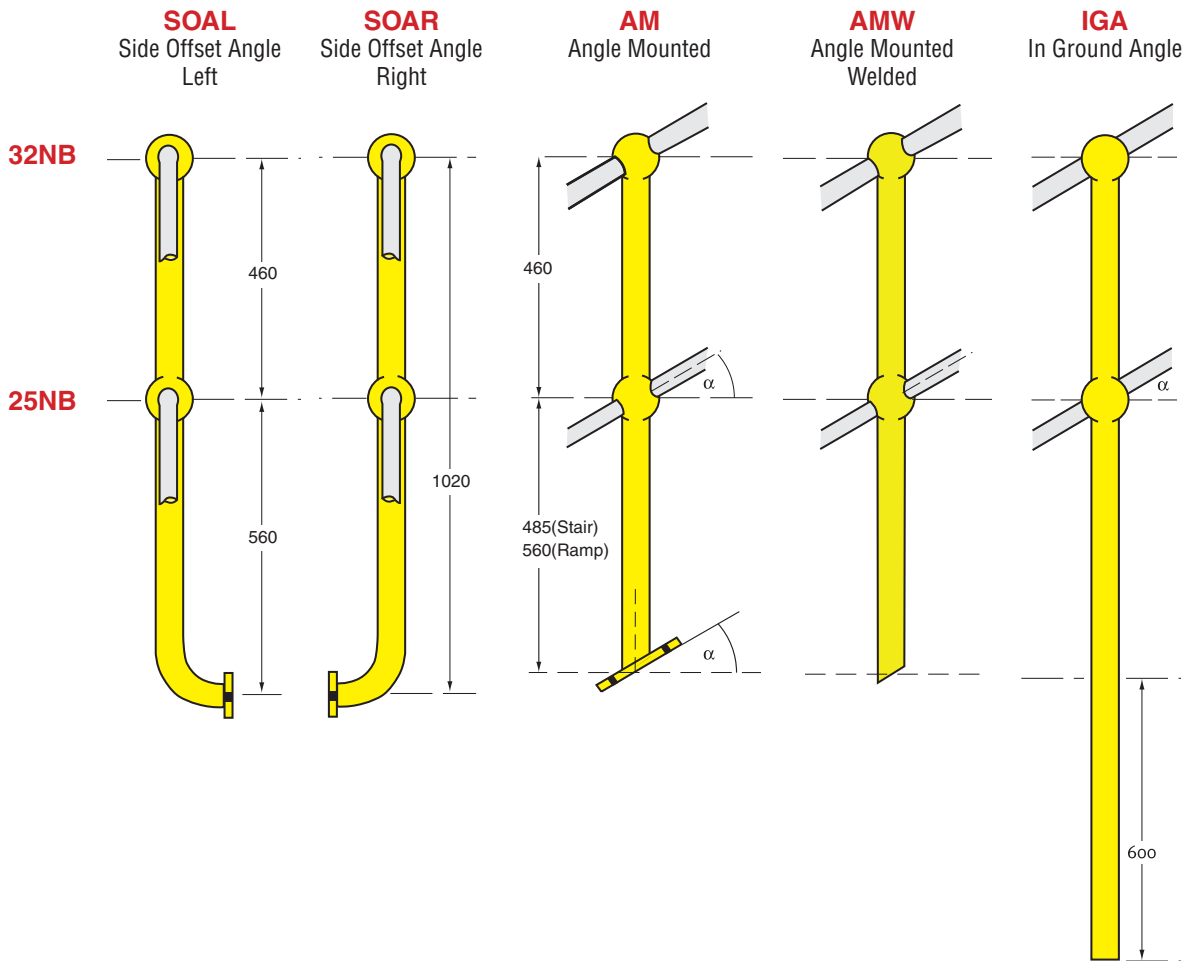
'SO' TYPE OFFSETS					
SIZE	CHANNELS		UNIVERSAL BEAMS		
	STEEL OFFSET	ALUM. OFFSET	SECTION	STEEL OFFSET	ALUM. OFFSET
150 x 75	110	150	200UB	110	150
180 x 75	110	150	250UB	110	150
200 x 75	110	150	310UB	130	150
230 x 75	110	150	360UB	130	150
250 x 90	130	150	410UB	130	150
300 x 90	130	150	460UB	130	165
380 x 100	130	165	530UB	140	165

Aluminium SO Stanchion centres should not exceed 1800mm.  
Steel SO Stanchion offset should not exceed 250mm if compliance with AS 1657 is required.

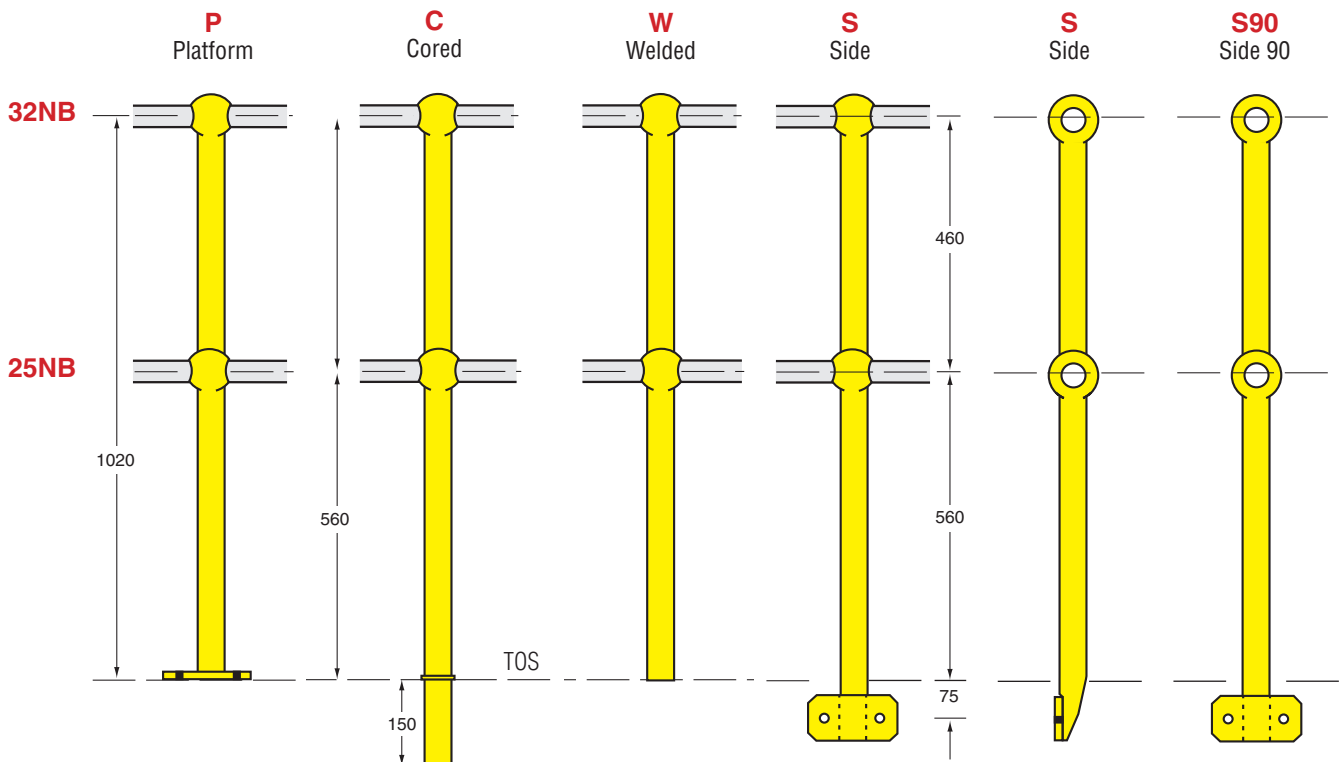
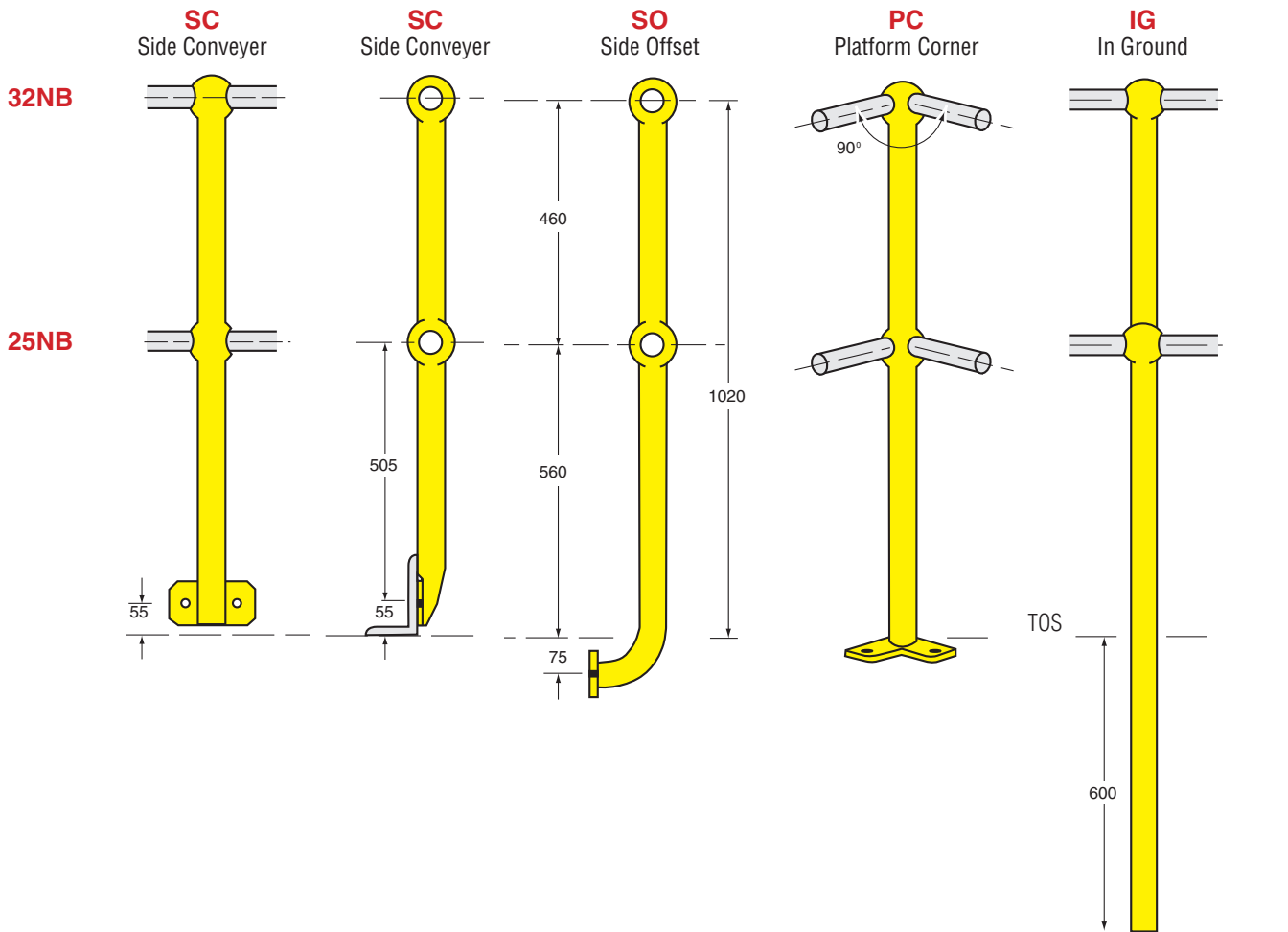
RADIUS  
Steel 90mm  
Aluminium 140mm

OFFSET







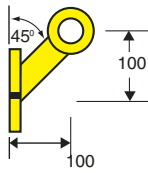


# ONE BALL STANCHIONS

## ONE BALL STANCHIONS

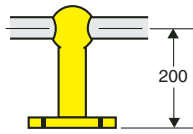
OBH  
One Ball Handrail

**K**



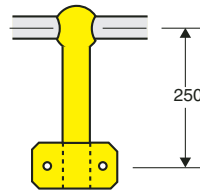
OBP  
One Ball Platform

**L**

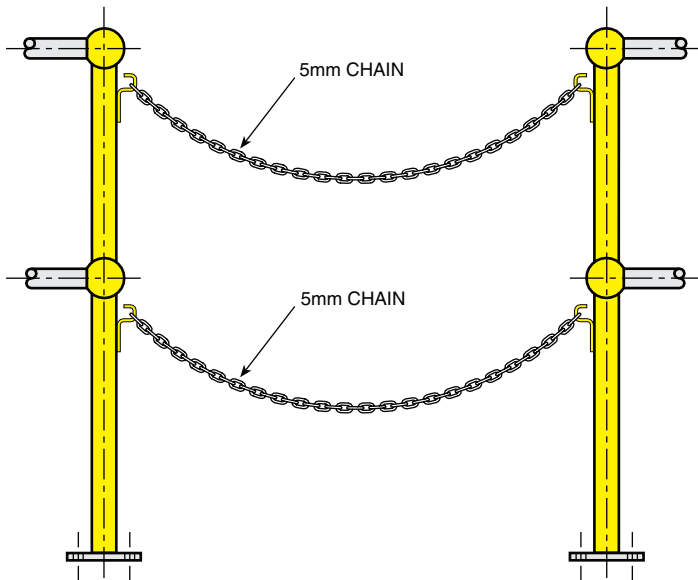


OBS  
One Ball Side

**M**

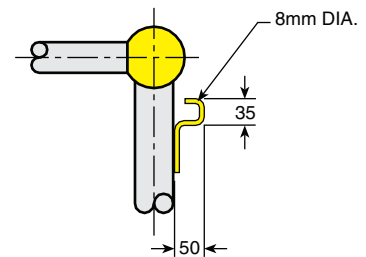


## BALLTUBE CHAIN HOOKS



### D.O.S.O STANCHIONS WITH CHAIN HOOKS

(SPECIFY WHETHER TOP RAIL ONLY OR BOTH RAILS)  
(5mm HEAVY DUTY CHAIN AVAILABLE ON REQUEST)

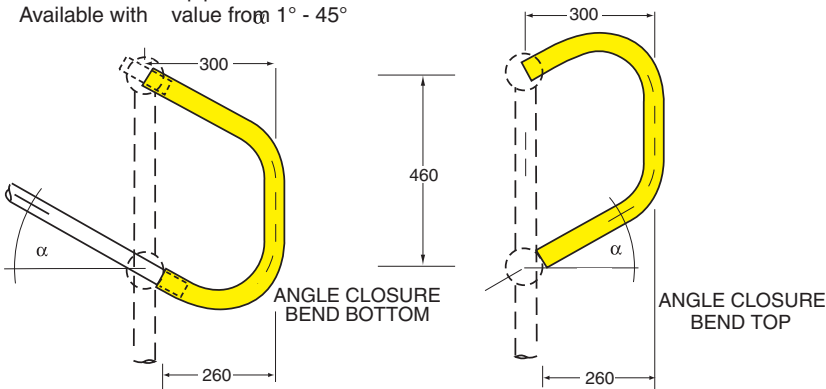


### DETAIL OF HOOK

## CLOSURE BENDS/BENDS

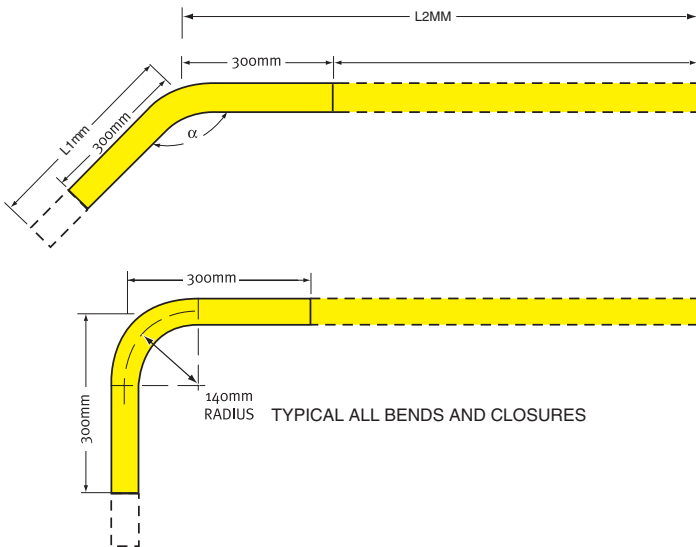
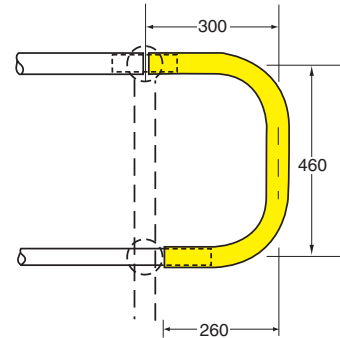
### Angle Closure Bends (ACB)

**Standard Pipe:**  
32NB 3.2mm WT  
Available in other pipe sizes.  
Available with value from  $1^\circ$  -  $45^\circ$



### Horizontal Closure Bends (HCB)

**Standard Pipe:**  
32NB 3.2mm WT  
Available in other pipe sizes.



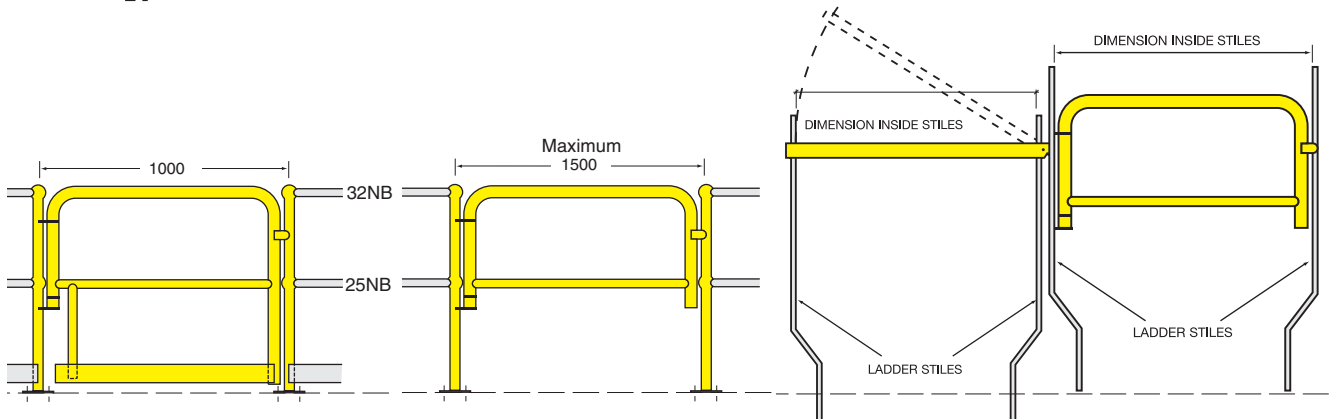
### Rail Bends (RB)

**Standard Pipe:**  
Handrail 32NB 3.2mm WT  
Knee rail 25NB 3.2mm WT

**Standard Leg:**  
300mm x 300mm

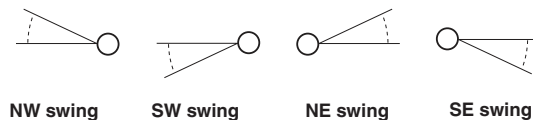
**Non-Standard Leg:**  
 $L1 + L2 = <6500$

## GATES/DROP BARRIERS



### Important

When ordering self closing gates, it is **essential** to nominate the swing direction



### Gates/Drop Barrier Types

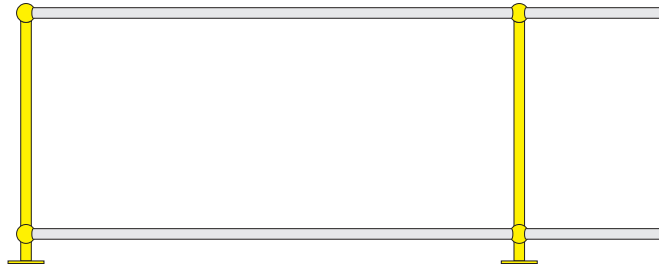
- Spring loaded self closing
- Gravity drop
- Padlock option available
- Combine with any stanchion
- Bracket variations for welding to columns
- Double gates options available
- Kickplate options available

# ARCHITECTURAL BALUSTRADING

## BALUSTRADE STYLES

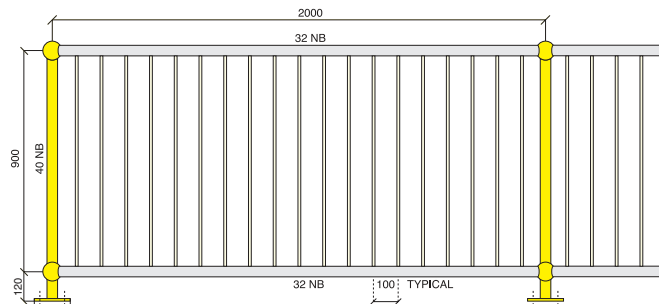
### AB-1

- Your choice of infill
- Your choice of stancion type - P type recommended



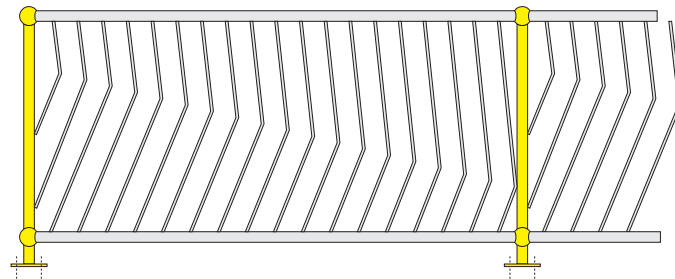
### AB-2

- 12mm diameter rods
- Your choice of stancion type - P type recommended



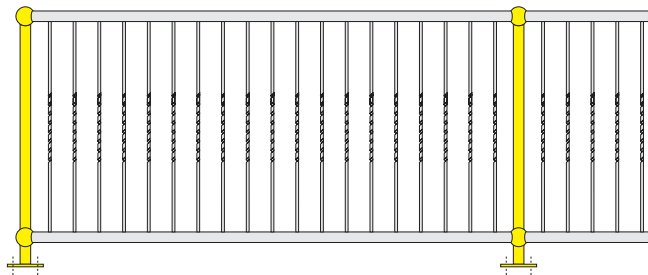
### AB-3

- 12mm diameter rods
- Cranked
- As Drawn
- Opposite hand
- Your choice of stancion type - P type recommended



### AB-4

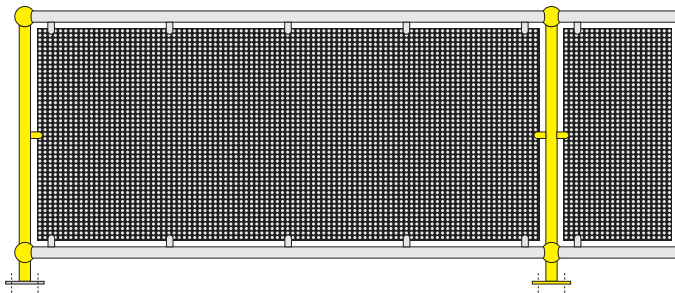
- 16 x 16mm square bar with middle twist
- Your choice of stancion type - P type recommended



### AB-5

Perforated plate

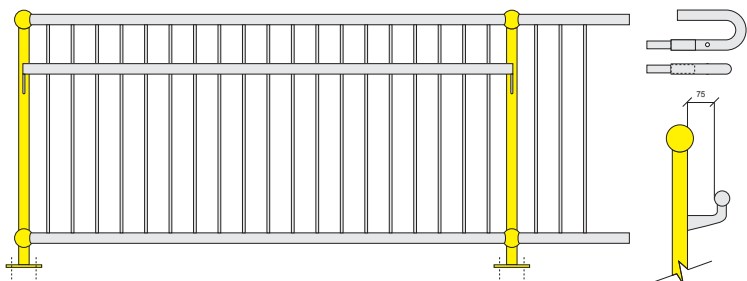
- 1.6 - 3mm sheeting
- 4 - 0 6.5mm holes
- 30 - 60% open area
- Your choice of stancion type - P type recommended



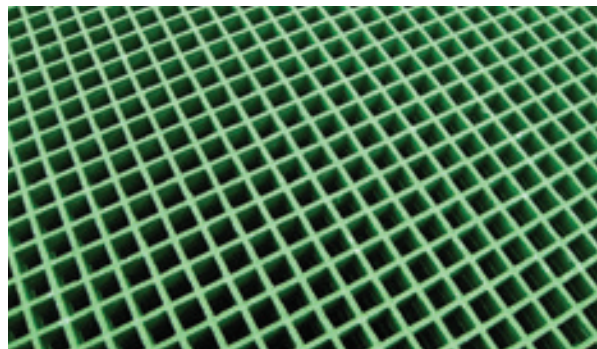
### AB-6

As for BAL-1, with the addition of extra railing to comply with requirements of AS1428.1 - 2001 for disability access

- Your choice of stancion type - P type recommended



# PHOTO GALLERY



## FTF MANUFACTURING “CATERING TO ALL THE METAL SERVICES INDUSTRY”

FTF provides a variety of services catering to the metal services industry including;

### Stanchions & Handrailing

First Time Fabrications handrail and balustrade system with its wide range of standard components forms an economical, strong and simple form of handrail and balustrade. FTF can supply stanchions either loose or in prefabricated panels to your specific needs, providing you with safe access to all areas. We can provide stanchion/prefabricated panels in galvanised steel, aluminium or stainless steel to suit your requirements.

### General Fabrication

FTF can also provide light to medium General fabrication works and processing involving highly repetitive type works.

### Conveyor/Safety Guards

From fully enclosed units to simple side guards with mesh FTF has expertise in the manufacture of conveyor/safety guards, providing a cost effective alternative to manufacturing them in house, leaving you to focus on your core business manufacturing.

### Pipe Bending

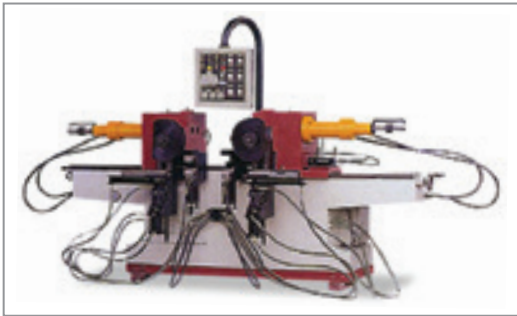
FTF has extensive experience in pipe bending, we can provide most types of bends required and can cope with high volume bending projects.

### Pipe/Plate Rolling

FTF can provide rolling services for both mild steel plate and pipe, contact your FTF rep for more information on our capabilities.



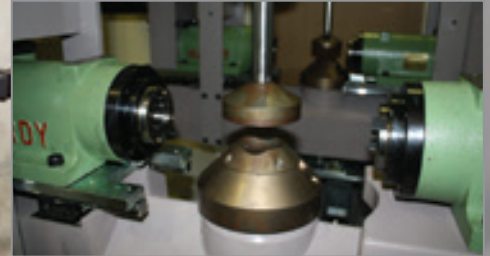
## FTF CAPABILITIES



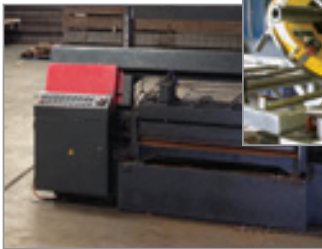
Dual Head Pipe Bender



Semi Auto Hydraulic Cold Saws



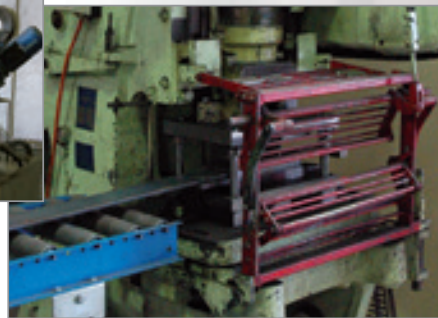
4 Head Stanchion Drill



Bandsaw



Bandsaw



Presses



Pipe Bender



Cropper



Pipe Rollers



Dot Peen



Cosen 300NC Bandsaw



Pipe Dream



## Grating

Our grating is available in numerous combinations of load bar depth and thickness, load bar pitch and cross rod pitch. The full range of standard types of grating as shown in our brochure covers a large range of requirements for any customer.

Grating treads can be made from any type of grating and to any dimensions which suit the relevant stairway. In the interest of economy we suggest that the recommended widths and lengths be used wherever possible.



## FRP

Fibre Reinforced Plastic (FRP) grating is a moulded, one-piece fibreglass reinforced plastic grating, available in standard panels or fabricated into panels of the shape you require to fit your floor.



## iTread

iTread is a tough walkway system designed for aggressive environments. Use it to safely access rooftops, access platforms, factory environments: all those hard to reach destinations it might otherwise be too dangerous to venture.

Designed to be lightweight and easy to handle, iTread is simple and quick to install. Manufactured from robust aluminium alloy this walkway system is strong, and best of all, the system is corrosion and maintenance free. Versatile, resilient, and built to last, iTread is the single solution to your walkway needs.

### First Time Fabrication

Ph (08) 9452 7806

Fax (08) 9459 9956

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