



 JURALCO

JURALCO EDGETEC[®] MINI POST BALUSTRADE and POOL FENCING SYSTEMS

ISSUE 1-23 v1

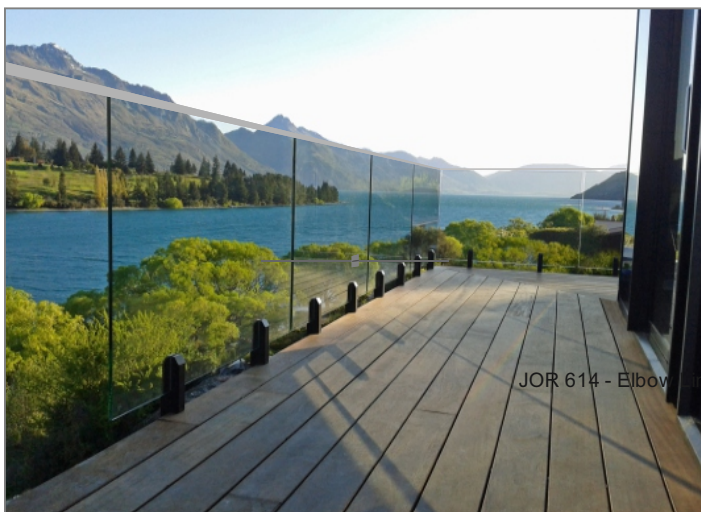
Juralco Edgetec® Mini Post Balustrade System

Juralco Aluminium Building Products Ltd designs and distributes specialist aluminium joinery systems through a national network of franchised fabricators and agents.

For more than 25 years we have been at the forefront of specialist aluminium door and window products suitable for New Zealand joinery and building methods. Our comprehensive product range includes security and insect screens, balustrades and gates, shutters and awnings, shower screens, wardrobe doors and organisers and internal doors.

The Juralco Mini Post Balustrade System has 3 x Mounting options, Top, Face and Gutter Bracket and is designed to use 12mm Frameless Toughened Glass.

The system is extremely versatile and can be custom made in a range of configurations and powder-coat colours to meet most modern architectural requirements.



Juralco Edgetec Mini Post Framless Balustrade
Face Fix to Timber Deck



Juralco Edgetec Mini Post Framless Balustrade
Top Fix to Tiled Concrete Deck. Pool



Juralco Edgetec Mini Post showing the Interlinking Top Rail and the use of a Top Mounted Edge Post and Brackets back to the structure



Juralco Edgetec Mini Post Framless Balustrade
Face Fix to Timber Deck

Juralco Edgetec® Mini Post Balustrade System

Complies With AS/NZS 1170:2002, NZS 4223.3.2016, NZ Building Code B1, B2, F2, F4 and F9

**Mini Post Balustrade is for Domestic and Residential Occupancy types A, A Other and C3 only
Occupancy Types as per AS/NZ 1170.1.2002. Not suitable for Commercial C3 applications**

Code	Type of Occupancy for part of the building or structure	Specific Uses	Glass
A	Domestic and Residential activities	All areas within or serving exclusively one dwelling including stairs, landings etc, but excluding external balconies and edges of roofs.	12mm Toughened Glass
A Other, C3	Areas without obstacles for moving people and not susceptible to over crowding	Stairs, landings, external balconies, edges of roofs etc.	

- Note 1** All for 12mm Toughened Glass Frameless.
Glass must have a minimum strength of 100mpa. All edges polished
-
- Note 2** Juralco Balustrade Systems building code compliance documentation requires all balustrade installations are to be completed in accordance with the requirements of our authorised installer certification.
-
- Note 3** All Frameless Glass balustrades using Toughened Glass must have an Interlinking Rail to conform to NZS 4223.3.2016. Not necessary for Swimming Pool Fencing
-
- Note 4** Juralco Edgetec® Mini Post Balustrade Patent Application #NZ603315

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Section 4852JB

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Juralco Edgetec® Mini Post Balustrade System Specifications, Powder Coating

Juralco Aluminium Building Products Ltd (JABP) Specifications for Juralco Edgetec® Mini Post Balustrade System

1. Scope

- This specification details the documents the Juralco Mini Post Balustrade System refers to in relation to the New Zealand Building Code, the manufacturer's documents, products used in the System, requirements in relation to fixing and surface finishing.

2. NZBC Compliance

- The Juralco Mini Post Balustrade System has been reviewed by Lautrec Technology Group Ltd, Engineers to demonstrate compliance with the structural requirements of the New Zealand Building Code and AS/NZS 1170 : 2002 occupancy A, A Other and C3, NZS 3604 for wLow, Medium, High, and Very High Wind Zones
- The Structural Engineering design includes the requirements of B1 Structure, B2 Durability, F2 Hazardous material and F4 Safety from falling, all from the Building Code.
- Verification Method B1 / VM1, B2/AS1, F4 / AS1
- All glass used in the Juralco Mini Post Balustrade System must conform to AS/NZS 2208.
- Complies with NZS 4223.3.2016
- Separation of dissimilar materials (as relates to B2 compliance) have been reviewed.
For other combinations refer to NZS 3604:2011 Section 2.3.3 Separation and Section 4 Durability

3. Manufacturer's Documents

- The Juralco Mini Post Balustrade System manual details all extrusions and components used for the fabrication and installation/fixing of the system.
- A Producer Statement 1(Design) is available.
Copies of the above documents are available from:
Juralco Aluminium Building Products Ltd
48 Bruce McLaren Rd, Henderson, Auckland
Phone 09 478 8018 Fax 09 478 7883 Email specify@juralco.co.nz
- Any deviation from the standard fabrication or installation/fixing must be accompanied by a site specific PS1 with site specific calculations and drawings

4. Products

- Only extrusions, components and hardware supplied by or specified by JABP may be used in the Juralco Mini Post System
- Aluminium extrusions, components and hardware – unless specified are manufactured to 6060 T5 specifications
- Stainless Steel components, hardware, fixings – all components to 316 grade
- Glass - all glass used in the Juralco Mini Post Balustrade System must conform to the specifications as listed in the Juralco Mini Post manual with each panel conforming to AS/NZS 2208 as confirmed by the Safety Stamp detailing the manufacturer's description and licence number.

5. Surface Finishing

- Juralco Aluminium Building Products Ltd is a Dulux Registered Applicator site, registration number 2101.
JABP uses only Dulux branded powder coating materials
- Dulux Duralloy® powder coating systems are suitable for properties greater than 100m from high tide level
AAMA 2603 performance. Residential buildings, 3 levels max. Warranty 10 yrs
- Dulux Duralloy Plus® powder coating systems are suitable for properties greater than 10m from high tide level.
AAMA 2603 performance. Residential and Light commercial buildings, 3 levels max Warranty 15 yrs
- Dulux Duratec® powder coating systems are suitable for properties greater than 10m from high tide level
AAMA2603 and 2604 performance. All Residential and Commercial buildings. Warranty 25 yrs

6. Installation and Fixing

- The Juralco Mini Post Balustrade System must only be installed in accordance with the Juralco Mini Post Balustrade System manual
- Any deviation from that specified in the Juralco Mini Post manual must only be in accordance with the site specific PS1 with site specific calculations and drawings listing the non standard details
- The Juralco Mini Post Balustrade System must only be fabricated/installed by a Juralco approved fabricator
- Upon completion of the installation the fabricator must supply the owner with a PS3 (Construction)

Important information - Powder Coating systems.

Powdercoat Systems The new standard Dulux powder coating system used by Juralco is Duralloy Plus®. Also Duralloy® and Duratec®. All as per specs above. Juralco Powder coated prices are for Duralloy Plus® and Duralloy® (same pricing). Duratec® prices on application.

Attachment to structures A PVC Tape or similar material spacer must be used to separate powder coated aluminium items from all concrete and steel structures. Failure to do so can lead to the chemicals in the structure affecting the powder coating, leading to corrosion.

Swimming Pools The chlorinated water in swimming pools can cause the deterioration of powder coated surfaces, leading to corrosion of the underlying surface. It is recommended that Powder coated surfaces be 1200mm min from a pool.

Care The Dulux powder coating warranty period is conditional upon the surface being maintained in accordance with the Dulux 'Care and Maintenance Instructions'. Download from Dulux or refer to the back page of this manual.

Juralco Edgetec® Mini Post Balustrade System - Typical Layouts

Mini Post
+ Interlinking Rail

Glass must have a minimum strength of 100MPa. All edges polished

Residential & Domestic only
Occupancy types A, A Other and C3

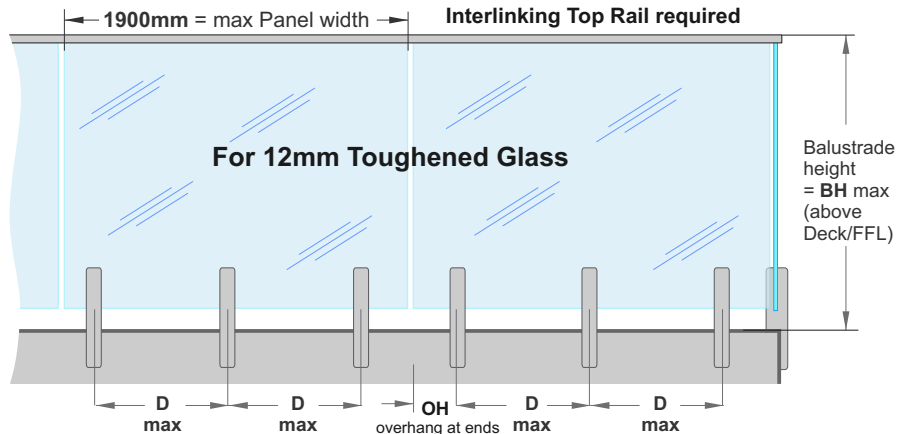
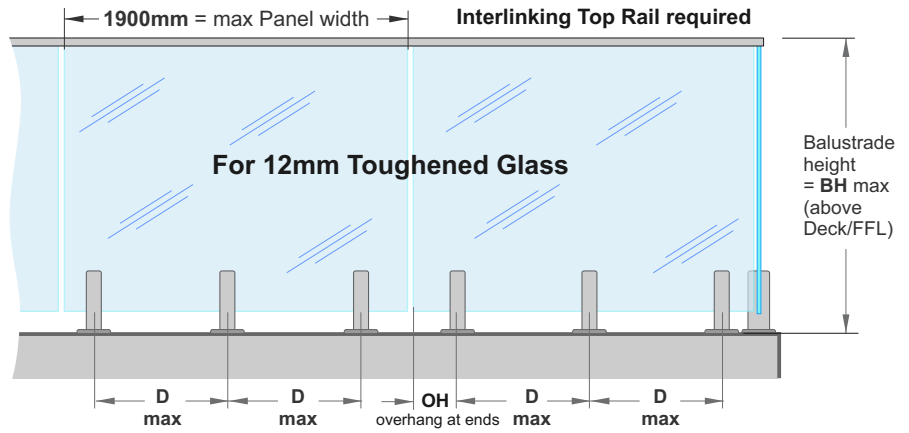
12mm Toughened Glass

Top Fix and Face Fix only

High Wind Zone - BH max 1200mm
- D max 720mm
- OH max 250mm

Very High Wind Zone - BH max 1100mm
- D max 720mm
- OH max 250mm

Exceeds the wind loading for **up to and including** Wind Zones as detailed above



Residential & Domestic only
Occupancy types A, A Other and C3

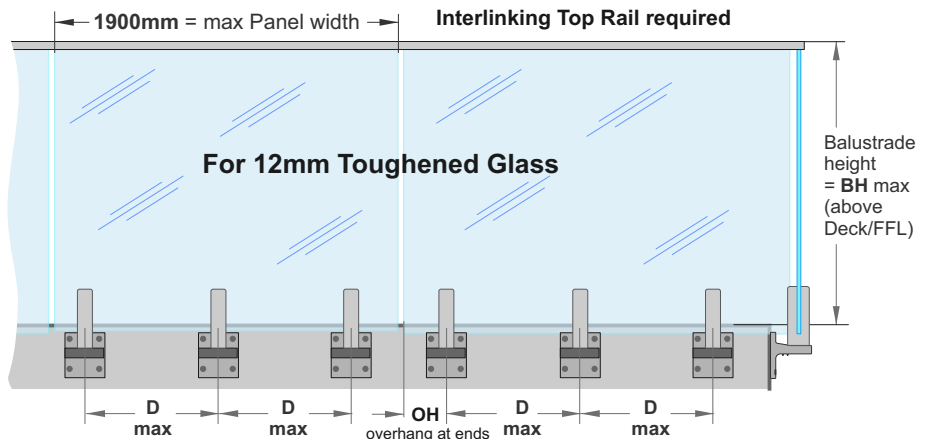
12mm Toughened Glass

Gutter Brkt Face Fix only

High Wind Zone - BH max 1200mm
- D max 720mm
- OH max 250mm

Very High Wind Zone - BH max 1100mm
- D max 720mm
- OH max 250mm

Exceeds the wind loading for **up to and including** Wind Zones as detailed above



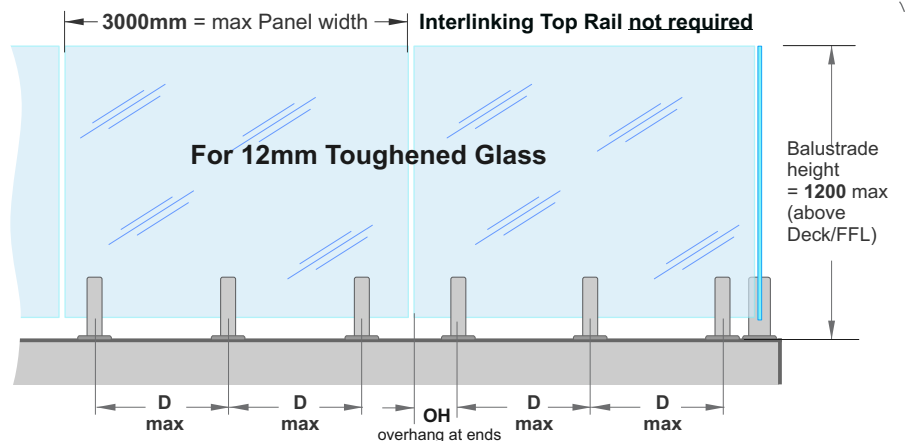
MiniPost
Pool Fencing Only
TOP or FACE FIX ONLY

Glass must have a minimum strength of 100MPa. All edges polished

12mm Toughened Glass
(Pool Fence only)

Wind Zone	D max	OH max
up to Medium	1000	500
up to High	750	375
up to V High	600	300

Exceeds the wind loading for **up to and including** Wind Zones as detailed above



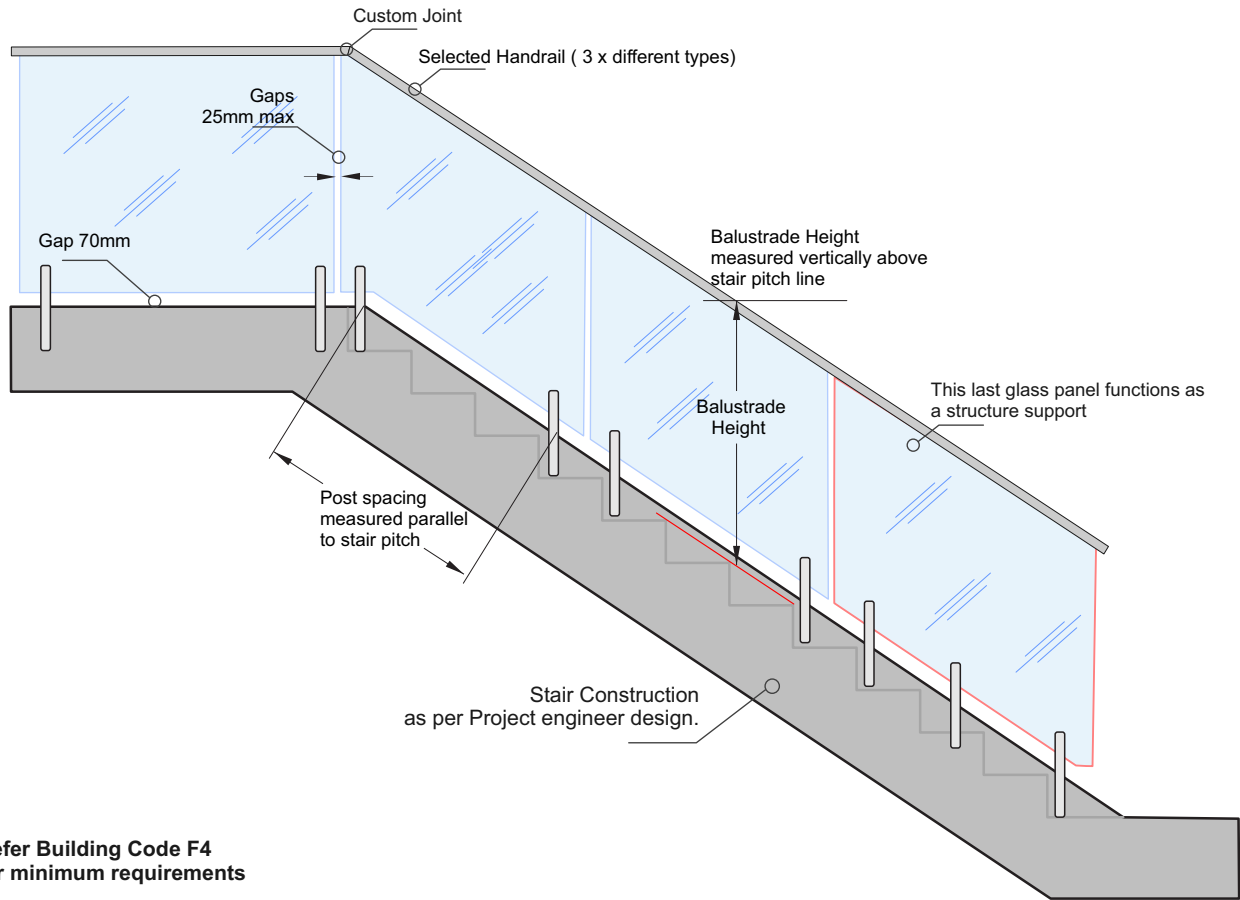
Applies to Swimming Pools as of Jan 2017, complies with the Building Code clause F9 and section 162C of the Building Act.

Applies to Pool Fences not protecting a fall of 1.0m or more

Juralco Edgetec® Mini Post Balustrade System - Typical Stair Layout

MiniPost Balustrade Face Fix

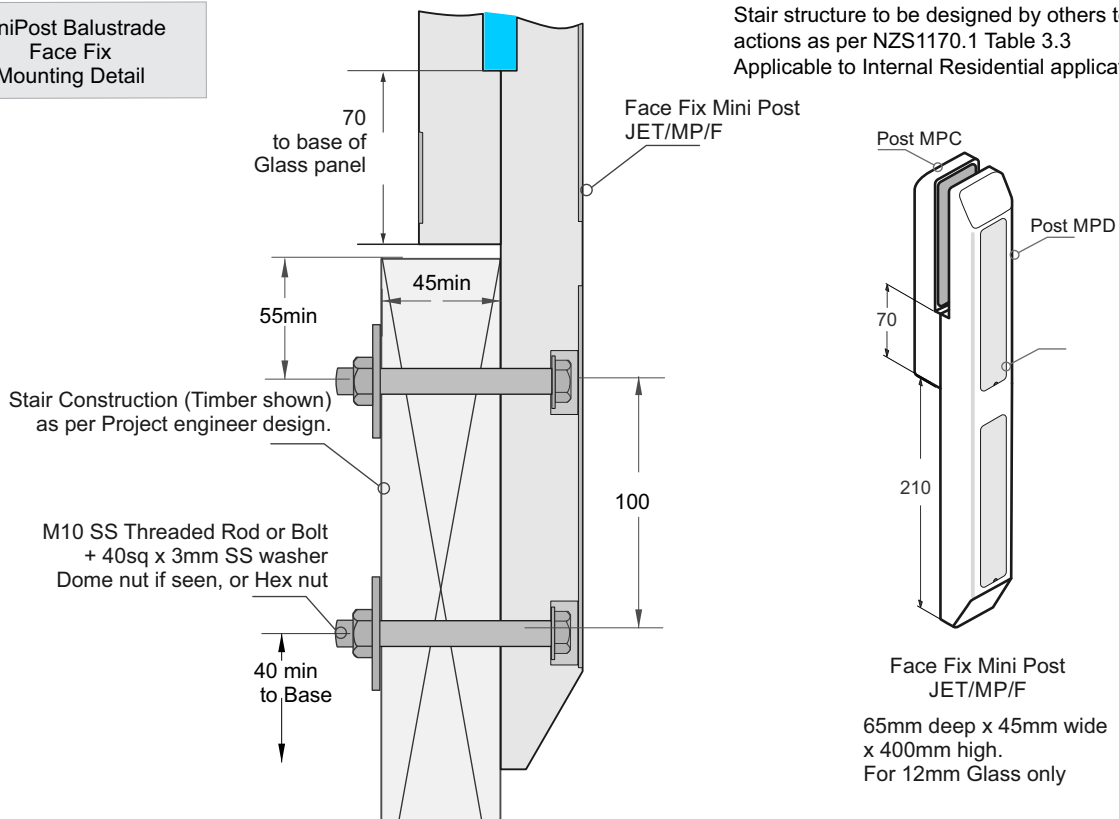
Typical Stair installation. Internal only
 Fixings into Single or Double Joists/Stiffeners, Concrete or Steel



Refer Building Code F4 for minimum requirements

MiniPost Balustrade Face Fix Mounting Detail

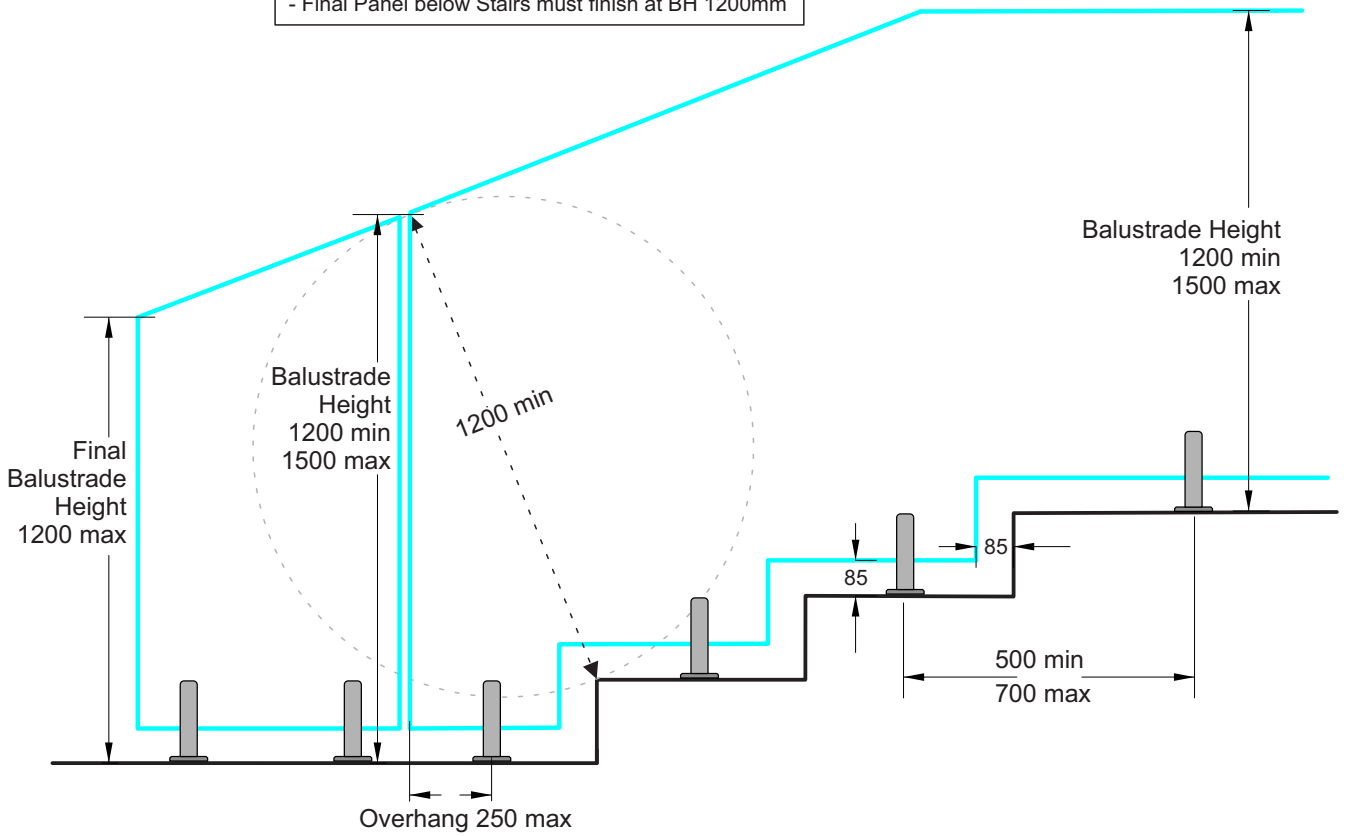
Stair structure to be designed by others to resist Balustrade actions as per NZS1170.1 Table 3.3
 Applicable to Internal Residential applications only



Juralco Edgetec® Mini Post Balustrade System - Typical Stair Layout leading to a Pool

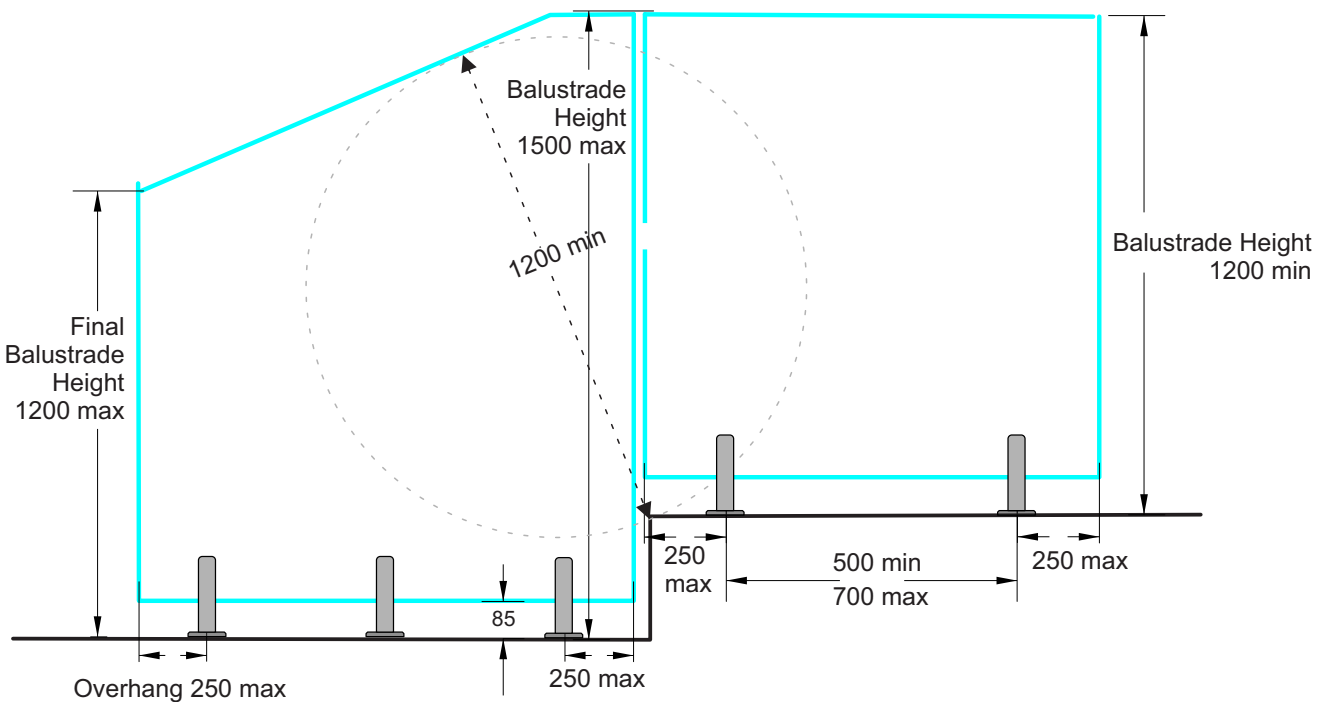
Mini Post,
Pool Access Stairs

Important Note:
 - Up to and including Medium Wind Zone
 - Applies to Top Fix Mini Post
 - Final Panel below Stairs must finish at BH 1200mm



Mini Post
Pool Access Steps

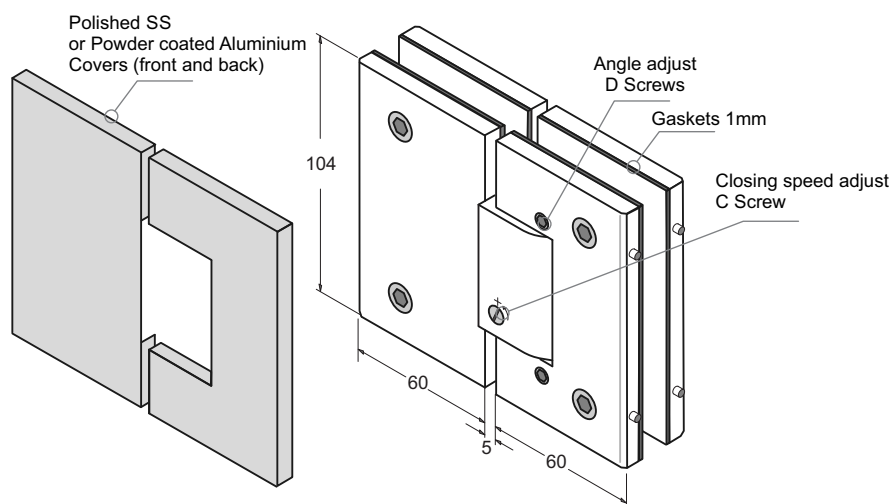
Important Note:
 - Up to and including Medium Wind Zone
 - Applies to Top Fix Mini Post
 - Final Panel below Step must finish at BH 1200mm



Juralco Edgetec® Mini Post Balustrade System Juralco Glass to Glass Hydraulic Hinges and Latches for Pool Gates

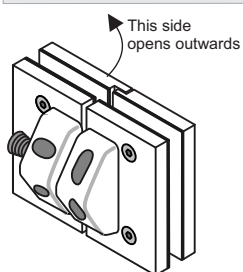
Glass to Glass SS Hinge 12mm Glass only

Powder Coated - Part No JET/HH180/SCC
Polished SS - Part No JET/HH180/PSS

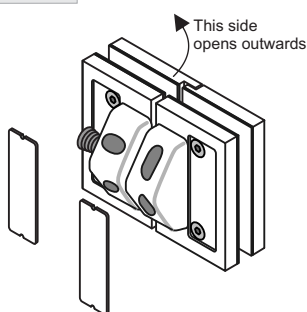


Glass to Glass Latches

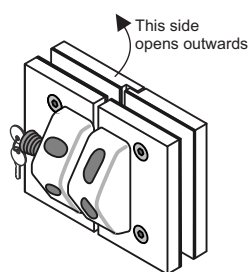
Note :Can be assembled as RH or LH



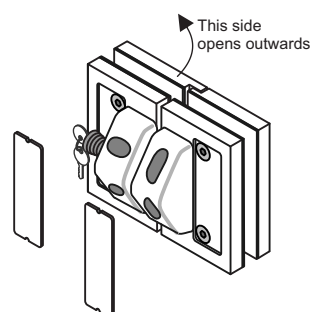
Clamp Plates SS
Latch Non Locking type
Part No JET/PL 180/PSS



Clamp Plates Powder Coated
Latch Non Locking type
Part No JET/PL 180/SCC

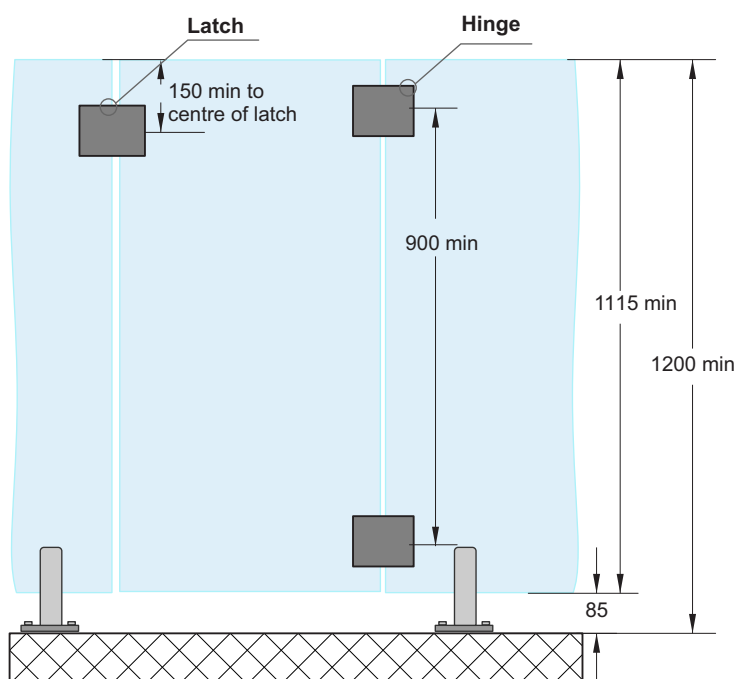


Clamp Plates SS
Latch Locking type
Part No JET/PL 180KLK/PSS



Clamp Plates Powder Coated
Latch Locking type
Part No JET/PL 180KLK/SCC

Latch and Hinge Positions



Specifications..

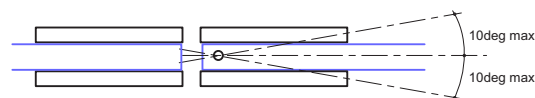
Glass Thickness 12mm
Hinge and Latch packers, 1.0mm each side
Gate width max = 900mm
Gate Height min = 1200mm
Gate Weight max = 65 kg (= 2.1sqm)
Hinge - Auto close. Adjustable Closing Speed and angle.
Non Hold open
Latch, Side pull magnetic. Gap = 8mm min -12mm max
Gate to open outwards; Latch to be mounted on inside.
Installation to conform to NZS8500:2006
Complies with NZBC Clause F9

Closing Speed Adjust

- Remove the covers
- Slotted screwdriver, turn Screw C
- Clockwise = slower
- Synchronise both hinges for equal speed.

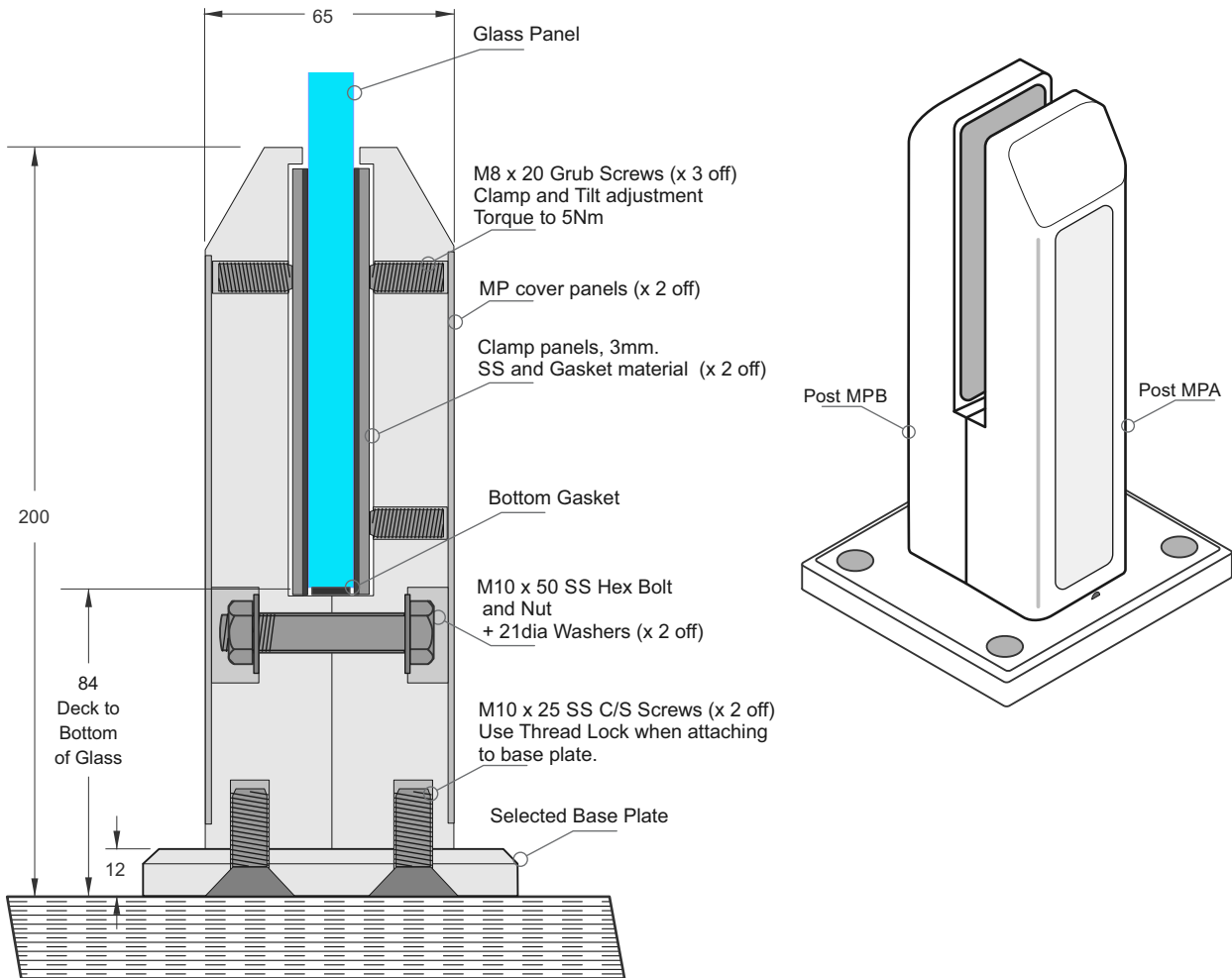
Angle Adjust

- Remove the covers
- Using a M3 allen key, loosen the two D screws 360deg.
- Adjust the angle (+/- 10 deg max)
- Tighten both firmly at correct angle



See Glass Pool Gate Manual for more details and other options

Juralco Edgetec® Mini Post Balustrade System - Top Fix to Baseplate

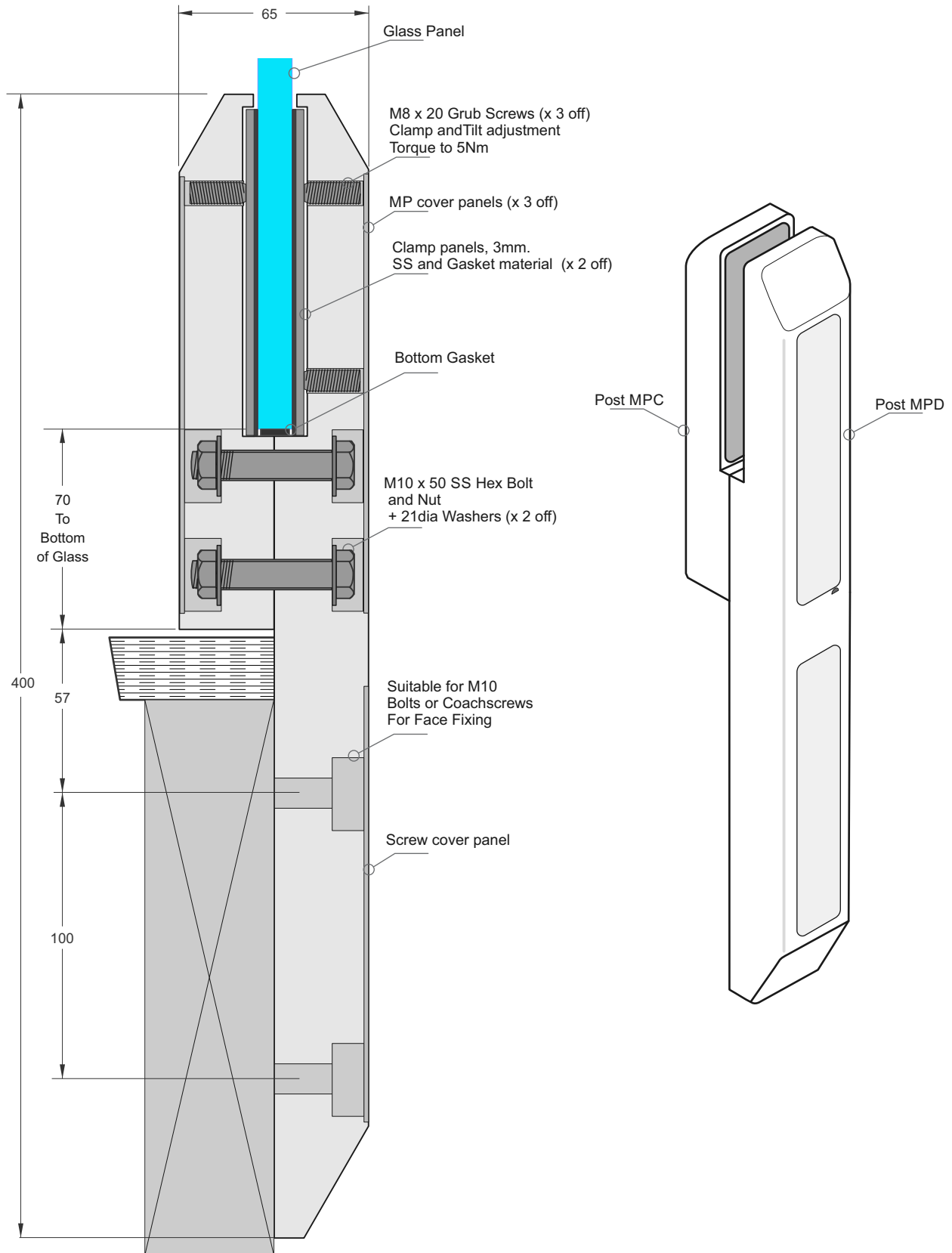


Elevation showing the Main Features
For a Top Fix Bracket

Notes:

- 1 - Clamp panels, 3mm SS and Gasket material . Held in place with JMF/X03 Double sided tape
- 2 - Glass Clamping - Tighten bottom grubscrew first, then two top screws. Do not over tighten, max torque 5Nm.
- 3 - MP Cover Panels. Held in place with JMF/X02 Double sided tape
- 4 - Use top grub screw for vertical alignment of the glass panel.
- 5 - Ensure that the glass panel is not in contact with any of the Mini post
- 6 - For height adjustment pack the bottom of the glass with additional bottom gaskets as required.

Juralco Edgetec® Mini Post Balustrade System - Face Fix

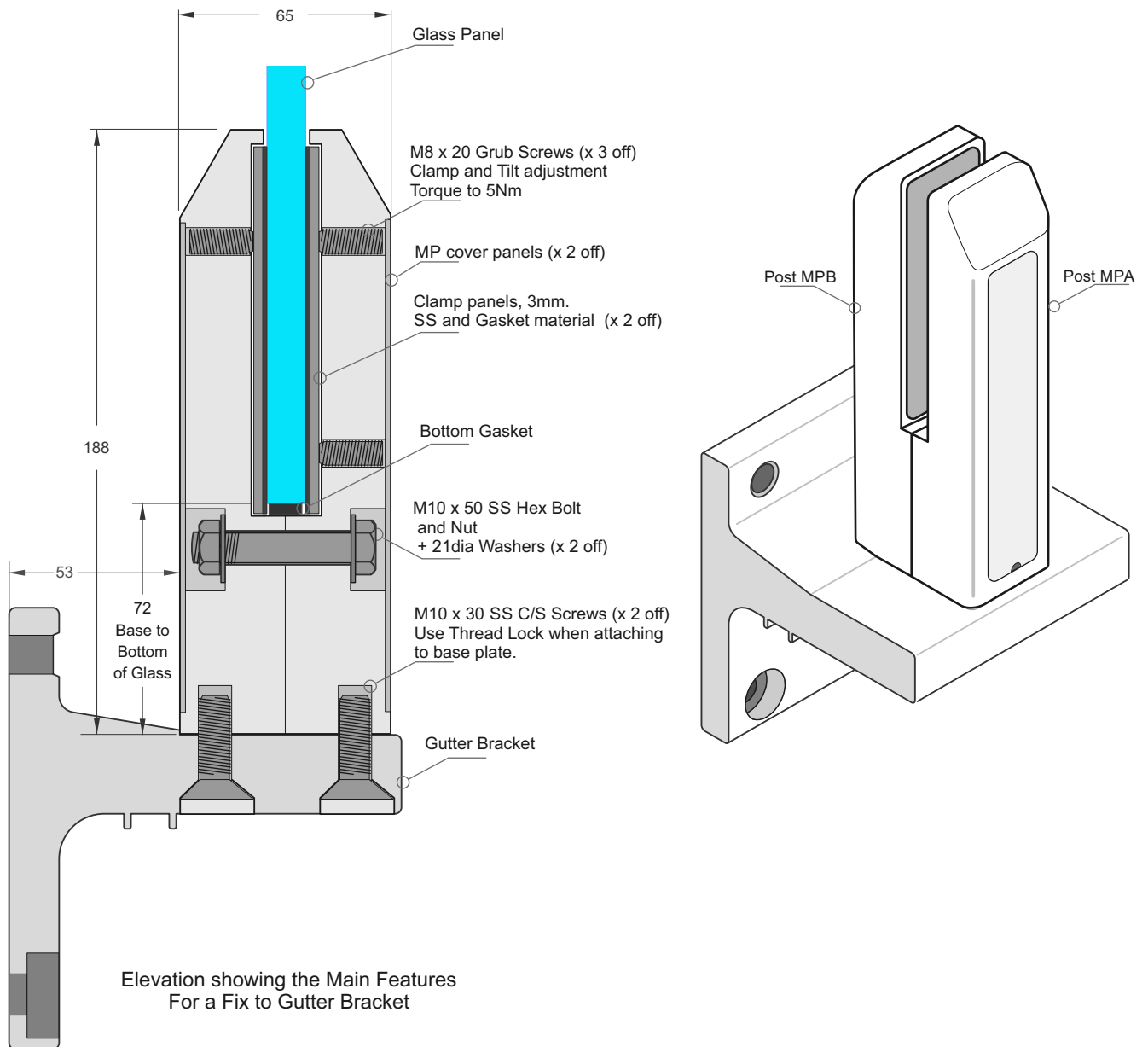


Elevation showing the Main Features
For a Face Fix Bracket

Notes:

- 1 - Clamp panels, 3mm SS and Gasket material . Held in place with JMF/X03 Double sided tape
- 2 - Glass Clamping - Tighten bottom grubscrew first, then two top screws. Do not over tighten, max torque 5Nm.
- 3 - MP Cover Panels. Held in place with JMF/X02 Double sided tape
- 4 - Use top grub screw for vertical alignment of the glass panel.
- 5 - Ensure that the glass panel is not in contact with any of the Mini post
- 6 - For height adjustment pack the bottom of the glass with additional bottom gaskets as required.

Juralco Edgetec® Mini Post Balustrade System - Top Fix, Gutter Bracket



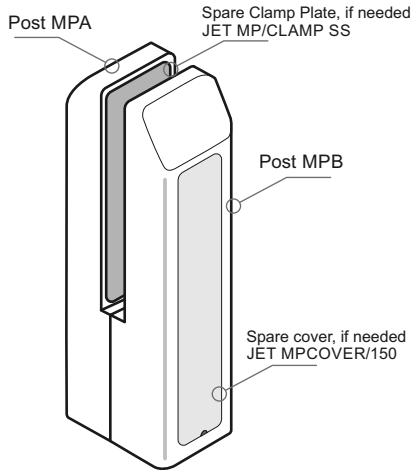
Notes:

- 1 - Clamp panels, 3mm SS and Gasket material . Held in place with JMF/X03 Double sided tape
- 2 - Glass Clamping - Tighten bottom grub screw first, then two top screws. Do not over tighten, max torque 5Nm.
- 3 - MP Cover Panels. Held in place with JMF/X02 Double sided tape
- 4 - Use top grub screw for vertical alignment of the glass panel.
- 5 - Ensure that the glass panel is not in contact with any of the Mini post
- 6 - For height adjustment pack the bottom of the glass with additional bottom gaskets as required.

Juralco Edgetec® Mini Post Balustrade System - Components

Top Fix Mini Post Part No JET/MP/T

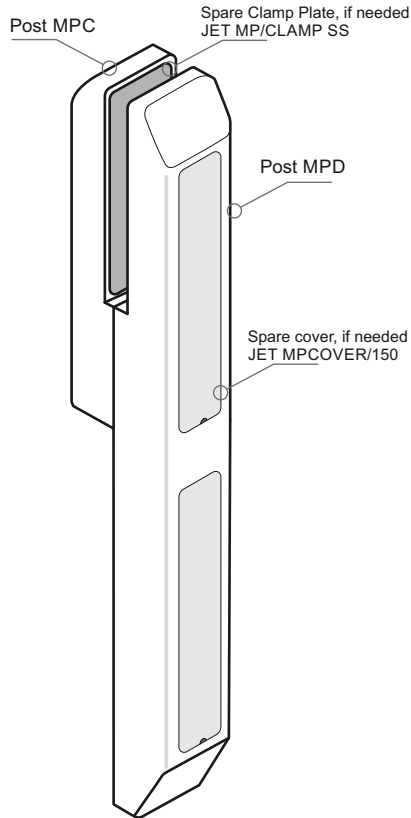
65mm deep x 45mm wide
x 200mm high, including Baseplate.
For 12mm Glass only



Supplied as a complete Kit, including
Screws for base plate. Base plate extra.
Powder coat, SCC to your choice

Face Fix Mini Post Part No JET/MP/F

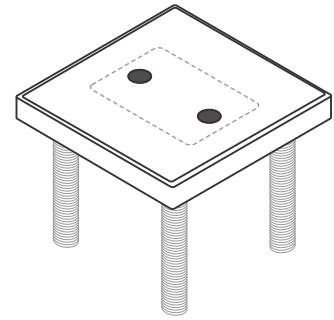
65mm deep x 45mm wide
x 400mm high.
For 12mm Glass only



Supplied as a complete Kit.
Powder coat, SCC to your choice

Base Plate, Hidden Fix Part No JET304

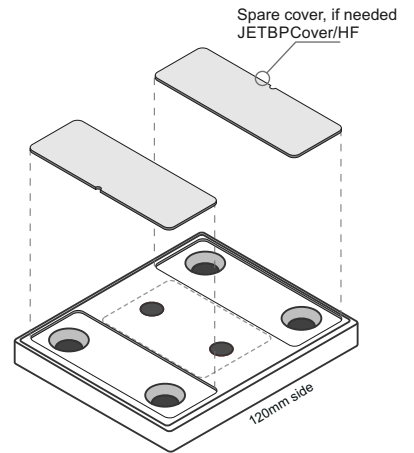
Top Mount.
Concrete



100mm x 100mm x 15mm - 4 x fixings
8 x 10dia M10 Blind Threaded holes
Installer to cut/install M10 SS Threaded Rod to
correct depth. Loctite threaded rod in place

Base plate, Hidden Fix Part No JET305

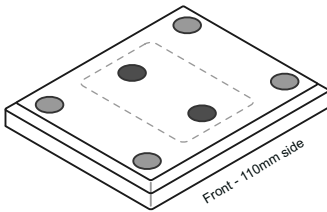
Top Mount
Hidden Fix



120mm x 100mm x 15mm - 4 x hole
For M10 Countersink screws

Base plate Part No JET300

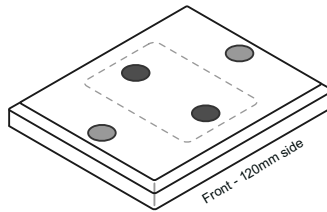
Top Mount



110mm x 90mm x 12mm - 4 x hole

Base plate Part No JET301

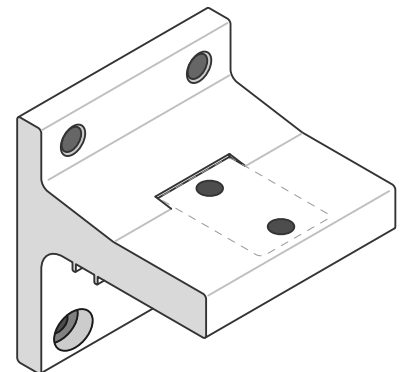
Top Mount.
Concrete and
Steel



120mm x 90mm x 12mm - 2 x hole

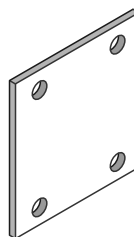
Gutter Bracket Part No JET137/65

Top/Face
Mount



120mm wide x 135mm high - 4 x hole

Gutter Bracket Spacer Part No JEC 139

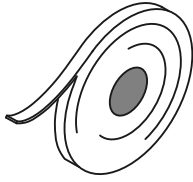


135mm x 120mm x 5mm thick

Juralco Edgetec® Mini Post Balustrade System - Components

Clear DS Tape 8mmx1.0mm
Part No JMF/X03/50

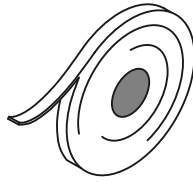
Attach SS
clamp plates



Double sided 8mm wide x 50mt Roll

Acrylic DS Tape 8mmx0.8mm
Part No JMF/X02/66

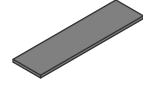
Attach Screw
Cover Plates



Double sided 8mm wide x 66mt Roll

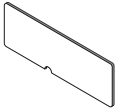
Bottom Gasket
Part No JET/Gasket 45x12

Under Glass
edge

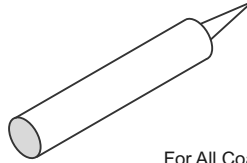


Gasket 12mm wide x 45mm long

Glass Bracket
Replacement Cover Plate
Part No JET 68/51

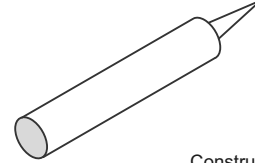


SIKA Supergrip 2hr
Part No JEC SUPERGRIP



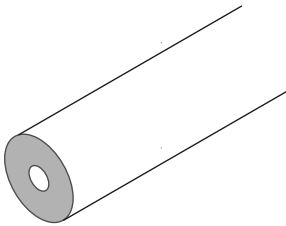
For All Coachscrews fixings

Rhodorsil V60 Clear Silicone
Part No H/RTV419098



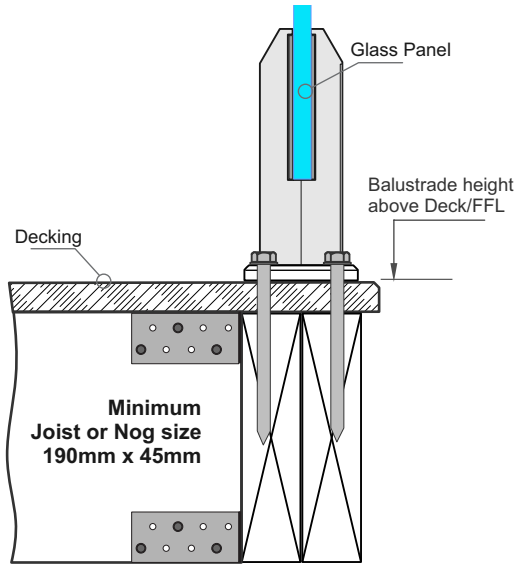
Construction Silicone

Face Fix Spacer
PN JVB 125

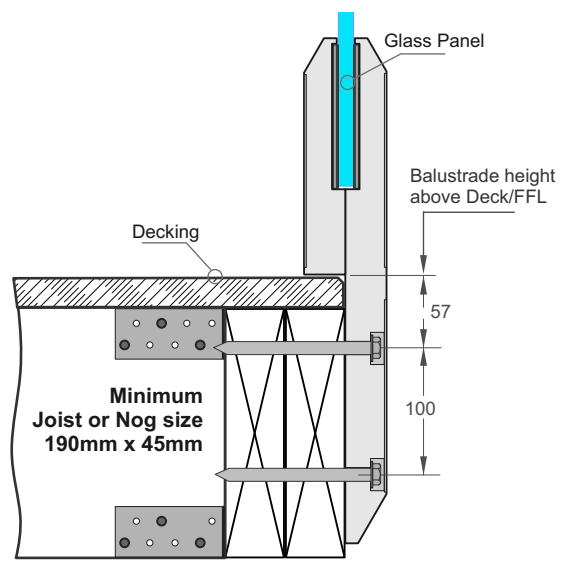


38mm dia x 1m long - 11mm dia Hole

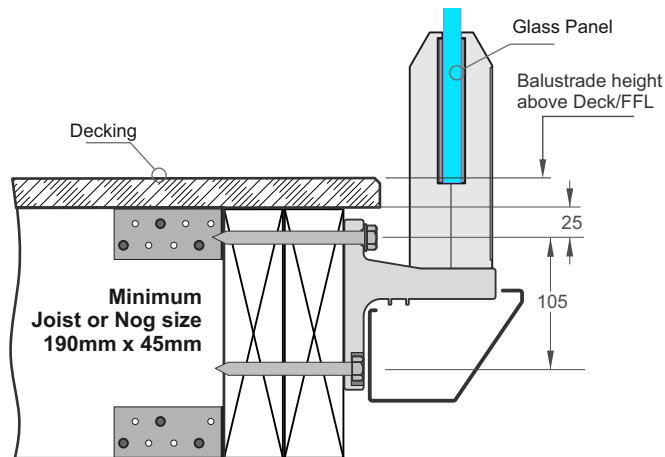
Approved Timber Construction Options, fixing into Double Joists
M10 SS Coachscrews, Bolts or Threaded Rod
Refer individual construction pages for further details



1 - Top Fix to Double Joists



2 - Face Fix directly to Double Joists

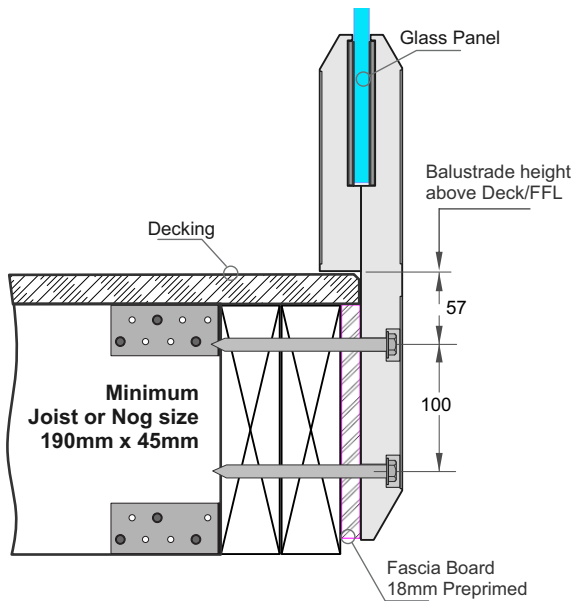


3 - Gutter Bracket Face Fix directly to Double Joists

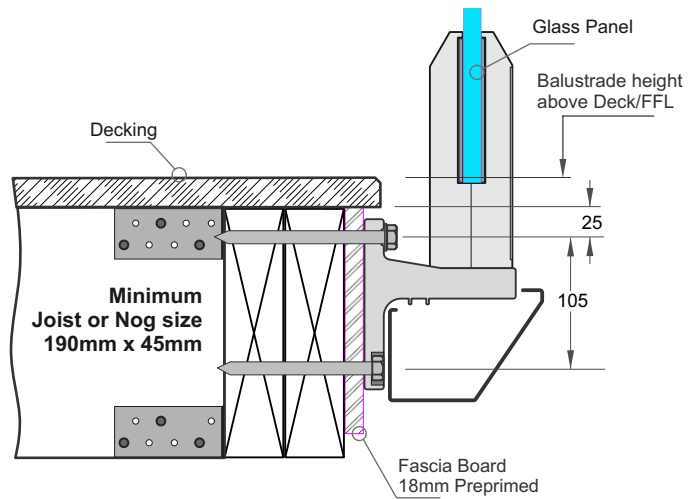
Approved Timber Construction Options, fixing into Double Joists

M10 SS Coachscrews, Bolts or Threaded Rod
Refer individual construction pages for further details.

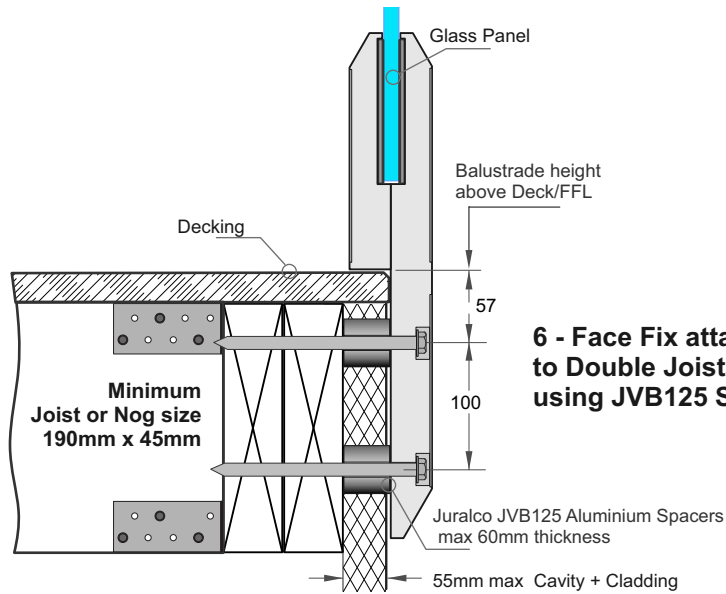
Fascia Board details below



4 - Face Fix directly Fascia Board then to Double Joists



5 - Gutter Bracket Face Fix directly to Fascia Board then into Double Joists

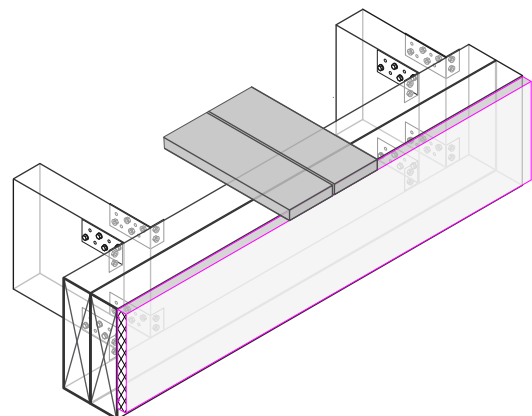


6 - Face Fix attach through Cavity Wall to Double Joists using JVB125 Spacers (60mm max)

Notes re Mounting to Timber using a Preprimed Fascia

Fascia Specs

Must be Straight and true 180mm x 18mm Preprimed
 H3.1 Pine FJ. Painted, 15yr min durability.
 Predrill 8mm dia + C/sink for No8 x 40mm SS C/S Woodscrews between mounting positions to hold the Fascia board in place.
 You may predrill the Fascia board with all the Mounting holes if desired.
 No Packing of Fascia Board, must be directly mounted to Boundary Joists



Juralco Edgetec® Mini Post Balustrade System - Typical Fixing
Complies with NZS3604:2011 - Double Boundary Joists

Typical TOP Fix to Timber - JET 300, 110mm x 90mm, 4 hole Base Plate - M10 SS Coachscrews

Wind Zones (up to and including)
 Residential A, A Other and C3 only

Wind Zone	Glass Thickness, Type	Balustrade Height (max)	Clamp Spacing (max)	Glass Overhang (max)
Applies to Top and Face Fix only				
High	12 T	1200	720	250
Very High	12 T	1100		

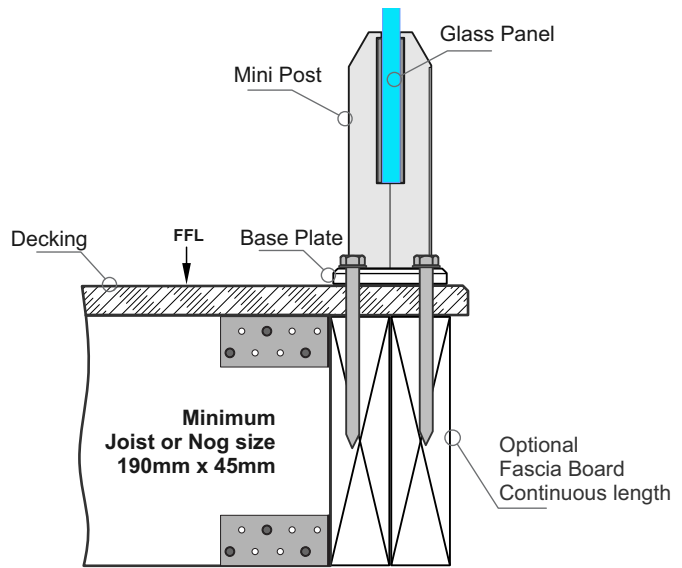
Wind Zones (up to and including)
 Pool Fence only

Applies to Pool Fences not protecting a fall of 1.0m or more

Wind Zone	Glass Thickness, Type	Balustrade Height (max)	Clamp Spacing (max)	Glass Overhang (max)
Medium	12 T	1200	1000	500
High	12 T	1200	750	375
Very High	12 T	1200	600	300

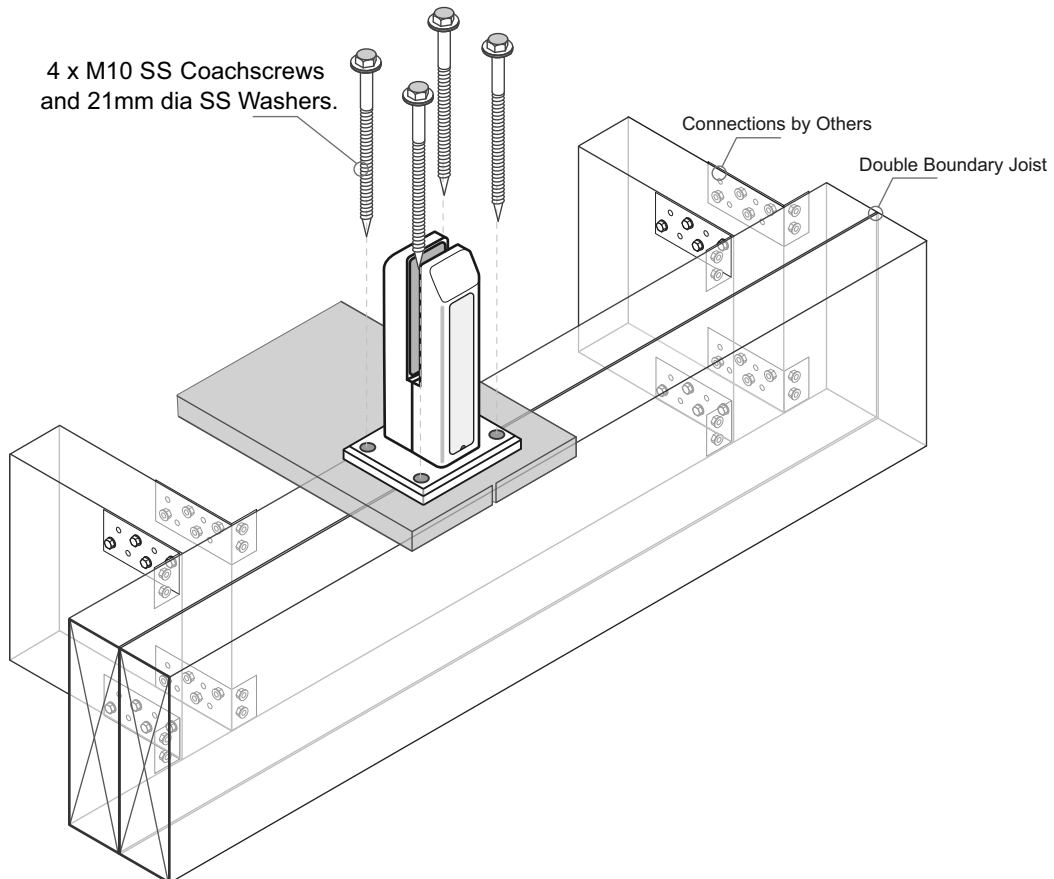
General Notes:

- 1 - Glass thickness mm
Glass type T= Toughened
- 2 - All measurements mm
- 3 - Balustrade Height, above Deck/FFL
- 4 - Refer to Elevations for Max Panel widths



Important Notes:

- 1 - The Project Engineer must ensure the structure can support the appropriate loads
- 2 - Timber SG8 minimum strength
- 3 - Coachscrews 100mm min engagement into joists.
Drill 6mm holes
- 4 - Bond all coachscrews with SIKA Supergrip to full depth
- 5 - Substructure shown indicatively only
- 6 - All Fixings must be Stainless steel



Juralco Edgetec® Mini Post Balustrade System - Typical Fixing
Complies with NZS3604:2011 - Double Boundary Joists

Typical TOP Fix to Timber - JET 305, 120mm x 100mm, 4 hole Base Plate - M10 SS C/S Coachscrews

Wind Zones (up to and including)
 Residential A, A Other and C3 only

Wind Zone	Glass Thickness, Type	Balustrade Height (max)	Clamp Spacing (max)	Glass Overhang (max)
Applies to Top and Face Fix only				
High	12 T	1200	720	250
Very High	12 T	1100		

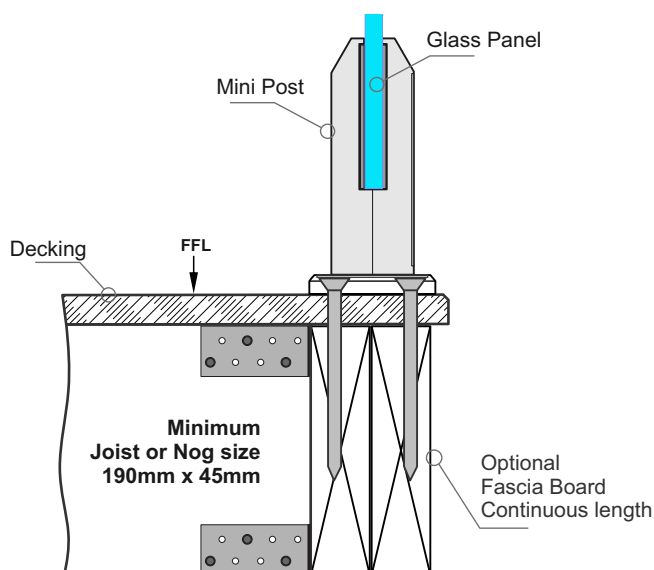
Wind Zones (up to and including)
 Pool Fence only

Applies to Pool Fences not protecting a fall of 1.0m or more

Wind Zone	Glass Thickness, Type	Balustrade Height (max)	Clamp Spacing (max)	Glass Overhang (max)
Medium	12 T	1200	1000	500
High	12 T	1200	750	375
Very High	12 T	1200	600	300

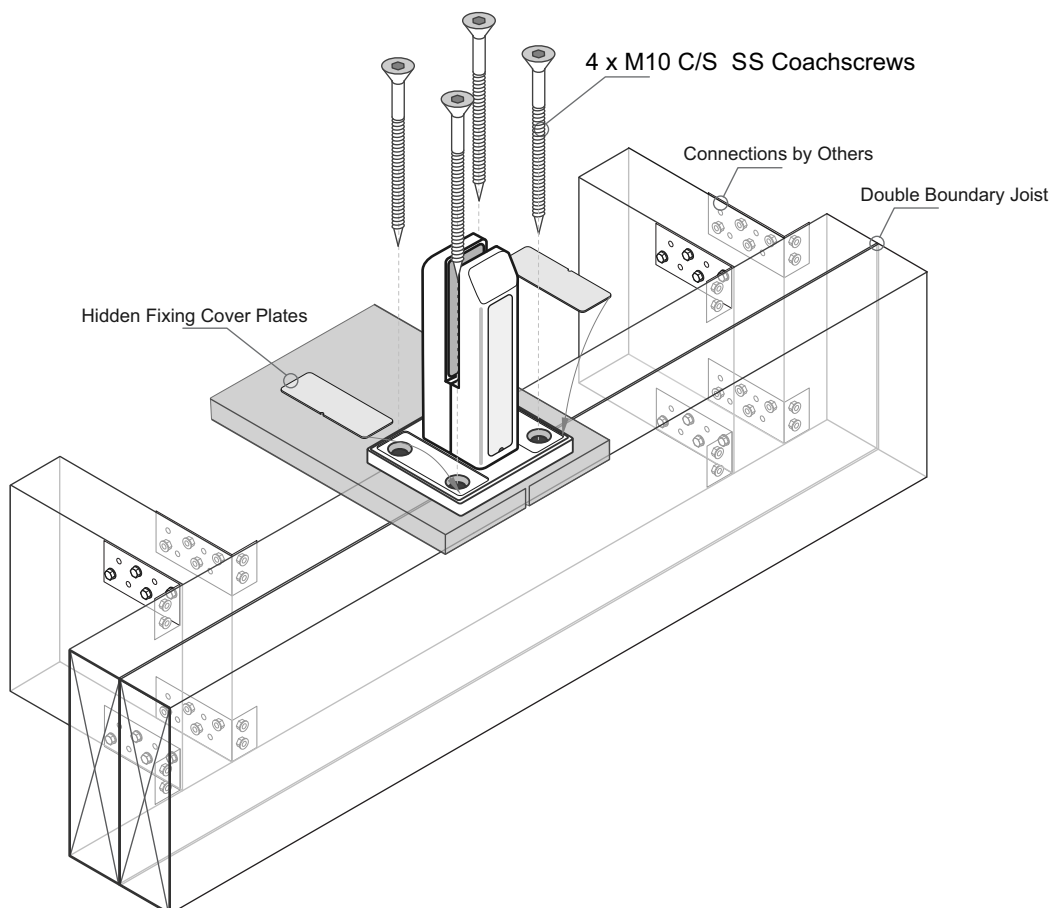
General Notes:

- 1 - Glass thickness mm
Glass type T= Toughened
- 2 - All measurements mm
- 3 - Balustrade Height, above Deck/FFL
- 4 - Refer to Elevations for Max Panel widths



Important Notes:

- 1 - The Project Engineer must ensure the structure can support the appropriate loads
- 2 - Timber SG8 minimum strength
- 3 - Coachscrews 100mm min engagement into joists.
Drill 6mm holes
- 4 - Bond all coachscrews with SIKA Supergrip to full depth
- 5 - Substructure shown indicatively only
- 6 - All Fixings must be Stainless steel



Juralco Edgetec® Mini Post Balustrade System - Typical Fixing

Typical TOP Fix to Timber on Steel - JET 300, 110mm x 90mm, 4 hole Base Plate - M10 SS Bolts

Wind Zones (up to and including) Residential A, A Other and C3 only

Wind Zone	Glass Thickness, Type	Balustrade Height (max)	Clamp Spacing (max)	Glass Overhang (max)
Applies to Top and Face Fix only				
High	12 T	1200	720	250
Very High	12 T	1100		

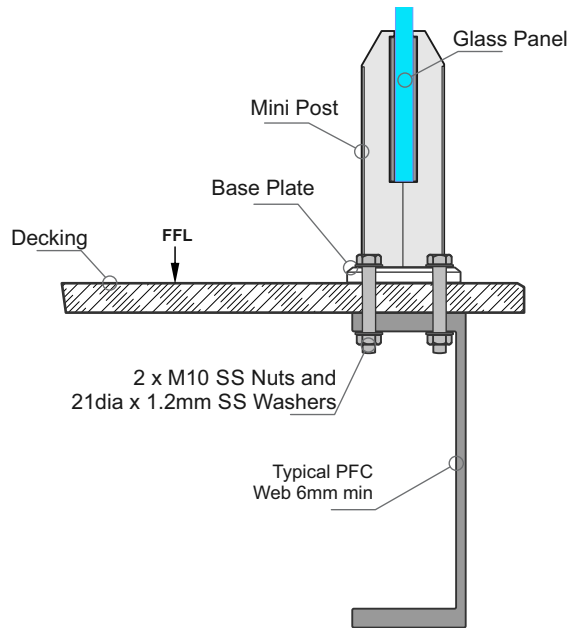
Wind Zones (up to and including) Pool Fence only

Applies to Pool Fences not protecting a fall of 1.0m or more

Wind Zone	Glass Thickness, Type	Balustrade Height (max)	Clamp Spacing (max)	Glass Overhang (max)
Medium	12 T	1200	1000	500
High	12 T	1200	750	375
Very High	12 T	1200	600	300

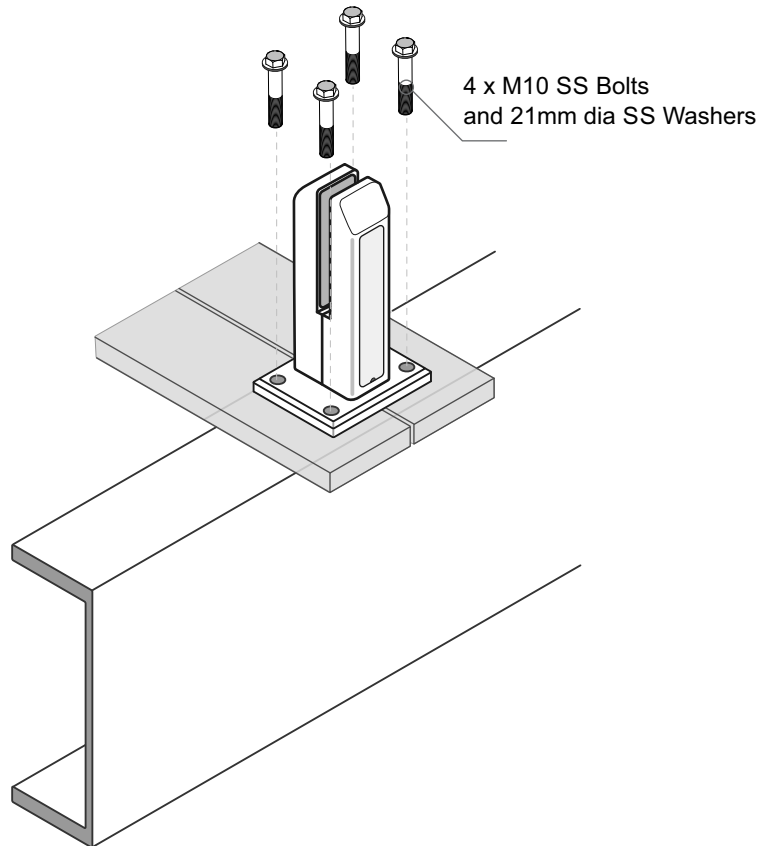
General Notes:

- 1 - Glass thickness mm
Glass type T= Toughened
- 2 - All measurements mm
- 3 - Balustrade Height, above Deck/FFL
- 4 - Refer to Elevations for Max Panel widths



Important Notes:

- 1 - The Project engineer must ensure the structure can support the appropriate loads
- 2 - Substructure shown indicatively only
- 3 - All fixings must be Stainless Steel



Juralco Edgetec® Mini Post Balustrade System - Typical Fixing

Typical TOP Fix direct to Steel - JET 301, 120mm x 90mm, 2 hole Base Plate - M10 SS Bolts

Wind Zones (up to and including) Residential A, A Other and C3 only

Wind Zone	Glass Thickness, Type	Balustrade Height (max)	Clamp Spacing (max)	Glass Overhang (max)
Applies to Top and Face Fix only				
High	12 T	1200	720	250
Very High	12 T	1100		

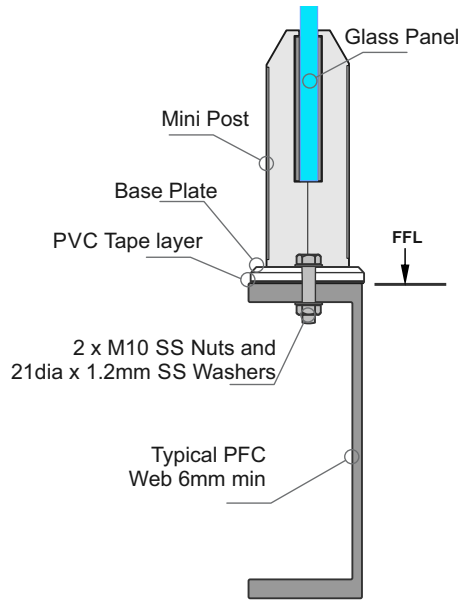
Wind Zones (up to and including) Pool Fence only

Applies to Pool Fences not protecting a fall of 1.0m or more

Wind Zone	Glass Thickness, Type	Balustrade Height (max)	Clamp Spacing (max)	Glass Overhang (max)
Medium	12 T	1200	1000	500
High	12 T	1200	750	375
Very High	12 T	1200	600	300

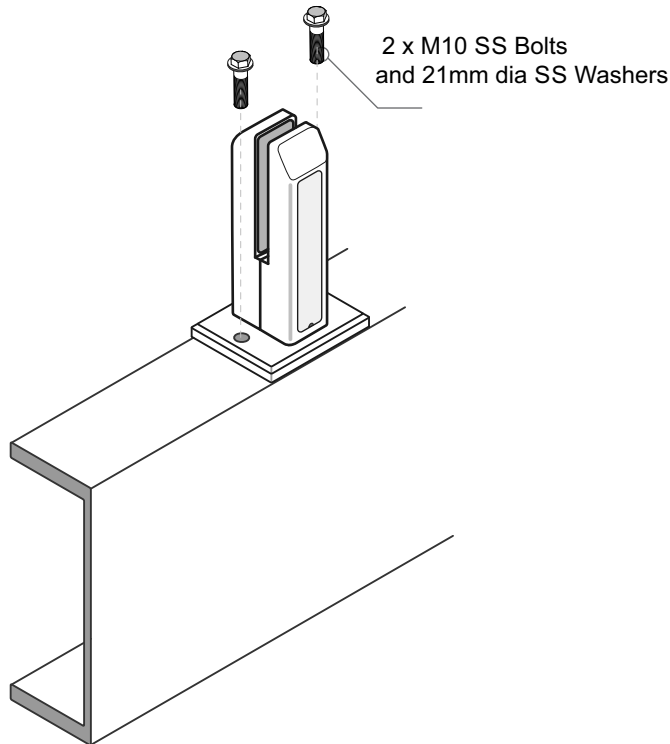
General Notes:

- 1 - Glass thickness mm
Glass type T= Toughened
- 2 - All measurements mm
- 3 - Balustrade Height, above Deck/FFL
- 4 - Refer to Elevations for Max Panel widths



Important Notes:

- 1 - The Project engineer must ensure the structure can support the appropriate loads
- 2 - There must be a PVC Tape layer between the Baseplate and Steel
- 3 - Substructure shown indicatively only
- 4 - All fixings must be Stainless Steel



Typical TOP Fix to Concrete Path - JET300, 110mm x 90mm, 4 hole Base Plate - M10 SS Studs

Wind Zones (up to and including)
Residential A, A Other and C3 only

Wind Zone	Glass Thickness, Type	Balustrade Height (max)	Clamp Spacing (max)	Glass Overhang (max)
Applies to Top and Face Fix only				
High	12 T	1200	720	250
Very High	12 T	1100		

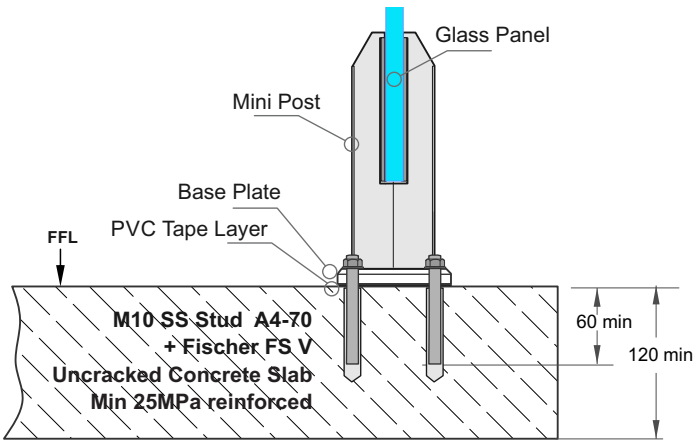
Wind Zones (up to and including)
Pool Fence only

Applies to Pool Fences not protecting a fall of 1.0m or more

Wind Zone	Glass Thickness, Type	Balustrade Height (max)	Clamp Spacing (max)	Glass Overhang (max)
Medium	12 T	1200	1000	500
High	12 T	1200	750	375
Very High	12 T	1200	600	300

General Notes:

- 1 - Glass thickness mm
Glass type T= Toughened
- 2 - All measurements mm
- 3 - Balustrade Height, above Deck/FFL
- 4 - Refer to Elevations for Max Panel widths



- Important Notes:**
- 1 - The Project engineer must ensure the structure can support the appropriate loads
 - 2 - All fixings must engage the structural slab
 - 3 - A PVC Tape layer must be installed between the Baseplate and Concrete
 - 4 - Edge distance can be reduced to 75mm provided the Anchors are outside the Concrete slab cover and do not damage any reinforcement
 - 5 - Substructure shown indicatively only
 - 6 - All fixings must be Stainless Steel

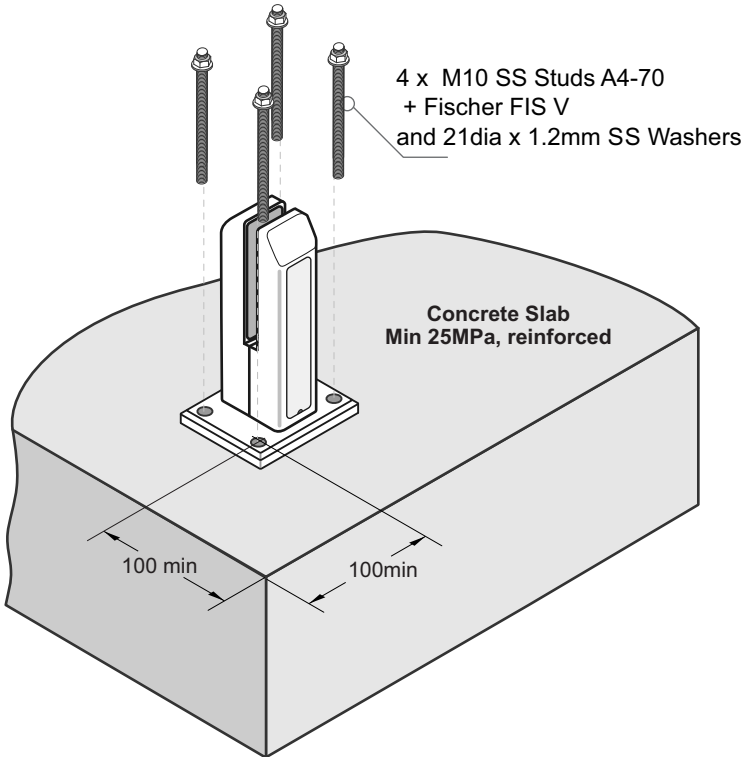


Installation details Fischer FIS V 300T

Thread diameter M10
 Drill hole diameter = 12 mm
 Drill hole depth = 70 mm
 Anchorage depth = 60 mm

Drilling method Hammer drilling
 Drill hole cleaning 4 times blowing,
 4 times brushing,
 4 times blowing

No borehole cleaning required in case of using a hollow drill bit, e.g. fischer FHD.



Typical TOP Fix to Concrete - JET 301, 120mm x 90mm, 2 hole Base Plate - M12 SS Studs

Wind Zones (up to and including)
Residential A, A Other and C3 only

Wind Zone	Glass Thickness, Type	Balustrade Height (max)	Clamp Spacing (max)	Glass Overhang (max)
Applies to Top and Face Fix only				
High	12 T	1200	720	250
Very High	12 T	1100		

Wind Zones (up to and including)
Pool Fence only

Applies to Pool Fences not protecting a fall of 1.0m or more

Wind Zone	Glass Thickness, Type	Balustrade Height (max)	Clamp Spacing (max)	Glass Overhang (max)
Medium	12 T	1200	1000	500
High	12 T	1200	750	375
Very High	12 T	1200	600	300

General Notes:

- 1 - Glass thickness mm
Glass type T= Toughened
- 2 - All measurements mm
- 3 - Balustrade Height, above Deck/FFL
- 4 - Refer to Elevations for Max Panel widths

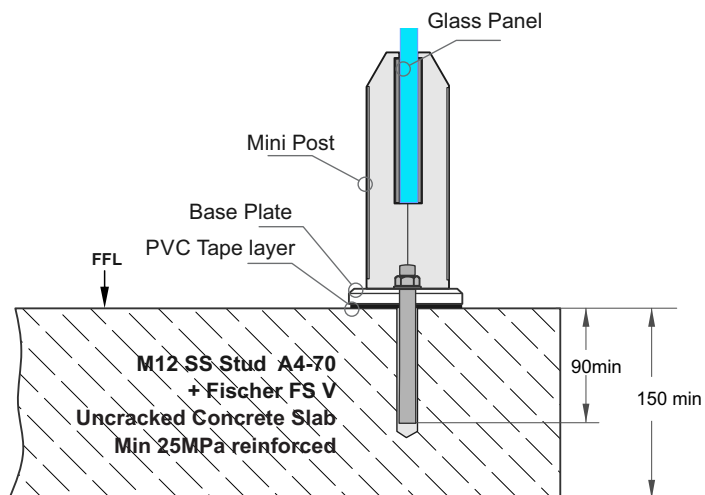


Installation details Fischer FIS V

Thread diameter	M 12
Drill hole diameter	= 14 mm
Drill hole depth	= 100 mm
Anchorage depth	= 90 mm
Drilling method	Hammer drilling

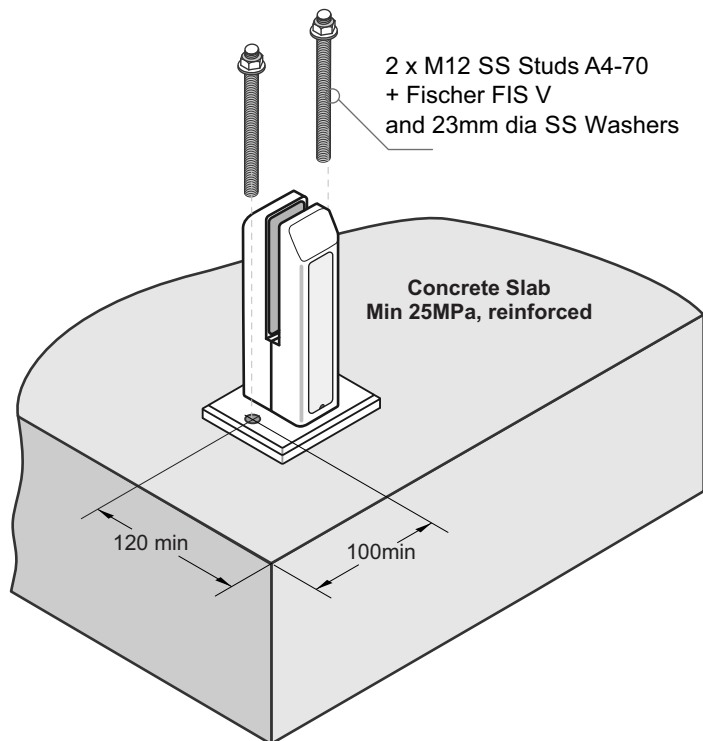
Drill hole cleaning
4 times blowing,
4 times brushing,
4 times blowing

No borehole cleaning required in case of using a hollow drill bit, e.g. fischer FHD.



Important Notes:

- 1 - The Project engineer must ensure the structure can support the appropriate loads
- 2 - All fixings must engage the structural slab
- 3 - A PVC Tape layer must be installed between the Baseplate and Concrete
- 4 - Substructure shown indicatively only
- 5 - All fixings must be Stainless Steel



Typical TOP Fix to Concrete - JET 305, 120mm x 100mm, 4 hole Base Plate - M10 SS C/S Screws

Wind Zones (up to and including)
Residential A, A Other and C3 only

Wind Zone	Glass Thickness, Type	Balustrade Height (max)	Clamp Spacing (max)	Glass Overhang (max)
Applies to Top and Face Fix only				
High	12 T	1200	720	250
Very High	12 T	1100		

Wind Zones (up to and including)
Pool Fence only

Applies to Pool Fences not protecting a fall of 1.0m or more

Wind Zone	Glass Thickness, Type	Balustrade Height (max)	Clamp Spacing (max)	Glass Overhang (max)
Medium	12 T	1200	1000	500
High	12 T	1200	750	375
Very High	12 T	1200	600	300

General Notes:

- 1 - Glass thickness mm
Glass type T= Toughened
- 2 - All measurements mm
- 3 - Balustrade Height, above Deck/FFL
- 4 - Refer to Elevations for Max Panel widths

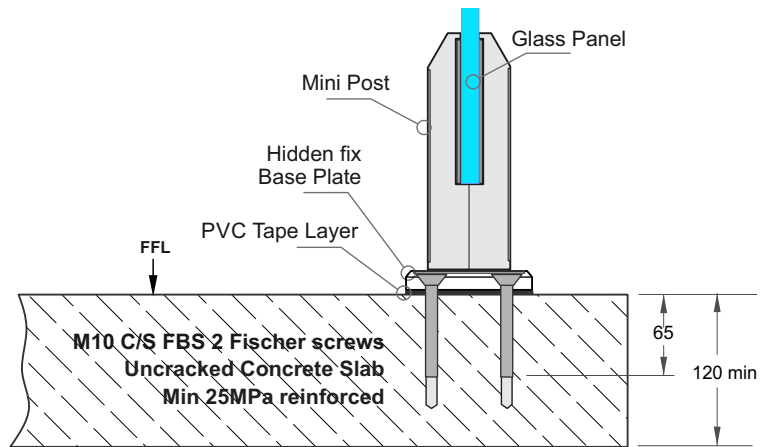


Installation details
Fischer FBS II 8 x 80 C/S Screws

Thread diameter M10
 Drill hole diameter = 8 mm
 Drill hole depth = 90 mm
 Anchorage depth = 65 mm

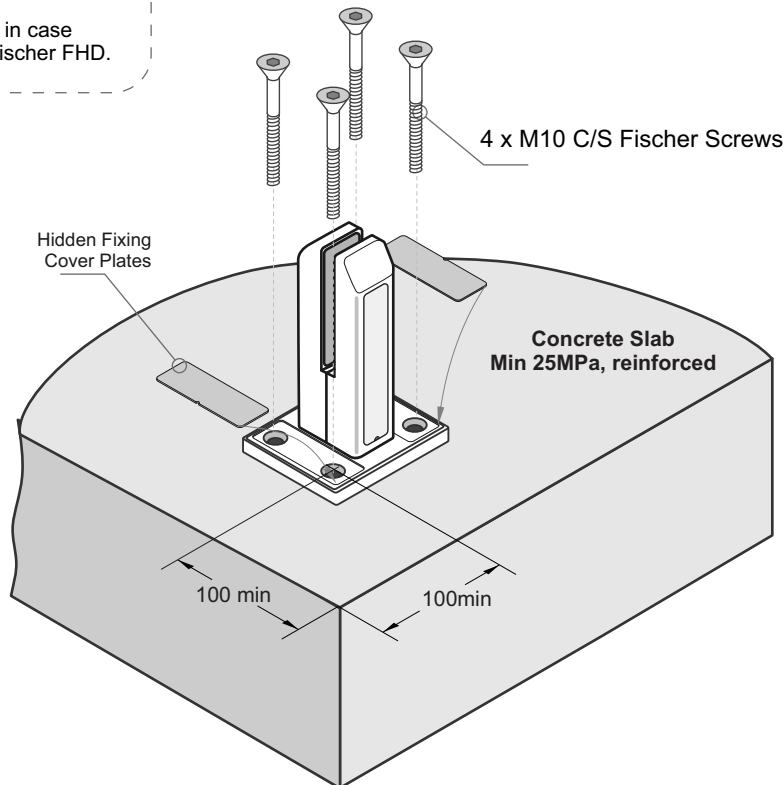
Drilling method Hammer drilling
 Drill hole cleaning Blow out by hand

No borehole cleaning required in case of using a hollow drill bit, e.g. fischer FHD.



Important Notes:

- 1 - The Project engineer must ensure the structure can support the appropriate loads
- 2 - All fixings must engage the structural slab
- 3 - A PVC Tape layer must be installed between the Baseplate and Concrete
- 4 - Edge distance can be reduced to 75mm provided the Anchors are outside the Concrete slab cover and do not damage any reinforcement
- 5 - Substructure shown indicatively only
- 6 - All fixings must be Stainless Steel



Typical HIDDEN TOP Fix to Concrete - JET 304, 100mm x 100mm Base Plate, 4 x M10 SS Hidden Studs

Wind Zones (up to and including)
Residential A, A Other and C3 only

Wind Zone	Glass Thickness, Type	Balustrade Height (max)	Clamp Spacing (max)	Glass Overhang (max)
Applies to Top and Face Fix only				
High	12 T	1200	720	250
Very High	12 T	1100		

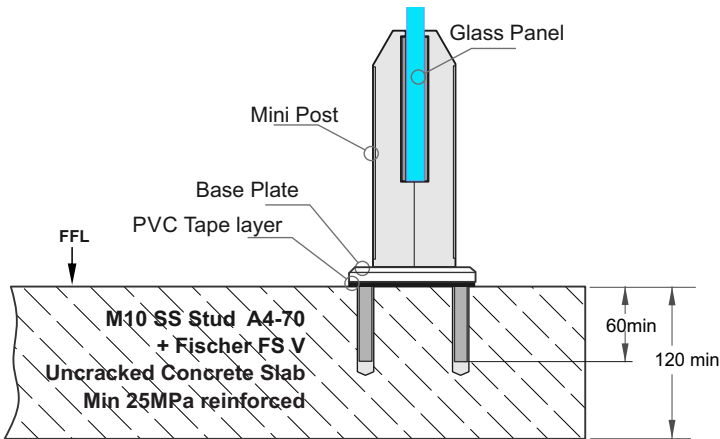
Wind Zones (up to and including)
Pool Fence only

Applies to Pool Fences not protecting a fall of 1.0m or more


Wind Zone	Glass Thickness, Type	Balustrade Height (max)	Clamp Spacing (max)	Glass Overhang (max)
Medium	12 T	1200	1000	500
High	12 T	1200	750	375
Very High	12 T	1200	600	300

General Notes:

- 1 - Glass thickness mm
Glass type T= Toughened
- 2 - All measurements mm
- 3 - Balustrade Height, above Deck/FFL
- 4 - Refer to Elevations for Max Panel widths



- Important Notes:**
- 1 - The Project engineer must ensure the structure can support the appropriate loads
 - 2 - All fixings must engage the structural slab
 - 3 - A PVC Tape layer must be installed between the Baseplate and Concrete
 - 4 - Edge distance can be reduced to 75mm provided the Anchors are outside the Concrete slab cover and do not damage any reinforcement
 - 5 - Substructure shown indicatively only
 - 6 - All fixings must be Stainless Steel

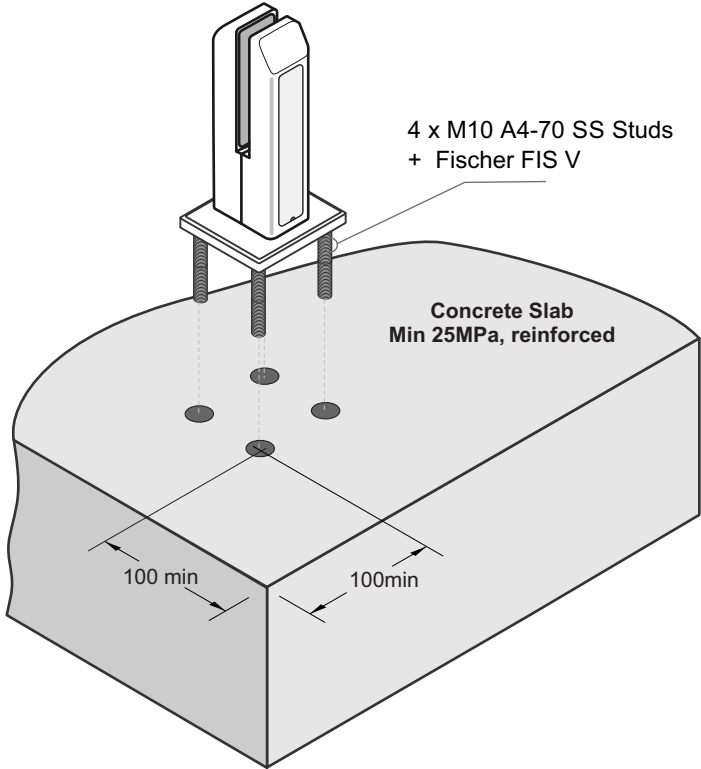


Installation details Fischer FIS V 300T

Thread diameter M10
 Drill hole diameter = 12 mm
 Drill hole depth = 70 mm
 Anchorage depth = 60 mm

Drilling method Hammer drilling
 Drill hole cleaning 4 times blowing,
 4 times brushing,
 4 times blowing

No borehole cleaning required in case of using a hollow drill bit, e.g. fischer FHD.



Juralco Edgetec® Mini Post Balustrade System - Typical Fixing
Complies with NZS3604:2011 - Double Boundary Joists

Typical FACE Fix Post to Timber - M10 SS Coachscrews

Wind Zones (up to and including)
 Residential A, A Other and C3 only

Wind Zone	Glass Thickness, Type	Balustrade Height (max)	Clamp Spacing (max)	Glass Overhang (max)
Applies to Top and Face Fix only				
High	12 T	1200	720	250
Very High	12 T	1100		

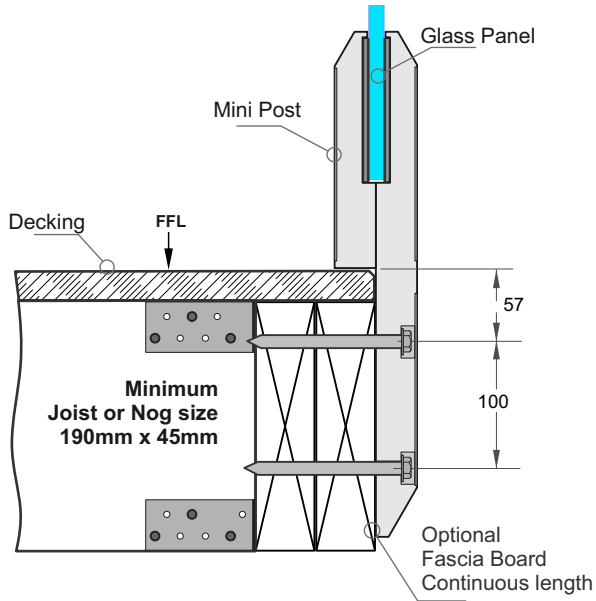
Wind Zones (up to and including)
 Pool Fence only

Applies to Pool Fences not protecting a fall of 1.0m or more

Wind Zone	Glass Thickness, Type	Balustrade Height (max)	Clamp Spacing (max)	Glass Overhang (max)
Medium	12 T	1200	1000	500
High	12 T	1200	750	375
Very High	12 T	1200	600	300

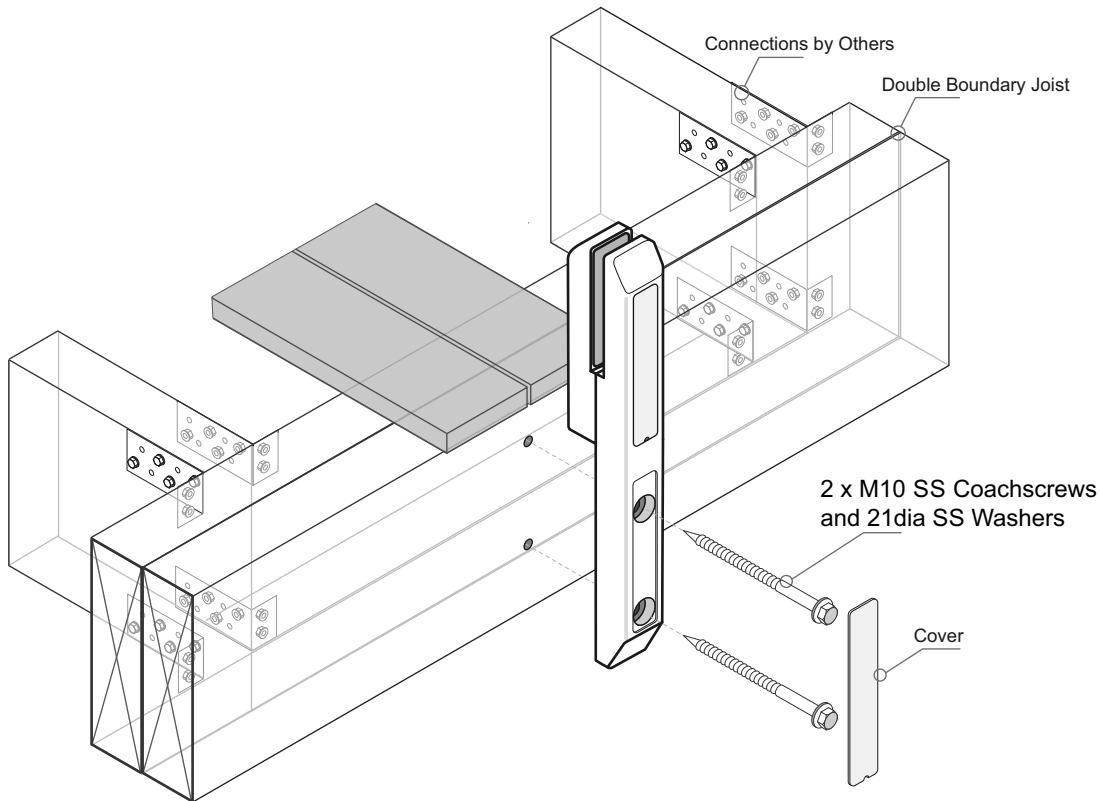
General Notes:

- 1 - Glass thickness mm
Glass type T= Toughened
- 2 - All measurements mm
- 3 - Balustrade Height, above Deck/FFL
- 4 - Refer to Elevations for Max Panel widths



Important Notes:

- 1 - The Project Engineer must ensure the structure can support the appropriate loads
- 2 - Timber SG8 minimum strength
- 3 - Coachscrews 90mm min engagement into joists. Drill 6mm holes
- 4 - Bond all coachscrews with SIKA Supergrip to full depth
- 5 - Substructure shown indicatively only
- 6 - All Fixings must be Stainless steel



Juralco Edgetec® Mini Post Balustrade System - Typical Fixing
Complies with NZS3604:2011 - Double Boundary Joists

Typical FACE Fix Post to Timber - M10 SS Bolts or M10 SS Threaded Rod

Wind Zones (up to and including)
 Residential A, A Other and C3 only

Wind Zone	Glass Thickness, Type	Balustrade Height (max)	Clamp Spacing (max)	Glass Overhang (max)
Applies to Top and Face Fix only				
High	12 T	1200	720	250
Very High	12 T	1100		

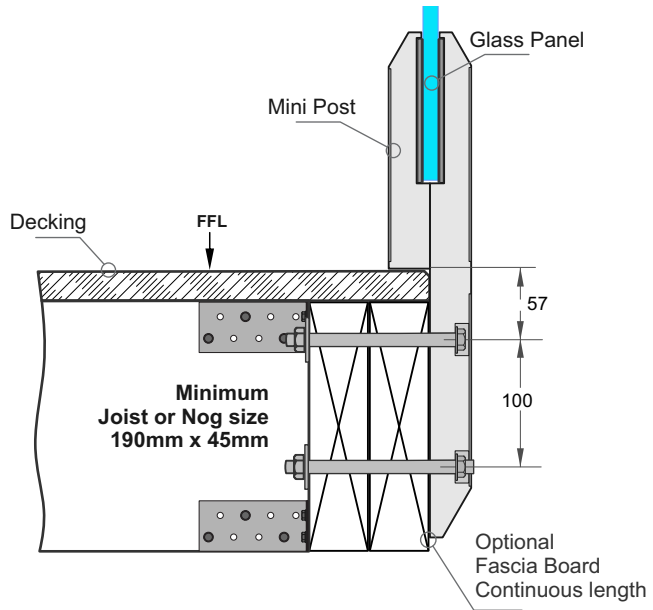
Wind Zones (up to and including)
 Pool Fence only

Applies to Pool Fences not protecting a fall of 1.0m or more

Wind Zone	Glass Thickness, Type	Balustrade Height (max)	Clamp Spacing (max)	Glass Overhang (max)
Medium	12 T	1200	1000	500
High	12 T	1200	750	375
Very High	12 T	1200	600	300

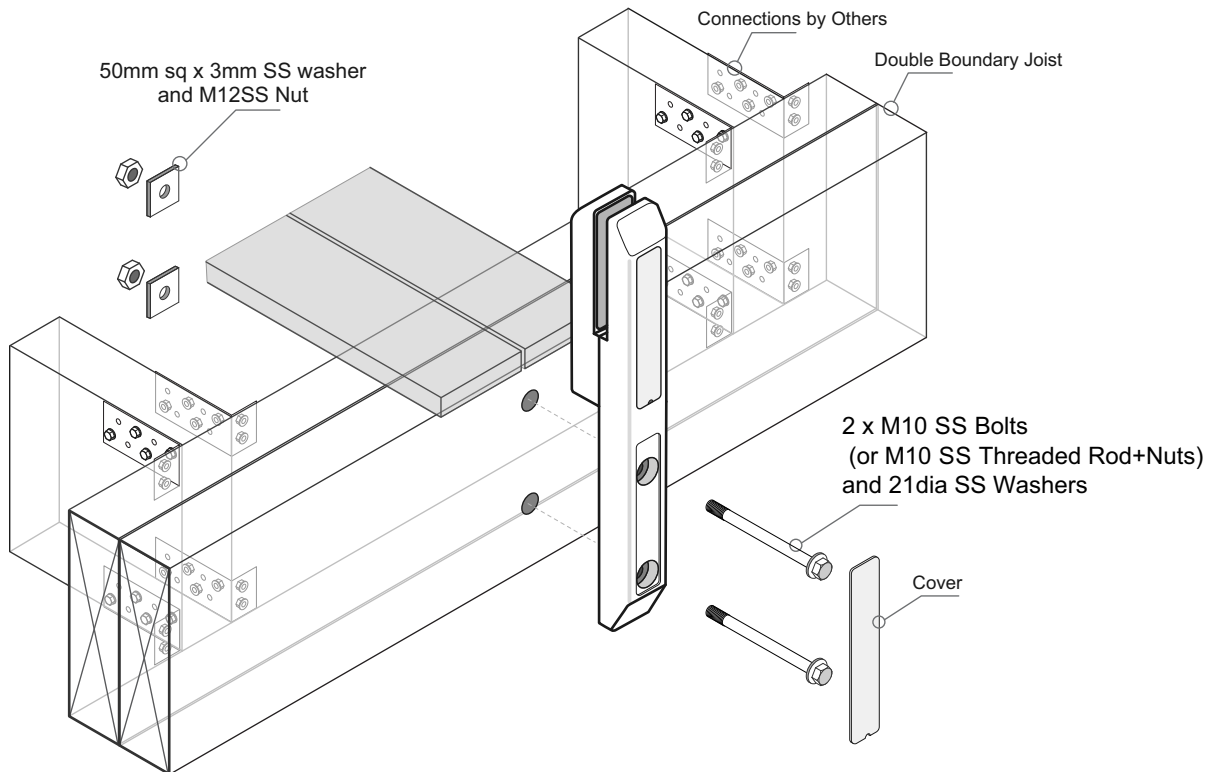
General Notes:

- 1 - Glass thickness mm
Glass type T= Toughened
- 2 - All measurements mm
- 3 - Balustrade Height, above Deck/FFL
- 4 - Refer to Elevations for Max Panel widths



Important Notes:

- 1 - The Project Engineer must ensure the structure can support the appropriate loads
- 2 - Timber SG8 minimum strength
- 3 - Substructure shown indicatively only
- 4 - All Fixings must be Stainless steel



Juralco Edgetec® Mini Post Balustrade System - Typical Fixing
Complies with NZS3604:2011 - Double Boundary Joists

Typical FACE Fix Post Through a Cavity - M10 SS Coachscrews and Spacers

Wind Zones (up to and including)
 Residential A, A Other and C3 only

Wind Zone	Glass Thickness, Type	Balustrade Height (max)	Clamp Spacing (max)	Glass Overhang (max)
Applies to Top and Face Fix only				
High	12 T	1200	720	250
Very High	12 T	1100		

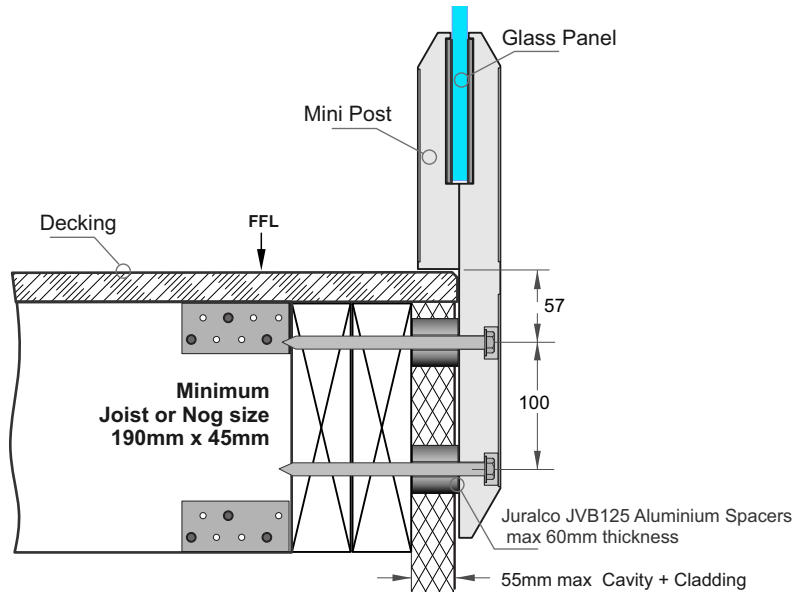
Wind Zones (up to and including)
 Pool Fence only

Applies to Pool Fences not protecting a fall of 1.0m or more

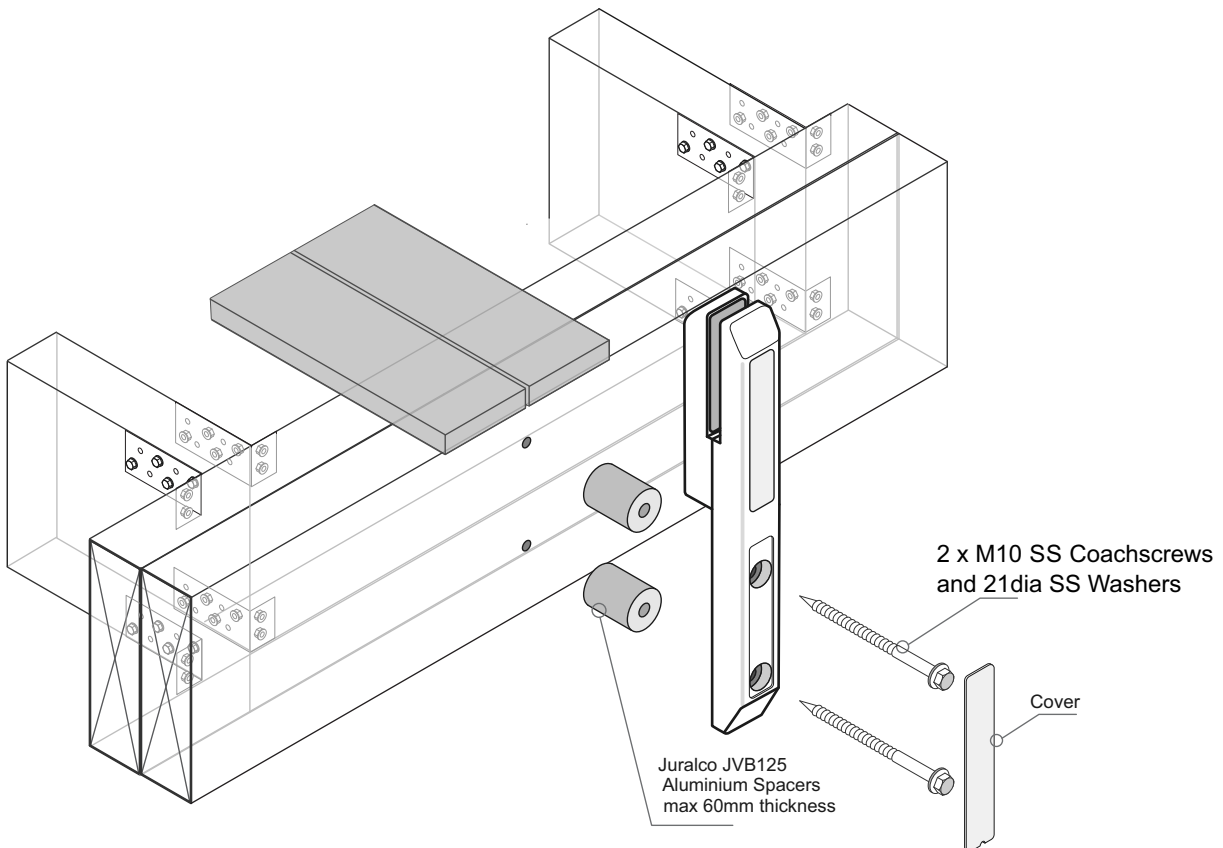
Wind Zone	Glass Thickness, Type	Balustrade Height (max)	Clamp Spacing (max)	Glass Overhang (max)
Medium	12 T	1200	1000	500
High	12 T	1200	750	375
Very High	12 T	1200	600	300

General Notes:

- 1 - Glass thickness mm
Glass type T= Toughened
- 2 - All measurements mm
- 3 - Balustrade Height, above Deck/FFL
- 4 - Refer to Elevations for Max Panel widths



- Important Notes:**
- 1 - The Project Engineer must ensure the structure can support the appropriate loads
 - 2 - Timber SG8 minimum strength
 - 3 - Coachscrews 90mm min engagement into joists.
Drill 6mm holes
 - 4 - Bond all coachscrews with SIKA Supergrip to full depth
 - 5 - Substructure shown indicatively only
 - 6 - All Fixings must be Stainless steel



Juralco Edgetec® Mini Post Balustrade System - Typical Fixing

Typical FACE Fix to Steel, Wooden Packers - M10 SS Bolts

Wind Zones (up to and including) Residential A, A Other and C3 only

Wind Zone	Glass Thickness, Type	Balustrade Height (max)	Clamp Spacing (max)	Glass Overhang (max)
Applies to Top and Face Fix only				
High	12 T	1200	720	250
Very High	12 T	1100		

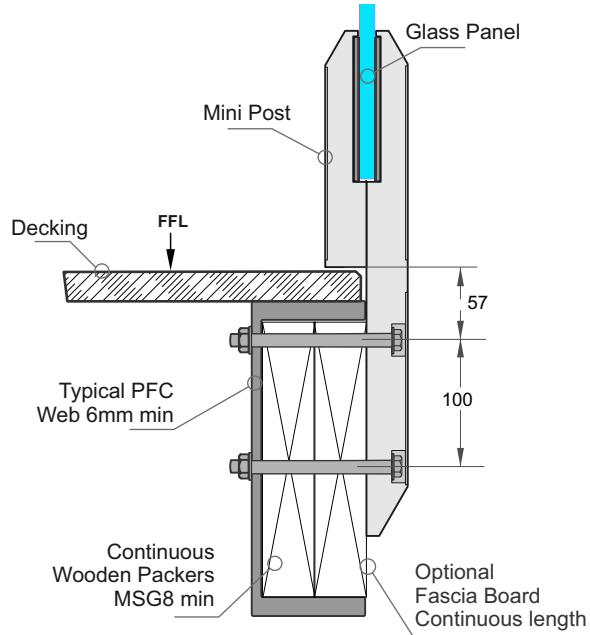
Wind Zones (up to and including) Pool Fence only

Applies to Pool Fences not protecting a fall of 1.0m or more

Wind Zone	Glass Thickness, Type	Balustrade Height (max)	Clamp Spacing (max)	Glass Overhang (max)
Medium	12 T	1200	1000	500
High	12 T	1200	750	375
Very High	12 T	1200	600	300

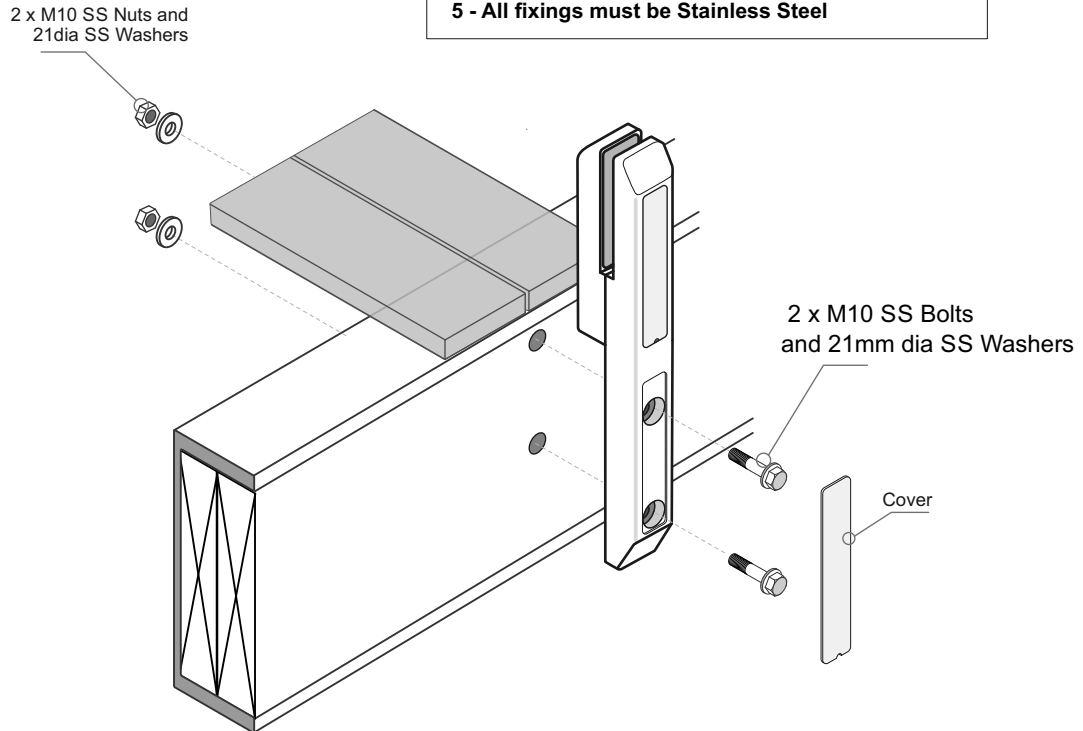
General Notes:

- 1 - Glass thickness mm
Glass type T= Toughened
- 2 - All measurements mm
- 3 - Balustrade Height, above Deck/FFL
- 4 - Refer to Elevations for Max Panel widths



Important Notes:

- 1 - The Project engineer must ensure the structure can support the appropriate loads
- 2 - Timber SG8 minimum strength
- 3 - A PVC Layer must be installed between the MiniPost and Steel Flange
- 4 - Substructure shown indicatively only.
- 5 - All fixings must be Stainless Steel



Juralco Edgetec® Mini Post Balustrade System - Typical Fixing

Typical FACE Fix to Steel - M10 SS Bolts

Wind Zones (up to and including) Residential A, A Other and C3 only

Wind Zone	Glass Thickness, Type	Balustrade Height (max)	Clamp Spacing (max)	Glass Overhang (max)
Applies to Top and Face Fix only				
High	12 T	1200	720	250
Very High	12 T	1100		

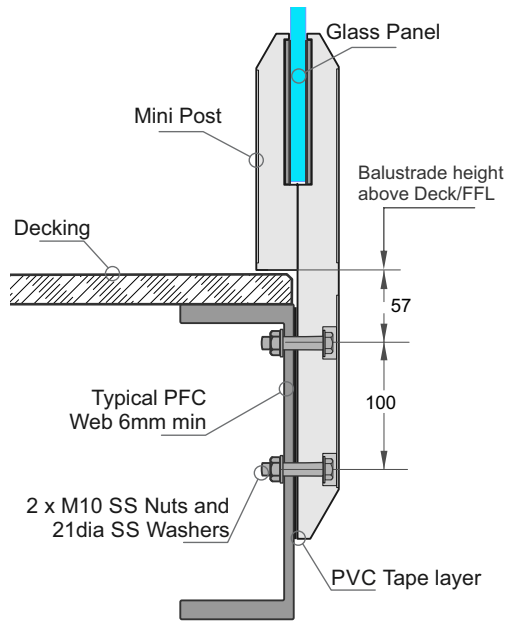
Wind Zones (up to and including) Pool Fence only

Applies to Pool Fences not protecting a fall of 1.0m or more

Wind Zone	Glass Thickness, Type	Balustrade Height (max)	Clamp Spacing (max)	Glass Overhang (max)
Medium	12 T	1200	1000	500
High	12 T	1200	750	375
Very High	12 T	1200	600	300

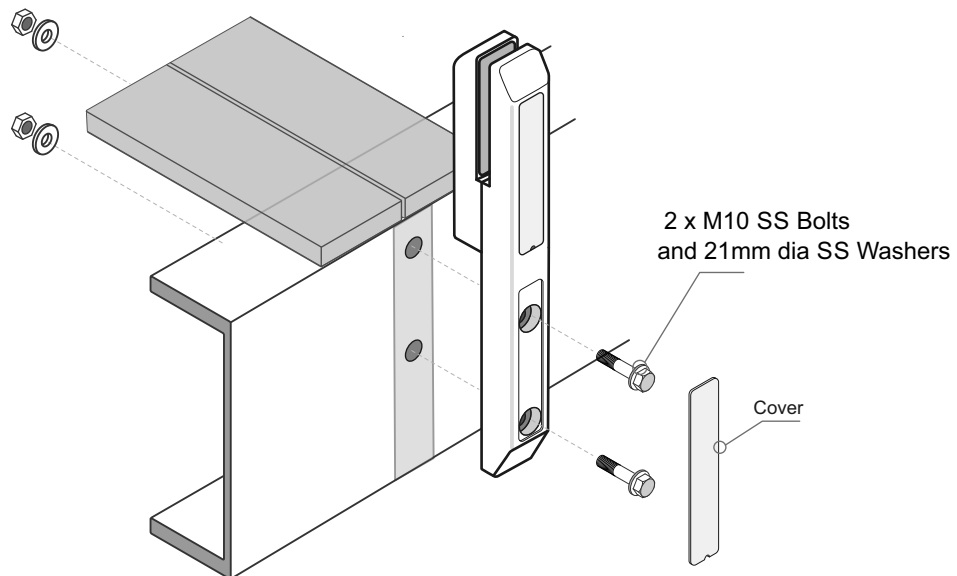
General Notes:

- 1 - Glass thickness mm
Glass type T= Toughened
- 2 - All measurements mm
- 3 - Balustrade Height, above Deck/FFL
- 4 - Refer to Elevations for Max Panel widths



Important Notes:

- 1 - The Project engineer must ensure the structure can support the appropriate loads
- 2 - Timber SG8 minimum strength
- 3 - A PVC Layer must be installed between the MiniPost and Steel
- 4 - Substructure shown indicatively only.
- 5 - All fixings must be Stainless Steel



Juralco Edgetec® Mini Post Balustrade System - Typical Fixing

Typical FACE Fix to Concrete - M10 SS Studs

Wind Zones (up to and including) Residential A, A Other and C3 only

Wind Zone	Glass Thickness, Type	Balustrade Height (max)	Clamp Spacing (max)	Glass Overhang (max)
Applies to Top and Face Fix only				
High	12 T	1200	720	250
Very High	12 T	1100		

Wind Zones (up to and including) Pool Fence only

Applies to Pool Fences not protecting a fall of 1.0m or more

Wind Zone	Glass Thickness, Type	Balustrade Height (max)	Clamp Spacing (max)	Glass Overhang (max)
Medium	12 T	1200	1000	500
High	12 T	1200	750	375
Very High	12 T	1200	600	300

General Notes:

- 1 - Glass thickness mm
Glass type T= Toughened
- 2 - All measurements mm
- 3 - Balustrade Height, above Deck/FFL
- 4 - Refer to Elevations for Max Panel widths

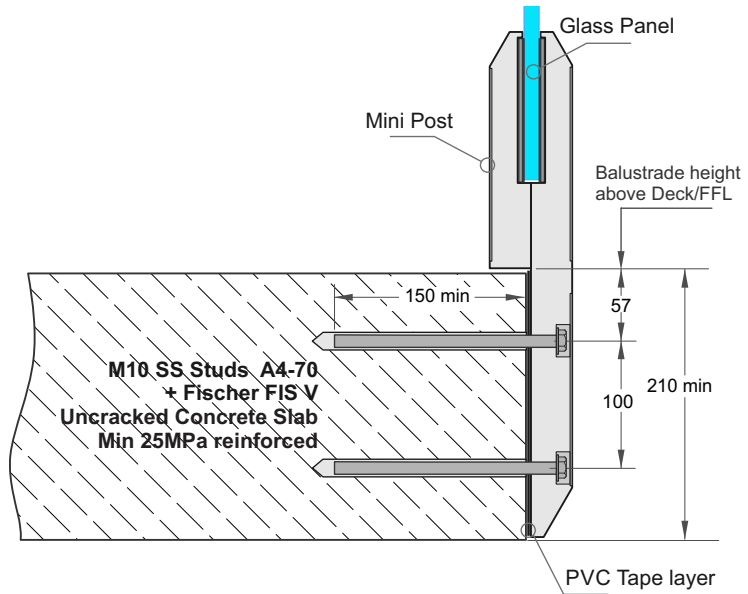


Installation details Fischer FIS V 300T

Thread diameter M10
 Drill hole diameter = 12 mm
 Drill hole depth = 160 mm
 Anchorage depth = 150 mm

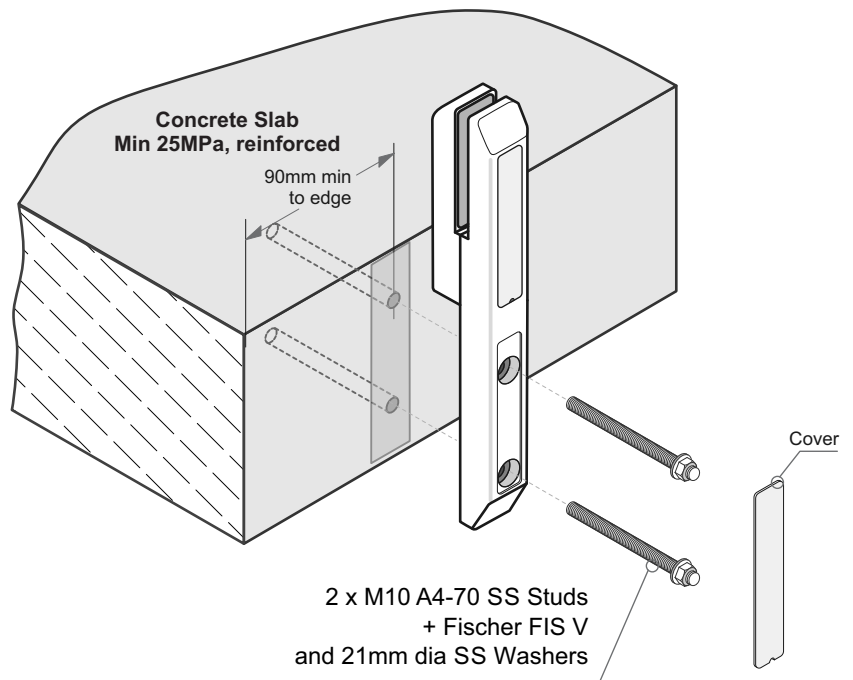
Drilling method Hammer drilling
 Drill hole cleaning 4 times blowing,
 4 times brushing,
 4 times blowing

No borehole cleaning required in case of using a hollow drill bit, e.g. fischer FHD.



Important Notes:

- 1 - The Project engineer must ensure the structure can support the appropriate loads
- 2 - All fixings must engage the structural slab
- 3 - A PVC Tape layer must be installed between the MiniPost and Concrete
- 4 - Substructure shown indicatively only
- 5 - All fixings must be Stainless Steel



2 x M10 A4-70 SS Studs
 + Fischer FIS V
 and 21mm dia SS Washers

Juralco Edgetec® Mini Post Balustrade System - Typical Fixing
Complies with NZS3604:2011 - Double Boundary Joists

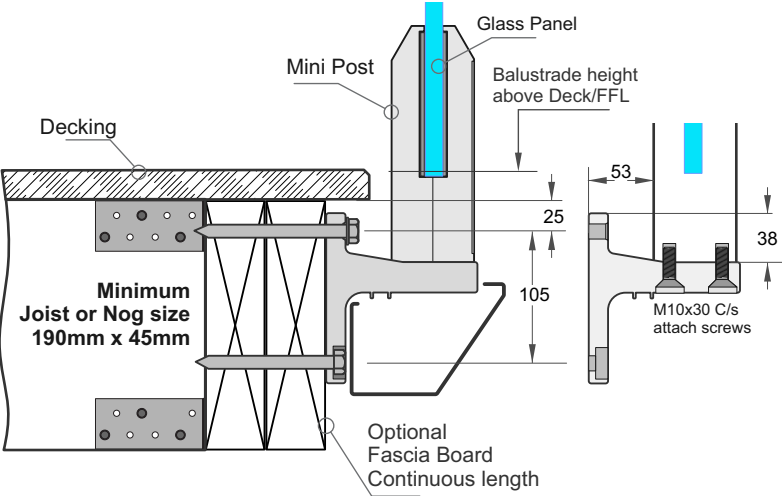
Typical GUTTER BRKT FACE Fix to Timber - JET 137/65, Gutter Bracket - M10 SS Coachscrews

Wind Zones (up to and including)
 Residential A, A Other and C3 only

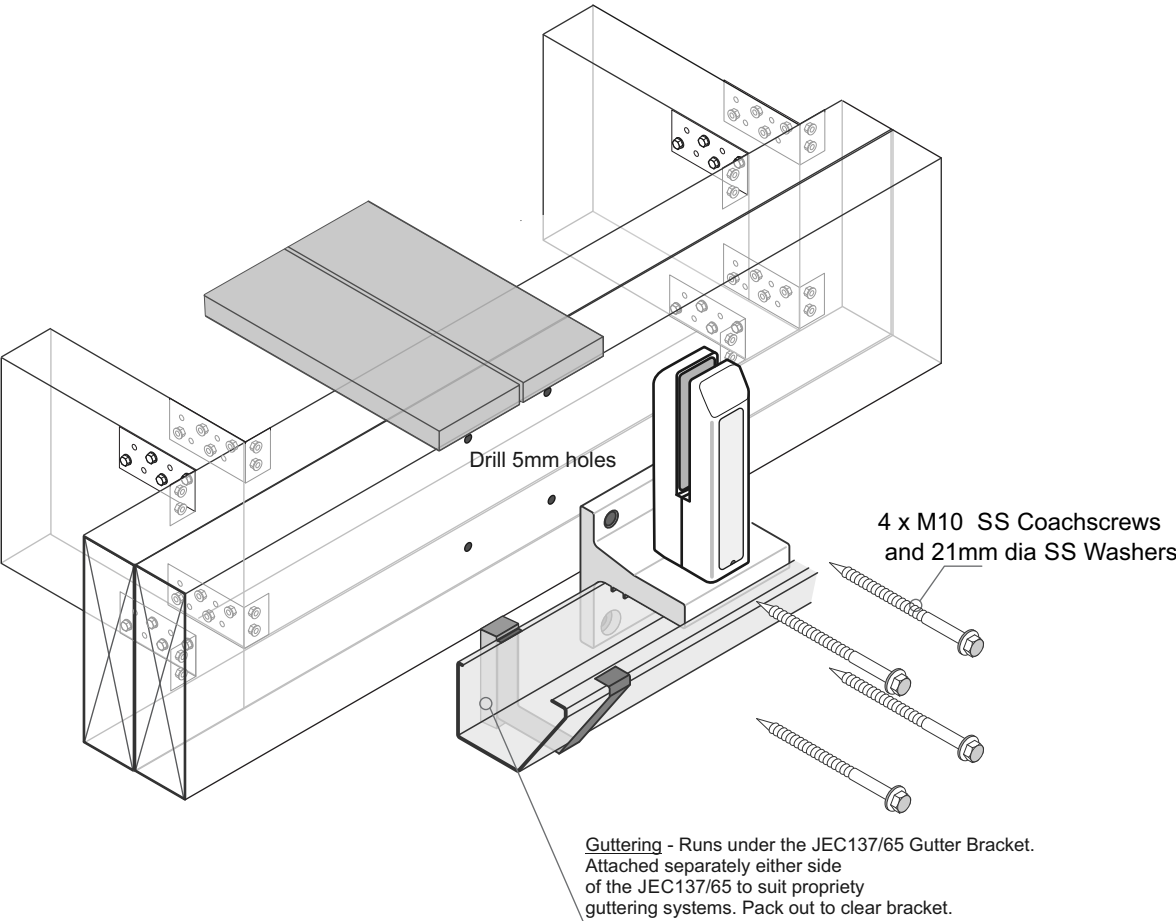
Wind Zone	Glass Thickness, Type	Balustrade Height (max)	Clamp Spacing (max)	Glass Overhang (max)
Applies to Top and Face Fix only				
High	12 T	1200	720	250
Very High	12 T	1100		

Gutter bracket mount not applicable to Pool Fences

- General Notes:
 1 - Glass thickness mm
 Glass type T= Toughened
 2 - All measurements mm
 3 - Balustrade Height, above Deck/FFL
 4 - Refer to Elevations for Max Panel widths



- Important Notes:**
- 1 - The Project Engineer must ensure the structure can support the appropriate loads
 - 2 - Timber SG8 minimum strength
 - 3 - Coachscrews 90mm min engagement into joists.
 Drill 6mm holes
 - 4 - Bond all coachscrews with SIKA Supergrip to full depth
 - 5 - Substructure shown indicatively only
 - 6 - All Fixings must be Stainless steel



Juralco Edgetec® Mini Post Balustrade System - Typical Fixing
Complies with NZS3604:2011 - Double Boundary Joists

Typical GUTTER BRKT FACE Fix to Timber- JET 137/65, Gutter Bracket - M10 SS Bolts or M10 SS Threaded Rod

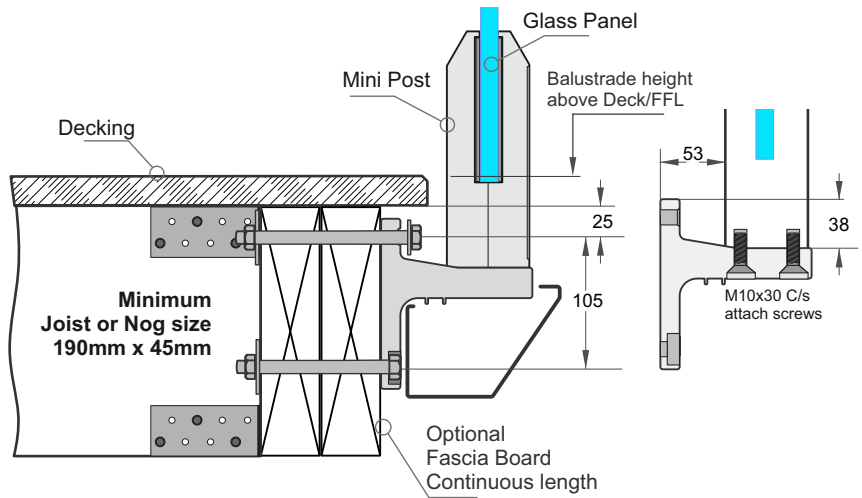
Wind Zones (up to and including)
 Residential A, A Other and C3 only

Wind Zone	Glass Thickness, Type	Balustrade Height (max)	Clamp Spacing (max)	Glass Overhang (max)
Applies to Top and Face Fix only				
High	12 T	1200	720	250
Very High	12 T	1100		

Gutter bracket mount not applicable to Pool Fences

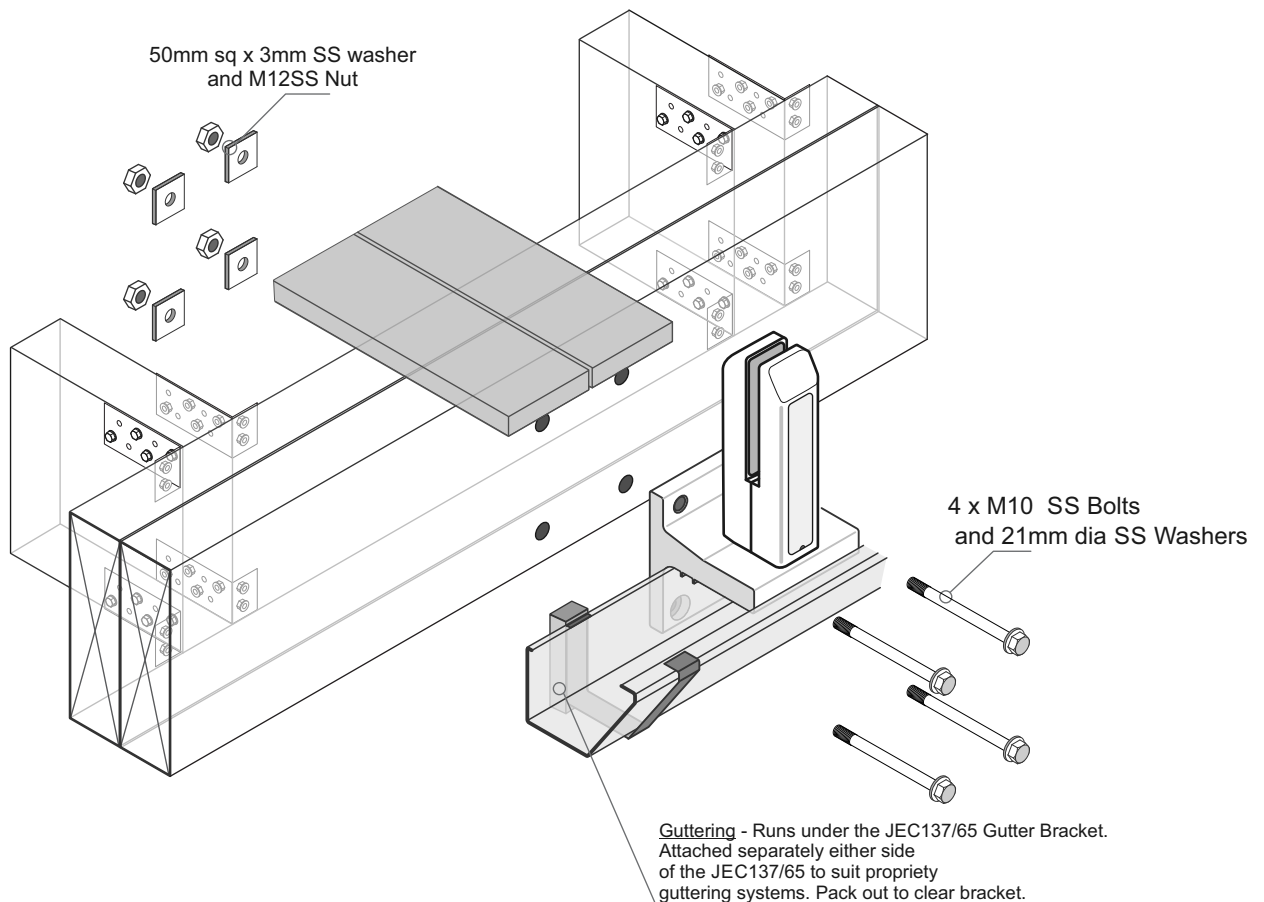
General Notes:

- 1 - Glass thickness mm
Glass type T= Toughened
- 2 - All measurements mm
- 3 - Balustrade Height, above Deck/FFL
- 4 - Refer to Elevations for Max Panel widths



Important Notes:

- 1 - The Project Engineer must ensure the structure can support the appropriate loads
- 2 - Timber SG8 minimum strength
- 3 - Substructure shown indicatively only
- 4 - All Fixings must be Stainless steel



Juralco Edgetec® Mini Post Balustrade System - Typical Fixing

Typical GUTTER BRKT FACE Fix to Steel - JET 137/65, Gutter Bracket - M10 SS Bolts

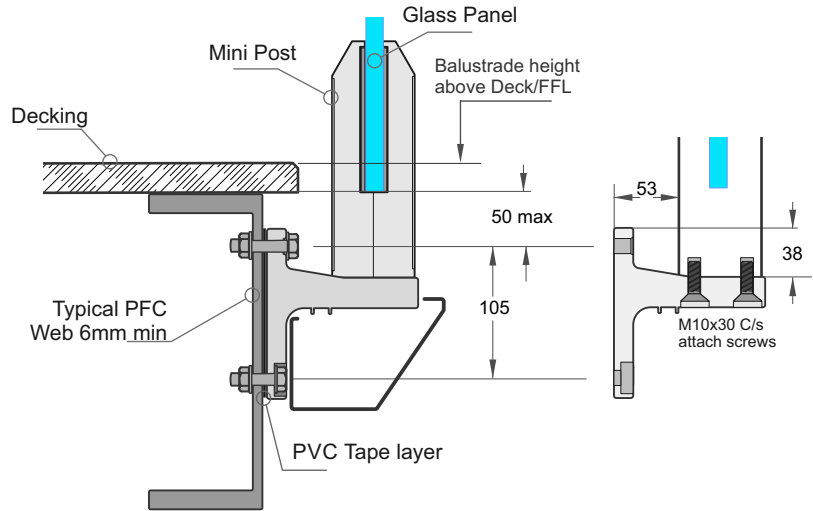
Wind Zones (up to and including)
Residential A, A Other and C3 only

Wind Zone	Glass Thickness, Type	Balustrade Height (max)	Clamp Spacing (max)	Glass Overhang (max)
Applies to Top and Face Fix only				
High	12 T	1200	720	250
Very High	12 T	1100		

Gutter bracket mount not applicable to Pool Fences

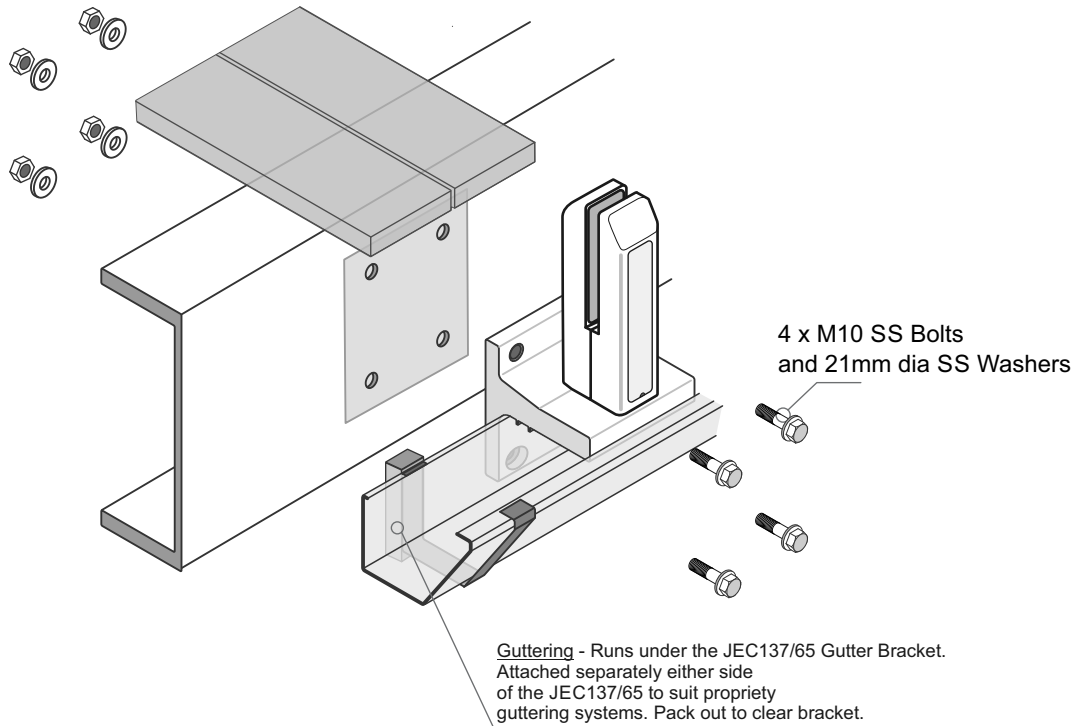
General Notes:

- 1 - Glass thickness mm
Glass type T= Toughened
- 2 - All measurements mm
- 3 - Balustrade Height, above Deck/FFL
- 4 - Refer to Elevations for Max Panel widths



Important Notes:

- 1 - The Project engineer must ensure the structure can support the appropriate loads
- 2 - A PVC Tape layer must be installed between the Bracket and Steel
- 3 - Substructure shown indicatively only
- 4 - All fixings must be Stainless Steel



Juralco Edgetec® Mini Post Balustrade System - Typical Fixing

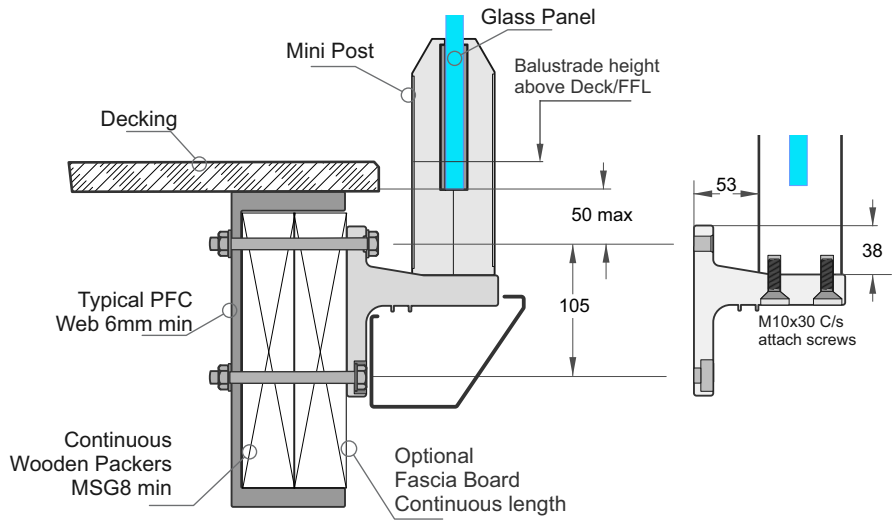
Typical GUTTER BRKT FACE Fix to Steel, Wooden Packers - JET 137/65, Gutter Bracket - M10 SS Bolts

Wind Zones (up to and including) Residential A, A Other and C3 only

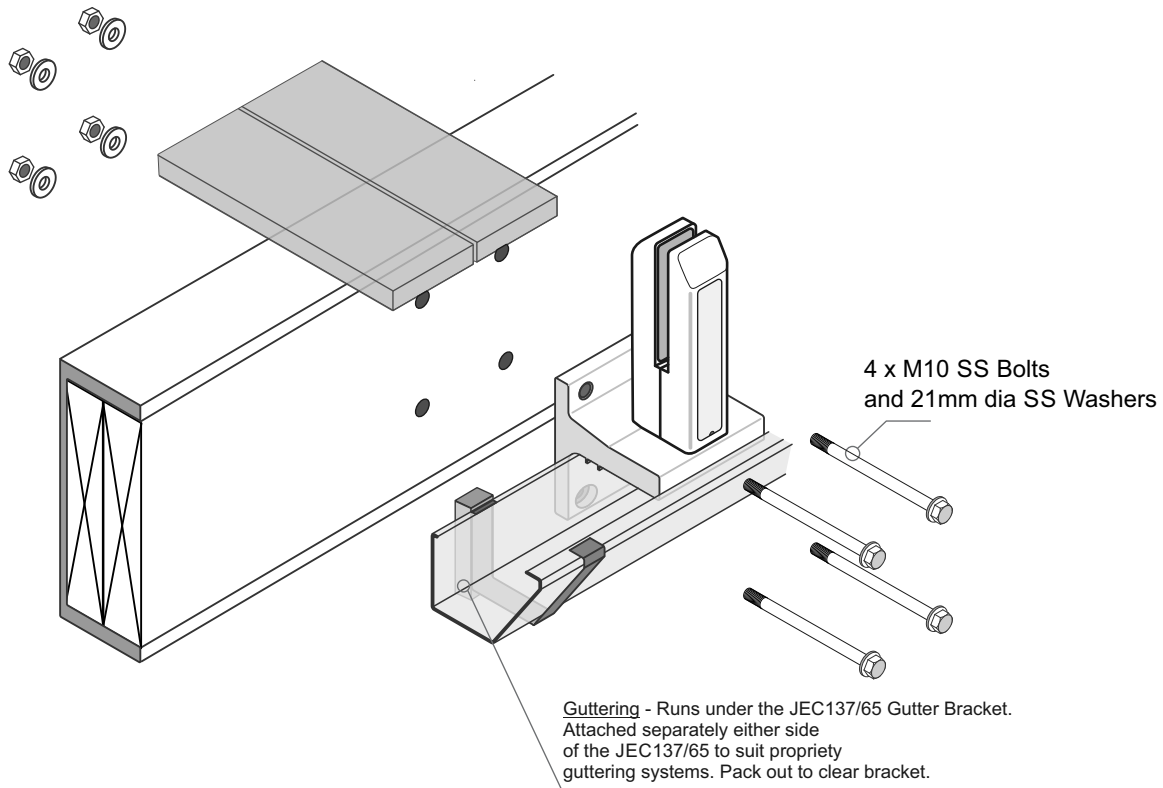
Wind Zone	Glass Thickness, Type	Balustrade Height (max)	Clamp Spacing (max)	Glass Overhang (max)
Applies to Top and Face Fix only				
High	12 T	1200	720	250
Very High	12 T	1100		

Gutter bracket mount not applicable to Pool Fences

- General Notes:
- 1 - Glass thickness mm
Glass type T= Toughened
 - 2 - All measurements mm
 - 3 - Balustrade Height, above Deck/FFL
 - 4 - Refer to Elevations for Max Panel widths



- Important Notes:**
- 1 - The Project engineer must ensure the structure can support the appropriate loads
 - 2- Timber SG8 minimum strength
 - 3 - Substructure shown indicatively only
 - 4 - All fixings must be Stainless Steel



Typical GUTTER BRKT FACE Fix to to Concrete - JET 137/65, Gutter Bracket - M10 SS Studs

Wind Zones (up to and including)
Residential A, A Other and C3 only

Wind Zone	Glass Thickness, Type	Balustrade Height (max)	Clamp Spacing (max)	Glass Overhang (max)
Applies Gutter Bracket Fix only				
High	12 T	1200	720	200
Very High	12 T	1100		

Gutter bracket mount not applicable to Pool Fences

General Notes:

- 1 - Glass thickness mm
Glass type T= Toughened
- 2 - All measurements mm
- 3 - Balustrade Height, above Deck/FFL
- 4 - Refer to Elevations for Max Panel widths

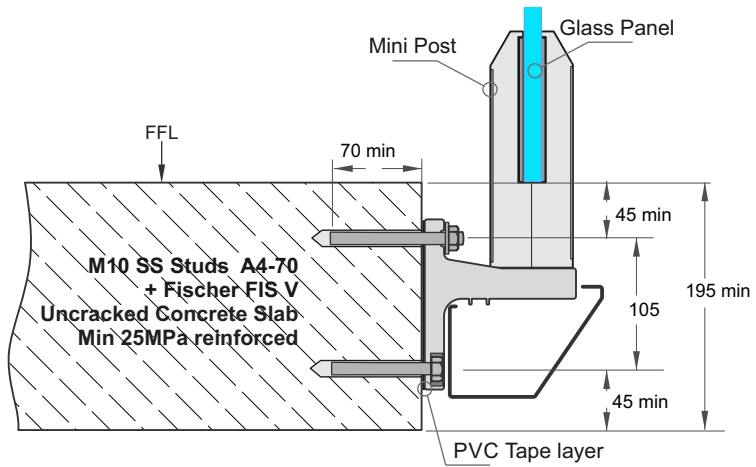


Installation details Fischer FIS V 300T

- Thread diameter M10
 Drill hole diameter = 12 mm
 Drill hole depth = 80 mm
 Anchorage depth = 70 mm

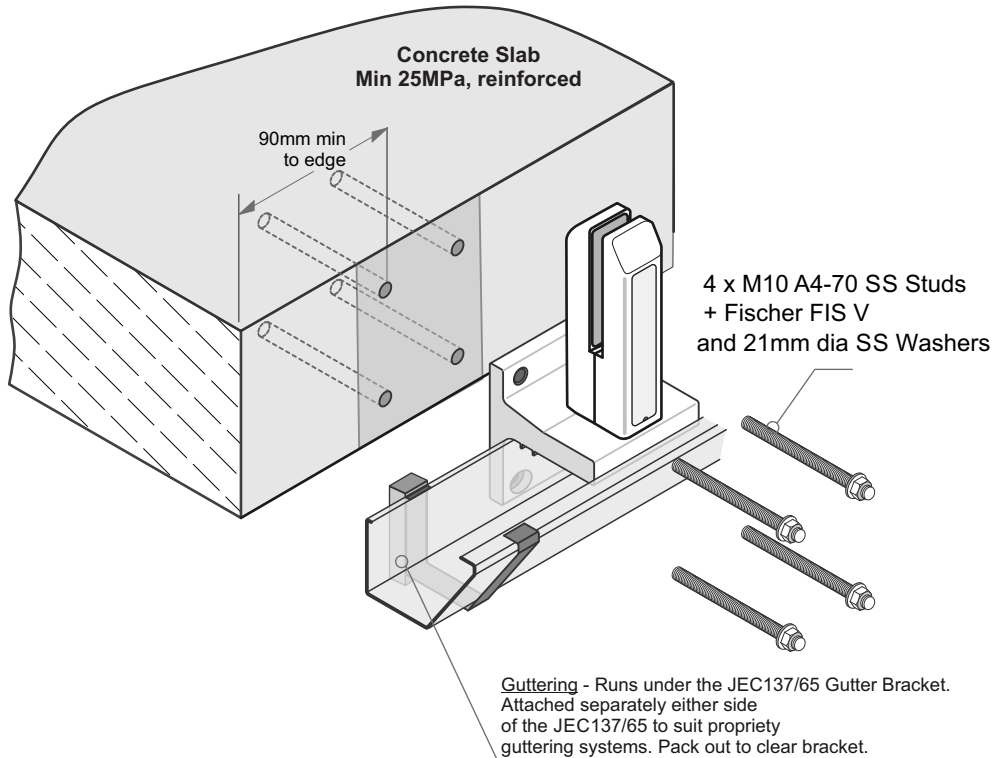
- Drilling method Hammer drilling
 Drill hole cleaning 4 times blowing,
 4 times brushing,
 4 times blowing

No borehole cleaning required in case of using a hollow drill bit, e.g. fischer FHD.

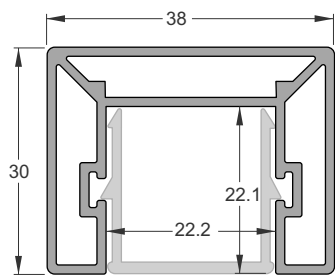


Important Notes:

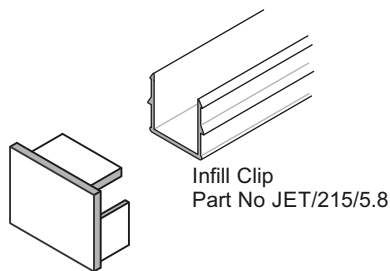
- 1 - The Project engineer must ensure the structure can support the appropriate loads
- 2 - All fixings must engage the structural slab
- 3 - A PVC Tape layer must be installed between the Bracket and Concrete
- 4 - Substructure shown indicatively only
- 5 - All fixings must be Stainless Steel



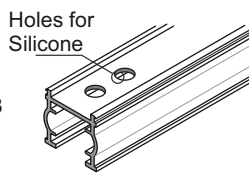
Juralco 38mm Rectangular Interlinking Top Rail



Rectangular Interlinking Top Rail
Part No JET/220/5.8
Also showing Infill Clip, for
use in between Glass Panels



Interlinking Top
Rail End Cap
Part No JET 37



Interlinking Top Rail Gasket
for 12 mm Toughened Glass
Part No JET/Gasket 12/2.9

1 - 12mm Glass and Gasket

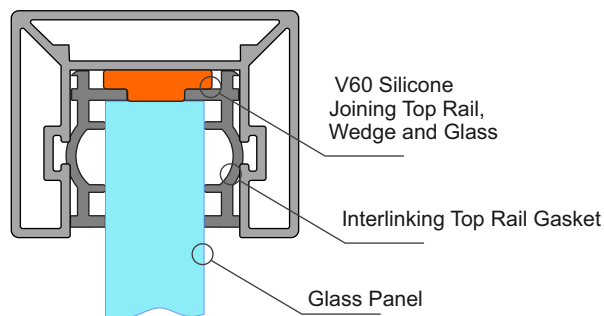
Application Notes:

- Cut short lengths of Gasket (50mm) and place say every 700mm.
- Cut/adjust Interlinking rail to correct dimensions, test in place.
- Remove all, install full cut lengths of Gasket to glass top edge

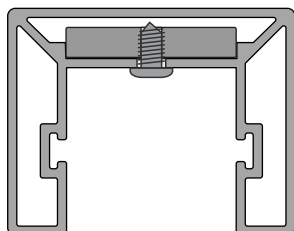
- Assemble Top Rail + Joiners and suitable End plates

- Place blobs of V60 silicone in every Gasket hole
- Then place Top Rail extrusion + Joiners and End plates in place clipping firmly to Gasket
- Tape all down, wait 24 hrs to fully bond. Clean up.

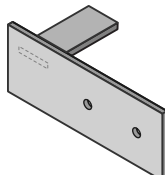
Note: Ends must be attached to structure or post,
- Joins must have a suitable joiner plate



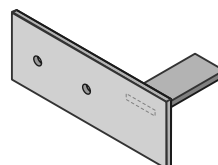
2 - End Plate Brackets



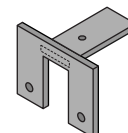
End Plate
Tabs all 22.5 x 4mm SS.



Interlinking Top Rail
Wall type End Plate
SS. 120x45mm
JET 40LH



Interlinking Top Rail
Wall type End Plate
SS. 120x45mm
JET 40RH



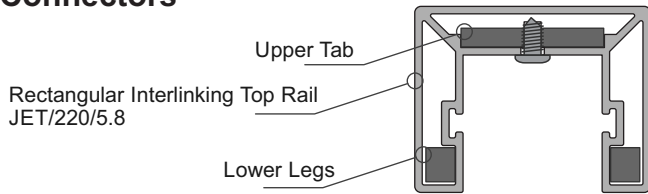
Interlinking Top Rail
End Bracket
SS. 60mm x 46mm
JET 42

- End Plates: (After cutting extrusions to length)
- With End Plate in place, spot drill from below for position
 - Drill out to SS tab to 3mm dia, extrusion to 4mm dia
 - Use No 6 x 1/4in SS ST Pan sq drive Screw, 2 per plate.
 - End Plate must be securely attached to Post or structure.

Important Note: All Interlinking rails, at their ends must be attached to a Building Structure or to an Edge Post attached to the Deck structure, using Rail End Plates/Brackets

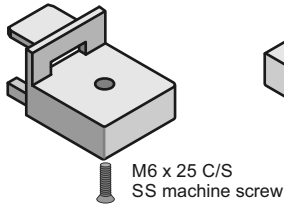
Juralco 38mm Rectangular Interlinking Top Rail - Corner Connectors and Joiners

1 - Connectors

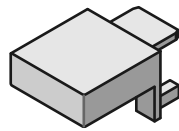


- Swivel Kits: (After cutting extrusions to length)
- With Swivel in place, spot drill from below for position
 - Drill out Swivel to 3mm dia, extrusion to 4mm dia
 - Use No6 x 1/4in SS ST Pan sq drive screws, 2 x ea side of joint
 - Both sides must be attached.
 - Join together with the M6 x 25 C/S SS Screw

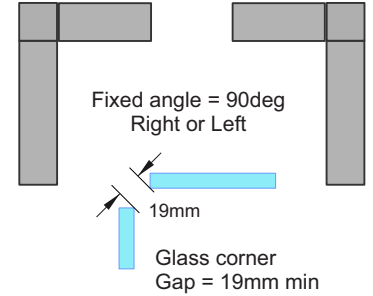
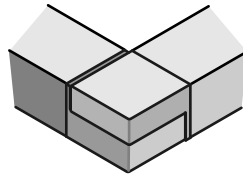
Interlinking Top Rail Horizontal Fixed 90 deg Connector JET 45A



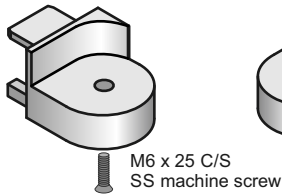
Interlinking Top Rail Horizontal Fixed 90 deg Connector JET 45B



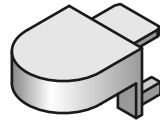
Rectangular Interlinking Top Rail Horizontal Fixed 90deg Kit JET220/90deg Corner Kit (JET 45A and B + screw)



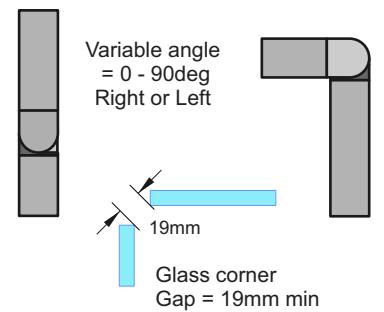
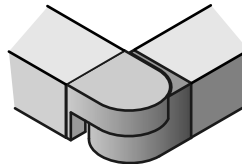
Interlinking Top Rail Horizontal 0 - 90deg Swivel Connector JET 46A



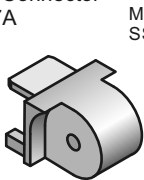
Interlinking Top Rail Horizontal 0 - 90deg Swivel Connector JET 46B



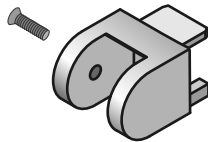
Rectangular Interlinking Top Rail Horizontal 0 - 90 deg Right/Left Swivel Connector Kit JET220/Horizontal Adj Corner Kit (JET 46A and B + screw)



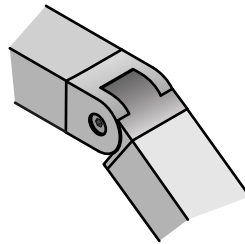
Interlinking Top Rail Vertical 35deg up to 35 deg down Swivel Connector JET 47A



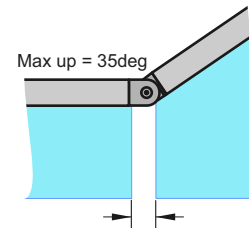
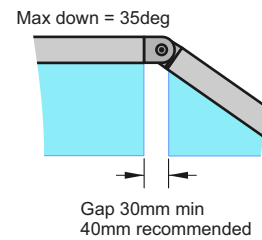
M6 x 25 C/S SS machine screw



Interlinking Top Rail Vertical 35deg up to 35 deg down Swivel Connector JET 47B

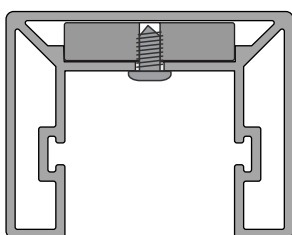


Interlinking Top Rail Vertical 35deg up to 35 deg down. Swivel Connector Kit JET220/Vertical Adj Corner Kit (JET 47A and B + screw)

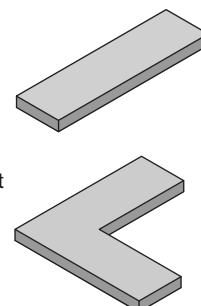


Gap 30mm min
40mm recommended

2 - Joiners



- Joiners: (After cutting extrusions to length)
- With Joiner in place, spot drill from below for position
 - Drill out to joiner to 3mm dia, extrusion to 4mm dia
 - Use No 6 x 1/4in SS ST Pan sq drive screws, 2 x ea side of joint
 - Both ends must be attached.
 - Joins, where required must be at the end of Glass Panels

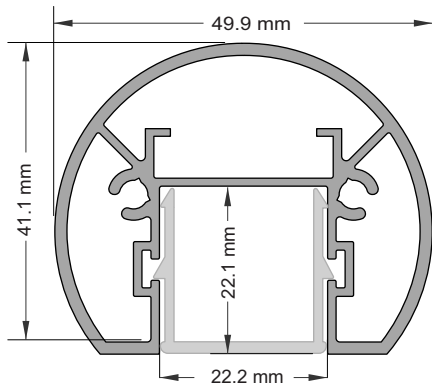


Interlinking Top Rail Straight Joiner 80x22.8x5mm JET 30

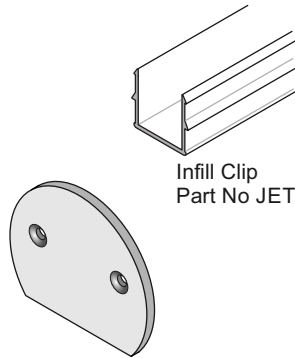
Interlinking Top Rail Corner Joiner 75x75x5mm JET 31

Joiners both 22.5 x 5mm Aluminium

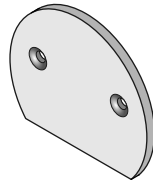
Juralco 50mm Round Interlinking Top Rail



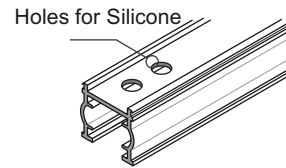
Round Interlinking Top Rail
Part No JET/211/5.8
Also showing Infill Clip, for
use in between Glass Panels



Infill Clip
Part No JET/215/5.8



Round Interlinking
Top Rail End Cap
Part No JET/231



Holes for Silicone
Interlinking Top Rail Gasket
for 12 mm Toughened Glass
Part No JET /Gasket 12/2.9

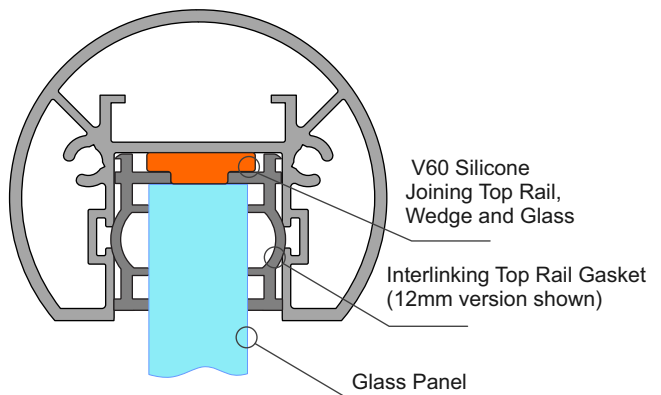
1 - 12mm Glass and Gasket

Application Notes:

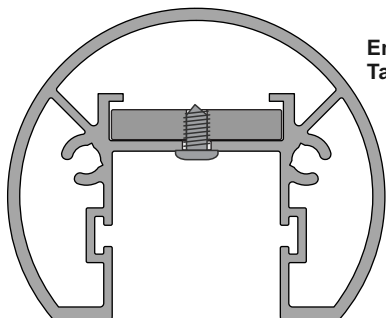
- Cut short lengths of Gasket (50mm) and place say every 700mm.
- Cut/adjust Interlinking rail to correct dimensions, test in place.
- Remove all, install full cut lengths of Gasket to glass top edge
- Assemble Top Rail + Joiners and suitable End plates
- Place blobs of V60 silicone in every Gasket hole
- Then place Top Rail extrusion + Joiners and End plates in place clipping firmly to Gasket
- Tape all down, wait 24 hrs to fully bond. Clean up.

Note: Ends must be attached to structure or post,

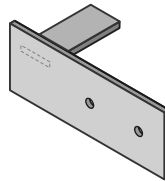
- Joins must have a suitable joiner plate



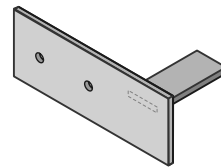
2 - End Plate Brackets



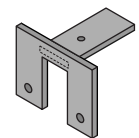
End Plate
Tabs all 22.5 x 4mm SS.



Interlinking Top Rail
Wall type End Plate
SS. 120x45mm
JET 40LH



Interlinking Top Rail
Wall type End Plate
SS. 120x45mm
JET 40RH



Interlinking Top Rail
End Bracket
SS. 60mm x 46mm
JET 42

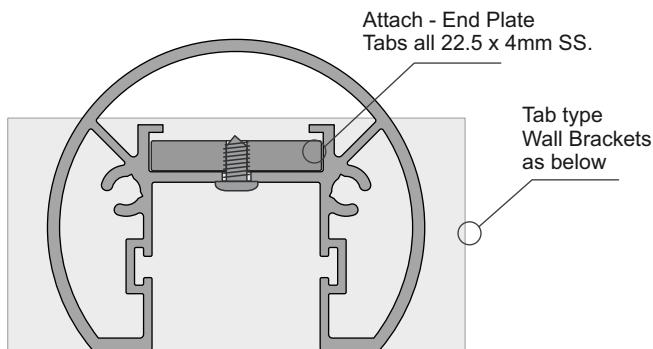
End Plates: (After cutting extrusions to length)

- With End Plate in place, spot drill from below for position
- Drill out to SS tab to 3mm dia, extrusion to 4mm dia
- Use No 6 x 1/4in SS ST Pan sq drive Screw, 2 per plate
- End Plate must be securely attached to Post or structure.

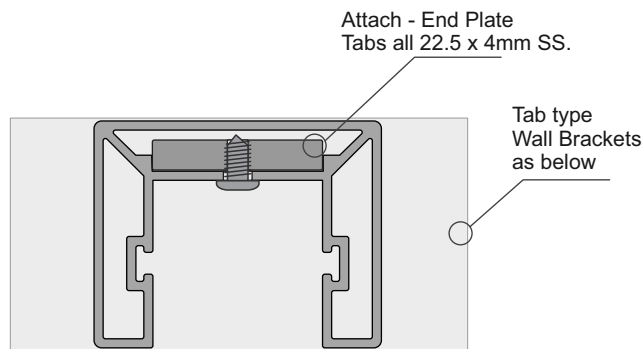
Important Note: All Interlinking rails, at their ends must be attached to a Building Structure or to an Edge Post attached to the Deck structure, using Rail End Plates/Brackets

Juralco 38mm Rectangular and 50mm Round Interlinking Top Rail - End Bracket Attachments

Applies to 38mm Rectangular and 50mm Round Interlinking Top Rails only

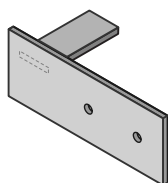


Round Interlinking Top Rail Extrusion
JET/211/5.8

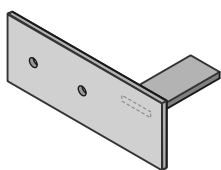


Interlinking Top Rail Extrusion
JET/220/5.8

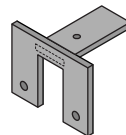
Interlinking Top Rail End Bracket Options - Both types above - Tab attach Type



Interlinking Top Rail
Wall type End Plate
SS. 120x45mm
JET 40LH



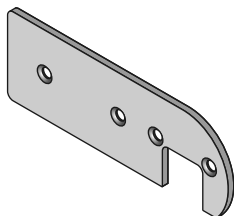
Interlinking Top Rail
Wall type End Plate
SS. 120x45mm
JET 40RH



Interlinking Top Rail
End Bracket
SS. 60mm x 46mm
JET 42

**Tabs all 22.5 x 4mm SS.
Front faces all 3mm SS**

Interlinking Top Rail End Bracket Options - Round Type only - Attach into Screw ports



Interlinking Top Rail
Wall type offset End Plate
Round Rail type only
120x42x3mm, Al
C/s both sides = RH or LH
JET 233



Interlinking Top Rail
Wall type End Plate
Round Rail type only
50x58x5mm, Al
JET 232

General Notes:

- All fixings to be Stainless Steel - PVC Tape layer between Structure and Bracket
- ULS Point load $N^* = 0.9kN$, inwards, outwards or down and in tension

Note : Fixing to Steel

- use 2 off 8g SS TEK Screws or M6 SS Bolts
- Steel 2mm min thickness
- Steel 300MPa minimum
- 15mm min distance to any Edges

Note : Fixing to Timber Wall

- use 2 off 8g SS Screws, 35mm min into studs.
- use Sika Supergrip 2hr
- 30mm min distance to Horizontal Edge
- If Weatherboard use suitable predrilled Wedge
- Timber stud wall to be designed and detailed in accordance with NZS 1720.1:2022 Timber Structures Part 1 - Design methods or NZ3604

Note : Fixing to Juralco EDGE Post

- use 2 off 8g x 25 SS PK Screws

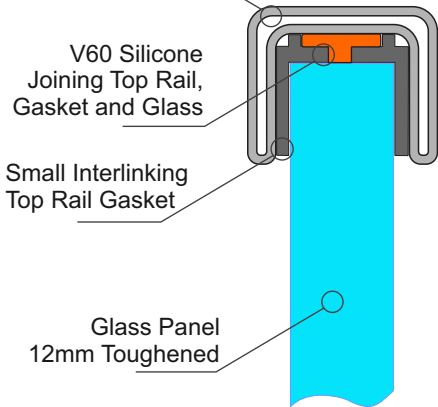
Note : Fixing to Concrete Wall

- use 2 off M6 x70 SS Screw Anchors
- Solid Concrete min 20Mpa
- Block wall Concrete filled/Reinforced
- 140mm min Wall thickness
- 70mm min distance to Horizontal Edge
- 100mm min distance to Vertical Edge
- Blockwork wall must be corefilled /reinforced and is to be designed and detailed in accordance with NZ4230 or NZ4229

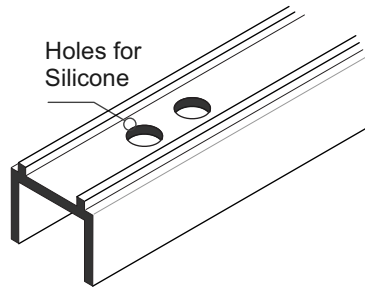
Important Note: All Interlinking rails, at their ends must be attached to a Building Structure or to an Edge Post attached to the Deck structure, using Rail End Plates/Brackets

Juralco 25mm SS Interlinking Top Rail

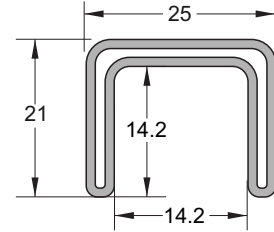
Small SS Interlinking Top Rail



25mm SS Interlinking Top Rail



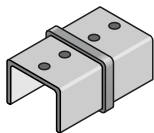
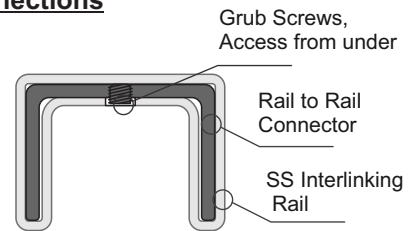
SMALL SS INTERLINKING TOP RAIL GASKET
JET/490GT/12/2.9 (Black)



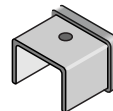
SMALL SS INTERLINKING TOP RAIL
JET/490/5.8/SSS JET/490/5.8/SCC
Duplex 2205

25mm SS Interlinking Rail Connections

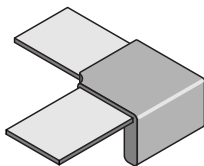
Note : All these Brackets use M5 x 6 SS Grub Screws.
If necessary these holes must be Drilled + tapped M5, as shown.
The under side of the Interlinking Rail must be drilled M6 to match M5 tapped holes positions, for access to Grub screws
- Joins, where required must be at the end of Glass Panels
Available as Satin(SSS) or Powdercoated SCC finishes



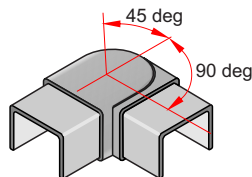
180deg INLINE JOINER
Duplex 2205
JET491/SSS JET491/SCC
21mm x 25mm x 51mm deep



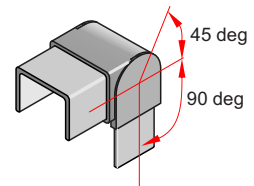
END CAP Duplex 2205
JET492/SSS JET492/SCC
21mm x 25mm x 25mm deep



90deg JOINER Duplex 2205
JET493/SSS JET493/SCC
21mm x 80mm x 80mm

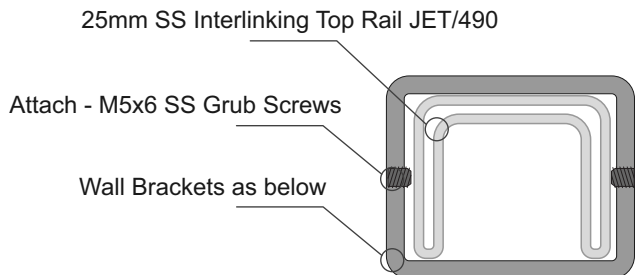


+90 to - 45 deg ADJUSTABLE HORIZONTAL JOINER Duplex 2205
JET494/SSS JET494/SCC
21mm x 25mm x 75mm overall deep

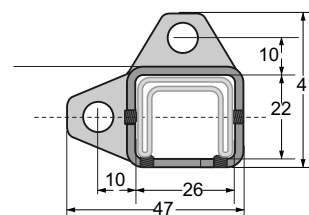
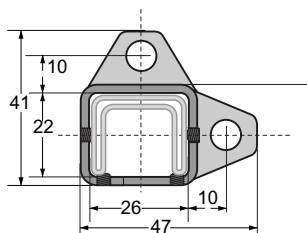
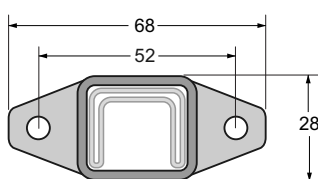


+90 to - 45 deg ADJUSTABLE VERTICAL JOINER Duplex 2205
JET495/SSS JET495/SCC
21mm x 25mm x 73mm overall deep

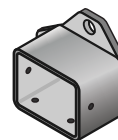
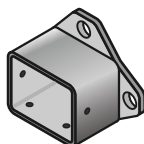
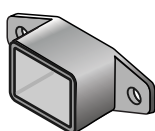
Juralco 25mm SS Interlinking Top Rail - End Brackets



Brackets for Fixing to Wall or End Post for 25mm SS Interlinking Rail



Note : All these Brackets use M5x6mm SS Grub Screws



WALL BRACKET Duplex 2205
JET496/SSS JET/496/SSC
68mm x 28mm x 30mm deep

WALL BRACKET - RH. Duplex 2205
JET497/RH/SSS JET497/RH/SSC
41mm x 47mm x 30mm deep

WALL BRACKET - LH Duplex 2205
JET497/LH/SSS JET497/RH/SSC
41mm x 47mm x 30mm deep

General Notes:

- All fixings to be Stainless Steel. - PVC Tape layer between Structure and Bracket
- ULS Point load $N^* = 0.9\text{kN}$, inwards, outwards or down and in tension

Note : Fixing to Steel

- use 2 off 8g SS TEK Screws or M6 SS Bolts
- Steel 2mm min thickness
- Steel 300MPa minimum
- 15mm min distance to any Edges

Note : Fixing to Timber Wall

- use 2 off 8g SS Screws, 35mm min into studs.
- use Sika Supergrip 2hr
- 30mm min distance to Horizontal Edge
- If Weatherboard use suitable predrilled Wedge
- Timber stud wall to be designed and detailed in accordance with NZS 1720.1:2022 Timber Structures Part 1 - Design methods or NZ3604

Note : Fixing to Juralco EDGE Post

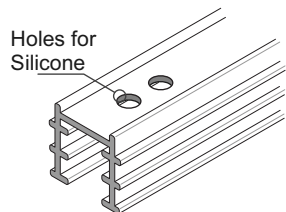
- use 2 off 8g x 25 SS PK Screws

Note : Fixing to Concrete Wall

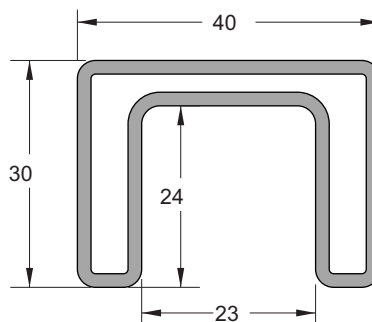
- use 2 off M6 x70 SS Screw Anchors
- Solid Concrete min 20Mpa
- Block wall Concrete filled/Reinforced
- 140mm min Wall thickness
- 70mm min distance to Horizontal Edge
- 100mm min distance to Vertical Edge
- Blockwork wall must be corefilled /reinforced and is to be designed and detailed in accordance with NZ4230 or NZ4229

Important Note: All Interlinking rails, at their ends must be attached to a Building Structure or to an Edge Post attached to the Deck structure, using Rail End Plates/Brackets

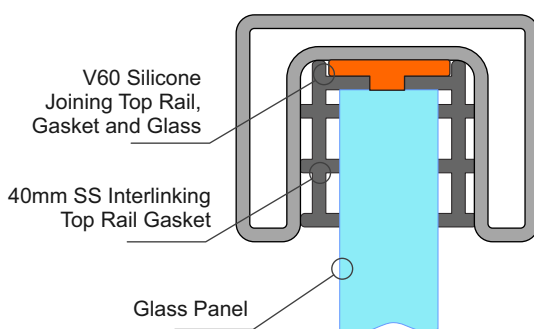
Juralco 40mm SS Interlinking Top Rail



SS Interlinking Top Rail
12mm Glass Gasket
JET/430GT/12/2.9



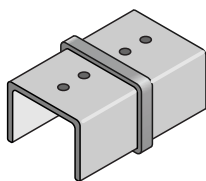
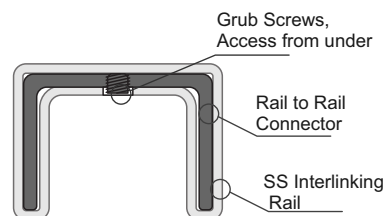
SS INTERLINKING TOP RAIL
JET/430/PSS/5.8



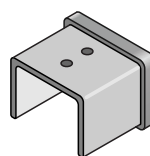
V60 Silicone sealant

40mm SS Interlinking Rail Connectors

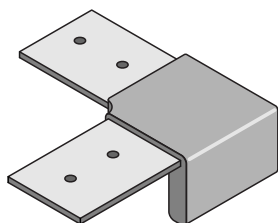
Note : All these Brackets use M5 x 6 SS Grub Screws.
If necessary these holes must be Drilled + tapped M5, as shown.
The under side of the Interlinking Rail must be drilled
M6/7 to match M5 tapped holes positions, for access to Grub screws
- Joins, where required must be at the end of Glass Panels



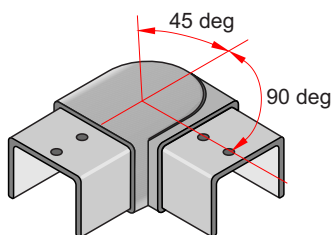
180deg INLINE JOINER 2205
JET/431/PSS
60mm x 40mm x 30mm deep



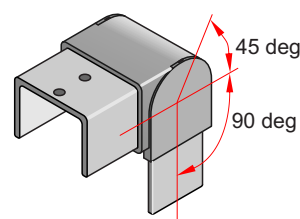
END CAP 2205
JET/432/PSS
33mm x 40mm x 30mm deep



90deg JOINER 2205
JET/433/PSS
95mm x 95mm x 30mm deep

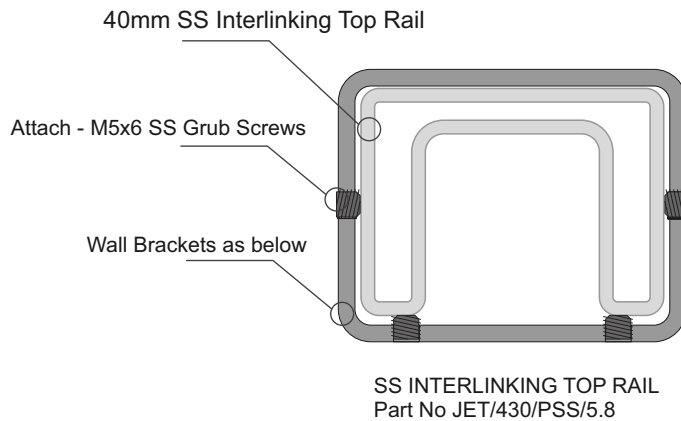


+90 to - 45 deg ADJUSTABLE
HORIZONTAL JOINER 2205
JET/434/PSS
70mm x 70mm x 30mm deep



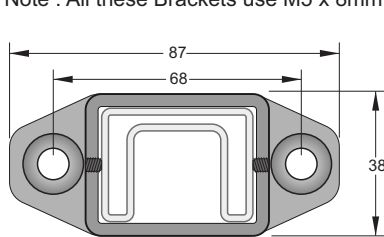
+90 to - 45 deg ADJUSTABLE
VERTICAL JOINER 2205
JET/435/PSS
60mm x 60mm x 40mm wide

Juralco 40mm SS Interlinking Top Rail - End Brackets

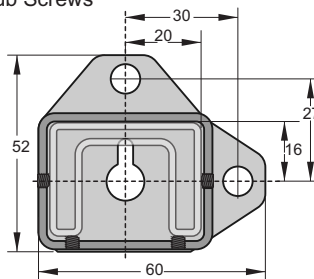


Brackets for Fixing to Wall or End Post for 40mm SS Interlinking Rail

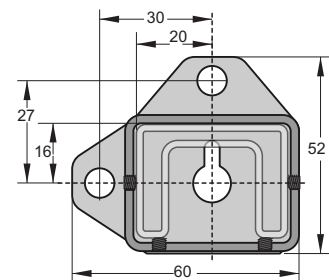
Note : All these Brackets use M5 x 8mm SS Grub Screws



WALL BRACKET 2 FIX 2205
Part No JET/436/PSS
87mm x 37mm x 25mm deep



WALL BRACKET 2 FIX - RH 2205
Part No JET/437/RH/PSS
52mm x 60mm x 33mm deep



WALL BRACKET 2 FIX - LH 2205
Part No JET/437/LH/PSS
52mm x 60mm x 33mm deep

General Notes:

- All fixings to be Stainless Steel - PVC Tape layer between Structure and Bracket
- ULS Point load $N^* = 0.9\text{kN}$, inwards, outwards or down and in tension

Note : Fixing to Steel

- use 2 off 8g SS TEK Screws or M6 SS Bolts
- Steel 2mm min thickness
- Steel 300MPa minimum
- 15mm min distance to any Edges

Note : Fixing to Timber Wall

- use 2 off 8g SS Screws, 35mm min into studs.
- use Sika Supergrip 2hr
- 30mm min distance to Horizontal Edge
- If Weatherboard use suitable predrilled Wedge
- Timber stud wall to be designed and detailed in accordance with NZS 1720.1:2022 Timber Structures Part 1 - Design methods or NZ3604

Note : Fixing to Juralco EDGE Post

- use 2 off 8g x 25 SS PK Screws

Note : Fixing to Concrete Wall

- use 2 off M6 x70 SS Screw Anchors
- Solid Concrete min 20Mpa
- Block wall Concrete filled/Reinforced
- 140mm min Wall thickness
- 70mm min distance to Horizontal Edge
- 100mm min distance to Vertical Edge
- Blockwork wall must be corefilled /reinforced and is to be designed and detailed in accordance with NZ4230 or NZ4229

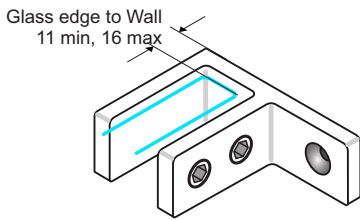
Important Note: All Interlinking rails, at their ends must be attached to a Building Structure or to an Edge Post attached to the Deck structure, using Rail End Plates/Brackets

Juralco Glass Panel Stiffener Brackets

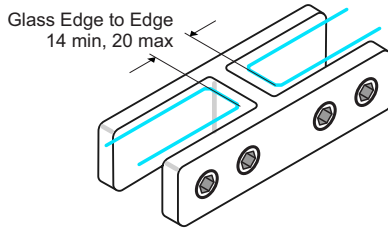
**This page applies
POOL FENCES only**

Top Edge, Frameless
Glass Stiffeners.

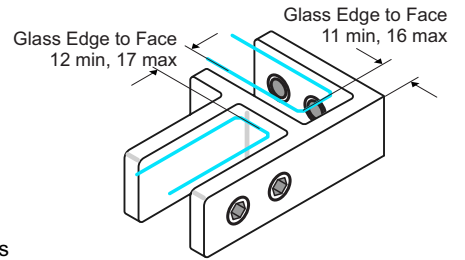
- Install 200mm max from Glass Top edge
- Supplied as a kit, with screws, a variety of Gaskets and a SS clamp Plate
- Duplex 2205 SS construction. Polished (PSS), Satin (SSS) or Powder coat SCC Finishes



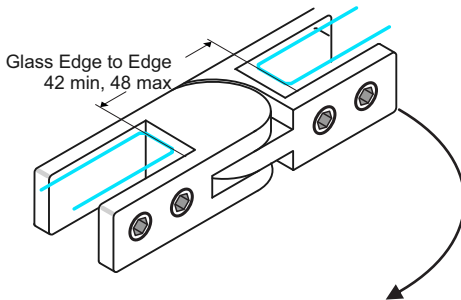
90 Deg Glass to Wall
75x505x25mm
Part No JET/72/PSS
Part No JET/72/SSS
Part No JET/72/SCC



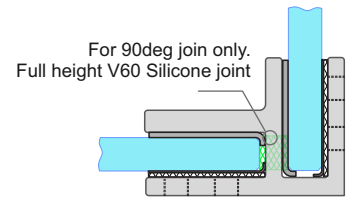
180 Deg Glass to Glass
70x34x25mm
Part No JET/71/PSS
Part No JET/71/SSS
Part No JET/71/SCC



90 deg Glass to Glass
65x55x25mm
Part No JET/70/PSS
Part No JET/70/SSS
Part No JET/70/SCC



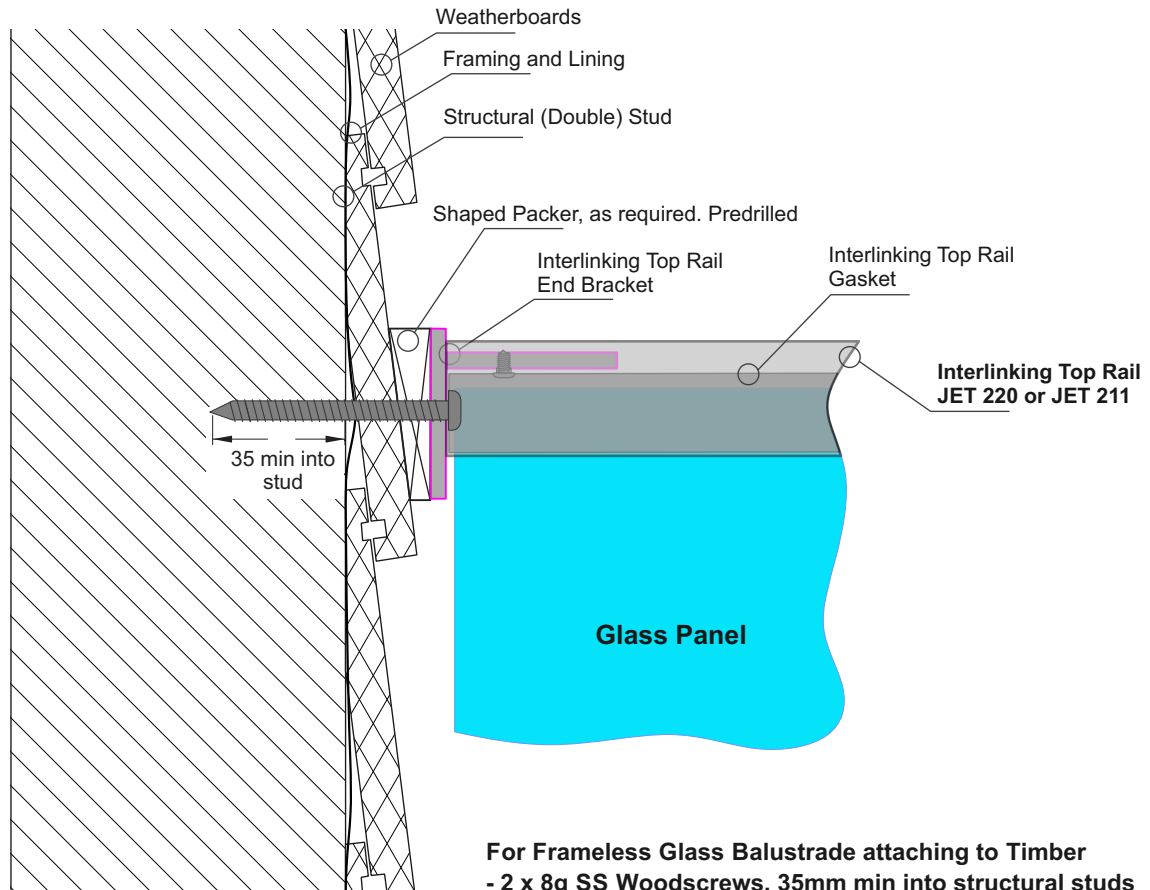
90 - 180 Deg
Adjustable Glass to Glass
135x34x25mm
Part No JET/73/PSS
Part No JET/73/SSS
Part No JET/73/SCC



For 90deg join only.
Full height V60 Silicone joint

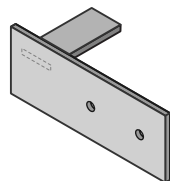
**Juralco Interlinking Top Rail End Bracket
fixing to a Timber Wall**

**Applies to 38mm Rectangular and
50mm Round Interlinking Top Rails only**

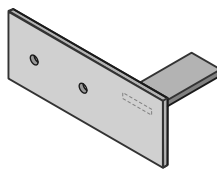


For Frameless Glass Balustrade attaching to Timber
- 2 x 8g SS Woodscrews, 35mm min into structural studs
- 20mm min to edge of stud in all directions

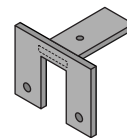
Interlinking Top Rail End Bracket Options - Drawing above shows JET40



Interlinking Top Rail
Wall type End Plate
SS. 120x45mm
JET 40LH



Interlinking Top Rail
Wall type End Plate
SS. 120x45mm
JET 40RH



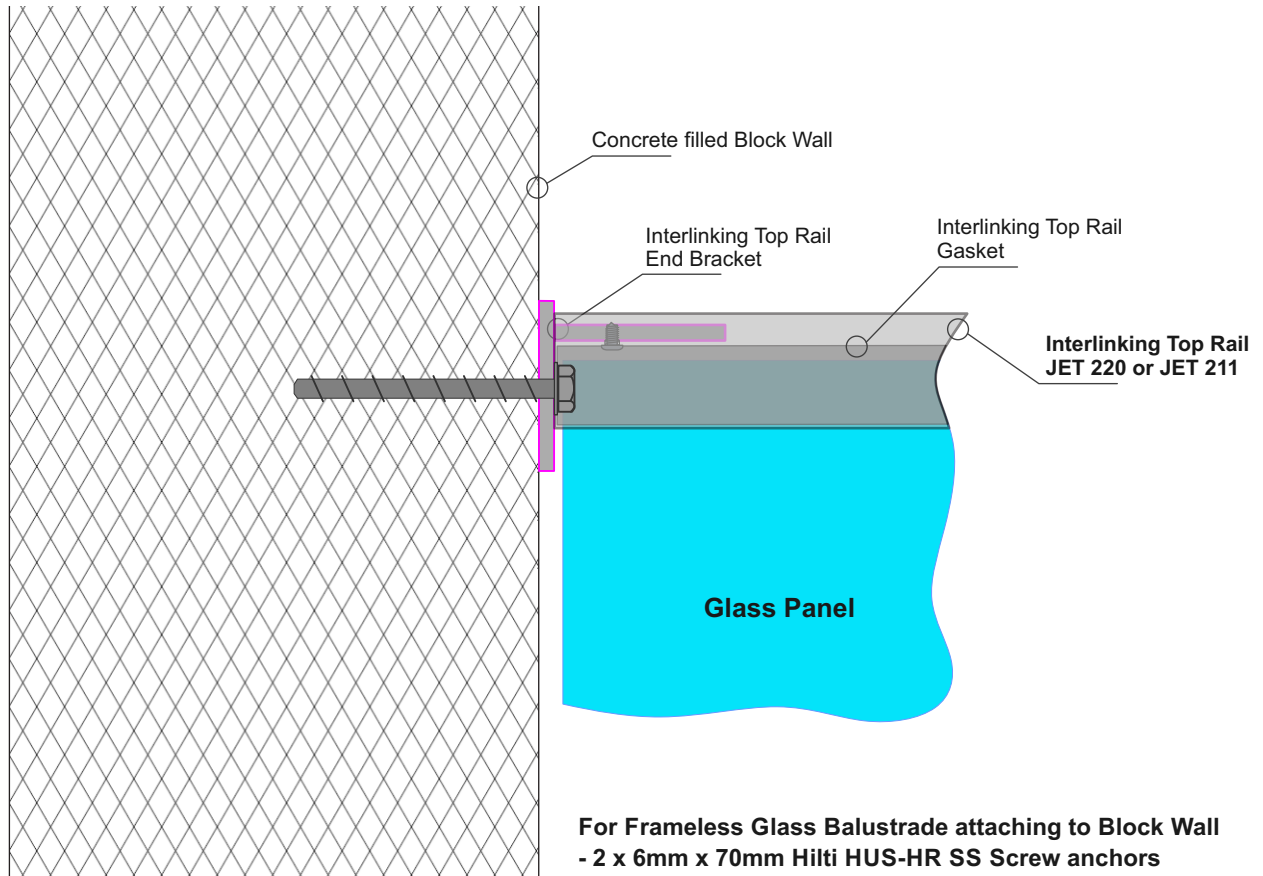
Interlinking Top Rail
End Bracket
SS. 60mm x 46mm
Part No JET 42

Notes:

- All fixings to be stainless steel
- Timber stud wall to be designed by Project structural engineer for loads imposed by Balustrade.
- ULS Point load $N^* = 0.9\text{kN}$, inwards, outwards or down.
- Minimum Stud size = 90mm x 45mm
- Minimum Timber grade = SG8
- Timber stud wall to be designed and detailed in accordance with NZS 1720.1:2022 Timber Structures Part 1 - Design methods or NZ3604

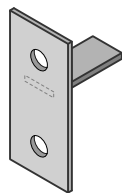
**Juralco Interlinking Top Rail End Bracket
fixing to a Concrete Wall**

**Applies to 38mm Rectangular and
50mm Round Interlinking Top Rails only**

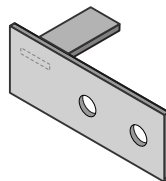


- For Frameless Glass Balustrade attaching to Block Wall**
- 2 x 6mm x 70mm Hilti HUS-HR SS Screw anchors
 - For concrete drill 6mmØ holes
 - 70mm min to side edge of concrete, 100mm to top edge.

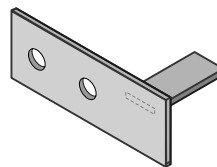
Interlinking Top Rail End Bracket Options - Drawing above shows JET40



Interlinking Top Rail
Wall type End Plate
SS. 100x45mm
JET 38



Interlinking Top Rail
Wall type End Plate
SS. 120x45mm
JET 40LH

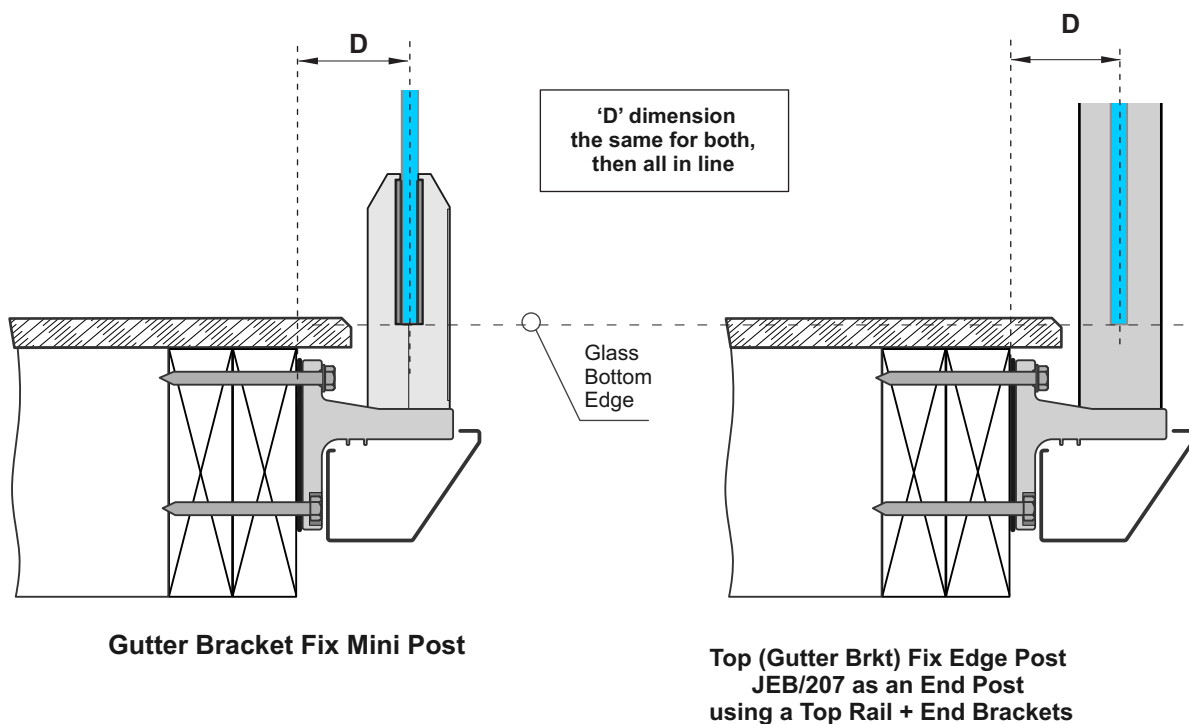
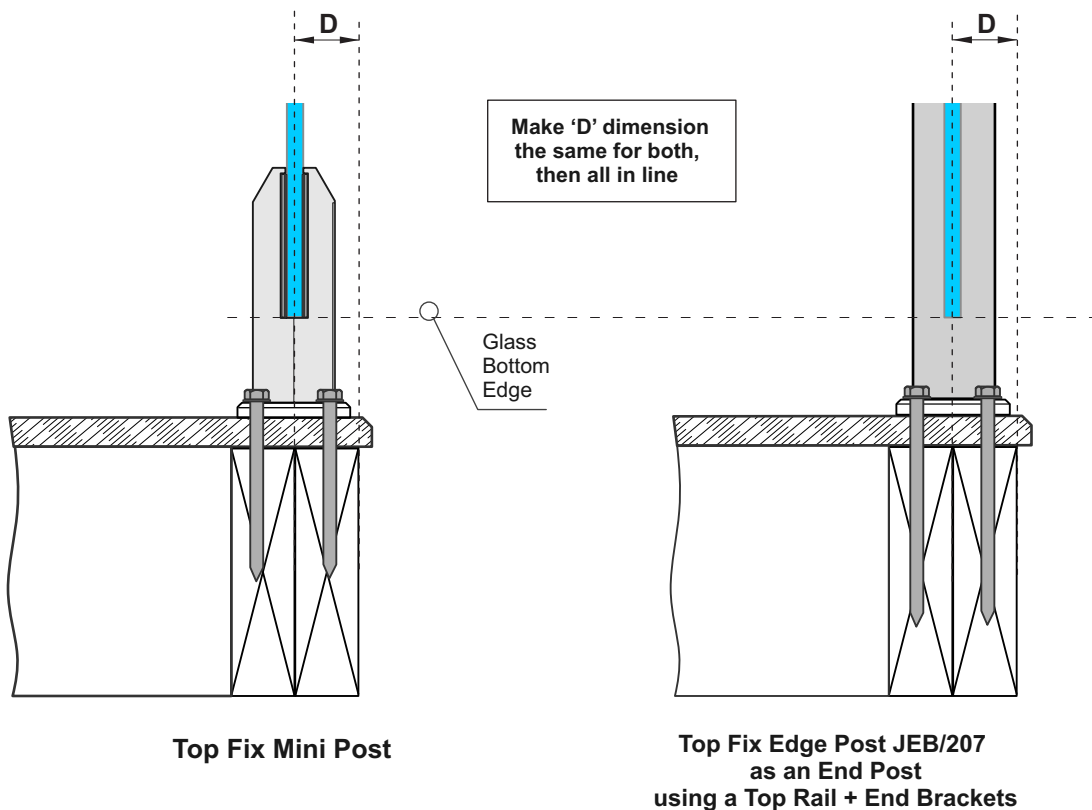


Interlinking Top Rail
Wall type End Plate
SS. 120x45mm
JET 40RH

Drill out holes to 9mmØ

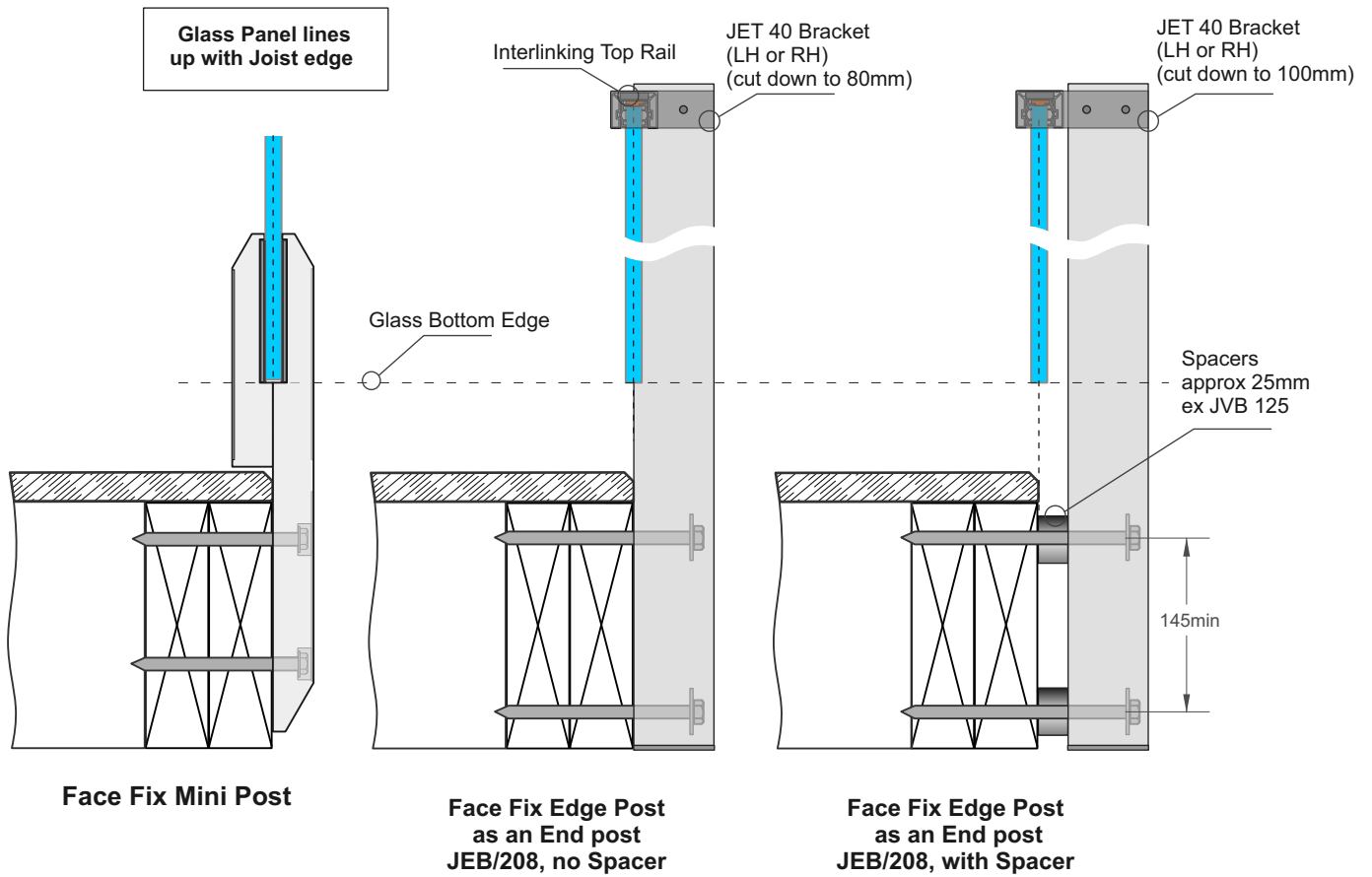
Notes:

- All fixings to be stainless steel
- Blockwall to be designed by Project structural engineer for loads imposed by Balustrade.
- ULS Point load $N^* = 0.9kN$, inwards, outwards or down.
- Minimum blockwork thickness = 140mm
- Minimum core fill concrete strength = 17.5MPa
- Blockwork wall must be corefilled /reinforced and is to be designed and detailed in accordance with NZ4230 or NZ4229

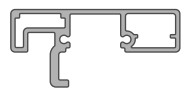


Juralco MiniPost® Balustrade System
Interlinking Top Rail for attaching to a Edge balustrade End Post
where Wall fixing not suitable

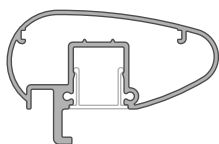
Applies to Interlinking Top Rails suitable for 12mm Toughened Glass



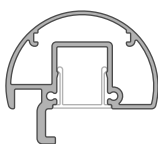
Juralco Interlinking Rails



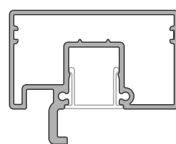
INTERLINKING RAIL
JEB/222/5.8



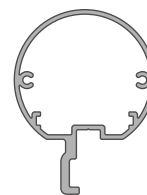
AEROFOIL HANDRAIL
JEB/217/5.8



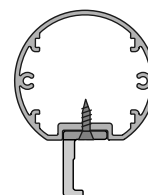
ROUND HANDRAIL
JEB/209/5.8



RECTANGULAR
HANDRAIL
JEB/216/5.8



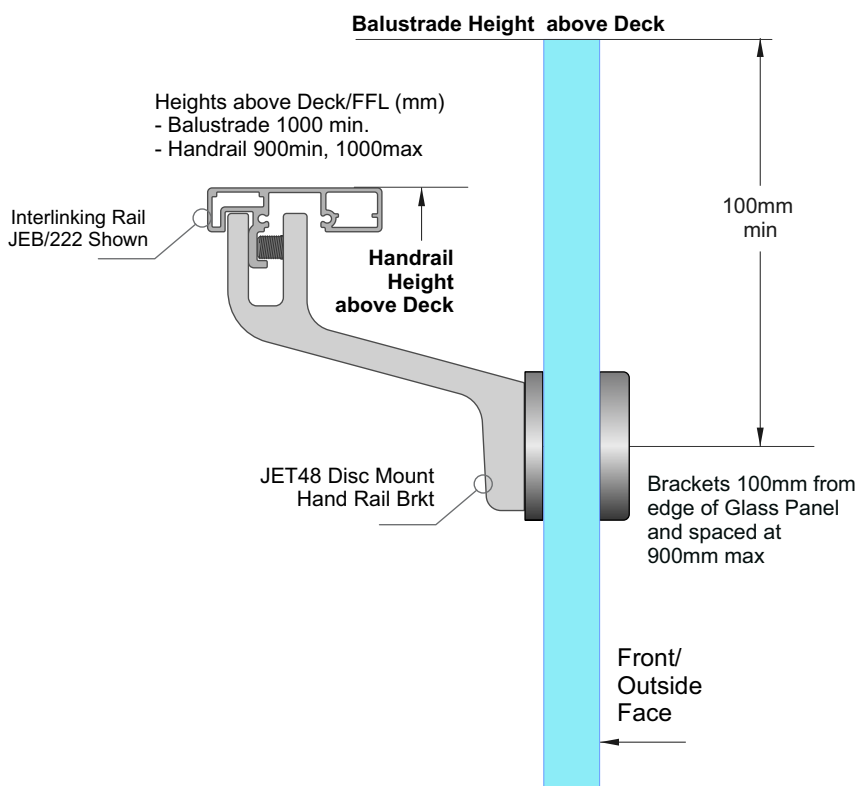
CIRCULAR
HANDRAIL
JEB/221/5.8



CIRCULAR
HANDRAIL
JEB/223/5.8
+ Clip JEC38

Suitable Interlinking Rail and Handrails (as Interlinking Rails)

Interlinking or Handrails on Deck side.



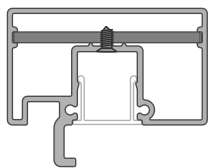
Frameless Glass Systems

Important Note: All Interlinking rails, at their ends must be attached to a Building Structure or to an Edge Post attached to the Deck structure, using Rail End Plates/Brackets. Applies to Handrails used as Interlinking Rails

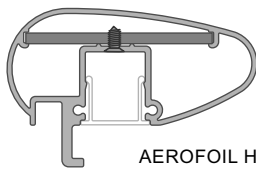
Juralco Handrail Components - Joiners

Rectangular Handrails and 75mm Aerofoil - End Cap, Straight and 90deg corners

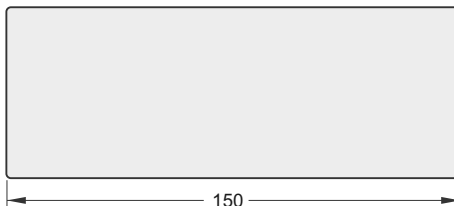
All ex 3mm Aluminium



RECTANGULAR HANDRAIL
JEB/216/5.8

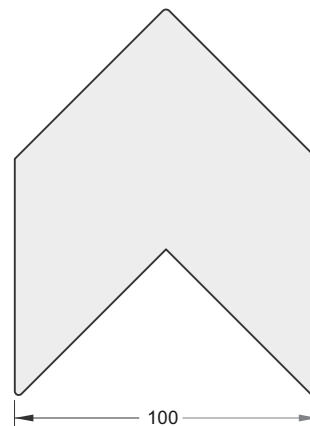


AEROFOIL HANDRAIL
JEB/217/5.8



Rectangular and 75mm Aerofoil Inline Joiner
Use 56.5 x 3 flat bar JA/189/5.0

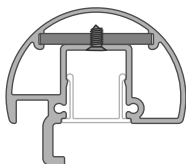
Use No6 x 1/4in SS pan sq drive screws, 2 ea side of joint



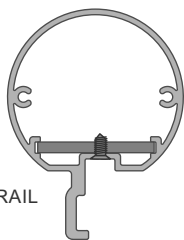
Rectangular and 75m Aerofoil
90deg Corner Joiner JEC 01

Round and Circular Handrail, End Cap, Straight and 90deg corners

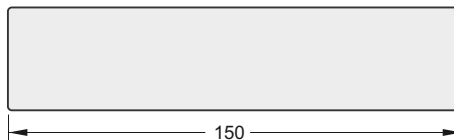
All ex 3mm Aluminium



ROUND HANDRAIL
JEB/209/5.8

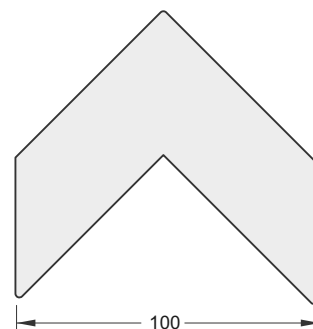


CIRCULAR HANDRAIL
JEB/221/5.8



Round and Circular Inline Joiner
Use 34.0 x 3 flat bar JA/188/5.0

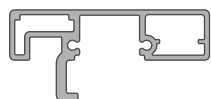
Use No6 x 1/4in SS pan sq drive screws, 2 ea side of joint



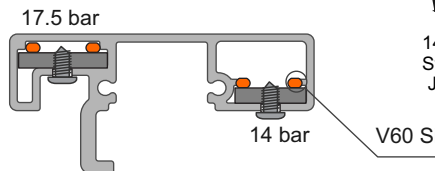
Round and Circular 90deg Corner Joiner
JEC 04

Interlinking Rail End Cap, Straight 135 deg and 90deg corners

All ex 3mm Aluminium

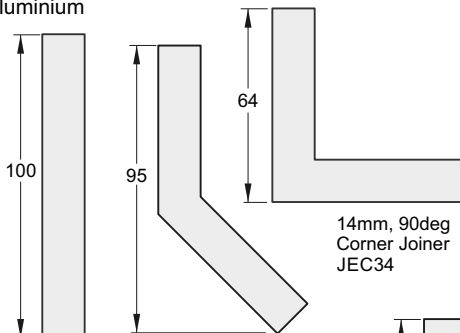


STANDARD HANDRAIL
JEB/222/5.8



Joiners:

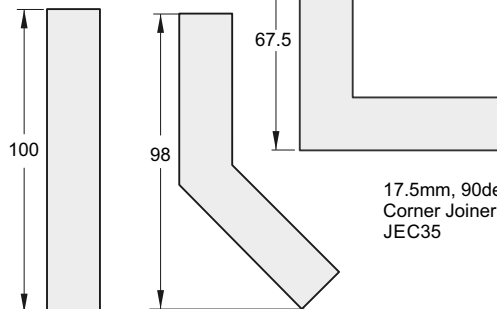
- With Joiner in place, spot drill from below for position
- Drill out joiner to 3mm dia, extrusion to 4mm dia
- Use No 6 x 1/4in SS ST Pan sq drive screw
- Insert dobs of V60 Silicone inside cavities before inserting
- Both ends to be attached.
- Joins must be within 300mm of Post
- Minimum distance between screw and end of handrail is 10mm



14mm
Straight Joiner
JEC32

14mm, 135deg
Corner Joiner
JEC36

14mm, 90deg
Corner Joiner
JEC34



17.5mm
Straight Joiner
JEC33

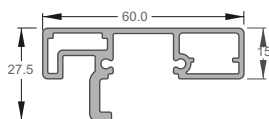
17.5mm, 135deg
Corner Joiner
JEC37

17.5mm, 90deg
Corner Joiner
JEC35

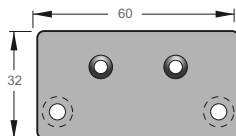
Juralco Handrail End Plates for Attaching to a Structure or Edge Deck mounted Post

End Caps for Handrails, Wall or Edge Post attach for JEB 222, 217, 209, 216 and 221 Handrails

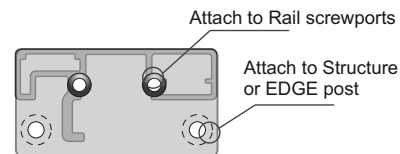
End Caps all ex 3mm Aluminium



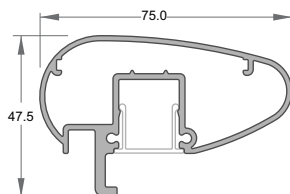
HANDRAIL
Part No JEB/222/5.8



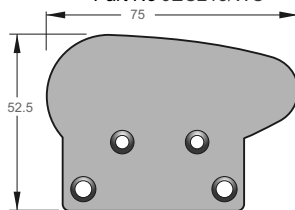
HANDRAIL
WALL ATTACH END PLATE
Part No JEC215/WC



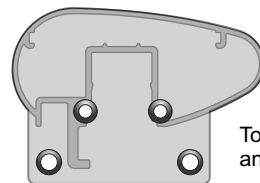
For RH and LH



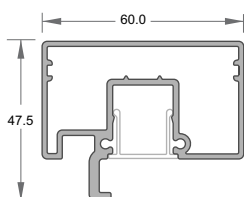
AEROFOIL HANDRAIL
Part No JEB/217/5.8



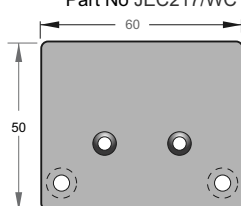
HANDRAIL
WALL ATTACH END PLATE
Part No JEC217/WC



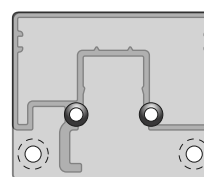
For RH and LH



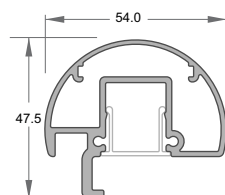
RECTANGULAR
HANDRAIL
Part No JEB/216/5.8



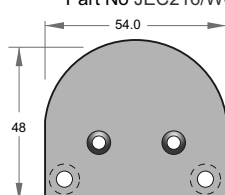
HANDRAIL
WALL ATTACH END PLATE
Part No JEC216/WC



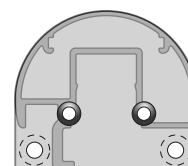
For RH and LH



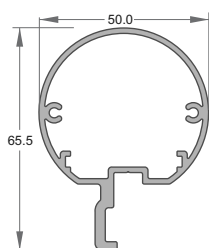
HALF ROUND HANDRAIL
Part No JEB/209/5.8



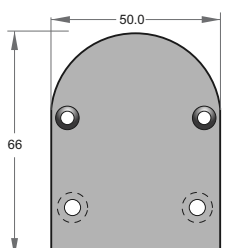
HANDRAIL
WALL ATTACH END PLATE
Part No JEC209/WC



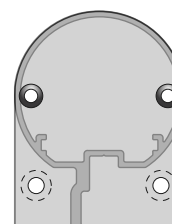
For RH and LH



CIRCULAR HANDRAIL
Part No JEB/221/5.8



HANDRAIL
WALL ATTACH END PLATE
Part No JEC221/WC



For RH and LH

General Notes: - All fixings to be Stainless Steel. - EPDM layer between Structure and End Cap
- ULS Point load $N^* = 0.9\text{kN}$, inwards, outwards or down and in tension

Note : Fixing to Steel

- use 2 off 8g SS TEK Screws or M6 SS Bolts
- Steel 2mm min thickness
- Steel 300MPa minimum
- 15mm min distance to any Edges

Note : Fixing to Timber Wall

- use 2 off 8g SS Screws, 35mm min into studs.
- use Sika Supergrip 2hr
- 30mm min distance to Horizontal Edge
- If Weatherboard use suitable predrilled Wedge
- Timber stud wall to be designed and detailed in accordance with NZS 1720.1:2022 Timber Structures Part 1 - Design methods or NZ3604

Note : Fixing to Juralco EDGE Post

- use 2 off 8g x 25 SS PK Screws

Note : Fixing to Concrete Wall

- use 2 off M6 x70 SS Screw Anchors
- Solid Concrete min 20Mpa
- Block wall Concrete filled/Reinforced
- 140mm min Wall thickness
- 70mm min distance to Horizontal Edge
- 100mm min distance to Vertical Edge
- Blockwork wall must be corefilled /reinforced and is to be designed and detailed in accordance with NZ4230 or NZ4229

Glass Cleaning and Maintenance

Architectural glass products must be properly cleaned during the construction period so visual and aesthetic clarity are maintained. Because glass can be permanently damaged if improperly cleaned, glass producers and fabricators recommend strict compliance with the following procedures.

First, determine whether the glass is clear, tinted or reflective. Surface damage is more noticeable on reflective glass compared with the other glass products. If the reflective coated surface is exposed, either on the exterior or interior, special care must be taken when cleaning, as scratches can result in coating removal and a visible change in light transmittance. Cleaning tinted and reflective glass in direct sunlight should be avoided. Cleaning should begin at the top of the building and continue to the lower levels.

Commence cleaning by soaking the glass surfaces with clean water and a soap solution to loosen dirt or debris. Then, using a mild, non-abrasive commercial window washing solution, uniformly apply the solution to the glass surfaces with a non-abrasive applicator and follow with a squeegee to remove all of the cleaning solution from the glass surface.

Ensure that no metal parts of the cleaning equipment touch the glass surface and that no abrasive particles are trapped between the glass and the cleaning materials. All water and cleaning solution residue should be dried from the window gaskets, sealants and frames.

Scratches and Metal Scrapers

Scratches can occur from hard pointed objects or poor handling, but most often occurs from the careless removal of foreign matter from the glass surface.

Mortar splatter and paint are common offenders and efforts to remove after hardening almost always lead to surface damage. It is essential that the foreign materials are removed before they harden. Better still, if construction work continues after glazing, that the glazed areas are protected by adhesive plastic films or suitable tarpaulins or covers.

One of the common mistakes made by non-glass trades people, including glass cleaning contractors, is the use of razor blades or other metal scrapers on a large portion of the glass surface. Using large blades to scrape a window clean carries considerable risk of causing damage to the glass.

The glass industry, fabricators, distributors and installers neither condones nor recommends any scraping of glass surfaces with metal blades or knives. Such scraping usually permanently damages or scratches the glass surfaces. When paint or other construction materials cannot be removed with normal cleaning procedures, a new 25mm razor blade may have to be used. The razor blade should be used on small spots only. Cleaning should be done in one direction only. Never scrape in a back and forth motion as this could trap particles under the blade that could scratch the glass.

Blades or scrapers can dislodge "pickup" on toughened glass. There are fine particles of glass that are fused on to the surface during toughening. Once dislodged they can scratch the glass.

Glass Cleaning, Do's and Don'ts

DO NOT..

- Do Not - Use Scrapers of any type or size on a Glass surface
- Do Not - Leave building dirt or residues to remain on Glass for a period of time.
- Do Not - Begin cleaning glass until you have identified the surface type.
- Do Not - Clean Glass surfaces in direct sunlight.
- Do Not - Allow dirty water or cleaning residues to remain on the Glass.
- Do Not - Begin cleaning before rinsing off a loose residues.
- Do Not - Use abrasive cleaning solutions, materials or solvents.
- Do Not - Allow metal parts of the cleaning equipment to come in contact with the Glass.
- Do Not - Trap abrasive particles between the cleaning material and the Glass.

DO...

- Clean glass promptly when dirt or building residues appear.
- Determine glass surface type.
- Exercise special care when cleaning coated surfaces.
- Avoid cleaning glass surfaces in direct sunlight.
- Start cleaning at the top of a building, then continue to lower levels.
- Soak the glass surface in a clean soapy solution before cleaning.
- Use a mild non abrasive commercial cleaner.
- Use a squeegee to remove all cleaning solution.
- Try your procedures on a small window and check.
- Caution other trades re the care and protection of the glass surfaces.

**Residues of surface grit may be present from the toughening production process.
These grit particles must not be dragged across the surface.
NEVER use Metal Scrapers**

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Juralco Edgetec® Mini Post Balustrade System

Powder Coating Care and Maintenance

Powder Coating Installation Care

Warning re use of solvents:

- In some cases strong solvents are recommended for thinning various types of paints and also for cleaning up mastics and sealants.
- These can be harmful to the extended life of the powder coated surface, and must not be used for cleaning purposes.
- It is important to note that the damage will not be visible immediately and may take up to 12 months to develop.

If paint splashes or sealants and mastics need to be removed then the following may be safely used:
Methylated Spirits, Ethyl Alcohol, Isopropanol or preferably a mild detergent in warm water.

Joinery Protection during Installation:

All the activity on a construction site means that your powder coated items may get knocked or scratched, splattered with mortar, plaster, textured coating or paint during the later stages of construction.

Please ensure that all powder coated articles are masked or covered at this time. It is far easier to prevent accidents than to try and correct them. Should your joinery receive mortar or paint splashes see that these are removed before cure and follow the instructions contained in this brochure.

Typical sticker used to warn other trades of the need to protect and mask off powder coated joinery (applies to anodised joinery also)

"IMPORTANT ALL TRADES"
This valuable aluminium joinery will suffer permanent damage from: plaster, mortar and paint splashes - Protect if splashes occur - Immediately wash down joinery with water or meths - Do not allow splashes to harden! ~ Do not use solvents! - Do not remove this label until final clean completed.

This photograph displays damage that has occurred on site, post installation. The photo of the masked joinery displays clear signs of damage that could have occurred were it not masked. Please ensure that your joinery is protected right through the entire construction process.



Powder Coating Maintenance

External - Maintenance Program:

To extend the life of external powder coated articles and to comply with warranty requirements for powder coated aluminium joinery, a simple, regular maintenance program must be implemented.

The effects of ultra violet light, atmospheric pollution, dirt, grime and airborne salt deposits will all accumulate over time and must be removed or surface staining and weathering will occur, leading to an unsightly appearance.

For external coatings, cleaning should take place every six months. In areas where pollutants are more prevalent, such as beachfront houses and industrial or geothermal areas, then a cleaning program should be carried out on a more frequent basis ie. every one to three months.

Fences or Balustrades in close proximity to swimming pools must be washed down every six months, to clean off chlorine and salt deposits.

Cleaning your powder coating:

1. Carefully remove any loose surface deposits with a wet sponge.
2. Use a soft brush (non abrasive) and a mild household detergent (do not use solvents) in warm water, remove dust, salt and other deposits.
3. Rinse off with clean fresh water.



Restoring weathered or scratched surfaces:

Repair of Scuffed or Scratched surfaces
Dulux Spray Cans are available in all colour card colours.

Repair of Small Scratches or Chips.
Dulux Dabsticks are ideally suited for the repair of small scratches.
Dabsticks may not be available in all colour card colours.

Repair of Weathered areas .
Dulux Gloss Up is a light to medium cutting cream ideally suited for gloss restoration and has been specifically designed for this purpose.
Gloss Up contains no waxes or silicone and is a one step system.



Contact Dulux Powder Coatings , ph 0064 9 441 8244

Juralco Edgetec® Infinity Balustrade System

Stainless Steel Care and Maintenance

Care and Maintenance of Stainless Steel

Introduction

Stainless steels are selected for applications where their inherent corrosion resistance, strength and aesthetic appeal are required. However, dependent on the service conditions, stainless steels will stain and discolour due to surface deposits and so cannot be assumed to be completely maintenance-free. In order to achieve maximum corrosion resistance and aesthetic appeal, the surface of the stainless steel must be kept clean. Provided the grade of stainless steel and the surface finish are correctly selected, and cleaning schedules carried out on a regular basis, good performance and long service life will result.

For the correct selection of a Stainless Steel grade, with respect to Location, see Table below.

Factors affecting maintenance

Surface contamination and the formation of deposits on the surface of the stainless steel must be prevented. These deposits may be minute particles of iron or rust generated during construction. Industrial and even naturally occurring atmospheric conditions can produce deposits which can be equally corrosive, e.g. salt deposits from marine conditions.

Working environments can also provide aggressive conditions such as heat and humidity in swimming pool buildings. These conditions can result in surface discolouration of stainless steels and so maintenance on a more frequent basis may be required.

Modern processes use many cleaners, sterilizers and bleaches for hygienic purposes. Proprietary solutions, when used in accordance with makers' instructions, should be safe but if used incorrectly (e.g. warm or concentrated), may cause discolouration or corrosion on stainless steels. Strong acid solutions are sometimes used to clean masonry and tiling of buildings. These acids should never be used where contact with metals, including stainless steel, is possible. If this happens, the acid solution must be removed immediately, followed by dilution and rinsing with clean water.

Maintenance programme

With care taken during fabrication and installation, cleaning before 'hand-over' should not present any problems. More attention may be required if the installation period has been prolonged or hand-over delayed. Where surface contamination is suspected, immediate cleaning after site fixing should avoid problems later.

The frequency of cleaning is dependent on the application. This may vary from once to four times a year for external applications, Recommendations on cleaning frequencies in architectural applications are shown below.

Cleaning frequency

Reccommended Cleaning for various grades of Stainless Steel		
Location	304 Grade	316 Grade
Surbarban or Rural	Clean at 6-12mth intervals or as necessary	
Industrial or Urban	Clean at 3-6mth intervals	Clean at 6-12mth intervals
Coastal or Marine	Not recommended	