

2021



### INTRODUCTION



#### THE STAINLESS STEEL HANDRAIL COMPONENT SYSTEM



Stylish, durable and cost effective stainless steel handrailing component system designed with ease of installation in mind.

The comprehensive range of components allows you to specify and install without the need for fabrication and maximises on-site flexibility for those changes that inevitably arise.

The system enables the most stylish of handrailing and balustrades to be constructed quickly and simply by the contractor. All you have to do is cut, glue or screw to create professional results every time.

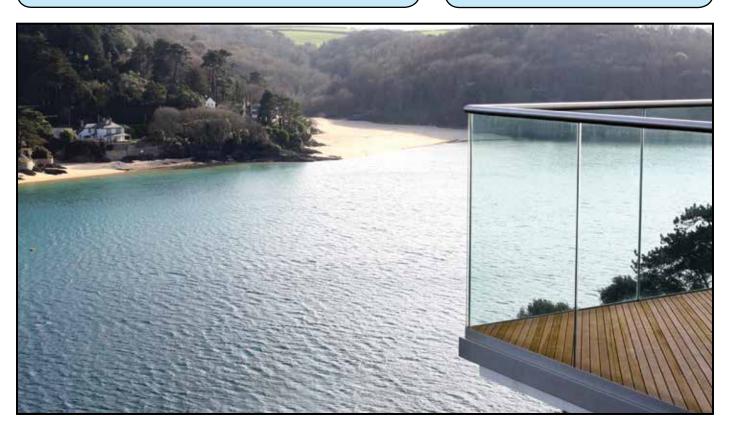
Specifiers can be assured that component design and range flexibility mean installation by a competent installer is a straight forward process.

We offer a range of infill solutions using glass with glass clamps, wire rope, round bar and decorative bars. We can also manufacture infill panels incorporating perforated metal, wire mesh and wire rope netting.

Available in Grade 304 and 316 to suit internal and external applications, you can be sure the quality and product care will provide stunning results.

ALL FITTINGS ARE STAINLESS STEEL WITH 2mm WALL THICKNESS UNLESS OTHERWISE STATED.

SATIN POLISH FINISH IS 320 GRIT & MIRROR FINISH IS 800 GRIT.





### **CONTENTS**

**SPIGOTS** 



**BALUSTRADE SYSTEMS** 



**TOP RAIL SYSTEMS** 



**MARANO® HANDRAILING** 



**PRE-ASSEMBLED POSTS** 



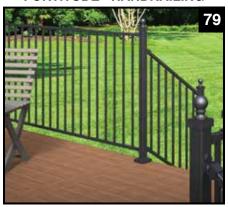
**GLASS CLAMPS** 



**BALCONIES** 



FORTITUDE™ HANDRAILING



SYNERGISED™ DECKING



#### **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 the catalogue. Products not colour coded will have their material or finish below the table.



Grade 304

Stainless steel (Internal)





Zamac (Zinc aluminium alloy)



Zinc



Mild Steel



Galvanised



Aluminium



Duplex 2205 (Ultra marine stainless)

#### **ICONS**

Throughout the catalogue there are various icons to help you with your product selection.



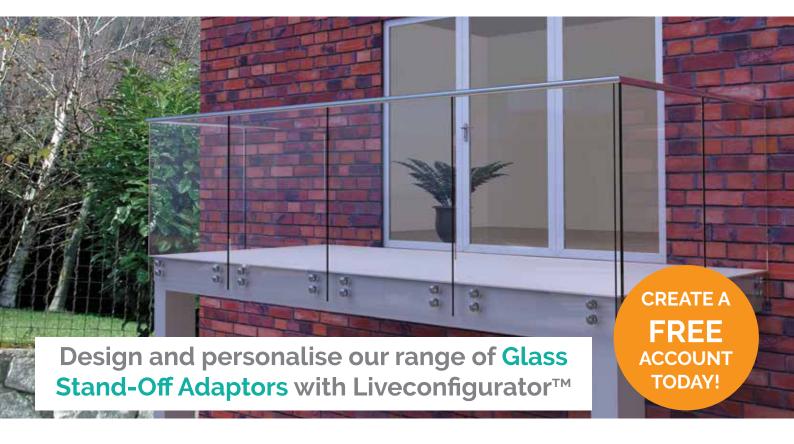
Technical information that can be found on our website.



Handy tip for quicker and more effortless installation.

# **live**configurator

### REAL TIME DESIGN





Configure to Your Specification



Accurate Drawings



Eliminate Mistakes



Instant Quotes

- ✓ Save time estimating your balustrade
- ✓ Get a very competitive quote within minutes
- ✓ Use 24/7 any day of the year
- ✓ Save hours of time drawing
- ✓ A choice of styles, layouts, glass and components
- ✓ Receive 100% accurate CAD drawings, free of charge
- ✓ Real time design
- ✓ Impress customers with your fast response and ability to provide drawings



Simple to use, Liveconfigurator™ will generate a quote for stainless steel and glass balustrade systems in minutes, at any time or any day. It will also provide a list of all the parts you need to complete your project almost instantly. If you prefer to speak to one of our staff you can request a call back.

- Get a quote in minutes
- Use 24/7 any day of the year
- You have a choice of systems
- Save hours of time drawing

- Automatically configure drawings to your dimensions
- Provide accurate, detailed layout drawings
- Ideal for anyone designing a glass balustrade
- Makes installation easier and faster

# **GLASS STAND-OFF ADAPTORS**

**FLAT BACK** 



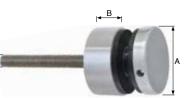
#### **GLASS ADAPTOR**

For use with round posts



Code	Glass Hole Size Ø mm	Glass mm	(C) mm	(B) mm	(A) Ø mm	Ø mm
1802404C	15	6 - 12	8	15	30	42.4
1804454C	22	8 - 19	10	10	50	42.4
1804454D	22	8 - 19	10	10	50	48.3
1806454D	22	8 - 19	10	10	50	48.3

**SOLID** Flat front



(A) Ø mm	(B) mm	(C) Ø mm	Glass mm	Glass Hole Ø mm	Satin Polish Code	Mirror Finish Code
30	15	8	6 - 12	15	1802404F	-
30	15	8	6 - 12	15	1806404F	1806404FM
50	20	10	8 - 19	22	1806455	1806455M
50	30	10	8 - 19	22	1806456	1806456M
50	40	10	8 - 19	22	1806457	1806457M
50	50	10	8 - 19	22	1806458	1806458M

**SOLID** Domed front

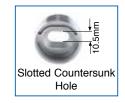


Glass mm	Glass Hole Ø mm	Satin Polish Code	Mirror Finish Code
8 - 19	22	1804454F	-
8 - 19	22	1806454F	1806454FM

#### **ADJUSTABLE HOLLOW**

Flat front





(A) mm	Glass mm	Glass Hole Ø mm	Satin Polish Code	Mirror Finish Code
20	12.76 - 17.50	26	1806459	1806459M
30	12.76 - 25.50	26	1806460	1806460M
40	8.00 - 25.50	26	1806461	1806461M
50	8.00 - 25.50	26	1806462	1806462M

Fixing bolt not supplied. Use code: 1899006112.

#### **SPANNER**

# INTERNAL THREADED ANCHOR

For use with adjustable stand-off adaptor







Size mm	Code
M10 x 100	5004RS10100F

#### COUNTERSUNK SCREW

CR-LX-CS-ZF



Size mm	Code
M10 x 100	5002CCS10100

#### **MESH SLEEVE**

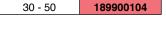
Size mm	Code
M10	50WMS101000

#### **RKER II HYBRID RESIN**

Suitable for use in dry & wet substrates & water filled holes



ml	Code
300	50RKER300



Code

To Suit Ø mm

### **SPIGOTS**



#### **TOP RAIL**

Please note when using a gasket this will add a few millimetres to the overall height.

**SQUARE SLIM** See page 21

**SQUARE MINI** See page 23

**ROUND MINI** See page 24

**RECTANGULAR** See page 26

OVAL See page 27

ROUND See page 25

MIRROR FINISH **ROUND** See page 75

**ALUMINIUM RECTANGULAR** See page 22









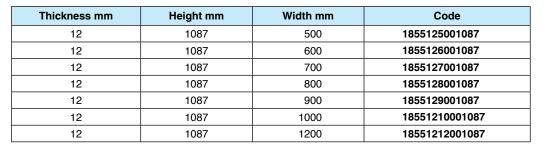












FOR 15mm STANDARD GLASS PANELS OR MADE TO ORDER GLASS PANELS PLEASE SEE FROM PAGE 10.

**HEX HEAD** WITH FLANGE See page 88

**HEX HEAD MULTI-FIX BOLT** See page 88

**THROUGH BOLT** See page 89

COUNTERSUNK **CONCRETE SCREW** See page 88

**RESIN** SOCKET See page 90

**R-STUD** WITH FLAT HEAD See page 90

A STATE OF THE STA



FOR OUR FULL RANGE OF FIXINGS SEE PAGE 88.



316

Zinc

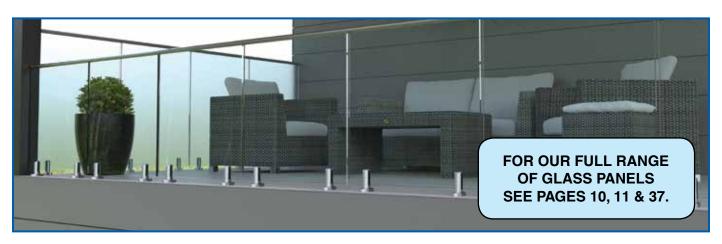
Zamac

Mild steel

Galvanised

Aluminium

# **SPIGOTS**



#### **FEATURES:**

- Economic frameless glass solution
- For use with 10 21.5mm glass

#### **DUPLEX ROUND SPIGOT**

No holes in glass needed



Not structurally tested

Finish	Code
Satin	1822009
Mirror	1822009M

To suit 12 - 15mm glass. Height to glass from base is 67mm. For M8 x 75mm bolt use code: **5002CCS875**. For M8 x 100mm bolt use code: **5002CCS8100**.

#### **GRADE 316 COVER CAP**

To suit duplex round spigot



Finish	Code
Satin	1822009CP
Mirror	1822009MCP

 Duplex 2205 (ultra marine stainless) option, stronger & reduced cleaning frequency when compared to Grade 316

#### SQUARE SPIGOT

No holes in glass needed



Glass Thickness mm	Code
12 - 21.50	1822010

Supplied with nut socket. To be used with M12 x 120mm lag screw with Allen key head code: **1899006124**.

#### PACKING SHIM

No holes in glass needed.

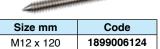


Code 1822010S

Thickness 3mm.

#### LAG SCREW

With Allen key head

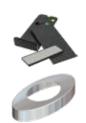


Please order nut code: **189900639** and washer code: **189900633**.

#### **ROUND SPIGOT**

No holes in glass needed





Description	Code
Round spigot	1822007
Cover cap	1822007CP

10 - 21.5mm Glass thickness. Height to glass when packer fitted is 45mm.

#### **SQUARE SPIGOT**

No holes in glass needed



Description	Code
Square spigot	1822008
Cover can	1822008CP

10 - 21.5mm Glass thickness. Height to glass when packer fitted is 45mm.

#### **PPC MATT BLACK SPIGOT**

No holes in glass needed





Description	Code
Square spigot	1822011B
Cover cap	1822011CPB

12mm Glass thickness. Height to glass when packer fitted is 53mm. Black PPC finish.

#### **FIXINGS**

Description	Size mm	Code
Locator Nut - For use with cover plate. Excess thread to be cut off after installation	M12	1829012N
Covered Locator Nut - For use instead of cover plate. Hides bolt thread under nut	M12	1829012DN
Lag Screw with Allen key head	M12 x 120	1899006124
Concrete Bolt Self-tapping - For cracked and non-cracked concrete	M12 x 75	5002HCS1275
Concrete Bolt Self-tapping - For cracked and non-cracked concrete	M12 x 100	5002HCS12100

# TILT-LOC™

#### RESIDENTIAL BALUSTRADE SOLUTION



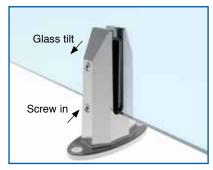
#### **FEATURES:**

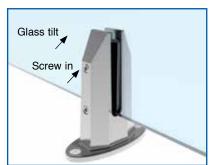
- Duplex 2205 (ultra marine stainless)
- Satin polish

- New adjustable tilt-lock technology
- Adjustment from one side



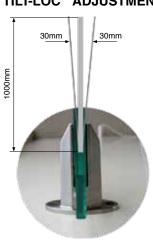
#### **TILT-LOC™ TIGHTENING**





Level by hand and tighten the grub screws once in position for a perfect finish in half the time compared to a standard non-adjustable spigot. The Tilt-Loc $^{\text{\tiny M}}$  system can easily be hand adjusted from one side by one person.

TILT-LOC™ ADJUSTMENT



TILT-LOC™ - BOLT DOWN



Glass mm	Height to Glass with Packer mm	Code
12 - 17.50	51	1822001
19 - 25.50	46	1822002



TILT-LOC™ - SIDE

Glass mm	Height to Glass with Packer mm	Code
12 - 17.50	39	1822003
19 - 25.50	44	1822004

TILT-LOC™- EDGE



Glass mm	Height to Glass with Packer mm	Code
12 - 17.50	43	1822005
19 - 25.50	43	1822006

Cover cap included.







Code	
1829002	

#### **ALIGNMENT GAUGE**

For use with Tilt-Loc™ - Side



8
Code
1829001

304 31

316

Zinc

Zamac

Mild steel

Galvanised

Aluminium

### **BALUSTRADE SYSTEMS**



#### **WEDGE-LOC® SLIM**

- · Available in satin anodised & mill finish
- Pre-drilled channel fixing holes
- Suitable for glass from 12 25.52mm thickness
- · Side or base-fix options
- · Quick to install







#### **WEDGE-LOC® F CHANNEL**

- · Available in satin anodised
- · For installations under screed or decking subframes
- Suitable for glass from 12 21.5mm thickness
- F profile allows flush fitting to the edge of your substrate







#### WEDGE-LOC® DUO

- Available in satin anodised & PPC black finish
- · Adjustable grips to allow quick alignment of glass
- Suitable for glass from 15 25mm
- For installations up to 1.5kN in commercial applications
- + / -1° adjustment on glass
- Side or base-fix options







- Satin anodised (Grade 6063 T6) Aluminium
- Suitable for glass from 12 21.5mm thickness
- · Up to 30mm tilt adjustment on glass
- Pre-drilled channel fixing holes
- Side or base-fix options

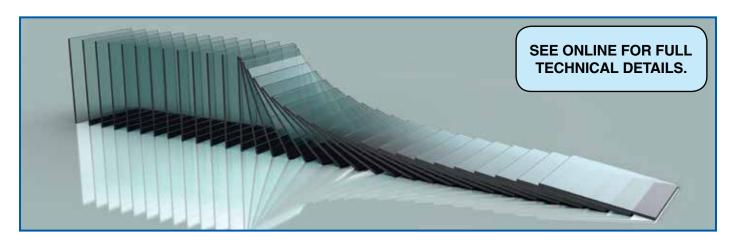






### STOCKED GLASS PANELS

#### FRAMELESS GLASS & SPIGOTS SYSTEMS



- 12 & 15mm thick toughened monolithic clear float glass
- 17.5 & 21.5mm thick PVB toughened laminated glass
- Polished all round and dubbed corners
- · Handrail should be used with toughened glass

#### 12mm TOUGHENED PANELS

Thickness mm	Height mm	Width mm	Code
12	1087	500	1855125001087
12	1087	600	1855126001087
12	1087	700	1855127001087
12	1087	800	1855128001087
12	1087	900	1855129001087
12	1087	1000	18551210001087
12	1087	1200	18551212001087

#### 15mm TOUGHENED PANELS

Thickness mm	Height mm	Width mm	Code
15	1087	500	1855155001087
15	1087	600	1855156001087
15	1087	700	1855157001087
15	1087	800	1855158001087
15	1087	900	1855159001087
15	1087	1000	18551510001087
15	1087	1200	18551512001087

#### 17.5mm PVB TOUGHENED LAMINATED PANELS

Thickness mm	Height mm	Width mm	Code
17.5	1087	500	18561755001087
17.5	1087	600	18561756001087
17.5	1087	700	18561757001087
17.5	1087	800	18561758001087
17.5	1087	900	18561759001087
17.5	1087	1000	185617510001087
17.5	1087	1200	185617512001087

#### 21.5mm PVB TOUGHENED LAMINATED PANELS

Thickness mm	Height mm	Width mm	Code
21.5	1087	500	18562155001087
21.5	1087	600	18562156001087
21.5	1087	700	18562157001087
21.5	1087	800	18562158001087
21.5	1087	900	18562159001087
21.5	1087	1000	185621510001087
21.5	1087	1200	185621512001087

#### **TOP RAIL**

Please note when using a gasket this will add a few millimetres to the overall height.

**SQUARE SLIM SQUARE MINI** See page 21

See page 23

**ROUND MINI** See page 24

**RECTANGULAR** See page 26

**OVAL** See page 27

**ROUND** See page 25 **MIRROR FINISH** ROUND See page 75

ALUMINIUM **RECTANGULAR** See page 22



304















**SPIGOTS & FRAMELESS GLASS** 















FOR OUR RANGE OF PRE-ASSEMBLED POSTS **SEE FROM PAGE 34.** 

FOR OUR RANGE OF GLASS STAND-OFF ADAPTORS **SEE PAGE 5.** 

316

Zinc

Zamac

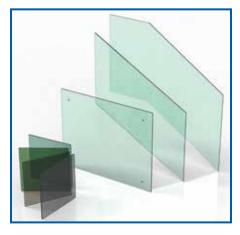
Mild steel

Galvanised

Aluminium

### MADE TO ORDER GLASS

#### **SQUARE METRE PANELS**



and come with docked corners for safety and aesthetic reasons. Glass can be supplied with radius corners, shaped, with cut-outs and drilled at extra cost. A range of coloured glass, etched glass and self-clean coatings also available. The current meterage rates can be checked online using the following codes and we can then prepare a detailed quote to meet your exact requirements. You will need to add 30% to the meterage price for shapes and cut-outs.

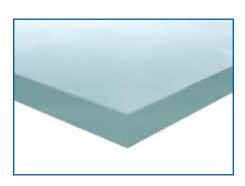
Consult with local building authorities and structural engineers to ensure correct glass specifications and fixings are used to achieve the required loadings. Where possible we have tested our systems and individual test reports are available online. For further information on the classification of building occupancy & glass loadings, visit our website.

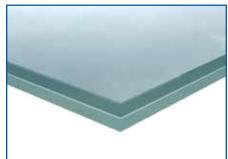
Our custom sized per square metre glass panels are polished on all edges

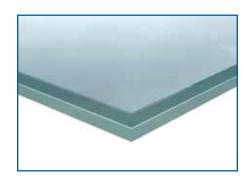
#### **TOUGHENED GLASS**

#### **TOUGHENED LAMINATED GLASS**

**SENTRYGLAS®** Ionoplast interlayer toughened glass







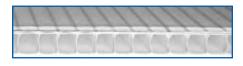
Thickness mm	Code
8	185508M
10	185510M
12	185512M
15	185515M
19	185519M
25	185525M

Thickness mm	Code
11.52	1856115M
13.52	1856135M
17.50	1856175M
21.50	1856215M
25.50	1856255M

Thickness mm	Code
12.89	18571289M
16.89	18571689M
20.89	18572089M
25.50	1857255M

Up to 5 times stronger and 100 times stiffer than conventional interlayers.

#### **TEMPLATING SHEETS**



We can provide suitable templating material that can be cut to suit any special shapes on site. This is sent to our factory for production to match the template exactly, using modern imaging scanning technology to duplicate your design. Price and availability for bespoke panels are available on application.

Height mm	Width mm	Thickness mm	Code
2440	1220	4	185900201

### **GLASS CLEANING**

#### **BOND IT GLASS CLEANER**

Fast acting all purpose cleaner with non smear formulation



	r	ĸ		
•	1	П		
	п			
٠,	ä	8	_	
ı	п	3	fi	
Н	Ľ		з	
١	ч			
М	ш		9	

Litre	Code
1	1859GC1

#### **MICRO FIBRE CLOTH** Pack of 10



Colour

Yellow

Size mm	Code
400 x 400	29MFC40

FOR STAINLESS STEEL **CLEANER SEE PAGE 92.** 

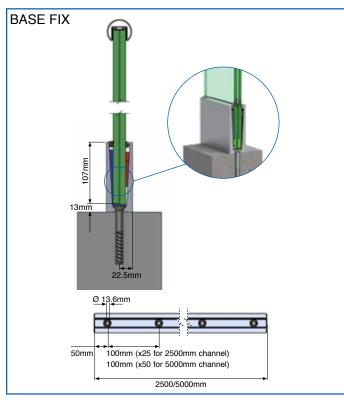
#### **SLIM CHANNEL**



#### **FEATURES:**

- Available in satin anodised & mill finish
- · Stainless cladding not required
- · Great value
- Quick to install

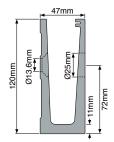
- Pre-drilled channel fixing holes
- · Height to glass when packer fitted is 13mm
- Packer height 2mm



SIDE FIX Ø 13.6mm 100mm (x25 for 2500mm channel) 100mm (x50 for 5000mm channel) 2500/5000mm

SIDE FIX CHANNEL





Glass Thickness mm		Height to Glass with Packer mm		Code
12 - 21.5	2.5	13	Satin Anodised	1805440SSA
12 - 21.5	5.0	13	Satin Anodised	18054405SSA

Channel fixing holes are  $\emptyset$  13.6mm at 100mm centres to suit a  $\emptyset$  12mm bolt with a Ø 22mm countersunk head.

**INTERNAL 90° CORNER** 

For use with side fix channel



|--|

Inside length 155mm each side. Outside length 200mm each side.

Satin Anodised

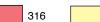
**EXTERNAL 90° CORNER** 

For use with side fix channel



Finish	Code
Satin Anodised	1805440SEC

Inside length 155mm each side. Outside length 200mm each side.



Zinc



Zamac



Galvanised

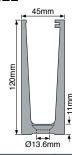
1805440SIC

Aluminium

#### **SLIM CHANNEL**

#### **BASE FIX CHANNEL**



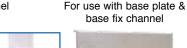


Glass Thickness mm		Height to Glass with Packer mm		Code
12 - 21.5	2.5	13	Satin Anodised	1805440BSA
12 - 21.5	2.5	13	Mill Finish	1805440BR
12 - 21.5	5.0	13	Satin Anodised	18054405BSA

Channel fixing holes are  $\emptyset$  13.6mm at 100mm centres to suit a  $\emptyset$  12mm bolt with a Ø 22mm countersunk head.

#### **BASE PLATE**

To side fix a base channel





Material/Finish	Code
Mill Finish	1805445R

**WEDGE SET** 

			100
			_
The second second	24		_
and the same of			
	_		_
	_		
	_		
	_		_
	_		_
1 - T	_		
C-1	_		
700	_		_
74			

Material/Finish	Code
Satin Anodised	1805443UC

**UNDERSIDE CLADDING** 

#### **WEDGE INSERTION & REMOVAL TOOL**



Code 180599001

PRO-RAILING

Glass Thickness mm	Code
12.00 - 12.76	180544112
13.52	180544113
15.00	180544115
16.76	180544116
17.50	180544117
19.00	180544119
20.76	180544120
21.50	180544121

Supplied with rubbers and wedges. To suit 2.5m long channel.

#### **INTERNAL 90° CORNER**

For use with base fix channel



Material/Finish	Code
Satin Anodised	1805440BIC
Mill Finish	1805440BICR

Inside length 155mm each side. Outside length 200mm each side.

#### **END CAP**

For use with underside cladding



Material/Finish	Code
Satin Anodised	1805443EC

#### **PLUG**

For side fix channel



Code
1805444PP

Plastic.



	-	
Marie Control		200
	141	3/2

**EXTERNAL 90° CORNER** 

For use with base fix channel

Material/Finish	Code
Satin Anodised	1805440BEC
Mill Finish	1805440BECR

Inside length 155mm each side. Outside length 200mm each side.

#### **END CAP**

For use without cladding



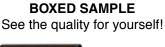
Material/Finish	Code
Stainless Steel	1805442E
Mill Finish	1805442ER

#### **CONCRETE SCREW**





Size mm	Code
M10 x 100	5002CCS10100





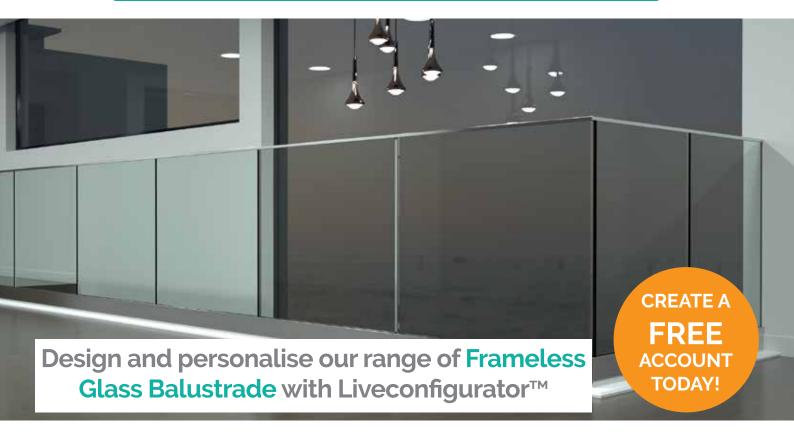
Sample cost refunded against your first order.

> Code 18SLIM1

CAN BE USED IN CONJUNCTION WITH OUR TOP RAIL SYSTEMS SEE PAGE 20.

# **live**configurator

# REAL TIME DESIGN











- ✓ Save time estimating your balustrade
- Get a very competitive quote within minutes
- ✓ Use 24/7 any day of the year
- Save hours of time drawing
- ✓ A choice of styles, layouts, glass and components
- ✓ Receive 100% accurate CAD drawings, free of charge
- ✓ Real time design
- Impress customers with your fast response and ability to provide drawings



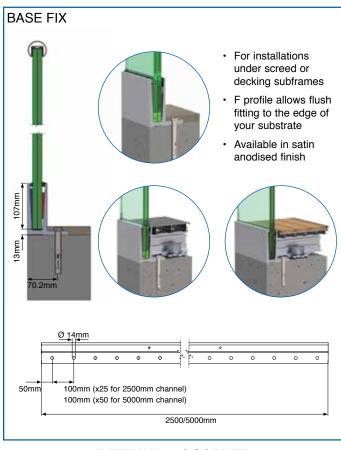
Simple to use, Liveconfigurator™ will generate a quote for stainless steel and glass balustrade systems in minutes, at any time or any day. It will also provide a list of all the parts you need to complete your project almost instantly. If you prefer to speak to one of our staff you can request a call back.

- Get a quote in minutes
- Use 24/7 any day of the year
- You have a choice of systems
- · Save hours of time drawing

- Automatically configure drawings to your dimensions
- Provide accurate, detailed layout drawings
- Ideal for anyone designing a glass balustrade
- Makes installation easier and faster

#### **BASE FIX CHANNEL**

**F CHANNEL** 



#### **INTERNAL 90° CORNER**

For use with base fix channel



Glass Thickness mm	Code
12 - 21.5	1805570BIC

Satin anodised.

#### **END CAP**



Material/Finish	Code
Satin Anodised	1805572E

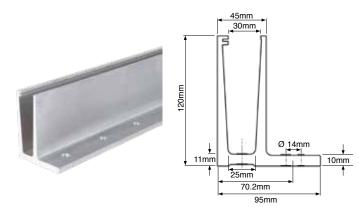
#### **CONCRETE BOLT**

Self-Tapping



Size mm	Code
M12 x 100	5002HCS12100

For fixing to cracked and non-cracked concrete.



Glass Thickness mm	Length m	Code
12 - 21.5	2.5	1805570BSA
12 - 21.5	5.0	18055705BSA



#### **EXTERNAL 90° CORNER**

For use with base fix channel



Glass Thickness mm	Code
12 - 21.5	1805570BEC

Satin anodised.

#### **WEDGE SET**



Glass Thickness mm	Code
12.00 - 12.76	180544112
13.52	180544113
15.00	180544115
16.76	180544116
17.50	180544117
19.00	180544119
20.76	180544120
21.50	180544121

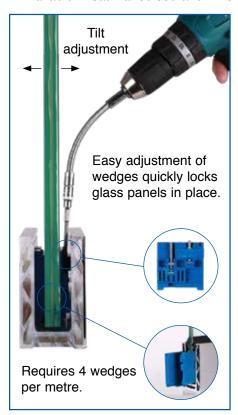
Supplied with rubber gasket and wedges. To suit 2.5m long channel.

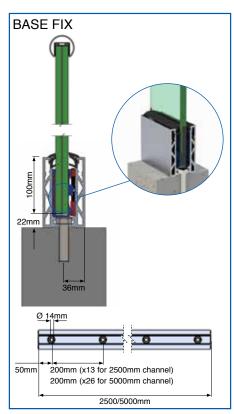
#### DUO

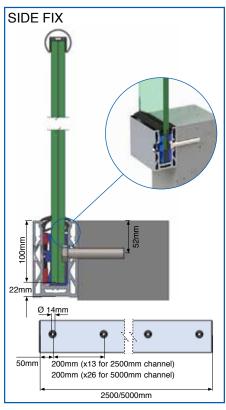


#### **FEATURES:**

- · Adjustable grips to allow quick alignment of glass
- A fast and cost effective frameless glass solution
- · Available in satin anodised and PPC black finish
- For installations up to 1.5kN in commercial applications
- +/-1° adjustment on glass







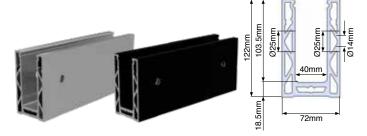
#### **BASE FIX CHANNEL**



Glass Thickness m	m Length m	Finish	Code
15 - 21.5	2.5	PPC Black	180556025BB
15 - 21.5	2.5	Satin Anodised	180556025BSA
15 - 21.5	5.0	PPC Black	18055605BB
15 - 21.5	5.0	Satin Anodised	18055605BSA

Channel fixing holes are Ø 14mm at 200mm centres to suit 12mm bolts. Height to glass with packer 22mm.

#### SIDE FIX CHANNEL



Glass Thickness mm	Length m	Finish	Code
15 - 21.5	2.5	PPC Black	180556025SB
15 - 21.5	2.5	Satin Anodised	180556025SSA
15 - 21.5	5.0	PPC Black	18055605SB
15 - 21.5	5.0	Satin Anodised	18055605SSA

Channel fixing holes are Ø 14mm at 200mm centres to suit 12mm bolts. Height to glass with packer 22mm.



304







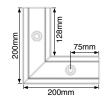
Zamac

DUO

#### **INTERNAL 90° CORNER**

For use with base fix channel





Finish	Code
Satin Anodised	1805560BIC
PPC Black	1805560BICB

#### **INTERNAL 90° CORNER**

For use with side fix channel

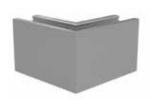


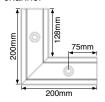


Finish	Code
Satin Anodised	1805560SIC
PPC Black	1805560SICB

#### **EXTERNAL 90° CORNER**

For use with base fix channel



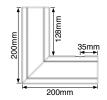


Finish	Code
Satin Anodised	1805560BEC
PPC Black	1805560BECB

#### **EXTERNAL 90° CORNER**

For use with side fix channel

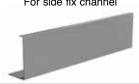




Finish	Code
Satin Anodised	1805560SEC
PPC Black	1805560SECB

#### **CLADDING**

For side fix channel



Finish	Code
Satin Anodised	1805565S
PPC Black	1805565SB

**END CAP** 

For base & side fix channel



Finish	Code
Satin Anodised	1805562
PPC Black	1805562B

**PLUG** 

For side fix channel



Finish	Code
Satin Anodised	1805564
PPC Black	1805564B

**CONNECTING PIN** 

For base & side fix channel





	Code	
	1805569	
Please order 2 pins per connection		

2.5m length. 13 plugs per 2.5m, 26 plugs per 5m channel and 2 plugs per corner.

#### **ADJUSTABLE WEDGE PACK**

For 2.5m length



Glass Thickness mm	Code
15.00	180556115
16.76 - 17.50	180556117
19.00	180556119
20.76 - 21.50	180556120

Includes rubber & wedges. Requires flexible

hex bit, code: 1805566

#### **CONCRETE BOLT**



Size mm	Code
M12 x 100	5002HCS12100

#### **FLEXIBLE HEX BIT**

For adjustable wedges



				Code		
1805566						
•					 	

Attaches to a standard powerdriver for ease of tightening wedges.

#### **CLADDING TAPE**

Double sided



Length m	Code
50	1805453

#### HIGH STRENGTH RETAINER GLUE

For use with cladding and end cap



ml	Code
50	1899007638

For fixing to cracked and non-cracked concrete.

# **TILT-LOC™ CHANNEL**

#### **TL86 SERIES**



Our top quality aluminium Tilt-Loc™ System has a unique patented rotating pressure plate system which allows for fast easy installation of frameless glass.

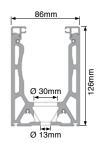
#### **FEATURES:**

- Satin anodised (Grade 6063 T6) Aluminium
- Up to 30mm tilt adjustment on glass
- · Adjustment from inside the balcony

- All holes are pre-drilled and fixings can be concealed
- Suitable for glass from 12 25.52mm thickness
- · Glass easily installed and aligned with a spanner

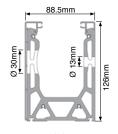
#### **BASE-FIX**



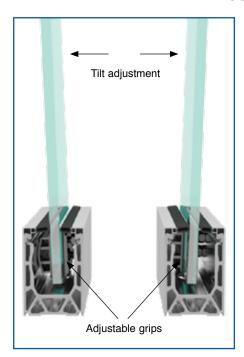


# SIDE-FIX



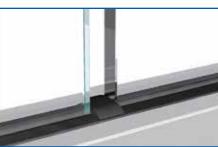


#### TILT-LOC ADJUSTMENT GIVES PERFECT ALIGNMENT





Up to 30mm tilt adjustment back and forward from inside the balcony.



EDPM dividing gasket to expel water and dirt.



Alignment pins x 2 included in channel kit.

#### FOR GLASS LOADING GUIDELINES VISIT OUR WEBSITE.

304

316

Zinc

Zamac

Mild steel

Galvanised

Aluminium

# **TILT-LOC™ CHANNEL**

#### **BASE FIX CHANNEL**



Glass Thickness mm	Length m	Code
12 - 25	3	1805540B

Supplied with 2 x top cladding and 2 alignment pins. Height to glass with packer 38mm.

#### **SIDE FIX CHANNEL**



Thickness mm	Length m	Code
12 - 25	3	1805540S
Cupplied with 2 v top aladding and 2		

Glass

Supplied with 2 x top cladding and 2 alignment pins. Height to glass with packer 38mm.

#### **CLAMP KIT**



Glass mm	Clamps Per Kit	Clamps Needed Per m	Code
12.0	6	2	180554112
15.0	9	3	180554115
17.0	6	2	1805541175
19.0	9	3	180554119
21.0	9	3	180554125
25.0	6	2	180554125

#### **INTERNAL 90° CORNER**

For base & side-fix channel



Description	Code
Base-Fix	1805540BIC
Side-Fix	1805540SIC

Inside length 64mm each side. Outside length 150mm each side.

#### **EXTERNAL 90° CORNER**

For base & side-fix channel



Description	Code
Base-Fix	1805540BEC
Side-Fix	1805540SEC

Inside length 64mm each side. Outside length 150mm each side.

#### **END CAP**

For base & side-fix channel



Description	Code
Base-Fix	1805547B
Side-Fix	1805547S

#### CONCRETE BOLT

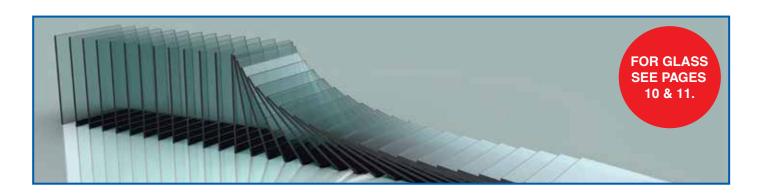
Self-Tapping



Size mm	Code
M12 x 100	5002HCS12100

For fixing to cracked and non-cracked concrete.





# **TOP RAIL SYSTEMS**

- Systems to suit 8 21.50mm glass
- Anodised or stainless steel Grade 304 & 316
- Reduced visual impact

- No welding required
- Satin polish or mirror finish
- Choice of 8 profiles



304

316

Z

Zinc

Zamac

Mild steel

Galvanised

Aluminium

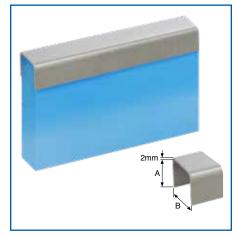
# **SQUARE SLIM TOP RAIL**



**ANODISED ALUMINIUM** 



To Suit Glass mm	Length m	(A) mm	(B) mm	Code
12.0	2.5	13	12.5	150501
15.0	2.5	13	15.5	150502
16.76 - 17.50	2.5	18	18.0	150503
19.0	2.5	18	19.5	150504
21.50	2.5	18	22.0	150505



#### STAINLESS STEEL



To Suit Glass mm	Length m	(A) mm	(B) mm	Code
12.0	2.5	13	12.5	150601
15.0	2.5	13	15.5	150602
16.76 - 17.50	2.5	18	18.0	150603
19.0	2.5	18	19.5	150604
21.50	2.5	18	22.0	150605

# **ADHESIVES & SEALANTS**

#### HIGH STRENGTH RETAINER GLUE

For use with tube fittings

#### **ADHESIVE ACTIVATOR**

Reduces curing time when used with Loctite 638



Supplied with plunger and needle for accurate application. For use as thread lock adhesive



#### LOCTITE.



30	1099007030
LOCTITE SILIC	CONE SEALANT

# Gives an all-round waterproof seal



Colour	ml	Code
Clear	310	18990125366
Black	310	18990125368



ml	Code
150	18990087649

**SILICONE SEALANT** 

Gives an all-round waterproof seal



Colour	ml	Code
Clear	310	189901201
Black	310	189901202



ml	Code
50	1899007454

#### **SEALANT GUN**



Code	
189900666	

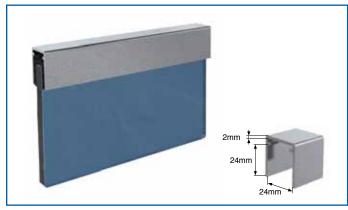
# **ALUMINIUM TOP RAIL SYSTEM**

#### 30 x 28mm PROFILE



#### **FEATURES**

- Designed for 8 21.5mm glass with rubber gasket
- No welding required
- Reduced visual impact of top rail
- Connectors simply slide into the top rail for a neat joint
- Flush fit fittings
- · All products are satin anodised aluminium



**TOP RAIL** 



Length m	Code
3	1505063

Code

150506412

90° TOP RAIL



Inside length 342mm each side. Outside length 370mm each side.

#### **INTERNAL CONNECTOR**





Co	ode
15050	641290

Inside length 76.5mm each side. Outside length 100mm each side.

**END CAP** 

150506413



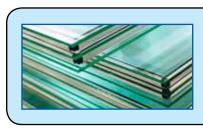
$\sim$	Λ	0	v	г
13	Н		n	

Length mm

100



To Suit Glass mm	Length m	Code		
8 - 11	1	189903811C		
11.5 - 13.5	1	189903115135C		
15	1	18990315C		
16 - 17.5	1	18990316175C		
19	1	18990319C		
20 - 21.5	1	18990320215C		



FOR OUR RANGE OF **GLASS PANELS SEE PAGES 10, 11 & 37.** 

Rubber.

304

316

Zinc

Zamac

Mild steel

Galvanised

Aluminium

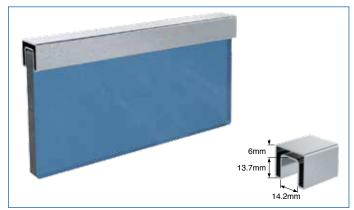
# **SQUARE MINITOP RAIL SYSTEM**

25 x 21mm PROFILE



#### **FEATURES:**

- Designed for 10 12mm glass with rubber gasket
- No welding required
- Reduced visual impact of top rail
- Straight joiner slides into the top rail for a neat joint
- Flush fit fittings
- All products are satin polish finish stainless steel Grade 316



**SPLIT TUBE** 



Length m	Code
3.0	18067053S25
5.8	1806705S25

**GASKET** 



To Suit Glass mm	Length m	Code
10	1	1899031010

Rubber.

**GASKET** 



To Suit Glass mm	Length m	Code
12	1	1899031012

Rubber.

**ADJUSTABLE CORNER** 



Code	
1806418S25	





Code
1806413\$25

90° JOINER



Code	
1806411S25	

**WALL BRACKET** 



Code	
1806415S25	

#### **ADJUSTABLE JOINER**



Code
1806416S25

**JOINER** 



Code	
1806412S25	

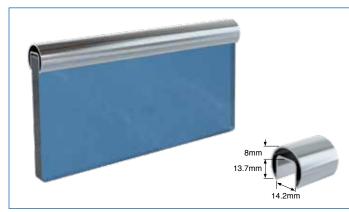
# **ROUND MINITOP RAIL SYSTEM**

#### Ø 25mm PROFILE



#### **FEATURES:**

- Designed for 10 12mm glass with rubber gasket
- No welding required
- Reduced visual impact of top rail
- Flush fit fittings
- All products are satin polish finish stainless steel Grade 316



• Straight joiner slides into the top rail for a neat joint **SPLIT TUBE GASKET GASKET** 



Length m	Code
3.0	18067053A
5.8	1806705∆

90° JOINER



To Suit Glass mm	Length m	Code
10	1	1899031010
Rubber.		



To Suit Glass mm	Length m	Code
12	1	1899031012

Rubber.



1806411A		
END CAD		

**ADJUSTABLE CORNER** 



Code	
1806418A	

**ADJUSTABLE JOINER** 



Code	
1806416A	

**JOINER** 





	.40
	The state of the s
7777	

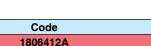


316

304

Code	
1806413A	

Code
1806415A



1806412A Aluminium Duplex Zinc Mild steel Galvanised Zamac

# **ROUND TOP RAIL SYSTEM**

Ø 42.4 & 48.3mm PROFILES



Round top rail system offers a stylish solution to the top of any glass balustrade and also provides a visual break. We can shape to match if you're planning radiused glass in your design.

#### **SPLIT TUBE**

Ø 42.4mm

# Ø 48.3mm





90° HORIZONTAL CORNER

Ø mm	3m Length Code	6m Length Code
42.4	18047053C	1804705C
48.3	18047053D	1804705D
42.4	18067053C	1806705C
48.3	18067053D	1806705D

1	5mm	wall	thickness.

Ø mm

42.4

To Suit	Ø 42.4mm	Ø 48.3mm
Glass mm	Code	Code
8 - 11	189903811C	189903811D
11.5 - 13.5	189903115135C	189903115135D
15	18990315C	18990315D
16 - 17.5	18990316175C	18990316175D
19	18990319C	18990319D
20 - 21.5	18990320215C	18990320215D

Code
1804411C
1804411D
1806411C
1806411D

**ADJUSTABLE CORNER** 



25 - 55° DOWNWARDS

**ADJUSTABLE** 

**CONNECTOR** 

Ø mm	Code
42.4	1804416C
48.3	1804416D
42.4	1806416C
48.3	1806416D

25 - 55° UPWARDS **ADJUSTABLE** CONNECTOR



Ø mm	Code
42.4	1804417C
48.3	1804417D
42.4	1806417C
48.3	1806417D

90° VERTICAL **CORNER** 



Ø mm	Code
42.4	1804410C
48.3	1804410D
42.4	1806410C
48.3	1806410D

**END CAP** 

Code

1806418C



Ø mm	Code
42.4	1804413C
48.3	1804413D
42.4	1806413C
48.3	1806413D

WALL/FLOOR FLANGE



Ø mm	Code
42.4	1804415C
48.3	1804415D
42.4	1806415C
48.3	1806415D

**TUBE ADAPTOR** 



Ø mm	Code
42.4	1804414C
48.3	1804414D
48.3	1806414D

**IN-LINE CONNECTOR** 



Ø mm	Code
42.4	1804412C
48.3	1804412D
42.4	1806412C
48.3	1806412D

FOR OUR MIRROR FINISH ROUND TOP RAIL SYSTEM SEE PAGE 75.

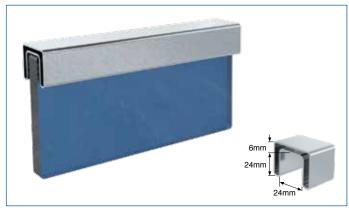
### RECTANGULAR TOP RAIL SYSTEM

#### 40 x 30mm PROFILE



#### **FEATURES:**

- Designed for 8 21.5mm glass with rubber gasket
- No welding required
- Joiner simply slides into the top rail for a neat joint
- · Flush fit fittings
- Split tube is stainless steel Grade 316 with a satin polish finish
- Components are Duplex 2205 with a satin polish finish



**SPLIT TUBE** 



Length m	Code
3	180670534030
6	18067054030

**GASKET** 



To Suit Glass mm	Length m	Code
8 - 11	1	189903811C
11.5 - 13.5	1	189903115135C
15	1	18990315C

Rubber.

To Suit Glass mm Length m Code 16 - 17.5 18990316175C 19 1 18990319C 20 - 21.5 18990320215C

Rubber.

90° JOINER



Code	
	18224114030

**ADJUSTABLE CORNER** 

90° - 180° left or right



Code	
18224184030	

**WALL BRACKET** 

**ADJUSTABLE JOINER** 

45° up & 90° down



Code
18224164030

**JOINER** 

#### **END CAP**



1000/12/020	
Code	

Code	
18224154030	



Code
18224124030

Mild steel

Galvanised

Aluminium

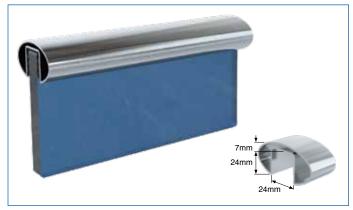
# **OVAL TOP RAIL SYSTEM**

60 x 30mm PROFILE



#### **FEATURES:**

- Designed for 8 21.5mm glass with rubber gasket
- No welding required
- Joiner simply slides into the top rail for a neat joint
- Flush fit fittings
- Split tube is stainless steel Grade 316 with a satin polish finish
- Components are Duplex 2205 with a satin polish finish



**SPLIT TUBE** 



Length m	Code
3	180670536030
6	18067056030

**GASKET** 



To Suit Glass mm	Length m	Code
8 - 11	1	189903811C
11.5 - 13.5	1	189903115135C
15	1	18990315C

Rubber.

 To Suit Glass mm
 Length m
 Code

 16 - 17.5
 1
 18990316175C

 19
 1
 18990319C

 20 - 21.5
 1
 18990320215C

Rubber.

90° JOINER



Code	
18224116030	
	_

ADJUSTABLE CORNER

45° left or right



Code	
18224186030	

**WALL BRACKET** 

ADJUSTABLE JOINER



Code		
18224166030		

**JOINER** 

**END CAP** 



Code	
18224136030	

1	F
177.00	7

Code	
1822/156030	



Code	
18224126030	

# **MARANO®**

#### **EDGE & CURVE**



Marano® Edge and Curve are a range of 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 1010 x W 1174mm
- You will need to buy blanking caps or notched post caps to suit design

NOW AVAILABLE IN 3 NEW COLOURS



Anthracite Black White RAL 7016 RAL 9005 RAL 9010

WHEN USING STANDARD GLASS WIDTH 1174mm YOU WILL HAVE APPROXIMATELY 13mm BETWEEN POST CENTRE AND GLASS FOR EASE OF INSTALLATION.

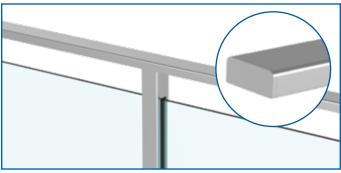


Image shows a square post using a rectangular handrail.



Image shows a round post using an oval handrail.

RECTANGULAR & OVAL HANDRAILS CAN BE USED WITH BOTH SQUARE & ROUND POSTS. FOR HANDRAILS SEE PAGE 31.



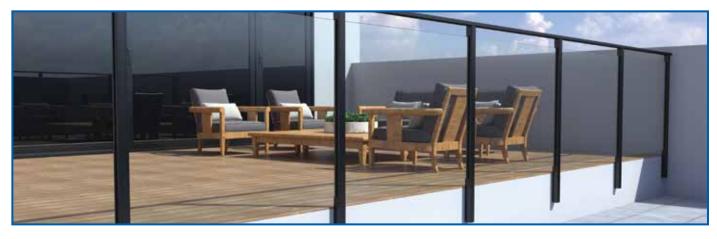






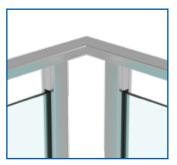
### **MARANO®**

#### **EDGE & CURVE**



#### **HOW TO TACKLE CORNERS**

MITRED CUT WITHOUT POST



MITRED CUT WITH POST

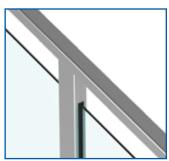


**HOW TO TACKLE GRADIENTS** 

MITRED CUT HANDRAIL

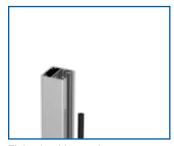


MITRED CUT POST

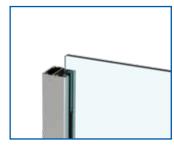


**FITTING GLASS** 

Fitting glass is easy with our 4 step guide.



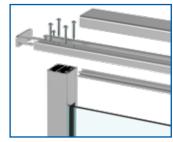
Fit back rubber to the post.



Slide glass in from the top between posts.



Fit glass retaining rubber, top packer & infill.



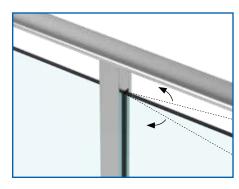
Fit the handrail (using the location jig, see pages, 30 & 32). Slide on the handrail under-cap and top handrail.

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 ON OUR WEBSITE.**

#### **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 GLASS PANELS SEE PAGE 33.

### **MARANO®**

#### **EDGE**

#### **POSTS**



50 Supplied with packers, rubbers, handrail screws and base plate cover.

1000

6805792S501000 1000 50 Supplied with packers, rubbers, handrail

50 Supplied with packers, rubbers, handrail screws and base plate cover.

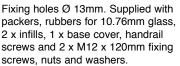
# screws and base plate cover.

1000

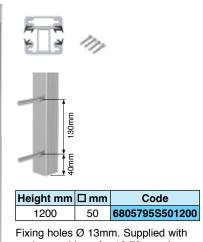
#### SIDE-FIX END

6805791S501000





#### SIDE-FIX MID



packers, rubbers for 10.76mm glass, 2 x infills, 1 x base cover, handrail screws and 2 x M12 x 120mm fixing screws, nuts and washers.

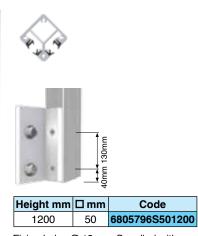
**END CAP** 

Code

6805ECES50

#### SIDE-FIX CORNER

6805793S501000



Fixing holes Ø 13mm. Supplied with packers, rubbers to suit 10.76mm glass, 4 x infills, 1 x base cover, handrail screws and 2 x side-fix brackets.

#### **POST BLANKING CAPS**

**END** 



#### HANDRAIL/POST LOCATION JIGS

#### **END/MID JIG**

For drilling through handrail



Code
6899732J

Plastic.





6899733J

Plastic.

CORNER

Code

6805BCCS50

#### NOTCHED POST CAPS - brings post height to 1100mm



#### **BRACKET**

#### 90° CORNER For use with side-fix posts



Supplied with screws.





304

316

Zinc

MID

Zamac

Mild steel

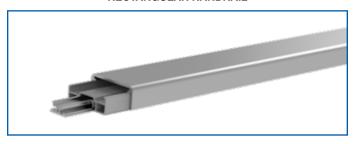
Galvanised



#### **ACCESSORIES**

#### **HANDRAILS**

#### RECTANGULAR HANDRAIL



Length m	□ mm	Code
3.0	62 x 25	680570536225
5.8	60 x 25	68057056225

#### **OVAL HANDRAIL**

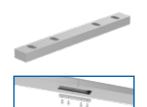


Length m	△ mm	Code
3.0	72 x 27	680570537227
5.8	72 x 27	68057057227

#### HANDRAIL CONNECTORS

#### IN-LINE CONNECTOR

For rectangular & oval handrails



Code
6805412i

Internal fix. Supplied with four screws.

#### 90° CORNER CONNECTOR

For rectangular & oval handrails



Code
6805411i

Internal fix. Supplied with four screws.

#### **ADJUSTABLE HANDRAIL JOINERS**

VERTICAL - 35° UP/80° DOWN

For use with rectangular handrail



Code
68054166225

Supplied with four screws.

VERTICAL - 35° UP/80° DOWN For use with oval handrail



Code					
68054167227					
0 1: 1 ::: 1					

Supplied with four screws.

HORIZONTAL +/- 80° For use with oval handrail



Code	
68054187227	

Supplied with four screws.

#### **HANDRAIL END CAPS**

#### **END CAP**

For use with rectangular handrail



		Code	
		68054136225	
_			

Supplied with two screws.

#### WALL BRACKET

HORIZONTAL +/- 80°

For use with rectangular handrail

Code 68054186225

Supplied with two screws.

For use with rectangular handrail



			C	ode		
		680	<b>)54</b>	1562	225	
_	 					

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.

Product	Code
Rubber gasket set to suit 8.76mm glass H 6000mm	68RG6000876
Rubber gasket set to suit 10.76mm glass H 6000mm	68RG60001076
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.

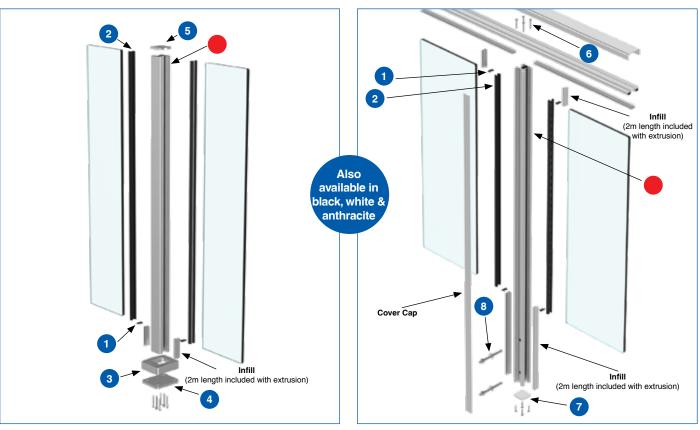


IF NO HANDRAIL IS REQUIRED, 1100mm RUBBERS WILL NEED TO BE ORDERED.

### MARANO® MAKE YOUR OWN POSTS

#### **EDGE**

Create your own posts, for any height, using our individual components below.







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

Supplied with 2m infill. Please order rubber gaskets separately.

#### **CUT TO SIZE SIDE-FIX EXTRUSION**









POSI	neignum	⊔ mm	Code
End	6	50	6805694S50
Mid	6	50	6805695S50

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

#### CHOOSE FROM THE COMPONENTS BELOW TO SUIT YOUR EXACT REQUIREMENTS.

posts

**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.

#### **TOP RAIL FIXINGS**



**POST CAP** 

Code	
6805PC01	

Code	
68HF01	

Pack of 4. For attaching handrail to post.

#### **COVER PLATE**

Use with bolt-down base plate



Code	
680520850	

#### **POST BASE COVER** Use with side-fix posts



Code	
6805PBC01	

Supplied with 4 fixings.

#### **BASE PLATE**

Use with bolt-down posts



Code
680520750

Supplied with 6 fixings to attach to extrusion.

#### **POST FIXINGS**

Use with side-fix posts



Code
68PF01

Sold in pairs.









316

Zinc

Zamac

Mild steel

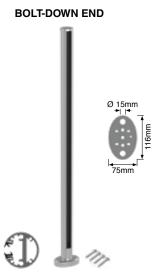
Galvanised



#### **CURVE**



#### **POSTS**



Height mm	Ø mm	Code
1100	54	6805791R54

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

#### **BASE PLATE COVER**



Code
680520854

To suit Ø 54mm round post.

#### HANDRAIL/POST LOCATION JIGS

**END/MID JIG**For drilling through handrail

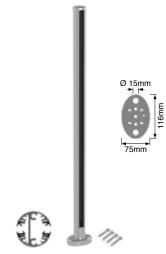




Code
6899732J54

Plastic.

#### **BOLT-DOWN MID**



Height mm	Ø mm	Code
1100	54	6805792R54

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

#### **CLEAR FLOAT TOUGHENED GLASS PANEL**

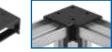
For use without handrail



	Height mm	Width mm	Code	
ſ	1010	1174	18551010101174	

### **CORNER JIG**For drilling through handrail

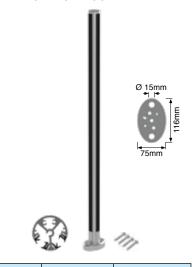




	Code
6899733J54	

Plastic.

#### **BOLT-DOWN CORNER**



Height mm	Ømm	Code
1100	54	6805793R54
	Height mm 1100	- J

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

#### **CLEAR FLOAT TOUGHENED GLASS PANEL**

For use with Marano top rails



Height mm	Width mm	Code
930	1174	1855109301174

#### **FIXINGS**

CONCRETE BOLT Self-tapping



***		-
ETA	(	t
**	_	_

Size mm	Code
M12 x 100	5002HCS12100

For cracked and non-cracked concrete.

#### FOR SQUARE POSTS SEE PAGE 30.

### PRE-ASSEMBLED POSTS

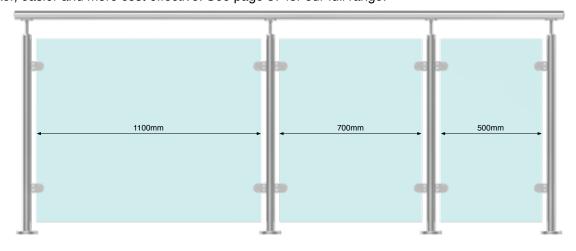


Save a huge amount of time and money with our extensive range of pre-assembled posts, supplied from stock. They are all tested to BS 6180. No drilling of tubes, no bolting on of glass clamps and no welding of base plates required. We've done the work for you!



### STANDARD GLASS PANELS

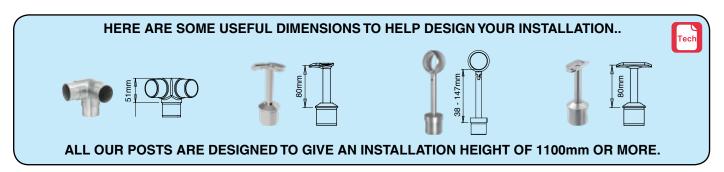
We stock a large range of widths of 10mm toughened glass panels in 100mm increments to make your installations even quicker, easier and more cost effective. See page 37 for our full range.



### PRE-ASSEMBLED POSTS

#### **CHOOSE YOUR OWN POST TOP**

Our pre-assembled glass clamp posts are supplied without a saddle or post cap, so you can choose the exact design to suit your requirement. The choice of tops available allows you to pick and mix from a huge range of options that will allow you to end up with your very own bespoke solution.



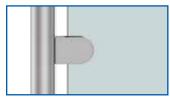
#### FOR FULL TECHNICAL DRAWINGS VISIT OUR WEBSITE. IF YOU DON'T SEE WHAT YOU NEED PLEASE ASK.



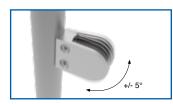
Welded base fitting complete with rubber 'O' ring and cover.



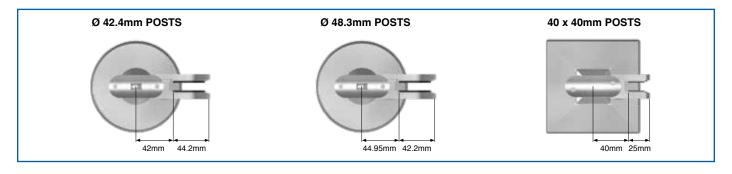
Welded base fitting complete with cover

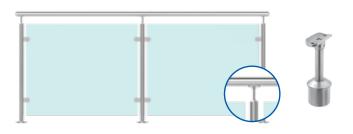


Glass clamp for 10mm glass (8 and 12mm rubbers available).



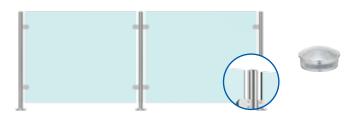
Variable fixing bolt.





# TIMELESS - STAINLESS STEEL POSTS AND GLASS PANELS WITH HANDRAIL

Our Timeless post systems that use 10mm glass panels and have a top rail, are all tested to BS6180 loading requirements.



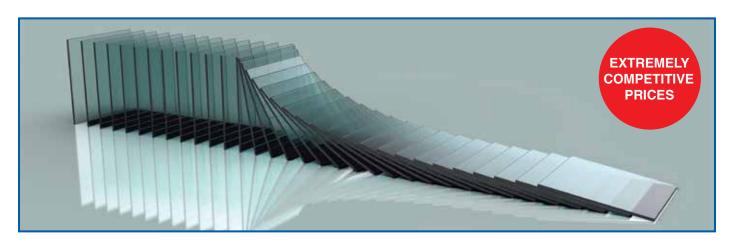
#### CONTEMPLATION – STAINLESS STEEL POSTS AND GLASS PANELS WITHOUT HANDRAIL

Our Contemplation post systems that use 10mm glass panels and have no top rail, will not pass BS6180 loading requirements and should therefore only be used as demarcation, or in areas where the fall is not more than 600mm.

#### FOR OUR STANDARD STOCKED GLASS PANELS SEE PAGES 10 & 37.

### MADE TO ORDER GLASS

#### **SQUARE METRE PANELS**



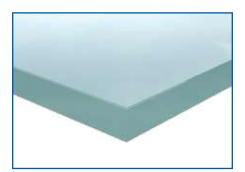
Our custom sized per square metre glass panels are polished on all edges and come with docked corners for safety and aesthetic reasons. Glass can be supplied with radiused corners, shaped, with cut-outs and drilled at extra cost. A range of coloured glass, etched glass and self-clean coating is also available. The current meterage rates can be checked online using the following codes and we can then prepare a detailed quote to meet your exact requirements. You will need to add 30% to the meterage price for shapes and cut-outs.

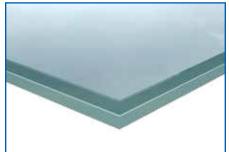
Consult with local building authorities and structural engineers to ensure correct glass specifications and fixings are used to achieve the required loadings. Where possible we have tested our systems and individual test reports are available online. For further information on the classification of building occupancy & glass loadings, visit our website.

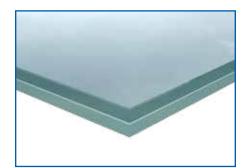
#### **TOUGHENED GLASS**

#### **TOUGHENED LAMINATED GLASS**

# SENTRYGLAS® lonoplast interlayer toughened glass







Thickness mm	Code
8	185508M
10	185510M
12	185512M
15	185515M
19	185519M
25	185525M

Thickness mm	Code
11.52	1856115M
13.52	1856135M
17.50	1856175M
21.50	1856215M
25.50	1856255M

Thickness mm	Code
12.89	18571289M
16.89	18571689M
20.89	18572089M
25.50	1857255M

Up to 5 times stronger and 100 times stiffer than conventional interlayers.

#### **TEMPLATING SHEETS**



We can provide suitable templating material that can be cut to suit any special shapes on site. This is sent to our factory for production to match the template exactly, using modern imaging scanning technology to duplicate your design. Price and availability for bespoke panels are available on application.

Height mm	Width mm	Thickness mm	Code
2440	1220	4	185900201





316

Zinc

Zamac

ľ

Mild steel

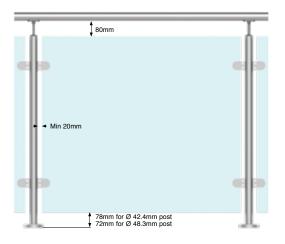
Galvanised

Aluminium

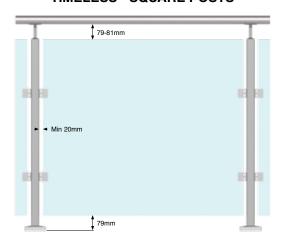
## STANDARD GLASS PANELS

#### STANDARD GLASS PANELS FOR TIMELESS & CONTEMPLATION PRE-ASSEMBLED POSTS

#### **TIMELESS - ROUND POSTS**



#### **TIMELESS - SQUARE POSTS**



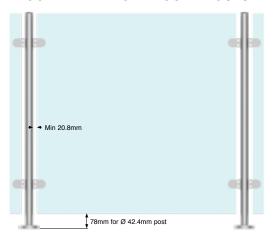
#### **TIMELESS - GLASS PANELS**



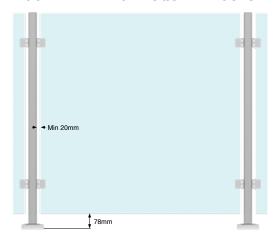
Thickness	Height	Width	Minimum* Post Centres For			Codo
mm	mm	mm	Ø 42.4mm Post	Ø 48.3mm Post	☐ 40mm Post	Code
10	900	100	184	190	180	185510100900
10	900	200	284	290	280	185510200900
10	900	300	384	390	380	185510300900
10	900	400	484	490	480	185510400900
10	900	500	584	590	580	185510500900
10	900	600	684	690	680	185510600900
10	900	700	784	790	780	185510700900
10	900	800	884	890	880	185510800900
10	900	900	984	990	980	185510900900
10	900	1000	1084	1090	1080	1855101000900
10	900	1100	1184	1190	1180	1855101100900

<sup>\*</sup>Minimum only applies to round posts, square posts are fixed centres.

#### **CONTEMPLATION - ROUND POSTS**



#### **CONTEMPLATION - SQUARE POSTS**



#### **CONTEMPLATION - GLASS PANELS**

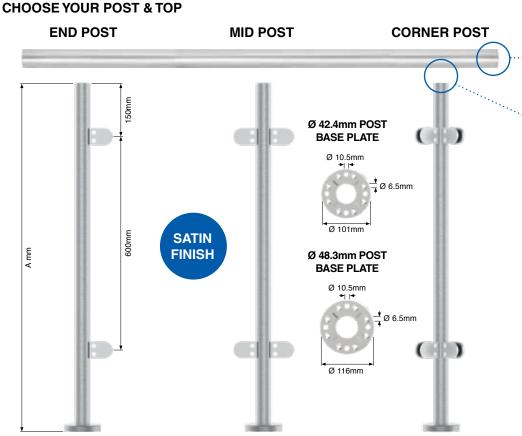


Thickness	Height	Width	Minimum* Post Centres For			Code
mm	mm	mm	Ø 42.4mm Post	Ø 48.3mm Post	☐ 40mm Post	Code
10	1024	100	184	190	180	1855101001024
10	1024	200	284	290	280	1855102001024
10	1024	300	384	390	380	1855103001024
10	1024	400	484	490	480	1855104001024
10	1024	500	584	590	580	1855105001024
10	1024	600	684	690	680	1855106001024
10	1024	700	784	790	780	1855107001024
10	1024	800	884	890	880	1855108001024
10	1024	900	984	990	980	1855109001024
10	1024	1000	1084	1090	1080	18551010001024
10	1024	1100	1184	1190	1180	18551011001024

<sup>\*</sup>Minimum only applies to round posts, square posts are fixed centres.

#### **BOLT-DOWN ROUND POST - SATIN FINISH**





0-				
Ø mm	A mm	Code		
42.4	978	1804791C		
48.3	972	1804791D		
42.4	978	1806791C		
48.3	972	1806791D		

Dim A is post only with no top. Top fitting not included.

	_	
Ø mm	A mm	Code
42.4	978	1804792C
48.3	972	1804792D
42.4	978	1806792C
48.3	972	1806792D

Dim A is post only with no top. Top fitting not included.

#### A mm Code Ø mm 42.4 978 1804793C 48.3 972 1804793D 42.4 978 1806793C 1806793D 48.3 972

Dim A is post only with no top. Top fitting not included.

> **HIGH STRENGTH RETAINER GLUE** For use with tube fittings

#### **HEX HEAD WITH FLANGE**

#### **MULTI-FIX HEX HEAD BOLT**

# MANAGEMENT OF THE PARTY OF THE

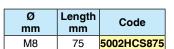
Ø mm	Length mm	Code
M10	75	5002MF10875

ml	Code
50	1899007638

LOCTITE



For our full range of tube see

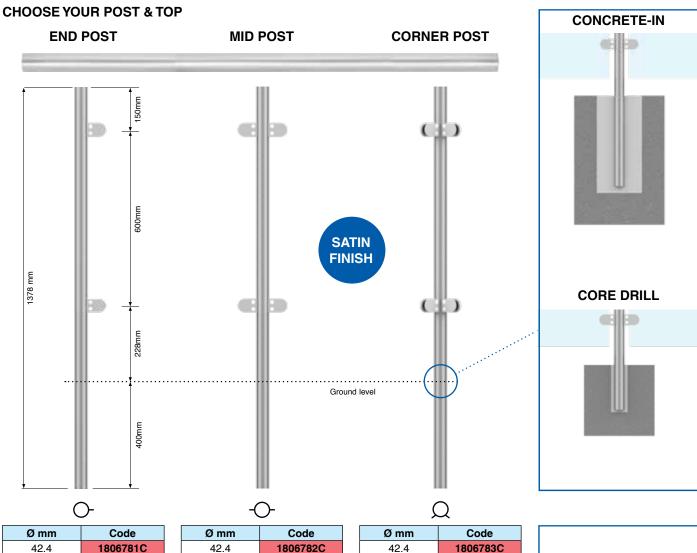


Ø mm	Length mm	Code
M10	75	5002MF10875

ml	Code
50	1899007638

#### **CONCRETE-IN ROUND POST - SATIN FINISH**





Height of post only with no top. Top fitting not included.

42.4 1806782C

Height of post only with no top. Top fitting not included.

**RETRO-FIT COVER PLATE** 

## 1806783C

Height of post only with no top. Top fitting not included.

#### **DONUT COVER PLATE**



Ø mm	Code
42.4	1806247C

Fit at time of installation. For silicone use code: 189901201.



Retro-fitted after installation. For silicone use code: 189901201.

#### **COVER CAP**



Ø mm	Code
42.4	1806208C

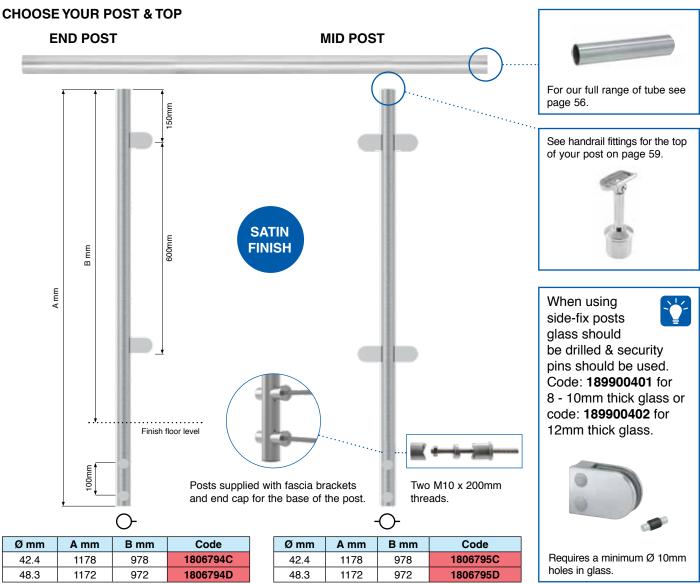
Fit at time of installation. For silicone use code: 189901201.



These posts can be used with our side-fix fascia brackets. See our range on page 62.

#### SIDE-FIX ROUND POST - SATIN FINISH





Dim A & B is post only with no top. Top fitting not included.

Dim A & B is post only with no top. Top fitting not included.

#### **RKER II HYBRID RESIN**



ml	Code
300	50RKER300

Suitable for use in dry and wet substrates and

#### **WIRE MESH SLEEVE** For use with R Stud



FOR LOCTITE ADHESIVES & GLUE SEE PAGE 92.

water filled holes



316

Zinc

Zamac

Mild steel

Galvanised

Aluminium

Duplex

## **CLEANING PRODUCTS**

#### **3-PART TEA STAINING CLEANER KIT**

#### **PICKLING GEL**

#### STAINLESS STEEL CLEANER

Keeps stainless handrail & fittings in top condition long after installation

Helps remove rust, dirt and grime from stainless steel

Degreases & cleans surfaces ready for gluing







Description	ml	Code
Demi water Spray	500	1899009DW
Stainless Steel Polish Spray	400	1899009SSP
R2U Stainless Steel Cleaner 500 ml Spray	500	1899009SSC

kg	Code
2	18990094023

ml	Code
400	18990097063

#### **UNBLOCKING SPRAY**

#### STAINLESS CLEANING WIPE Removes finger & hand marks left during

installation

#### **POLISHING CLOTHS** For removal of light scratches on stainless







ml	Code
400	2912
Suitable for various hardware.	

Code 189900901

Description Code 189901101 Fine (grey) Medium (red) 189901102

#### **LOW LINT TEXTELINE CLOTHS**

### Pack of 150

#### **MICRO FIBRE CLOTH**

Pack of 10



**BOND IT GLASS CLEANER** Fast acting all purpose cleaner with

non-smear formulation

	M1520
l itro	

Litre	Code
1	1859GC1

Use with code: 29RT150.

Code 29RT150

Colour Code Size mm 29MFC40 Yellow 400 x 400

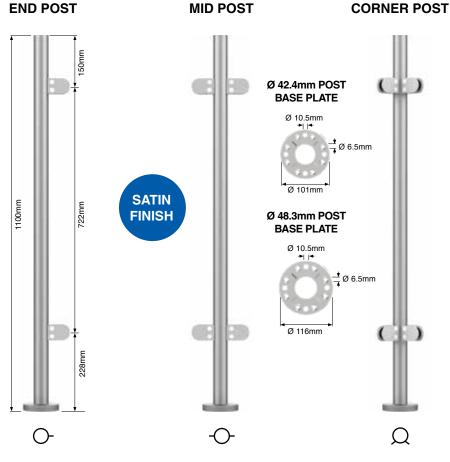
Ideal for use with code: 1859GC1.



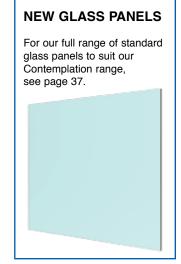
## **CONTEMPLATION**

#### **BOLT-DOWN ROUND POST - SATIN FINISH**





RANGE OF END CAPS
To be used with bolt-down and concrete-in posts. See page 56.
Raised Top
7 Groove Flat Top



Ø mm	Code
42.4	1806761C
48.3	1806761D

Top fitting not included.

Ø mm

42.4

48.3

Ø mm Code 42.4 1806763C 48.3 1806763D

Top fitting not included.

### **CONCRETE FIXINGS** HEX HEAD WITH FLANGE MULTI-FIX HEX HEAD BOLT

Top fitting not included.





Code

1806762C

1806762D

#### **HIGH STRENGTH RETAINER GLUE** For use with tube fittings



ALLEN	<b>KEY</b>
For glass	clamps



Ø mm	Length mm	Code
M8	75	5002HCS875

Ø mm	Length mm	Code
M10	75	5002MF10875

ml	Code
50	1899007638

Code
189900606



316

Zinc

Zamac

Mild steel

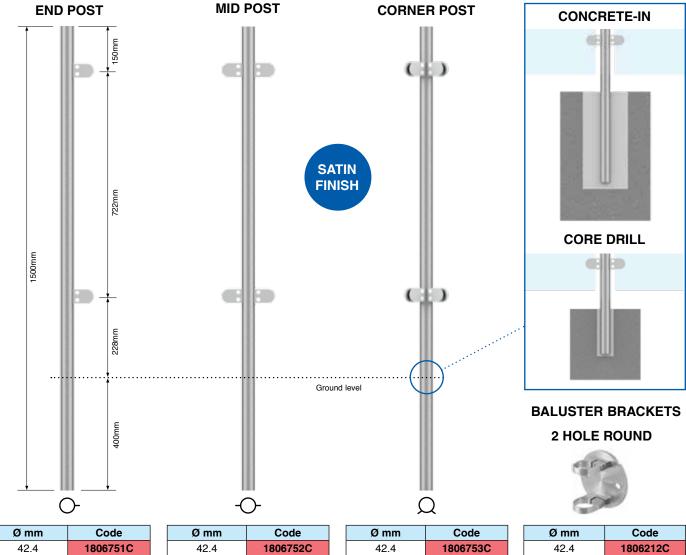
Galvanised

Aluminium

## **CONTEMPLATION**

**CONCRETE-IN ROUND POST - SATIN FINISH** 





Top fitting not included.

Top fitting not included.

**DONUT COVER PLATE** 

Ø mm	Code
42.4	1806247C

Fit at time of installation. For silicone use code: **189901201**.

**RETRO-FIT COVER PLATE** 



Retro-fitted after installation. For silicone use code: 189901201.

**COVER CAP** 

Top fitting not included.



Ø mm	Code
42.4	1806208C

Fit at time of installation. For silicone use code: 189901201.

**ADJUSTABLE CORNER INTERNAL / EXTERNAL** 



Ø mm	Code	
42.4	1806253C	

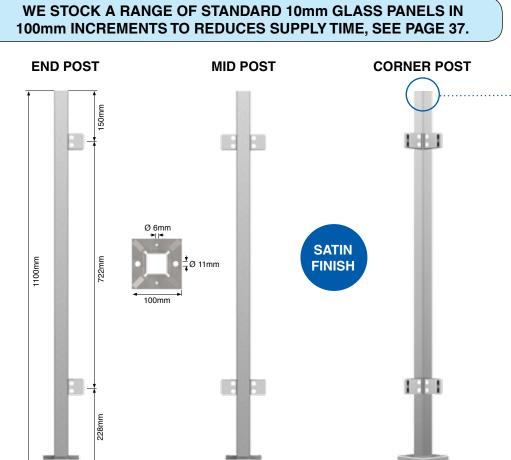
For side-fixing.posts.

For side-fixing.posts.

## **CONTEMPLATION**

#### **BOLT-DOWN SQUARE POST - SATIN FINISH**

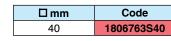




L	<b>}</b>		
□mm	Code		
40 <b>1806761S40</b>			
Top fitting not included.			

□mm	Code	
40	1806762S40	

Top fitting not included.



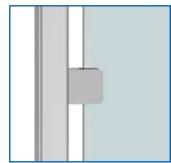
Top fitting not included.

### **FLAT TOP END CAP**

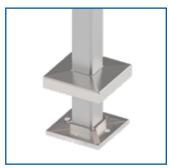


Code: 1806215S40

#### **ALL POSTS HAVE:**

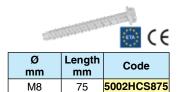


Glass clamps for 10mm glass (8mm rubbers available).

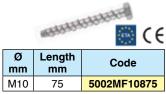


Welded base fitting complete with cover.

### **CONCRETE FIXINGS HEX HEAD WITH FLANGE**



### **MULTI-FIX HEX HEAD BOLT**



### **THROUGH BOLT**



FOR OUR FULL **RANGE OF SQUARE FITTINGS** SEE PAGE 69.









Zinc

Zamac

Mild steel

Galvanised

Aluminium

Duplex

## **TIMELESS & CONTEMPLATION**

#### **MAKE YOUR OWN POSTS**





#### PRE-ASSEMBLED PLAIN POST

STAINLESS STEEL TUBE No holes



DAJE FLATE	DAJE PLATE
→     Ø 10.5mm	→   → Ø 10.5mm
Ø 6.5mm	<b>1</b> Ø 6.5mm

Ø mm	A mm	Code
48.3	972	1806799D
42.4	978	1806799C
42.4	1000	1804790C
48.3	1000	1804790D
42.4	1000	1806790C
48.3	1000	1806790D
42.4	1100	1806760C
48.3	1100	1806760D

Dim A is post only with no top. Top fitting not included.



## FOR LOCTITE ADHESIVES & GLUE SEE PAGE 92.

Ø mm	Height mm	Code
42.4	1000	1804708CB
48.3	1000	1804708DB
42.4	1000	1806708CB
48.3	1000	1806708DB
42.4	1200	1804708CL
48.3	1200	1804708DL
42.4	1200	1806708CL
48.3	1200	1806708DL
42.4	1500	1804708CXL
48.3	1500	1804708DXL
42.4	1500	1806708CXL
48.3	1500	1806708DXL

These posts can be drilled, bolted, cut to size, welded & more!



Our La Fabbrica range of porcelain stoneware reaches new heights in style and engineering, taking all the beauty and charm of the finest timbers. Safe, sustainable, versatile, and refined, Italian excellence with unbeatable quality

#### **CA'FOSCARI COLLECTION**











#### Stunning wood effect Italian porcelain from one of Italy's top design houses

- · A1 and A2fl-s1 fire rated
- Low surface temperatures
- Ideal for elevated patios, all decking applications, and all types of balconies
- Build your dream elevated stone patio without the need for expensive retaining walls and backfill materials
- 1000mm joist spacing for 30mm boards & tile support trays
- · Dramatic reduction in hard landscaping costs
- Perimeter base section allows for our wide range of handrail systems to be fully integrated into your project

#### YOSEMITE COLLECTION











FOR MORE INFORMATION ON OUR SYNERGISED™ PORCELAIN TILES SEE PAGE 97.

## SLEEVE FIT BRACKETS



#### JUST **TIGHTEN** THE GRUB **SCREW** TO FIX TO **POST** \*Can be supplied with 442F square clamps.

#### **CREATE A WIDE RANGE OF POSTS** WITH NO DRILLING!

- Select your post height.
- 2 Choose your post top (End caps page 56, railing saddles page 59)
- 3 Choose your Glass clamp (401F page 64, 442F page 65)
- 4 Choose your base (Bolt-down page 61, side-fix page 62)

#### **END BRACKET**





40	B100
Ø mm	Code
42.4	1806521C

Code:

48.3 1806521D Supplied with M8 bolt for fixing glass clamps.

Code:

Øm



Ø mm	Code
42.4	1806522C
48.3	1806522D

Supplied with M8 bolt for fixing glass clamps.

Code:

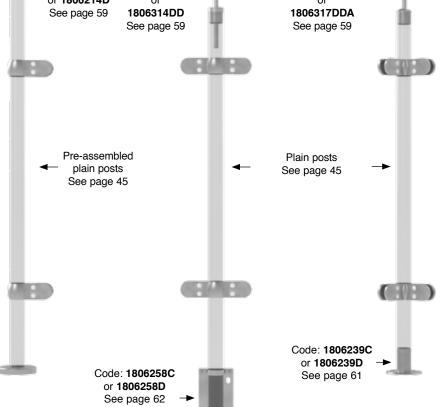
#### 75 - 185° ADJUSTABLE **CORNER BRACKET**



Ø mm	Code
42.4	1806523C
48.3	1806523D

Supplied with M8 bolt for fixing glass clamps.

### 1806214C 1806314CC 1806317CCA or 1806214D 1806314DD 1806317DDA See page 59 See page 59 See page 59



#### JUST SLIDE EVERYTHING **INTO PLACE & TIGHTEN!**



Image shows sleeve fit brackets being used on a curve.

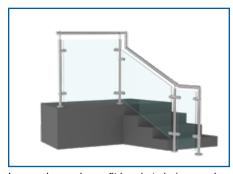


Image shows sleeve fit brackets being used on a staircase.

304

Zinc

Zamac

Code: 1806214C or 1806214D

See page 56

Mild steel

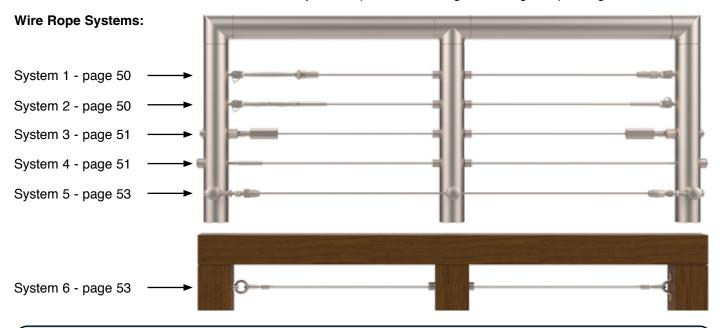
Galvanised

Aluminium

Duplex



Stainless steel Ø 3 and 6mm strand wire rope system is a simple and cost effective alternative to our crossbar system. It can be fixed to most surfaces including wood, metal and brick and is ideal for external applications in residential and commercial environments. Suitable for self assembly and simple to install using self locking, crimped or glued connectors.



#### PLEASE NOTE THAT OUR POSTS ARE NOT TO BE USED WITH 6mm WIRE.

	System 1 (Swageless)	System 2 (Swaged)	System 3 (Swageless)	System 4 (Swaged)	System 5 (Swageless)	System 6 (Swaged)
3mm wire	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
Grade 316	<b>√</b>	<b>√</b>	<b>J</b>	<b>√</b>	<b>√</b>	<b>√</b>
Face fix	_	_	_	_	<b>√</b>	_
In line	<b>√</b>	<b>√</b>	<b>J</b>	<b>√</b>	_	<b>√</b>
Pre-assembled posts	<b>√</b>	<b>√</b>	_	_	_	_
Bespoke posts	-	_	<b>J</b>	<b>√</b>	<b>√</b>	<b>√</b>
Bespoke posts on stairs	<b>√</b>	<b>√</b>	<b>J</b>	<b>√</b>	<b>√</b>	<b>√</b>
Wooden posts	_	_	_	_	_	<b>√</b>
Square posts	<b>√</b>	<b>√</b>	_	<b>√</b>	<b>√</b>	<b>√</b>
Ø 42.4mm posts	<b>√</b>	<b>√</b>	<b>V</b>	<b>√</b>	<b>✓</b>	_
Ø 48.3mm posts	<b>J</b>	J	<b>/</b>	<b>J</b>	<b>J</b>	_

#### SWAGELESS (no crimp)



#### A Tension the wire by inserting a screwdriver and rotating.

#### SWAGED (crimp)



A Secure the wire by crimping or gluing. Swaged connector.

#### **POSTS & FITTINGS**

#### 7 HOLE END/MID POST

M6 eyebolts

#### 14 HOLE MID STRAINING POST

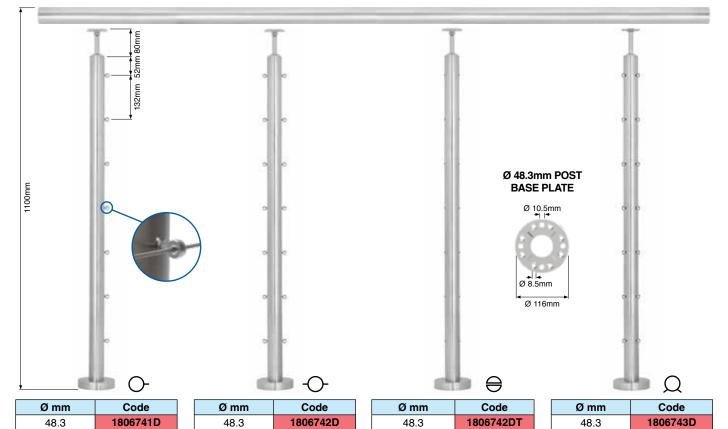
M6 eyebolts

#### 14 HOLE MID POST

Ø 6mm through holes

## 14 HOLE CORNER POST

M6 eyebolts



For use with Ø 3mm wire only.

For use with  $\emptyset$  3mm wire only.

Code

1806609

1301609

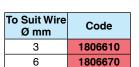
1806669

For use with  $\emptyset$  3mm wire only.

For use with Ø 3mm wire only.

8

**THIMBLE** 





To Suit Wire

Ø mm

3

6

**LOCKING COLLAR** 





To Suit Wire Ø mm	Code
3	1806604
6	1806664

EYEBOLT CONNECTOR



To Suit Wire Ø mm	Code
3	1806603
3	1301603
6	1806663*

M6 thread. \*M10 thread.

POST FITTING ADAPTOR RING



Code
1804335C
1804335D
1806335C
1806335D

M6 thread.

# TENSIONER

**SWAGELESS CABLE** 

To Suit Wire Ø mm	Code
3	1806611
6	1806671

SWAGELESS BUCKLE



To Suit Wire Ø mm	Code
3	1806612
6	1806672

SWAGED CABLE TENSIONER



To Suit Wire Ø mm	Code
3	1806601
6	1806661

SWAGED BUCKLE CONNECTOR



To Suit Wire Ø mm	Code
3	1806602
6	1806662



316

Zinc

С

Zamac

ıC

Mild steel

Galvanised

Aluminium

Duplex

#### **FITTINGS & TOOLS**

**DOWNWARD ANGLED** 

**WIRE ROPE HOLDER** 

For angles + / - 35°

#### **CABLE TENSIONER**

For flat runs



To Suit Wire Ø mm	Size mm	Code
3	Flat	1806617
3	42.4	1806617C
3	48.3	1806617D
6	Flat	1806667
6	42.4	1806667C
6	48.3	1806667D

Includes 1 x threaded cable tensioner, cover cap and end fitting.

#### **CABLE TENSIONER** For stairs and slopes



To Suit Wire Ø mm	Size mm	Code
3	Flat	1806618
3	42.4	1806618C
3	48.3	1806618D
6	Flat	1806677
6	42.4	1806677C
6	48.3	1806677D

Includes 1 x threaded cable tensioner, cover cap and end fitting.

**UPWARD ANGLED** 

**WIRE ROPE HOLDER** 

For angles + / - 35°

To Suit Wire Ø mm	Size mm	Code
3	Flat	1806622
3	42.4	1806622C
3	48.3	1806622D
6	Flat	1806682
6	42.4	1806682C
6	48.3	1806682D

	10	
Suit Wire Ø mm	Size mm	C
_		400

To Suit Wire Ø mm	Size mm	Code
3	Flat	1806621
3	42.4	1806621C
3	48.3	1806621D
6	Flat	1806681
6	42.4	1806681C
6	48.3	1806681D

#### **CABLE TENSIONER**

Through fitting



To Suit Wire Ø mm	Size mm	Code
3	N/A	1806613
6	N/A	1806673

#### **ANGLED WIRE ROPE HOLDER**

Left hand side





To Suit Wire Ø mm	Size mm	Code
3 and 6	Flat	1806615
3	42.4	1806615C
3	48.3	1806615D

Order screws code: 189900603.

#### **ANGLED WIRE ROPE HOLDER**

Middle



To Suit Wire Ø mm	Size mm	Code
3	Flat	1806616
3	42.4	1806616C
3	48.3	1806616D
6	Flat	1806676

Order screws code: 189900603.

#### **ANGLED WIRE ROPE HOLDER** Right hand side



100		
To Suit Wire Ø mm	Size mm	Code
3 and 6	Flat	1806614
3	42.4	1806614C
3	48.3	1806614D

Order screws code: 189900603.

#### **WIRE ROPE**

1 x 19 strands



Length m	Thickness mm	Code
10	3	180660510
10	6	180666510
50	3	180660550
50	6	180666550
100	3	1806605100
100	6	1806665100

#### **ARTICULATED WIRE TENSIONER**



Code	To Suit Wire Ø mm	Ø mm
1804607C	3	42.4
1806607C	3	42.4
1806607D	3	48.3

Secured with grub screw.

#### PAD EYE



To Suit Wire Ø mm	Code
3	1806608
6	1806668

Fixing holes Ø 4.5mm.

#### **EYEBOLT WOODSCREW THREAD**



To Suit Wire Ø mm	Code
3	1806606
6	1806666

#### **COVER CAP** With locking ends



To Suit Wire Ø mm	Code
3 and 6	1806619

**CRIMPING TOOL** 

Code 189900102

#### **END FITTING**



To Suit Wire Ø mm	Code
3	1806624
6	1806684

## **HYDRAULIC CRIMPING**



Code	
189900103	

#### **CABLE RELEASE TOOL**

For end fitting



To Suit Wire Ø mm	Code
3	1806620
6	1806680



	Code
080569	

#### **COUNTER SUNK SCREW**



Ø x L mm	Code
M6 x 20	189900603

#### **INSTANT ADHESIVE** WIRE CUTTING TOOL

For gluing wire in crimped connectors

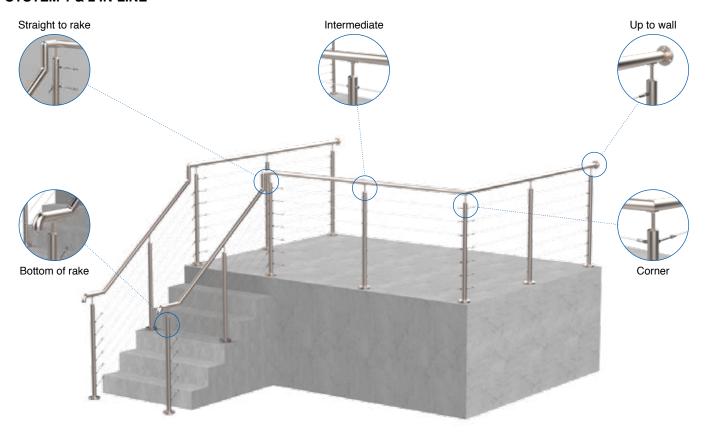


ml	Code
50	1899007454

Supplied with plunger and needle for accurate application.



#### **SYSTEM 1 & 2 IN-LINE**







To Suit Wire Ø mm	Code
3	1806604

#### **EYEBOLT CONNECTOR**



Thread mm	To Suit Wire Ø mm	Code
M6	3	1806603

M6 thread.

## POST FITTING ADAPTOR RING



Ø mm	Code
42.4	1804335C
48.3	1804335D
42.4	1806335C
48.3	1806335D



Example of post fitting adaptor ring with 6mm eye bolt code: **1806663** and swaged buckle connector code: **1806602** 

## SWAGELESS CABLE TENSIONER



To Suit Wire Ø mm	Code
3	1806611

SWAGELESS BUCKLE



To Suit Wire Ø mm	Code
3	1806612

## SWAGED CABLE TENSIONER



To Suit Wire Ø mm	Code
3	1806601

## SWAGED BUCKLE CONNECTOR



To Suit Wire Ø mm	Code
3	1806602

SWAGELESS CONNECTORS CAN BE SECURED USING THE 454 LOCTITE ADHESIVE CODE: 1899007454. WHEN LEFT FOR 72 HOURS THEY WILL BE ABLE TO CARRY A LOAD OF 322KGS. SO IN A 7 WIRE SYSTEM THE INFILL AT ONE END OF THE POST CAN RESIST OVER 2 TONNES!













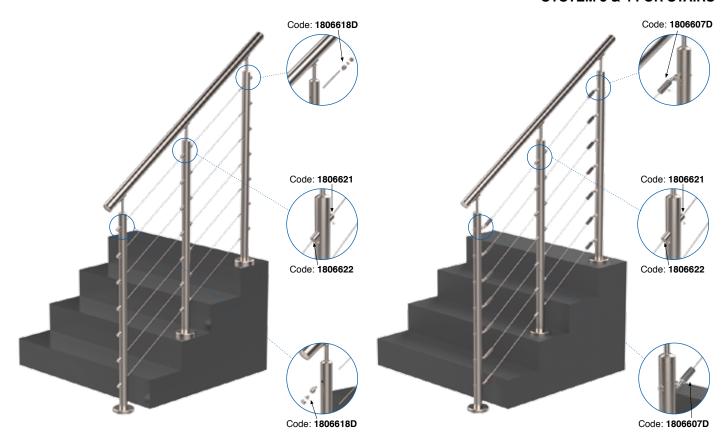








#### **SYSTEM 3 & 4 FOR STAIRS**



#### **CABLE TENSIONER** For stairs and slopes





To Suit Wire Ø mm	Size mm	Code
3	Flat	1806618
3	42.4	1806618C
3	48.3	1806618D

Includes 1 x threaded cable tensioner, cover cap and end fitting.

#### **UPWARD ANGLED WIRE ROPE HOLDER**

For angles + / - 35°



To Suit Wire Ø mm	Size mm	Code
3	Flat	1806622
3	42.4	1806622C
3	48.3	1806622D

#### **DOWNWARD ANGLED WIRE ROPE HOLDER**

For angles + / - 35°



Code	Size mm	To Suit Wire Ø mm
1806621	Flat	3
1806621C	42.4	3
1806621D	48.3	3

#### **ARTICULATED WIRE TENSIONER**



Ø mm	To Suit Wire Ø mm	Code
42.4	3	1806607C
48.3	3	1806607D

Secured with grub screw.

#### FOR CABLE RELEASE TOOL SEE PAGE 49.

#### **INSTALLATION USING CABLE TENSIONER**



Crimp wire into cable tensioner and insert through pre-drilled hole on starter post.



Add washer and nut and loosely tighten.



Insert end fitting through end post, pull tight, cut wire flush with fitting.



Screw on cover cap.



Tighten nut on starter post to bring the wire under tension.

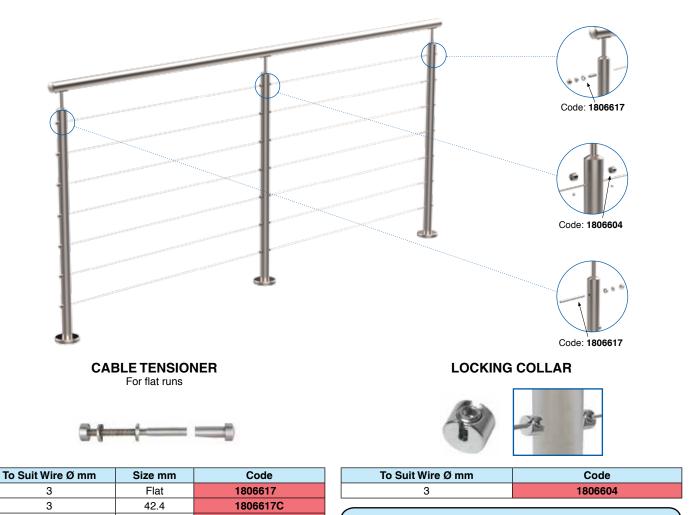


Cut excess protruding thread and screw on cover cap.

**FOR LOCTITE ADHESIVES & GLUE SEE PAGE 92.** 

FOR A FULL RANGE OF STAINLESS STEEL TUBE, HANDRAIL FITTINGS & ACCESSORIES SEE FROM PAGE 56.

#### **SYSTEM 3 FOR FLAT RUNS**



3 48.3 1806617D Includes 1 x threaded cable tensioner, cover cap and end fitting.

FOR WIRE ROPE SEE PAGE 49.

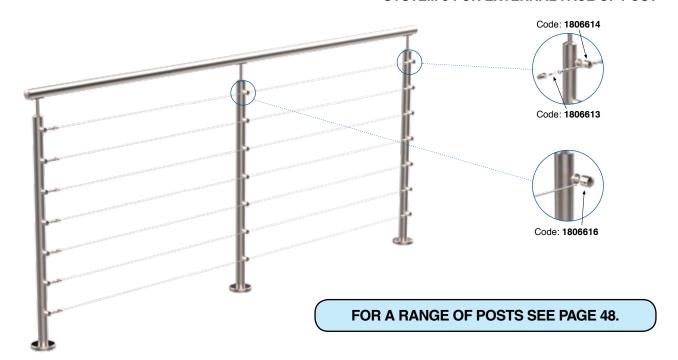
#### **UNIVERSAL STRAND WIRE COMPONENTS**



Make your own handrailing, in stainless, aluminium or mild steel and create your infills using our range of universal components to suit  $\emptyset$  3 & 6mm wire.



#### **SYSTEM 5 FOR EXTERNAL FACE OF POST**



**CABLE TENSIONER** 



To Suit Wire Ø mm	Code
3	1806613

ANGLED WIRE ROPE HOLDER

Left hand side





To Suit Wire Ø mm	Size mm	Code
3 and 6	Flat	1806615
3	42.4	1806615C
3	48.3	1806615D

Order screws code: 189900603.

ANGLED WIRE ROPE HOLDER

Middle



To Suit Wire Ø mm	Size mm	Code
3	Flat	1806616
3	42.4	1806616C
3	48.3	1806616D

Order screws code: 189900603.

## ANGLED WIRE ROPE HOLDER

Right hand side



To Suit Wire Ø mm	Size mm	Code
3 and 6	Flat	1806614
3	42.4	1806614C
3	48.3	1806614D

Order screws code: 189900603.

#### **SYSTEM 6 FOR WOODEN POSTS**



**THIMBLE** 



To Suit Wire Ø mm	Code
3	1806610

**FERRULE** 



To Suit Wire Ø mm	Code
3	1806609
3	1301609

**PAD EYE** 



To Suit Wire Ø mm	Code
3	1806608

Fixing holes Ø 4.5mm.

## EYEBOLT WOODSCREW THREAD



To Suit Wire Ø mm	Code
3	1806606

### FOR LOCTITE ADHESIVES & GLUE SEE PAGE 92.

## **CROSSBAR SYSTEM**

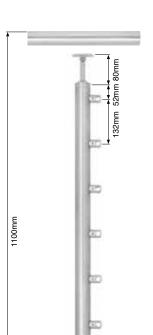


Our crossbar system can provide a modern handrail and balustrade for many applications. Offering another practical alternative to a glazed balustrade. Flexible components allow for 7 rails to be fitted as standard.

#### **ROUND 7 HOLE POST**

#### **HOLLOW TUBE**

#### **TUBE CONNECTOR**





**SOLID BAR** 

Ø mm	Code
12	1804500
12	1806500
3m length.	

Ø mm	Code
12	1804510
12	1806510
3m length. 1mm wall thickness.	



Ø mm	Code
12	1804524
12	1806524

**SOLID END BALL** 

**CROSSBAR HOLDER** 

Flat mounting



Code
1804501F
1806501F

Ø 12.2mm through hole requires M6 button head fixing bolt code: 5006BS06X20.

**ANGLE JOINT** 

CONNECTOR

**CROSSBAR HOLDER** 

Tube mounting



1806501C

1806501D

Code	
1804501C	
1804501D	
1806501C	

Ø mm	Code
20	1301502
20	1804502
20	1806502

Ø 12.2mm through hole requires M6 button head fixing bolt code: 5006BS06X20.

Ø mm

42.4 48.3

42.4

48.3

**ADJUSTABLE CROSSBAR HOLDER** 



90°	EL	BO	W	
RADIUS	FD	CO	RN	JEE



	1	
Ø m	m	

Ø mm	Code
Flat	1806509F

Requires 6mm button head fixing bolt code: 5006BS06X20.

Code 12 1804525 12 1806525

42.4 1806737C 48.3 1806737D

Ø mm

Code

Fitted with 12mm bar/tube holders.

Length

75

#### **HEX HEAD WITH FLANGE**

#### **MULTI-FIX HEX HEAD BOLT**

Code

1804507

1806507



Ø mm	Length mm	Code
M10	75	5002MF10875

#### THROUGH BOLT



Ø mm	Length mm	Code
M8	95	5006TB08100

#### **ALLEN KEY & BUTTON HEAD BOLT**



Description	Ø x L mm	Code
Allen Key	_	189900607
Bolt	M6 x 20	5006BS06X20



Metric

Ø x L mm

M8 x 75



Code

5002HCS875











## RECTANGULAR HANDRAIL SYSTEM

**TYPE 40 x 10mm** 



Our new 40 x 10mm rectangular handrailing system adds a contemporary look to your installation. It's easy to glue together and can work with any number of flat top saddle handrail brackets.

#### RECTANGULAR HANDRAIL



ADJUSTABLE CONNECTOR



Length m	Code
3.0	18067044010
6.0	18067004010

Code 18062064010

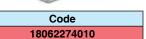
**JOINER** 



18062024010

90° JOINER





1.5mm wall thickness.

**END CAP** 

Code

18062144010

HANDRAIL BRACKET
Wall mounting

Code

18063054010

#### ADJUSTABLE HANDRAIL BRACKET Glass/flat



Ø mm	To Suit	Code
50	Flat	1806334FF

82mm distance from glass to centre of bracket. To suit 12 - 30mm glass thickness.

ADJUSTABLE HANDRAIL BRACKET



100		THE PERSON NAMED IN
□ mm	To Suit	Code
40	Flat	1806303S40F

92mm distance from wall to centre of bracket. Requires threaded dowel code: **189900622** for wall fixing.

## FOR LOCTITE ADHESIVES & GLUE SEE BELOW.

## HIGH STRENGTH RETAINER GLUE

For use with tube fittings

#### **ADHESIVE ACTIVATOR**

Reduces curing time when used with Loctite 638

## INSTANT ADHESIVE

Supplied with plunger and needle for accurate application. For use as thread lock adhesive



ml

50

LOCTITE.



ml	Code
150	18990087649



ml	Code
50	1899007454

Code 1899007638

## **TUBE & BAR**

#### **HOLLOW TUBE FOR HANDRAILS & POSTS**



1.0m LENGTH

Ø mm	Code
42.4	1804708CB
48.3	1804708DB
42.4	1806708CB
48.3	1806708DB

2mm wall thickness.

1.2m LENGTH

Ø mm	Code
42.4	1804708CL
48.3	1804708DL
42.4	1806708CL
48.3	1806708DL

2mm wall thickness.

1.5m LENGTH

Ø mm	Code
42.4	1804708CXL
48.3	1804708DXL
42.4	1806708CXL
48.3	1806708DXL

2mm wall thickness.

3.0m LENGTH

Ø mm	Code
42.4	1804704C
48.3	1804704D
42.4	1806704C
48.3	1806704D

2mm wall thickness.

6.0m LENGTH

Ø mm	Code
42.4	1804700C
48.3	1804700D
42.4	1806700C
48.3	1806700D

2mm wall thickness.

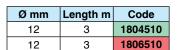
**HOLLOW TUBE** 

**SOLID BAR** 

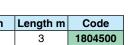
**SPLIT TUBE** 

**SQUARE HOLLOW TUBE** 



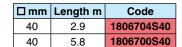


Ø mm	Length m	Code
12	3	1804500
10	0	1006500





	Ø mm	Length m	Code
	18	3	1504P011
1.25mm wall thickness.			



2.5mm wall thickness.

1mm wall thickness.

ALL STAINLESS FITTINGS ARE SUPPLIED IN A SATIN POLISH FINISH GRIT 320. THEY CAN ALSO BE SUPPLIED IN A MIRROR POLISH FINISH.

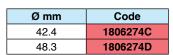
## **END CAPS**

**FLAT TOP** 





Ø mm	Code
42.4	1804214C
48.3	1804214D
42.4	1806214C
48.3	1806214D



Glue fit.

#### **RAISED TOP**



Ø mm	Code
42.4	1804215C
48.3	1804215D
42.4	1806215C
48.3	1806215D

#### **DOME TOP**



Ø mm	Code
42.4	1804216C
48.3	1804216D
42.4	1806216C
48.3	1806216D

**FOR LOCTITE ADHESIVES & GLUE** SEE PAGE 92.

#### FOR OUR RANGE OF MIRROR FINISH COMPONENTS SEE FROM PAGE 74.















316

Zamac

Mild steel

Galvanised

Aluminium



## HANDRAIL BRACKETS

#### **WELDABLE HANDRAIL BRACKET**

Fixed washer



Code	
1301301	

WALL/TUBE

Ø 60

Code 171178K

171177K

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

### WELDABLE HANDRAIL BRACKET

Adjustable washer



Code	
1301301A	

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

## Fixed washer



HANDRAIL BRACKET WITH SADDLE

To Suit Ø mm	Code
42.4	1301301C
48.3	1301301D

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





Ø mm	Code
42.4 or 48.3	171179K

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



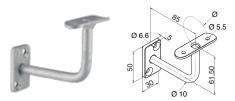
Description	Code
Cover Plate & Bracket	171167
Bracket only	171167B
Cover Plate only	171162C

90mm distance from wall to centre of bracket.

### Three $\varnothing$ 6.5mm countersunk fixing plate holes. WALL/TUBE

Ø mm

42.4 or 48.3 42.4 or 48.3



Ø mm	Code
42.4 or 48.3	171181K
42.4 or 48.3	171180K

Two Ø 6.6mm countersunk fixing plate holes.



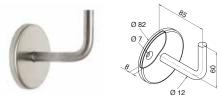
Description	Code
Bracket Only	171182K
Cover Plate & Bracket	171182

Three Ø 7mm countersunk fixing plate holes.



171162
171162B
171162C

76mm distance from wall to centre of bracket.



Code
171166K
171169K

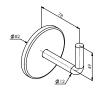
Three Ø 7mm countersunk fixing plate holes. SIDE FIX HANDRAIL BRACKET



Code	
171174	

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





Description	Code
Cover Plate & Bracket	171166
Cover Plate & Bracket	171169

76mm distance from wall to centre of bracket. SIDE FIX HANDRAIL BRACKET

With saddle

To Suit Ø mm	Code
42.4	171174C
48.3	171174D

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

#### **UNIVERSAL PLUG & SCREW JARS**





Size Ø mm	Pack Qty	Code
6	500	50UPS6R

6 x 28mm plugs, 4.5 x 40mm screws.





Size Ø mm	Pack Qty	Code
7	450	50UPS7B

7 x 30mm plugs, 4.0 x 40mm screws.

## HANDRAIL BRACKETS

#### **ADJUSTABLE HEIGHT - FIXED SPIGOT**

#### FLAT/TUBE



Ø mm	Code
48.3	1806301FD

65mm distance from flat to centre of bracket.

#### WALL/TUBE



Ø mm	Code
42.4	1804303FC
48.3	1804303FD
42.4	1806303FC
48.3	1806303FD

68mm distance from wall to centre of bracket.

#### **GLASS/TUBE**



Ø mm	Code
42.4	1804333FC
48.3	1804333FD
42.4	1806333FC
48.3	1806333FD

82mm distance from glass to centre of bracket. To suit 12 - 30mm glass thickness.

#### **FIXED SPIGOT**

WALL/TUBE



Ø mm	Code
42.4	1804305FC
48.3	1804305FD
42.4	1806305FC
48.3	1806305FD

63.5mm distance from wall to centre of bracket.

#### WALL/TUBE



Ø mm	Code
42.4	1804305FCB
48.3	1804305FDB
42.4	1806305FCB
48.3	1806305FDB

85mm distance from wall to centre of bracket.

WALL/FLAT



1804305FF	
63.5mm distance from wall to	
centre of bracket.	

Code

#### **SINGLE WALL MOUNT**





Ø mm	Code
42.4	1804315FC
48.3	1804315FD
42.4	1806315FC
48.3	1806315FD

72mm distance from wall to centre of bracket. Supplied with 8mm screw thread for wall fixing.

#### ADJUSTABLE SPIGOT WALL/TUBE



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

85mm distance from wall to centre of bracket.

#### SATIN POLISH WELDABLE **HANDRAIL BRACKET & COVER PLATE**



Code	
171166	
171169	

76mm distance from wall to centre of bracket.

#### HANDRAIL BRACKET **PLATE & RUBBERS**

To suit glass balustrading



Ø mm	Glass mm	Code
50	8 - 19	1804358G
50	8 - 19	1806358G

Glass hole size Ø 22mm. M8 thread.

#### **ALLEN KEY**

For tightening grub screws in handrail brackets



Code	
189900607	

#### **FIXINGS**

#### **COUNTERSUNK SCREW**

For fixing flat saddles



Ø x L mm	Code
M5 x 20	189900619

Self-tapping. Pilot holes required. Use drill bit code: 189901004

#### **PAN HEAD SCREW**

For fixing Ø 42.4 & 48.3mm saddles



Ø x L mm	Code
M5 x 20	189900620

Self-tapping. Pilot holes required. Use drill bit code: 189901004.

#### **BUTTON HEAD BOLT**

For fixing handrail brackets in threaded holes



Ø x L mm	Code
M5 x 20	5006BS05X20
M6 x 20	5006BS06X20

Pilot holes required.



















Galvanised





## **RAILING SADDLES**

#### **FIXED SPIGOT**

FLOOR/TUBE



Ø mm	Code
42.4	1804307FC
48.3	1804307FD
42.4	1806307FC
48.3	1806307FD

#### TUBE/TUBE



Ø mm	Code
42.4	1804310CC
48.3	1804310DD
42.4	1806310CC
48.3	1806310DD

#### 90° TUBE/TUBE



Ø mm	Code
42.4	1804311CC
48.3	1804311DD
42.4	1806311CC
48.3	1806311DD

For 201 type elbows used with handrails.

#### **ADJUSTABLE SPIGOTS**

Height 62mm.

TUBE/TUBE



Ø mm	Code
42.4	1804312CC
48.3	1804312DD
42.4	1806312CC
48.3	1806312DD

#### TUBE/TUBE



Ø mm	Code
42.4	1806322CC
48.3	1806322DD

90° FIXED SADDLE TUBE/TUBE



Ø mm	Code
42.4	1806321CC
48.3	1806321DD

**ADJUSTABLE HANDRAIL** SUPPORT BRACKET



· · · · · · · · · · · · · · · · · · ·	
Ø mm	Code
42.4	1804314CC
48.3	1804314DD
42.4	1806314CC
48.3	1806314DD

#### HANDRAIL SUPPORT BRACKETS

#### HANDRAIL BRACKET WITH 90° FIXED ELBOW



- Annual Property Control of the Con	
Ø mm	Code
42.4	1804311CCA
48.3	1804311DDA
42.4	1806311CCA
48.3	1806311DDA

#### HANDRAIL BRACKET WITH +/- 90° ADJUSTABLE ELBOW



Ø mm	Code
42.4	1804317CCA
48.3	1804317DDA
42.4	1806317CCA
48.3	1806317DDA

#### **FIXED SADDLE**

90° CORNER TOP



Ø mm	Code
42.4	1804356C
48.3	1804356D
48.3	1806356D
Flat	1804356F
Flat	1806356F



135° ROUND **CORNER TOP** 

Ø mm	Code
42.4	1804354C
48.3	1804354D
48.3	1806354D
Flat	1804354F
Flat	1806354F



Ø mm	Code
42.4	1804351C
48.3	1804351D
42.4	1806351C
48.3	1806351D
Flat	1804351F
Flat	1806351F

#### PAN HEAD THREAD ROLLING BOLT

For fixing railing saddles to tube



Ø x L mm	Code
M5 x 20	189900686

Self-tapping. Pilot holes required. Use drill bit code: 189901005.

#### **COBALT DRILL BIT**

To suit 5mm screws & bolts



Description	Code
4.2mm drill for self-tapping screw	189901004
4 5mm drill for thread rolling bolt	189901005

**FOR LOCTITE ADHESIVES & GLUE SEE PAGE 92.** 

## **TUBE FITTINGS**

90° ELBOW **RADIUSED CORNER** 



Ø mm	Code
42.4	1804200C
48.3	1804200D
42.4	1806200C
48.3	1806200D

90° ELBOW **ROUND CORNER** 



Ø mm	Code
42.4	1804201C
48.3	1804201D
42.4	1806201C
48.3	1806201D

90° ELBOW **SQUARE CORNER** 



Ø mm	Code
42.4	1804202C
48.3	1804202D
42.4	1806202C
48.3	1806202D

135° ELBOW



Ø mm	Code
42.4	1804220C
48.3	1804220D
42.4	1806220C
48.3	1806220D

90° WELDABLE **ELBOW** 



Ø mm	Code
42.4	1804E42
48.3	1804E48
42.4	1806E42
48.3	1806E48





Ø mm	Code	
42.4	1804203C	
48.3	1804203D	
42.4	1806203C	
48.3	1806203D	

**ADJ. ELBOW SMOOTH 0 - 70°** 



Ø mm	Code
42.4	1804227C
48.3	1804227D
42.4	1806227C
48.3	1806227D

**ROTATING ELBOW** 



Ø mm	Code
42.4	1804233C
48.3	1804233D
42.4	1806233C
48.3	1806233D

**ADJ. HANDRAIL** ADAPTOR 0 - 70°



Ø mm	Code
42.4	1806316CC
48.3	1806316DD

**TUBE ADAPTOR** 





**3 WAY CORNER** 

Ø mm	Code
42.4	1804204C
48.3	1804204D
42.4	1806204C
48.3	1806204D

**LONG TEE** 



Ø mm	Code
42.4	1804205C
48.3	1804205D
42.4	1806205C
48.3	1806205D

**4 WAY CROSS** 



Ø mm	Code
42.4	1804222C
48.3	1804222D
42.4	1806222C
18.3	1806222D

**IN-LINE CONNECTOR** 



Ø mm	Code
42.4	1804206C
48.3	1804206D
42.4	1806206C
48.3	1806206D

**FOR OUR RANGE OF SQUARE FITTINGS SEE PAGE 69.** 

**FOR LOCTITE ADHESIVES & GLUE** 

**SCROLL END** 



Ø mm	Code
42.4	1804221C
48.3	1804221D
42.4	1806221C
48.3	1806221D

304

**EXTENDED SCROLL END** 



Code	Length mm	Ø mm
1804EA42180	400	42.4
1804EA48180	400	48.3
1806EA42180	400	42.4
1806EA48180	400	48.3

PANEL INFILL ADAPTOR



Ø mm	Code
42.4	1804503C
48.3	1804503D
42.4	1806503C
48.3	1806503D

SEE PAGE 92.

Requires 6mm fixing bolt code: 5006BS06X20. Suits material 1.5 - 10mm thick.











## **FLANGES & BASE PLATES**

#### **EXTERNAL ROUND TUBE FLANGE**



Ø mm	Code
42.4	1804209C
48.3	1804209D
42.4	1806209C
48.3	1806209D

**SQUARE EDGE TUBE FLANGE** 



Ø mm	Code
42.4	1804210C
48.3	1804210D
42.4	1806210C
48.3	1806210D

**WELDABLE ROUND WALL FLANGE** 



Ø mm	Code
42.4	1804217C
48.3	1804217D
42.4	1806217C
48.3	1806217D

**COVER PLATE** 

To suit 217

Ø mm	Code
42.4	1804218C
48.3	1804218D
42.4	1806218C
48.3	1806218D

**ADJUSTABLE ELBOW** 

**TUBE FLANGE** 

**ADJUSTABLE INTERNAL** FIT BASE FLANGE +/- 55°



Ø mm	Code
42.4	1804234C
48.3	1804234D
42.4	1806234C
48.3	1806234D

**INTERNAL FIT FLOOR BASE** 

Glue fix



Ø mm	Code
42.4	1804225C
48.3	1804225D
42.4	1806225C
48.3	1806225D

**WELD ON ROUND BASE PLATE** 

With 'O' ring & cover



Ø mm	Code
42.4	1804228C
48.3	1804228D
42.4	1806228C
48.3	1806228D

- 3			
	Nu	2	
16	:63	20	lb i

Ømm	Code
42.4	1804229C
48.3	1804229D
42.4	1806229C
48.3	1806229D

**INTERNAL FIT TUBE FLANGE** 

Glue fix, no cover plate required



Glue fix

**INTERNAL FIT TUBE FLANGE** 

Hammer fix





Ø mm	Code
42.4	1804237C
48.3	1804237D
42.4	1806237C
10.2	1806237D



Ø mm	Code
42.4	1804235C
48.3	1804235D
42.4	1806235C
48.3	1806235D



Ø mm	Code
42.4	1804239C
48.3	1804239D
42.4	1806239C
48.3	1806239D

**WELD ON ROUND BASE PLATE** 



Ø mm	Code
42.4	1804207C
48.3	1804207D
42.4	1806207C
48.3	1806207D

**COVER CAP** 



Ø mm	To Suit 207 Code	To Suit 225 Code	To Suit 235 Code
42.4	1804208C	1804226C	1804236C
48.3	1804208D	1804226D	1804236D
42.4	1806208C	1806226C	1806236C
48.3	1806208D	1806226D	1806236D

Fit at time of installation. For silicone use code: 189901201.

#### **DONUT COVER PLATE**



Ø mm	Code
42.4	1806247C
48.3	1806247D

Fit at time of installation. For silicone use code: 189901201.

**RETRO-FIT COVER PLATE** 



Ø mm	Code
42.4	1806248C
48.3	1806248D

Retro-fitted after installation. For silicone use code: 189901201.

## **BALUSTER BRACKETS**

#### **2 HOLE ROUND**



Ø mm	Code
42.4	1804212C
48.3	1804212D
42.4	1806212C
48.3	1806212D

**2 HOLE ROUND** With tube support spigot



Ø mm	Code
42.4	1804219C
48.3	1804219D
42.4	1806219C
48.3	1806219D

### **2 HOLE ROUND FOLDED**

Weld fix



Ø mm	Code
42.4	1806256C
48.3	1806256D

#### **ADJUSTABLE CORNER -**INTERNAL/EXTERNAL



Ø mm	Code
42.4	1806253C
48.3	1806253D

**RECTANGULAR BACK** 



Ø mm	Code
42.4	1806213C
48.3	1806213D

#### **FASCIA BRACKET**



Ø mm	Code
42.4	1806258C
48.3	1806258D

**WALL BRACKET** 



Ø mm	Code
48.3	1806257D

#### **TUBE SUPPORT**



Ø mm	Code
48.3	1806519D

For extra support.

SINGLE SIDE SUPPORT



Ø mm	Code
42.4	1804511C
42.4	1806511C
48.3	1806511D

**DOUBLE SIDE SUPPORT** 



Ø mm	Code
42.4	1804512C
42.4	1806512C
48.3	1806512D

#### **TUBE TO WALL CONNECTOR**



Ø mm	Code	
42.4	1804255C	
48.3	1804255D	
42.4	1806255C	
48.3	1806255D	









Zamac



Mild steel



Galvanised

Aluminium



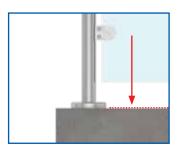
## **GLASS CLAMPS**



The most popular method for providing a glazed balustrade, while at the same time keeping the outlook open and views beyond visible. Glass clamps are simple to install and are offered in either a square or radiused option, providing a glazed system between posts. Compatible with 8 to 21.5mm thick glass, clamps can be used over any length of installation as well as slopes and staircases.

## **GLASS FIXING INFORMATION**

If using glass clamps in any installation where the glass is fixed to the outside of a staircase and overhanging, then security pins (code: **189900401** or **189900402**) and drilled glass must be used.



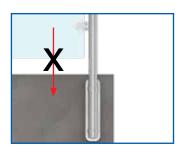


Pin - 189900401 or 189900402 not required



Pin - 189900401 or 189900402 required Requires a minimum Ø 10mm

holes in glass.



Cast Zamac clamps are a cheaper alternative to stainless steel. Available in a mirror finish, satin finish or mill finish (suitable for powder coating). Not for external use.

Cast Aluminium clamps are a new innovation, that can be used internally or externally.

Cast Stainless 304 clamps are available in satin polish and are for internal use.

Cast Stainless 316 clamps are available in both mirror and satin polish and for external use.

Cast Duplex 2205 (ultra marine) for external applications, ideal for use in close proximity to the coast.



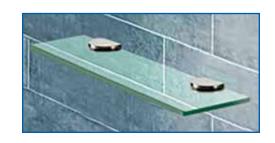
#### **SATIN FINISH SMALL**



Back	Glass mm	Code
Flat	8	1806400F

Not suitable for handrailing applications. Typical uses are for display and shelving. H  $20 \times L 40 \times D 16$ mm. For 6mm rubbers, order code: **1899001S06**.

## SHELF CLAMP



## **GLASS CLAMPS**

#### SATIN FINISH



Back	Glass mm	Ø mm	Code
Round	8 - 10	42.4	1802401C
Round	8 - 12	48.3	1802401D
Round	8 - 12	42.4	1804401C
Round	8 - 12	48.3	1804401D
Round	8 - 12	42.4	1806401C
Round	8 - 12	48.3	1806401D
Flat	8 - 10	-	1802401F
Flat	8 - 12	-	1804401F
Flat	8 - 12	-	1806401F

Supplied with 10mm rubbers, for other sizes refer to D Rubbers table. Type 401.

#### **SATIN POLISH EFFECT**



ECO	YMON
VER	SION

**ECONOMY VERSION** 

Back	Glass mm	Ø mm	Code
Round	10	42.4	05CL1260C304
Round	10	48.3	05CL1260D304
Round	10	42.4	05CL1260C316
Round	10	48.3	05CL1260D316
Flat	10	-	05CL1260F304
Flat	10	-	05CL1260F316

Supplied with 10mm rubbers. Only for use with 10mm glass. Type 401.

#### MIRROR FINISH



Back	Glass mm	Ø mm	Code
Flat	8 - 10	-	1802401FP

Supplied with 10mm rubbers, for other sizes refer to D Rubbers table. Type 401.

#### **MIRROR FINISH**



Back	Glass mm	Ø mm	Code
Round	8 - 10	42.4	1806401CM
Round	8 - 10	48.3	1806401DM
Flat	8 - 10	-	1806401FM

Supplied with 10mm rubbers, for other sizes refer to D Rubbers table. Type 401.

#### **MIRROR FINISH**



Back	Glass mm	Ø mm	Code
Round	10	42.4	05CL1260C316M
Round	10	48.3	05CL1260D316M
Flat	10	-	05CL1260F316M

Supplied with 10mm rubbers. Only for use with 10mm glass. Type 401.

#### **RAW FINISH**



Back	Glass mm	Ø mm	Code
Round	8 - 10	42.4	1802401CZ
Round	8 - 10	48.3	1802401DZ
Flat	8 - 10	-	1802401FZ

Supplied with 10mm rubbers, for other sizes refer to D Rubbers table. Type 401. Suitable for powder coating.

#### **PPC MATT BLACK**





Code	Glass mm	Code
1805401CB	8 - 12	1804401180
1805401DB	8 - 10	1806401180
1805401FB	H 45 x L 107 x D 28mm. Supplied	

Supplied with 10mm rubbers, for with 10mm rubbers, for other sizes refer to D Rubbers table. other sizes refer to D Rubbers table. Type 401. Cast aluminium. Type 401.

#### **SATIN FINISH SATIN FINISH** 180° DOUBLE 90° DOUBLE



Glass mm	Code
8 - 12	180440190
8 - 12	180640190

H 45 x L 73 x W 73 x D 28mm. Supplied with 10mm rubbers, for other sizes refer to D Rubbers table. Type 401.

**SATIN FINISH** Flat back



Glass mm	Code
15.0 - 21.5	1806440F

H 70 x L 60 x D 41mm. Supplied with 15mm rubbers, for other sizes refer to D Rubbers table. Type 440.

#### **DIMENSION DRAWINGS**

#### **401 ROUND BACK**

Glass

mm

Round 8 - 10 48.3

8 - 12

Back

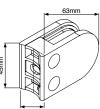
Flat

Round 8 - 10

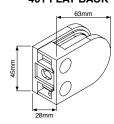
Ø

mm

42.4



### **401 FLAT BACK**



#### **D RUBBERS**

5 110552110			
Glass Clamp Code Group	Glass mm	Code	
400	6.00	1899001S06	
	8.00	189900108	
401	8.76	18990010876	
401	10.00	189900110	
	12.00	189900112	
	15.00	1899001L15	
440	17.50	1899001L175	
440	19.00	1899001L19	
	21.50	1899001L215	





Zinc

Zamac

Mild steel

Galvanised

Aluminium

Duplex

## **GLASS CLAMPS**

#### **SATIN FINISH**



Back	Glass mm	Ø mm	Code
Round	6 - 10	42.4	1806442C
Round	6 - 10	48.3	1806442D
Flat	6 - 10	-	1806442F

Supplied with 10mm rubbers, for other sizes refer to Square Rubbers table. Type 442.

#### **SATIN FINISH**



Back	Glass mm	Ø mm	Code
Round	8 - 12	42.4	1804402C
Round	8 - 12	48.3	1804402D
Round	8 - 12	42.4	1806402C
Round	8 - 12	48.3	1806402D
Flat	8 - 12	-	1802402F
Flat	8 - 12	-	1804402F
Flat	8 - 12	-	1806402F

Supplied with 10mm rubbers, for other sizes refer to Square Rubbers table. Type 402.

#### **SATIN FINISH** 180° DOUBLE



Code

1806442180

	90	Ъ	JOBL	_	
Ш		ш-	4		

**SATIN FINISH** 

00° DOLIBLE

Glass mm	Code
6 - 10	180644290

H 45 x W 60 x D 27.5mm. Supplied with 10mm rubbers, for other sizes refer to Square Rubbers table. Type 442.

#### SATIN FINISH Flat back



Glass mm	Code
15.0 - 21.5	1806445F

H 70 x L 60 x D 44mm. Supplied with 15mm rubbers, for other sizes refer to Square Rubbers table. Type 445.

#### **SQUARE RUBBERS**

Glass Clamp Code Group	Glass mm	Code
	6.00	189944206
442	8.00	189944208
	10.00	189944210
	8.00	189900208
402	10.00	189900210
	12.00	189900212
	15.0	1899002L15
445	17.5	1899002L175
445	19.0	1899002L19
	21.5	1899002L215

#### **DIMENSION DRAWINGS**

Glass mm

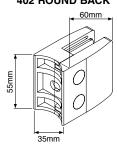
6 - 10

H 45 x L 70 x D 27.6mm. Supplied with 10mm rubbers, for

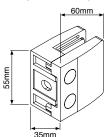
other sizes refer to Square

Rubbers table. Type 442.

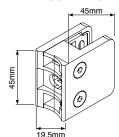
#### **402 ROUND BACK**



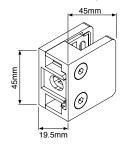




#### **442 ROUND BACK**



**442 FLAT BACK** 



#### **FIXINGS**

#### **METAL SECURITY PINS** For Glass



Glass mm	Code
8 - 10	189900401
12	189900402

Requires a minimum Ø 10mm hole in glass.

#### **PLASTIC SCREW COVER CAPS**



Colour	Code
Grey	189900501
Silver	189900502

#### VARIABLE FIXING BOLT To give +/- 5° adjustment on round back clamps



Description	Code
M8 x 20mm	189900602A
Allen Key*	189900606

\*Allen key is used for glass clamps.

#### **SOCKET HEAD CAP SCREW**

For fixing glass clamps into posts



Size mm	Code
M8 x 20	13i0323*
M6 x 20	189900601
M8 x 20	189900602

\*Zinc plated.

**ALLEN KEY** 



To suit	Code
8mm bolts	189900605
6mm bolts	189900608

## **STIFFENERS**

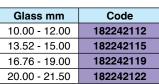


#### **FEATURES:**

- To join glass panels & tie glass panels back to the building
- To suit 10 21.5mm glass thickness

- Made from cast steel or duplex 2205 ultra marine stainless
- Available in a BZP with satin polish







Code	Glass mm
182242212	10.00 - 12.00
182242215	13.52 - 15.00
182242219	16.76 - 19.00
182242222	20.00 - 21.50

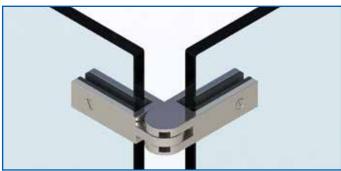


Glass mm	Code
10.00 - 12.00	182242312
13.52 - 15.00	182242315
16.76 - 19.00	182242319
20.00 - 21.50	182242322



Glass mm	Code
10.00 - 12.00	182242012
13.52 - 15.00	182242015
16.76 - 19.00	182242019
20.00 - 21.50	182242022





## **GLASS CONNECTOR**

#### **DOMED FRONT & BACK**



Ø mm	Glass mm	Code
50	12 - 21.5	1806454





316



Zinc











## **WELDABLE GLASS CLAMPS**



An economic alternative to the traditional glass clamp system. They not only look good, but are easy to install with no on-site fixing and if required the mild steel clamps can be galvanised and powder coated after fabrication.

#### SPECIFICATION:

 Stainless steel Grade 316 M8 dome nut & countersunk bolt

**SHORT SINGLE** 



Size mm	Code
80 x 40 x 6	1801405F
80 x 40 x 6	1801407F*
80 x 40 x 6	1806405F

\*With stainless steel discs.





Size mm	Code
80 x 80 x 40 x 6	1801409IC

**NYLON SPACER** 

#### Rubber washer

· 6mm plate & disc

#### **LONG SINGLE**



Size mm	Code
120 x 40 x 6	1801406F
120 x 40 x 6	1801408F*
120 x 40 x 6	1806406F

**EXTERNAL CORNER** 

\*With stainless steel discs.



Size mm	Code
80 x 80 x 40 x 6	1801409EC

• Suits 8 - 12mm glass thickness

• Mild steel & stainless steel

#### STRAIGHT DOUBLE



Size mm	Code
160 x 40 x 6	1801409F
160 x 40 x 6	1806409F





Ø mm	Code	
40	4000 40ED:	



**BOLT & DOME NUT** 



Code 1899405TA

Ø mm	Code	Ø mm	Code	Ø mm	Code	Ø x Length mm	Ī
15	1899405NS	40	1899405RD	40	1899405Ri	M8 x 34.6	

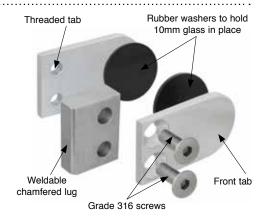
· No pre-drilled glass required

• Suitable for 10mm glass

#### **SPECIFICATION:**

- Weldable lug
- For square or round steel posts Stainless steel Grade 316 flush 8mm screw
- Size 40 x 80 x 26mm
  - Description Code BZP tabs with cast steel lug 1801401F Satin polished 316 tabs with cast steel lug 1801401F316 Satin polished 316 tabs with cast 1806401W stainless steel 316 lug Spare rubber washer for 1801401F clamp | 1899001RW

Only use where glass does not overhang an edge/balcony.

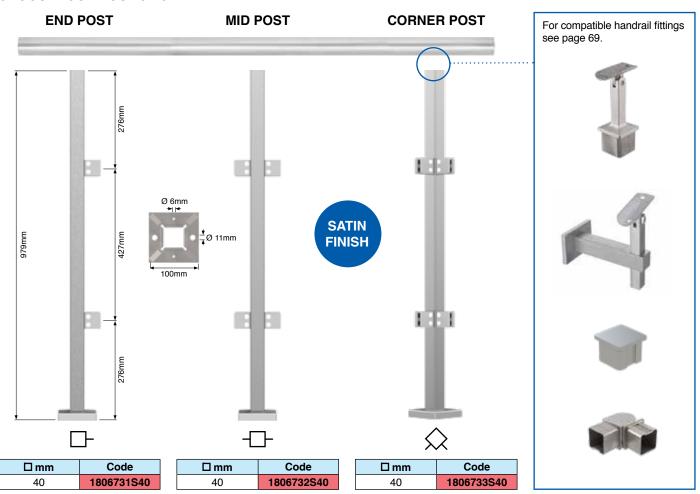




#### **BOLT-DOWN SQUARE POST - SATIN FINISH**

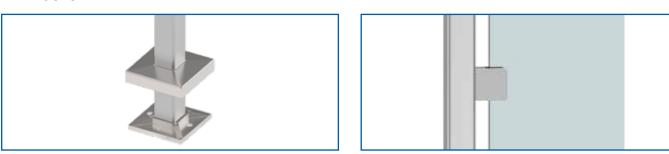


#### **CHOOSE YOUR POST & TOP**



WE STOCK A RANGE OF STANDARD 10mm GLASS PANELS IN 100mm INCREMENTS TO REDUCE SUPPLY TIME, SEE PAGE 37.

#### **ALL POSTS HAVE:**



Welded base fitting complete with cover.

Glass clamps for 10mm glass (8mm rubbers available).



304

316

Zinc

;

Zamac

M

Mild steel

Galvanised

Aluminium

Duplex

## **SQUARE FITTINGS**







90° FIXED SPIGOT

□ mm	To Suit Ø mm	Code
40	42.4	1806311S40C

#### **ADJUSTABLE SPIGOT SADDLE**

Tube/flat



mm	To Suit Ø mm	Code
40	Flat	1806312S40F

90° FIXED SPIGOT **SADDLE** Tube/flat



□ mm	To Suit Ø mm	Code

1806311S40F

**ADJUSTABLE HANDRAIL BRACKET** 

Code

1806312S40C

To Suit

Ø mm

42.4

mm

40

Wall/tube

**ADJUSTABLE HANDRAIL BRACKET** 

Wall/flat

**2 HOLE BALUSTER BRACKET** 

**SQUARE BALUSTRADE BRACKET** 

Flat

40



mm	To Suit Ø mm	Code
40	42.4	1806303S40C



mm	To Suit	Code
40	Flat	1806303S40F



□ mm	Code
40	1806256S40
Weld fix.	



□mm	Code
40	1806213S40

90° ELBOW

**3 WAY CORNER** 

**LONG TEE** 

**ADJUSTABLE ELBOW** 



□ mm	Code
40	1806227S40

**IN-LINE CONNECTOR** 



□ mm	Code
	-

□ mm Code 1806202S40 40

**FLAT TOP** 

**END CAP** 

1806204S40 **COVER PLATE** 

Code

□ mm

□ mm

1806205S40

Code

**WELD ON BASE PLATE** 



□ mm	Code
40	1806207S40

**WALL FLANGE** 



□ mm	Code
40	1806209S40

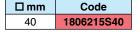
**TUBE** 

1806206S40



Length m	Code
2.9	1806704S40
5.8	1806700S40

☐ 40 x 40mm. 2.5mm wall thickness.



To suit code: 1806207S40.

1806208S40

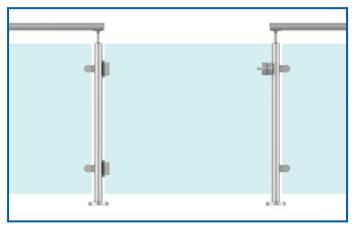
FOR SQUARE GLASS CLAMPS SEE PAGE 65.

□ mm

FOR LOCTITE ADHESIVES & GLUE SEE PAGE 92.

## **GLASS GATE HARDWARE**

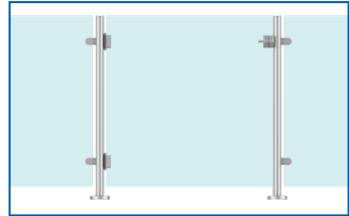
#### **TIMELESS**



Panel	Thickness mm	Height mm	Width mm	Code
Gate	10	900	1000	185510GSP01

Gives 1100mm handrail height when used on a flat surface with saddles and top rail. Achievable with round or square posts and fittings.

#### CONTEMPLATION



Panel	Thickness mm	Height mm	Width mm	Code
Gate	10	1024	1000	185510GSP61

Gives 1100mm glass height when used on a flat surface with end caps. Achievable with round or square posts and fittings.

#### **HINGES & LATCHES**

#### **MAGNETIC LATCH**

Glass to round post



To Suit Glass mm	Code
8 - 12	1806518C

#### **SELF-CLOSING HINGE**

Glass to round post



To Suit Glass mm	Code
8 - 12	1806516C

Sold in pairs.

#### **MAGNETIC LATCH**

Glass to square post



To Suit Glass mm	Code
8 - 12	1806518F

#### **SELF-CLOSING HINGE**

Glass to square post



To Suit Glass mm	Code
8 - 10	1806516F

Sold in pairs.

#### **MAGNETIC LATCH**

Glass to glass



To Suit Glass mm	Code
8 - 12	1806517

Holes required in glass, screws compress plate onto glass. For use where there are no posts..

### **SELF-CLOSING HINGE**

Glass to glass



To Suit Glass mm	Code
8 - 12	1806515

Sold in pairs. For use where there are no posts.

#### **SELF-CLOSING GLASS GATE HINGE**



Туре	To Suit Ø mm	Code
Vinyl	50	05GC09

For fixing 8 and 10mm glass weighing up to 25kg on to round posts. Glass needs to be pre-drilled. Sold in pairs.

**SELF-CLOSING SAFETY GATE HINGE** 



Description	Code
For stainless tube	18SGH

Aluminium

Duplex

Weldable.

#### **LATCH & CATCH**



Ø mm	Code
42.4	1806513C
48.3	1806513D

#### **GATE HINGE PIN & BOLT**



Ø mm	Code
42.4	1806514C
48.3	1806514D

Zinc

FOR OUR FULL RANGE OF STANDARD 10mm GLASS PANELS SEE PAGE 37.

## **CLEANING PRODUCTS**

#### **3-PART TEA STAINING CLEANER KIT**

#### **PICKLING GEL**

#### STAINLESS STEEL CLEANER

Keeps stainless handrail & fittings in top condition long after installation

Helps remove rust,  $\operatorname{dirt}$  and  $\operatorname{grime}$  from stainless steel

Degreases & cleans surfaces ready for gluing







Description	ml	Code
Demi water Spray	500	1899009DW
Stainless Steel Polish Spray	400	1899009SSP
R2U Stainless Steel Cleaner 500 ml Spray	500	1899009SSC

kg	Code
2	18990094023

ml	Code
400	18990097063

#### **UNBLOCKING SPRAY**

## STAINLESS CLEANING WIPE Removes finger & hand marks left during

installation

POLISHING CLOTHS
For removal of light scratches on stainless tube & fittings

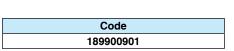


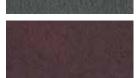
Code

2912









Description	Code
Fine (grey)	189901101
Medium (red)	189901102

Suitable for various hardware.

ml

400

## **BOND IT GLASS CLEANER**Fast acting all purpose cleaner with

non-smear formulation

LOW LINT TEXTELINE CLOTHS
Pack of 150

MICRO FIBRE CLOTH Pack of 10







Litre	Code
1	1859GC1

Code 29RT150

 Colour
 Size mm
 Code

 Yellow
 400 x 400
 29MFC40

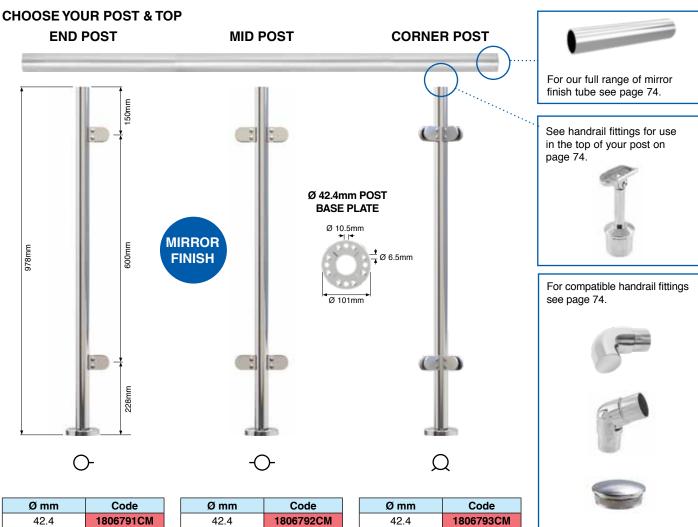
Use with code: 29RT150.

Ideal for use with code: 1859GC1.

FOR OUR RANGE OF STAINLESS STEEL COMPONENTS SEE FROM PAGE 56.

#### **BOLT-DOWN ROUND POST - MIRROR FINISH**





#### **3-PART TEA STAINING CLEANER KIT**

Keeps stainless handrail & fittings in top condition long after installation



Description	ml	Code
Demi water Spray	500	1899009DW
Stainless Steel PolishSpray	400	1899009SSP
R2U Stainless Steel Cleaner 500 ml Spray	500	1899009SSC

#### STAINLESS STEEL CLEANER

Degreases & cleans surfaces ready for gluing



ml	Code
400	18990097063

#### **BOND IT GLASS CLEANER**

Fast acting all purpose cleaner with non smear formulation



Litre	Code
1	1859GC1

FOR LOCTITE ADHESIVES & GLUE SEE PAGE 92.



















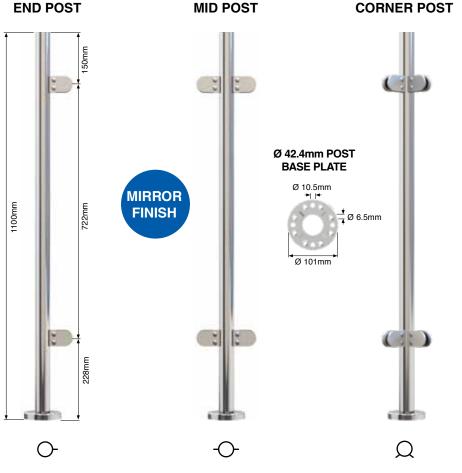




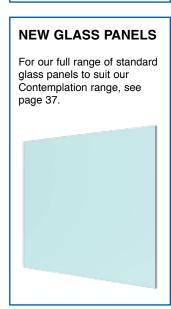
# **CONTEMPLATION**

### **BOLT-DOWN ROUND POST - MIRROR FINISH**









Top fitting not included.

Ø mm

42.4

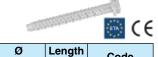
Ø mm	Code
42.4	1806762CM

Top fitting not included.

Ø mm	Code
42.4	1806763CM

Top fitting not included.

# CONCRETE FIXINGS HEX HEAD WITH FLANG



Code 1806761CM

Ø mm	Length mm	Code
M8	75	5002HCS875

### HEX HEAD WITH FLANGE MULTI-FIX HEX HEAD BOLT



### THROUGH BOLT



ALLEN KEY
For glass clamps

Code
189900606

# **MIRROR FINISH FITTINGS**

### HANDRAIL BRACKET FIXED SPIGOT

### 90° FIXED SPIGOT SADDLE

Tube/tube

### **ADJUSTABLE SPIGOT SADDLE**

Tube/tube





2

Ø mm	Wall to Bracket Centre mm	Code
42.4	85	171176CM
48.3	85	171176DM

Ø mm	Code
42.4	1806311CCM

Ø mm	Code
42.4	1806312CCM

### 90° ELBOW ROUND **CORNER**





**ADJUSTABLE ELBOW** 



**SCROLL END** 

Ø mm	Code
42.4	1806201CM

MELLA	ı
B1 216	l
1 3	

Code

1806203CM

	-elfobs.
Ø mm	Code
42.4	1806227CM

IN-LINE	CONNECTO	R



Ø mm

42.4



1806221CM 42.4

Code

Ø mm





<b>2 HOLE BALUSTER</b>
BRACKET



WELD ON	BASE PLATE
With 'O'	ring & cover





Ø mm	Code
42.4	1806206CM

Ø mm	Code
42.4	1806209CM

**RAISED TOP END CAP** 

Ø mm Code 42.4 1806212CM

Ø mm Code 42.4 1806228CM

**TUBE** 

**COVER PLATE** To suit 235C, see page 45





7 GROOVE FLAT TOP **END CAP** 



	CONTRACTOR OF THE PARTY OF THE		
			-
	-	200	57

Ø mm	Code	Ø mm
42.4	1806236CM	42.4

Ø mm	Code
42.4	1806215CM

Ø mm Code 42.4 1806274CM 48.3 1806274DM

Glue fit.

Ø mm Length m Code 3 1806704CM 42.4 6 1806700CM 48.3 3 1806704DM 48.3 6 1806700DM

2mm thickness.

### FOR MIRROR FINISH PRE-ASSEMBLED **POSTS SEE FROM PAGE 72.**

FOR LOCTITE ADHESIVES & GLUE SEE PAGE 92.







Zinc













# MIRROR FINISH SPLIT TUBE RAIL SYSTEM

Ø 42.4 & 48.3mm PROFILES



**SPLIT TUBE** 

**GASKET** 









3m LENGTH

 Ø mm
 Code

 42.4
 18067053CM

 48.3
 18067053DM

1.5mm wall thickness.

6m LENGTH

Ø mm	Code
42.4	1806705CM
48.3	1806705DM

1.5mm wall thickness.

Ø 42.4mm

Glass Thickness mm	Code
8 - 11	189903811C
11.5 - 13.5	189903115135C
15	18990315C
16 - 17.5	18990316175C
19	18990319C
20 - 21.5	18990320215C

Ø 48.3mm

Glass Thickness mm	Code		
8 - 11	189903811D		
11.5 - 13.5	189903115135D		
15	18990315D		
16 - 17.5	18990316175D		
19	18990319D		
20 - 21.5	18990320215D		

90° HORIZONTAL CORNER

25 - 55° DOWNWARDS ADJUSTABLE CONNECTOR





25 - 55° UPWARDS ADJUSTABLE CONNECTOR



Code	Ø mm	Code	Ø mm	Code
1806411CM	42.4	1806416CM	42.4	1806417CM
1806411DM	48.3	1806416DM	48.3	1806417DM

**END CAP** 

Ø mm 42.4 48.3

WALL/FLOOR FLANGE

**TUBE ADAPTOR** 

**IN-LINE CONNECTOR** 







Ø mm	Code
42.4	1806415CM
48.3	1806415DM



Ø mm	Code
42.4	1806414CM



Ø mm	Code
42.4	1806412CM
48.3	1806412DM

### FOR OUR FULL RANGE OF BALUSTRADE SYSTEMS SEE PAGE 9.









# **ELEGANCE JULIET BALCONY**



### **FEATURES:**

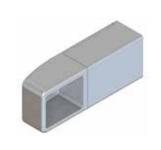
• To suit 40 x 30mm rectangular top rail system, see page 26

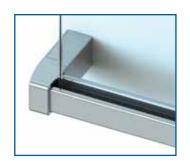
**BRACKET SET** 

- No welding required
- Designed for 12 21.5mm glass

- Reduced visual impact
- Glass is 80mm off the wall
- All products are satin polish finish

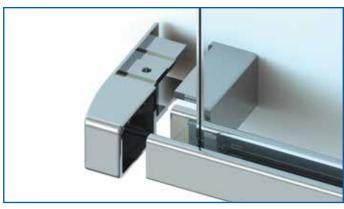
### **EXPLODED BRACKET**



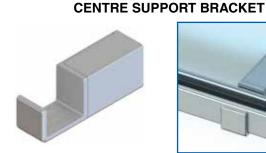


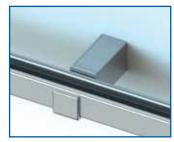
Fixing Holes Ø mm	Code
12	1822JBS4030

Sold in pairs, left & right hand side.



### **GLASS SUPPORT BRACKET**





Fixing Hole Ø mm	Code
12	1822CSB4030





Fixing Hole mm 1822GSBS 13 x 22

**GASKET** 

**SPLIT TUBE** 



Length m	Code
3	180670534030
6	18067054030

FOR OUR FULL RANGE OF GLASS PANELS SEE PAGES 10, 11 & 37.



To Suit Glass mm	Length m	Code
8 - 11	1	189903811C
11.5 - 13.5	1	189903115135C
15	1	18990315C
16 - 17.5	1	18990316175C
19	1	18990319C
20 - 21.5	1	18990320215C





Zinc

Zamac

Mild steel

Galvanised

Aluminium

# **ELEGANCE ROMEO BALCONY**



### **FEATURES:**

- To suit 60 x 30mm oval top rail system, see page 27
- No welding required
- Designed for 12 21.5mm glass

- Reduced visual impact
- Glass is 80mm off the wall
- All products are satin polish finish

### **BRACKET SET**





Fixing Hole Ø mm	Code
12	1822JBS6030

Sold in pairs, left & right hand side.



**EXPLODED BRACKET** 

**CENTRE SUPPORT BRACKET** 

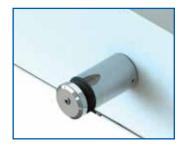




Fixing Hole Ø mm	Code
12	1822CSB6030

**GLASS SUPPORT BRACKET** 





Fixing Hole mm	Code
13 x 22	1822GSBR

### **SPLIT TUBE**



Length m	Code
3	180670536030
6	18067056030

FOR OUR FULL RANGE OF GLASS **PANELS SEE PAGES 10, 11 & 37.** 

### **GASKET**



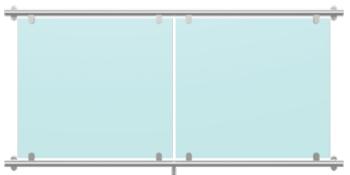
To Suit Glass mm	Length m	Code
8 - 11	1	189903811C
11.5 - 13.5	1	189903115135C
15	1	18990315C
16 - 17.5	1	18990316175C
19	1	18990319C
20 - 21.5	1	18990320215C

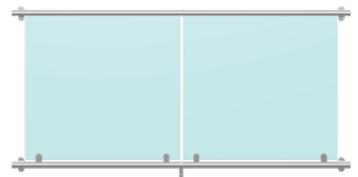
# **VERONA JULIET BALCONY**



GLASS CLAMPS ON TOP & BOTTOM RAIL KIT

# SPLIT TUBE ON TOP RAIL & GLASS CLAMPS ON BOTTOM RAIL KIT





Rail	Opening Width mm	Overall Width mm	Ø mm	Glass mm	Code
Тор	2300	2650	48.3	10	1806814D
Bottom	2300	2650	48.3	10	1806818D

Please order glass panels separately. Supplied with four wall brackets and one trellis bracket.

Rail	Opening Width mm	Overall Width mm	Ø mm	Glass mm	Code
Тор	2300	2650	48.3	10	1806816D
Bottom	2300	2650	48.3	10	1806818D
	·		·		

Please order glass panels separately. Supplied with four wall brackets and one trellis bracket.



FOR EXTRA WALL OR TUBE SUPPORT BRACKETS SEE PAGE 62.

FOR OUR FULL RANGE OF GLASS PANELS SEE PAGES 10, 11 & 37.



### INTRODUCTION TO THE RANGE

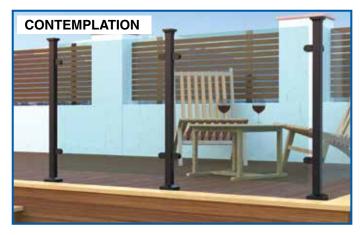


Fortitude Traditional railings are one of the easiest, most versatile, off the shelf handrail solutions on the market today. The range consists of a series of railing panels, posts and brackets that can provide a number of different design solutions. Available in either a long lasting, UV resistant, stylish black sand or white gloss finish.

The steel panels can be cut to size on site, to suit different post centres. The innovative and unique steel raking panel can be adjusted, to allow the installation of railings on stairs and gradients, without needing to pre-fabricate. The panels are cleverly designed to conceal the pivot points of each spindle.

Our Fortitude Contemplation range of posts with glass clamps and 10mm standard glass panels, provide an off the shelf, stylish handrailing system, which maximises the view from your deck. There is nothing to stop the mixing of Traditional steel panels and Contemplation glass panels, to open up the view in specific sections of an installation.

The two styles of Contemporary Glass Panels or Slats, are supplied in a kit with an aluminium top and bottom rail, that cleverly integrates the glass into the design. The glass is available in a clear or grey tint. If you wish to cut the kits to length, glass can be supplied made to order to suit.









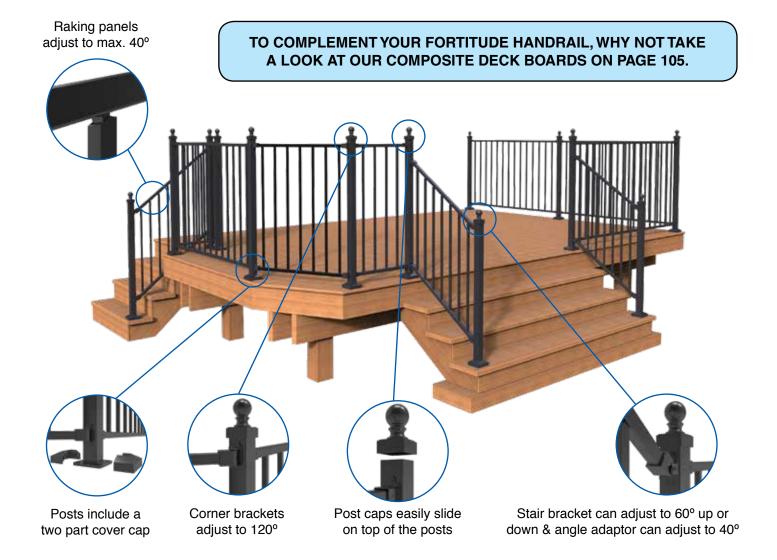
### INTRODUCTION TO THE RANGE

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.



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





304

316

Zinc

Zamac

Mild steel

Galvanised

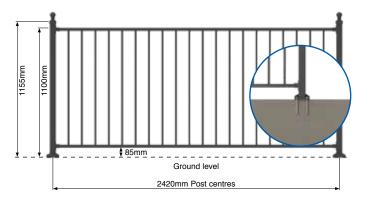
Aluminium

### INTRODUCTION TO THE RANGE

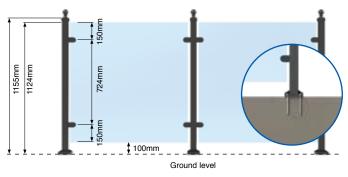


### **APPLICATION SCENARIOS**

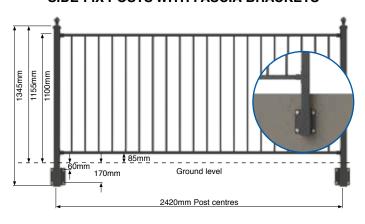
### **BOLT-DOWN POSTS**



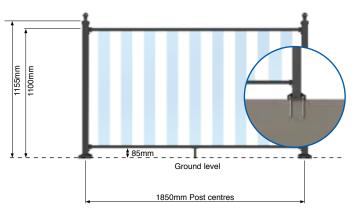
### PRE-ASSEMBLED POSTS WITH GLASS CLAMPS



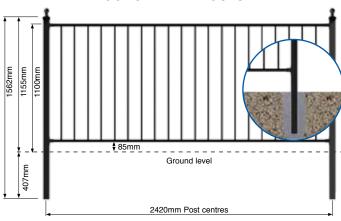
### SIDE-FIX POSTS WITH FASCIA BRACKETS



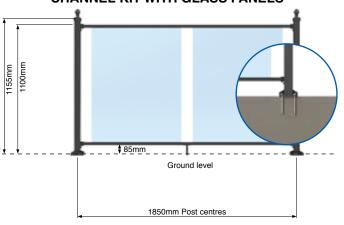
### **CHANNEL KIT WITH GLASS SLATS**



### **CONCRETE-IN POSTS**



### **CHANNEL KIT WITH GLASS PANELS**

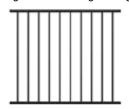


### TRADITIONAL RAILING PANELS

### **STEEL RAILINGS**

### **FIXED RAILING PANEL**

To give 1100mm high railings

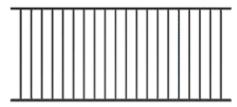


Colour	Height mm	Width mm	Code
Black Sand	1016	1200	64FR1012B

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

### **FIXED RAILING PANEL**

To give 1100mm high railings



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

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

### **FIXED CIRCLES RAILING PANEL**

To give 1100mm high railings

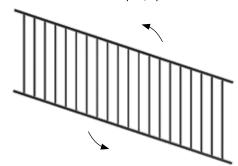


Colour	Height mm	Width mm	Code
Black Sand	1016	2370	64FRC10B
White Gloss	1016	2370	64FRC10W

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

### ADJUSTABLE RAKING PANEL

For stairs & slopes, up to 40°



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

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

# A TIME & MONEY SAVING SOLUTION FOR STAIRS OR SLOPES ADJUSTABLE UP TO 40°. **EASY TO INSTALL.**

## **RAILING GATE KIT**

To be used with a cut to size railing panel



Colour	Code
Black Sand	64GK5011B
White Gloss	64GK5011W

□ 38mm tube to create gate frame.









WAGNA-LAICH	
General purpose magnetic gate late	h



**UNSPRUNG HINGE** Suitable for 25 - 50mm posts

H x W mm	Code
90 x 70	09FA30
110 x 75	09FA31

Maximum gate weight 50kg per pair. Polymer.

Size mm	Code (Pair)
23 / 23	09FA20

Maximum gate weight 52kg per pair. Polymer.



Code	
09FA27	

Non-lockable. Side Pull. Polymer.

### FOR OUR RANGE OF POSTS SEE PAGE 83.

304

316

Zamac



Zinc

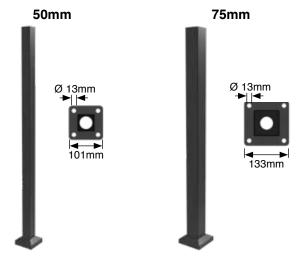
Mild steel

Galvanised

Aluminium

### **POSTS**

### **BOLT-DOWN STEEL POSTS**



Colour	Height mm	□ mm	Thickness mm	Code
Black Sand	1155	50	2.3	64PB5011B
Black Sand	1155	75	2.3	64PB7511B
White Gloss	1155	50	2.3	64PB5011W
White Gloss	1155	75	2.3	64PB7511W
Black Sand	1155	50	3.0	59PBF5011BS
Black Sand	1155	75	3.0	59PBF7511BS
White Gloss	1155	50	3.0	59PBF5011W
White Gloss	1155	75	3.0	59PBF7511W

Supplied with base cover plate & protective cap. For fixing bolts use code:

**CONCRETE-IN 75mm 50mm** Ground level

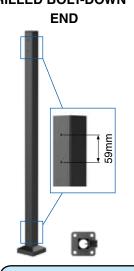
Colour	Height mm	mm	Code
Black Sand	1562	50	64PC5011B
Black Sand	1562	75	64PC7511B

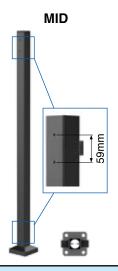
2.3mm thickness. Supplied with protective cap.

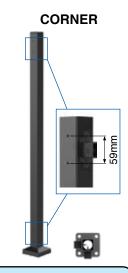
FOR POST CAPS & BRACKETS SEE PAGE 85.

### PRE-DRILLED BOLT-DOWN

5002HCS1075.







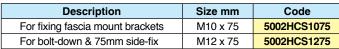
### ONLY FOR USE WITH SUPERIOR HORIZONTAL ANGLE BRACKET OR SUPERIOR UNIVERSAL BRACKET.

Description	Colour	Height mm	☐ 50mm Code	☐ 75mm Code
End	Black Sand	1155	64PBE5011B	64PBE7511B
Mid	Black Sand	1155	64PBM5011B	64PBM7511B
Corner	Black Sand	1155	64PBC5011B	64PBC7511B

2.3mm thickness. Supplied with base cover plate & protective cap. Ø 5mm pre-drilled holes. For use with fixed panels. Gives 1100mm high handrail on flat surfaces. For fixing bolts use code: 5002HCS1075.

### **HEX HEAD WITH FLANGE**

R-LX-HF-ZF



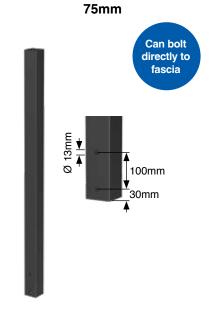
For cracked and non-cracked concrete. Wood fixings available on request.

FOR RAILING PANELS SEE PAGE 82.



### **POSTS**

### **SIDE-FIX POST**



Colour	Size □ mm	Height mm	Code
Black Sand	75	1345	59PSF7513BS
White Gloss	75	1345	59PSF7513W

3mm thickness. Post cap sold separately, see page 83.

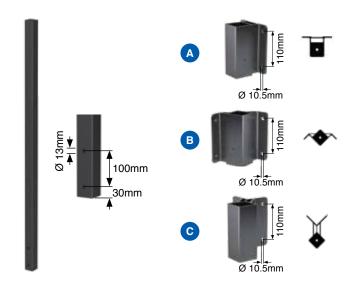






304

# SIDE-FIX POST AND FASCIA BRACKETS 50mm FASCIA BRACKETS



Colour	Size □ mm	Height mm	Code
Black Sand	50	1345	59PSF5013BS
White Gloss	50	1345	59PSF5013W

3mm thickness. Post cap sold separately, see page 83.

### **FASCIA BRACKETS**

Bracket	Description	Colour	Size □ mm	Code
A	End/Mid	Black sand	50	59FMM50BS
A		White Gloss		59FMM50W
В	Inside Corner	Black sand	50	59FMIC50BS
		White Gloss		59FMIC50W
C	Outside Corner	Black Sand	- 50	59FMOC50BS
		White Gloss		59FMOC50W

Supplied with 4 x M5 self-drilling screw to secure post in place. Suitable for use with 50mm square posts.





### **POST CAPS, BRACKETS & GATE KIT**

**PYRAMID POST CAP** 

### **BALL POST CAP**





50mm cap

75mm cap.

· · · · · · · · · · · · · · · · · · ·			
Colour	To Suit □ mm	Code	
Black Sand	50	64CB50B	
White Gloss	50	64CB50W	
Black Sand	75	64CB75B	
White Gloss	75	64CB75W	

### **CHOICE UNIVERSAL BRACKET**

For use with fixed & raking panels



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

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

### SUPERIOR HORIZONTAL **ANGLE BRACKET**

For use with fixed panels, 60° left & right



Colour	To Suit □ mm	Code
Black Sand	25	64SCB25B
White Gloss	25	64SCB25W

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

### **TOUCH UP PAINTS**

### **SPRAY**



Colour	ml	Code
Black Sand	400	29PC400SBS
Gloss White - RAL 9016	400	29PC400SW

### PRESSED POST CAP



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

### **CHOICE ANGLE ADAPTOR**

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



Colour	Code
Black Sand	64CAA25B
White Gloss	64CAA25W

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

### SUPERIOR UNIVERSAL BRACKET

For use with fixed panels



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

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

### **BRUSHABLE**



Colour	ml	Code
Black Sand	125	29PC125TBS
Gloss White - RAL 9016	125	29PC125TW

Supplied with brush.



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

### **SUPERIOR STAIR BRACKET**

For use with raking panel, 60° up & down



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

Supplied as a pack of 4, with steel & wood

### **CAP RAIL CLIP**

For wooden handrail



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

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

### **DRILLING TEMPLATES**

### **UNIVERSAL BRACKET TEMPLATE**

To ensure quick & easy positioning of brackets



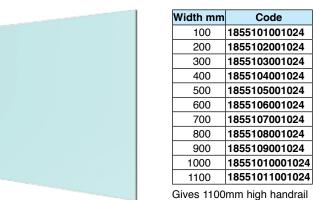
Code
64UT25

### **CONTEMPLATION**



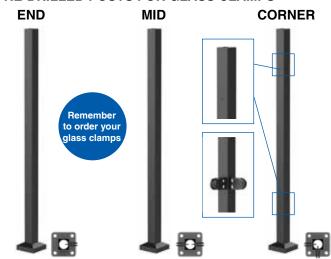
# IMAGE SHOWS ASSEMBLED POSTS

GLASS PANELS 1024mm height x 10mm thickness



Gives 1100mm high handra on flat surfaces.

### PRE-DRILLED POSTS FOR GLASS CLAMPS

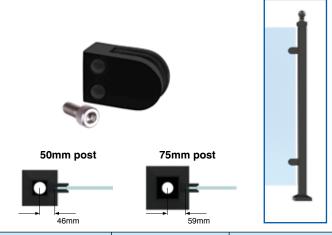


Description	Colour	Height mm	☐ 50mm Code	☐ 75mm Code
End	Black Sand	1155	64PB76150B	64PB76175B
Mid	Black Sand	1155	64PB76250B	64PB76275B
Corner	Black Sand	1155	64PB76350B	64PB76375B

2.3mm thickness. Supplied with base cover plate & protective cap. Predrilled holes for use with glass clamps code: **1805401FBS**. For fixing bolts use code: **5002HCS1075**.

### ROUND GLASS CLAMP





Colour	To Suit Glass	Code
Black Sand	10mm	1805401FBS

Supplied as a pack of 4, with cover caps and bolts for fixing to post. Cast aluminium.

FOR OUR GLASS SLATS & PANEL SYSTEMS SEE PAGE 87.



304

316

Zinc

Zamac

Mild steel

Galvanised

Aluminium

### **CONTEMPORARY GLASS SLATS & PANELS**



**GLASS PANELS SYSTEM** 



To achieve this look, order:

- 1 x channel kit, colour options below
- 2 x glass panels 760 x 1000 x 8mm, code: **1855087601000**
- 1 x railing bracket (pack of 4) colour options below

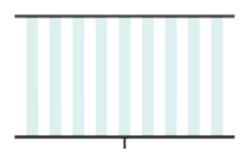
**RAILING KIT**To suit 8mm glass panels



Finish/Colour	Length m	Height mm	Width mm	Code
Mill finish	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 SYSTEM

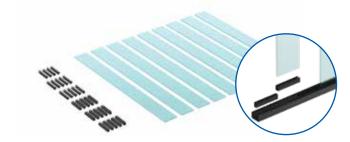


To achieve this look, order:

- 1 x channel kit, colour options below
- 1 x glass slats kit, see glass colour options right
- 1 x railing bracket (pack of 4) colour options below

### **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

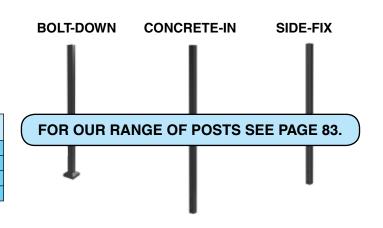
Kit includes 9 x slats, 18 x gaskets and 14 x wedges to cover a 1.8m length.

# RAILING BRACKET Pack of 4



Finish/Colour	To suit □ mm	Code
Mill finish	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.



# **CONCRETE SCREWS & BOLTS**

### **COUNTERSUNK SCREW**

CR-LX-CS-ZF







### **FEATURES**

- ETA 17/0806
- Zinc flake
- Self-tapping
- Completely removable for possible reuse
- Non-expansion
- · For use with cracked & non-cracked concrete

### **APPLICATIONS**

- · Through-fixing
- Temporary anchorage
- Framework support systems
- Balustrading & handrails
- Fencing & gates manufacturing & installation
- Racking systems
- Public seating
- Scaffolding

Drill Size mm	Thread Ø mm	Length mm	Max Fixture Thickness mm	CE	Code
5	6.3	75	32	✓	5002CCS575
6	7.5	75	32	✓	5002CCS675
8	10.0	75	25	✓	5002CCS875
10	12.5	75	20	✓	5002CCS1075
10	10.0	100	50	<b>✓</b>	5002CCS8100
12	12.5	100	45	✓	5002CCS10100

### **HEX HEAD WITH FLANGE**

R-LX-HF-ZF









- ETA 17/0806
- · Zinc flake
- Self-tapping
- Completely removable for possible reuse
- Non-expansion
- · For use with cracked & non-cracked concrete

### **APPLICATIONS**

- Through-fixing
- · Temporary anchorage
- Framework support systems
- Balustrading & handrails
- Fencing & gates manufacturing & installation
- Racking systems
- Public seating
- Scaffolding

Drill Size mm	Ø mm	Length mm	Max Fixture Thickness mm	C€	Code
5	6.3	75	50	✓	5002HCS575
6	7.5	75	35	✓	5002HCS675
8	10.0	75	25	✓	5002HCS875
10	12.5	75	20	✓	5002HCS1075
12	14.9	75	10	✓	5002HCS1275
8	10.0	100	50	✓	5002HCS8100
10	12.5	100	45	✓	5002HCS10100
12	14.9	100	35	✓	5002HCS12100
14	17.0	115	40	✓	5002HCS14115

### **MULTI-FIX HEX HEAD BOLT**



### **APPLICATIONS**

- · Heavy duty non-expansion anchor
- New solution for heavy duty anchoring into concrete, brick, stone, wood & concrete block replacing the need for traditional anchors
- For use in pre-drilled shallow concrete holes

Code	Length mm	Ø mm
5002MF10860	60	M10
5002MF10875	75	M10
5002MF108100	100	M10
5002MF108150	150	M10
5002MF121075	75	M12
5002MF1210100	100	M12

- Unique patented concave thread design which taps its own thread & provides rapid, low torque installation with exceptional pull-out resistance
- High low parallel threads for ease of insertion and high pull out values
- · It allows the user to adjust or remove & use again

Ø mm	Length mm	Code
M12	130	5002MF1210130
M12	150	5002MF1210150
M14	75	5002MF141275
M14	100	5002MF1412100
M14	150	5002MF1412150





















# **ANCHORS & BOLTS**



### **THROUGH BOLT**

### **APPLICATIONS**

ETA option 1 to attach objects or structures to cracked or non-cracked concrete

Drill Size Ø mm	Anchor Length mm	Max Fixture Thickness mm	Code
8	90	30	16248
10	95	35	162410
12	100	25	162412
16	105	10	162416
20	125	5	162420

Zinc plated..



### **THROUGH BOLT**

R-XPTii

IPRAWLPLUG\*



### **APPLICATIONS**

· ETA option 1 to attach objects or structures to cracked or non-cracked concrete

Drill Size Ø mm	Anchor Length mm	Max Fixture Thickness mm	Code
8	95	45	5006TB08100
10	95	35	5006TB10100
12	100	25	5006TB12100
16	125	5	5006TB16125
20	125	5	5006TB20125

# **APPLICATIONS**

### **CONTERSUNK THROUGH BOLT**

R-SPLII-C



· Used to firmly affix steel to concrete

Thread Ø mm	Drill Size Ø mm	Anchor Length mm	Max Fixture Thickness mm	CE	Code
M6	10	80	25	✓	50CSSA0680
M8	12	90	26	✓	50CSSA0890
M10	15	100	27	✓	50CSSA10100
M12	18	125	33	✓	50CSSA12120



# LOOSE BOLT WITH SHIELD ANCHOR

R-RBL





### **APPLICATIONS**

· Used to attach objects or structures to concrete

Thread Ø mm	Drill Size Ø mm	Anchor Length mm	Max Fixture Thickness mm	CE	Code
M8	14	65	40	✓	5006LB0860
M10	16	90	25	✓	5006LB1085
M12	20	100	25	✓	5006LB12100

# **CHEMICAL FIXINGS & CLEANING TOOLS**

### **ROCKITE CONCRETE COMPOUND**

Fast setting hydraulic style cement for interior use

HOLE CLEANING BLOW PUMP

**HOLE CLEANING BRUSH** 







kg	Code
2.2	189900665

Code	
50HCBP	

Size mm	Code
M8	50HCBM08
M10	50HCBM10
M12	50HCBM12

# **ANCHORS, BOLTS & STUDDING**



### **TARMAC FIXING**

With rubber sleeve

### **APPLICATIONS**

· Specialist rubber fixing designed for fixing steel to Tarmac or Asphalt surfaces and many other surfaces/materials

Thread Ø mm	Overall Length mm	Hole Ø mm	Wall Thickness mm	Flange Thickness mm	Flange Ø mm	Required Tightening Torque Nm	Bolt Code	Fixing Sleeve Code
M8	50	18	25.0 - 35.0	1.6	20.0	8	50HS08X80TF	1205TF08R
M10	55	20	25.0 - 35.0	1.3	22.5	10	50HS10X80TF	1205TF10R
M12	125	24	35.0 - 45.0	1.3	27.0	15	50HS12X80TF	1205TF12R

BZP.



**R-STUD** With hex head

IPRAWLPLUG\*

### **APPLICATIONS**

· Used to firmly affix steel to concrete

Thread Ø mm	Drill Size Ø mm	Anchor Length mm	Code
M8	10	110	5002RS8110
M10	12	130	5002RS10130
M12	14	160	5002RS12160
M16	18	190	5002RS16190
M20	24	260	5002RS20260
M8	10	110	5006RS8110
M10	12	130	5006RS10130
M12	14	160	5006RS12160
M16	18	190	5006RS16190

### **WIRE MESH SLEEVE**

For use with R-Studs

### **APPLICATIONS**

· Used to firmly affix steel to concrete

Sleeve Size mm	Stud Size	C€	Code
12 x1000	M8	✓	50WMS081000
16 x1000	M10	✓	50WMS101000
22 x1000	M16	✓	50WMS161000
26 x1000	M20	✓	50WMS201000

### **RESIN SOCKET**

For use with adjustable stand-off adaptor

IPRAWLPLUG\*

### **APPLICATIONS**

· Used to firmly affix steel to concrete

Thread Ø mm	Drill Size Ø mm	Overall Length mm	CE	Code
M10	20	100	✓	5004RS10100F

Stainless steel Grade 304 socket and 316 bolt.

# CHEMICAL FIXINGS

### **RKEM+ CHEMICAL FIXING**

A high performance, styrene free system that is suitable for use in concrete & other solid hollow masonry structures



### **RKER II HYBRID RESIN**

Suitable for use in dry & wet substrates & water filled holes



### **RKER II MIXER NOZZLES** Special 14 element mixing nozzle allows for

proper mixing of the resin, which ensures the reliability of the curing process

1100	
Total State of the last	
11	
KEN	4
12	3
	3

Code	ml
05RKEM	300

Code	ml
50RKER300	300

Code
50RKERMN

304

316

Zinc

Zamac

Mild steel

Galvanised

Aluminium

# **ACCESSORIES**

### **THREADED RODS**



Ø mm	Length mm	Code	
M6	1000	50TR06X1	
M6	3000	50TR06X3	
M8	1000	50TR08X1	
M8	3000	50TR08X3	
M10	1000	50TR10X1	

Ø mm	Length mm	Code	
M10	3000	50TR10X3	
M12	1000	50TR12X1	
M12	3000	50TR12X3	
M16	3000	50TR16X3	
M20	3000	50TR20X3	
D7D			

Ø mm	Length mm	Code	
M6	1000	5006TR06X1	
M6	3000	5006TR06X3	
M8	1000	5006TR08X1	
M8	3000	5006TR08X3	
M10	1000	5006TR10X1	
M10	3000	5006TR10X3	

Code	Length mm	Ø mm
189900641	150	M12
5006TR12X1	1000	M12
5006TR12X3	3000	M12
5006TR16X3	3000	M16
5006TR20X3	3000	M20

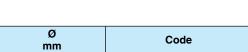
BZP.

### STUDDING CONNECTORS



Ø	Code
mm	Code
M6	50RC06
M10	50RC10
M10	50DC12

### ADDAX PLUS SDS BIT



Length mm	Ø mm	Code	
210	8	50SDS08210	
210	10	50SDS10210	
210	12	50SDS12210	

# **UNIVERSAL PLUGS & SCREWS**



	-		o	RAWLPLUG	ETA	CE
	Size Ø mm	Pack Qty		Cod	de	
1	7	450		FOLID	67D	

 Size Ø mm
 Pack Qty
 Code

 6
 500
 50UPS6R

 6 x 28mm plugs, 4.5 x 40mm screws.

7 x 30mm plugs, 4.0 x 40mm screws.

# **UNIVERSAL FRAME FIXING (R-FFS)**

The unique expansion zone ensures optimal anchorage depth, guaranteeing the highest fastener load capacity. Thanks to this, it can be used in all types of substrates with minimum installation times. High load capacities and the use of steel class 6.8 make it recommended for light steel structures like balustrades and handrails.

### **FEATURES**

- · Hexagonal head with collar
- R90 fire resistance and A1 fire classification allow the product to be used in most applications
- High shear strength thanks to the use of steel grade 6.8

Plug	Plug	Screw	Max Fixture Thickness		Code
Ø mm	Length mm	Length mm	40mm	50mm	Code
10	50	59	10	-	5002FFS1050
10	60	69	20	10	5002FFS1060

Drill size Ø 12mm.



Please note the plastic plug is fitted through the fixture so the screw has no contact with the material eliminating cross contamination from dissimilar metals.

- Quick installation thanks to 2 reduced anchoring depths: 40 mm in concrete and solid brick\* (categories A and B\*) 50 mm in substrates with hollow brick and aerated concrete (categories C and D)
- Use a punch-tool to increase a performance in aerated concrete

### **BASE MATERIALS**

- Cracked and non-cracked concrete ≥ C12/15 (Use category A)
- Solid brick or solid sand-lime brick (Use category B)
- Hollow brick or hollow sand-lime brick (Use category C)
- Aerated or hollow lightweight concrete block (Use category D)



\*Solid brick based on RAD data, 50 mm anchoring according to data in ETA.

# **ADHESIVES & SEALANTS**

### **HIGH STRENGTH RETAINER GLUE**

For use with tube fittings

### **ADHESIVE ACTIVATOR**

Reduces curing time when used with Loctite 638

### **INSTANT ADHESIVE**

Supplied with plunger and needle for accurate application. For use as thread lock adhesive







ml	Code
50	1899007638

ml	Code
150	18990087649

SILICONE SEALANT

Gives an all-round waterproof seal

ml	Code
50	1899007454

### **LOCTITE SILICONE SEALANT**

Gives an all-round waterproof seal



SEALANT	<b>GUN</b>
---------	------------



Colour	ml	Code
Clear	310	18990125366
Black	310	18990125368

Colour	ml	Code
Clear	310	189901201
Black	310	189901202

Code
189900666

# **CLEANING PRODUCTS**

### **3-PART TEA STAINING CLEANER KIT**

LOCTITE.

Keeps stainless handrail & fittings in top condition long after installation



Description	ml	Code
Demi water Spray	500	1899009DW
Stainless Steel Polish Spray	400	1899009SSP
R2U Stainless Steel Cleaner 500 ml Spray	500	1899009SSC

### **PICKLING GEL**

Helps remove rust, dirt and grime from stainless steel



kg	Code
2	18990094023

### STAINLESS STEEL **CLEANER**

Degreases & cleans surfaces ready for gluing



ml	Code
400	18990097063



**UNBLOCKING SPRAY** 

ml	Code
400	2912

Suitable for various hardware.









Zamac











# **CLEANING PRODUCTS**

### STAINLESS CLEANING WIPE

Removes finger & hand marks left during installation



	Code
189900901	

### **POLISHING CLOTHS**

For removal of light scratches on stainless tube & fittings



Description	Code
Fine (grey)	189901101
Medium (red)	189901102

MICRO FIBRE CLOTH

Pack of 10

### **BOND IT GLASS CLEANER**

Fast acting all purpose cleaner with non-smear formulation



Litre	Code
1	1859GC1

Use with code: 29RT150.

### **LOW LINT TEXTELINE CLOTHS**

Pack of 150



Code	
29RT150	

Colour Code Size mm Yellow 400 x 400 29MFC40

FOR OUR RANGE **OF STAINLESS STEEL COMPONENTS SEE FROM PAGE 56.** 

Ideal for use with code: 1859GC1.

# PROTECTIVE CLOTHING

### **LATEX GLOVES**

Size 8



185900101	
Based around a 10 gauge 100% Kevlar liner with a natural rubber latex	
crinkle coating that provides good grip in wet or dry conditions, abrasion &	

Code

**HEAVY DUTY MITTENS** For razor barb



Code	
080618	

tear resistant. The thumb is fully coated to protect the most vulnerable part of the hand.

### **RED SUPERIOR GAUNTLET**



Code	
60EAD009	

### **DOUBLE HEAD RUBBER SUCTION CUP**



Suction Cups Ø mm	Max. lift kg	Code
120	70	185900104

For use in hand lift applications only. All are fitted with a rubber suction which will not damage contact surface during the lifting action.

YOU CAN ORDER ONLINE 24 HOURS A DAY, 7 DAYS A WEEK. **VISIT OUR WEBSITE.** 

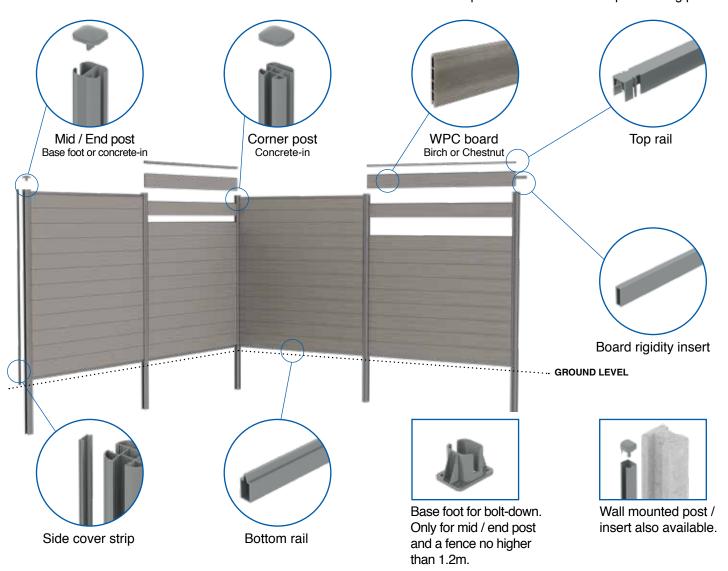
# RINATO™ WPC FENCING

### THE LOOK OF WOOD WITHOUT THE HASSLE



Our Rinato WPC fencing system looks amazing and is both easy to use and cost effective. It will also enhance any garden and create a contemporary focal point. This versatile recycled composite system is an eco-friendly product made from combining waste wood particles and thermoplastic resin. It is waterproof, strong and easy to maintain. We have bolt-down and concrete-in aluminium post options, and if you would like to use our WPC fencing between your existing concrete posts we have inserts to fit them. We have two colours to choose from: Chestnut or Birch.

- · Long-lasting & low maintenance
- · Boards available in 2 colours Birch or Chestnut
- Standard fence height 1.8m with 1.8m post centres
- · Aluminium concrete-in or bolt-down post options available
- Posts & boards can be cut to create a lower or narrower fence
- · No more frost damaged, cracked or chipped concrete posts
- Panels are built quickly using tongue & groove boards
- Easy to carry & deliver; much lighter than concrete posts
- Recycled, eco-friendly FSC® certified wood
- Wall mounted post / insert available for pre-existing posts



# RINATO™ WPC FENCING

### THE LOOK OF WOOD WITHOUT THE HASSLE

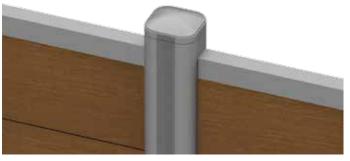
# BIRCH - PRICE PER METRE RUN WITH CONCRETE-IN MID / END POSTS



Fence Height m	Code
1.8	72FP18BM

Metre price includes concrete in posts, WPC boards and panel pack. Please add any additional corner or end posts required to the order.

# CHESTNUT - PRICE PER METRE RUN WITH CONCRETE-IN MID / END POSTS



Fence Height m	Code
1.8	72FP18CM

Metre price includes concrete in posts, WPC boards and panel pack. Please add any additional corner or end posts required to the order.

### MID / END POST

Bolt-down or concrete-in



Colour	Fence Height m	H x W x D mm	Code
Grey	1.8	2400 x 73 x 66	72PC18iG

Includes 1 x post cap with screw, 2 x plastic height setting pieces with 2 x screws, 1 x long side cover strip & 2 x short side cover strips. Aluminium PPC RAL 7012.

### **BASE FOOT**

For use with Mid / End post only, for a fence no higher than 1.2m.



Colour	H x W x D mm	Code
Grey	90 x 100 x 140	72BFG

Includes 2 x screws and 4 x anchor sleeves. Aluminium PPC RAL 7012.

### CORNER POST Concrete-in



	III		
Colour	Fence Height m	H x W x D mm	Code
Grey	1.8	2400 x 73 x 66	72PC18CG

Includes 1 x post cap, 1 x long side cover strip and 2 x short side cover strips. Aluminium PPC RAL 7012.

**PANEL PACK** 

### 2.

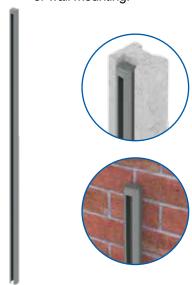


Colour	Code
Grey	72FPR18G

Includes 1 x top rail, 1 x bottom rail and  $3 \times 1$  board rigidity inserts. Aluminium PPC RAL 7012.

### **WALL MOUNTED POST / INSERT**

For use with pre-existing concrete post or wall mounting.



Colour	Fence Height m	H x W x D mm	Code
Grey	1.8	1905 x 48 x 40	72Pi18G

Includes 1 x post cap and 2 x post cap screws. Fix with screws & plugs or glue, depending on your posts and preference. Aluminium PPC RAL 7012.

### WPC DOUBLE-SIDED BOARD

Smooth & realistic wood grain effect

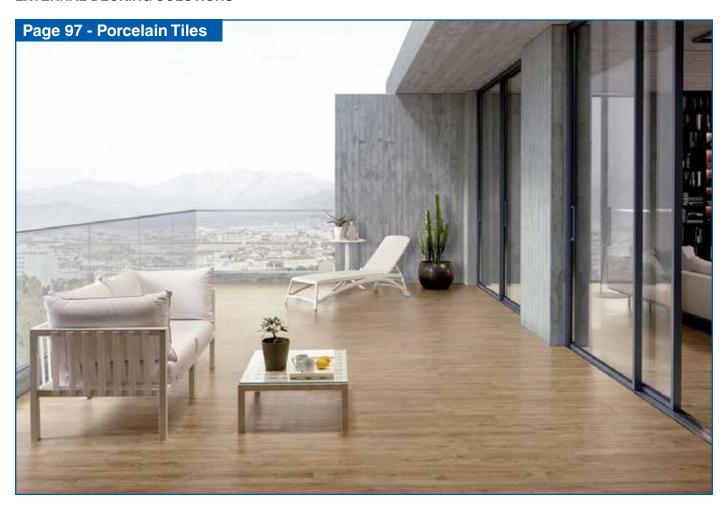


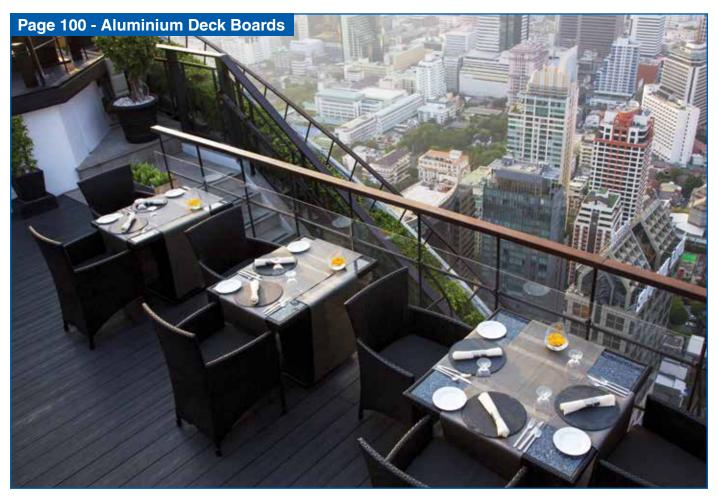
Colour	LxHxTmm	Code
Birch	1700 v 150* v 01	72FPS18B
Chestnut	1783 x 150* x 21	72FPS18C

Includes 6 x boards per pack. \*Overall height 159mm; to the shoulder 150mm.

# **SYNERGISED™**

### **EXTERNAL DECKING SOLUTIONS**





# SYNERGISED™ PORCELAIN TILES

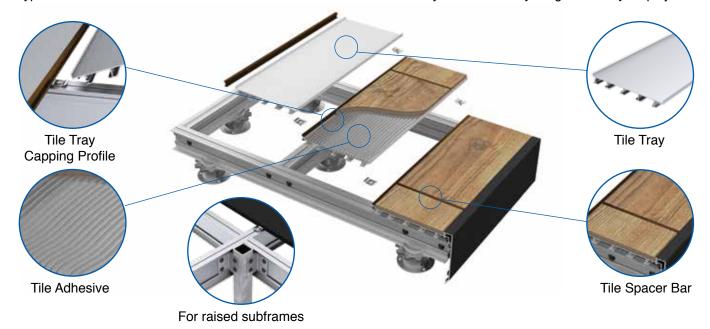
**EXTERNAL DECKING SOLUTIONS** 



As part of our Synergised framing & decking program the La Fabbrica range of porcelain stoneware reaches new heights in style and engineering, taking all the beauty and charm of the finest timbers. Safe, sustainable, versatile, and refined, Italian excellence with unbeatable quality. The tiles can flow seamlessly from inside your house to outside, changing only the surface texture with the designs dominated by the warmth and texture of wood. Whether on flat ground, a raised patio or high-rise balcony, you can now step out of your house onto porcelain tiles that look like natural wood. And it's fire rated too covering all current and proposed fire regulations.

Ca' Foscari recreates the warmth and natural appearance of textured wood, while the knots and veining in Yosemite convey the warm and traditional recreation of wood. Both offer elegant and contemporary style to any setting, whether residential or commercial it offers a long lasting low maintenance solution.

- Stunning wood effect Italian porcelain from one of Italy's top design houses
- · A1 and A2fl-s1 fire rated
- · Low surface temperatures
- Ideal for elevated patios, all decking applications, and all types of balconies
- Build your dream elevated stone patio without the need for expensive retaining walls and backfill materials
- · 1000mm joist spacing for 30mm boards & tile support trays
- · Dramatic reduction in hard landscaping costs
- Perimeter base section allows for our wide range of handrail systems to be fully integrated into your project



### **NEW RAISED PATIO**



**EXISTING SUBFRAME** 



**CANTILEVER BALCONY** 



CONCRETE INSET BALCONY



THE PERIMETER BASE SECTION ALLOWS FOR OUR WIDE RANGE OF HANDRAIL SYSTEMS TO BE FULLY INTEGRATED. SEE PAGE 103.

# SYNERGISED™ PORCELAIN TILES

### **EXTERNAL DECKING SOLUTIONS**

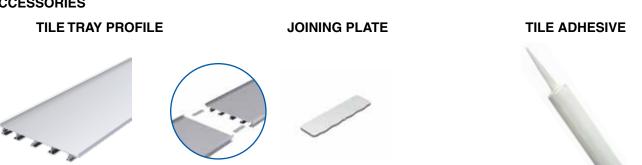


### **CA'FOSCARI COLLECTION**



Tile size: L 1200 x W 200 x D 10mm. Supplied as box of 4.

### **ACCESSORIES**



L x W x D mm	Code
3600 x 200 x 30	79TT30
Requires 2 joining plates per join, code: <b>79DJP</b> .	

Quantity	Code
100	79DJP
2 per join. For use with tile tray code: <b>79TT30</b> .	

Description	ml	Code
Fire rated	300	79FRTA
General Purpose	290	79GPTA



Mill finish.















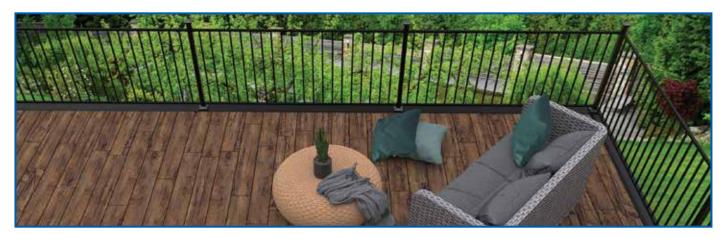






# SYNERGISED™ PORCELAIN TILES

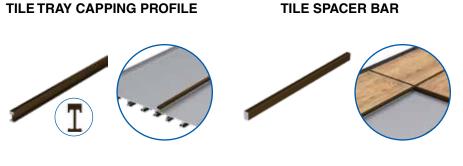
**EXTERNAL DECKING SOLUTIONS** 



**YOSEMITE COLLECTION** 



Tile size: L 1200 x W 200 x D 10mm. Supplied as box of 4.



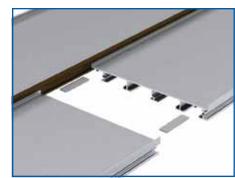
L x W mm	Code
3600 x 8	79TCP
E 111 111 1 E TOTTO	

For use with tile tray profile code: **79TT30**. Aluminium Grade GT547. Bronze anodised finish.

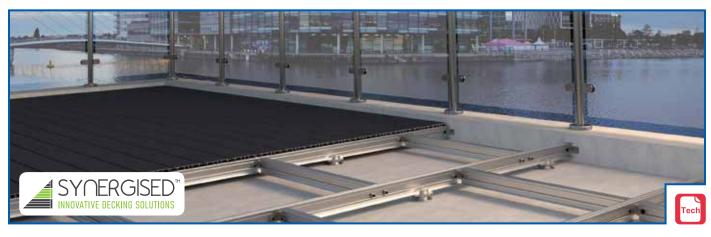
L x W mm Code
200 x 4 79FSB200

Bronze anodised finish.

# EXPLODED VIEW OF TILE TRAY ASSEMBLY

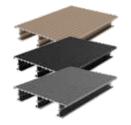


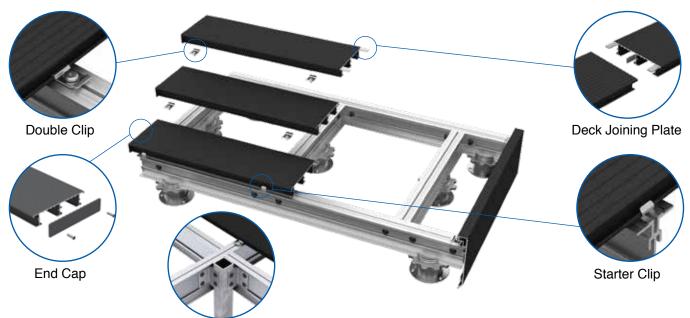
### INNOVATIVE FIRE RATED ALUMINIUM DECKING SOLUTIONS



The Synergised range of aluminium deck products has been tested by the UK's leading fire test centre to EN 13823, EN 13501 and EN ISO 1716. All elements of the Synergised System achieve Euroclass Classifications of A1 and A2fl-s1. Available in 3 contemporary colours and manufactured from structural grade 6063 T6 aluminium with a 100 micron Qualicoat™ premium powder coating, these are the ideal decking solution for both residential and commercial high footfall environments such as high rise balconies, walkways, terraces, pubs, gardens and much more. Installation couldn't be easier, with our innovative cradle base and joist support system that offers up to 50% cost saving compared to other solutions. Once installed the system is long lasting and low maintenance with a manufacturer's limited warranty.

- · A1 and A2fl-s1 fire rated
- Made from structural grade 6063 T6 aluminium
- · Ideal for high rise concrete balconies & terraces
- Up to 50% cost saving when compared to other systems
- 100 micron Qualicoat<sup>™</sup> premium powder coating
- · Adjustable cradle and deck support system
- Cradle spacing up to 1800mm
- · Low surface temperatures
- · Long lasting and low maintenance
- Lightweight and easy to install
- · Mill finish subframes and cradles
- · 10 year warranty on powder coating





### **HIGH RISE BUILDINGS**



**CONCRETE BALCONY & TERRACE** 

For raised subframes



**TIMBER REPLACEMENT** 



**COMMERCIAL & HIGH FOOTFALL BUILDINGS** 



304

316

Zinc

Zamac

Mild steel

Galvanised

Aluminium

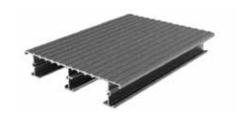
### INNOVATIVE FIRE RATED ALUMINIUM DECKING SOLUTIONS

### **DECK BOARDS**

**ANTHRACITE** 

**BLACK** 

**SERENGETI SAND** 



Length mm	Width mm	Depth mm	Code
3600	145	30	79DB30A

RAL 7016.

Length mm Width mm Depth mm Code 79DB30B 3600 30 145

RAL 9005.



Length mm Width mm Depth mm Code 3600 79DB30SS 145 30

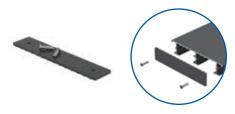
RAL 1019.

### **END CAPS**

**ANTHRACITE** 

**BLACK** 

**SERENGETI SAND** 



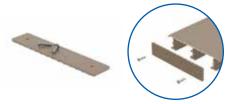
Code 79DBEC30A

RAL 7016. Supplied with all fixings. Requires Torx15 bit, code: 79TX001.



Code 79DBEC30B

RAL 9005. Supplied with all fixings. Requires Torx15 bit, code: **79TX001**.



Code 79DBEC30SS

RAL 1019. Supplied with all fixings. Requires Torx15 bit, code: **79TX001**.

### **DECK JOINING PLATE**



Quantity	Code
100	79DJP

STARTER CLIP



le
C01

Use 4 per full length board. For screws, use code: **79SS**.

**DOUBLE CLIP** 





Quantity	Code
1	79DC01

Use 4 per full length board. Leaves 5mm gap between deck boards. For screws, use code: 79SS.

**TOUCH UP PAINT** 

For deck boards

**SCREWS** For starter, double clips & joist mounting clips



3 per join.

Quantity	Code
100	79SS

Quantity Code 79TX001

**TORX15 BIT** 

For end cap fixings

25mm long.

**TORX40 BIT** For 90° brackets fixings



Quantity	Code
1	79TX002

25mm long.

### Colour ml Code Anthracite 400 29PC400SASY **RAL 7016** Black 400 29PC400SBSY **RAL 9005** Serengeti Sand 400 29PC400SSSY **RAL 1019**

### **FULL INSTALLATION INSTRUCTIONS AVAILABLE ONLINE.**

### **SUBFRAME & ADJUSTABLE CRADLES**

### **JOISTS**



### 70mm PROFILE



Length mm	Width mm	Height mm	Code
3600	40	70	79J070

# 120mm PROFILE

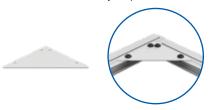


Length mm	Width mm	Height mm	Code	
3600	40	120	79J120	

### **JOIST JOINING KITS**



To suit 20 / 70mm joist profiles



Quantity	Code
1	79CB20

Supplied with all fixings. Drill 3.5mm pilot holes into joists. Requires Pozi-Drive bit to tighten.

### 90° BRACKET

To suit 70mm joist profile



Quantity	Code
4	79JBK70

Supplied with all fixings. Drill 8.5mm pilot holes into joists. Requires Torx40 bit, code: **79TX002**.

### 90° BRACKET

To suit 120mm joist profile

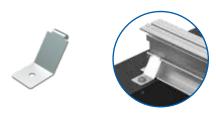


Quantity	Code
4	79JBK120

Supplied with all fixings. Drill 8.5mm pilot holes into joists. Requires Torx40 bit, code: **79TX002**.

### JOIST MOUNTING CLIP

To suit 70 / 120mm joist profiles



Code
79MP01

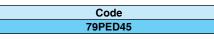
Used to mount the joist to the floor, existing subframe or to stack joists. For screws to stack joist to joist, use code: **79SS**.

304

### ADJUSTABLE CRADLES

45mm





Minimum height 45mm. Maximum height 160mm.

# 64mm 54mm 40mm

64mm



Aluminium

Minimum height 64mm. Maximum height 180mm.

### 45mm Cradle

Minimum - Maximum Height



### 64mm Cradle Minimum - Maximum Height

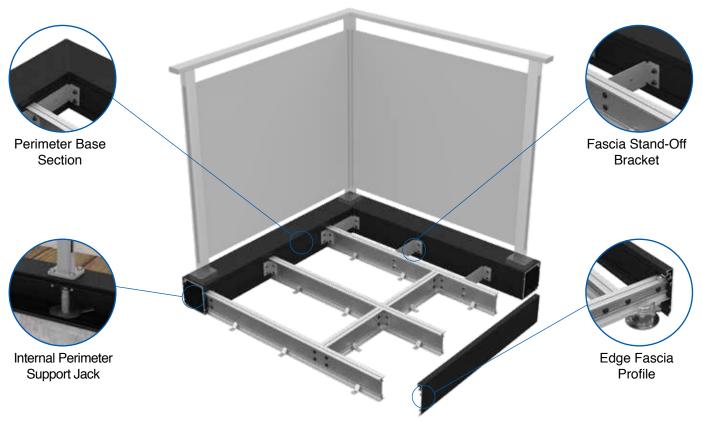


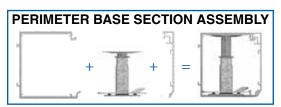
316 Zinc Zamac Mild steel Galvanised

### PERIMETER BASE SYSTEM

Our unique innovative perimeter base section, bolts directly to the Synergised subframe. It allows for a wide range of our base fix handrailing solutions to be bolted down to the perimeter, to provide a safe, stunning edge protection where there is a fall of more than 600mm. The Internal Perimeter Support Jack provides the strength required to allow handrailing systems to reach the desired residential 0.74kn loading requirements, as per BS6180.

If handrailing is not required, then our Edge Fascia Profile can be fitted to discreetly hide the subframe. The Edge Fascia Profile is supplied powder coated black, to contrast stylishly with the range of ceramic tiles and handrailing solutions, it also perfectly matches the perimeter base section when used alongside on the same project







# PERIMETER BASE SECTION



L x W x D mm	Code
3600 x 150 x 130	79PPB150B

For use with edge fascia profile code: **79EFB100**. Polyester powder coated black RAL 9005.

EDGE FASCIA PROFILE



L x D mm	Code
3600 x 100	79EFB100
3600 x 100	79EFB100

Polyester powder coated black RAL 9005.

INTERNAL PERIMETER SUPPORT JACK



Code									
79PBSP01									

Adjust to desired height and rotate lever to lock in place.

FASCIA STAND-OFF BRACKET



Code
79TBC

For use with perimeter base section code: **79PB150B**. Stainless steel.

FOR A WIDE RANGE OF HANDRAIL SYSTEMS VISIT OUR WEBSITE.

# CREATE A STUNNING FINISH WITH RINATO™ DECK BOARDS













# RINATO™ DECK BOARDS

### THE LOOK OF WOOD WITHOUT THE HASSLE



With our range of composite deck boards there is a style, colour and price to suit everyone. These boards are easy to install and look fantastic. As well as being environmentally friendly, all our decking is virtually maintenance free, is incredibly durable and will remain so for years to come. Experience the beauty of wood without the hassle.

### **FEATURES**

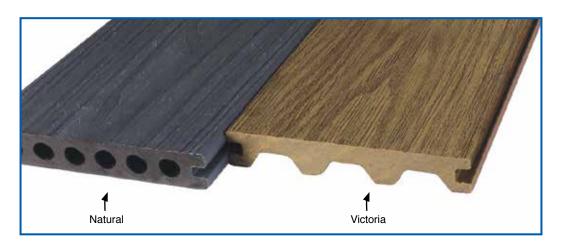
	Anti-slip resistance tested	Solid & hollow core options
O Does not absorb moisture	Mould free	Made from recycled material
So Easy to keep clean & stain free	Rot free	<u>∠∕s</u> Recyclable
Excellent UV resistance	Easy to install	Non-toxic
Splinter free	∆ Workability - similar to wood	Flammability tested

### **AVAILABLE IN TWO RANGES:**

**NATURAL** - Features a 360 degree wrap around Polymer Capstock shield that encapsulates the hollow core deck board and gives it year-round protection against the elements and is suitable for a variety of outdoor uses. Available in 3 colours and with an enhanced natural woodgrain effect one side and traditional flat sanded effect the other.

**VICTORIA** - Uses less composite material thanks to the 'M' design on the underside, making the board lighter and more economic, the perfect cost-friendly choice for every garden, balcony or patio. Available in 4 colours, boards are single-sided with a choice of natural woodgrain effect or a traditional grooved effect across all the colours.

### All our deck boards are supported with a warranty.



# **RINATO™**

### **NATURAL DECK BOARDS**



**CEDAR DAWN** 



**TWILIGHT GREY** 

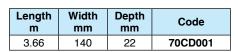






**DECK BOARDS - DOUBLE-SIDED** 





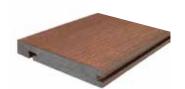


Length m	Width mm	Depth mm	Code
3.66	140	22	70PA001



Length	Width	Depth	Code
m	mm	mm	
3.66	140	22	70TG001

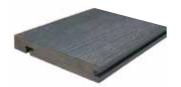
### STARTER BOARDS (Used at the start of a run to hide starter clips)



L	ength m	Width mm	Depth mm	Code
	3.66	140	22	70CD005



Length m	Width mm	Depth mm	Code
3.66	140	22	70PA005



Length m	Width mm	Depth mm	Code
3.66	140	22	70TG005

### **FASCIA BOARDS**



Length	Width	Depth	Code
m	mm	mm	
3.66	10	70	70CD004



Length m	Width mm	Depth mm	Code
3.66	70	10	70PA004



ı	Length m	Width mm	Depth mm	Code
	3.66	10	70	70TG004

Zinc

Zamac

Mild steel

Galvanised

Aluminium

### **NATURAL DECK BOARDS**

### **L SHAPED TRIMS**

**CEDAR DAWN** 



Length	Width	Depth	Code
m	mm	mm	
3.66	50	50	70CD003

### **PLATINUM ASH**



Length	Width	Depth	Code
m	mm	mm	
3.66	50	50	70PA003

### TWILIGHT GREY



Length m	Width mm	Depth mm	Code
3.66	50	50	70TG003

### **FIXINGS**

### STARTER CLIP

- Used to start a run of deck boards
- Supplied in packs of 10 with screws



Pack Quantity	Code
10	66SC01

10 clips are recommended for each perimeter/ starter board.

### **DOUBLE CLIP**

- 1mm gap between deck boards
- Supplied in packs of 50 with screws



Pack Quantity	Code
50	66DC01

9 clips are recommended for each board length.

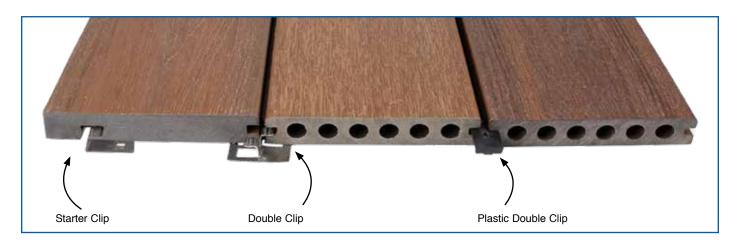
### PLASTIC DOUBLE CLIP

- 7mm gap between deck boards
- Supplied in packs of 100 with screws

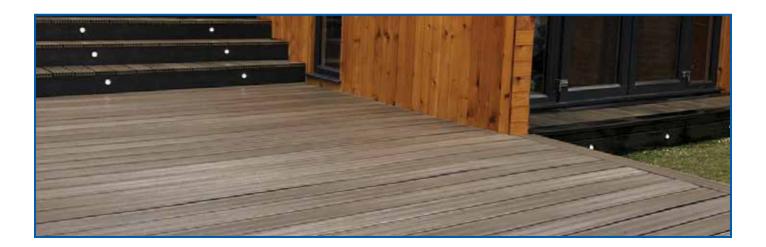


Pack Quantity	Code
100	70FCP01

9 clips are recommended for each board length.



### FOR OUR FULL RANGE OF FIXING CLIPS SEE PAGE 109.



# **RINATO**

### **VICTORIA DECK BOARDS**













**WOOD GRAIN DECK BOARD** 

Length m	Width mm	Depth mm	Code
3.6	135	23	71T004

**WOOD GRAIN DECK BOARD** 

Length m	Width mm	Depth mm	Code
•••			
3.6	135	23	71 D00/

**WOOD GRAIN DECK BOARD** Length Width Depth

Code

71G004

WOOD	GRAIN I	DECK B	OARD
Length m	Width mm	Depth mm	Code
3.6	135	23	71E004

**GROOVED DECK BOARD** 

Length m	Width mm	Depth mm	Code
3.6	135	23	71T003

GROOVED DECK BOARD			
Length m	Width mm	Depth mm	Code
3.6	135	23	71R003

135 **GROOVED DECK BOARD** 

mm

3.6

Length	Width	Depth	Code
m	mm	mm	
3.6	135	23	71G003

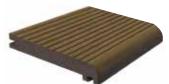
mm

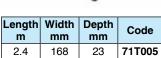
23

**GROOVED DECK BOARD** 

Length m	Width mm	Depth mm	Code
3.6	135	23	71E003

### STARTER BOARDS - ONLY FOR THE VICTORIA RANGE







Length m	Width	Depth	Code
2.4	168	23	71R005



Length	Width	Depth	Code	
m	mm	mm		
2.4	168	23	71G005	



Length m	Width mm	Depth mm	Code	
2.4	168	23	71E005	

### **FIXINGS**

### STARTER CLIP

- Screws sold separately
- Stainless steel & PPC black



	-
Pack Quantity	Code
1	71SC003
25	71SC003P

10 clips are recommended for each perimeter/starter board.

### **DOUBLE CLIP**

- 7mm gap between deck boards
- Screws sold separately
- Stainless steel & PPC black



Pack Quantity	Code		
1	71DC003		
100	71DC003P		

12 clips are recommended for each board length.























### **FULL RANGE OF FIXING CLIPS**













No.	Туре	Material	Colour	Gap Between Boards mm	Number of Clips per Pack	Number of Clips Needed per sq/m	Clip Code	Screws Included	Screw Code
1	Starter Clip	Stainless Steel	Silver	0	10	N/A	66SC01	Yes	N/A
2	Double Clip	Stainless Steel	Silver	1	50	18	66DC01	Yes	N/A
3	Double Clip	Plastic	Black	7	100	18	70FCP01	Yes	N/A
	Starter Clip	Stainless Steel	Black	7	1	N/A	71SC003	No	71SS003*
4	Starter Clip	Stainless Steel	Black	0	25	N/A	71SC003P	No	71SS003*
	Double Clip	Stainless Steel	Black	7	1	18	71DC003	No	71SS003*
5	Double Clip	Stainless Steel	Black	7	100	18	71DC003P	No	71SS003*
6	Double Clip	Nylon	Black	7	100	18	71DCN003P	No	71SS003*

<sup>\*</sup>Supplied in a pack of 100. For screw driver bit use code: 66TX001.

**NB.** We recommend 9 clips per board length when using Natural boards and 12 clips per board length when using Victoria boards.

We also recommend using 10 starter clips per perimeter/starter board across the range.

# A RANGE OF HANDRAILING PERFECTLY DESIGNED FOR DECKING













FOR MORE INFORMATION VISIT OUR WEBSITE

# Stylish, durable and cost effective



May 2021



ProRailing Scandinavia AS Julsundvegen 113 6410 Molde

Tlf: 99448930 Email: ruben@prorailing.no Web: www.prorailing.no