






COLOUR GUIDE

The colours in the tables will help you select your products material and finish. These will also be displayed in the page footer throughout this section. Products not colour coded will state their material or finish below the table.

	Grade 304 Stainless steel (Internal)
	Grade 316 Stainless steel (External)
	Zamac (Zinc aluminium alloy)
	Zinc coated steel
	Mild steel
	Galvanised steel
	Aluminium
	Duplex 2205 (Ultra marine stainless)

ICONS

Throughout this section there are various icons to help you with your product selection.

-  Diameter
-  Square Solid
-  Technical information that can be found on our website
-  Handy tip for quicker and more effortless installation
-  Important note, please read

**TESTED TO
BS 4211**

UK standard for ladders for permanent access to high structures

**TESTED TO
BS 14122-4**

Requirements for safe access to machines, where a fixed means of access is necessary

**TESTED TO
BS 6399-1**

UK standard loading for buildings. Code of practice for dead & imposed loads

**TESTED TO
BS 4592**

UK standard for flooring, stair treads and handrails for industrial use

**TESTED TO
BS 8300**

Conforms to the requirements that handrails should not be cold to the touch

HANDRAILING





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HANDRAIL TUBE



Tube	Style	Description	Technical	Page no.
Mild Steel		<ul style="list-style-type: none"> Available in mild steel & BZP 	<ul style="list-style-type: none"> Ø: 48.3mm Mild steel length: 3.0m BZP length: 5.8m Thickness: 2.0mm 	459
Mild Steel		<ul style="list-style-type: none"> Available in zinc plated 	<ul style="list-style-type: none"> Ø: 42.4mm Length: 6.0m Thickness: 2.0mm 	461
Mild Steel		<ul style="list-style-type: none"> Available in mild steel 	<ul style="list-style-type: none"> Ø: 33.7 - 48.3mm Length: 7.5m Thickness: 2.5 - 3.0mm 	465
Mild Steel		<ul style="list-style-type: none"> Available in BZP 	<ul style="list-style-type: none"> Ø: 33.7mm Length: 3.0m Thickness: 2.0mm 	473
GRP		<ul style="list-style-type: none"> Available in grey & yellow GRP 	<ul style="list-style-type: none"> Ø: 45 & 50mm Length: 6.0m Thickness: 5.0 & 6.0mm 	482
PVC Coated Mild Steel		<ul style="list-style-type: none"> Available in grey & yellow PVC coated mild steel With fixing holes either end of the tube 	<ul style="list-style-type: none"> Ø: 45mm Length: 790 - 1400mm Thickness: 4.0mm 	485
Galvanised Steel		<ul style="list-style-type: none"> PPC yellow 	<ul style="list-style-type: none"> Ø: 42.4 & 48.3mm Length: 6.5m Thickness: 3.2mm 	487
Galvanised Steel		<ul style="list-style-type: none"> Hot dipped galvanised 	<ul style="list-style-type: none"> Ø: 26.9 - 60.3mm Length: 1.044 - 6.5m Thickness: 3.2mm 	487
Aluminium		<ul style="list-style-type: none"> Available in anodised aluminium, golden oak and walnut. wood effect 	<ul style="list-style-type: none"> Ø: 50mm Length: 5.8m 	527
Stainless Steel		<ul style="list-style-type: none"> Available in stainless steel Grade 316 Satin polish 	<ul style="list-style-type: none"> Width: 40mm Depth: 40mm Length: 2.9 & 5.8m Thickness: 2.5mm 	581
Stainless Steel		<ul style="list-style-type: none"> Available in stainless steel Grade 304 & 316 Satin polish 	<ul style="list-style-type: none"> Ø: 42.4 & 48.3mm Length: 0.95, 1.2, 3.0 & 6.0m Thickness: 2.0mm 	581
Stainless Steel Mirror Finish		<ul style="list-style-type: none"> Available in stainless steel Grade 316 Mirror finish 	<ul style="list-style-type: none"> Ø: 42.4 & 48.3mm Length: 3.0 & 6.0m Thickness: 2.0mm 	581
Stainless Steel		<ul style="list-style-type: none"> Available in stainless steel Grade 316 	<ul style="list-style-type: none"> Width: 40mm Depth: 10mm Length: 3.0 & 6.0m Thickness: 1.5mm 	583
Softwood		<ul style="list-style-type: none"> Available in untreated, varnished, beech effect & wengé effect Solid wood 	<ul style="list-style-type: none"> Ø: 45mm Length: 2.0 & 3.0m 	608
Hardwood		<ul style="list-style-type: none"> Available in steamed beech, sapele, American white oak & European brown oak Solid wood 	<ul style="list-style-type: none"> Ø: 48.3mm Length: 2.0 & 3.0m 	609

A great new range of cast steel handrail fittings. Suitable for welding, galvanising, powder coating and gluing. Only for use with our Ø 48.3 x 2mm steel tube. Some fittings also supplied in bright zinc plated.

SEAMLESS TUBE



Ø mm	Length m	Code
48.3	5.8	130148258
48.3	3.0	13024823*

Thickness 2mm. *BZP.

90° ELBOW RADIUSED CORNER



Ø mm	Code
48.3	1301200D
48.3	1302200D*

*BZP.

90° ELBOW ROUND CORNER



Ø mm	Code
48.3	1301201D

SCROLL END



Ø mm	Code
48.3	1301221D
48.3	1302221D*

*BZP.

ADJUSTABLE ELBOW



Ø mm	Code
48.3	1301203D
48.3	1302203D*

*BZP.

BASE PLATE



Ø mm	Code
48.3	1301228D

BASE COVER PLATE



Ø mm	Code
48.3	1301208D
48.3	1302208D*

*BZP.

IN-LINE CONNECTOR



Ø mm	Code
48.3	1301206D
48.3	1302206D*

*BZP.

END CAP



Ø mm	Code
48.3	1301214D
48.3	1302214D*

*BZP.

WALL BALUSTER BRACKET



Ø mm	Code
48.3	1301212D

HIGH STRENGTH GLUE For use with tube fittings



ml	Code
50	1899007638

ADHESIVE ACTIVATOR Reduces curing time when used with Loctite 638



ml	Code
150	18990087649

EXAMPLE OF BZP FINISH



HANDRAIL BRACKETS



FIXED SPIGOT

WALL/FLAT



Wall to Bracket Centre mm	Code
63	171164

Solid disc fixing plate. BZP.

WALL/FLAT



Wall to Bracket Centre mm	Code
63	171161
75	171163

Domed disc fixing plate. BZP.

WALL/FLAT



Wall to Bracket Centre mm	Code
63	171165

WALL/FLAT



Wall to Bracket Centre mm	Code
63.5	1804305FF

WALL/TUBE



Ø mm	Wall to Bracket Centre mm	Code
42.4	72	13i0223

Zinc plated.

WALL/TUBE



Ø mm	Wall to Bracket Centre mm	Code
42.4	63.5	1804305FC
48.3	63.5	1804305FD
42.4	63.5	1806305FC
48.3	63.5	1806305FD

WALL/TUBE



Ø mm	Wall to Bracket Centre mm	Code
42.4	85	1804305FCB
48.3	85	1804305FDB
42.4	85	1806305FCB
48.3	85	1806305FDB

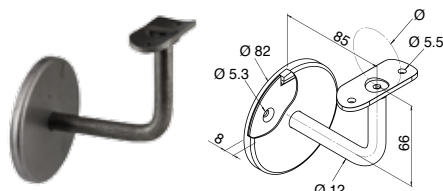
WALL/TUBE



Ø mm	Wall to Bracket Centre mm	Code
42.4	72	1804315FC
48.3	72	1804315FD
42.4	72	1806315FC
48.3	72	1806315FD

Supplied fitted with 8mm screw thread for wall fixing.

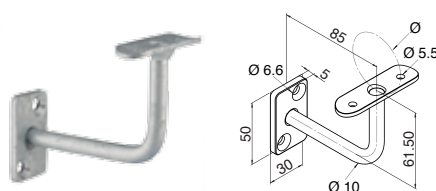
WALL/TUBE



Ø mm	Wall to Bracket Centre mm	Code
42.4/48.3	85	171179K

Supplied with snap fit cover plate. Three Ø 5.3mm countersunk fixing plate holes.

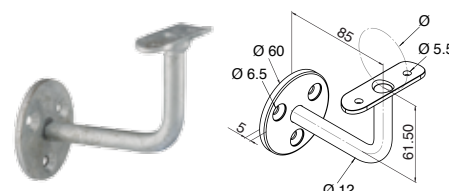
WALL/TUBE



Ø mm	Wall to Bracket Centre mm	Code
42.4/48.3	85	171181K
42.4/48.3	85	171180K

Two Ø 6.6mm countersunk fixing plate holes.

WALL/TUBE



Ø mm	Wall to Bracket Centre mm	Code
42.4/48.3	85	171178K
42.4/48.3	85	171177K

Three Ø 6.5mm countersunk fixing plate holes.

ADJUSTABLE HEIGHT - FIXED SPIGOT

FLAT/TUBE



Ø mm	Wall to Bracket Centre mm	Code
42.4	65	1804301FC
48.3	65	1804301FD
42.4	65	1806301FC
48.3	65	1806301FD

TUBE/TUBE



Ø mm	Wall to Bracket Centre mm	Code
42.4	65	1804301CC
48.3	65	1804301DD
42.4	65	1806301CC
48.3	65	1806301DD

FLAT/TUBE



Ø mm	Wall to Bracket Centre mm	Code
42.4	68	1804303FC
48.3	68	1804303FD
42.4	68	1806303FC
48.3	68	1806303FD

GLASS/TUBE



Ø mm	Wall to Bracket Centre mm	Code
42.4	69	1804333FC
48.3	69	1804333FD
42.4	69	1806333FC
48.3	69	1806333FD

To suit up to 20mm glass. For thicker glass longer threaded lengths can be purchased.

HANDRAIL BRACKETS

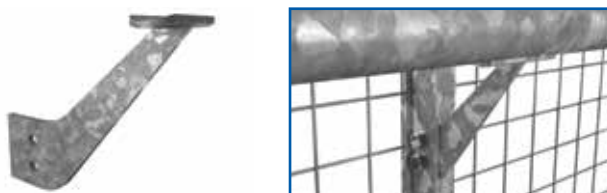
HANDRAIL BRACKET WITH SADDLE

Fixed washer



SIDE FIX HANDRAIL BRACKET

With saddle



To Suit Ø mm	Code
42.4	1301301C
48.3	1301301D

To Suit Ø mm	Code
42.4	171174C
48.3	171174D

To fit square: □ 40, 50, 60, 70 and 75mm.
To fit round: Ø 42.4, 48.3 and 60.3mm.

99mm distance from centre of fixing holes to centre of bracket.

ADJUSTABLE SPIGOT WALL/TUBE



Adjustable angle

TUBULAR HANDRAIL BRACKETS



WE ALSO STOCK GALVANISED
TUBE. SEE PAGE 487.

TUBULAR FLANGED HANDLE



Ø mm	Code
42.4	1804308FC
48.3	1804308FD
42.4	1806308FC
48.3	1806308FD

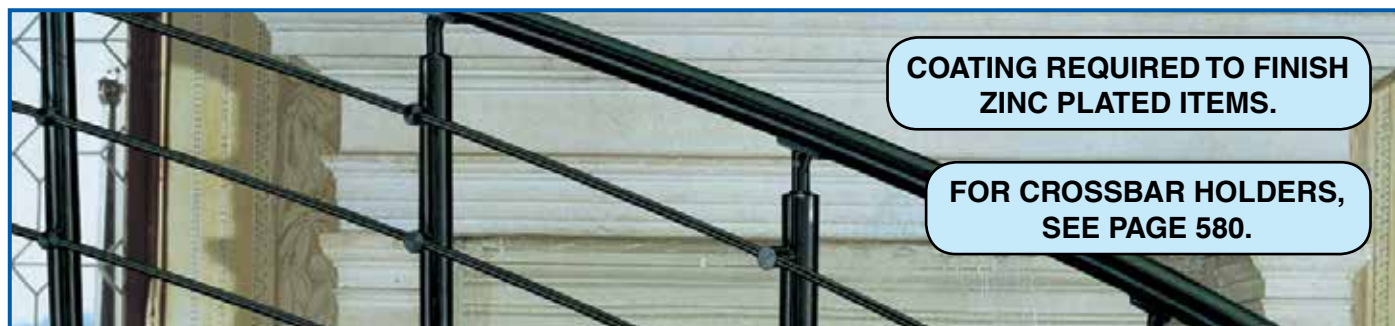
Ø mm	Code
33.7	171168B
42.4	171168C
48.3	171168D

Ø mm	Code
26.9	16143A
33.7	16143B
42.4	16143C
48.3	16143D

H x W mm	Tube Ø mm	Code
230 x 64	20	171170
345 x 80	28	171171

85mm distance from wall to
centre of bracket.

ZINC PLATED HANDRAIL SADDLES



COATING REQUIRED TO FINISH
ZINC PLATED ITEMS.

FOR CROSSBAR HOLDERS,
SEE PAGE 580.

HANDRAILING

FIXED SADDLE



ADJUSTABLE SADDLE



COVER PLATE



HANDRAIL TUBE



Height mm	Ø mm	Code
75	42.4	13i031S1

For use with code: 13i001600.
Zinc plated.

Height mm	Ø mm	Code
75	42.4	13i030S

For use with code: 13i001600.
Zinc plated.

Height mm	Ø mm	Code
15	42.4	13i020

Zinc plated.

Length m	Ø mm	Code
6	42.4	13i0016000

2mm wall thickness. Zinc plated.

TUBULAR HANDRAIL STANDARDS



MILD STEEL OR GALVANISED TO FIT Ø 33.7, 42.4 & 48.3mm TUBE

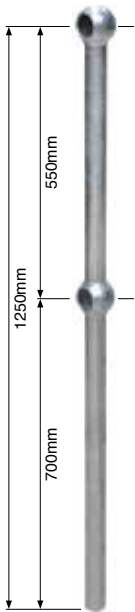


- Mild steel vented for galvanising
- M8 clamping screws fitted to balls
- Other dimensions can be supplied quickly, to order

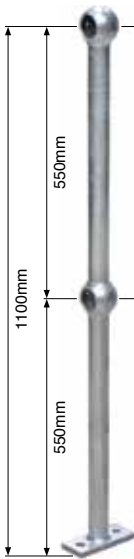
TESTED TO
BS 4592



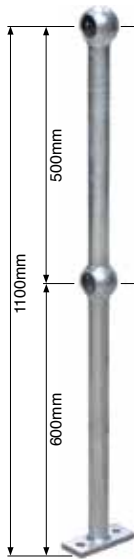
FHB 1A



FHB 4D



FHB 5E



Ø mm	Code
33.7	25011
42.4	2501142
48.3	2501148
33.7	25021
42.4	2502142
48.3	2502148

Ø mm	Code
33.7	25014
42.4	2501442
48.3	2501448
33.7	25024
42.4	2502442
48.3	2502448

Ø mm	Code
33.7	25015
42.4	2501542
48.3	2501548
33.7	25025
42.4	2502542
48.3	2502548

12mm flat drilled base plate.
Ø 18mm holes for M16 bolts.

12mm flat drilled base plate.
Ø 18mm holes for M16 bolts.

CRIMP CONNECTORS

TO SUIT Ø 33.7mm

STRAIGHT
CONNECTOR



RIGHT ANGLE
CONNECTOR



WALL PALMS
CONNECTOR



CRIMPING TOOL



Code
25C01

Code
25C03

Code
25C02

Code
25CMPT

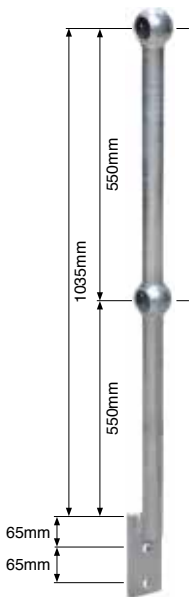
HANDRAILING

TUBULAR HANDRAIL STANDARDS

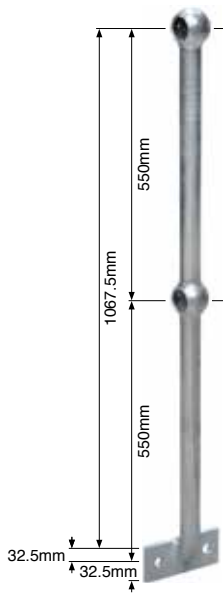
MILD STEEL OR GALVANISED TO FIT Ø 33.7, 42.4 & 48.3mm TUBE



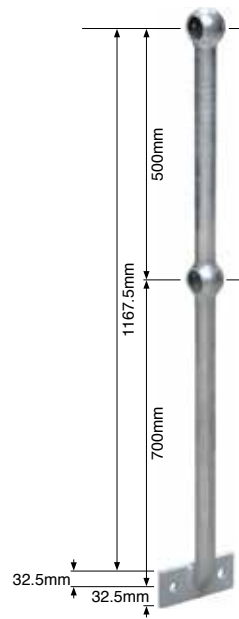
FHB 3C



FHB 2B



FHB 6F



Ø mm	Code
33.7	25013
42.4	2501342
48.3	2501348
33.7	25023
42.4	2502342
48.3	2502348

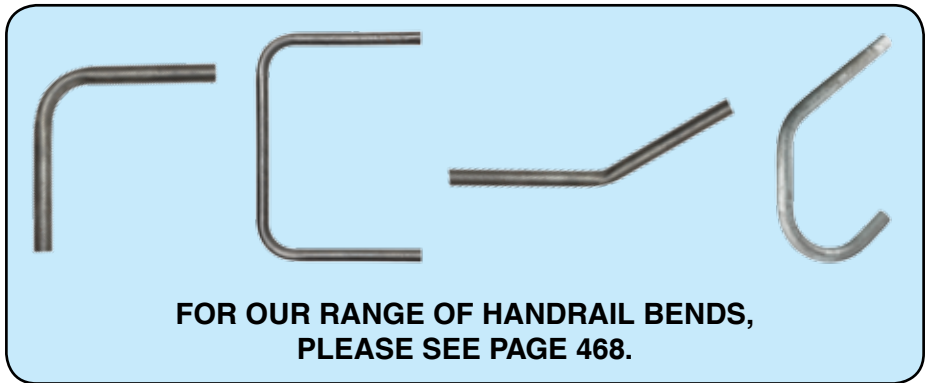
12mm flat drilled base plate.
Ø 18mm holes for M16 bolts.

Ø mm	Code
33.7	25012
42.4	2501242
48.3	2501248
33.7	25022
42.4	2502242
48.3	2502248

12mm flat drilled base plate.
Ø 18mm holes for M16 bolts.

Ø mm	Code
33.7	25016
42.4	2501642
48.3	2501648
33.7	25026
42.4	2502642
48.3	2502648

12mm flat drilled base plate.
Ø 18mm holes for M16 bolts.



FOR OUR RANGE OF HANDRAIL BENDS,
PLEASE SEE PAGE 468.

FOR OUR FULL RANGE OF GALVANISED TUBE,
PLEASE SEE PAGE 487.



HANDRAILING

ADJUSTARAIL



GALVANISED TO FIT Ø 33.7, 42.4 & 48.3mm TUBE



- Load tested
- No fabrications of raked specials required
- Flexible on site adjustment
- Delivery from stock
- Ball centres 500mm

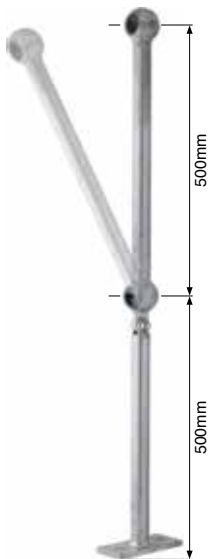
FOR HANDRAIL BENDS, SEE PAGE 468.

F.H.BRUNDLÉ PATENTED DESIGN.

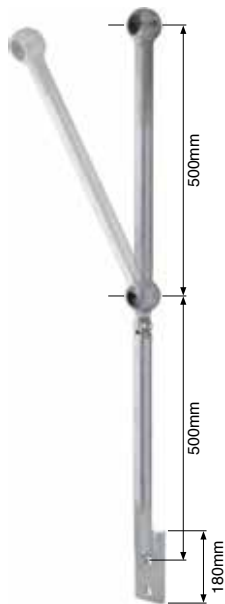
FHB 1A ADJUSTABLE



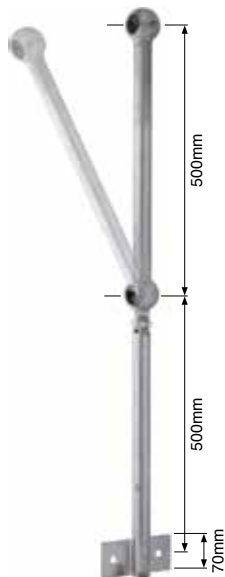
FHB 4D ADJUSTABLE



FHB 3C ADJUSTABLE



FHB 2B ADJUSTABLE



Ø mm	Code
33.7	25A25011
48.3	25A2501148

Ø mm	Code
33.7	25A25024
42.4	25A2502442
48.3	25A2502448

12mm flat drilled base plate.
Ø 18mm holes for M16 bolts.

Ø mm	Code
33.7	25A25023
42.4	25A2502342
48.3	25A2502348

12mm flat drilled base plate.
Ø 18mm holes for M16 bolts.

Ø mm	Code
33.7	25A25022
42.4	25A2502242

12mm flat drilled base plate.
Ø 18mm holes for M16 bolts.

OPEN STEEL



ANTI-SLIP



DURBAR



WE STOCK A HUGE RANGE OF FLOORING & STAIR TREADS, PLEASE SEE FROM PAGE 422.

HANDRAILING



TUBULAR HANDRAIL KNUCKLE



To Suit Ø mm	Ø mm	Code
33.7	63	25K25
33.7	82	25K2576
42.4	82	25K32
48.3	82	25K40
48.3	95	25K40L

GRUB SCREWS



To Suit Ø mm	Length mm	Code
33.7 x 63	8 x 16	25GRUB1
33.7 x 82	8 x 25	25GRUB3
42.4 x 82	8 x 20	25GRUB2
48.3 x 82	8 x 20	25GRUB2
48.3 x 95	8 x 25	25GRUB3

ROUND HOLLOW SECTION

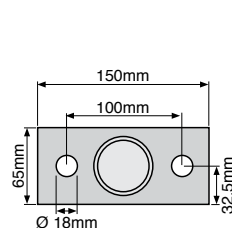


To Suit Ø mm	Thickness mm	Code
33.7	3.0	30063373
42.4	2.5	300642425
42.4	3.0	300642432
48.3	3.0	300648332

Length 7.5m.

BASE OPTIONS

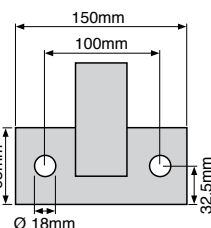
RECTANGULAR FLAT BASE



Thickness mm	Code
12	25F0112*

*Same plate as horizontal side palm.

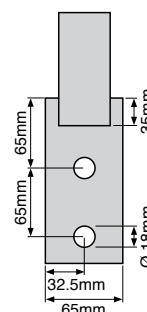
HORIZONTAL SIDE PALM



Thickness mm	Code
12	25F0112*

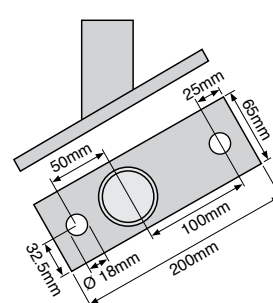
*Same plate as rectangular flat base

LONG SIDE PALM



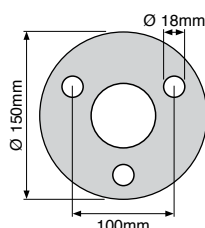
Thickness mm	Code
12	25F0312

RECTANGULAR RAKED FLAT BASE



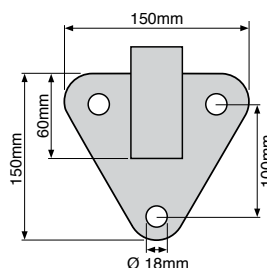
Thickness mm	Code
12	25F0412

ROUND BASE



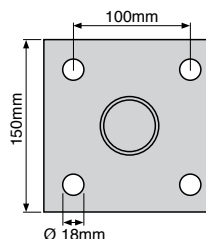
Thickness mm	Code
12	25F0512

TRIANGULAR SIDE PALM

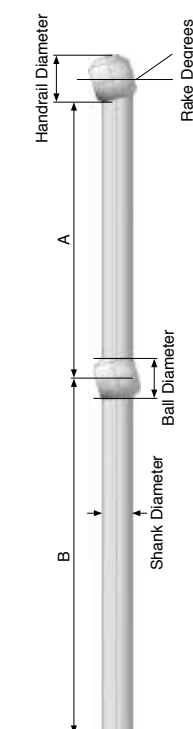


Thickness mm	Code
12	25F0612

SQUARE BASE



Thickness mm	Code
12	25F0712



Dimension B is to the bottom of the base plate if flat base or centre of top hole if side mount.

TUBULAR HANDRAIL STANDARDS

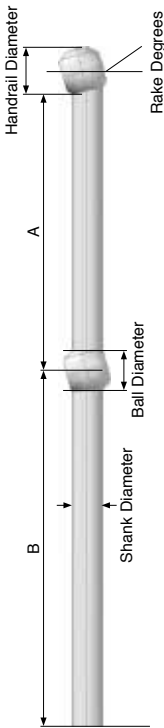


MADE TO ORDER FORM



MILD STEEL OR GALVANISED TO FIT Ø 33.7, 42.4 & 48.3mm TUBE

BASE OPTIONS



1 RECTANGULAR FLAT BASE

2 HORIZONTAL SIDE PALM

3 LONG SIDE PALM

4 RECTANGULAR RAKED FLAT BASE

5 ROUND BASE

6 TRIANGULAR SIDE PALM

7 SQUARE BASE

HANDRAIL & BALL DIAMETER OPTIONS

Handrail Ø mm	Ball Ø mm
33.7	63
33.7	75
42.4	75
48.3	75
48.3	90

Dimension B is to the bottom of the base plate if flat base or centre of top hole if side mount.

PLEASE STATE YOUR REQUIRED OPTION FROM THE COLUMNS BELOW

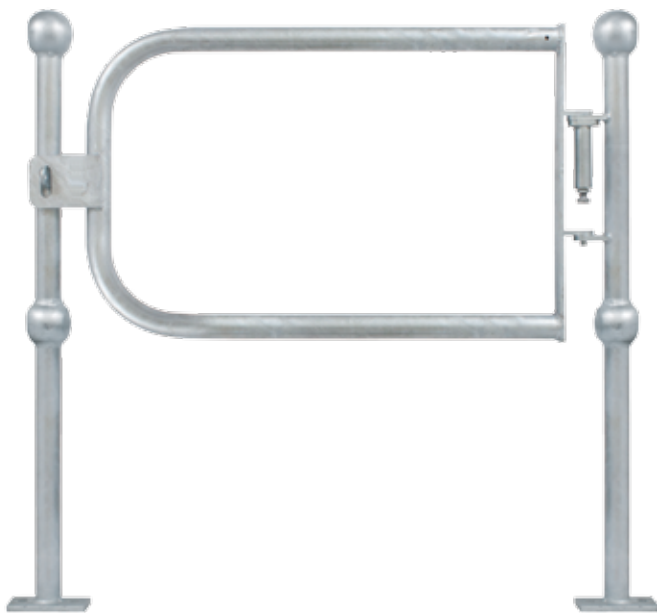
Qty	Base Type	Base Thickness mm				Post Ø mm			Handrail Ø mm*			Ball Ø mm*			Finish		Height mm		L/Hand R/Hand	Rake Degrees
	1 - 7	10	12	15	20	33.7	42.4	48.3	33.7	42.4	48.3	63	75	90	M/S	Galv	A	B		
10	5	12				42.4			42.4			75			Galv		500	400	L/Hand	25°

*See handrail and ball diameter options table above.



**FOR USE WITH
HANDRAIL STANDARDS**

SELF-CLOSING GATE & HANDRAIL STANDARD POSTS



- Supplied with hinge post & slam plate
- Galvanised
- Height 1100mm
- Horizontal tube centres 550mm on horizontal rails
- Gate post centres 1070mm
- Lockable with padlock through Ø 15mm hole
- Base plate: 2 x Ø 18mm holes at 100mm centres
- Image shows right hand opening inwards

Ø mm	Base Plate mm	Left Hand	Right Hand
33.7	65 x 150 x 12	25SG01L	25SG01R
42.4	65 x 150 x 15	25SG02L	25SG02R
48.3	65 x 150 x 15	25SG03L	25SG03R

SELF-CLOSING GATE - MADE TO ORDER



- Made to size can be supplied with or without posts
- Suitable for welding to your existing posts or existing ladder installations
- Supplied mild steel or galvanised

SELF-CLOSING UNIVERSAL GATE HINGES

Gate hinge set contains top and bottom hinge with adjustable closing speed, for welding to tubular and square sections.



**IF OUR SELF-CLOSING
GATES DON'T MATCH YOUR
REQUIREMENTS, WHY NOT
WELD YOUR OWN?**

Code
25SGHU

WE STOCK THE LARGEST RANGE OF GATE CLOSERS IN THE UK, SEE PAGE 286.

HANDRAIL BENDS



FOR JOINING TUBE WE HAVE SINGLE OR DOUBLE SPLICE LOCKS, SLEEVES & INTERNAL JOINTS, SEE PAGE 502.

F.H.Brundle is continually striving to make installations quicker and easier. Tubular bends in both galvanised and mild steel for Ø 33.7, 42.4 and 48.3mm tube will do just that. These bends are designed for Handrail Standards, Adjustarail and Tube Clamps. Joining bends to handrail tube couldn't be simpler.

90° BEND



Ø mm	Code
33.7	25B25143
42.4	25B32143
48.3	25B40143
33.7	25B25243
42.4	25B32243
48.3	25B40243

300mm legs.

ADJUSTARAIL RETURN BEND
500mm centres



Ø mm	Code
33.7	25BA25113
42.4	25BA32113
48.3	25BA40113
33.7	25BA25213
42.4	25BA32213
48.3	25BA40213

300mm legs.

STANDARD RETURN BEND
550mm centres



Ø mm	Code
33.7	25B25113
42.4	25B32113
48.3	25B40113
33.7	25B25213
42.4	25B32213
48.3	25B40213

300mm legs.

90° BEND



Splice lock ready

Ø mm	Code
48.3	1301B48248

248mm legs.

RAMP BEND



500mm legs. Required angle and tube diameter size needs to be confirmed at the time of ordering.

MADE TO ORDER

STAIR RETURN BEND

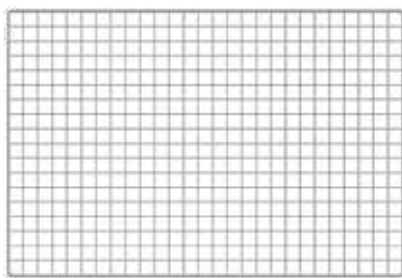


400mm legs. Required angle and tube diameter size needs to be confirmed at the time of ordering.

MESH INFILL PANELS



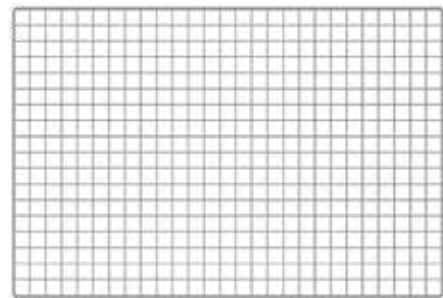
SINGLE MESH PANEL WITH BOTTOM TUBE



Mesh Inch	Mesh mm (approx)	Gauge g	Frame Ø mm	Panel H x W mm	Code
2 x 2	50 x 50	10	8	826 x 1082	0102008B
2 x 2	50 x 50	10	8	826 x 1382	0102004B



SINGLE MESH PANEL

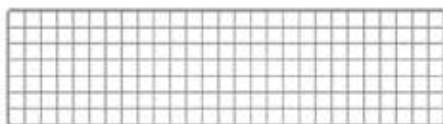


Mesh Inch	Mesh mm (approx)	Gauge g	Frame Ø mm	Panel H x W mm	Code
2 x 2	50 x 50	10	8	972 x 1082	0102007B
2 x 2	50 x 50	10	8	972 x 1382	0102003B

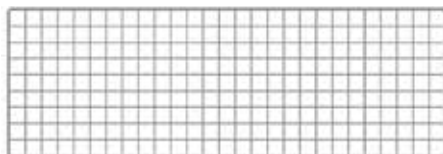


DOUBLE MESH PANEL

A



B



	Mesh Inch	Mesh mm (approx)	Gauge g	Frame Ø mm	Panel H x W mm	Code
A	2 x 2	50 x 50	10	8	369 x 1082	0102005B
A	2 x 2	50 x 50	10	8	369 x 1382	0102001B
B	2 x 2	50 x 50	10	8	470 x 1082	0102006B
B	2 x 2	50 x 50	10	8	470 x 1382	0102002B

THESE MESH PANELS WORK WELL WITH THE FOLLOWING POSTS. HANDRAIL STANDARDS PAGE 462, TUBE CLAMPS PAGE 490 & MEZZIRAIL® PAGE 472.



ACCESSORIES

MESH PANEL CLIP SINGLE

MESH PANEL CLIP DOUBLE



Ø mm	Code
42.4	16170C
48.3	16170D

Also available in stainless steel Grade 316.

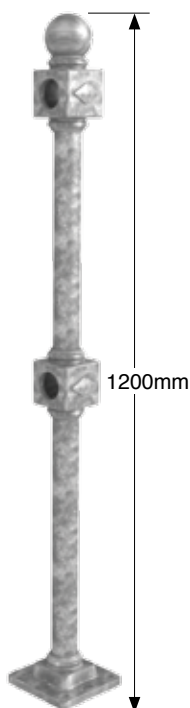
Ø mm	Code
42.4	16171C
48.3	16171D

Also available in stainless steel Grade 316.



Cast-A-Rail is a self-assembly railing system suitable for welding and galvanising. The range works with fittings available exclusively from F.H.Brundle and provides a cost effective alternative railing solution to cast iron.

PRE-ASSEMBLED POST



Overall Height mm	Post Ø mm	Code
1200	48.3	63BSCP

Height of top handrail is 1100mm.

TUBE

Ø 48.3mm



To Suit Ø mm	Thickness mm	Code
48.3	3.00	300648332
48.3	3.25	160248

SINGLE SPLICE LOCK



Ø mm	Length mm	Code
48.3	95.25	2502SL8

DOUBLE SPLICE LOCK



Ø mm	Length mm	Code
48.3	152.4	2502SL8D

SLEEVE JOINT



Ø mm	Code
48.3	16149D

ADJUSTABLE ELBOW

Cast steel - Internal fit



Ø mm	Code
48.3	13V48

Thickness 3.2mm.

WALL FLANGE



Ø mm	Code
48.3	16131D

WE SELL THE LARGEST RANGE OF HANDRAIL COMPONENTS AND HANDRAILING SYSTEMS IN THE UK.

INTERNAL JOINT



Ø mm	Code
48.3	16149D

90° BEND



Splice lock ready

Ø mm	Code
48.3	1301B48248

248mm legs.

90° ELBOW



Ø mm	Code
48.3	16125D

STOP END



Ø mm	Code
48.3	16133D

Plastic.

FOR MORE INFORMATION ON CAST-A-RAIL, SEE PAGE 248.

liveconfigurator™

REAL TIME DESIGN

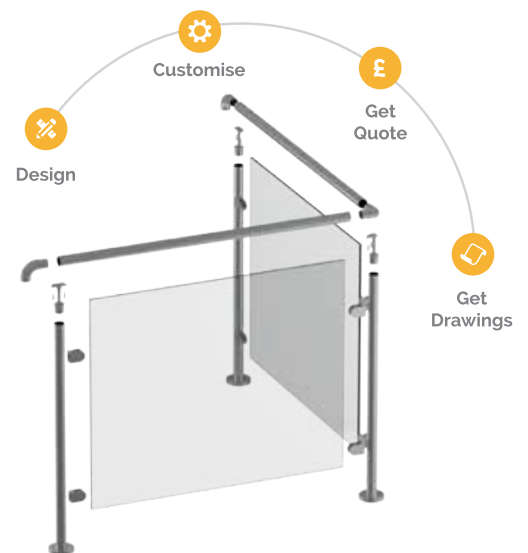


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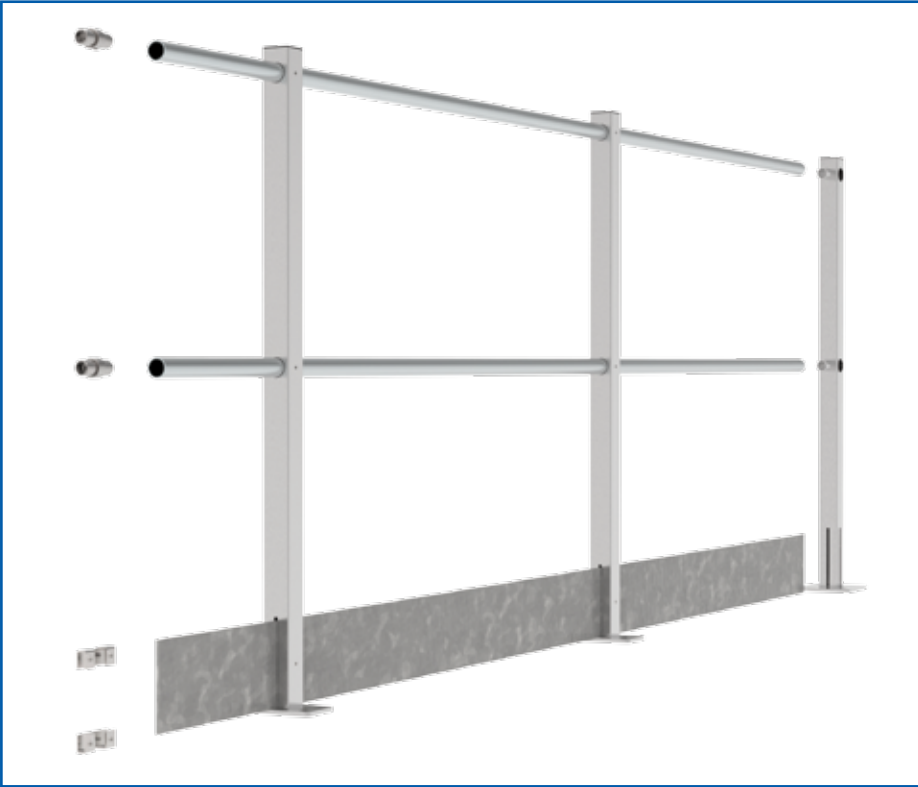
- Get a quote in minutes
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- A choice of styles, layouts and components
- Makes installation easier and faster

MEZZIRAIL® SYSTEM



The system is ideal for use on flooring, stair treads and handrails in industrial areas. Bright zinc plated posts are available in bolt-down and side-fix. Mezzirail® is designed to be used with 150 x 6mm kick plate. Powder coat for external use.

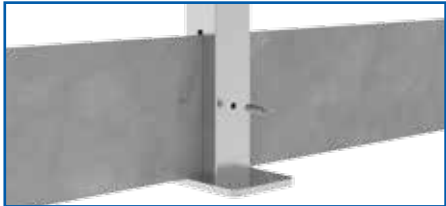
EXPLODED VIEW



Black ribbed plastic caps.



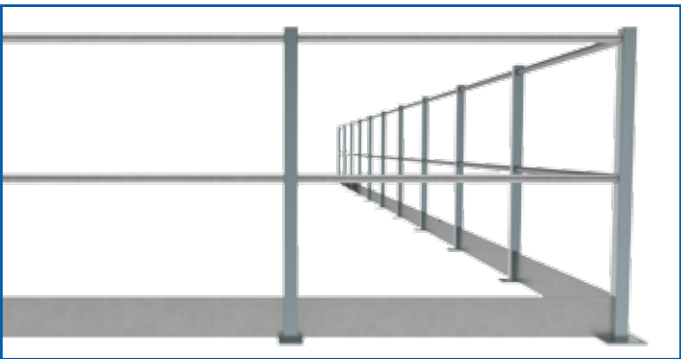
Grub screw prevents tube rotation.



Kick plate slides through the post and secures with grub screw.

CORNER OPTIONS

WITH CORNER POST



WITHOUT CORNER POST

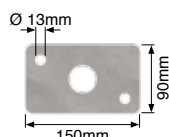


FOR KICK PLATES, SEE PAGE 474.

WORKS GREAT WITH PALLET GATES, SEE PAGE 478.

POSTS

BOLT-DOWN END



Height mm	□ mm	Thickness mm	Code
1130	50	2.5	25SPE

To suit any Ø 33.7mm tube. BZP.

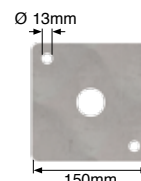
BOLT-DOWN MID



Height mm	□ mm	Thickness mm	Code
1130	50	2.5	25SPi

To suit any Ø 33.7mm tube. BZP.

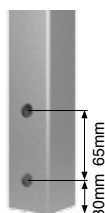
BOLT-DOWN CORNER



Height mm	□ mm	Thickness mm	Code
1130	50	2.5	25SPC

Corner post is only suitable for FHB seamless 2mm thick tube code: **13023373**. BZP.

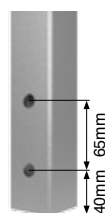
SIDE-FIX FOR FLATS



Height mm	□ mm	Thickness mm	Code
1250	50	2.5	25SFf

To suit any Ø 33.7mm tube.
Fixing holes Ø 13mm, to suit M12.
BZP.

SIDE-FIX FOR ANGLES 25 - 45°



Height mm	□ mm	Thickness mm	Code
1130	50	2.5	25SFIS

To suit any Ø 33.7mm tube.
Fixing holes Ø 13mm, to suit M12.
BZP.



CONNECTOR



Code
6202S34

To suit any Ø 33.7mm tube and 50 x 50mm post.

TUBE & FITTINGS

TUBE



Ø mm	Length m	Code
33.7	3	13023373

2mm thickness.
BZP.

INTERNAL CONNECTOR



Code
1302206B

To suit Ø 33.7 x 2mm wall thickness.
Loctite 638 glue fit, see page 737.
BZP.

EXTERNAL SLEEVE JOINT



Code
16149B

For use with all Ø 33.7mm tube.

EXTERNAL SWIVEL








Code
16BC538B

For use with all Ø 33.7mm tube.

KICK PLATES



Profile	Plate	Description	Technical	Page no.
Flat		<ul style="list-style-type: none"> Available in mild steel & galvanised Ideal for use with: <ul style="list-style-type: none"> Mezzirail® Handrail Standards Tube Clamp Posts 	<ul style="list-style-type: none"> Length: 3m Height: 100 & 150mm Thickness: 6.0mm 	475
GRP		<ul style="list-style-type: none"> Available in GRP yellow & black Ideal for use with: <ul style="list-style-type: none"> Mezzirail® Handrail Standards Tube Clamp Posts Warmagrip® GRP 	<ul style="list-style-type: none"> Length: 3m Height: 150mm Thickness: 6.0mm 	475
GRP "W"		<ul style="list-style-type: none"> Available in GRP Ideal for use with: <ul style="list-style-type: none"> Mezzirail® Handrail Standards Tube Clamp Posts GRP Fittings Warmagrip® GRP 	<ul style="list-style-type: none"> Length: 6m Height: 100 & 150mm Width: 14mm Thickness: 3.0mm 	475
Folded		<ul style="list-style-type: none"> Available in galvanised 1.5mm thick folded sheet Ideal for use with: <ul style="list-style-type: none"> Handrail Standards Tube Clamp Posts 	<ul style="list-style-type: none"> Length: 3m Height: 100mm Thickness: 3.0mm 	475
C Section		<ul style="list-style-type: none"> Available in galvanised Ideal for use with: <ul style="list-style-type: none"> Handrail Standards Tube Clamp Posts 	<ul style="list-style-type: none"> Length: 3m Height: 150mm Width: 25mm Thickness: 2.2mm 	477



FLAT PROFILE GALVANISED KICK PLATE



Length m	Height mm	Thickness mm	Code
3	100	6	25KP04
3	150	6	25KP02

FLAT PROFILE MILD STEEL KICK PLATE



Length m	Height mm	Thickness mm	Code
4	100	3	30031003
4	150	3	3003150341
6	100	6	30031006
6	150	6	30031506

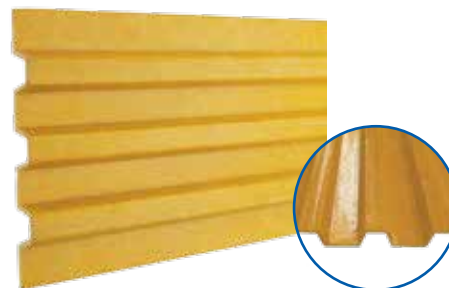
FOLDED KICK PLATE



Length m	Height mm	Thickness mm	Code
3	100	3	25KP03

1.5mm thick folded sheet.

GRP YELLOW "W" KICK PLATE



Length m	Height mm	Width mm	Thickness mm	Code
6	100	14	3	33KP02Y6
6	150	14	3	33KP03Y6

Can be used with GRP foot code: **33132DY**. See page 482 for GRP foot.

GRP KICK PLATE



Colour	Length m	Height mm	Thickness mm	Code
Yellow	3	150	6	33KP01Y3
Black	3	150	6	33KP01B3

KICK PLATE CLAMP



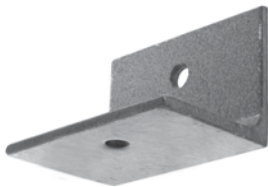
Type	Code
C	16142C
D	16142D

KICK PLATE FIXINGS



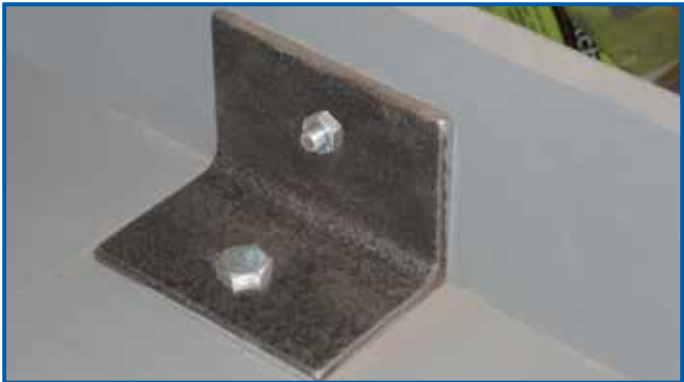
These fixings are ideal to secure any of the kick plates found on page 475.

KICK PLATE BRACKET



Height mm	Width mm	Depth mm	Thickness mm	Code
69	100	69	4.7	25KP01

Fixing holes Ø 10mm. BZP.



KICK PLATE CLAMP

1



To Suit Ø mm	Code
33.7	25KP25
42.4 - 48.3	25KP40

STRAIGHT CONNECTOR

2



Code
25KCB3

EXTERNAL CORNER CONNECTOR

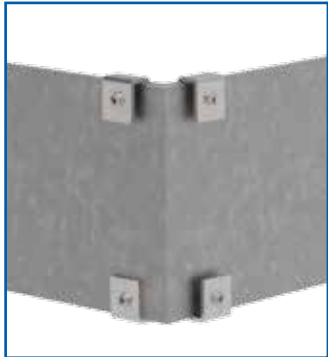
3



Code
25KCB2

INTERNAL CORNER CONNECTOR

4



Code
25KCB1

KICK PLATES WORK GREAT WITH OUR MEZZIRAIL SYSTEM, SEE PAGE 472.



As the installation of kick plates has become more prevalent in mezzanines around factories, warehouses and the work place, so has our range of accessories to help the installer retro fit and conform to changing building regulations.

C SECTION KICK PLATE



Length m	Height mm	Width mm	Thickness mm	Code
3	150	25	2.2	25KF3000



ADJUSTABLE CONNECTOR



Code
25KFPH

Plastic.

END CAP



Code
25KFPE

Plastic.

POST CONNECTOR



To Suit Ø mm	Code
33.7	25KFSP25
42.4 - 48.3	25KFSP40

HANDRAILING

FOR OUR FULL RANGE OF FIXINGS SEE PAGE 710.

PALLET GATES



MEZZANINE PALLET SAFETY GATES



Pallet gates have been designed to provide a safe access solution for loading and unloading pallets onto mezzanine floors or raised working surfaces. Designed to fit seamlessly into a guardrail or barrier and toe-board mounted on a mezzanine for safe working at height. In the event of damage from a forklift, the design allows individual fittings to easily be replaced, using our tube clamp fittings.

FEATURES & BENEFITS

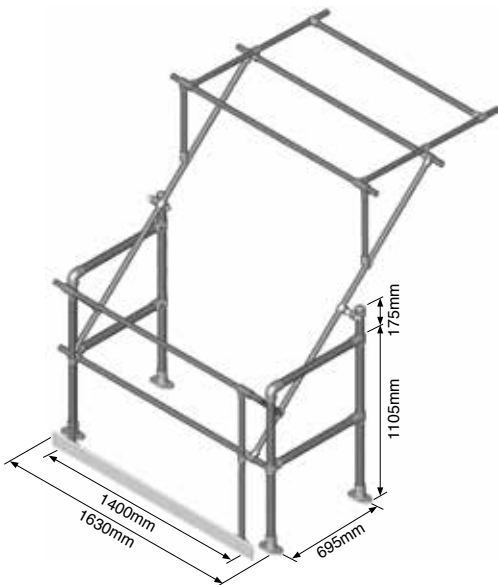
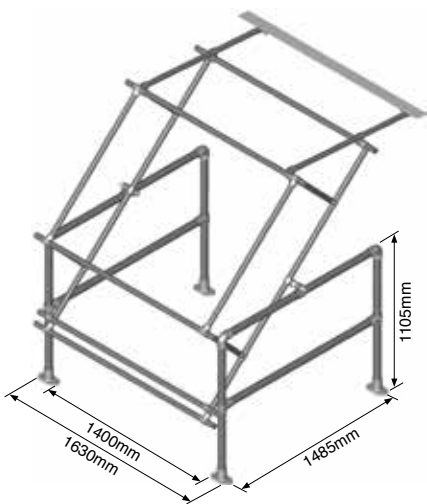
- Modular system using standard components
- Available in galvanised or aluminium
- Complies with EN 14122-3 & OSHA requirements for assured safe operation
- Built using tube clamp fittings, TUV approved components for quality assurance
- Cycle tested for 50,000 openings for assured durability
- Salt spray tested for corrosion resistance (over 200 hours) to allow continuous operation even in corrosive environments
- No welded parts so any damage can be easily repaired
- Minimal number of moving parts for lower maintenance
- Will be supplied part-assembled to facilitate on site installation
- Balanced for a positive open & close action



STANDARD FRAME

NARROW FRAME

For use on mezzanines where space is limited



Sides Ø mm	Gate Ø mm	Max. Pallet H m	Max. Pallet W x D m	Code
48.3	33.7	1.6	1.4 x 1.48	1603PAD
48.3	33.7	1.6	1.4 x 1.48	1603PADY*

Sides Ø mm	Gate Ø mm	Max. Pallet H m	Max. Pallet W x D m	Code
48.3	33.7	1.8	1.4 x 1.48	1603PBD
48.3	33.7	1.8	1.4 x 1.48	1603PBDY*

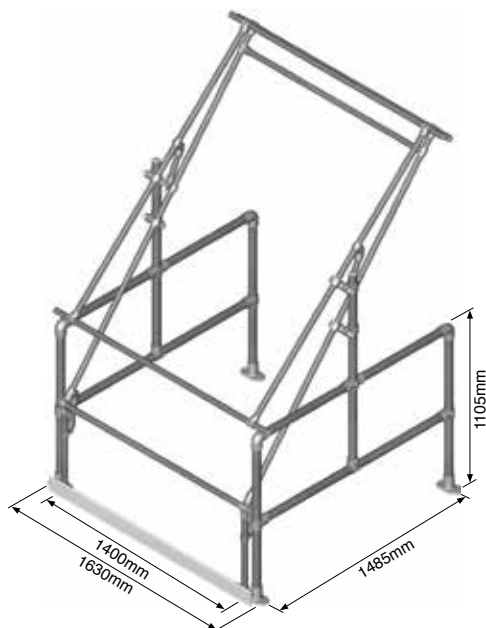
*Polyester powder coated yellow RAL 1021.

*Polyester powder coated yellow RAL 1021.



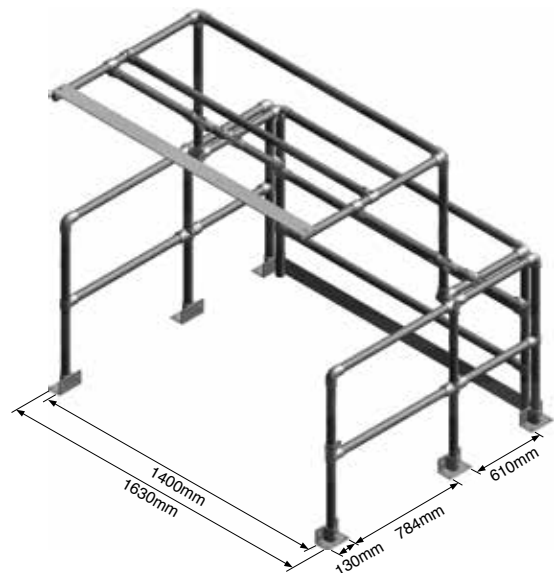
TALL FRAME

The cantilever design provides maximum height with minimal ceiling height requirement



EXTRA WIDE FRAME

Provides maximum load width, whilst also offering 2m head clearance for workers



Sides Ø mm	Gate Ø mm	Max. Pallet H m	Max. Pallet W x D m	Code
48.3	33.7	2.2	1.4 x 1.48	1603PCD
48.3	33.7	2.2	1.4 x 1.48	1603PCDY*

Sides Ø mm	Gate Ø mm	Max. Pallet H m	Max. Pallet W x D m	Code
48.3	48.3	1.6	1.95 x 1.4	1603PDDA

Toe-board mounted on all sides to protect gates from pallet contact.

*Polyester powder coated yellow RAL 1021.

PALLET GATES ARE IDEAL TO USE WITH OUR MEZZIRAIL® SYSTEM, SEE PAGE 472.



SAFETY GATES



SELF-CLOSING



A fully adjustable range of self-closing safety gates which have been designed to easily fit to new or existing structures where a gate is required. Our gates are spring loaded so will automatically close behind the user, thus maintaining a safe barrier. Gates can easily be cut to size on site for a perfect fit.

FEATURES & BENEFITS

- Spring loaded gates automatically close
- Galvanised or polyester powder coated yellow
- Comply with test requirements of EN 13374 Class A & EN 14122 Part 3 & Part 4, & OSHA
- Reversible, hinges can be on the left or right hand side of an opening to allow easy installation
- Quick & easy to assemble
- Fully adjustable height & width
- Easily cut to size on site
- Can be used for external & internal applications
- Can fit round or square surfaces
- To suit Ø 33.7, 42.4 & 48.3mm
- Retro-fits to existing structures
- Single gates are supplied with welded on slam plate

SINGLE LEAF GATE

Galvanised



Height mm	Width m	Code
668	1.0	1603TCG3D

SINGLE LEAF GATE

Polyester powder coated yellow



Height mm	Width m	Code
668	1.0	1603TCG3DY

FULL SINGLE LEAF GATE

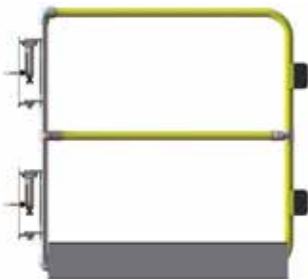
Galvanised



Height mm	Width m	Code
1100	1.0	1603TCG5D

FULL SINGLE LEAF GATE

Polyester powder coated yellow



Height mm	Width m	Code
1100	1.0	1603TCG5DY

DOUBLE LEAF GATE

Galvanised



Height mm	Max. Width m	Code
668	2.06	1603TCG4D

DOUBLE LEAF GATE

Polyester powder coated yellow



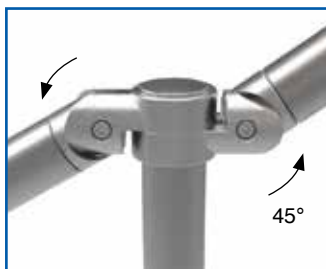
Height mm	Max. Width m	Code
668	2.06	1603TCG4DY

HANDRAILING



The most flexible handrailing solution for stairs, gradients and around corners. Made with Ø 48.3 x 3.2mm galvanised tube.

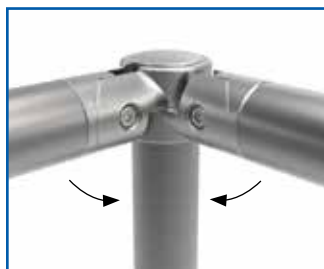
VARIABLE ANGLES



STRAIGHT RUNS



VARIABLE CORNERS

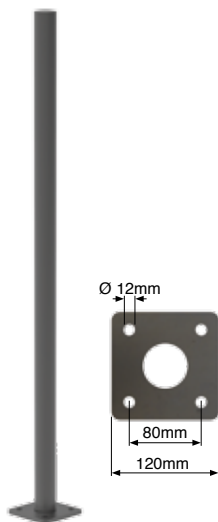


EXPLODED VIEW

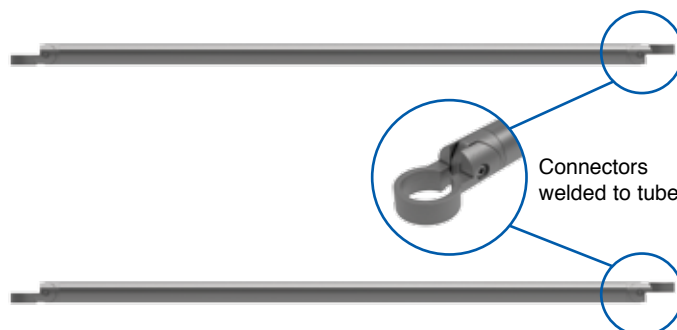


BOLT-DOWN POST

With steel end cap



TOP/MID RAIL



CONCRETE-IN POST

With steel end cap



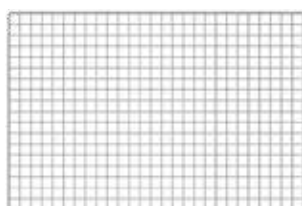
Height mm	Code
1100	62SP48B

Post Centres mm	Code
1200	62SR48

Height mm	Code
1450	62SP48C

Sold separately.

MESH INFILL PANELS



Flexirail is compatible with all of our mesh infill panels, see pages 469.

INTERNAL JOINT



Code
16150D

For shorter post centres cut rail and join using an internal joint.

CONNECTOR



Suitable for	Code
Welding	62R48
Glue Fit	6202R48



A cost effective, warm to the touch modular GRP handrail system; it is lightweight and easy to install with low maintenance costs. Simply cut tube and fix on site.

90° SHORT TEE



Colour	Ø mm	Code
Yellow	50	33101DY

Requires 2 fixings.

90° LONG TEE



Colour	Ø mm	Code
Yellow	50	33104DY

Requires 3 fixings.

90° MID RAIL CROSS

With centre vertical tube



Colour	Ø mm	Code
Yellow	50	33119DY

Requires 3 fixings.

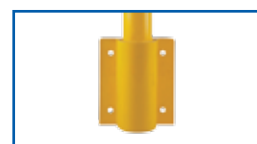
90° ELBOW



Colour	Ø mm	Code
Yellow	50	33125DY

Requires 2 fixings.

SIDE MOUNT



Colour	Ø mm	Code
Yellow	50	33146DY

Fixing holes Ø 8mm.

BASE FOOT



Colour	Ø mm	Code
Yellow	50	33132DY

Fixing holes Ø 13mm.
Can be used with GRP 'W' profile kick plate.

TOP RAIL CORNER



Colour	Ø mm	Code
Yellow	50	33128DY

Requires 3 fixings.

MID RAIL CORNER

With through centre tube



Colour	Ø mm	Code
Yellow	50	33116DY

Requires 4 fixings.

SINGLE ADJUSTABLE



Colour	Ø mm	Code
Yellow	50	33173DY

Requires 2 fixings.

DOUBLE ADJUSTABLE



Colour	Ø mm	Code
Yellow	50	33167DY

Requires 3 fixings.

60° SHORT TEE



Colour	Ø mm	Code
Yellow	50	33129DY

Requires 2 fixings.

60° MID RAIL CROSS

With centre vertical tube



Colour	Ø mm	Code
Yellow	50	33130DY

Requires 3 fixings.

60° ELBOW



Colour	Ø mm	Code
Yellow	50	33124DY

Requires 2 fixings.

ADJUSTABLE INTERNAL ELBOW



Colour	Ø mm	Code
Yellow	50	33764DY

Requires 1 fixing.

ADJUSTABLE EXTERNAL ELBOW



Colour	Ø mm	Code
Yellow	50	33166DY

Requires 1 fixing.

RAILING FLANGE



Colour	Ø mm	Code
Yellow	50	33131DY

Fixing holes Ø 8mm.

TUBE



Colour	Ø mm	Code
Yellow	50	335065Y

6m length. 5mm thickness. For plastic cap use code: **3203505**.

FIXING SET



Length mm	Code
50	3399M6X60

M6. For rivet tool use code: **189900667**.

FOR OUR RANGE OF KICK PLATES SEE PAGE 474.



AVAILABLE IN THREE OPTIONS:

WARMAGRIP™ GRP TUBE & PVC FITTINGS

This option is based on the supply of standard PVC coated fittings and long lengths of GRP tube that can be cut down on site to suit varying post centres. The fittings are then glued to the steel core of the handrail fittings.

WARMAGRIP™ PVC TUBE & PVC FITTINGS

This option is based on the supply of standard PVC coated fittings and standard pre-cut lengths of PVC coated tube. The system is bolted together using special security fixings.

WARMAGRIP™ ORIGINAL

This option is based on the supply of standard PVC coated steel fittings and standard lengths of pre drilled PVC coated tube. The system is bolted together using special security fixings.

Both GRP & PVC solutions are available as post mounted or wall mounted. They provide two smooth continuous handrails. They will also allow our post mounted handrail brackets to be fixed using different methods:



Fix handrail brackets into our standard posts.



Bolt handrail brackets onto steel work fitted with a suitable lug.



Pre-drill steel RHS post and then bolt handrail bracket from the inside of the RHS section. Use a plastic cap, from our **3201** range to conceal hole, see page 31.

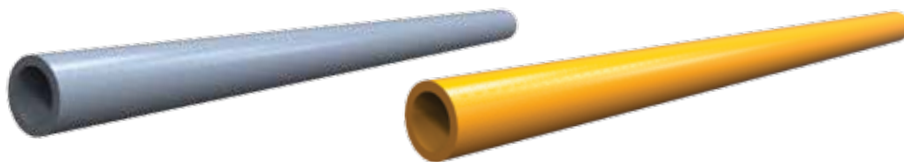
**FOR MORE DETAILS ON OUR
3 WARMAGRIP™ SYSTEMS
SEE PAGES 484 - 486.**

WARMAGRIP™ GRP



A "WARM TO THE TOUCH" DDA COMPLIANT HANDRAIL COMPONENT SYSTEM

GRP HANDRAIL TUBE

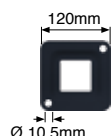


Colour	Length m	Ø mm	Thickness mm	Code
Grey	1	45	6	334561GY
Yellow	1	45	6	334561Y
Grey	6	45	6	334566GY
Yellow	6	45	6	334566Y

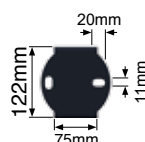
DUE TO THE USE OF A PVC COATING ON THE HANDRAIL FITTINGS AND GRP ON THE HANDRAIL TUBES. THERE MAY BE A SLIGHT COLOUR VARIATION.

POSTS

BOLT-DOWN



SIDE-FIX



Height mm	□ mm	Code
1026	50	33BP001
1026	50	33BP001B*

1100mm height to the top of handrail. 650mm height to the top of the mid-rail. *Polyester powder coated gloss black RAL 9005. BZP.

Height mm	□ mm	Code
1203	50	33SP001
1203	50	33SP001B*

1100mm height to the top of handrail. 650mm height to the top of the mid-rail. *Polyester powder coated gloss black RAL 9005. BZP.

FITTINGS

PVC POST MOUNTED HANDRAIL BRACKET



Colour	Code
Grey	52RD028G
Yellow	52RD028Y

Screw fitting size is M10.

PVC WALL MOUNTED HANDRAIL BRACKET



Colour	Code
Grey	52RD026G
Yellow	52RD026Y

Fixing holes Ø 12mm.

FITTINGS

PVC WALL MOUNTED ELBOW



Colour	Code
Grey	52RD027G
Yellow	52RD027Y

PVC SCROLL END



Colour	Code
Grey	52RD025G
Yellow	52RD025Y

PVC VARIABLE ELBOW



Colour	Code
Grey	52RD024G
Yellow	52RD024Y

PVC 90° ELBOW



Colour	Code
Grey	52RD002G
Yellow	52RD002Y

Fixing holes Ø 12mm.

ACCESSORIES

HANDRAIL FIXING CAPS



Colour	Code
Grey	52HFCG
Yellow	52HFCY

Plastic.

ADHESIVE 310ml



Colour	Code
Grey	3399001GY
Clear	3399001

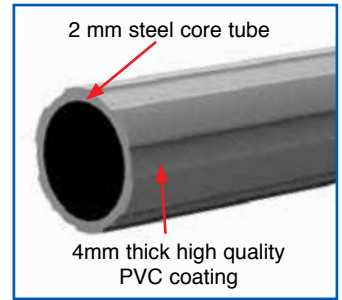
For use with a sealant gun.

A “WARM TO THE TOUCH” DDA COMPLIANT HANDRAIL COMPONENT SYSTEM

PVC HANDRAIL TUBE



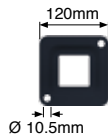
Length mm	Ø mm	Thickness mm	Grey Code	Yellow Code
790	45	6	52A014G790	52A014Y790
800	45	6	52A014G800	52A014Y800
845	45	6	52A014G845	52A014Y845
890	45	6	52A014G890	52A014Y890
900	45	6	52A014G900	52A014Y900
990	45	6	52A014G990	52A014Y990
1400	45	6	52A014G1400	52A014Y1400



Fixings included with fittings.

POSTS

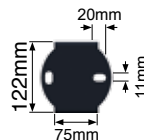
BOLT-DOWN



Height mm	□ mm	Code
1026	50	33BP001
1026	50	33BP001B*

1100mm height to the top of handrail. 650mm height to the top of the mid-rail. *Polyester powder coated gloss black RAL 9005. BZP.

SIDE-FIX



Height mm	□ mm	Code
1203	50	33SP001
1203	50	33SP001B*

1100mm height to the top of handrail. 650mm height to the top of the mid-rail. *Polyester powder coated gloss black RAL 9005. BZP.

FITTINGS

PVC POST MOUNTED HANDRAIL BRACKET



Colour	Code
Grey	52A028G
Yellow	52A028Y

Screw fitting size is M10. 2 fixing bolts supplied.

PVC WALL MOUNTED HANDRAIL BRACKET



Colour	Code
Grey	52A026G
Yellow	52A026Y

Fixing holes Ø 12mm. 2 fixing bolts supplied.

FITTINGS

PVC WALL MOUNTED ELBOW



Colour	Code
Grey	52A027G
Yellow	52A027Y

Fixing holes Ø 12mm. 1 fixing bolt supplied.

PVC SCROLL END



Colour	Code
Grey	52A025G
Yellow	52A025Y

1 fixing bolt supplied.

PVC VARIABLE ELBOW



Colour	Code
Grey	52A024G
Yellow	52A024Y

2 fixing bolts supplied.

PVC 90° ELBOW



Colour	Code
Grey	52A002G
Yellow	52A002Y

2 fixing bolts supplied.

ACCESSORIES

HANDRAIL FIXING CAPS



Colour	Code
Grey	52HFCG
Yellow	52HFCY

Plastic.

SECURITY FIXING SET DRILL BIT



Code
52FSD

SECURITY FIXING TOOL



Code
52FSA

DEBURRING TOOL



Code
5299001

Hand held.

WARMAGRIP™ ORIGINAL

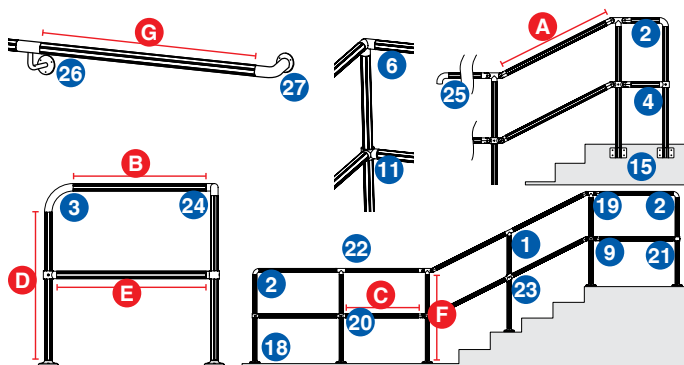


A "WARM TO THE TOUCH" DDA COMPLIANT HANDRAIL COMPONENT SYSTEM

PVC HANDRAIL TUBE



	Length mm	Ø mm	Thickness mm	Grey Code	Yellow Code
A	790	45	6	52A014G790	52A014Y790
B	800	45	6	52A014G800	52A014Y800
C	845	45	6	52A014G845	52A014Y845
D	890	45	6	52A014G890	52A014Y890
E	900	45	6	52A014G900	52A014Y900
F	990	45	6	52A014G990	52A014Y990
G	1400	45	6	52A014G1400	52A014Y1400



CHOICE OF TOP RAIL FITTINGS

90° ELBOW



Colour	Code
Grey	52A002G
Yellow	52A002Y

2 fixing bolts supplied.

HAND RAIL BEND



Colour	Code
Grey	52A003G
Yellow	52A003Y

2 fixing bolts supplied.

90° TEE



Colour	Code
Grey	52A022G
Yellow	52A022Y

3 fixing bolts supplied.

ADJUSTABLE TEE



Colour	Code
Grey	52A019G
Yellow	52A019Y

3 fixing bolts supplied.

3 WAY ELBOW



Colour	Code
Grey	52A006G
Yellow	52A006Y

3 fixing bolts supplied.

63.4° TEE



Colour	Code
Grey	52A001G
Yellow	52A001Y

3 fixing bolts supplied.

CHOICE OF MID RAIL FITTINGS

MID RAIL SINGLE



Colour	Code
Grey	52A021G
Yellow	52A021Y

2 fixing bolts supplied.

ADJUSTABLE MID RAIL SINGLE



Colour	Code
Grey	52A004G
Yellow	52A004Y

2 fixing bolts supplied.

MID RAIL DOUBLE



Colour	Code
Grey	52A020G
Yellow	52A020Y

3 fixing bolts supplied.

ADJUSTABLE MID RAIL DOUBLE



Colour	Code
Grey	52A009G
Yellow	52A009Y

3 fixing bolts supplied.

MID RAIL CORNER



Colour	Code
Grey	52A011G
Yellow	52A011Y

2 fixing bolts supplied.

63.4° MID RAIL DOUBLE



Colour	Code
Grey	52A023G
Yellow	52A023Y

3 fixing bolts supplied.

CHOICE OF BASE FITTINGS

BASE FOOT FLANGE



Colour	Code
Grey	52A018G
Yellow	52A018Y

1 fixing bolt supplied.

SIDE MOUNT BRACKET



Colour	Code
Grey	52A015G
Yellow	52A015Y

1 fixing bolt supplied.

ADJUSTABLE CONNECTOR SET



Colour	Code
Grey	52A024G
Yellow	52A024Y

2 fixing bolts supplied.

WALL MOUNTED TEE



Colour	Code
Grey	52A026G
Yellow	52A026Y

2 fixing bolts supplied.

WALL MOUNTED ELBOW



Colour	Code
Grey	52A027G
Yellow	52A027Y

1 fixing bolt supplied.

SCROLL END



Colour	Code
Grey	52A025G
Yellow	52A025Y

1 fixing bolt supplied.

HANDRAIL & ADJUSTABLE CONNECTOR FITTINGS

ACCESSORIES

HANDRAIL FIXING CAPS



Colour	Code
Grey	52HFCG
Yellow	52HFCY

Plastic.

FLOOR FIXING CAPS



Colour	Code
Grey	52FFCG
Yellow	52FFCY

Plastic.

SECURITY FIXING SET DRILL BIT



Code
52FSD

SECURITY FIXING TOOL



Code
52FSA

DEBURRING TOOL



Code
5299001

Hand held.

FIXING SET



Length mm	Code
40	52SFS
50	52LFS

Supplied with components.

Tube Clamp fittings are manufactured with simplicity and ease of use in mind. Specialised skills are not required. No welding, no bending, no threading, just an Allen key to tighten the set screws and you can join tubes together in a matter of seconds. The comprehensive range of fittings and sizes means Tube Clamps can be used in a wide variety of temporary or permanent applications. For example in the construction of:

- HANDRAILS
- SAFETY BARRIERS
- AWNINGS AND CARPORTS
- SUPPORT STRUCTURES
- CHILDREN'S PLAY EQUIPMENT
- MARKET STALLS
- EXHIBITION STANDS
- TEMPORARY BUILDINGS
- LIGHTING GRIDS
- PALLET OR GARMENT RACKING



TUBE – EASY TO ORDER

As with the fittings we've also made ordering simple. Each illustration carries a number - for example 16101. Look under the type column and you will see that this fitting is available in five different sizes A, B, C, D and E. Each of these letters refers to the size of the tube on which the fitting is to be used as indicated below. No letter after the fitting number indicates that size is not available at the time of printing. For example 16191 is only available to suit size D tubing.

GALVANISED TUBE

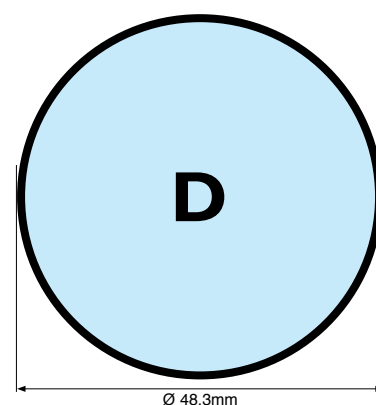
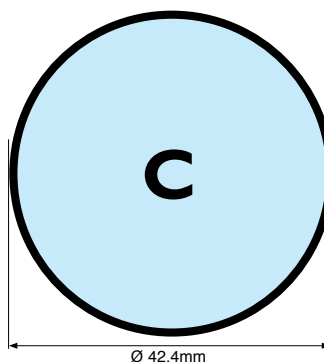
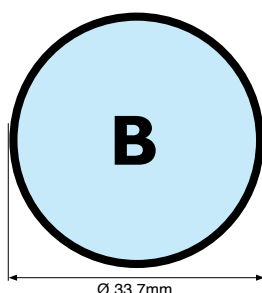
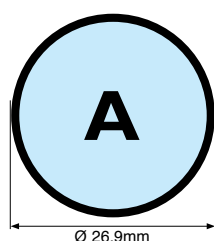
LENGTH OF GALVANISED TUBE STOCKED

Type	Ø mm	1.044m	1.050m	1.075m	1.15m	1.45m	2.0m	3.0m	6.5m
A	26.9	-	-	-	-	-	-	16022530	160225
B	33.7	-	-	1602341075*	-	-	16023420	16023430	160234
C	42.4	-	1602421050*	1602421075	1602421150**	1602421450***	16024220	16024230	160242
D	48.3	1602481044*	-	1602481075	1602481150**	1602481450***	16024820	16024830	160248
E	60.3	-	-	-	-	-	-	-	160260

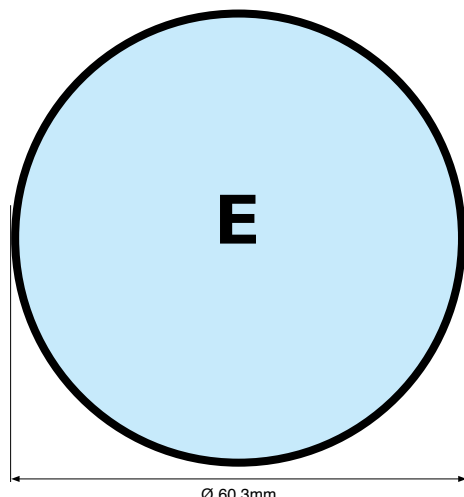
*To give 1100mm high posts. **To give 1.2m post centres. ***To give 1.5m post centres. 3.25 thickness.

LENGTH OF POLYESTER POWDER COATED YELLOW GALVANISED TUBE STOCKED

Type	Ø mm	6.5m
C	42.4	160242Y
D	48.3	160248Y



HANDRAILING



SPECIAL LENGTHS CUT TO ORDER.

SPLICE LOCKS



See page 490.

MATERIAL SPECIFICATIONS

Malleable cast iron to BS EN 1562 - grade 330 - 08
Ductile cast iron to BS EN 1563 - grade 450 - 10
Hot dipped galvanised to BS EN ISO 1461 - minimum 45 microns

NOTE: The standard finish is hot-dipped galvanised to BS EN ISO 1461
Tube Clamps and tube can also be supplied to order, polyester powder coated in a range of colours.

DDA HANDRAIL FITTINGS

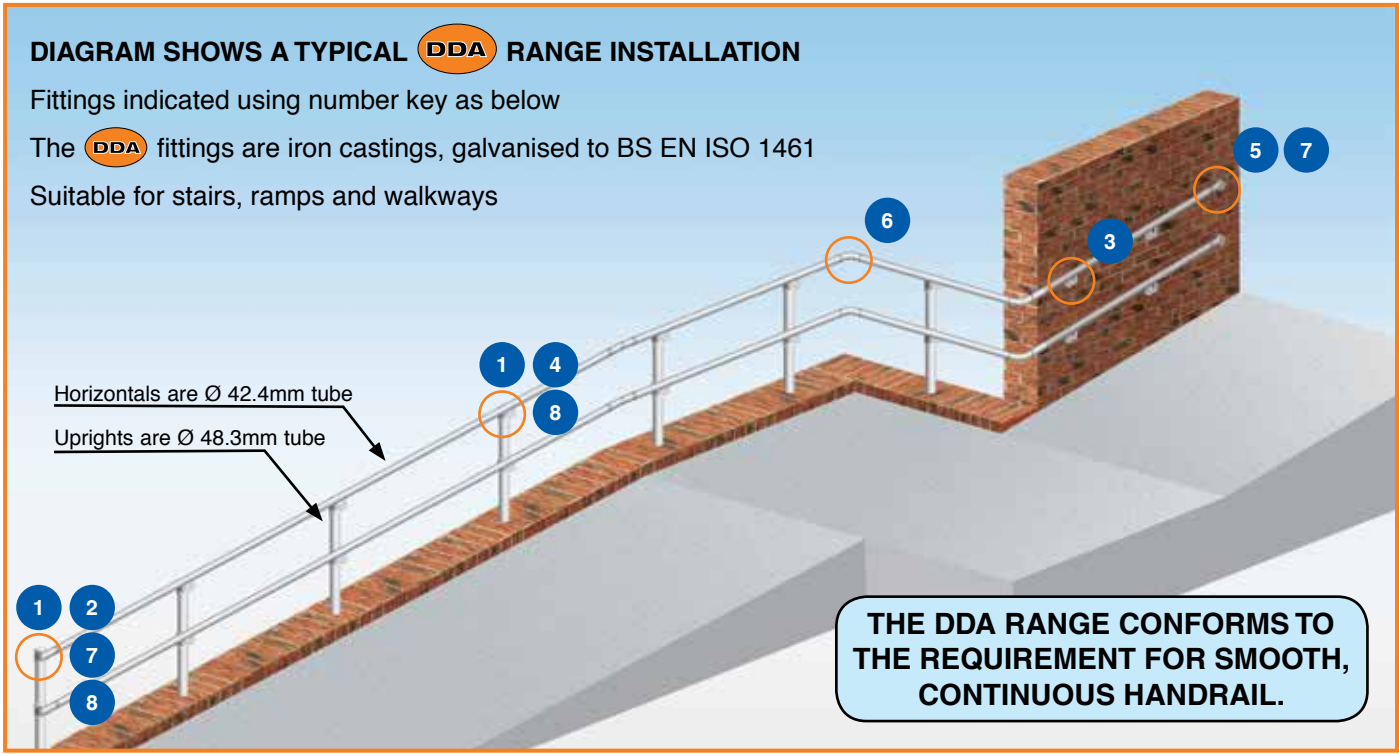


FOR DISABLED ACCESS

The Range

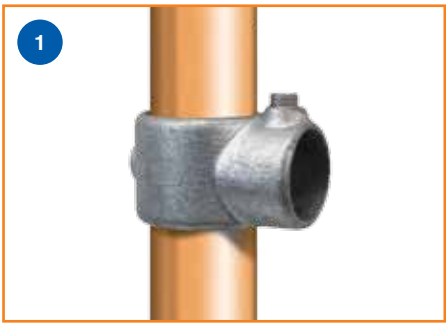


Designed to satisfy the requirements of Part 'M' of the Building Regulations 2004.



For uprights use type D tube (Ø 48.3mm) for horizontal use type C tube (Ø 42.4mm).

UPRIGHT CONNECTOR



Ø mm	Code
48.3	16DDA01

HANDRAIL CURVE

For use with 16DDA01



Ø mm	Code
42.4	16DDA02

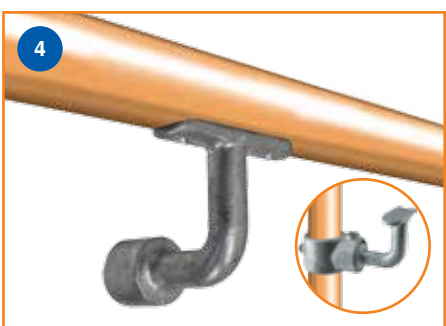
WALL BRACKET



Ø mm	Code
42.4	16DDA03

INTERMEDIATE BRACKET

For use with 16DDA01



Ø mm	Code
42.4	16DDA04

WALL MOUNTED HANDRAIL JOINER



Ø mm	Code
42.4	1699580C

END RETURN

For use with 16150C



Ø mm	Code
42.4	16DDA05

HANDRAILING

DDA HANDRAIL FITTINGS

90° BEND



Ø mm	Code
42.4	16DDA06

ADJUSTABLE BEND

For use with 16150C



Ø mm	Code
42.4	16DDA09

INTERNAL JOINT



Ø mm	Code
42.4	16150C

EXPANDING INTERNAL CORNER BRACKET

For use with 16101C



Ø mm	Code
42.4	16728C

EXPANDING EXTERNAL CORNER BRACKET

For use with 16101C



Ø mm	Code
42.4	16729C

EXPANDING FITTING



Ø mm	Code
48.3	16750CD

WASHERS



Ø mm	Code
42.4	1699508C

Rubber.

STOP END



Ø mm	Code
48.3	16133D

Plastic.

THE STANDARD FINISH IS
HOT DIPPED GALVANISED
TO BS EN ISO 1461.

ENQUIRE NOW FOR
WARMAGRIP™ 'WARM TO
THE TOUCH' HANDRAIL
SYSTEM, SEE PAGES
483 - 486.

HANDRAILING



TUBE CLAMP POSTS



TOP RAIL POST



Post Type	Ø 42.4mm Code	Ø 48.3mm Code
End	1603004C	1603004D
Mid	1603005C	1603005D
Corner	1603006C	1603006D

TOP & BOTTOM RAIL POST



Post Type	Ø 48.3mm Code
End	1603007D
Mid	1603008D
Corner	1603009D

Bottom rail fitting is adjustable in height.

TOP & MID RAIL POST



Post Type	Ø 42.4mm Code	Ø 48.3mm Code
End	1603001C	1603001D
Mid	1603002C	1603002D
Corner	1603003C	1603003D

Mid rail fitting is adjustable in height.

POSTS WORK REALLY GREAT WITH MESH INFILL PANELS, PLEASE SEE PAGE 469.

SPLICE LOCKS

FOR JOINING TUBE

Effective joint stiffeners, splice locks are proven to be the best mechanical splice available for pipe and tubular handrail joints.

SINGLE SPLICE LOCK

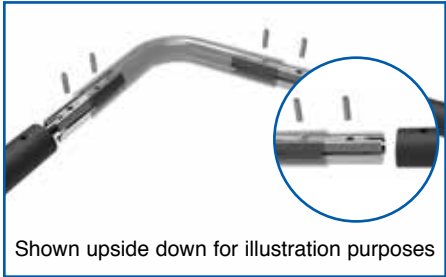


Ø mm	Length mm	Code
33.7	95.25	2502SL6
42.4	95.25	2502SL7
48.3	95.25	2502SL8
60.3	95.25	25SL9

DOUBLE SPLICE LOCK



Ø mm	Length mm	Code
42.4	152.4	2502SL7D
48.3	152.4	2502SL8D



View our video on YouTube



SHORT TEE



Type	Code
A	16101A
B	16101B
C	16101C
D	16101D
E	16101E

ADD ON SHORT TEE



Type	Code
A	-
B	-
C	16A101C
D	16A101D
E	-

LONG TEE



Type	Code
A	16104A
B	16104B
C	16104C
D	16104D
E	16104E

CORNER

With through centre tube



Type	Code
A	16116A
B	16116B
C	16116C
D	16116D
E	16116E

**L/H SLOPING DOWN
SIDE OUTLET TEE**

30 - 45° slope



Type	Code
A	-
B	-
C	16A116LHC
D	16A116LHD
E	-

**R/H SLOPING DOWN
SIDE OUTLET TEE**

30 - 45° slope



Type	Code
A	-
B	-
C	16A116RHC
D	16A116RHD
E	-

TWO SOCKET CROSS

With centre vertical tube



Type	Code
A	16119A
B	16119B
C	16119C
D	16119D
E	16119E

ACUTE ANGLE ELBOW

30 - 45° slope



Type	Code
A	-
B	-
C	16122C
D	16122D
E	-

ACUTE ANGLE ELBOW

11 - 30° slope



Type	Code
A	-
B	-
C	16A122C
D	16A122D
E	-

ACUTE ANGLE ELBOW

40 - 70° slope



Type	Code
A	-
B	-
C	16123C
D	16123D
E	-

VARIABLE ELBOW

15 - 60° from horizontal



Type	Code
A	-
B	16124B
C	16124C
D	16124D
E	-

VARIABLE ELBOW

11 - 30° slope



Type	Code
A	-
B	-
C	16A124C
D	16A124D
E	-

Ⓐ size to suit Ø 26.9mm tube Ⓑ size to suit Ø 33.7mm tube Ⓒ size to suit Ø 42.4mm tube

Ⓓ size to suit Ø 48.3mm tube Ⓔ size to suit Ø 60.3mm tube

TUBE CLAMPS



90° ELBOW



Type	Code
A	16125A
B	16125B
C	16125C
D	16125D
E	16125E

THREE WAY 90° ELBOW



Type	Code
A	16128A
B	16128B
C	16128C
D	16128D
E	16128E

**L/H SLOPING DOWN
SIDE OUTLET ELBOW**
30 - 45° slope



Type	Code
A	-
B	-
C	16A128LHC
D	16A128LHD
E	-

**R/H SLOPING DOWN
SIDE OUTLET ELBOW**
30 - 45° slope



Type	Code
A	-
B	-
C	16A128RHC
D	16A128RHD
E	-

ADJUSTABLE SHORT TEE
30 - 60° slope



Type	Code
A	-
B	16129B
C	16129C
D	16129D
E	-

TWO SOCKET CROSS
With adjustable centre 30 - 45°



Type	Code
A	-
B	16130B
C	16130C
D	16130D
E	-

WALL FLANGE



Type	Code
A	16131A
B	16131B
C	16131C
D	16131D
E	16131E

RAILING BASE FLANGE



Type	Code
A	16132A
B	16132B
C	16132C
D	16132D
E	16132E

STOP END



Type	Code
A	16133A
B	16133B
C	16133C
D	16133D
E	16133E

GROUND SOCKET



Type	Code
A	-
B	16134B
C	16134C
D	16134D
E	-

CLAMP ON TEE



Type	Code
A	16135A
B	16135B
C	16135C
D	16135D
E	16135E

GATE EYE



Type	Code
A	16138A
B	16138B
C	16138C
D	16138D
E	-

GATE HINGE



Type	Code
A	16140A
B	16140B
C	16140C
D	16140D
E	-



Type	Code
A	-
B	16141B
C	16141C
D	16141D
E	-

KICK PLATE CLAMP



Type	Code
A	-
B	-
C	16142C
D	16142D
E	-

HANDRAIL BRACKET



Type	Code
A	16143A
B	16143B
C	16143C
D	16143D
E	-

*These fittings are not to be used as a base plate for guardrails or dependent structures
No structure should be built using swivel fittings only

HANDRAILING

Plastic.

RAILING SIDE SUPPORT
Vertical base



Type	Code
A	-
B	16144B
C	16144C
D	16144D
E	-

RAILING SIDE SUPPORT
Horizontal base



Type	Code
A	-
B	16145B
C	16145C
D	16145D
E	-

SIDE PALM FIXING



Type	Code
A	-
B	16146B
C	16146C
D	16146D
E	-

INTERNAL SWIVEL TEE



Type	Code
A	-
B	16147B
C	16147C
D	16147D
E	-

SHORT SWIVEL TEE
Used in pairs



Type	Code
A	16148A
B	16148B
C	16148C
D	16148D
E	16148E

SLEEVE JOINT



Type	Code
A	16149A
B	16149B
C	16149C
D	16149D
E	16149E

INTERNAL JOINT



Type	Code
A	-
B	16150B
C	16150C
D	16150D
E	-

ANGLE BASE FLANGE
11 - 30° slope



Type	Code
A	-
B	-
C	16151C
D	16151D
E	-

ANGLE BASE FLANGE
30 - 45° slope



Type	Code
A	-
B	-
C	16A151C
D	16A151D
E	-

BASE FLANGE
Allows slope up to 11°



Type	Code
A	-
B	-
C	16152C
D	16152D
E	-

SHORT TEE
Allows slope up to 11°



Type	Code
A	-
B	-
C	16153C
D	16153D
E	-

ELBOW
Allows slope up to 11°



Type	Code
A	-
B	-
C	16154C
D	16154D
E	-

LONG TEE
Allows slope up to 11°



Type	Code
A	-
B	-
C	16155C
D	16155D
E	-

TWO SOCKET CROSS
Allows slope up to 11°



Type	Code
A	-
B	-
C	16156C
D	16156D
E	-

FOUR WAY CROSS
With centre tube



Type	Code
A	16158A
B	16158B
C	16158C
D	16158D
E	16158E

CLAMP ON CROSSOVER



Type	Code
A	16160A
B	16160B
C	16160C
D	16160D
E	16160E

Ⓐ size to suit Ø 26.9mm tube Ⓑ size to suit Ø 33.7mm tube Ⓒ size to suit Ø 42.4mm tube
 Ⓓ size to suit Ø 48.3mm tube Ⓔ size to suit Ø 60.3mm tube

TUBE CLAMPS



90° CROSSOVER

Also available in C/B, D/C, D/B



Type	Code
A	16161A
B	16161B
C	16161C
D	16161D
E	16161E

90° COMBINATION CROSSOVER



Type	Code
C/B	16161CB
D/B	16161DB
D/C	16161DC

ADD ON CROSSOVER



Type	Code
A	-
B	-
C	16A161C
D	16A161D
E	-

COMBINATION SOCKET

Tee & crossover



Type	Code
A	16165A
B	16165B
C	16165C
D	16165D

DOUBLE SWIVEL COMBINATION



21.5 mm	Code
A	16167A
B	16167B
C	16167C
D	16167D
E	16167E

DOUBLE MALE SECTION OF SWIVEL



Type	Code
A	16167AM
B	16167BM
C	16167CM
D	16167DM
E	16167EM

90° CORNER SWIVEL COMBINATION



Type	Code
A	16168A
B	16168B
C	16168C
D	16168D
E	-

90° CORNER SWIVEL MALE COMBINATION



Type	Code
A	16168AM
B	16168BM
C	16168CM
D	16168DM
E	-

SWIVEL BASE



Type	Code
A	16169A
B	16169B
C	16169C
D	16169D
E	16169E

SWIVEL BASE SECTION



Code
16169M

MESH PANEL CLIP SINGLE

Available in stainless steel Grade 316



Type	Code
A	16170A
B	16170B
C	16170C
D	16170D
E	16170E

MESH PANEL CLIP DOUBLE

Available in stainless steel Grade 316



Type	Code
A	16171A
B	16171B
C	16171C
D	16171D
E	16171E

SINGLE SWIVEL COMBINATION



Type	Code
A	16173A
B	16173B
C	16173C
D	16173D
E	16173E

FEMALE SECTION OF SWIVEL



Type	Code
A	16173AF
B	16173BF
C	16173CF
D	16173DF
E	16173EF

SINGLE MALE SECTION OF SWIVEL



Type	Code
A	16173AM
B	16173BM
C	16173CM
D	16173DM
E	16173EM

SWIVEL TEE



Type	Code
A	-
B	-
C	-
D	16174D
E	-

*These fittings are not to be used as a base plate for guardrails or dependent structures
No structure should be built using swivel fittings only

HANDRAILING

SWIVEL ELBOW



Type	Code
A	-
B	-
C	-
D	16175D
E	-

SIDE OUTLET TEE



Type	Code
A	16176A
B	16176B
C	16176C
D	16176D
E	16176E

THREE SOCKET TEE

11 - 30° slope



Type	Code
A	-
B	-
C	16177C
D	16177D
E	-

TWO SOCKET CROSS

11 - 30° slope



Type	Code
A	-
B	-
C	16178C
D	16178D
E	-

LOCKING COLLAR



Type	Code
A	16179A
B	16179B
C	16179C
D	16179D
E	16179E

HOOK



Type	Code
A	16182A
B	16182B
C	16182C
D	16182D
E	-

45° TEE



Type	Code
A	-
B	16184B
C	16184C
D	16184D
E	-

27½° EAVES FITTING



Type	Code
A	-
B	-
C	-
D	16185D
E	-

27½° RIDGE FITTING



Type	Code
A	-
B	-
C	-
D	16191D
E	-

BASE FLANGE WEATHER SHIELD



Type	Code
A	-
B	16192B
C	16192C
D	16192D
E	-

ADJUSTABLE FIXING BRACKET



Type	Code
A	-
B	16199B
C	16199C
D	16199D
E	-

IN-LINE SWIVEL FITTING



Type	Code
A	-
B	16BC538B
C	16BC538C
D	16BC538D
E	-

ADJUSTABLE ELBOW

Internal fit



Type	Code
A	-
B	-
C	-
D	13V48
E	-

SLOPING DOWN TEE

30 - 45° slope



Type	Code
A	-
B	-
C	16204C
D	16204D
E	-

SLOPING UP TEE

30 - 45° slope



Type	Code
A	-
B	-
C	16A204C
D	16A204D
E	-

SLOPING DOWN/UP CROSS

30 - 45° slope



Type	Code
A	-
B	-
C	16219C
D	16219D
E	-

Ⓐ size to suit Ø 26.9mm tube Ⓑ size to suit Ø 33.7mm tube Ⓒ size to suit Ø 42.4mm tube

Ⓓ size to suit Ø 48.3mm tube Ⓔ size to suit Ø 60.3mm tube

TUBE CLAMPS



SINGLE SOCKET TEE

11 - 30° slope



Type	Code
A	-
B	-
C	16229C
D	16229D
E	-

METAL STOP ENDS



Type	Code
A	16236A
B	16236B
C	16236C
D	16236D
E	-

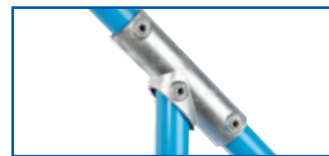
METAL DRIVE IN PLUG



Type	Code
A	-
B	-
C	-
D	-
E	16136E

THREE SOCKET TEE

30 - 45° slope



Type	Code
A	-
B	-
C	16277C
D	16277D
E	-

SINGLE GLASS CLAMP



Type	Code
A	-
B	-
C	16401C
D	16401D
E	-

DOUBLE GLASS CLAMP



Type	Code
A	-
B	-
C	16402C
D	16402D
E	-

EXPANDING FITTING

Also available in C/D



Type	Code
A	-
B	-
C	16750C
D	16750D
E	-

PALLET FLANGE



Type	Code
A	-
B	-
C	-
D	169931D
E	-

STAIR TREAD BRACKET



Type	Code
A	-
B	-
C	-
D	169972D
E	-

LADDER WALL CLAMP



Type	Code
A	-
B	-
C	-
D	25SL109D
E	-

CRADLE



Type	Code
A	-
B	-
C	-
D	16KG135D
E	-

FOR OUR RANGE
OF GALVANISED
TUBE, SEE
PAGE 487.

FIXINGS & TOOLS

GRUB SCREWS



Type	Code
A	16231A
B - C	16231BC
D - E	16231DE

GRUB SCREW PROTECTORS



Type	Code
A - B	16305BC
C - E	16305DE

Plastic.

ALLEN KEY



Type	Code
A - C	16232ABC
D - E	16232D

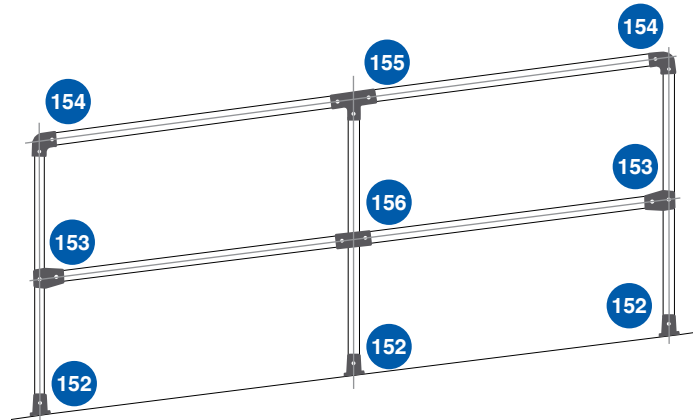
RATCHET SET



Type	Code
A - E	16233

*These fittings are not to be used as a base plate for guardrails or dependent structures
No structure should be built using swivel fittings only

TUBE CLAMP SLOPE FITTINGS



For railings on slopes and ramps between 0 - 70°. Available to suit Ø 42.4 and 48.3mm tube (C and D size).

N.B. The tolerance on standard Tube Clamp fittings is between 3° and 5°.

FOR SLOPES UP TO 11°

BASE FLANGE



Type	Code
C	16152C
D	16152D

SHORT TEE



Type	Code
C	16153C
D	16153D

ELBOW



Type	Code
C	16154C
D	16154D

LONG TEE

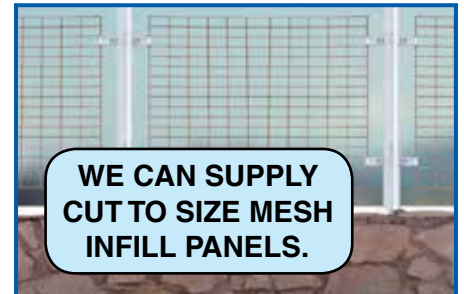


Type	Code
C	16155C
D	16155D

TWO SOCKET CROSS



Type	Code
C	16156C
D	16156D



WE CAN SUPPLY
CUT TO SIZE MESH
INFILL PANELS.

FOR SLOPES 11 - 30°

ANGLE BASE FLANGE



Type	Code
C	16151C
D	16151D

THREE SOCKET TEE



Type	Code
C	16177C
D	16177D

TWO SOCKET CROSS



Type	Code
C	16178C
D	16178D

ACUTE ANGLE ELBOW



Type	Code
C	16A122C
D	16A122D

VARIABLE ELBOW



Type	Code
C	16A124C
D	16A124D

FOR SLOPE
APPLICATIONS
GREATER THAN 11°,
SEE PAGE 499.

TUBE CLAMP SLOPE FITTINGS



FOR SLOPES 30 - 45°

L/H SLOPING DOWN SIDE OUTLET TEE



Type	Code
C	16A116LHC
D	16A116LHD

R/H SLOPING DOWN SIDE OUTLET TEE



Type	Code
C	16A116RHC
D	16A116RHD

ACUTE ANGLE ELBOW



Type	Code
C	16122C
D	16122D

L/H SLOPING DOWN SIDE OUTLET ELBOW



Type	Code
C	16A128LHC
D	16A128LHD

R/H SLOPING DOWN SIDE OUTLET ELBOW



Type	Code
C	16A128RHC
D	16A128RHD

TWO SOCKET CROSS With adjustable centre 30 - 45°



Type	Code
B	16130B
C	16130C
D	16130D

ANGLE BASE FLANGE



Type	Code
C	16A151C
D	16A151D

SLOPING DOWN TEE



Type	Code
C	16204C
D	16204D

SLOPING UP TEE



Type	Code
C	16A204C
D	16A204D

SLOPING DOWN/UP CROSS



Type	Code
C	16219C
D	16219D

THREE SOCKET TEE



Type	Code
C	16277C
D	16277D

FOR OUR RANGE
OF GALVANISED
TUBE, SEE
PAGE 487.

FOR SLOPES 30° & ABOVE

VARIABLE ELBOW 15 - 60° from horizontal



Type	Code
B	16124B
C	16124C
D	16124D

ADJUSTABLE SHORT TEE 30 - 60° slope



Type	Code
B	16129B
C	16129C
D	16129D

ACUTE ANGLE ELBOW 40 - 70° slope



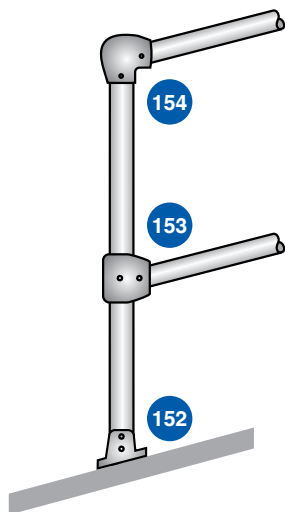
Type	Code
C	16123C
D	16123D

FOR SLOPES GREATER THAN 30°, SEE PAGE 500.

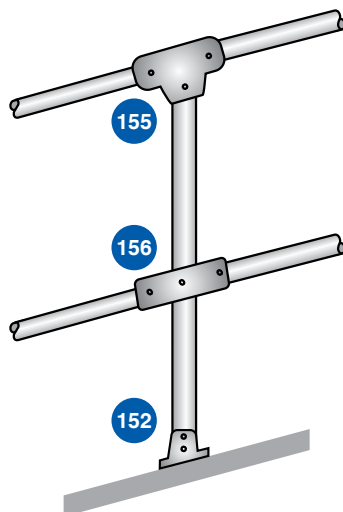
CONSTRUCTION OF AN IN-LINE GUARDRAIL - SLOPING

FOR SLOPES 0 - 11°

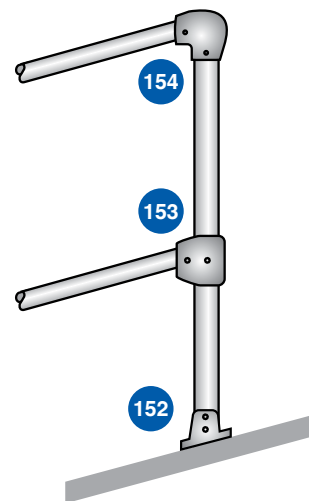
BOTTOM END POST



MID POST

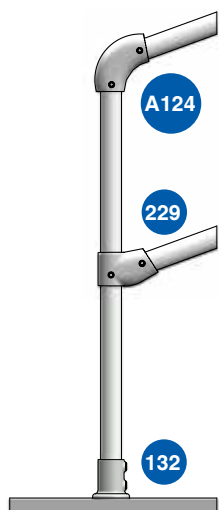


TOP END POST

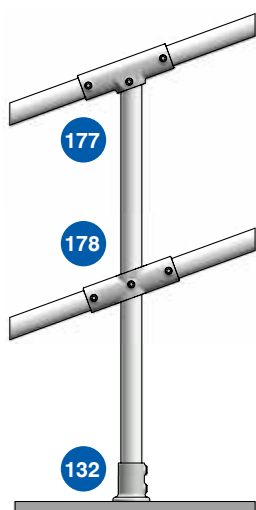


FOR SLOPES 11 - 30°

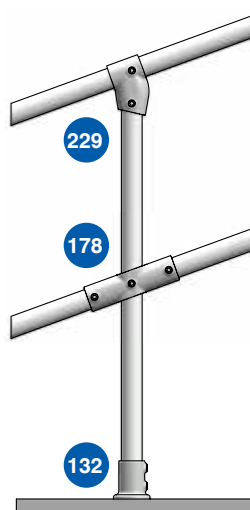
BOTTOM END POST



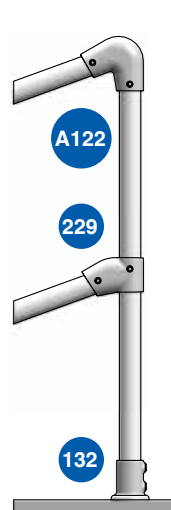
MID POST



MID POST

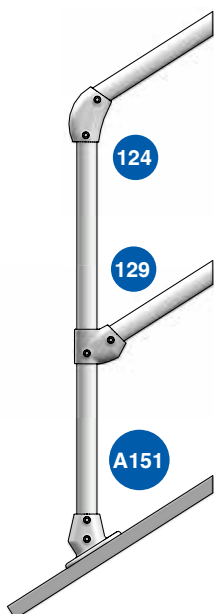


TOP END POST

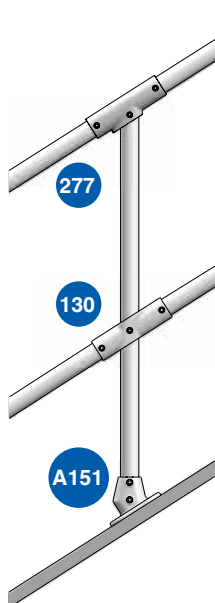


FOR SLOPES 30 - 45°

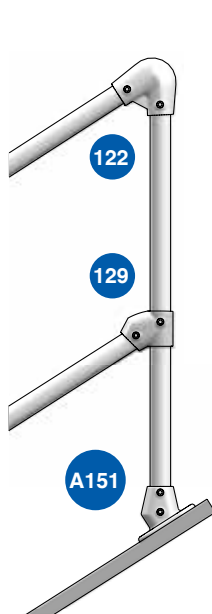
BOTTOM END POST



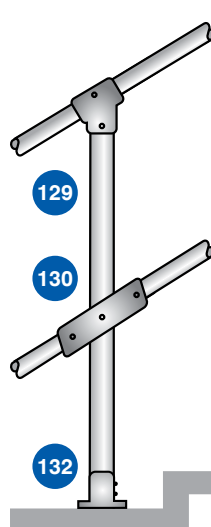
MID POST



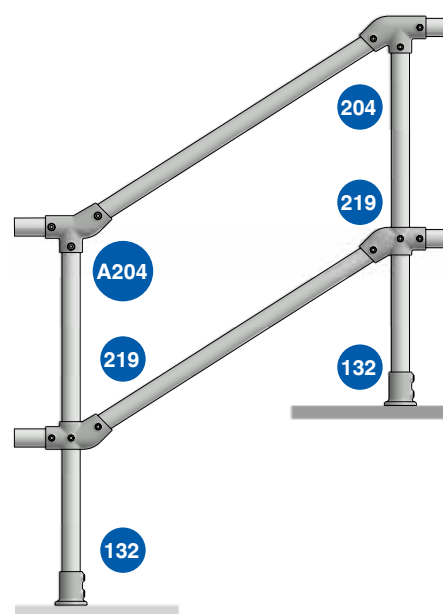
TOP END POST



ADJUSTABLE



LEVEL TO SLOPING

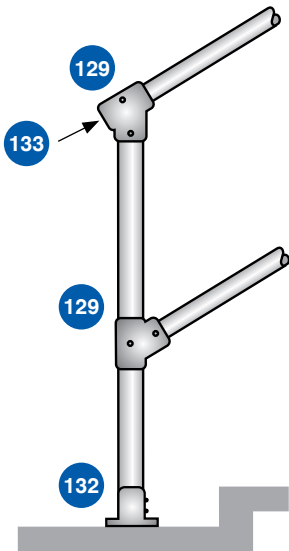


APPLICATION GUIDE

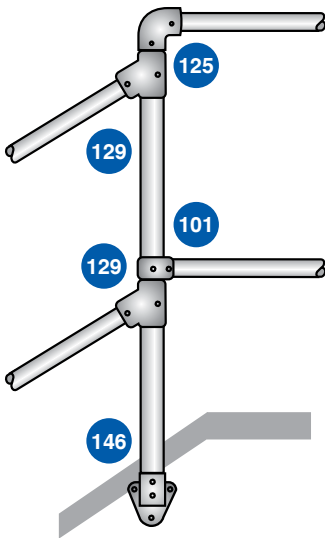


CONSTRUCTION OF AN IN-LINE GUARDRAIL - SLOPING FOR SLOPES 30 - 60°

ADJUSTABLE

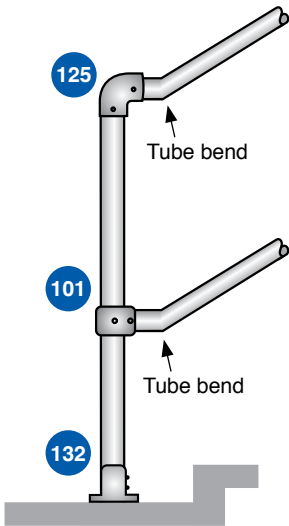


LEVEL TO SLOPING

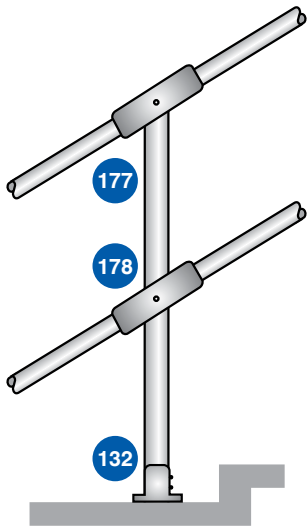


VARIABLE SLOPES

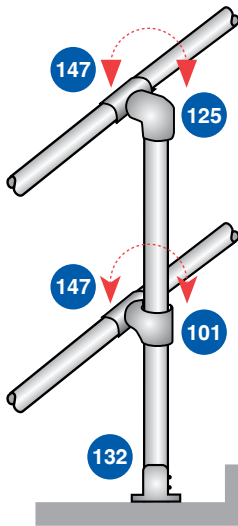
VARIABLE



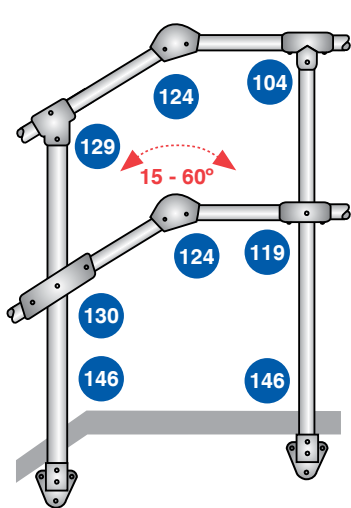
0 - 45° MACHINED TO
REQUIRED ANGLE



360° ROTATION

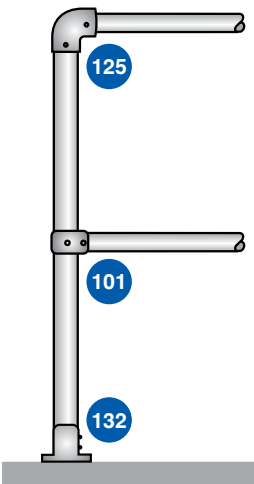


LEVEL TO SLOPING USING 124

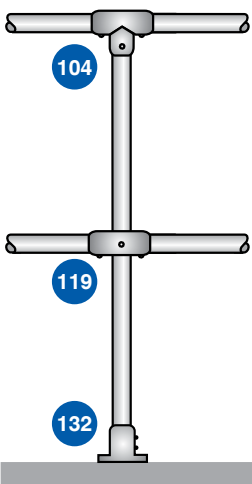


CONSTRUCTION OF AN IN-LINE GUARDRAIL - LEVEL

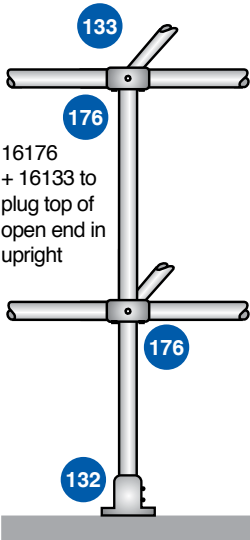
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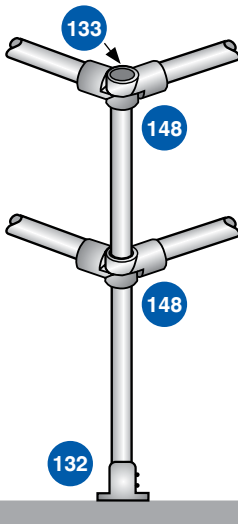
MID POST



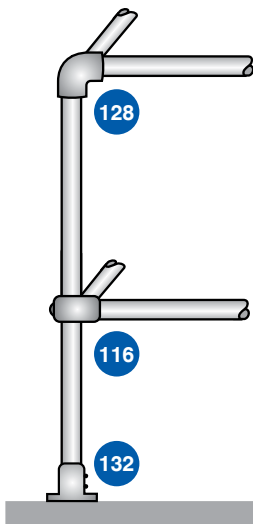
DIVIDER



CORNER POST
90 - 180°



90° CORNER POST



HANDRAILING



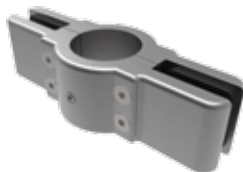
SINGLE GLASS CLAMP



To Suit Ø mm	Code
42.4	16401C
48.3	16401D

Suits 10mm glass/lug.

DOUBLE GLASS CLAMP



To Suit Ø mm	Code
42.4	16402C
48.3	16402D

Suits 10mm glass/lug.



Exploded view.

ADJUSTABLE CAST STEEL ELBOW

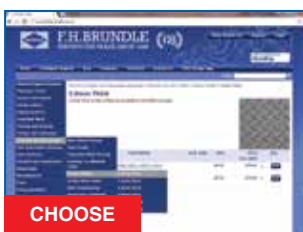
INTERNAL FIT



To Suit Ø mm	Thickness mm	Code
48.3	3.2	13V48



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RSJ POST SYSTEM



SPECIFICATION:

- Upright 50 x 100mm
- Galvanised
- Suits Ø 48.3mm tube
- Overall height 1130mm
- Base plate 200 x 200mm
- Base plate fixing holes 22 x 40mm

FOR OUR RANGE OF GALVANISED TUBE, PLEASE SEE PAGE 487.

2 RAIL POST



Code
25RSJ02



3 RAIL POST



Code
25RSJ03



WALL FLANGE



Code
16131D

90° ELBOW



Code
16125D

LOCKING COLLAR



Code
16179D

SLEEVE JOINT



Code
16149D

INTERNAL JOINT



Code
16150D

SINGLE SPLICE LOCK



Code
2502SL8

Zinc plated.

DOUBLE SPLICE LOCK



Code
2502SL8D

Zinc plated.

TUBE



Length m	Code
3.0	16024830
6.5	160248

STOP END



Code
16133D

Plastic.

METAL STOP END



Code
16236D

HIGH STRENGTH RETAINER GLUE (50ml)



Code
1899007638

For use with tube fittings.

HANDRAILING



Our grey modular ladder system is designed for potable and stormwater, whereas our yellow ladder system is for use in sewage or foulwater applications. Made from nylon PBT (Polybutylene terephthalate) with 35% glass filled makes this incredibly lightweight at approximately 4kg per linear metre when compared to steel alternatives, and our modular design allows you to minimise transportation costs and difficulties.

FEATURES:

- Fully modular design
- Easily transportable
- Cost effective alternative to steel
- Incredibly lightweight
- Easy to install
- Suitable for round & rectangular chambers

LADDER KIT

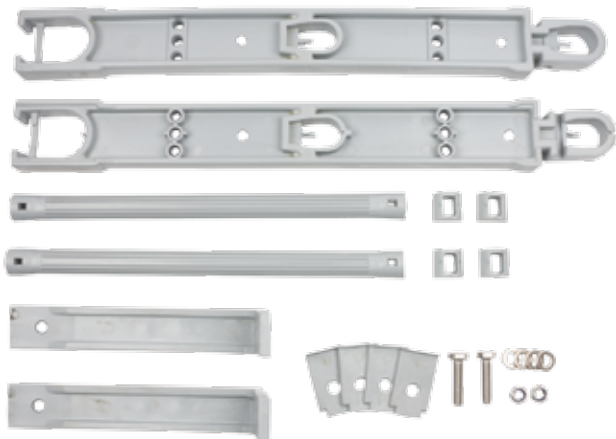
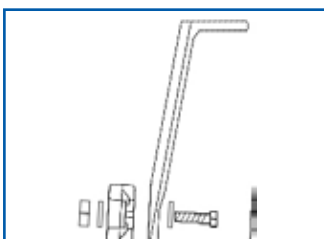


Image shows a constructed ladder kit.

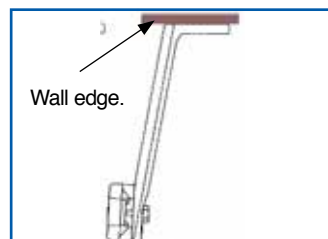
Colour	Code
Yellow	25P60Y
Black	25P60B
Grey	25P60G

Kit includes 2 x 600mm long stiles, 2 x rungs, 2 x wall brackets, 4 x locking wedges, 2 x stainless steel lock nuts, bolts and washers for fixing wall brackets to stiles. Nylon.

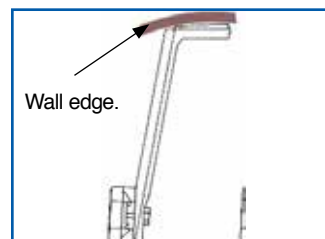
BIRDS EYE VIEW OF RIDGE STAY WITH WEDGE INSTRUCTIONS



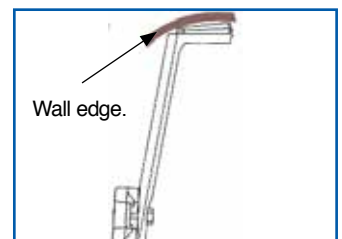
Attach stay to the ladder.



No wedge use:
For rectangular cross section where the diameter is greater than 3m.



One wedge use:
For rectangular cross section where the diameter is greater than 2m and less than 3m.



Two wedge use:
For rectangular cross section where the diameter is less than 2m.

ORIGINAL LADDER KIT



LADDER RUNGS & SELF-CLOSING GATE AS AN OPTIONAL EXTRA



The original ladder kit is of a safe, simple modular design offering individual parts which bolt together to form a complete ladder. This system tries to eliminate the need for expensive site surveys and the preparation of detailed drawings which add to delivery time. It is flexible, easy to install and will solve virtually any access problem. Available from 2 - 6m, ladders are supplied "flat-pack" for ease of transportation.



FULL LADDER KITS

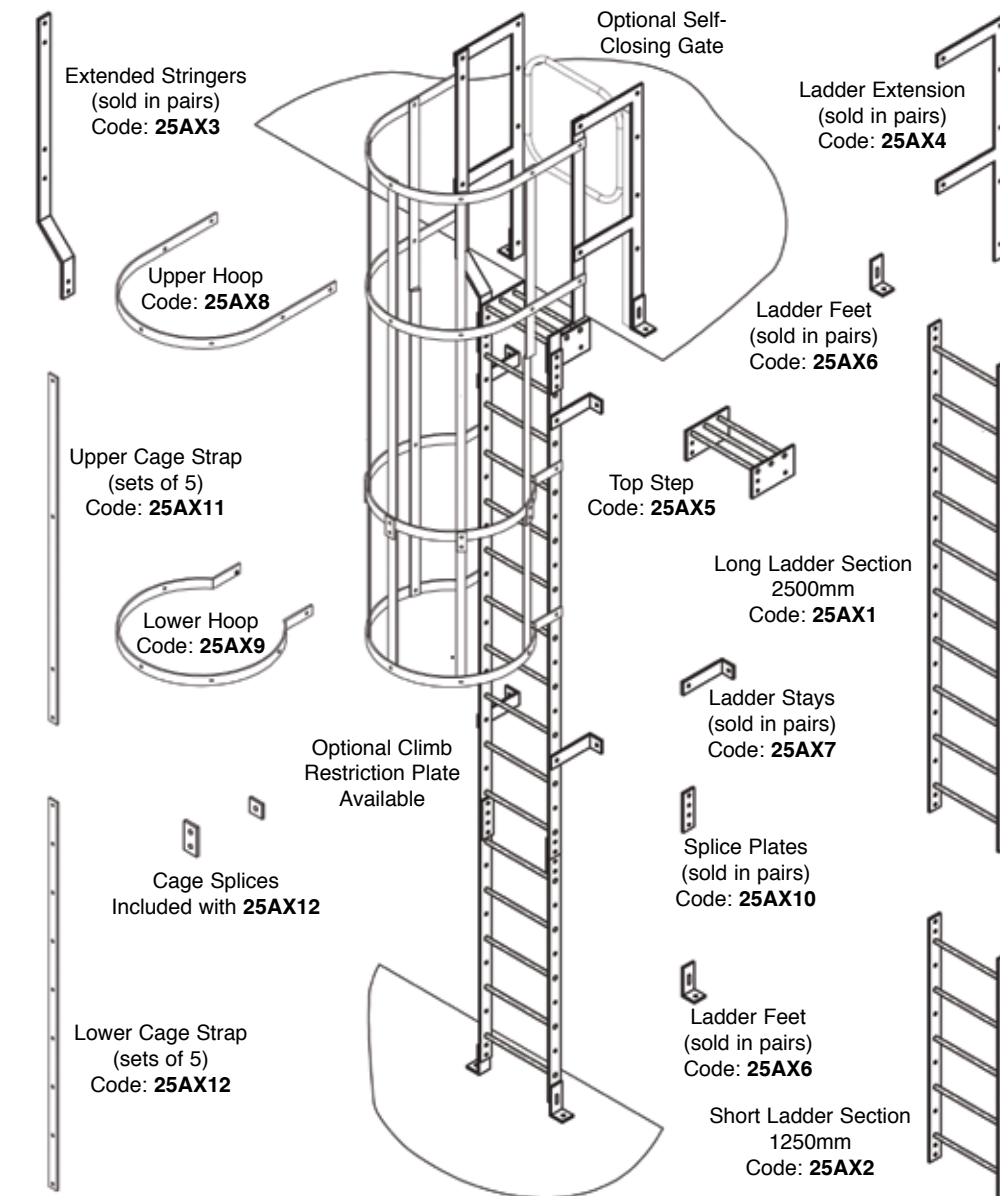
Rise Size mm	Code
2000 - 2300	25AX2000
2400 - 2700	25AX2500
2800 - 3200	25AX3000
3300 - 3800	25AX3500
3900 - 4300	25AX4000
4400 - 5200	25AX4500
5300 - 6000	25AX5500

FOR EUROPEAN LADDER KIT, PLEASE SEE PAGES 506.

IF YOU DON'T SEE WHAT YOU NEED PLEASE ASK OUR SALES TEAM.

ORIGINAL LADDER KIT

LADDER RUNGS & SELF-CLOSING GATE AS AN OPTIONAL EXTRA



UNIVERSAL SELF-CLOSING HALF GATE

Supplied with fixing bolts



Height mm	Code
550	25AXSG04

LADDER SECURITY PLATE

Supplied with fixing bolts



Height mm	Width mm	Code
2000	415	25AXLSP01

Lock not included.

LADDER RUNG



Length mm	H x W mm	Code
2100	30 x 30	25R01

Component Description	Code
Long ladder section - 2500mm	25AX1
Short ladder section - 1250mm	25AX2
Extended stringers (sold in pairs) - includes four M12 x 35mm bolts	25AX3
Ladder extension (sold in pairs) - includes ladder feet and four M12 x 35mm bolts	25AX4
Top step - includes four M12 x 50mm bolts	25AX5
Ladder feet (sold in pairs) - includes four M12 x 35mm bolts	25AX6
Ladder stays (sold in pairs) - includes four M12 x 35mm bolts	25AX7
Upper hoop - Ø 700 x 750mm with holes - includes five M12 x 36mm bolts	25AX8
Lower hoop - Ø 700 x 750mm with holes - includes five M12 x 36mm bolts	25AX9
Splice plates (sold in pairs) - includes six M12 x 35mm bolts	25AX10
Upper cage strap (sets of 5)	25AX11
Lower cage strap (set of 5) - includes cage splices and ten M12 x 50mm bolts	25AX12

UPPER HOOP

Without holes



LOWER HOOP

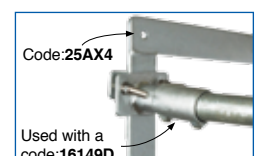
Without holes



Ø x L mm	Bar Size mm	Code
700 x 750	50 x 8	25GC11

Ø x L mm	Bar Size mm	Code
700 x 750	50 x 8	25GC12

LADDER WALL CLAMP



Ø mm	Plate H x W mm	Code
48.3	75 x 125	25SL109D

125 x 51mm back plate. 70 x Ø 11.7mm thread.

EUROPEAN LADDER KIT



ENHANCED SLIP RESISTANT RUNGS INCLUDED



TESTED TO
BS 14122-4



Developed from the Original Ladder Kits, but with extra safety in mind. These European Kits have been designed with enhanced slip resistant ladder rungs, produced from punched ladder rung O₂-30 / 30. This pattern has surface holes of Ø 9mm punched up and 5mm drainage holes affording both high slip resistance properties and excellent drainage. As with the original kits, these are available in 2 - 6m ladders and are supplied "flat-pack" for ease of transportation.

Components are generally compatible to BS EN ISO 14122-4:2004+A1:2010 (E). Ladder sections have been independently tested and they comply with the loading requirements and performance tests as detailed in BS EN 131-2:2010+A1:2012.

FULL LADDER KITS

Rise Size mm	Code
1825 - 2150	25EX2000
2200 - 2650	25EX2500
2700 - 3150	25EX3000
3200 - 3650	25EX3500
3700 - 4150	25EX4000
4200 - 4650	25EX4500
4700 - 5150	25EX5000
5200 - 5650	25EX5500
5700 - 6000	25EX6000

IT IS RECOMMENDED
THAT OPERATIVES USING
VERTICAL LADDERS WEAR
PROTECTIVE GLOVES.

FULL HEIGHT SELF-
CLOSING GATE CODE:
25AXSG05 CONFORMS
WITH BS EN 14122-4.

Self-closing gate not supplied. Use code: **25AXSG05**.

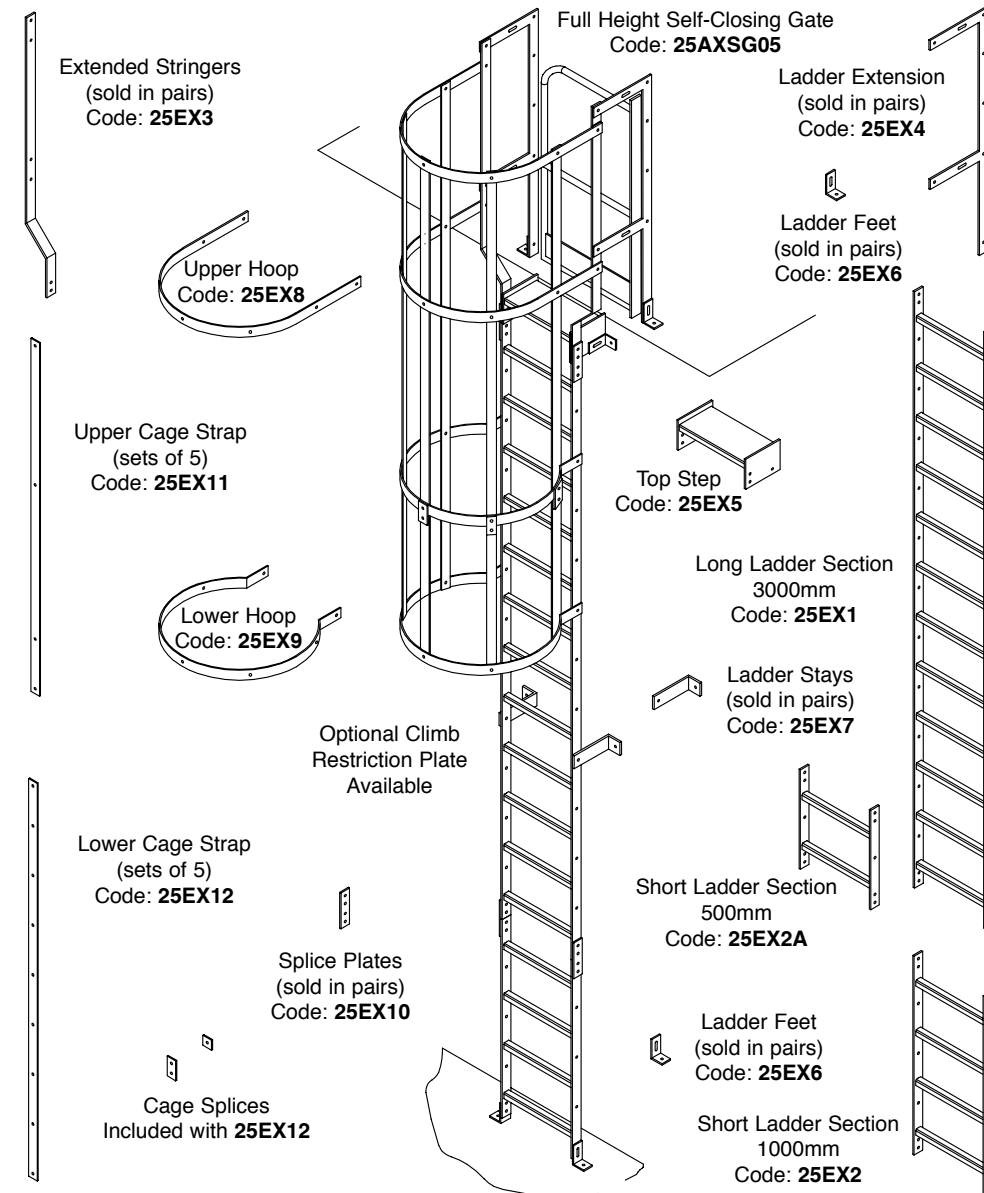
HANDRAILING



IF YOU DON'T SEE WHAT YOU NEED PLEASE ASK OUR SALES TEAM.

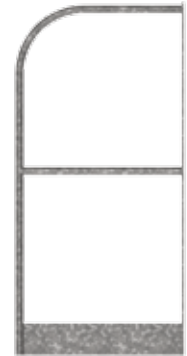
EUROPEAN LADDER KIT

ENHANCED SLIP RESISTANT RUNGS INCLUDED



UNIVERSAL SELF-CLOSING FULL GATE

Supplied with fixing bolts



Height mm	Code
1100	25AXSG05

LADDER SECURITY PLATE

Supplied with fixing bolts



Component Description	Code
Long ladder section - 3000mm	25EX1
Short ladder section - 1000mm	25EX2
Short ladder section - 500mm	25EX2A
Extended stringers (sold in pairs) - includes four M12 x 35mm bolts	25EX3
Ladder extension (sold in pairs) - includes ladder feet and four M12 x 35mm bolts	25EX4
Top step - includes four M12 x 50mm bolts	25EX5
Ladder feet (sold in pairs) - includes four M12 x 35mm bolts	25EX6
Ladder stays (sold in pairs) - includes four M12 x 35mm bolts	25EX7
Upper hoop - Ø 700 x 750mm with holes - includes five M12 x 36mm bolts	25EX8
Lower hoop - Ø 700 x 750mm with holes - includes five M12 x 36mm bolts	25EX9
Splice plates (sold in pairs) - includes six M12 x 35mm bolts	25EX10
Upper cage strap (sets of 5)	25EX11
Lower cage strap (set of 5) - includes cage splices and ten M12 x 50mm bolts	25EX12

Height mm	Width mm	Code
2000	415	25AXLSP01

Lock not included.

LADDER RUNG



Length mm	H x W mm	Code
2100	30 x 30	25R01

UPPER HOOP

Without holes



LOWER HOOP

Without holes



Ø x L mm	Bar Size mm	Code
700 x 750	50 x 8	25GC11

Ø x L mm	Bar Size mm	Code
700 x 750	50 x 8	25GC12

LADDER WALL CLAMP



Ø mm	Plate H x W mm	Code
48.3	75 x 125	25SL109D

125 x 51mm back plate. 70 x Ø 11.7mm thread.

ROOF EDGE PROTECTION



NO FIXINGS REQUIRED



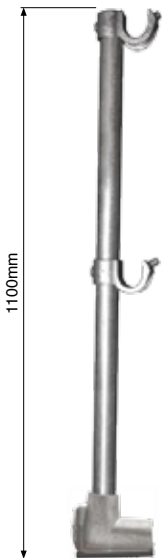
Roof Edge Protection is a system that requires no fixings or drilling and subsequently no repair to the roof membrane. It is suitable for flat or nearly flat roofs. The system operates on a counterbalance principle using curved PVC counterweights as the main component. A galvanised malleable iron foot supports the handrail post, this includes an integral toeplate facility which is a fundamental requirement if there is no perimeter edge upstand.

FEATURES:

- TUV Certificate no. Z1A 04 03 50796 001
- Satisfies the CEN harmonised European standard BS EN ISO 14122-3:2001
- Rapid installation
- 25kg maximum component weight
- No welding or bending required on site
- No special tools required
- Bolt on toeplate facility to comply with HSG 33
- For use on asphalt, coated steel sheet or concrete mineral felt roofs. The system is effectively maintenance free with galvanised to BS EN ISO 1461 malleable iron fittings, PVC counterweights & galvanised tube

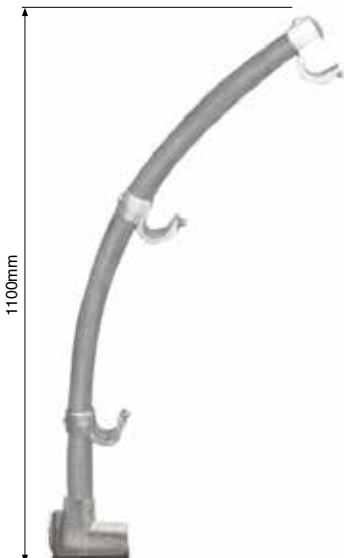


UPRIGHT POST



Ø mm	Code
48.3	16RE00G40

CURVED POST



Ø mm	Code
48.3	16RE00G40SS

COUNTERWEIGHT



Ø mm	Tube Length m	Code
48.3	1.075	16RE11G40SS
48.3	1.575	16RE11G40

Includes locking collar. Recycled PVC moulding.

RUN END COUNTERWEIGHT



Ø mm	Tube Length m	Code
48.3	1.575	16RE12G40

Includes bar, long tee and locking collars. Recycled PVC moulding.

90° ELBOW



Ø mm	Code
48.3	16125D

WALL FLANGE



Ø mm	Code
48.3	16131D

SLEEVE JOINT



Ø mm	Code
48.3	16149D



Foldshield® is the perfect solution for free standing edge protection when working on roofs. It can be easily folded, so it does not reduce the buildings aesthetics. Designed for use on slopes up to 10°, this folding system is suitable for use on asphalt, concrete, mineral felt or PVC sheet covered roofs and complies with the requirements of EN 13374.

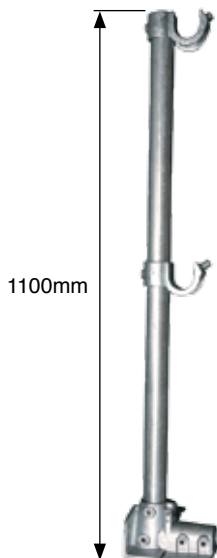
FEATURES & BENEFITS

- Galvanised
- Suits Ø 48.3mm tube
- Complies to EN 13374 & 14122
- Recycled PVC feet do not penetrate the roof membrane
- Folds down when not in use
- Does not spoil building aesthetics
- System can be raised & lowered in sections



The guard rail can easily be lifted into place when work is in progress and then quickly folded back down when finished. A simple locking pin is all that needs to be removed from the fitting to allow it to pivot.

UPRIGHT POST



Ø mm	Code
48.3	16RE00G40HBF

COUNTERWEIGHT



Ø mm	Tube Length m	Code
48.3	1.075	16RE11G40SS
48.3	1.575	16RE11G40

Includes locking collar. Recycled PVC moulding.

RUN END COUNTERWEIGHT



Ø mm	Tube Length m	Code
48.3	1.575	16RE12G40

Includes bar, long tee and locking collars. Recycled PVC moulding.

SLEEVE JOINT



Ø mm	Code
48.3	16149D

INTERNAL JOINT



Ø mm	Code
48.3	16150D

90° ELBOW



Ø mm	Code
48.3	16125D

STOP END



Ø mm	Code
48.3	16133D

Plastic.

HINGED BASE FOOT



Ø mm	Code
48.3	16KG134D

CRADLE



Ø mm	Code
48.3	16KG135D

TUBE



Ø mm	Length m	Code
42.4	1.0	1602421075
48.3	3.0	16024830
48.3	6.5	160248

TOPFIX SYSTEM



ROOF EDGE PROTECTION FOR STANDING SEAM & METAL ROOFS

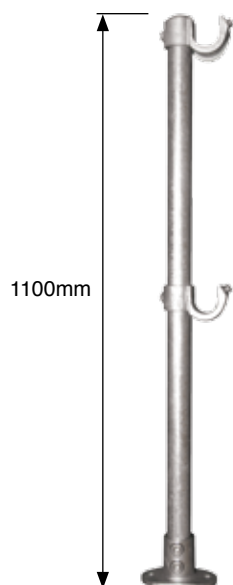


Topfix provides a roof edge protection solution for metal profile and standing seam roofs up to 45° pitch. The specially designed base plate, which incorporates multiple fixing centres, allows installation to a wide range of popular roofs. Base plates for standing seam roofs are fixed using non-penetrative 2-part clamps and metal profile roofs are fixed with minimal penetrations using rivets and butyl sealing strip to maintain the roof's integrity.

FEATURES & BENEFITS

- Galvanised
- Suits Ø 48.3mm tube
- Complies with the test requirements of BS EN 14122 Part 3 & EN 13374 Class A
- Fixing centres for standing seam roofs: 305, 400 & 500mm
- Fixing centres for trapezoidal profile roof panels: 310, 333, 400 & 500mm
- Easier specification means less site visits
- Non-penetrative solution for standing seam roofs
- Watertight fixings for metal profile roofs

UPRIGHT POST



Ø mm	Code
48.3	16RE00G40RBF

Order 2 x 5002M1230SET for fixing to base plate.

BASE PLATE



L x W mm	Code
538 x 380	16KGTF1

SLEEVE JOINT



Ø mm	Code
48.3	16149D

90° ELBOW



Ø mm	Code
48.3	16125D

STOP END



Ø mm	Code
48.3	16133D

Plastic.

FOR SELF-CLOSING GATES, SEE PAGE 511.

CRADLE



Ø mm	Code
48.3	16KG135D

ANGLE BASE FLANGE

30 - 45° slope



Ø mm	Code
48.3	16A151D

ADJUSTABLE SHORT TEE

30 - 60° slope



Ø mm	Code
48.3	16129D

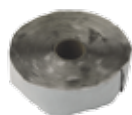


STANDING SEAM CLAMP



Code
16WPF6

SEALING STRIP



Roll m	Width mm	Code
15	40	16KGSEAL

Butyl.

RIVETS



Ø x L mm	Code
6 x 14.5	16KGRIVET

Pack of 100.

FIXING SET



Ø mm	Code
M12	5002M1230SET

Includes bolt, nut & washer.

TUBE

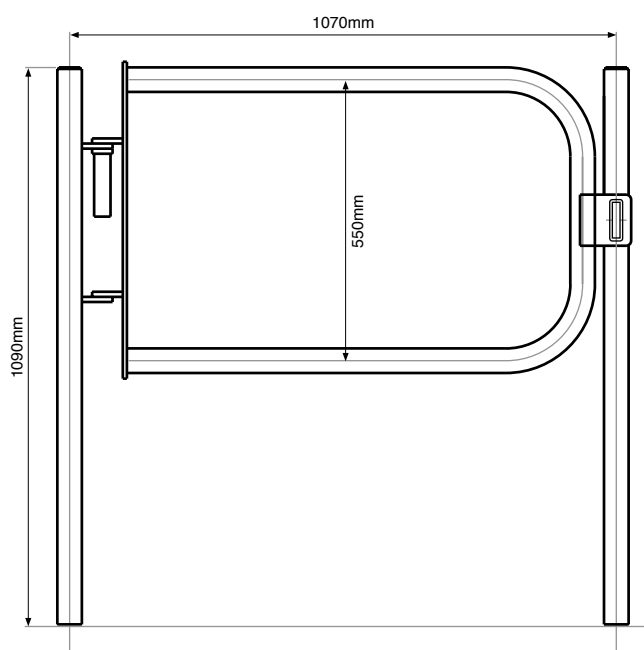


Ø mm	Length m	Code
48.3	3.0	16024830
48.3	6.5	160248

SELF-CLOSING FABRICATED GATES



SELF-CLOSING GATE



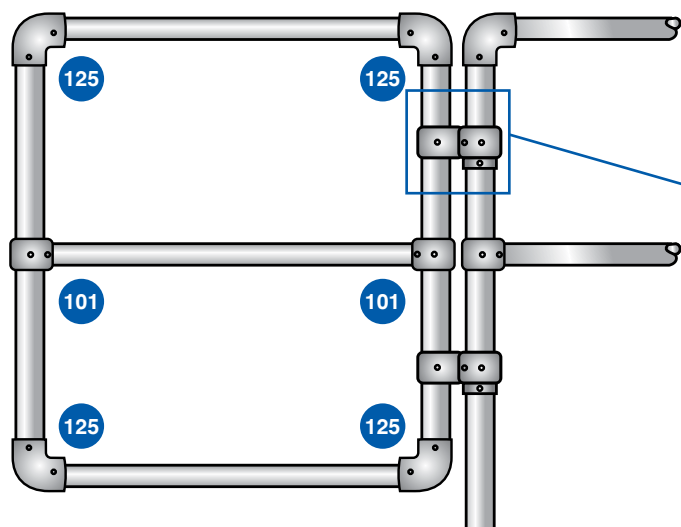
FOR USE WITH TUBE CLAMPS & ROOF EDGE PROTECTION SYSTEM.

- Supplied with hinge, post and slam post
- Galvanised
- Height 1100mm when tube clamp fitted
- Lockable with padlock through Ø 15mm hole
- Gate post centres 1070mm
- Not supplied with base fittings
- Image shows left hand opening inwards

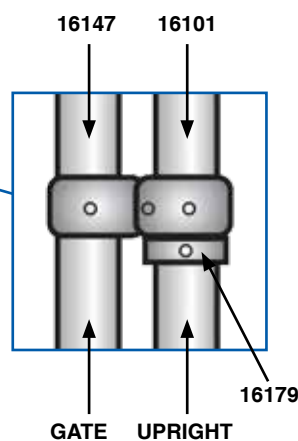
FROM STOCK

Ø mm	Left Hand	Right Hand
33.7	1603TCG1B	1603TCG2B
42.4	1603TCG1C	1603TCG2C
48.3	1603TCG1D	1603TCG2D

GATE CONSTRUCTION



HEAVY DUTY GATE HINGE



- Tighten the setscrew on the **16147** to the gate
- Tighten the setscrew on the **16101** to the **16147**
- Tighten the setscrew on the **16179** to the upright
- Leave the setscrew on the **16101** to the upright loose

ROOF DOME MAXI

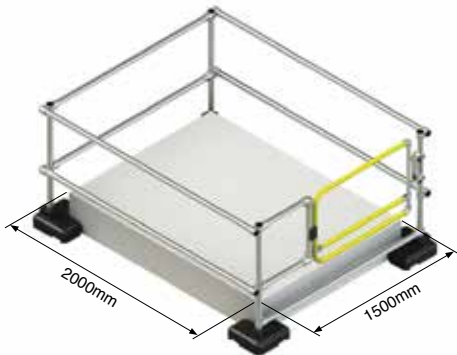


SKYLIGHT FALL PROTECTION

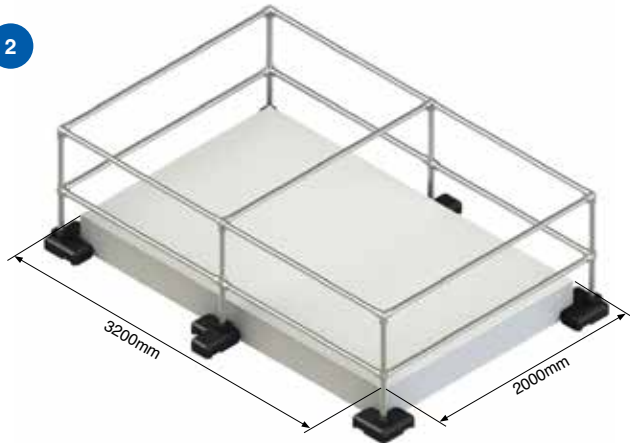


Roof Dome Maxi is a modular system designed specifically to prevent falls through skylights, roof hatches, and other roof openings. Sturdy recycled PVC bases lock the posts into position around the corners of a skylight then Tube Clamp fittings and tube are used to construct a rigid frame. Additionally, a gate can be incorporated for access to roof hatches.

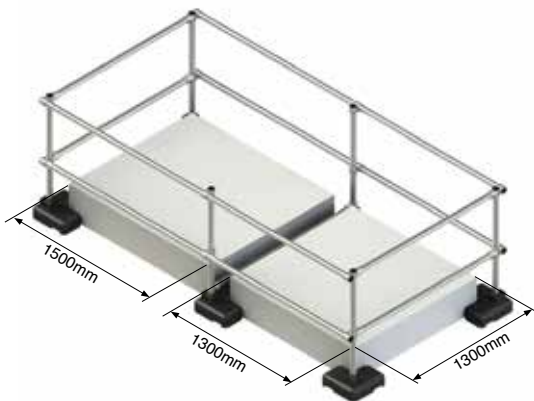
1



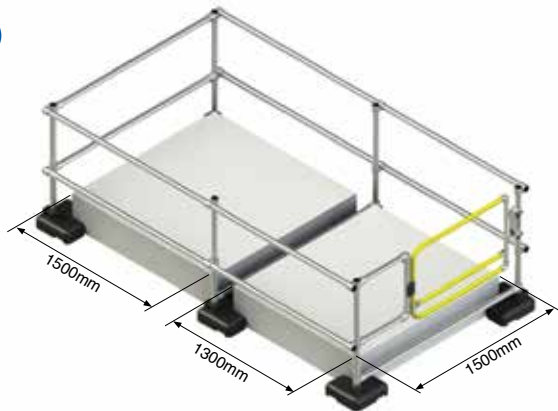
2



3



4



**COMPLETELY FREE-STANDING &
ELIMINATES THE RISK OF DAMAGE
TO THE ROOF MEMBRANE.**

Kit	L x W mm	Code
1	2000 x 1500	16KDH3
2	4000 x 2000	16KDK3
3	3200 x 1500	16KDH2
4	3200 x 1500	16KDH1

FEATURES

- Modular system using standard components
- Made from Ø 48.3mm tube (size D)
- Galvanised to BS EN ISO 1461
- Complies with EN 14122 pt3
- Recycled PVC feet
- Suitable for use on all roof surfaces with a maximum pitch of 3°

HANDRAILING



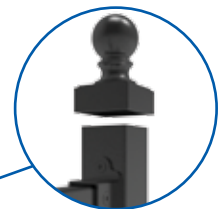
Fortitude railings are one of the easiest to install, most versatile, off the shelf handrail solutions on the market today. The range consists of a series of railing panels and brackets that can suit many different requirements. The panels can be cut to size on site to suit different post centres. The Fortitude raking panel cleverly allows installation of railings on stairs and gradients, whilst concealing the pivot points of each spindle.

For ease and simplicity all our brackets are supplied with suitable fixings for use on steel or wooden posts.

Available in two polyester powder coated finishes, a contemporary black sand and an elegant white gloss. Fortitude is a high quality, long lasting handrailing solution. It is made from pre-galvanised steel, which is then sprayed with a protective zinc phosphate coating, then treated with a further coating, before finally getting treated with a high quality Akzo Nobel UV resistant powder coated finish.

FORTITUDE RAILINGS • PURE QUALITY • PREMIUM FINISH

- | | | | |
|-----------------------------|---------------------------------|-------------------|--|
| 1. Made from pre-galv steel | 2. Zinc Phosphate pre-treatment | 3. Electro coated | 4. Quality Akzo Nobel powder coated finish |
|-----------------------------|---------------------------------|-------------------|--|



Post caps easily slide on top of the posts



Raking panels adjust to max. 40°



Posts include a two part cover cap



Corner brackets adjust to 120°

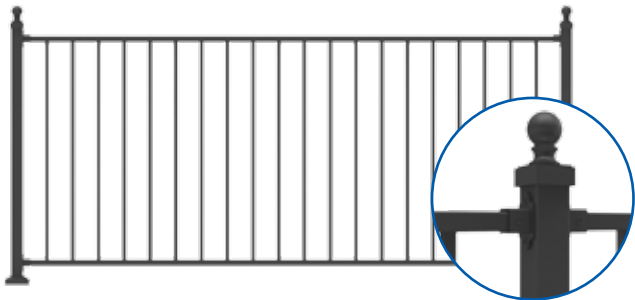


Stair bracket can adjust to 60° up or down & angle adaptor can adjust to 40°

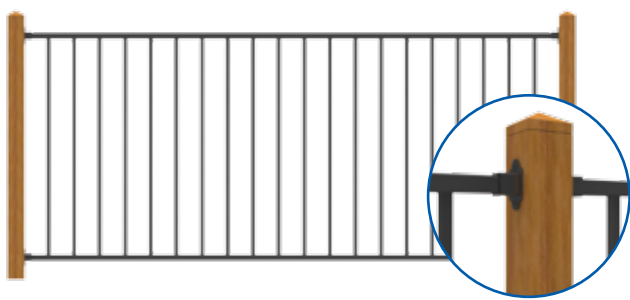
TRADITIONAL RAILING



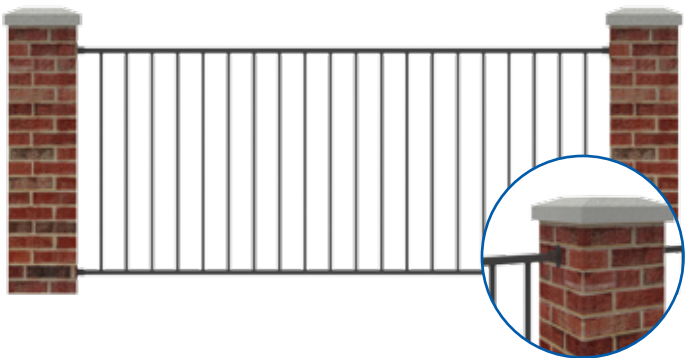
FIXED TO STEEL POSTS



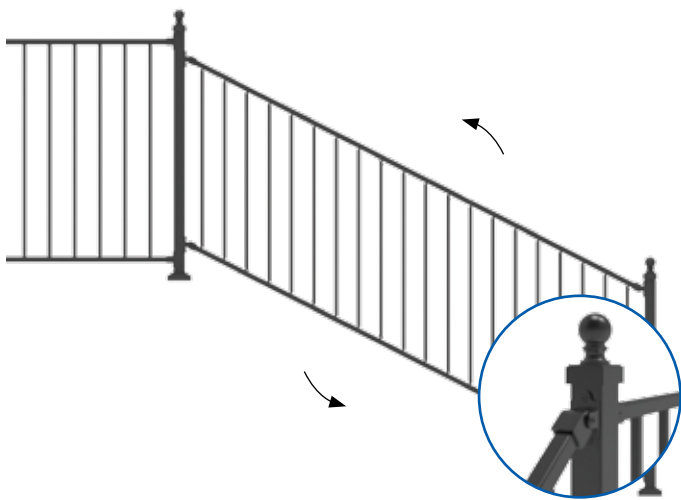
FIXED TO WOODEN POSTS



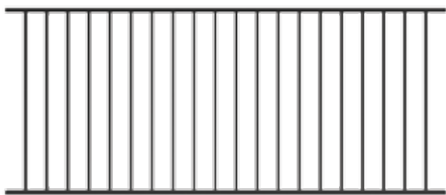
FIXED TO BRICK PILLARS



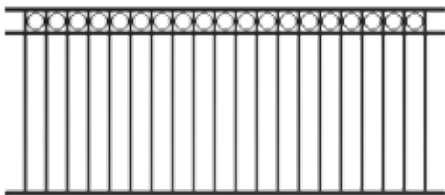
ADJUSTABLE RAKING PANEL



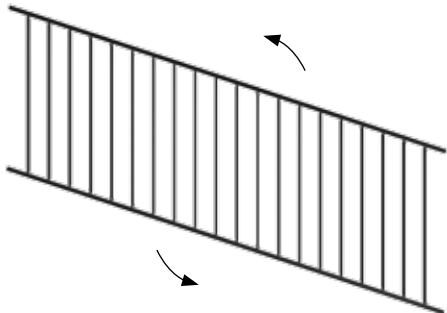
FIXED RAILING PANEL
To give 1100mm high railings



FIXED CIRCLES RAILING PANEL
To give 1100mm high railings



ADJUSTABLE RAKING PANEL
For stairs & slopes, up to 40°



Colour	Height mm	Width mm	Code
Black sand	1016	2370	64FR10B
White	1016	2370	64FR10W

Horizontal rails: □ 25mm x 1.5mm wall thickness.
Infill bars: □ 16mm x 1.2mm wall thickness.

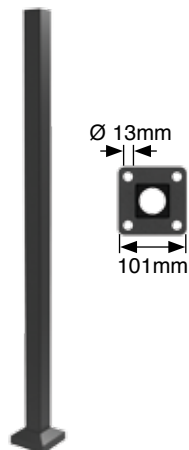
Colour	Height mm	Width mm	Code
Black sand	1016	2370	64FRC10B
White	1016	2370	64FRC10W

Horizontal rails: □ 25mm x 1.5mm wall thickness.
Infill bars: □ 16mm x 1.2mm wall thickness.
Circles: Ø 96 x 8mm.

Colour	Height mm	Width mm	Code
Black sand	863	2320	64ARP10B
White	863	2320	64ARP10W

Horizontal rails: □ 25mm x 1.5mm wall thickness.
Infill bars: □ 16mm x 1.2mm wall thickness.

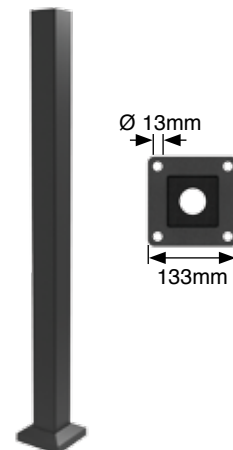
50mm BOLT-DOWN POST



Colour	Height mm	□ mm	Code
Black sand	1155	50	64PB5011B
White	1155	50	64PB5011W

Supplied with base cover plate & protective cap. 2.3mm nominal thickness.

75mm BOLT-DOWN POST



Colour	Height mm	□ mm	Code
Black sand	1155	75	64PB7511B
White	1155	75	64PB7511W

Supplied with base cover plate & protective cap. 2.3mm nominal thickness.

FOR BRACKETS SEE PAGE 516.

PRE-DRILLED POSTS



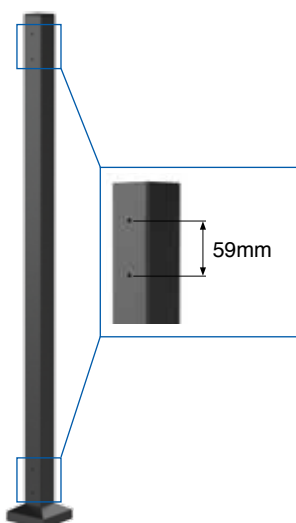
Image shows application of a pre-drilled corner post with superior universal bracket.

- Ø 5mm pre-drilled holes for ease of use
- For use with fixed panels
- Gives 1100mm high handrail on flat surfaces

- For use with Superior Horizontal Angle Bracket or Superior Universal Bracket
- Supplied with base, cover plate & protective cap

HANDRAILING

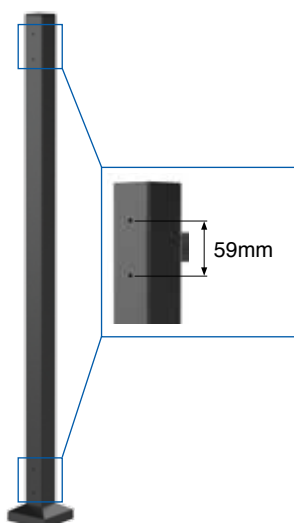
BOLT-DOWN END POST



Colour	Height mm	□ mm	Code
Black sand	1155	50	64PBE5011B
Black sand	1155	75	64PBE7511B

2.3mm nominal thickness.

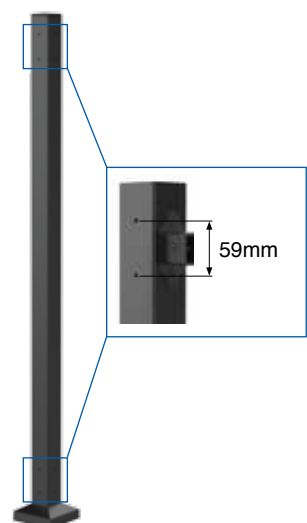
BOLT-DOWN MID POST



Colour	Height mm	□ mm	Code
Black sand	1155	50	64PBM5011B
Black sand	1155	75	64PBM7511B

2.3mm nominal thickness.

BOLT-DOWN CORNER POST



Colour	Height mm	□ mm	Code
Black sand	1155	50	64PBC5011B
Black sand	1155	75	64PBC7511B

2.3mm nominal thickness.

TRADITIONAL RAILING

BALL POST CAP



50mm cap.



75mm cap.

Colour	To Suit □ mm	Code
Black sand	50	64CB50B
White	50	64CB50W
Black sand	75	64CB75B
White	75	64CB75W

PRESSED POST CAP



Colour	To Suit □ mm	Code
Black sand	50	64CD50B
White	50	64CD50W
Black sand	75	64CD75B
White	75	64CD75W

PYRAMID POST CAP



Colour	To Suit □ mm	Code
Black sand	50	64CP50B
White	50	64CP50W
Black sand	75	64CP75B
White	75	64CP75W

CHOICE UNIVERSAL BRACKET

For use with fixed & raking panels



Colour	To Suit □ mm	Code
Black sand	25	64CUB25B
White	25	64CUB25W

Supplied as a pack of 4, with steel & wood fixings.

CHOICE ANGLE ADAPTOR

For horizontal & vertical angle applications, using the choice universal bracket, 40° left/right & up/down



Colour	Code
Black sand	64CAA25B
White	64CAA25W

Supplied as a pack of 4, with set screws to screw to the universal bracket.

SUPERIOR STAIR BRACKET

For use with raking panel, 60° up & down



Colour	To Suit □ mm	Code
Black sand	25	64SSB25B
White	25	64SSB25W

Supplied as a pack of 4, with steel & wood fixings.

SUPERIOR HORIZONTAL ANGLE BRACKET

For use with fixed panels, 60° left & right



SUPERIOR UNIVERSAL BRACKET

For use with fixed panels



Colour	To Suit □ mm	Code
Black sand	25	64SUB25B
White	25	64SUB25W

Supplied as a pack of 4, with steel & wood fixings.

CAP RAIL CLIP

For wooden handrail



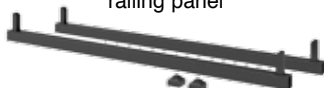
Colour	To Suit □ mm	Code
Black sand	25	64CR25B
White	25	64CR25W

Supplied as a pack of 4, with wood/composite fixings.

HANDRAILING

RAILING GATE KIT

To be used with a cut to size railing panel



Colour	Code
Black sand	64GK5011B
White	64GK5011W

□ 38mm tube to create gate frame.



UNIVERSAL BRACKET TEMPLATE

To ensure quick & easy positioning of brackets



Code
64UT25

ACCESSORIES

Description	Code
Black sand 125ml touch up kit with brush	29PC125TBS
White RAL 9016 125ml touch up kit with brush	29PC125TW
Black sand 400ml touch up spray paint	29PC400SBS
White RAL 9016 400ml touch up spray paint	29PC400SW

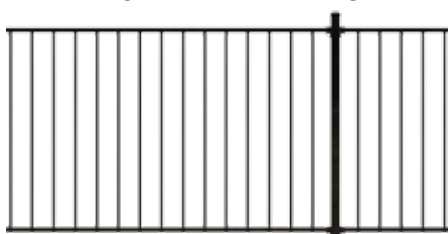
FOR LATCHES & HINGES, SEE PAGE 293.





Aluminium railings are quick and simple to install with no welding required. This system is polyester powder coated gloss black RAL 9005 and also gloss white RAL 9010, which makes it ideal for indoor and outdoor use. Railings are not designed for use on balconies or where the fall is greater than 600mm.

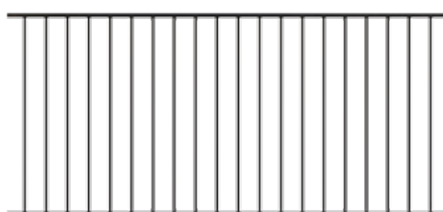
PRICE PER METRE RUN



Post	Overall Height m	PPC	Code
Bolt-down	1.0	Black	59RP10BM
Bolt-down	1.0	White	59RP10WM
Concrete-in	1.2	Black	59RP11CBM
Bolt-down	1.2	Black	59RP11BM

Supplied with posts, caps, brackets and fixings. Please order an extra post to finish the run.

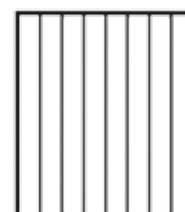
RAILING PANEL



Overall Height m	PPC	Height mm	Width mm	Code
1.0	Black	900	2400	59RP10B
1.0	White	900	2400	59RP10W
1.2	Black	1100	2400	59RP12B

25 x 38 x 2.5mm horizontal rails. Ø 16 x 1.2mm infill bars.

GATE



Overall Height m	PPC	Height mm	Width mm	Code
1.0	Black	900	962	59SLG10B
1.0	White	900	962	59SLG10W
1.2	Black	1100	962	59SLG12B

38 x 25 x 1.5mm frame. Ø 16 x 1.2mm infill bars. Please order hinges and latches below.

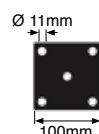
CONCRETE-IN POST



Overall Height m	PPC	Height mm	□ mm	Code
1.2	Black	1600	50	59PC12B

2.5mm thickness.

BOLT-DOWN POST



Overall Height m	PPC	Height mm	□ mm	Code
1.0	Black	1050	50	59PB105B
1.0	White	1050	50	59PB105W
1.2	Black	1250	50	59PB125B

2.5mm thickness.

RAILING BRACKET

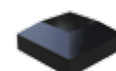
Pack of 4



PPC	To suit □ mm	Code
Black	25 x 38	59BR3825B
White	25 x 38	59BR3825W

Supplied as a pack of 4, with 12 x self-drilling screws.

POST CAP



PPC	□ mm	Code
Black	50	59PT50B
White	50	59PT50W

Hammer fit.

ACCESSORIES

Product	Code
Magnetic latch. Supplied with fixings. Polymer	Non-lockable: 09FA27 . Lockable: 09FA28 .
Hinge. Supplied in pairs. Please order 8 x 59SC519B . Polymer	09FA30
Lockable drop bar. Supplied with fixings	09FA29
Self-drilling screw. M5 x 19mm long. Dacromet coated	Black gloss: 59SC519B . White gloss: 59SC519W

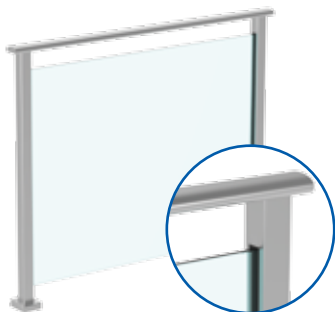


Marano® railings are a range innovative railing systems designed to be fully modular. The pre-assembled aluminium posts have a stunning satin anodised finish and are available in square and round profiles ready to install. Fully engineered to meet the requirements of most applications, the systems can be installed with or without a top rail to provide an economical solution for a post and glass panel design. Each system can be fully fitted using basic equipment.

FEATURES:

- Fully assembled posts
- Aluminium & satin anodised finish
- To suit 10mm glass
- Suitable for indoor & outdoor installations
- Quick, safe & easy installation
- Gap between handrail & glass is 80mm
- Bottom edge of glass to floor is 90mm
- Tested to 1.2m posts centres
- Posts available in bolt-down & side-fix
- Posts are supplied complete

SQUARE POSTS WITH HANDRAIL
Railing height 1125mm



- Glass panel is H 930 x W 1174mm

SQUARE POSTS WITHOUT HANDRAIL
Post height to 1100mm



- Glass panel is H 1005 x W 1174mm
- You will need to buy blanking caps or notched post caps to suit design.

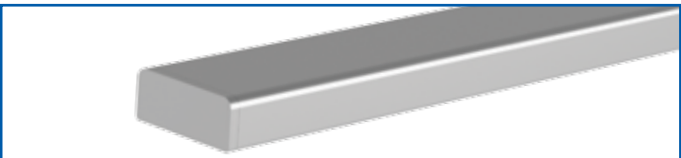
HANDRAILING



Image shows a square post using a rectangular handrail.



Image shows a round post using an oval handrail.

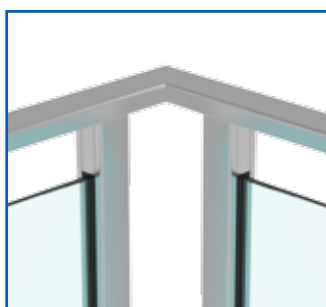


RECTANGULAR & OVAL HANDRAILS CAN BE USED WITH BOTH
SQUARE & ROUND POSTS. FOR HANDRAILS SEE PAGE 521.

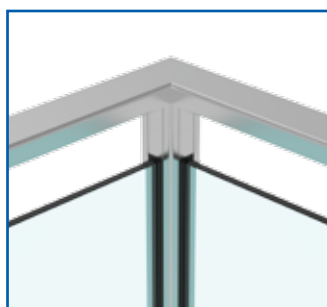


HOW TO TACKLE CORNERS

MITRED CUT NO POST



MITRED CUT WITH POST

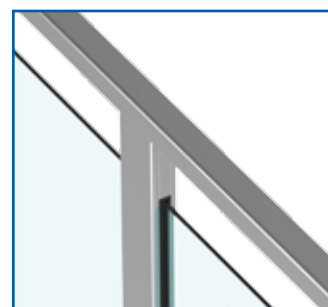


HOW TO TACKLE GRADIENTS

MITRED CUT HANDRAIL

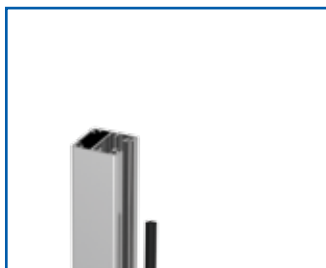


MITRED CUT POST



FITTING GLASS

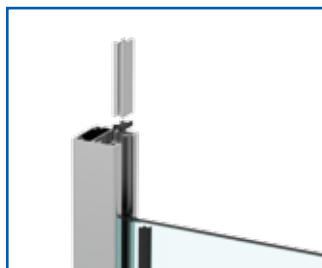
Fitting glass is easy with our 4 step guide.



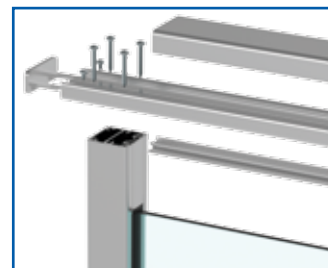
Fit back rubber to the post.



Slide glass in from the top between posts.



Fit glass retaining rubber, top packer & infill.



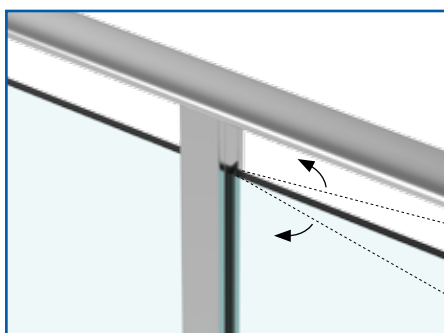
Fit the handrail (using the location jig, see page, 521). Slide on the handrail under-cap and top handrail.

When fitting glass make sure the back rubber is fitted to the post, then install retaining rubber once glass is in place.



INSTALLATION GUIDE & VIDEO ARE AVAILABLE AT
www.fhbrundle.co.uk

POST HEIGHT



- Posts can be cut down if a shorter height is needed
- Capping will slide back in to give 80mm gap from glass to rail
- Allows 8 - 10° glass angle each side with rubbers

Spray soapy water on rubbers to help slide glass into rubber locators.



FOR OUR RANGE OF GLASS, SEE PAGE 617.

SQUARE

POSTS & GLASS PANELS

BOLT-DOWN END



Height mm	□ mm	Code
1100	50	6805791S50

Supplied with post caps, packers, rubbers, handrail screws and cover plate.

BOLT-DOWN MID



Height mm	□ mm	Code
1100	50	6805792S50

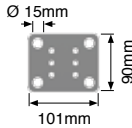
Supplied with post caps, packers, rubbers, handrail screws and cover plate.

BOLT-DOWN CORNER

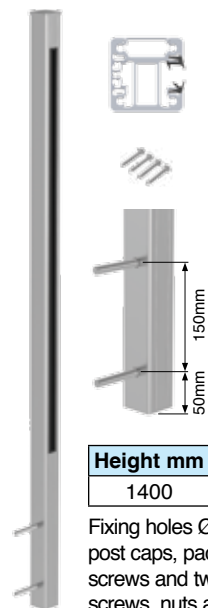


Height mm	□ mm	Code
1100	50	6805793S50

Supplied with post caps, packers, rubbers, handrail screws and cover plate.



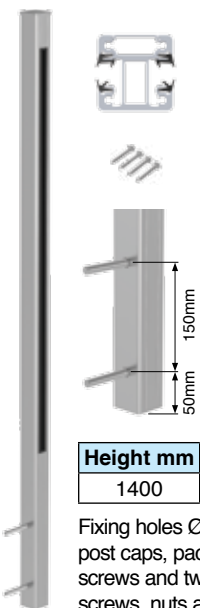
SIDE-FIX END



Height mm	□ mm	Code
1400	50	6805794S50

Fixing holes Ø 13mm. Supplied with post caps, packers, rubbers, handrail screws and two M12 x 120mm fixing screws, nuts and washers.

SIDE-FIX MID



Height mm	□ mm	Code
1400	50	6805795S50

Fixing holes Ø 13mm. Supplied with post caps, packers, rubbers, handrail screws and two M12 x 120mm fixing screws, nuts and washers.

CLEAR FLOAT TOUGHENED GLASS PANEL
For use with no handrail



Height mm	Width mm	Code
1010	1174	18551010101174

CLEAR FLOAT TOUGHENED GLASS PANEL
For use with Marano top rails



Height mm	Width mm	Code
930	1174	1855109301174

POST BLANKING CAPS

END CAP



Code
6805BCES50

MID CAP



Code
6805BCMS50

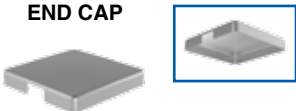
CORNER CAP



Code
6805BCCS50

NOTCHED POST CAPS

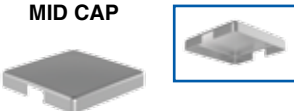
END CAP



Code
6805ECES50

Brings post height to 1100mm.

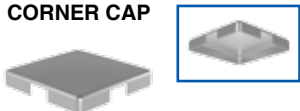
MID CAP



Code
6805ECMS50

Brings post height to 1100mm.

CORNER CAP



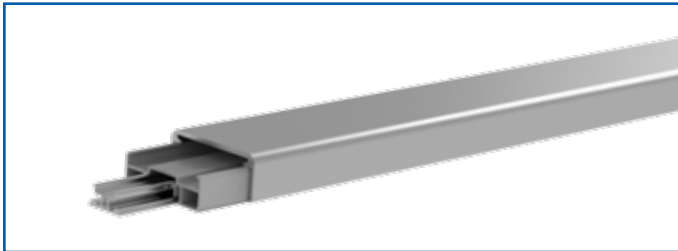
Code
6805ECCS50

Brings post height to 1100mm.

HANDRAILING

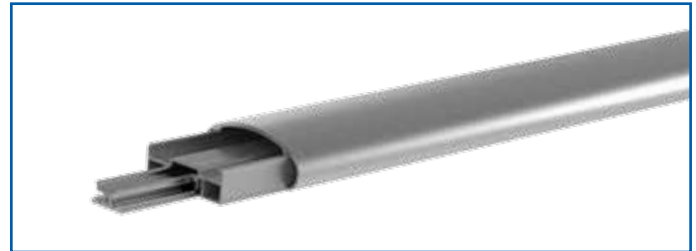
HANDRAILS

RECTANGULAR HANDRAIL



Length m	mm	Code
3.0	62 x 25	680570536225
5.8	62 x 25	68057056225

OVAL HANDRAIL

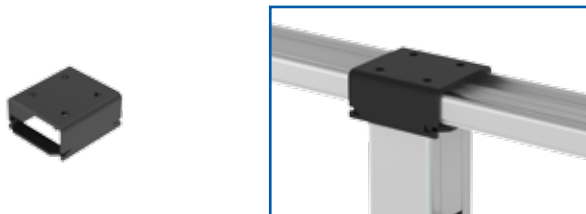


Length m	mm	Code
3.0	72 x 27	680570537227
5.8	72 x 27	68057057227

HANDRAIL/POST LOCATION JIGS

END/MID JIG

For drilling through handrail



Code
6899732J

Plastic.

CORNER JIG

For drilling through handrail



Code
6899733J

Plastic.

HANDRAIL FITTINGS

END CAP

For use with rectangular handrail



Code
68054136225

Supplied with two screws.

WALL BRACKET

For use with rectangular handrail



Code
68054156225

Supplied with four screws.

END CAP

For use with oval handrail



Code
68054137227

Supplied with two screws.

WALL BRACKET

For use with oval handrail



Code
68054157227

Supplied with four screws.

IN-LINE CONNECTOR

For use with rectangular & oval handrails



Code
6805412I

Internal fix. Supplied with four screws.

90° CORNER CONNECTOR

For use with rectangular & oval handrails



Code
6805411I

Internal fix. Supplied with four screws.

SPARES & ACCESSORIES

Product	Code
Base plate. For use with bolt-down posts	680520750
Cover plate. For use with bolt-down base plate	680520850
Blanking strip. For use with side-fix mid posts. 1.4m long	68BS1400
Rubber gasket set H 1100mm	68RG1100
Rubber gasket set H 6000mm	68RG6000
Packers. For use with posts. Pack of 10. Plastic	68PP01
Eraser for cleaning marks and scratches on anodising	6899AE01
Assembly tool. For rubber sealing strips	6899RR01

For corners with no post use a 90° corner connector to strengthen the handrail.

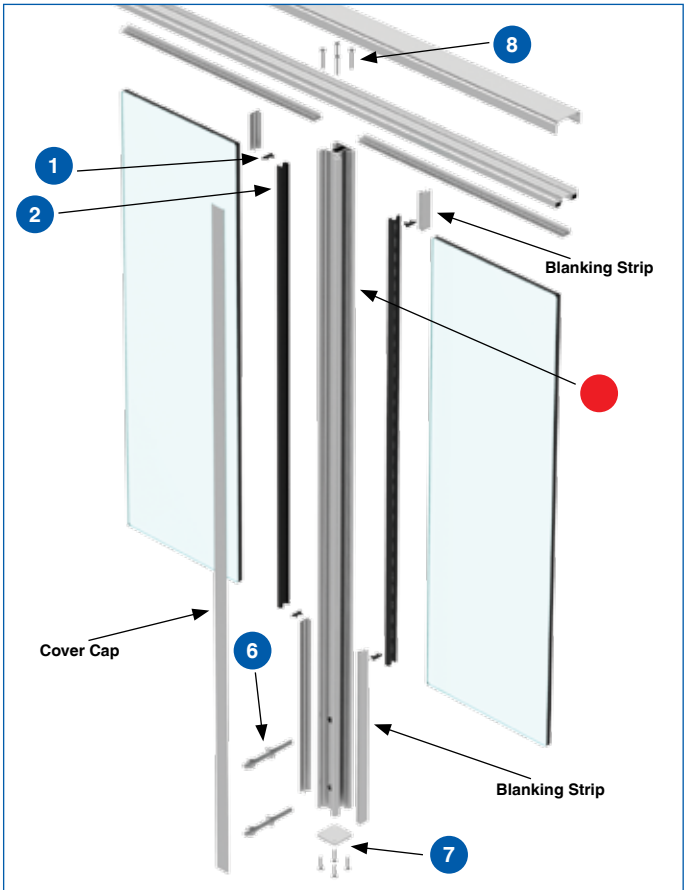
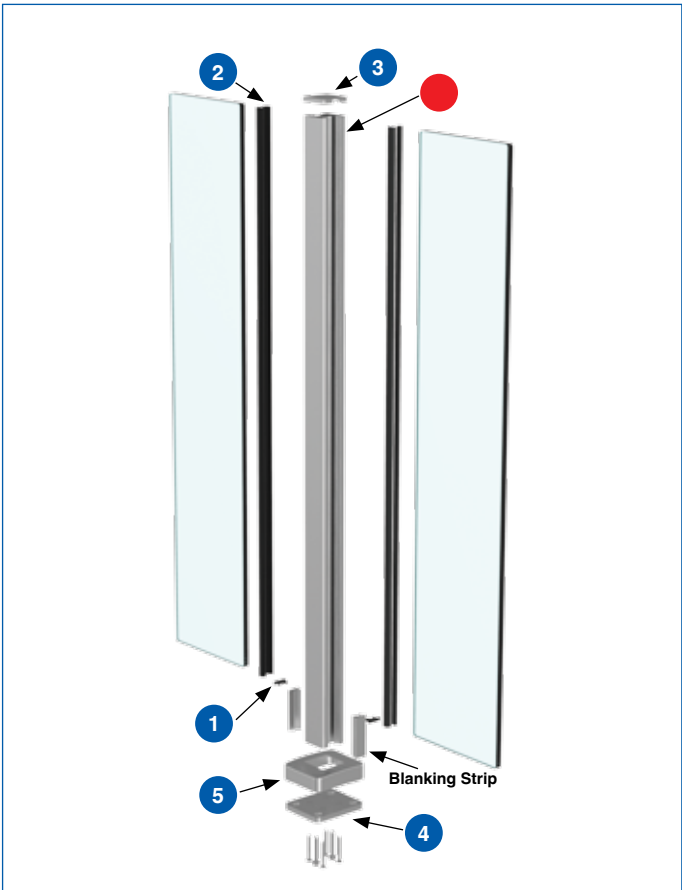


IF NO HANDRAIL IS REQUIRED, 1100mm RUBBERS WILL NEED TO BE ORDERED.

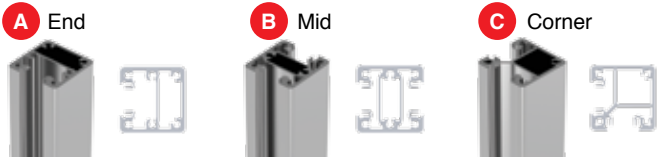
MARANO® MAKE YOUR OWN POSTS



SQUARE



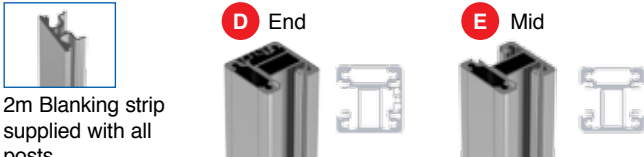
BOLT-DOWN EXTRUSION



Post	Height m	□ mm	Code
End	6	50	6805691S50
Mid	6	50	6805692S50
Corner	6	50	6805693S50

Supplied with 2m blanking strip. Please order rubber gaskets separately.

SIDE-FIX EXTRUSION



Post	Height m	□ mm	Code
End	6	50	6805694S50
Mid	6	50	6805695S50

Supplied with 2m blanking strip and 6m cover cap. Please order rubber gaskets separately.

PACKERS



Code
68PP01

Pack of 10. Plastic.

RUBBER GASKETS



Length m	Code
1.1	68RG1100
6.0	68RG6000

Sold in pairs, 1 x back rubber & 1 x glass retaining rubber.

POST CAP



Code
6805PC01

BASE PLATE

Use with bolt-down posts



Code
680520750

Supplied with 6 fixings.

COVER PLATE

Use with bolt-down base plate



Code
680520850

POST FIXINGS

Use with side-fix posts



Code
68PF01

Sold in pairs.

POST BASE COVER

Use with side-fix posts



Code
6805PBC01

Supplied with 4 fixings.

TOP RAIL FIXINGS



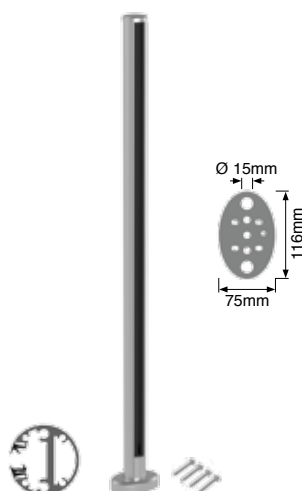
Code
68HF01

Pack of 4. For attaching handrail to post.



POSTS

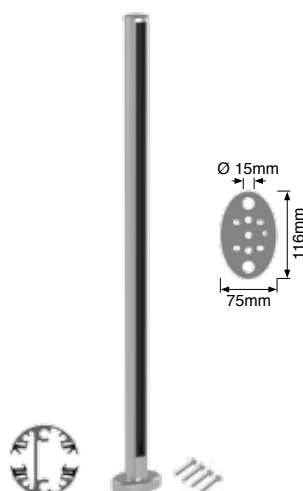
BOLT-DOWN END



Height mm	Ø mm	Code
1100	54	6805791R54

Supplied with post caps, packers, rubbers, handrail screws and cover plate.

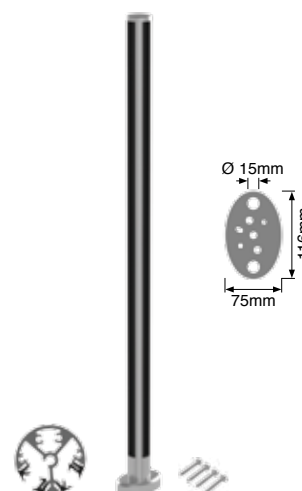
BOLT-DOWN MID



Height mm	Ø mm	Code
1100	54	6805792R54

Supplied with post caps, packers, rubbers, handrail screws and cover plate.

BOLT-DOWN CORNER

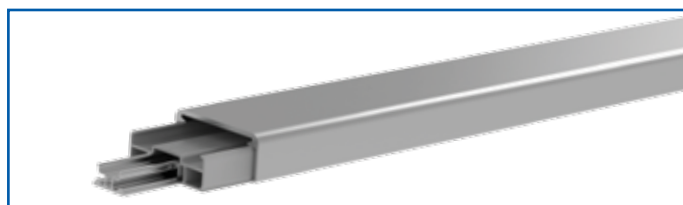


Height mm	Ø mm	Code
1100	54	6805793R54

Supplied with post caps, packers, rubbers, handrail screws and cover plate.

HANDRAILS

RECTANGULAR HANDRAIL



Length m	mm	Code
3.0	62 x 25	680570536225
5.8	62 x 25	68057056225

OVAL HANDRAIL



Length m	mm	Code
3.0	72 x 27	680570537227
5.8	72 x 27	68057057227

BASE PLATE COVER

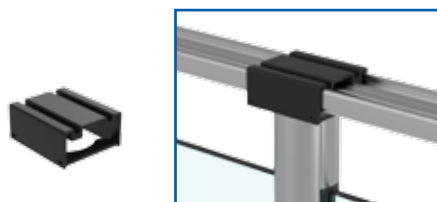


Code
680520854

To suit Ø 54mm round post.

END/MID JIG

For drilling through handrail

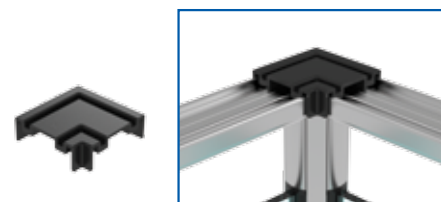


Code
6899732J54

Plastic.

CORNER JIG

For drilling through handrail



Code
6899733J54

Plastic.

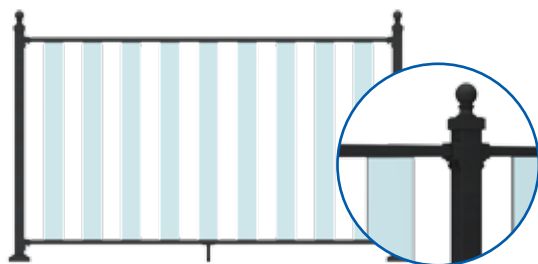
CONTEMPORARY



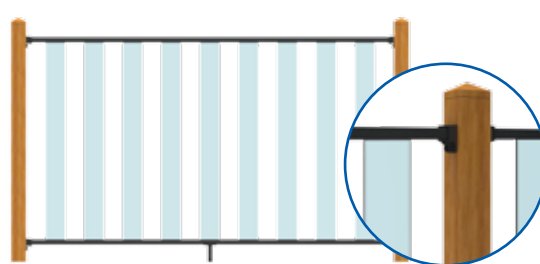
Marano® Contemporary railings offer style and sophistication without compromising the views. With its simple slide technology, the channel is quick and easy to install. Choose from 3 polyester powder coated channel colours: black gloss RAL 9005, black sand and white gloss RAL 9016, these are also available in a mill/raw finish. A choice of two glass sizes: 2 x 760mm glass panels or 9 x 95mm glass slats.

FIXING SCENARIOS

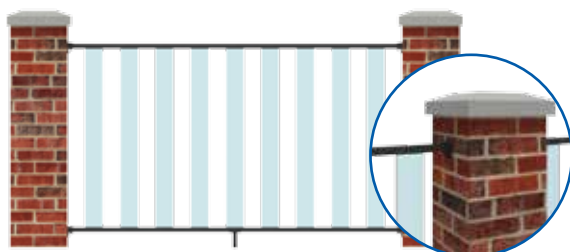
FIXED TO STEEL POSTS



FIXED TO WOODEN POSTS



FIXED TO BRICK PILLARS



**RAILING KITS CAN BE CUT TO FIT
DIFFERENT POST CENTRES.
GLASS PANELS MADE TO SUIT
DIFFERENT RAILING HEIGHTS.
CALL YOUR LOCAL BRANCH.**

TWO GLASS STYLES TO CHOOSE FROM

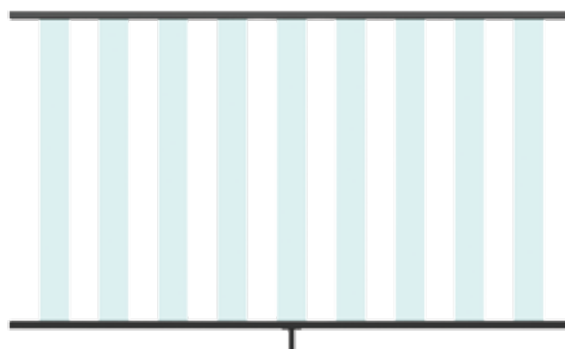
TWO GLASS PANELS



To achieve this look, order:

- 1 x channel kit, colour options on the next page
- 2 x glass panels 760 x 985 x 8mm, code: **1855087601000**
- 1 x railing bracket (pack of 4)

NINE GLASS SLATS



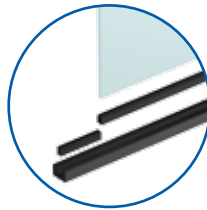
To achieve this look, order:

- 1 x channel kit, colour options on the next page
- 1 x glass slats kit, see glass colour options on the next page
- 1 x railing bracket (pack of 4)

RAILING KIT

To suit 8mm glass

Don't forget to order railing brackets!

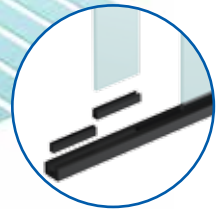


Finish/PPC	Length m	Height mm	Width mm	Code
Mill/raw	1.8	25	38	59AC3818R
black gloss	1.8	25	38	59AC3818BG
black sand	1.8	25	38	59AC3818BS
white gloss	1.8	25	38	59AC3818W

Kit includes 2 x channels, 4 x gaskets, 6 x wedges, 1 x support foot with 1 x wood screw and 2 x self-drilling screws. Glass and railing brackets sold separately.

GLASS SLATS KIT

For use with Channel Kit

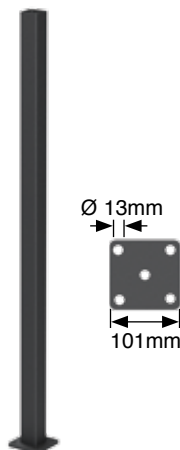


Glass	Height m	Width mm	Thickness mm	Code
Clear	1.0	95	8	59GP188C
Grey tinted	1.0	95	8	59GP188T

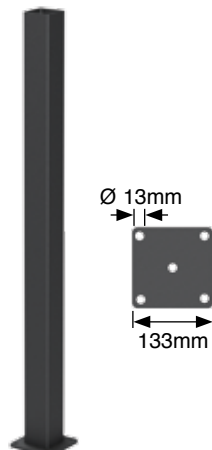
Kit includes 9 x slats, 18 x gaskets and 14 x wedges to cover a 1.8m length.

FLUTED POSTS

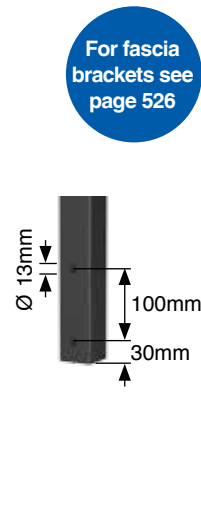
50mm BOLT-DOWN



75mm BOLT-DOWN

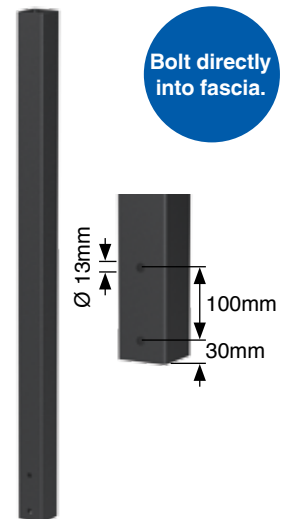


50mm SIDE-FIX



For fascia brackets see page 526

75mm SIDE-FIX



Bolt directly into fascia.

PPC	Code
Black sand	59PBF5011BS
White gloss	59PBF5011W

1155mm height. 3mm thickness. Supplied with no post cap.

PPC	Code
Black sand	59PBF7511BS
White gloss	59PBF7511W

1155mm height. 3mm thickness. Supplied with no post cap.

PPC	Code
Black sand	59PSF5013BS
White gloss	59PSF5013W

1345mm height. 3mm thickness. Supplied with no post cap.

PPC	Code
Black sand	59PSF7513BS
White gloss	59PSF7513W

1345mm height. 3mm thickness. Supplied with no post cap.

BALL CAP



To suit 50mm posts. To suit 75mm posts.

PRESSED CAP



PYRAMID CAP



RAILING BRACKET

Pack of 4



PPC	To Suit □ mm	Code
Black sand	50	64CB50B
White gloss	50	64CB50W
Black sand	75	64CB75B
White gloss	75	64CB75W

PPC	To Suit □ mm	Code
Black sand	50	64CD50B
White gloss	50	64CD50W
Black sand	75	64CD75B
White gloss	75	64CD75W

PPC	To Suit □ mm	Code
Black sand	50	64CP50B
White gloss	50	64CP50W
Black sand	75	64CP75B
White gloss	75	64CP75W

Finish/PPC	To suit □ mm	Code
Mill/raw	25 x 38	59BR3825R
Black gloss	25 x 38	59BR3825B
Black sand	25 x 38	59BR3825BS
White gloss	25 x 38	59BR3825W

Supplied as a pack of 4, with 12 x self-drilling screws.



FASCIA MOUNT BRACKETS FOR 50mm SIDE-FIX POSTS

MID BRACKET



Finish/PPC	To Suit □ mm	Code
Mill/raw	50	59FMM50R
Black gloss	50	59FMM50B
Black sand	50	59FMM50BS
White gloss	50	59FMM50W

Ø 10.5mm fixing holes. Supplied with 4 x M5 self-drilling screw to secure post in place.

INSIDE CORNER BRACKET



Finish/PPC	To Suit □ mm	Code
Mill/raw	50	59FMIC50R
Black gloss	50	59FMIC50B
Black sand	50	59FMIC50BS
White gloss	50	59FMIC50W

Ø 10.5mm fixing holes. Supplied with 4 x M5 self-drilling screw to secure post in place.

OUTSIDE CORNER BRACKET



Finish/PPC	To Suit □ mm	Code
Mill/raw	50	59FMOC50R
Black gloss	50	59FMOC50B
Black sand	50	59FMOC50BS
White gloss	50	59FMOC50W

Ø 10.5mm fixing holes. Supplied with 4 x M5 self-drilling screw to secure post in place.

SPARES & ACCESSORIES

SUPPORT FOOT



Finish/PPC	Code
Mill/Raw	59SFR
Black Gloss	59SFBG
Black Sand	59SFBS
White Gloss	59SFW

Supplied with 1 x M4 wood screw and 2 x M6 self-tapping screws.

WEDGES



Length mm	Code
94	59W01B

Black plastic.

GASKET



Length mm	Code
96	59G02B
761	59G01B

Black PVC plastic.

SELF-DRILLING SCREW



Finish PPC	Ø mm	Code
Black Gloss	M5	59SC519B
White Gloss	M5	59SC519W

Length 19mm. Self-drilling. Dacromet coated.

FOR OUR COMPLETE RANGE OF COMPOSITE DECK BOARDS SEE PAGE 441.



Our new cost effective range of anodised aluminium handrail fittings and tube, offers the installer a simple, modular system that simply glues and screws together. The end result is a stunning, low maintenance, lightweight, durable handrail solution. The system comprises of a top rail made from Ø 50mm tube in three exquisite finishes, with a Ø 42mm post that is designed to provide maximum strength.

TUBE



Length m	Ø mm	Code
5.8	50	7605700506

GOLDEN OAK

Wood effect



Length m	Ø mm	Code
5.8	50	760570050G6

WALNUT

Wood effect



Length m	Ø mm	Code
5.8	50	760570050W6

THESE TUBES ARE ONLY COMPATIBLE WITH HORIZON STAINLESS STEEL TUBE FITTINGS.

IN-LINE CONNECTOR



Ø mm	Code
50	760520650

END CAP



Ø mm	Code
50	760521550

HANDRAIL BRACKET



Ø mm	Code
50	7605305F50

Please order pack of screws code: **5004CS4232** x 2 to fix to handrail.



Image shows application of handrail bracket code: **7605305F50**.

HANDRAILING

ADJUSTABLE ELBOW



Ø mm	Code
50	760522750

90° ELBOW



Ø mm	Code
50	760520250

30° ADJUSTABLE WALL BRACKET



Ø mm	Code
50	760522950

Please order pack of screws code: **5004CS4232** x 2 if fixing to steel/aluminium posts.

WALL BRACKET



Ø mm	Code
50	760520950

Please order pack of screws code: **5004CS4232** x 2 if fixing to steel/aluminium posts.

FOR OUR FULL RANGE OF TOP RAIL SYSTEMS SEE PAGE 559.

HORIZON

SQUARE GLASS CLAMP

Round back



To suit tube Ø mm	Glass mm	Code
42.4	10	760540250

Supplied with rubbers to suit. Please order pack of screws code: **5004CS4232** x 2 to fix to post.

IN-LINE CONNECTOR

Round back



To suit tube Ø mm	Glass mm	Code
42.4	10	7605SS403C

Supplied with rubbers to suit. Please order pack of screws code: **5004CS4232** x 2 to fix to post.

IN-LINE CONNECTOR

Round back



To suit tube Ø mm	Glass mm	Code
42.4	10	7605SD403C

Supplied with rubbers to suit. Please order pack of screws code: **5004CS4232** x 2 to fix to post.

POST



Length m	Ø mm	Code
1.005	42.4	7605708C*
5.800	42.4	7605708C58

*Gives overall height of 1100mm handrail when using a base plate, handrail saddle and Ø 50mm tube.

FIXED HANDRAIL SADDLE



Ø mm	Code
50	760531050

Please order pack of screws code: **5004CS4232** x 2 to fix to handrail.

ADJUSTABLE HANDRAIL SADDLE



Ø mm	Code
50	760531250

Please order pack of screws code: **5004CS4232** x 2 to fix to handrail.

90° FIXED CORNER



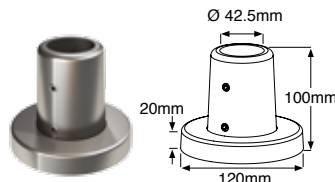
Ø mm	Code
50	7605311C50

ADJUSTABLE CORNER



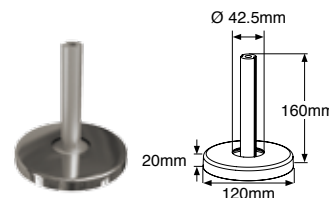
Ø mm	Code
50	760531750

BASE PLATE EXTERNAL FIT



Ø mm	Code
42.4	760521150

BASE PLATE INTERNAL FIT



Ø mm	Code
42.4	760523550

Supplied with cover cap.

SPLIT TUBE



Length m	Ø mm	Glass mm	Code
6	26	10	7605705A

FIXED SPLIT TUBE HOLDER



To suit tube Ø mm	Ø mm	Code
42.4	26	7605501C

Please order pack of screws code: **5004CS4232** x 2 if fixing to aluminium posts.

RUBBER GASKET

Per metre



Length m	Glass mm	Code
1	10	7605705G10

ADJUSTABLE SPLIT TUBE HOLDER



To suit tube Ø mm	Ø mm	Code
42.4	26	7605509C

Please order pack of screws code: **5004CS4232** x 2 if fixing to aluminium posts.



Image shows application of adjustable split tube holder code: **7605509C**.



MARANO®

HORIZON

FASCIA BRACKET



Height mm	Ø mm	Code
100	42.4	760521350

FASCIA BRACKET



Height mm	Ø mm	Code
150	42.4	760521950

ACCESSORIES



Description	Code
Glue 50ml	1899007638
Screws	5004CS4232

DRILLING JIG



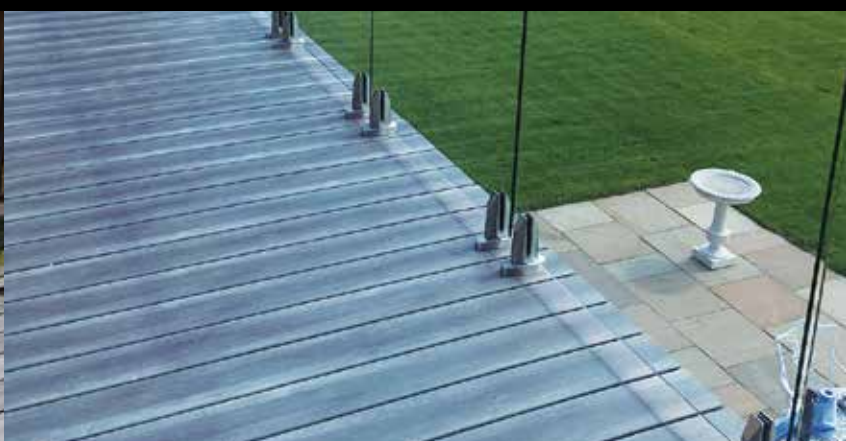
Length m	Code
1	7699DJ01



Drilling jig is used to secure post when drilling fixing holes. To suit screws code: **5004CS4232**. Not supplied with drill.

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