



 JURALCO

JURALCO EDGETEC[®] INFINITY BALUSTRADE SYSTEM

ISSUE 4/20

Juralco Edgetec® Infinity 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 Edgetec® Infinity Balustrade system is designed for Frameless Glass, from 12mm to 17.52mm, either Top or Faced fixed and for Residential or Commercial use.

An Interlinking Top Rail (depending on Glass type) must be used.

The system is extremely versatile and can be made in a range of configurations to suit most modern architectural requirements.

The Infinity Semi Frameless Glass system features heavy duty internal clamps at regular intervals all covered by continuous cover extrusions front and back, giving a streamlined minimal look. For Top or Face fixing.

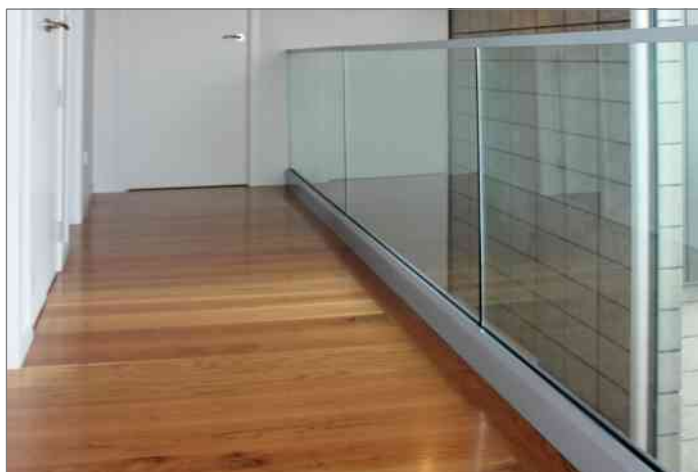
- Juralco Edgetec® Infinity Balustrade System
- Glass Panels from 12mm Toughened Safety Glass to 17.5mm SentryGlas®
- Tested to NZ standard NZS4203 and NZS1170
- Conforms to NZS 4223.3.2016
- Top Interlinking Rail to conform to NZS 4223.3.2016
- Clamps spaced at 400mm - 500mm centres depending on the application and Glass type
- Simple installation. Allows horizontal and vertical glass adjustment.



Top Fix System + Interlinking Top Rail



Top Fix System + SentryGlas. Interlinking Top rail not required



Top Fix System + Interlinking Top Rail



Face Fix System + Interlinking Top Rail

Juralco Edgetec® Infinity Balustrade Patent #NZ 630364
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Infinity Balustrade is for Domestic and Residential Occupancy types A, A Other and C3 and for Commercial Occupancy Types B, E, A Other and C3 Occupancy Types as per AS/NZ 1170.1.2002. Not suitable for Commercial C1/C2, C5 and D 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.	Residential, 12mm Toughened Glass, 15.2 mm Laminated or 13.52mm SentryGlas®
B, E	Offices and work areas not included elsewhere including storage areas.	Light access stairs and gangways not more than 600mm wide Fixed platforms, walkways, stairways and ladders for access Areas not susceptible to overcrowding in office and institutional buildings; also industrial and storage building.	Commercial, 15mm Toughened Glass, 17.2 mm Laminated or 17.52mm SentryGlas®
A Other, C3	Areas without obstacles for moving people and not susceptible to over crowding	Stairs, landings, external balconies, edges of roofs etc.	Residential or Commercial as detailed above

Note 1 All for 12mm or 15mm Toughened, 15.2mm or 17.2mm Laminated and 13.52mm or 17.52mm SentryGlas® . 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 Frameless Glass Balustrades must conform to NZS 4223.3.2016 See individual Layout pages for conformance details



Note 4 The Dulux powder coating warranty period is conditional upon the Balustrade being maintained in accordance with the Dulux 'Care and Maintenance Instructions'. See Page 5 for warnings concerning Coastal conditions. Contact your balustrade installer for a copy of the Care and Maintenance procedure.

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Juralco Edgetec® Infinity Balustrade System - Specifications, Powder Coating

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

1. Scope

- This specification details the documents the Juralco Infinity 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 Infinity Balustrade System has been reviewed by Lautrec Technology Group Ltd to demonstrate compliance with the structural requirements of the New Zealand Building Code and NZS 1170 : 2002 occupancy A, B, E ,A Other and C3, NZS 3604 Low, Medium, High, Very High and Extra High Wind Zones, to a maximum ULS wind load of 2.5kPa
- 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 Infinity 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 Infinity 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 Infinity System
- Aluminium extrusions, components and hardware – unless specified are manufactured to 6060 T5 specifications
- Stainless Steel components, hardware, fixings – all components to 304 or 316 grade
- Glass - all glass used in the Juralco Infinity Balustrade System must conform to the specifications as listed in the Juralco Infinity 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
- Unless specified otherwise, Dulux Duralloy® powder coating systems are used for properties greater than 100 metres from high tide level where AAMA 2603 performance is required
- Dulux Duratec® powder coating systems must be used for all properties greater than 10 metres and up to 100 metres from high tide level where AAMA 2604 performance is required
- Dulux Duralloy® has a 10 year film and colour integrity warranty, Dulux Duratec® has a 20 year film and colour integrity warranty

6. Installation and Fixing

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

Important instructions for Powder Coatings near Salt Water

The standard Dulux powder coating system used by Juralco is Duralloy® and is suitable for installations greater than 100 metres from high tide level and for buildings up to 3 stories above ground. Use Duratec® for installations between 10 and 100 metres from high tide level and for prestigious residential and commercial developments. For all other applications contact Juralco for alternative systems.

Note - Powder coated prices listed in Juralco price books are for the standard Duralloy® system. If the Duratec® system is required it must be specified upon placement of the order and will incur a surcharge – Duratec® prices on application.

Important instructions for Powder Coating - Attachment to structures

An EPDM or similar material spacer must be used to separate powder coated aluminium items from all timber, concrete and steel structures. Failure to do so can lead to the chemicals in the structure affecting the powder coating layer on the aluminium.

Powder Coating Warranty

The Dulux powder coating warranty period is conditional upon being maintained in accordance with the Dulux 'Care and Maintenance Instructions'. Contact your installer for a copy (or download from Dulux) of the Care and Maintenance instructions or refer to the back page of this manual.

Juralco Edgetec® Infinity Balustrade System Typical Layouts - Face Fix

Infinity Glass Clamps Face Fix + Interlinking Rail

Glass must have a minimum strength of 100Mpa
All edges polished

Clamp spacings
Min - 2 x clamps
Max - 4-5 x clamps
Max Tension load per Face fixing = 20kN

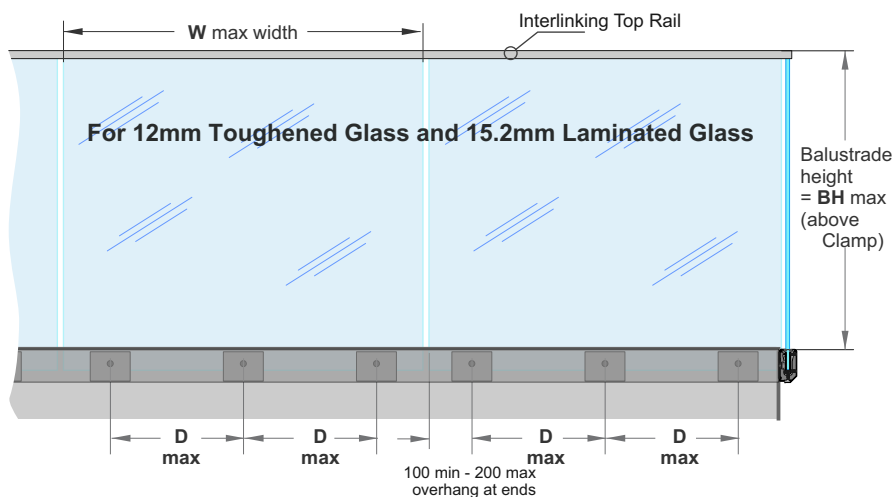
Residential & Domestic only Occupancy types A, A Other and C3 For 12mm Toughened Glass only

- D max 500mm.
- BH max 1200mm
- W max 1900mm

For 15.2mm Laminated Glass only

- D max 500mm.
- BH max 1150mm
- W max 1900mm

Note: See individual Mounting pages for construction options



Exceeds the wind loading for all Wind Zones up to **and Including Very High Wind Zone** as set out in NZS 3604:2011

Refer to the Interlinking Top Rail page for conformance to NZS 4223.3.2016.

Infinity Glass Clamps Face Fix + Interlinking Rail

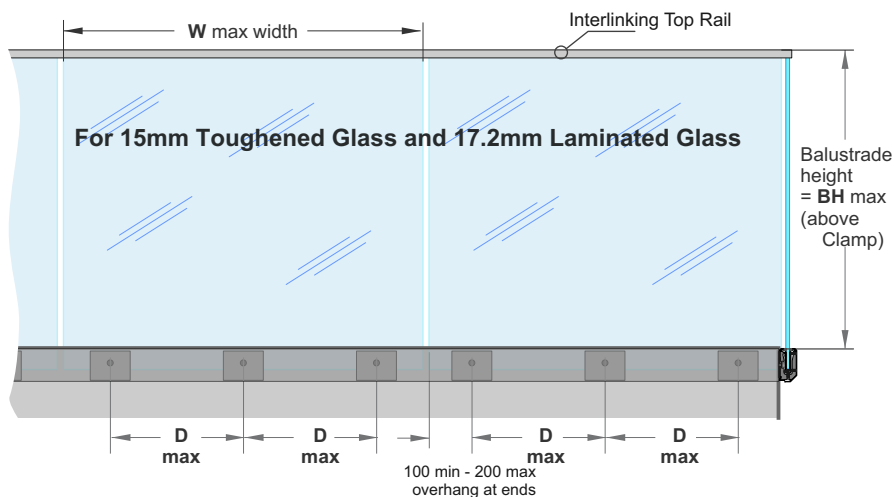
Glass must have a minimum strength of 100Mpa
All edges polished

Clamp spacings
Min - 2 x clamps
Max - 4-5 x clamps
Max Tension load per Face fixing = 23kN

Commercial Occupancy types B, E, and C3 only All for 15mm Toughened Glass or 17.2mm Laminated Glass

- D max 400mm
- BH max 1300mm
- W max 1600mm

Note: See individual Mounting pages for construction options



Exceeds the wind loading for all Wind Zones up to **and Including Extra High Wind Zone** as set out in NZS 3604:2011

Refer to the Interlinking Top Rail page for conformance to NZS 4223.3.2016.

Infinity Glass Clamps Face Fix

POOL FENCING only

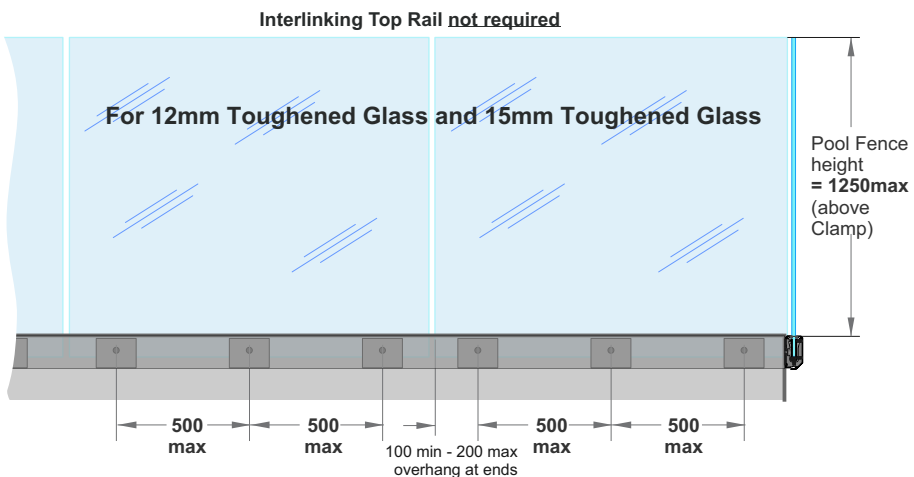
Glass must have a minimum strength of 100Mpa
All edges polished

Clamp spacings
Min - 2 x clamps. Max - 4-5 x clamps
Panel width 2000mm max

Max Tension load per Face fixing = 27kN

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



12mm Toughened - Very High Wind Zone. 15mm Toughened - Extra High Wind Zone

Note: See individual Mounting pages for construction options

Juralco Edgetec® Infinity Balustrade System Typical Layouts - Face Fix

Infinity Glass Clamps
Face Fix + Stiffener Brackets

Glass must have a minimum strength of 100Mpa
All edges polished
Clamp spacings
Min - 2 x clamps
Max - 4-5 x clamps
Max Tension load per Face fixing = 20kN

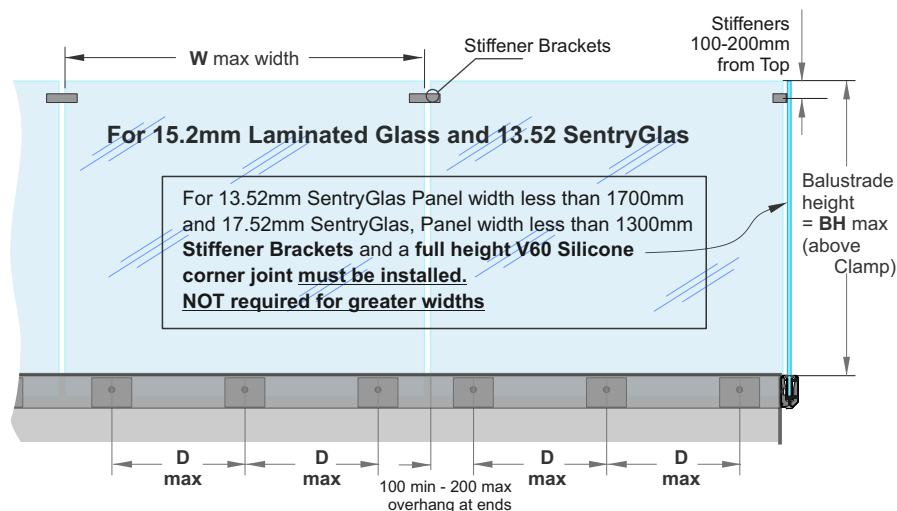
Residential & Domestic only
Occupancy types A, A Other and C3
For 15.2mm Laminated Glass only

- D max 500mm.
- BH max 1150mm
- W max 1900mm

For 13.52mm SentryGlas only

- D max 350mm.
- BH max 1050mm
- W max - none for SG

Note: See individual Mounting pages for construction options



Exceeds the wind loading for all Wind Zones up to **and including Very High Wind Zone** as set out in NZS 3604:2011

Refer to the Stiffener Bracket pages for conformance to NZS 4223.3.2016.

Infinity Glass Clamps
Face Fix + Stiffener Brackets

Glass must have a minimum strength of 100Mpa
All edges polished
Clamp spacings
Min - 2 x clamps
Max - 4-5 x clamps
Max Tension load per Face fixing = 23kN

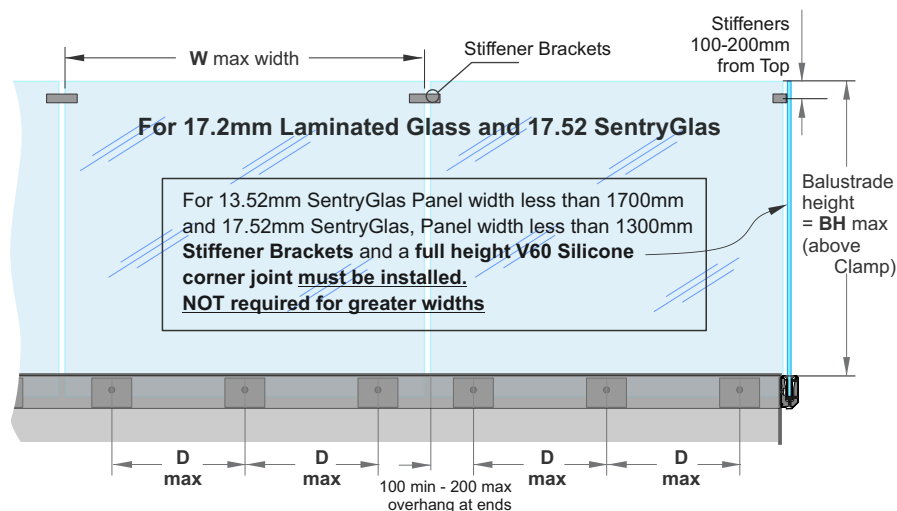
Commercial Occupancy types B, E, and C3 only
For 17.2mm Laminated Glass only

- D max 400mm
- BH max 1300mm
- W max 1600mm

For 17.52mm SentryGlas

- D max 350mm
- BH max 1200mm
- W max - none for SG

Note: See individual Mounting pages for construction options



Exceeds the wind loading for all Wind Zones up to **and including Extra High Wind Zone** as set out in NZS 3604:2011

Refer to the Stiffener Bracket pages for conformance to NZS 4223.3.2016.

SentryGlas® Glass Layers and Thickness Orientation

Glass Thickness (mm)	Inner Layer of Glass thickness (mm) Deckside	Interlayer thickness(mm) and Type	Outer Layer Glass thickness (mm)
13.52	6	1.52 SentryGlas®	6
17.52	8	1.52 SentryGlas®	8

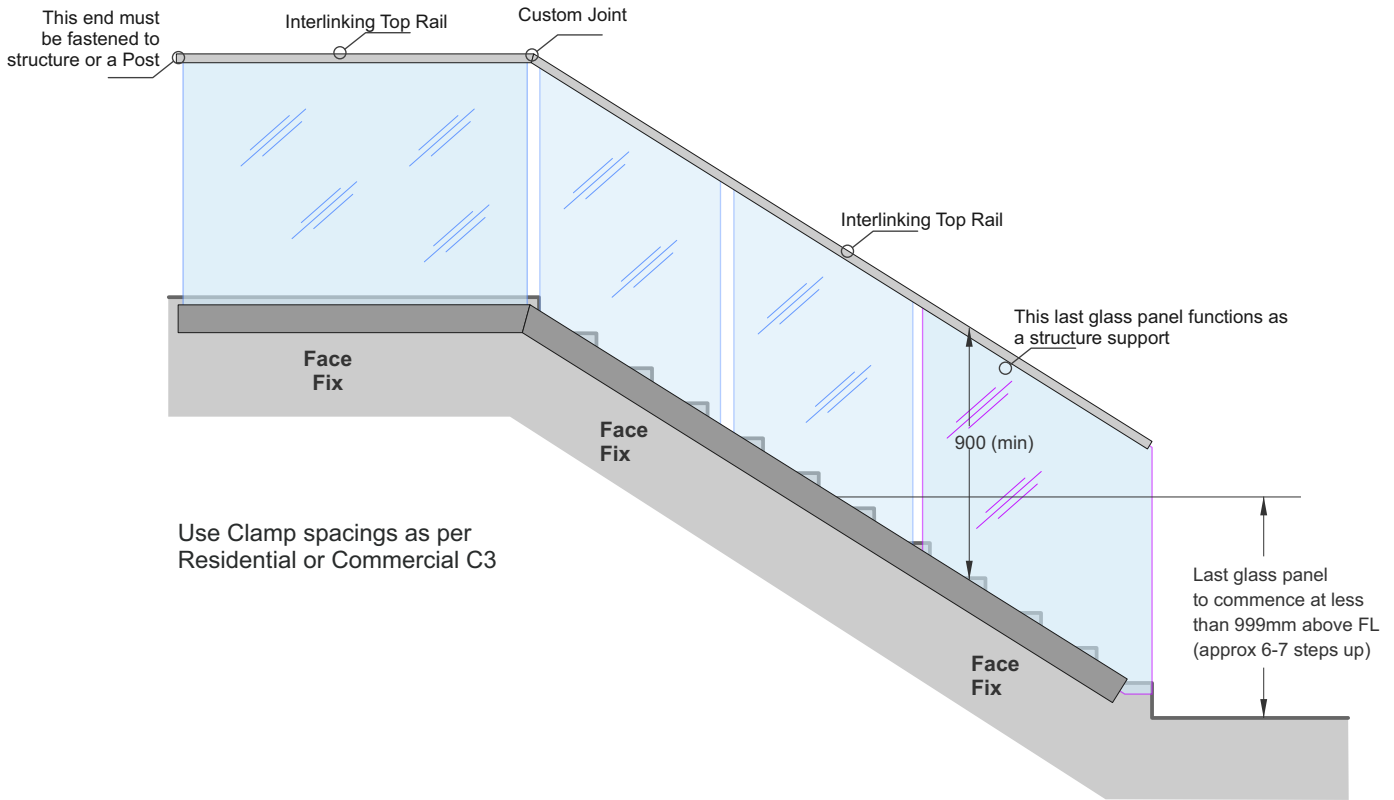
Refers to previous page. Laminated Glass Layers and Thickness Orientation

Glass Thickness (mm)	Inner Layer of Glass thickness (mm) Deckside	Interlayer thickness(mm) and Type	Outer Layer Glass thickness (mm)
15.2	8	1.2EVA	6
17.2	8	1.2EVA	8

Juralco Edgetec® Infinity Balustrade System - Typical Stair Layout

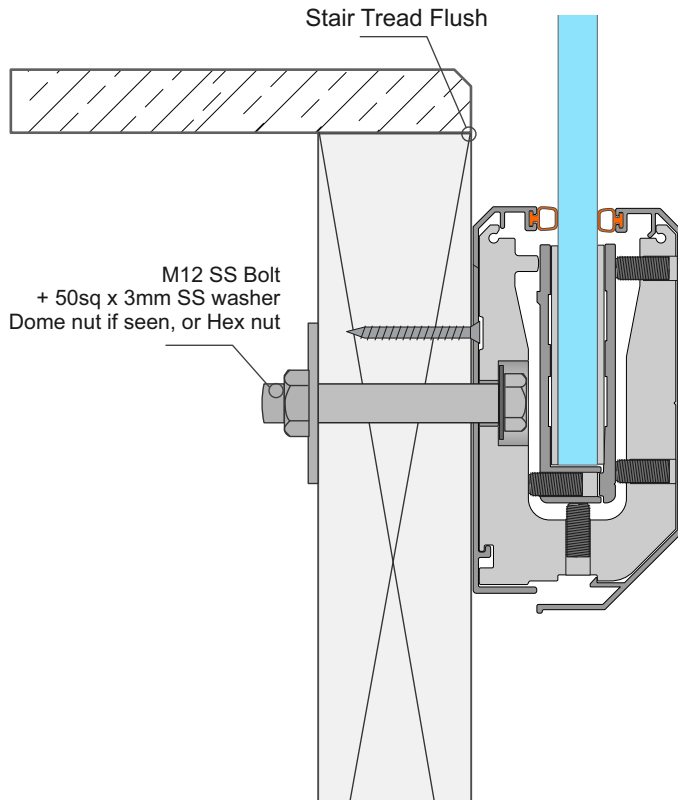
Infinity, Stairs Face Fix

Stair structure to be designed by others to resist Balustrade actions as per NZS1170.1 Table 3.3



Infinity Balustrade - Face fix only Stair Stringer Detail

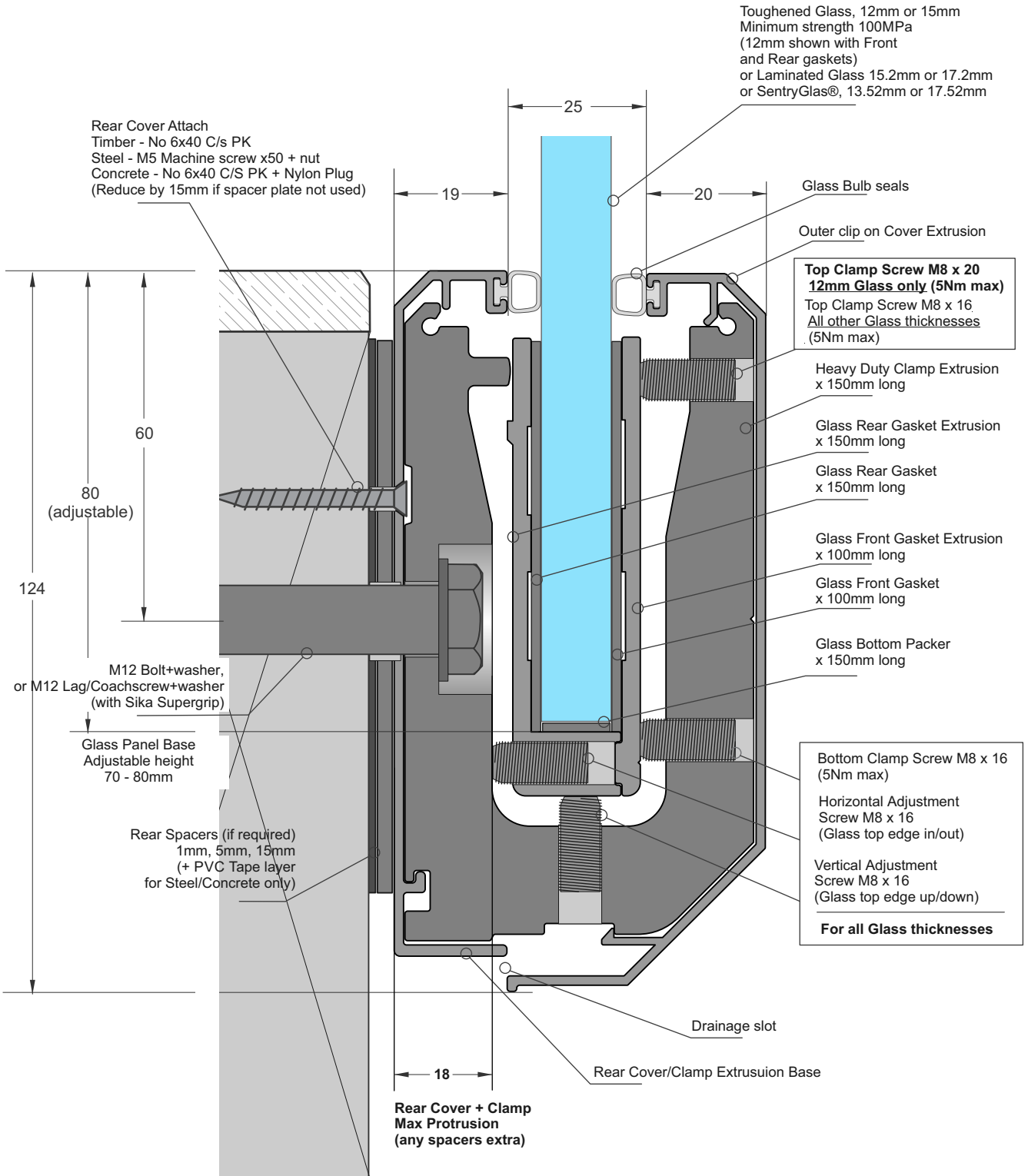
Stair structure to be designed by others to resist Balustrade actions as per NZS1170.1 Table 3.3
For Internal use only, Residential Type A



Juralco Edgetec® Infinity Balustrade System - Face Fix General

Infinity Glass Clamp
Face Fix
(12mm Glass Shown)

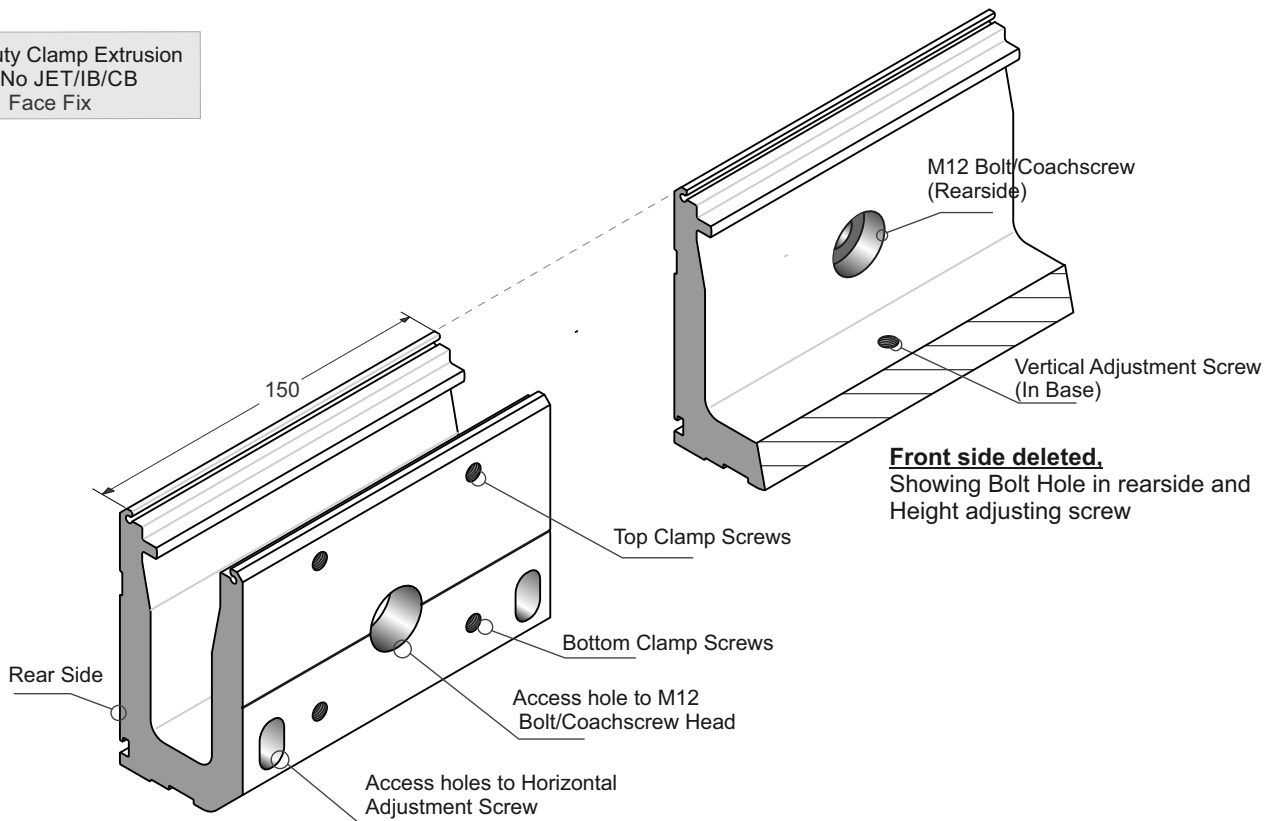
The Infinity Balustrade Clamp comes as a kit;
Clamp Extrusion, Front and Rear Gasket Extrusions
Gaskets, Glass bottom Packer and all adjusting screws.
(M12 Fastener not included)



Elevation showing the Main Features

Juralco Edgetec® Infinity Balustrade System - Face Fix Components

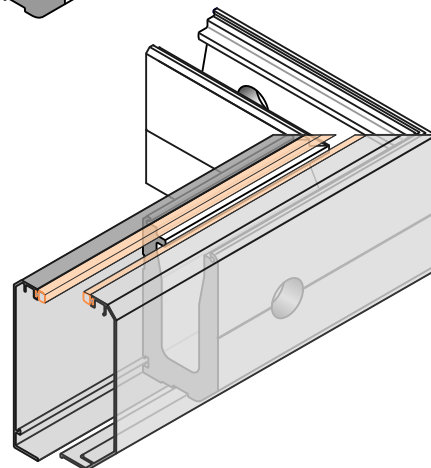
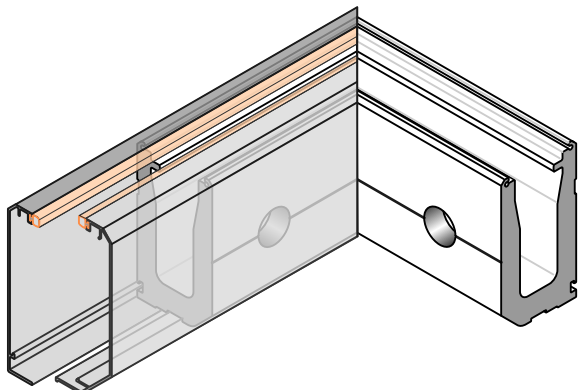
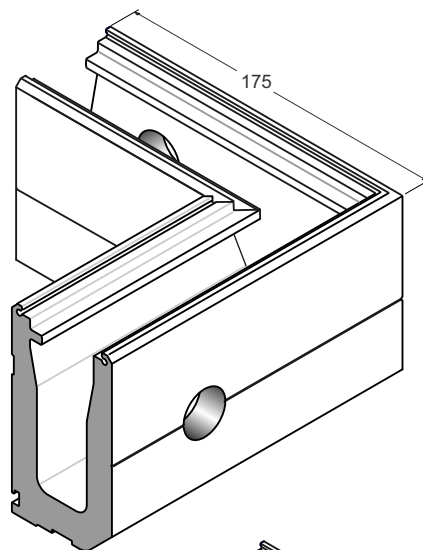
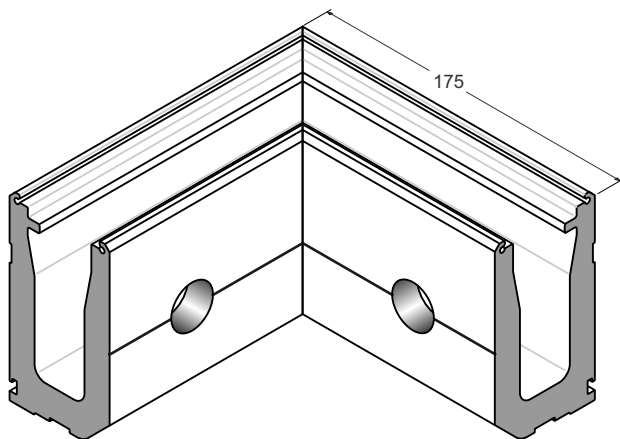
Heavy Duty Clamp Extrusion
Part No JET/IB/CB
Face Fix



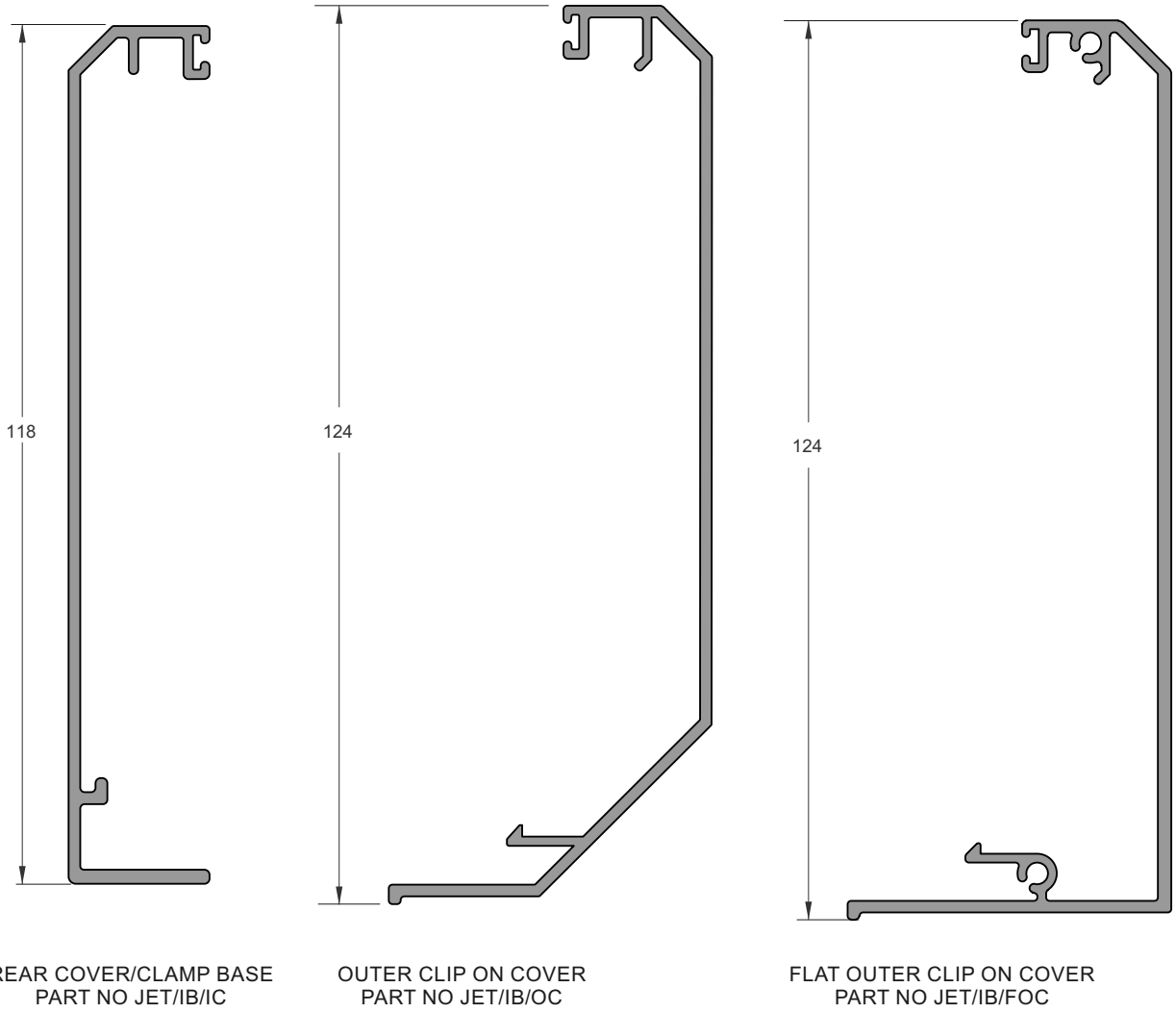
Heavy Duty Clamp Extrusion
90deg Internal Corner
Part No JET/IB/INCNRBLK
Face Fix

Note: These corners are used only to align the mitered Rear and Front cover corners. They are not supplied with Glass Clamps or adjusting screws

Heavy Duty Clamp Extrusion
90deg External Corner
Part No JET/IB/EXCNRBLK

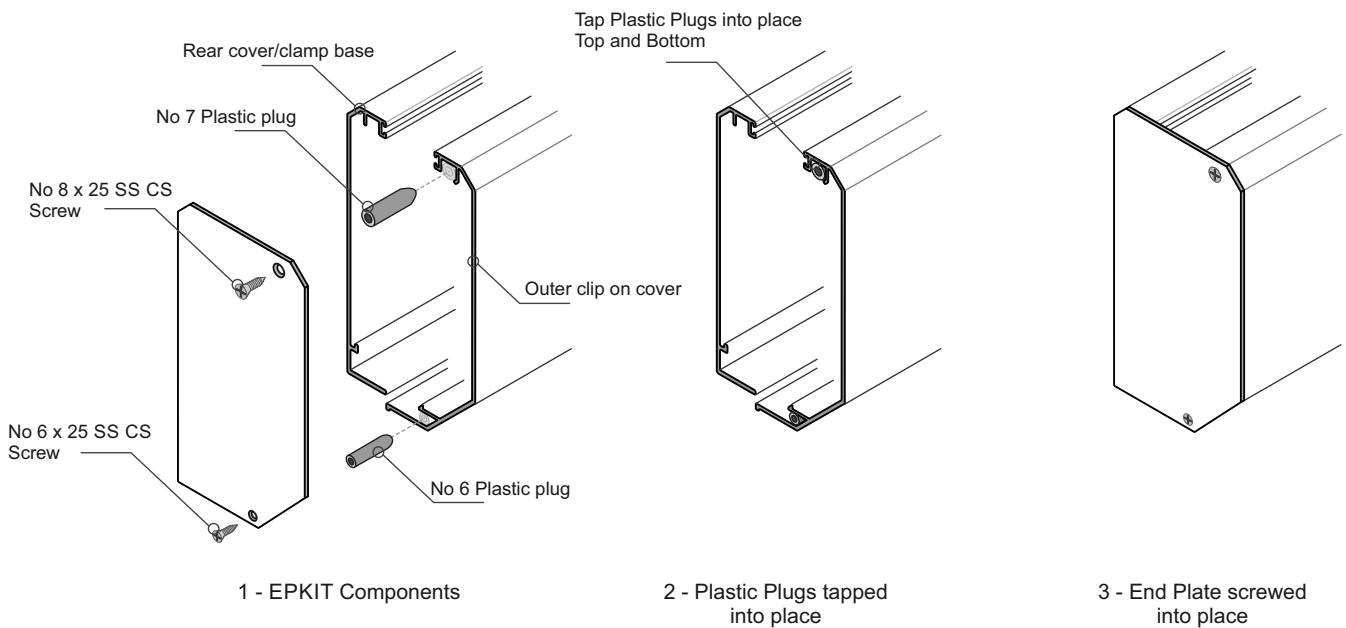


Juralco Edgetec® Infinity Balustrade System - Face Fix Extrusions



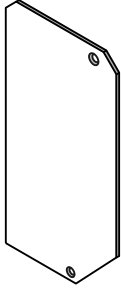
End Plate Fastening
with JET/IB/EPKIT
Face Fix

Note: Exactly the same procedure
for the Flat Cover



Juralco Edgetec® Infinity Balustrade System - Face Fix Components

Extrusion End Plate
Part No JET/IB/EPKIT



Kit Includes
No7 Plastic plug + 8g x 25 SS CS Screw
No 6 Plastic plug + 6g x 25 SS CS Screw

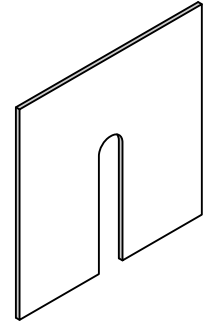
Flat Cover End Plate
Part No JET/IB/FEP



For Flat Outer Cover - Kit Includes
No7 Plastic plug + 8g x 25 SS CS Screw
No 6 Plastic plug + 6g x 25 SS CS Screw

Rear Spacer Plate
100 wide x 94 deep

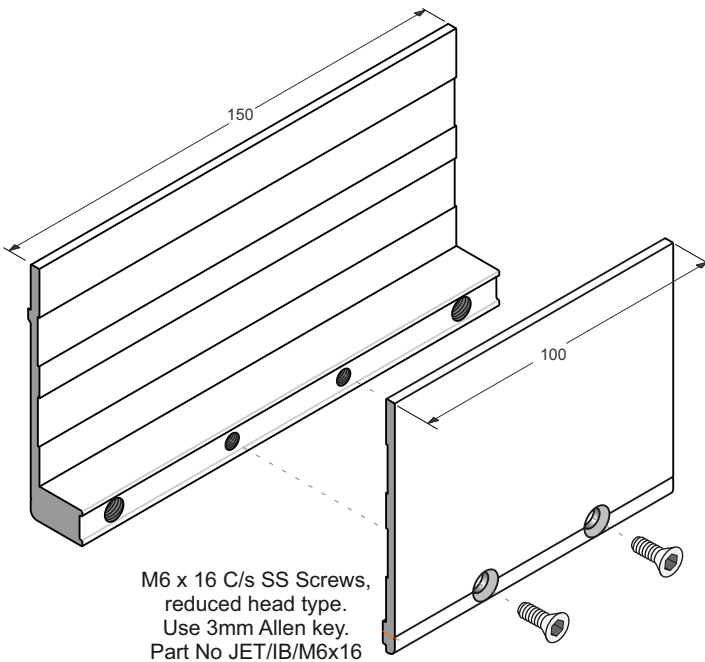
Use only if required



1mm thick Plate - Part No JET/IB/CSP/1.0
5mm thick Plate - Part No JET/IB/CSP/5.0

Glass Gasket Extrusions
Front and Rear

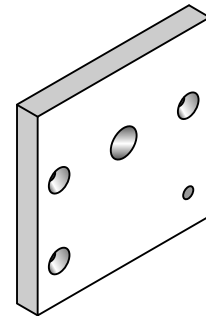
Front 100 wide, Part No JET/IB/GS/12
Rear 150 wide, Part No JET/IB/GS/15



M6 x 16 C/s SS Screws,
reduced head type.
Use 3mm Allen key.
Part No JET/IB/M6x16

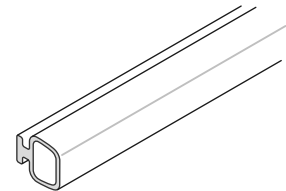
Rear Spacer Plate 15mm
Part No JET/IB/CSP/15

For use on Timber Decks

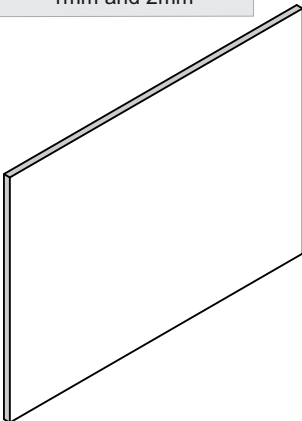


100 wide x 94 high x 15mm thick

Glass Bulb Seal
Part No JET/IB/CVRBLB250



Glass Gaskets
1mm and 2mm



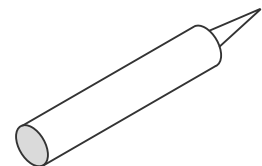
Gasket Schedule

12mm Toughened	Use 2 x 2mm Gaskets
13.2mm Laminated	
13.52mm SentryGlas	
15mm Toughened	Use 2 x 1mm Gaskets
17.2mm Laminated	
17.52mm SentryGlas	

Gasket 2mm Thick	Front 100 wide, Part No JET/IB/GGF2 Rear 150 wide, Part No JET/IB/GGR2
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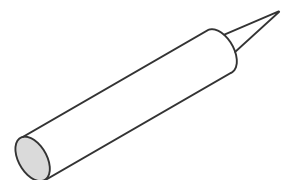
Gasket 1mm Thick	Front 100 wide, Part No JET/IB/GGF1 Rear 150 wide, Part No JET/IB/GGR1
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SIKA Supergrip 2hr
Part No JEC SUPERGRIP



For All Coachscrews fixings

Rhodorsil V60 Clear Silicone
Part No H/RTV419098



Construction Silicone

Approved Timber Construction Options

Face Fix into Double Joist

M12 SS Bolts or Threaded Rod - All Wind Zones

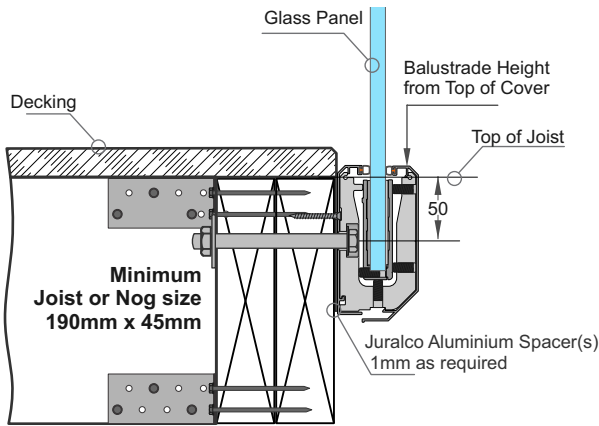
M12 SS Lagscrews - All Wind Zones

M12 SS Coachscrews - Up to and Incl

Very High Wind Zone only

Note: All Lag/Coachscrews 90mm min

Screw engagement into Joists



1 - Attach Directly to Double or Triple Joists using 1mm alignment Spacers

Approved Timber Construction Options

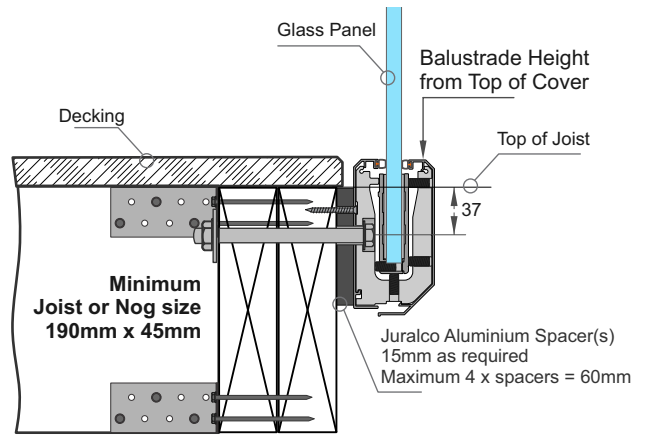
Face Fix into Triple Joist

M12 SS Bolts or Threaded Rod - All Wind Zones

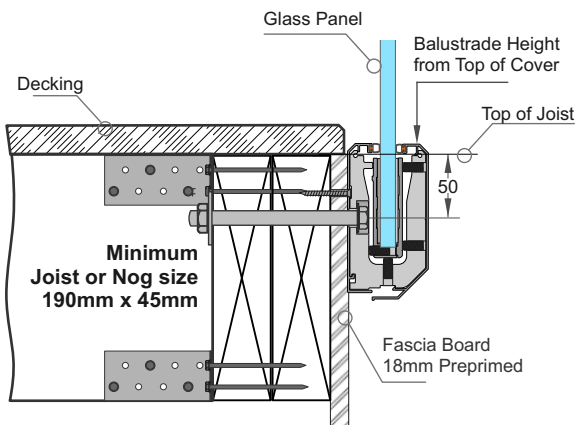
M12 SS Coachscrews - All Wind Zones

Note: All Coachscrews 130mm min

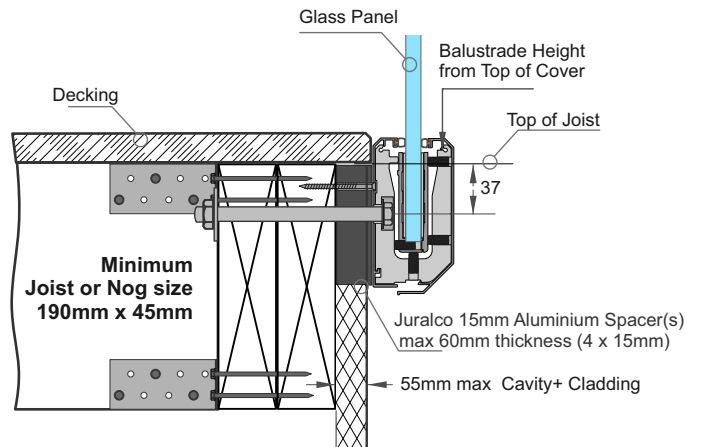
Screw engagement into Joists



2- Attach Directly to Double or Triple Joists using 15mm Spacers.

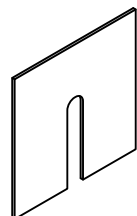


3 - Attach Directly to a Fascia then Double or Triple Joists using 1mm alignment Spacers

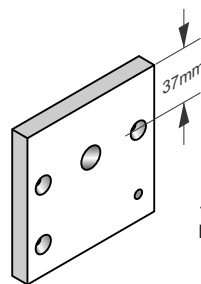


4 - Attach through Cavity Wall to Double or Triple Joists using 15mm Spacers (60mm max)

Rear Spacer Plates
94 high x 100 wide



1mm thick Plate
Part No JET/IB/CSP/1.0
5mm thick Plate
Part No JET/IB/CSP/5.0



15mm thick Plate
Part No JET/IB/CSP/15

Juralco Edgetec® Infinity Balustrade System - Typical Fixing - Residential

Complies with NZS3604:2011 - Double Boundary Joists

Typical FACE Fix to Timber - M12 SS Lag/Coachscrew

Very High Wind Zone

- Residential A, A Other and C3 only

Lag/Coachscrew attach

Glass Thickness, Type	Balustrade Height (max)	Clamp Spacing (max)	Glass Thickness, Type	Balustrade Height (max)	Clamp Spacing (max)
12 T	1200	500	15.2L	1150	500

Glass Thickness, Type	Balustrade Height (max)	Clamp Spacing (max)
13.52SG	1050	350

Note:
These attach comments apply to this page only

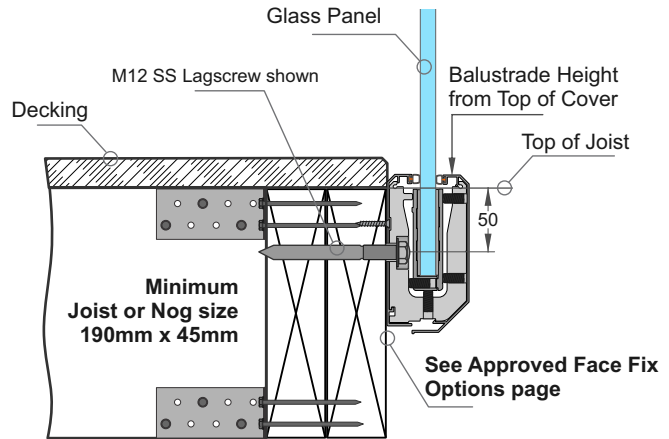
Very High Wind Zone Pool Fence only	Extra High Wind Zone Pool Fence only
Lag/Coachscrew attach	Lagscrew attach only

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

Glass Thickness, Type	Fence Height (max)	Clamp Spacing (max)	Glass Thickness, Type	Fence Height (max)	Clamp Spacing (max)
12T	1250	500	15T	1250	500

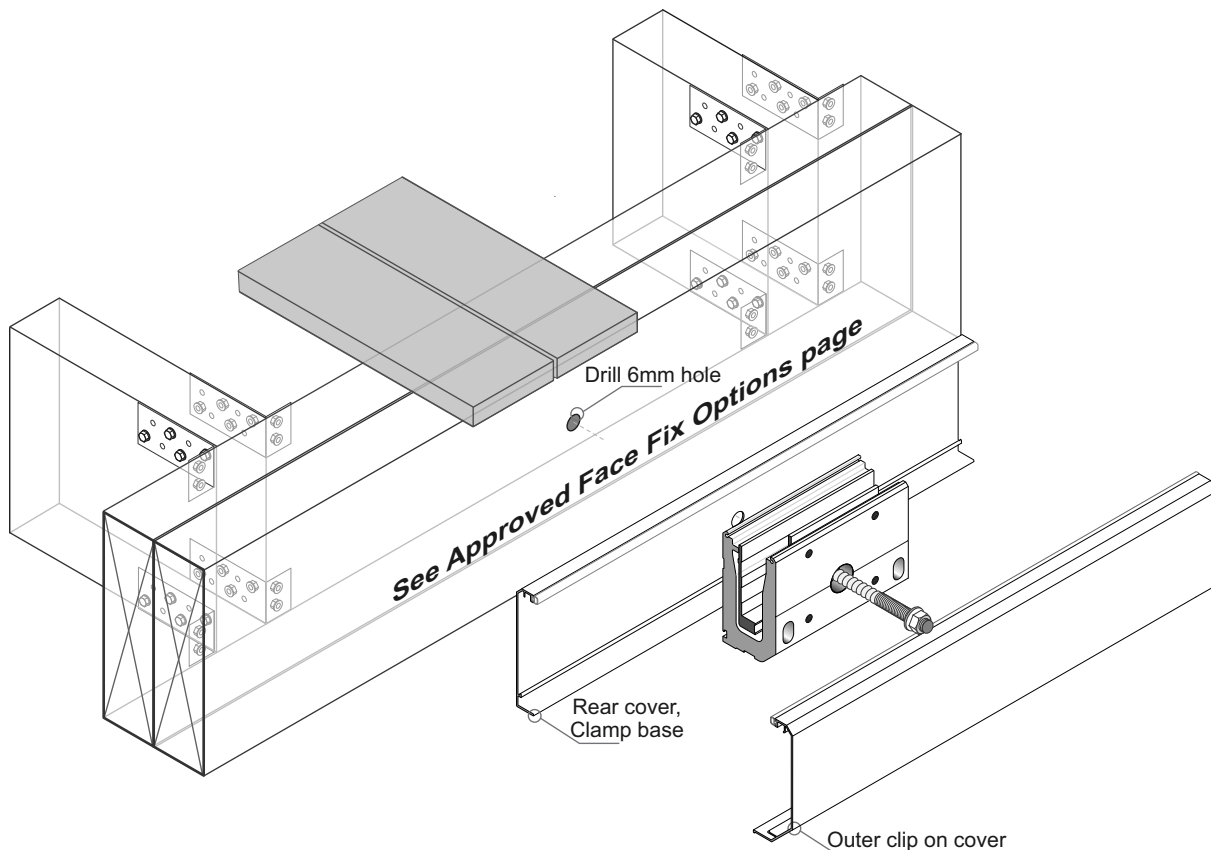
General Notes:

- 1 - Glass thickness, mm
Glass type T= Toughened, L = Laminated, SG = SentryGlas
- 2 - All measurements mm
- 3 - Refer to Elevations for Min/Max Panel widths and the use of Top Interlinking Rails (T and L only) or Stiffener Brackets (L and SG only)



Important Installation Notes:

- 1 - A Project engineer must ensure the structure can support the appropriate loads
- 2 - Pre-drill a 6mm dia Hole for Lag/Coachscrew
- 3 - Bond all screws with SIKA Supergrip to full depth
- 4 - Lag/Coachscrews 90mm min screw engagement into joists
- 5 - For Face Fix details see the Approved Face fix Options page
- 6 - All fixings must be Stainless Steel



Juralco Edgetec® Infinity Balustrade System - Typical Fixing - Residential

Complies with NZS3604:2011 - Double Boundary Joists

Typical FACE Fix to Timber - M12 SS Bolt or M12 SS Threaded Rod

Very High Wind Zone

- Residential A, A Other and C3 only

Lag/Coachscrew attach

Glass Thickness, Type	Balustrade Height (max)	Clamp Spacing (max)	Glass Thickness, Type	Balustrade Height (max)	Clamp Spacing (max)
12 T	1200	500	15.2L	1150	500

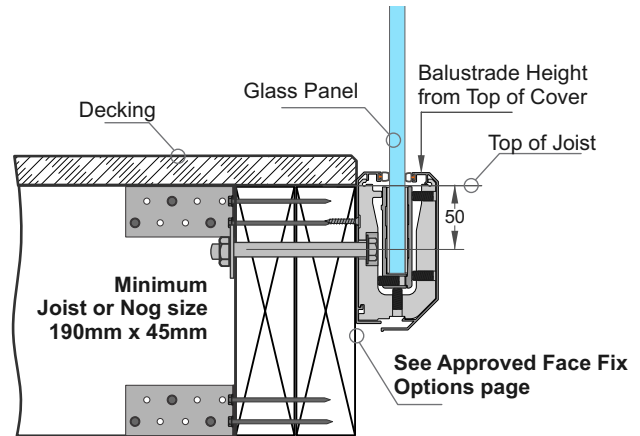
Glass Thickness, Type	Balustrade Height (max)	Clamp Spacing (max)
13.52SG	1050	350

Note:
These attach comments apply to this page only

Very High Wind Zone Pool Fence only	Extra High Wind Zone Pool Fence only
Lag/Coachscrew attach	Lagscrew attach only

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

Glass Thickness, Type	Fence Height (max)	Clamp Spacing (max)	Glass Thickness, Type	Fence Height (max)	Clamp Spacing (max)
12T	1250	500	15T	1250	500

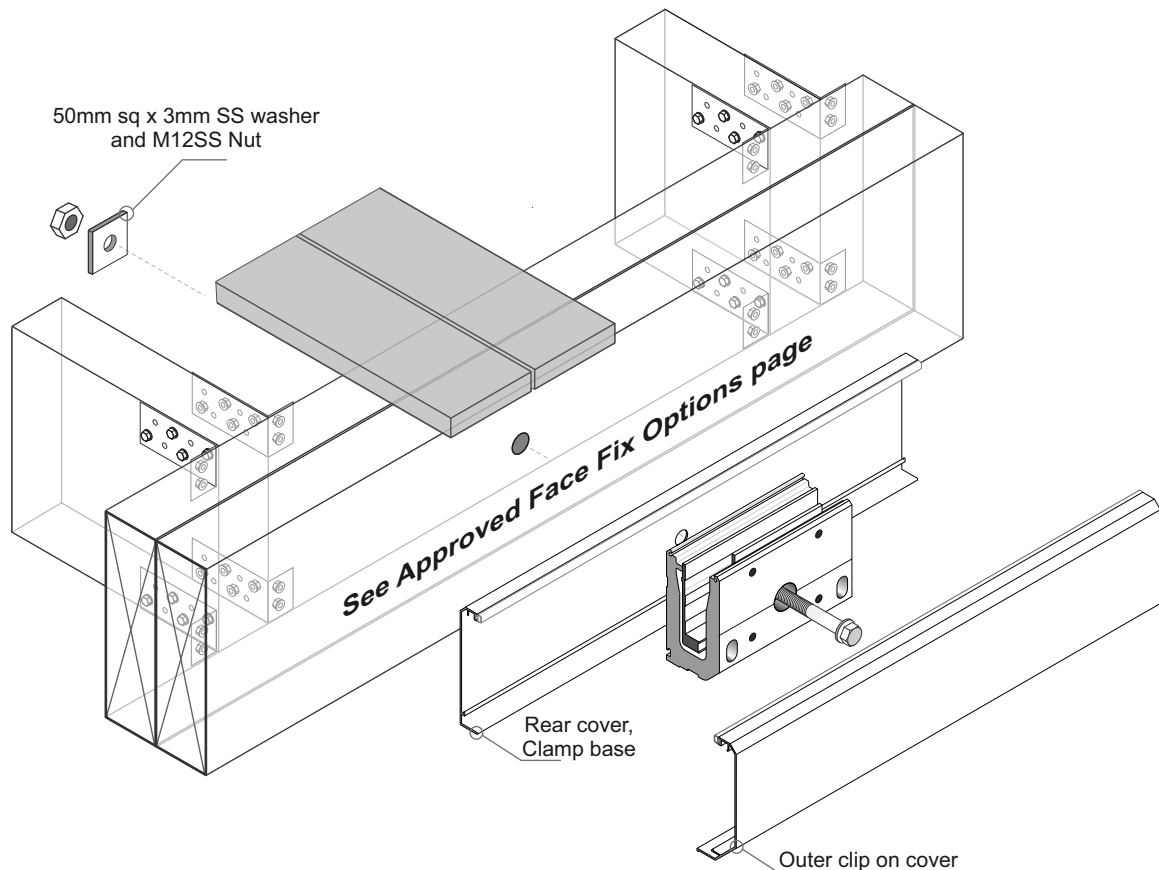


General Notes:

- 1 - Glass thickness, mm
Glass type T= Toughened, L = Laminated, SG = SentryGlas
- 2 - All measurements mm
- 3 - Refer to Elevations for Min/Max Panel widths and the use of Top Interlinking Rails (T and L only) or Stiffener Brackets (L and SG only)

Important Installation Notes:

- 1 - A Project engineer must ensure the structure can support the appropriate loads
- 2 - For Face Fix details see the Approved Face fix Options page
- 3 - All fixings must be Stainless Steel



Juralco Edgetec® Infinity Balustrade System - Typical Fixing - Residential

Complies with NZS3604:2011 - Double Boundary Joists

Typical Hidden FACE Fix to Timber - M12 SS Lag/Coachscrew

Very High Wind Zone

- Residential A, A Other and C3 only

Lag/Coachscrew attach

Glass Thickness, Type	Balustrade Height (max)	Clamp Spacing (max)	Glass Thickness, Type	Balustrade Height (max)	Clamp Spacing (max)
12 T	1200	500	15.2L	1150	500

Glass Thickness, Type	Balustrade Height (max)	Clamp Spacing (max)
13.52SG	1050	350

Note:
These attach comments apply to this page only

Very High Wind Zone Pool Fence only

Lag/Coachscrew attach

Extra High Wind Zone Pool Fence only

Lagscrew attach only

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

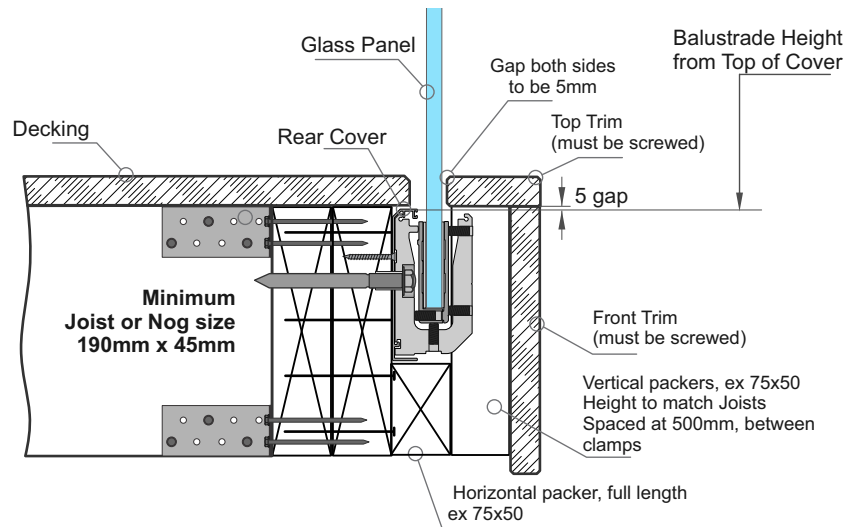
Glass Thickness, Type	Fence Height (max)	Clamp Spacing (max)	Glass Thickness, Type	Fence Height (max)	Clamp Spacing (max)
12T	1250	500	15T	1250	500

General Notes:

- 1 - Glass thickness, mm
Glass type T= Toughened, L = Laminated, SG = SentryGlas
- 2 - All measurements mm
- 3 - Refer to Elevations for Min/Max Panel widths and the use of Top Interlinking Rails (T and L only) or Stiffener Brackets (L and SG only)

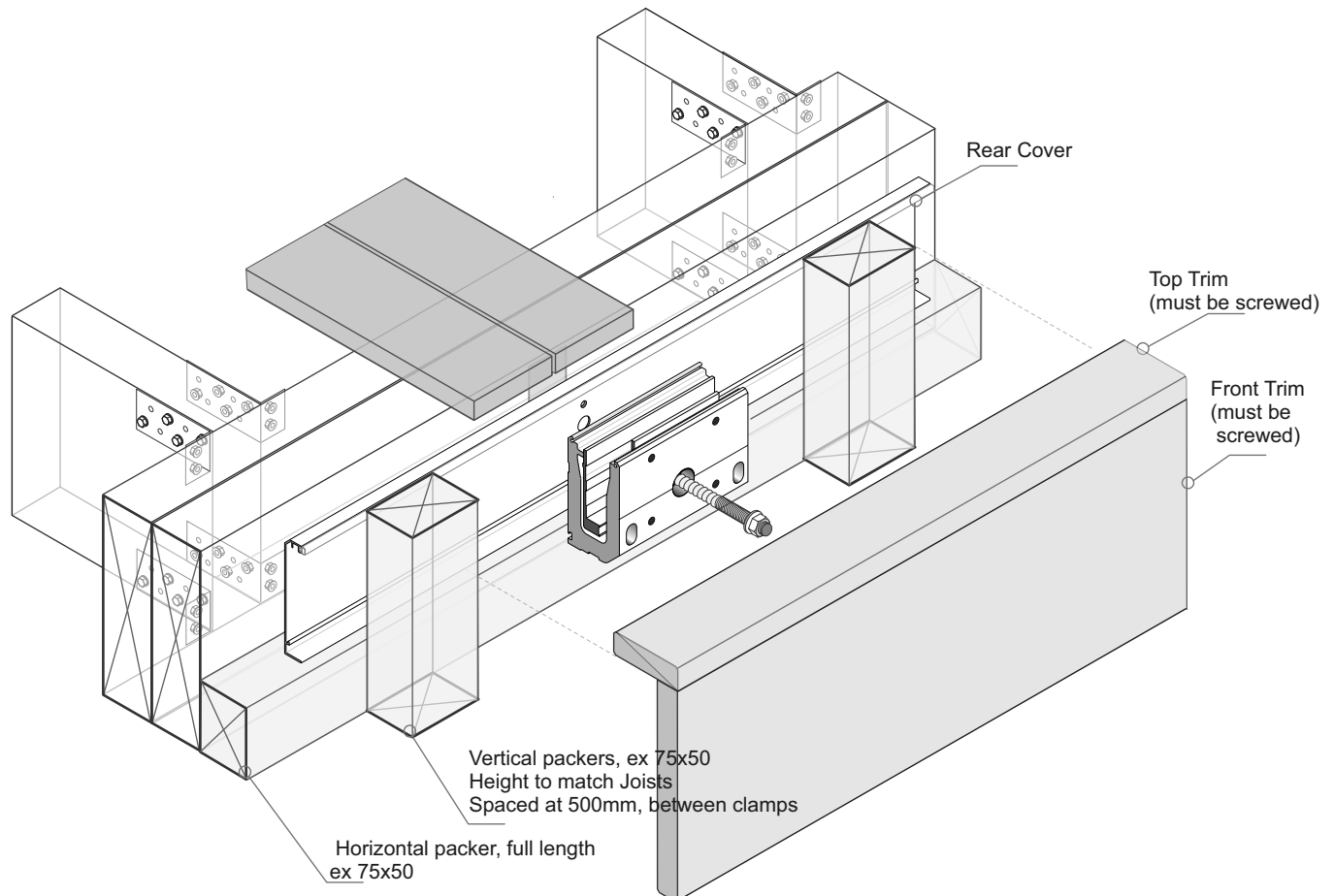
Important Note.

No Front Cover used, Back cover only



Important Installation Notes:

- 1 - A Project engineer must ensure the structure can support the appropriate loads
- 2 - Predrill a 6mm dia Hole for Lag/Coachscrew
- 3 - Bond all screws with SIKA Supergrip to full depth
- 4 - Lag/Coachscrews 90mm min screw engagement into joists
- 5 - For Face Fix details see the Approved Face fix Options page
- 6 - All fixings must be Stainless Steel



Juralco Edgetec® Infinity Balustrade System - Typical Fixing - Residential

Complies with NZS3604:2011 - Double Boundary Joists

Typical FACE Fix through a cavity into Timber - M12 SS Lag/Coachscrew

Very High Wind Zone

- Residential A, A Other and C3 only

Lag/Coachscrew attach

Glass Thickness, Type	Balustrade Height (max)	Clamp Spacing (max)	Glass Thickness, Type	Balustrade Height (max)	Clamp Spacing (max)
12 T	1200	500	15.2L	1150	500

Glass Thickness, Type	Balustrade Height (max)	Clamp Spacing (max)
13.52SG	1050	350

Note:
These attach comments apply to this page only

Very High Wind Zone Pool Fence only

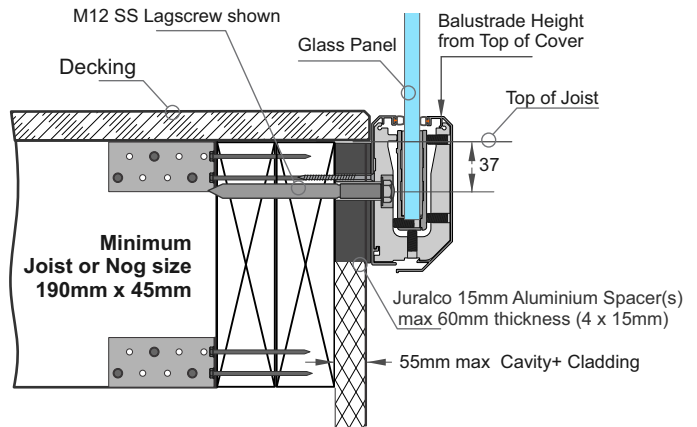
Lag/Coachscrew attach

Extra High Wind Zone Pool Fence only

Lagscrew attach only

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

Glass Thickness, Type	Fence Height (max)	Clamp Spacing (max)	Glass Thickness, Type	Fence Height (max)	Clamp Spacing (max)
12T	1250	500	15T	1250	500

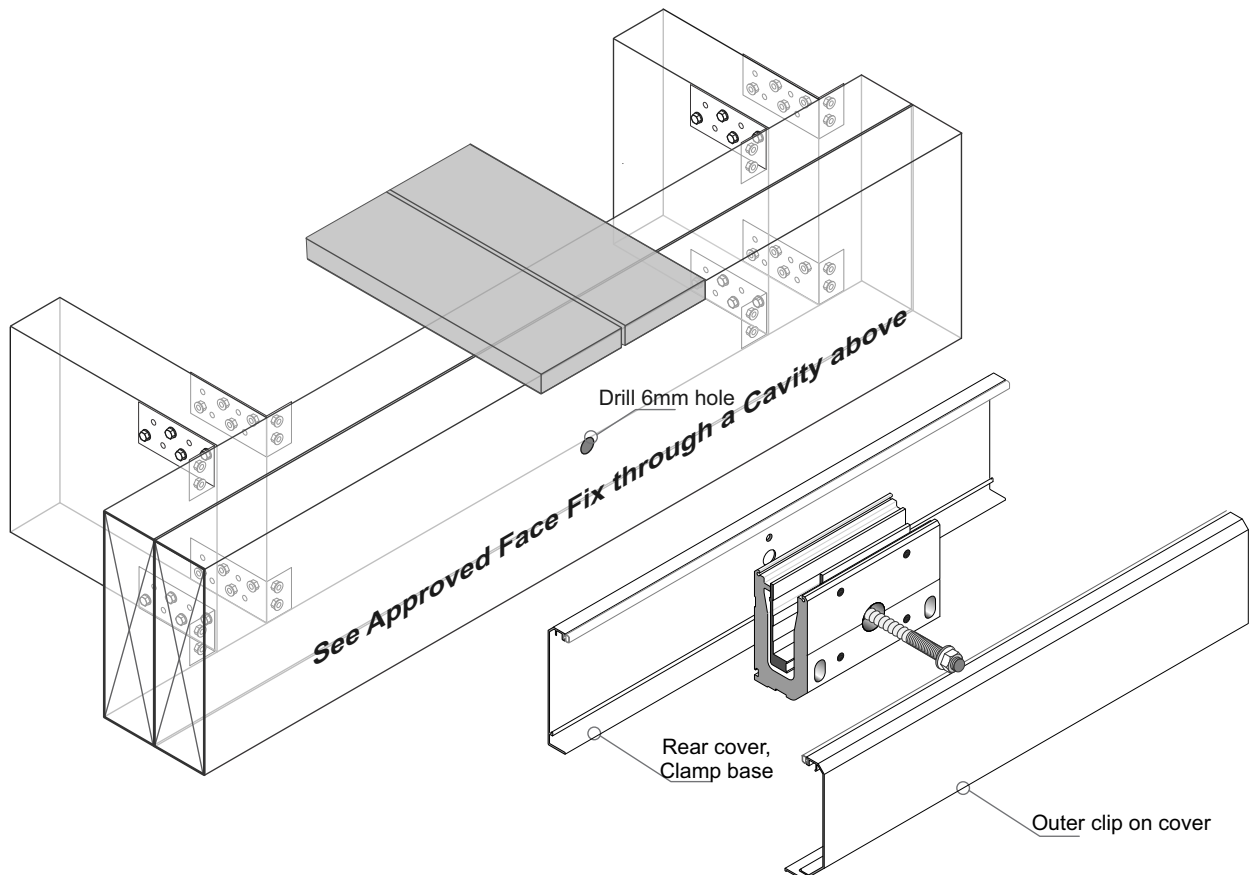


Important Installation Notes:

- 1 - A Project engineer must ensure the structure can support the appropriate loads
- 2 - Predrill a 6mm dia Hole for Lag/Coachscrew
- 3 - Bond all screws with SIKA Supergrip to full depth
- 4 - Lag/Coachscrews 90mm min screw engagement into joists
- 5 - For Face Fix details see the Approved Face fix Options page
- 6 - All fixings must be Stainless Steel

General Notes:

- 1 - Glass thickness, mm
Glass type T= Toughened, L = Laminated, SG = SentryGlas
- 2 - All measurements mm
- 3 - Refer to Elevations for Min/Max Panel widths and the use of Top Interlinking Rails (T and L only) or Stiffener Brackets (L and SG only)



Juralco Edgetec® Infinity Balustrade System - Typical Fixing - Commercial

Complies with NZS3604:2011 - Triple Boundary Joists

Typical FACE Fix to Timber - M12 SS Coachscrew

Extra High Wind Zone
- Commercial B, E and C3 only
Coachscrew attach OK

Glass Thickness, Type	Balustrade Height (max)	Clamp Spacing (max)	Glass Thickness, Type	Balustrade Height (max)	Clamp Spacing (max)
15 T	1300	400	17.2L	1300	400

Glass Thickness, Type	Balustrade Height (max)	Clamp Spacing (max)
17.52SG	1200	350

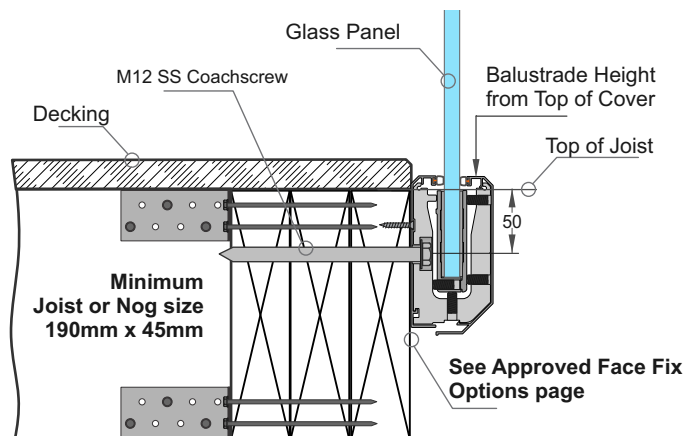
Note:
These attach comments apply to this page only

Very High Wind Zone Pool Fence only
Coachscrew attach OK

Extra High Wind Zone Pool Fence only
Coachscrew attach OK

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

Glass Thickness, Type	Fence Height (max)	Clamp Spacing (max)	Glass Thickness, Type	Fence Height (max)	Clamp Spacing (max)
12T	1250	500	15T	1250	500

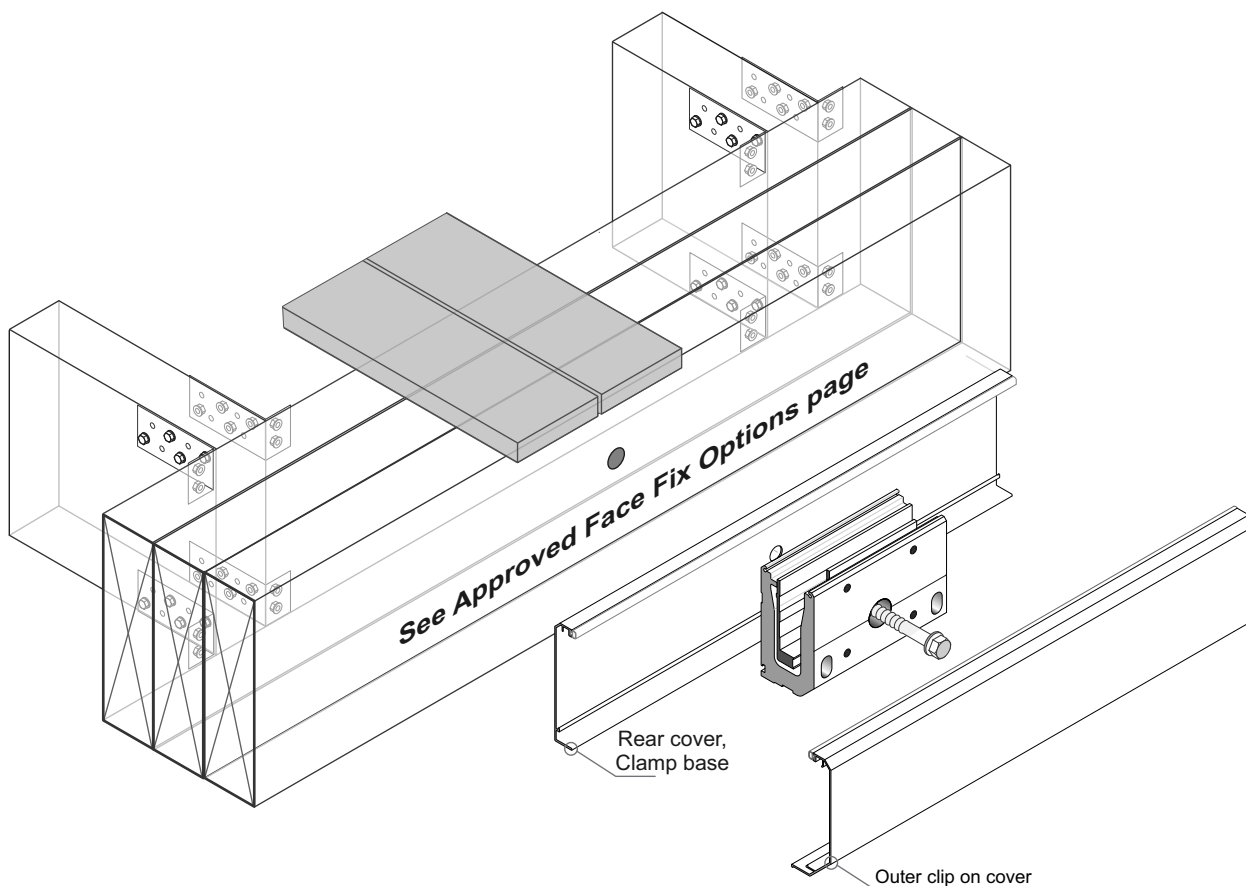


General Notes:

- 1 - Glass thickness, mm
Glass type T= Toughened, L = Laminated, SG = SentryGlas
- 2 - All measurements mm
- 3 - Refer to Elevations for Min/Max Panel widths and the use of Top Interlinking Rails (T and L only) or Stiffener Brackets (L and SG only)

Important Installation Notes:

- 1 - A Project engineer must ensure the structure can support the appropriate loads
- 2 - Coachscrews 130mm min screw engagement into joists
- 3 - Bond all coachscrews with SIKA Supergrip to full depth
- 4 - For Face Fix details see the Approved Face fix Options page
- 5 - All fixings must be Stainless Steel



Juralco Edgetec® Infinity Balustrade System - Typical Fixing - Commercial

Complies with NZS3604:2011 - Double Boundary Joists

Typical FACE Fix to Timber - M12 SS Bolt or M12 SS Threaded Rod

Extra High Wind Zone - Commercial B, E and C3 only

Glass Thickness, Type	Balustrade Height (max)	Clamp Spacing (max)	Glass Thickness, Type	Balustrade Height (max)	Clamp Spacing (max)
15 T	1300	400	17.2L	1300	400

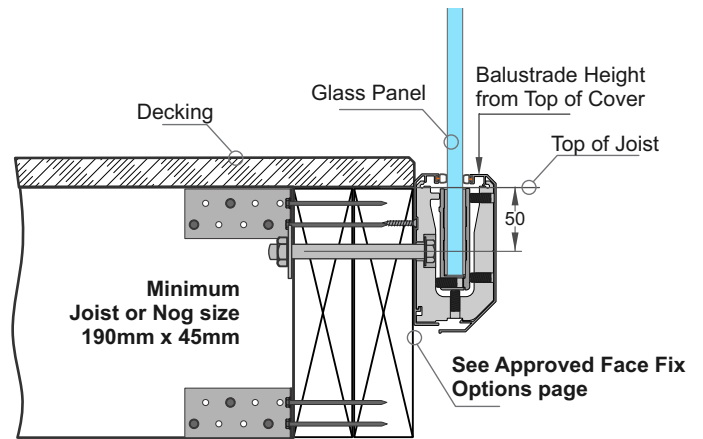
Glass Thickness, Type	Balustrade Height (max)	Clamp Spacing (max)
17.52SG	1200	350

Very High Wind Zone Pool Fence only

Extra High Wind Zone Pool Fence only

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

Glass Thickness, Type	Fence Height (max)	Clamp Spacing (max)	Glass Thickness, Type	Fence Height (max)	Clamp Spacing (max)
12T	1250	500	15T	1250	500

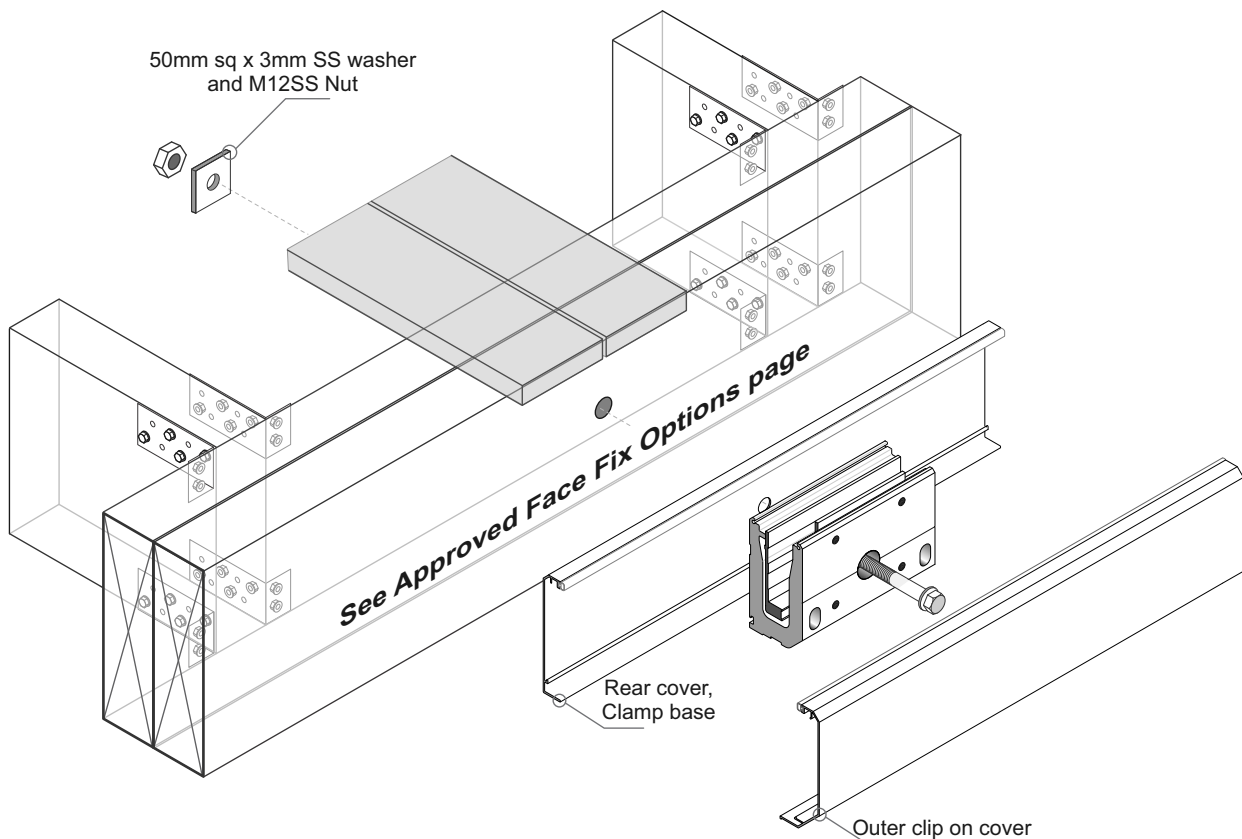


General Notes:

- 1 - Glass thickness, mm
Glass type T= Toughened, L = Laminated, SG = SentryGlas
- 2 - All measurements mm
- 3 - Refer to Elevations for Min/Max Panel widths and the use of Top Interlinking Rails (T and L only) or Stiffener Brackets (L and SG only)

Important Installation Notes:

- 1 - A Project engineer must ensure the structure can support the appropriate loads
- 2 - For Face Fix details see the Approved Face fix Options page
- 3 - All fixings must be Stainless Steel



Juralco Edgetec® Infinity Balustrade System - Typical Fixing - Commercial

Complies with NZS3604:2011 - Double Boundary Joists

Typical FACE Fix through a Cavity into Timber - M12 SS Bolt or M12 SS Threaded Rod

Extra High Wind Zone - Commercial B, E and C3 only

Glass Thickness, Type	Balustrade Height (max)	Clamp Spacing (max)	Glass Thickness, Type	Balustrade Height (max)	Clamp Spacing (max)
15 T	1300	400	17.2L	1300	400

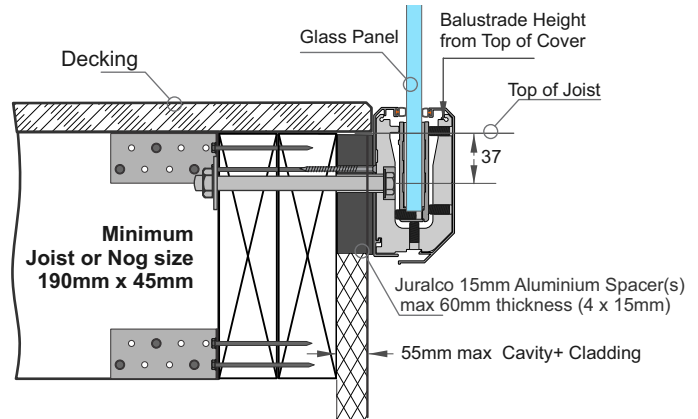
Glass Thickness, Type	Balustrade Height (max)	Clamp Spacing (max)
17.52SG	1200	350

Very High Wind Zone Pool Fence only

Extra High Wind Zone Pool Fence only

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

Glass Thickness, Type	Fence Height (max)	Clamp Spacing (max)	Glass Thickness, Type	Fence Height (max)	Clamp Spacing (max)
12T	1250	500	15T	1250	500

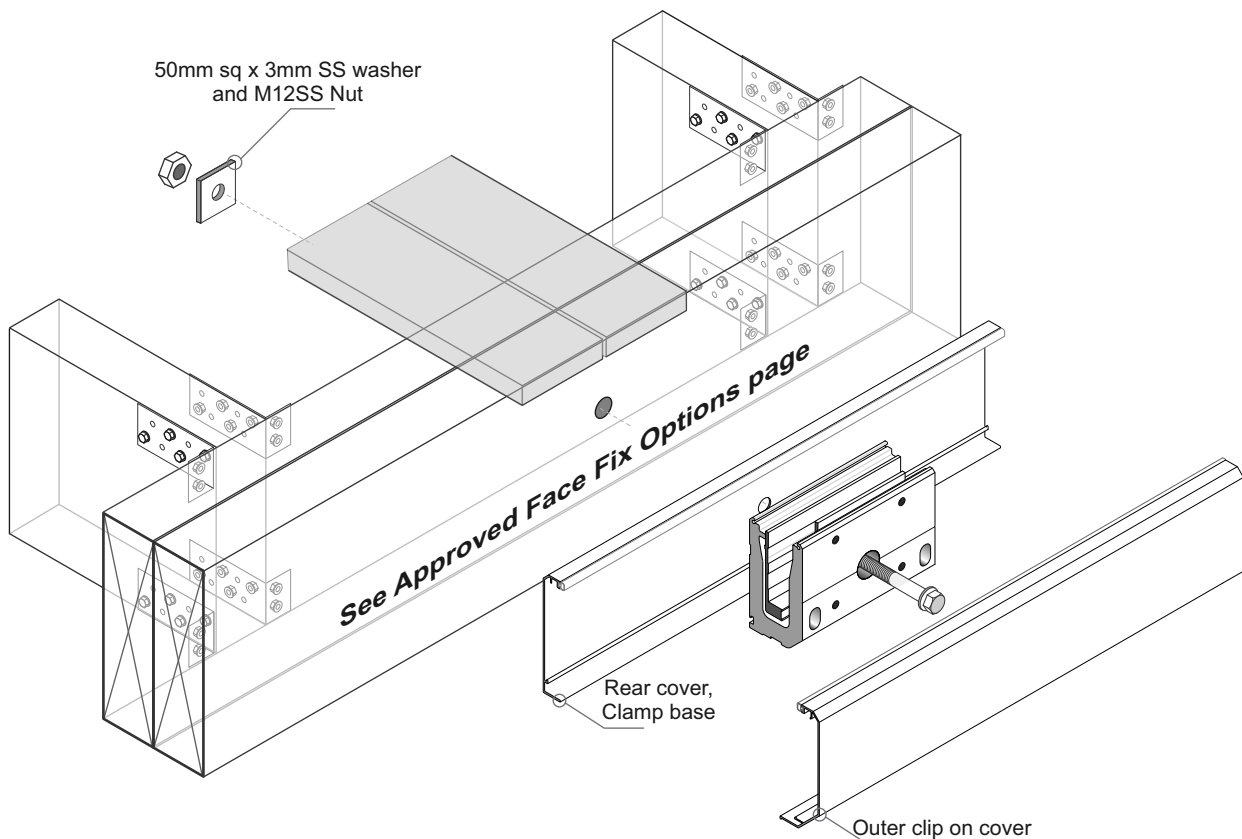


General Notes:

- 1 - Glass thickness, mm
Glass type T= Toughened, L = Laminated, SG = SentryGlas
- 2 - All measurements mm
- 3 - Refer to Elevations for Min/Max Panel widths and the use of Top Interlinking Rails (T and L only) or Stiffener Brackets (L and SG only)

Important Installation Notes:

- 1 - A Project engineer must ensure the structure can support the appropriate loads
- 2 - For Face Fix details see the Approved Face fix Options page
- 3 - All fixings must be Stainless Steel



Juralco Edgetec® Infinity Balustrade System - Typical Fixing - Commercial

Complies with NZS3604:2011 - Triple Boundary Joists

Typical Hidden FACE Fix to Timber - M12 SS Coachscrew

Extra High Wind Zone
- Commercial B, E and C3 only
Coachscrew attach OK

Glass Thickness, Type	Balustrade Height (max)	Clamp Spacing (max)	Glass Thickness, Type	Balustrade Height (max)	Clamp Spacing (max)
15 T	1300	400	17.2L	1300	400

Glass Thickness, Type	Balustrade Height (max)	Clamp Spacing (max)
17.52SG	1200	350

Note:
These attach comments apply to this page only

Very High Wind Zone Pool Fence only
Coachscrew attach OK

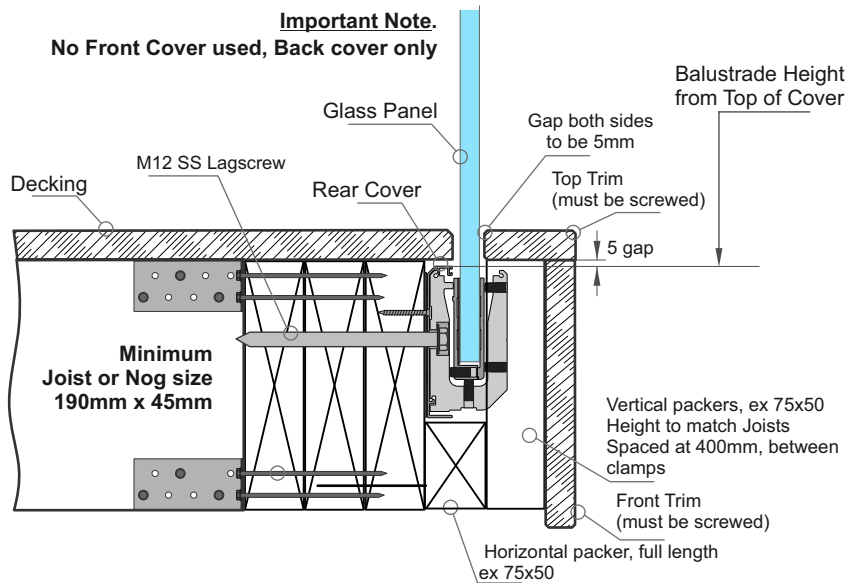
Glass Thickness, Type	Fence Height (max)	Clamp Spacing (max)	Glass Thickness, Type	Fence Height (max)	Clamp Spacing (max)
12T	1250	500	15T	1250	500

Extra High Wind Zone Pool Fence only
Coachscrew attach OK

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

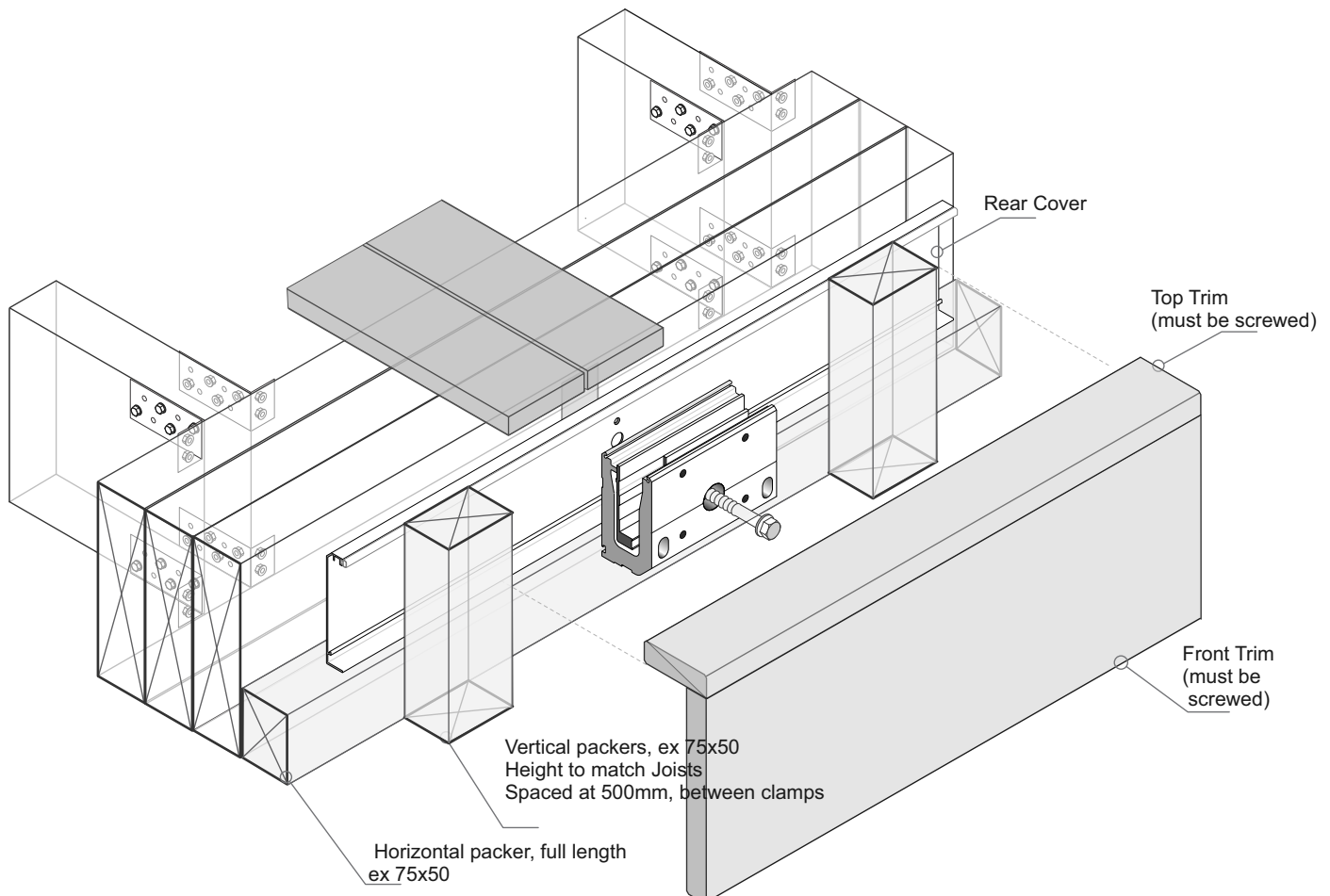
General Notes:

- 1 - Glass thickness, mm
Glass type T= Toughened, L = Laminated, SG = SentryGlas
- 2 - All measurements mm
- 3 - Refer to Elevations for Min/Max Panel widths and the use of Top Interlinking Rails (T and L only) or Stiffener Brackets (L and SG only)



Important Installation Notes:

- 1 - A Project engineer must ensure the structure can support the appropriate loads
- 2 - Pre-drill a 6mm dia Hole for Coachscrew
- 3 - Bond all screws with SIKA Supergrip to full depth
- 4 - Coachscrews 130mm min screw engagement into joists
- 5 - For Face Fix details see the Approved Face fix Options page
- 6 - All fixings must be Stainless Steel



Juralco Edgetec® Infinity Balustrade System - Typical Fixing - Commercial

Complies with NZS3604:2011 - Triple Boundary Joists

Typical FACE Fix through a Cavity into Timber deck - M12 SS Coachscrew

Extra High Wind Zone
- Commercial B, E and C3 only
Coachscrew attach OK

Glass Thickness, Type	Balustrade Height (max)	Clamp Spacing (max)	Glass Thickness, Type	Balustrade Height (max)	Clamp Spacing (max)
15 T	1300	400	17.2L	1300	400

Glass Thickness, Type	Balustrade Height (max)	Clamp Spacing (max)
17.52SG	1200	350

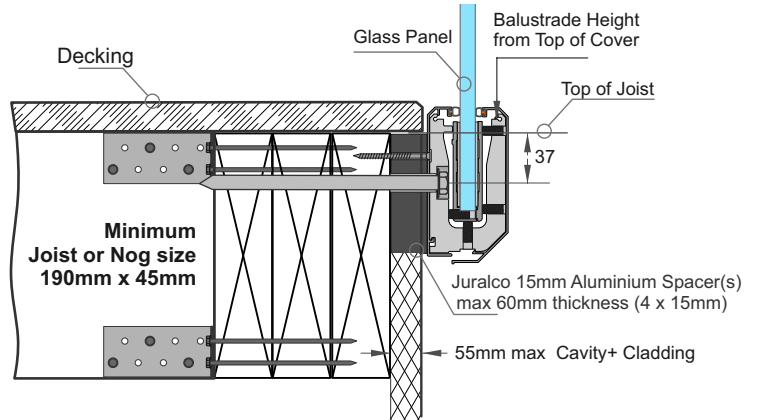
Note:
These attach comments apply to this page only

Very High Wind Zone Pool Fence only
Coachscrew attach OK

Extra High Wind Zone Pool Fence only
Coachscrew attach OK

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

Glass Thickness, Type	Fence Height (max)	Clamp Spacing (max)	Glass Thickness, Type	Fence Height (max)	Clamp Spacing (max)
12T	1250	500	15T	1250	500

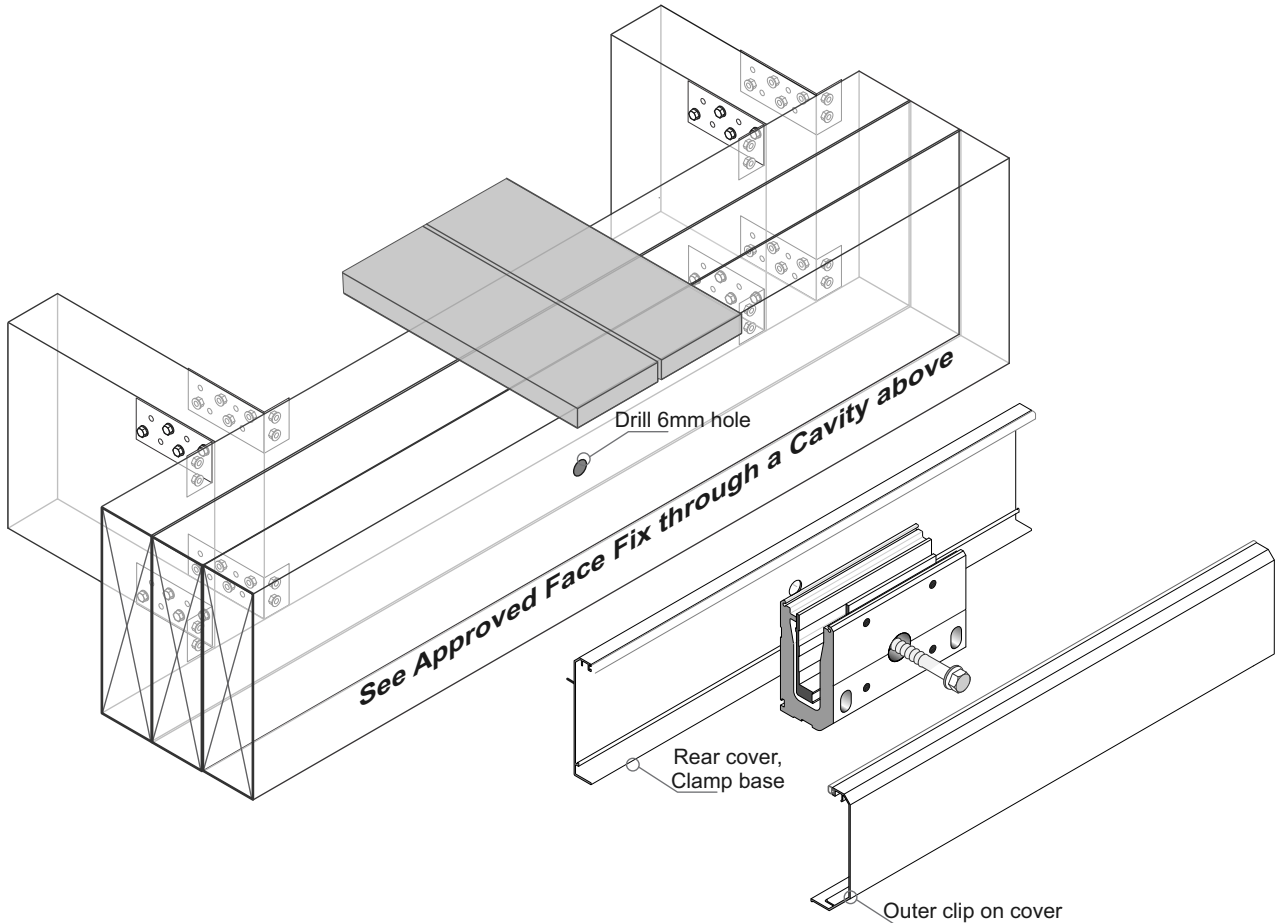


Important Installation Notes:

- 1 - A Project engineer must ensure the structure can support the appropriate loads
- 2 - Pre-drill a 6mm dia Hole for Coachscrew
- 3 - Bond all screws with SIKA Supergrip to full depth
- 4 - Coachscrews 130mm min screw engagement into joists
- 5 - For Face Fix details see the Approved Face fix Options page
- 6 - All fixings must be Stainless Steel

General Notes:

- 1 - Glass thickness, mm
Glass type T= Toughened, L = Laminated, SG = SentryGlas
- 2 - All measurements mm
- 3 - Refer to Elevations for Min/Max Panel widths and the use of Top Interlinking Rails (T and L only) or Stiffener Brackets (L and SG only)



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Juralco Edgetec® Infinity Balustrade System

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Typical FACE Fix to Steel - M12 SS Bolt or M12 SS Threaded Rod

Very High Wind Zone

- Residential A, A Other and C3 only

Extra High Wind Zone

- Commercial B, E and C3 only

Glass Thickness, Type	Balustrade Height (max)	Clamp Spacing (max)	Glass Thickness, Type	Balustrade Height (max)	Clamp Spacing (max)
12 T	1200	500	15.2L	1150	500
15 T	1300	400	17.2L	1300	400

Glass Thickness, Type	Balustrade Height (max)	Clamp Spacing (max)
13.52SG	1050	350
17.52SG	1200	350

Very High Wind Zone Pool Fence only

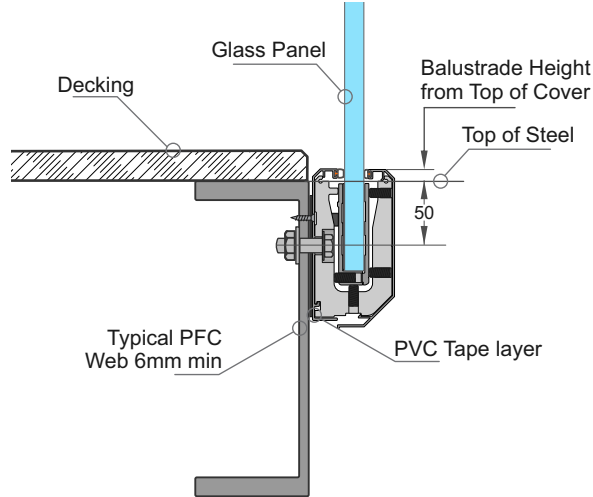
Extra High Wind Zone Pool Fence only

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

Glass Thickness, Type	Fence Height (max)	Clamp Spacing (max)	Glass Thickness, Type	Fence Height (max)	Clamp Spacing (max)
12T	1250	500	15T	1250	500

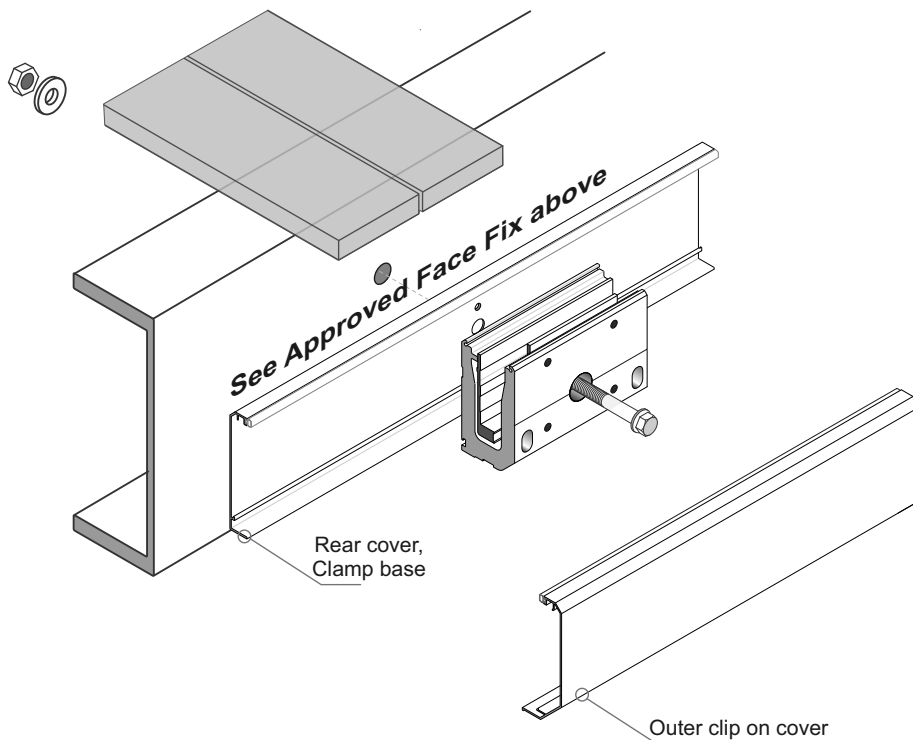
General Notes:

- 1 - Glass thickness, mm
Glass type T= Toughened, L = Laminated, SG = SentryGlas
- 2 - All measurements mm
- 3 - Refer to Elevations for Min/Max Panel widths and the use of Top Interlinking Rails (T and L only) or Stiffener Brackets (L and SG only)



Important Installation Notes:

- 1 - A Project engineer must ensure the structure can support the appropriate load
- 2 - An PVC tape layer must be placed between the Rear cover and Steel
- 3 - All fixings must be Stainless Steel



Typical FACE Fix to Steel, Wooden Packers - M12 SS Bolt or M12 SS Threaded Rod

Very High Wind Zone
 - Residential A, A Other and C3 only
Extra High Wind Zone
 - Commercial B, E and C3 only

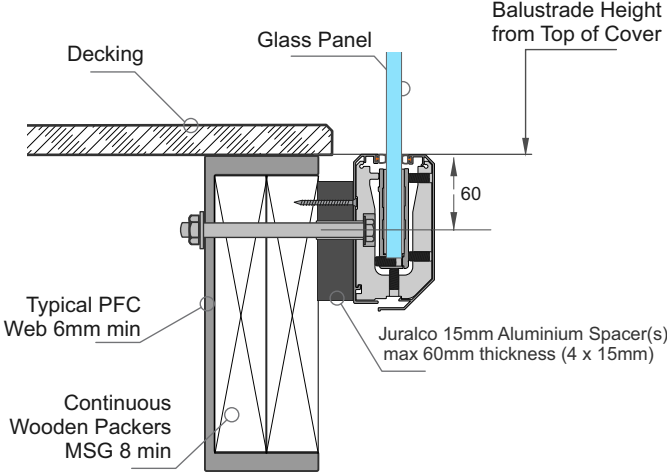
Glass Thickness, Type	Balustrade Height (max)	Clamp Spacing (max)	Glass Thickness, Type	Balustrade Height (max)	Clamp Spacing (max)
12 T	1200	500	15.2L	1150	500
15 T	1300	400	17.2L	1300	400

Glass Thickness, Type	Balustrade Height (max)	Clamp Spacing (max)
13.52SG	1050	350
17.52SG	1200	350

Very High Wind Zone Pool Fence only **Extra High Wind Zone Pool Fence only**

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

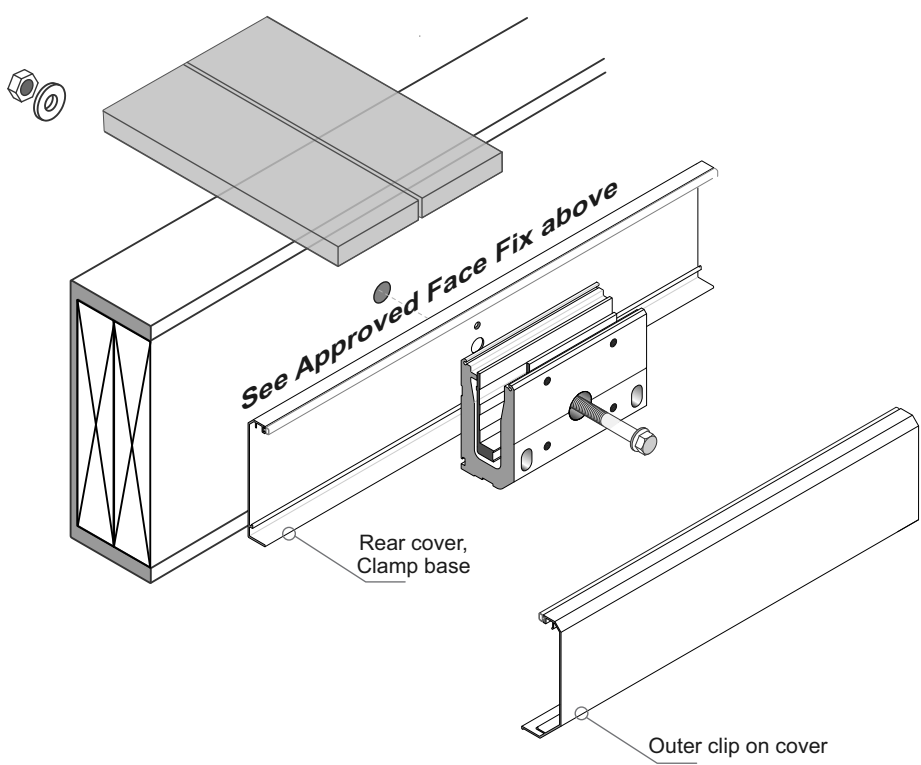
Glass Thickness, Type	Fence Height (max)	Clamp Spacing (max)	Glass Thickness, Type	Fence Height (max)	Clamp Spacing (max)
12T	1250	500	15T	1250	500



- Important Installation Notes:**
- 1 - A Project engineer must ensure the structure can support the appropriate loads
 - 2 - All fixings must be Stainless Steel

General Notes:

- 1 - Glass thickness, mm
 Glass type T= Toughened, L = Laminated, SG = SentryGlas
- 2 - All measurements mm
- 3 - Refer to Elevations for Min/Max Panel widths and the use of Top Interlinking Rails (T and L only) or Stiffener Brackets (L and SG only)



Typical FACE Fix to Steel, Wooden Packers - M12 SS Bolt or M12 SS Threaded Rod

Very High Wind Zone
 - Residential A, A Other and C3 only

Extra High Wind Zone

- Commercial B, E and C3 only

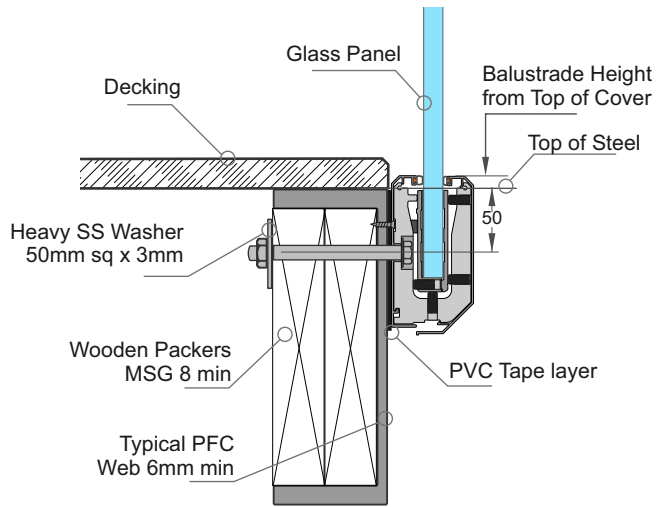
Glass Thickness, Type	Balustrade Height (max)	Clamp Spacing (max)	Glass Thickness, Type	Balustrade Height (max)	Clamp Spacing (max)
12 T	1200	500	15.2L	1150	500
15 T	1300	400	17.2L	1300	400

Glass Thickness, Type	Balustrade Height (max)	Clamp Spacing (max)
13.52SG	1050	350
17.52SG	1200	350

Very High Wind Zone Pool Fence only **Extra High Wind Zone Pool Fence only**

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

Glass Thickness, Type	Fence Height (max)	Clamp Spacing (max)	Glass Thickness, Type	Fence Height (max)	Clamp Spacing (max)
12T	1250	500	15T	1250	500

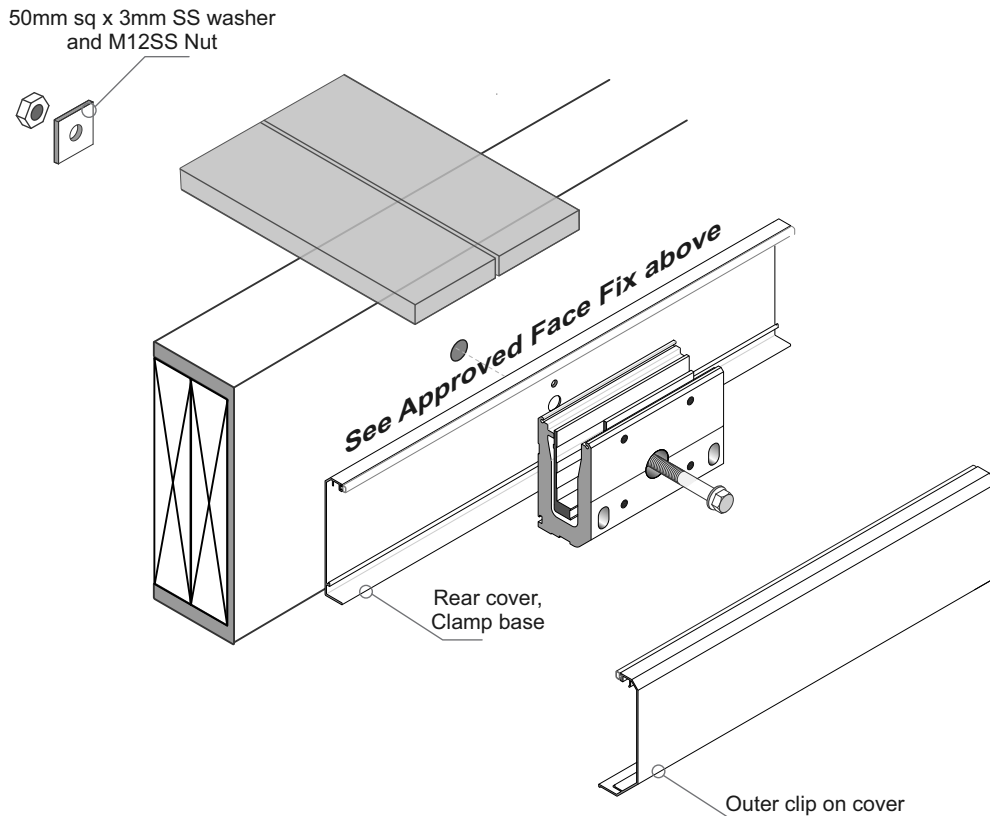


Important Installation Notes:

- 1 - A Project engineer must ensure the structure can support the appropriate loads
- 2 - A PVC tape layer must be placed between the Rear cover and Steel
- 3 - All fixings must be Stainless Steel

General Notes:

- 1 - Glass thickness, mm
 Glass type T= Toughened, L = Laminated, SG = SentryGlas
- 2 - All measurements mm
- 3 - Refer to Elevations for Min/Max Panel widths and the use of Top Interlinking Rails (T and L only) or Stiffener Brackets (L and SG only)



Typical FACE Fix to Concrete - M12 SS Threaded Rod Stud

Very High Wind Zone
 - Residential A, A Other and C3 only
Extra High Wind Zone
 - Commercial B, E and C3 only

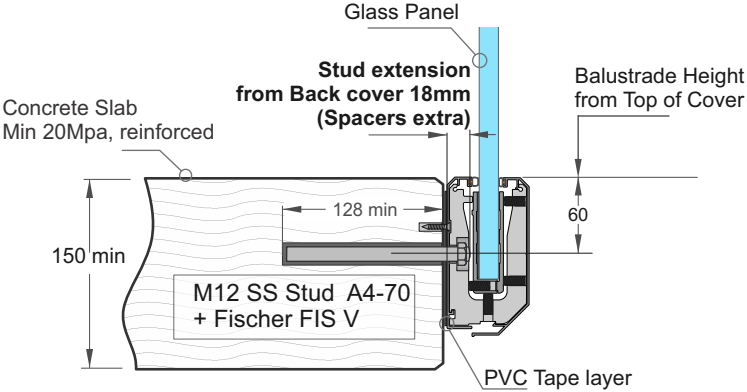
Glass Thickness, Type	Balustrade Height (max)	Clamp Spacing (max)	Glass Thickness, Type	Balustrade Height (max)	Clamp Spacing (max)
12 T	1200	500	15.2L	1150	500
15 T	1300	400	17.2L	1300	400

Glass Thickness, Type	Balustrade Height (max)	Clamp Spacing (max)
13.52SG	1050	350
17.52SG	1200	350

Very High Wind Zone Pool Fence only **Extra High Wind Zone Pool Fence only**

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

Glass Thickness, Type	Fence Height (max)	Clamp Spacing (max)	Glass Thickness, Type	Fence Height (max)	Clamp Spacing (max)
12T	1250	500	15T	1250	500




General Notes:

- 1 - Glass thickness, mm
 Glass type T= Toughened, L = Laminated, SG = SentryGlas
- 2 - All measurements mm
- 3 - Refer to Elevations for Min/Max Panel widths and the use of Top Interlinking Rails (T and L only) or Stiffener Brackets (L and SG only)

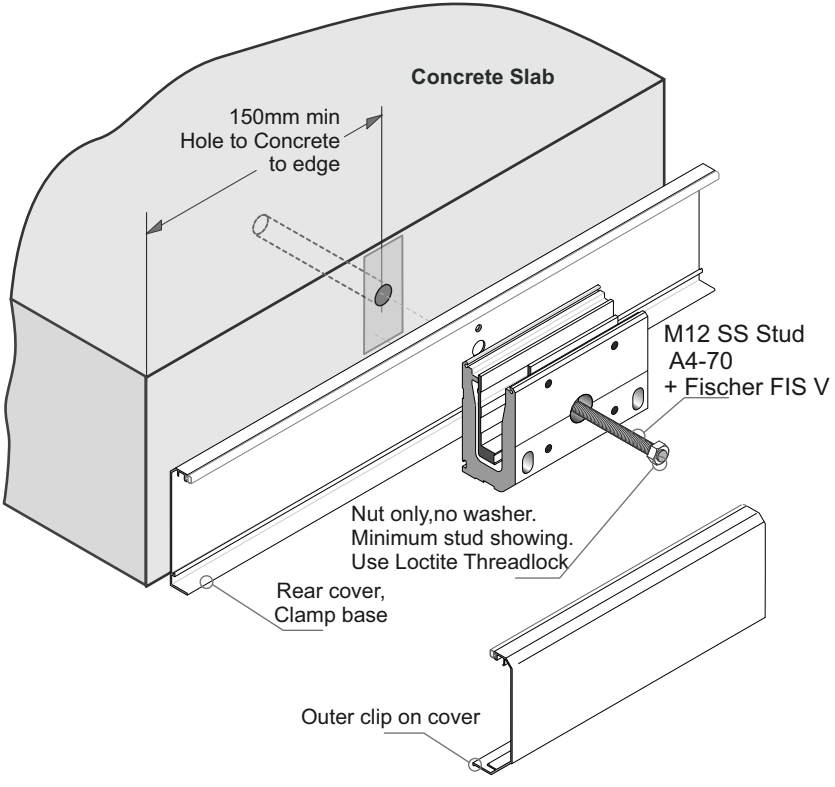
Important Installation Notes:

- 1 - A Project engineer must ensure the structure can support the appropriate loads
- 2 - A PVC Tape Layer between Clamp and Concrete
- 3 - All fixings must be Stainless Steel



Installation details Fischer FIS V

Thread diameter	M 12
Drill hole diameter	= 14 mm
Drill hole depth	= 128 mm
Anchorage depth	= 120 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.	
Installation type	Push-through installation
Maximum torque	T _{inst,max} = 40.0 Nm
Socket size	19 mm
Total fixing thickness, max	t _{fix} = 8 mm
Volume of resin per drill	12 ml/6 scale divisions

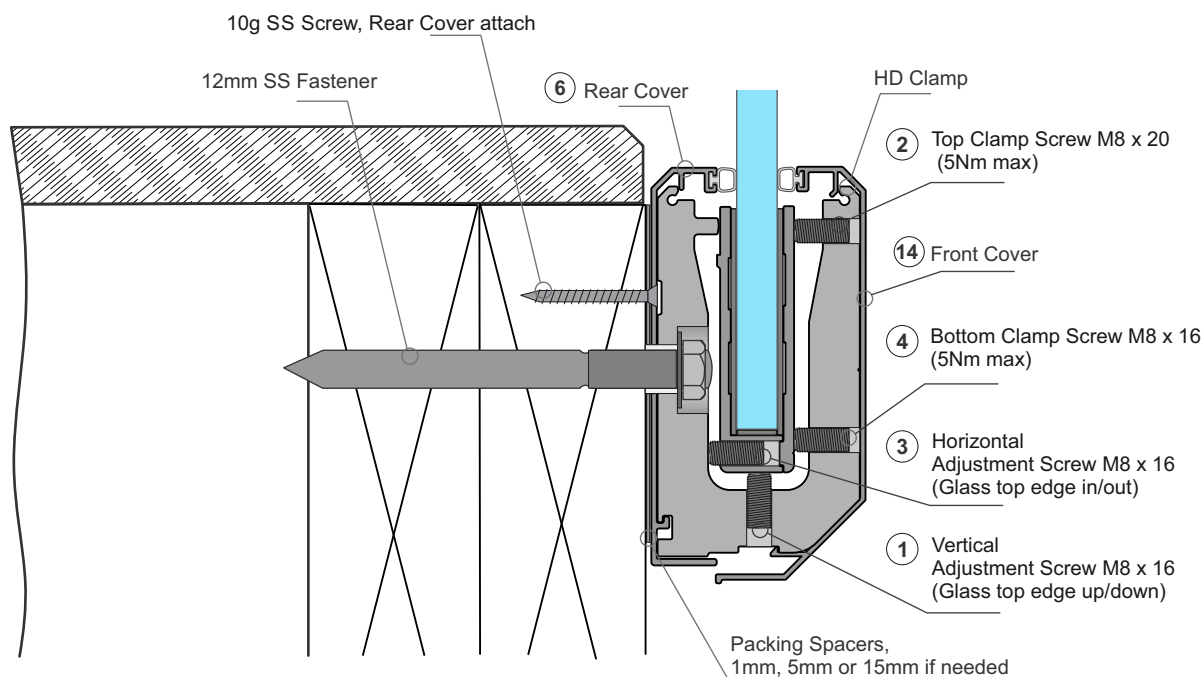


Infinity Balustrade Face Fix Installation procedure on Boundary Joists

- 1 - Attach a 15mm Spacer Plate to the boundary joist at each end of the balustrade section.
 - 2 - Run string line between these two Spacers Plates on the top edge of the Spacers.
 - 3 - Mark out position of intermediate Spacer Plates (will be the same spacing as the Heavy Duty clamps) and screw to joists using 10g SS Screws. EPDM or rubber membrane between Timber and Spacer
Use clamp spacings as listed on fixing details. Note that glass joins are usually made at the HD clamps.
 - 4 - Run string line between the spacers on the front face. This will determine if the joists are warped.
Calculate the position and quantity of JET/IB/CSP 1.0mm thick Packing spacers to packout the 15mm Spacer Plates as necessary. Do not fit at this stage.
 - 5 - Temporarily fit Rear cover and mark out position of 12.5mm holes for 12mm coach screw/Lacscrew /bolts. Drill holes. Fit bulb seal on back cover.
 - 6 - Fit Rear cover and HD clamps in position with the 12mm fasteners. Prior to tightening up fit the 1.0mm Packing spacers as previously determined between any 15mm Spacers Plates and the Rear cover extrusion.
Tighten up the 12mm fasteners, while ensuring the Rear Cover is plumb.
-
- 7 - Mark out position of Glass clamps on glass to match position of HD clamps and tighten on glass.
 - 8 - Fit glass into position on HD clamps.
-
- 9 - Adjust the Vertical height grub screw on the bottom of the HD clamp to ensure the top edges of the glass panels are level
 - 10 - Lightly nip the top 2 grub screws on the HD clamp to hold the glass vertical.
 - 11 - Adjust the 4 lower grub screws on the HD clamp and Glass clamp assemblies for top edge Horizontal alignment
 - 12 - When glass panels are in the correct position tighten top and bottom clamp screws on HD clamp (5.0Nm max)
-
- 13 - Cut Front cover to length and fit bulb seal
 - 14 - Clip Front cover on
 - 15 - Fit End plate kits as required (note: 2 different size plastic plugs and screws)

Fitting Stages 1-6 to get HD Clamp Plumb, both Vertical and Horizontal

Fitting Stages 9-11 to get Glass Plumb, both Vertical and Horizontal



Juralco Edgetec® Infinity Balustrade System Typical Layouts - Top Fix

Infinity Glass Clamps
Top Fix + Interlinking Rail

Glass must have a minimum strength of 100Mpa
All edges polished

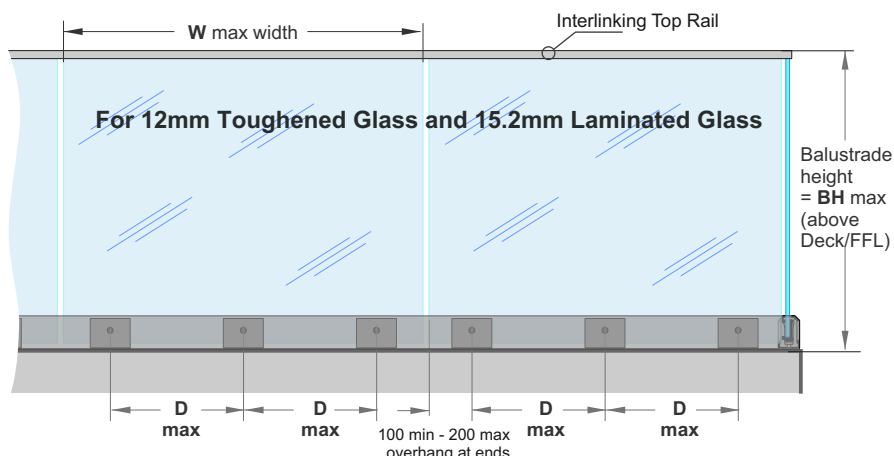
Clamp spacings
Min - 2 x clamps
Max - 4-5 x clamps
Max Tension per Top Fixing = 20kN

Residential & Domestic only
Occupancy types A, A Other and C3
For 12mm Toughened Glass only

- D max 500mm.
- BH max 1200mm
- W max 1900mm

For 15.2mm Laminated Glass only

- D max 500mm.
- BH max 1150mm
- W max 1900mm



Exceeds the wind loading for all Wind Zones up to **and Including Very High Wind Zone** as set out in NZS 3604:2011

Refer to the Interlinking Top Rail page for conformance to NZS 4223.3.2016.

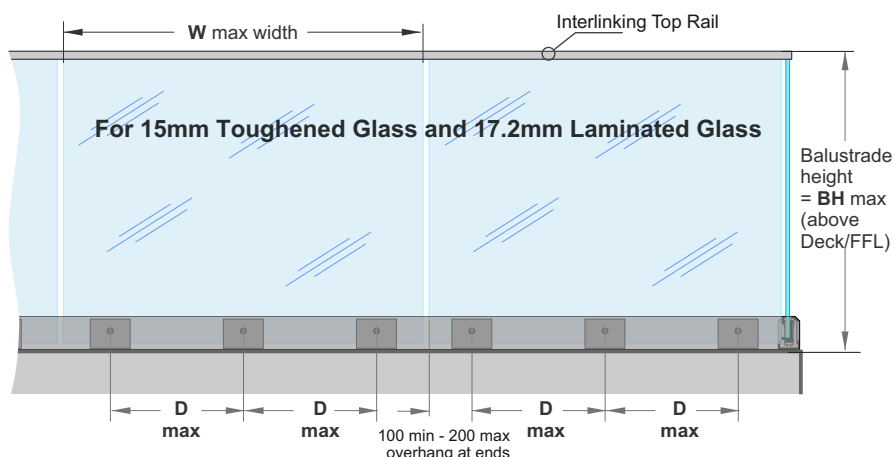
Infinity Glass Clamps
Top Fix + Interlinking Rail

Glass must have a minimum strength of 100Mpa
All edges polished

Clamp spacings
Min - 2 x clamps
Max - 4-5 x clamps
Max Tension per Top Fixing = 20kN

Commercial Occupancy types B, E, and C3 only
All for 15mm Toughened Glass or 17.2mm Laminated Glass

- D max 400mm
- BH max 1300mm
- W max 1600mm



Exceeds the wind loading for all Wind Zones up to **and Including Extra High Wind Zone** as set out in NZS 3604:2011

Refer to the Interlinking Top Rail page for conformance to NZS 4223.3.2016.

Infinity Glass Clamps
Top Fix

POOL FENCING only

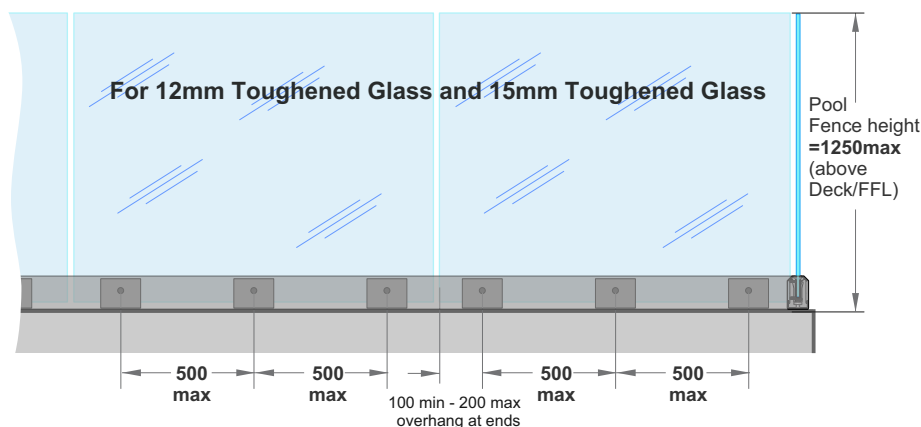
Glass must have a minimum strength of 100Mpa
All edges polished

Clamp spacings
Min - 2 x clamps. Max - 4-5 x clamps
Panel width 2000mm max
Max Tension per Top Fixing = 20kN

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

Interlinking Top Rail not required



12mm Toughened - Very High Wind Zone. 15mm Toughened - Extra High Wind Zone



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Juralco Edgetec® Infinity Balustrade System

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Juralco Edgetec® Infinity Balustrade System Typical Layouts - Top Fix

Infinity Glass Clamps Top Fix + Stiffener Brackets

Glass must have a minimum strength of 100Mpa
All edges polished

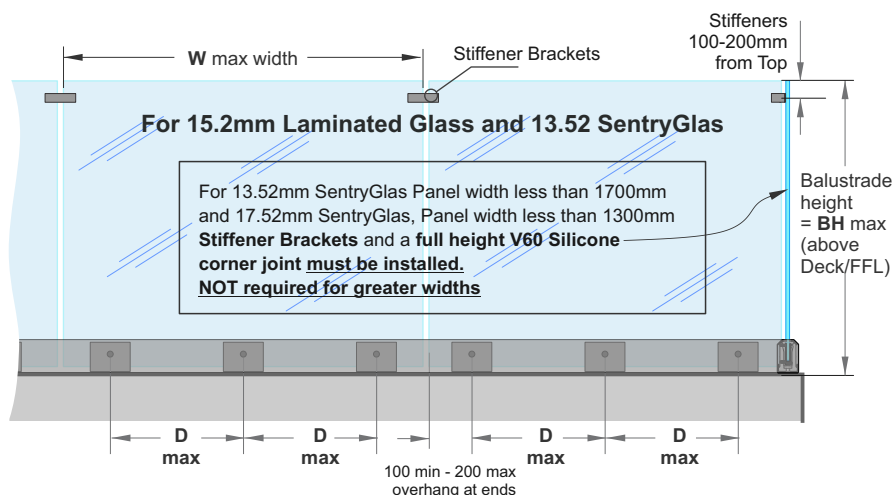
Clamp spacings
Min - 2 x clamps
Max - 4-5 x clamps
Max Tension per Top Fixing = 20kN

Residential & Domestic only Occupancy types A, A Other and C3 For 15.2mm Laminated Glass only

- D max 500mm.
- BH max 1150mm
- W max 1900mm

For 13.52mm SentryGlas only

- D max 350mm.
- BH max 1050mm
- W max - none for SG



Exceeds the wind loading for all Wind Zones up to **and Including Very High Wind Zone** as set out in NZS 3604:2011

Refer to the Stiffener Bracket pages for conformance to NZS 4223.3.2016.

Infinity Glass Clamps Top Fix + Stiffener Brackets

Glass must have a minimum strength of 100Mpa
All edges polished

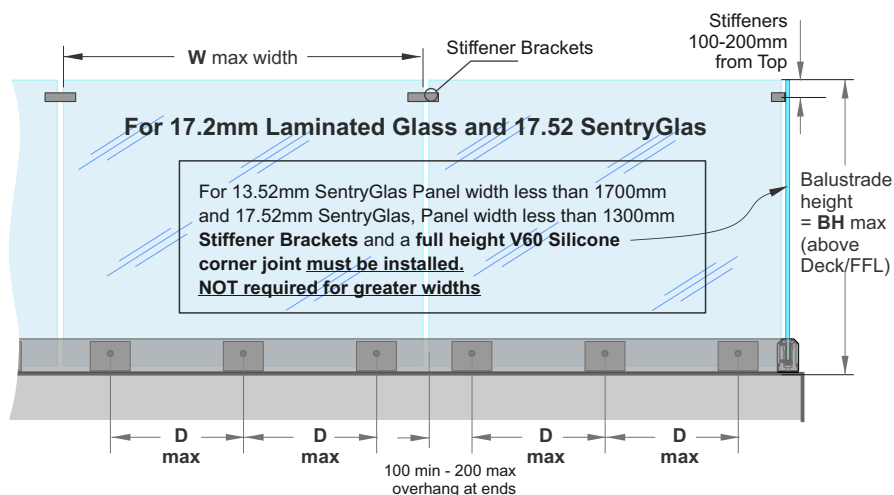
Clamp spacings
Min - 2 x clamps
Max - 4-5 x clamps
Max Tension per Top Fixing = 20kN

Commercial Occupancy types B, E, and C3 only For 17.2mm Laminated Glass only

- D max 400mm
- BH max 1300mm
- W max 1600mm

For 17.52mm SentryGlas

- D max 350mm
- BH max 1200mm
- W max - none for SG



Exceeds the wind loading for all Wind Zones up to **and Including Extra High Wind Zone** as set out in NZS 3604:2011

Refer to the Stiffener Bracket pages for conformance to NZS 4223.3.2016.

SentryGlas® Glass Layers and Thickness Orientation

Glass Thickness (mm)	Inner Layer of Glass thickness (mm) Decksides	Interlayer thickness(mm) and Type	Outer Layer Glass thickness (mm)
13.52	6	1.52 SentryGlas®	6
17.52	8	1.52 SentryGlas®	8

Refers to previous page. Laminated Glass Layers and Thickness Orientation

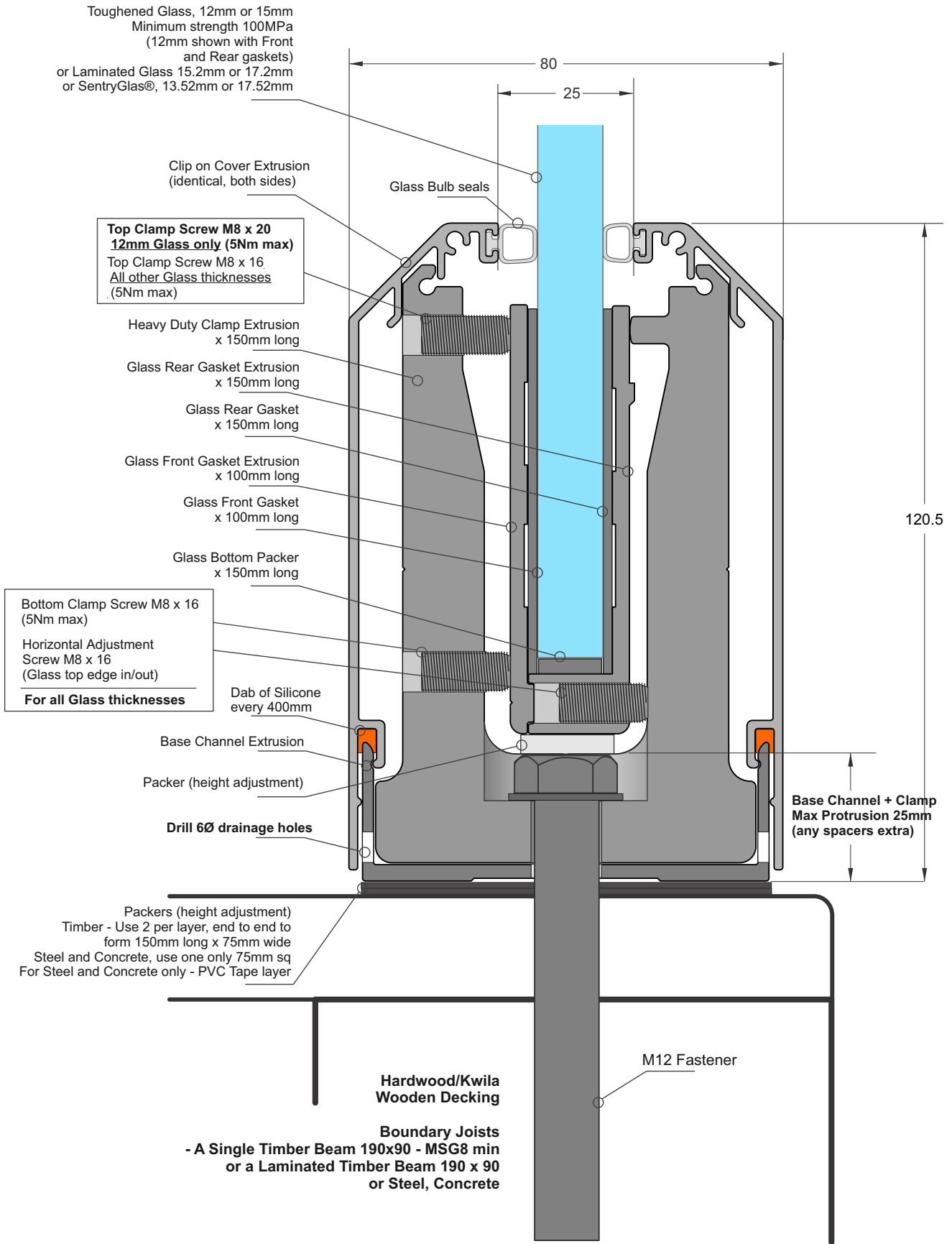
Glass Thickness (mm)	Inner Layer of Glass thickness (mm) Decksides	Interlayer thickness(mm) and Type	Outer Layer Glass thickness (mm)
15.2	8	1.2EVA	6
17.2	8	1.2EVA	8



Juralco Edgetec® Infinity Balustrade System - Top Fix General

Infinity Glass Clamp
Top Fix
(12mm Glass Shown)

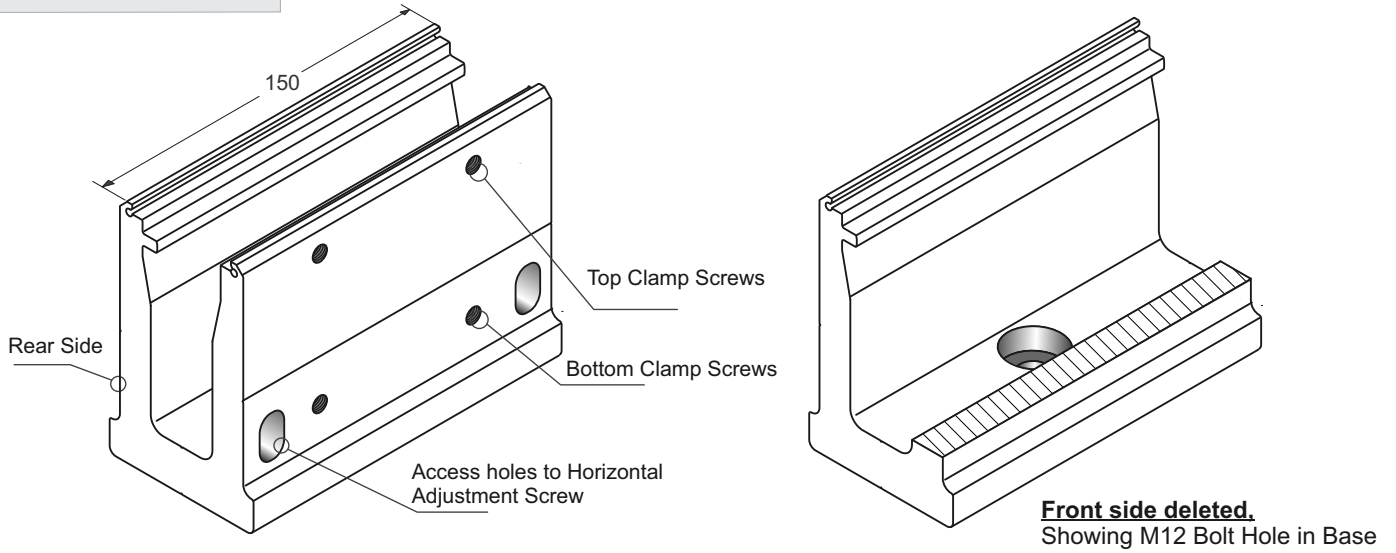
The Infinity Balustrade Clamp comes as a kit;
Clamp Extrusion, Front and Rear Gasket Extrusions
Gaskets, Glass bottom Packer and all adjusting screws.
(M12 Fastener not included)



Elevation showing the Main Features

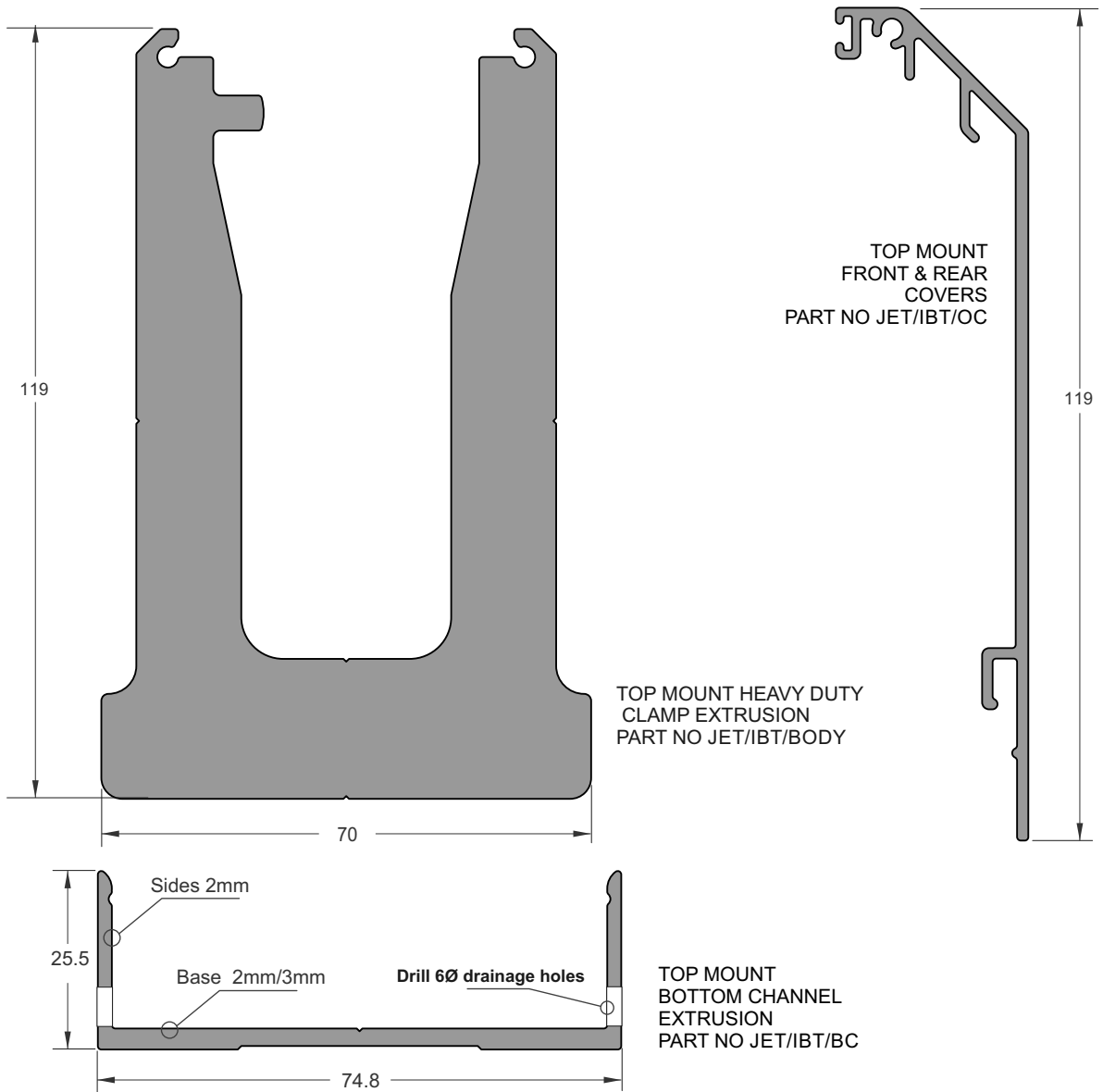
Juralco Edgetec® Infinity Balustrade System - Top Fix Components

Heavy Duty Clamp Extrusion
Part No JET/IBT/BODY



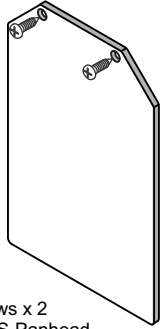
Cover and Base Extrusion

Front and Back Cover Extrusions Identical



Juralco Edgetec® Infinity Balustrade System - Top Fix Components

Top Mount End Plate Part No JET/IBT/EP

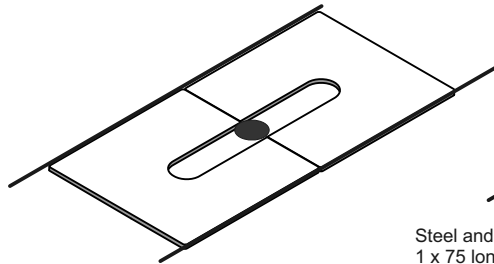


Attach Screws x 2
No 8 x 25 SS Panhead

Bottom Spacer Plates

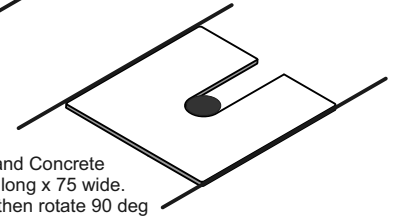
Packers (height adjustment)

- Timber - Use 2 per layer, end to end to form 150mm long x 75mm wide
- Steel and Concrete, use one only 75mm sq



Timber
2 x 75 long x 75 wide

1mm thick Plate - Part No JET/IBT/BSP1

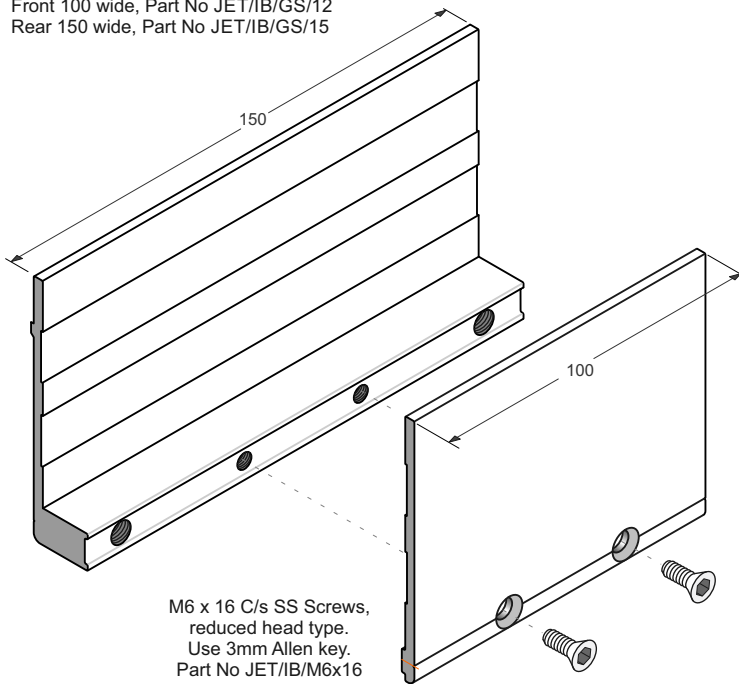


Steel and Concrete
1 x 75 long x 75 wide.
Insert then rotate 90 deg

5mm thick Plate - Part No JET/IBT/BSP5

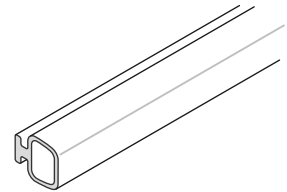
Glass Gasket Extrusions Front and Rear

Front 100 wide, Part No JET/IB/GS/12
Rear 150 wide, Part No JET/IB/GS/15

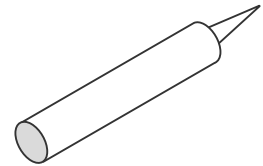


M6 x 16 C/s SS Screws,
reduced head type.
Use 3mm Allen key.
Part No JET/IB/M6x16

Glass Bulb Seal Part No JET/IB/CVRBLB250

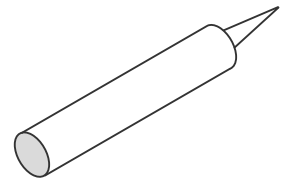


SIKA Supergrip 2hr Part No JEC SUPERGRIP



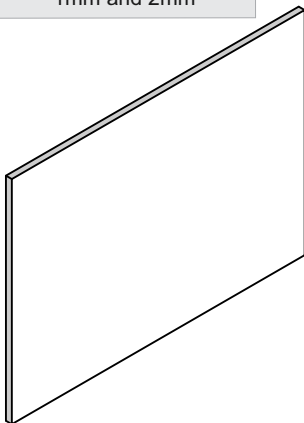
For All Coachscrews fixings

Rhodorsil V60 Clear Silicone Part No H/RTV419098



Construction Silicone

Glass Gaskets 1mm and 2mm



Gasket Schedule

12mm Toughened	Use 2 x 2mm Gaskets
13.2mm Laminated	
13.52mm SentryGlas	Use 2 x 1mm Gaskets
15mm Toughened	
17.2mm Laminated	
17.52mm SentryGlas	

Gasket 2mm Thick	Front 100 wide, Part No JET/IB/GGF2 Rear 150 wide, Part No JET/IB/GGR2
---------------------	---

Gasket 1mm Thick	Front 100 wide, Part No JET/IB/GGF1 Rear 150 wide, Part No JET/IB/GGR1
---------------------	---

Typical TOP Fix to Timber - M12 SS Coachscrew

Very High Wind Zone
 - Residential A, A Other and C3 only
Extra High Wind Zone
 - Commercial B, E and C3 only

Glass Thickness, Type	Balustrade Height (max)	Clamp Spacing (max)	Glass Thickness, Type	Balustrade Height (max)	Clamp Spacing (max)
12 T	1200	500	15.2L	1150	500
15 T	1300	400	17.2L	1300	400

Glass Thickness, Type	Balustrade Height (max)	Clamp Spacing (max)
13.52SG	1050	350
17.52SG	1200	350

Very High Wind Zone
Pool Fence only

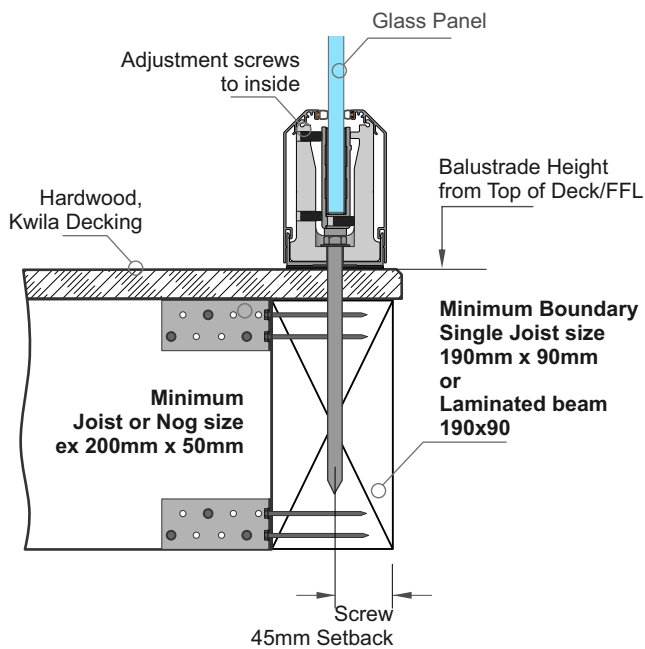
Extra High Wind Zone
Pool Fence only

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

Glass Thickness, Type	Fence Height (max)	Clamp Spacing (max)	Glass Thickness, Type	Fence Height (max)	Clamp Spacing (max)
12T	1250	500	15T	1250	500

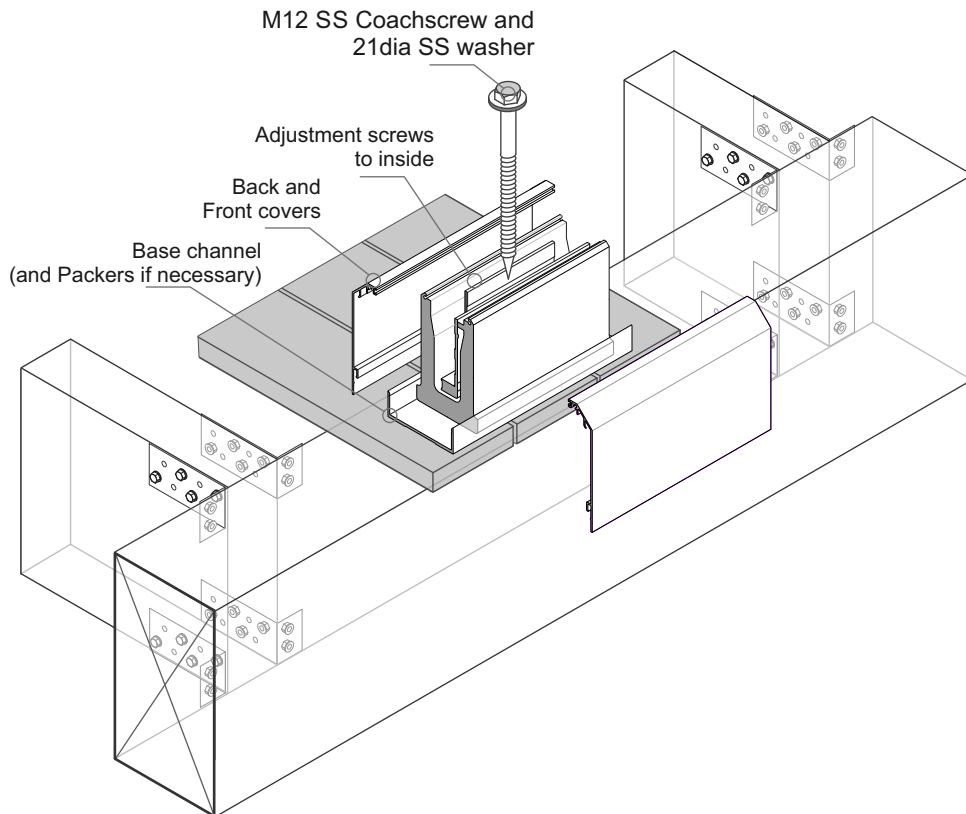
General Notes:

- 1 - Glass thickness, mm
Glass type T= Toughened, L = Laminated, SG = SentryGlas
- 2 - All measurements mm
- 3 - Refer to Elevations for Min/Max Panel widths and the use of Top Interlinking Rails (T and L only) or Stiffener Brackets (L and SG only)



Important Installation Notes:

- 1 - A Project engineer must ensure the structure can support the appropriate loads
- 2 - Pre-drill a 6mm dia Hole for Coachscrew
- 3 - Bond all screws with SIKA Supergrip to full depth
- 4 - Coachscrews 130mm min screw engagement into joists
- 5 - For Face Fix details see the Approved Face fix Options page
- 6 - All fixings must be Stainless Steel



Typical TOP Fix to Steel + Timber Deck - M12 SS Bolt or M12 SS Threaded Rod

Very High Wind Zone

- Residential A, A Other and C3 only

Extra High Wind Zone

- Commercial B, E and C3 only

Glass Thickness, Type	Balustrade Height (max)	Clamp Spacing (max)	Glass Thickness, Type	Balustrade Height (max)	Clamp Spacing (max)
12 T	1200	500	15.2L	1150	500
15 T	1300	400	17.2L	1300	400

Glass Thickness, Type	Balustrade Height (max)	Clamp Spacing (max)
13.52SG	1050	350
17.52SG	1200	350

Very High Wind Zone Pool Fence only

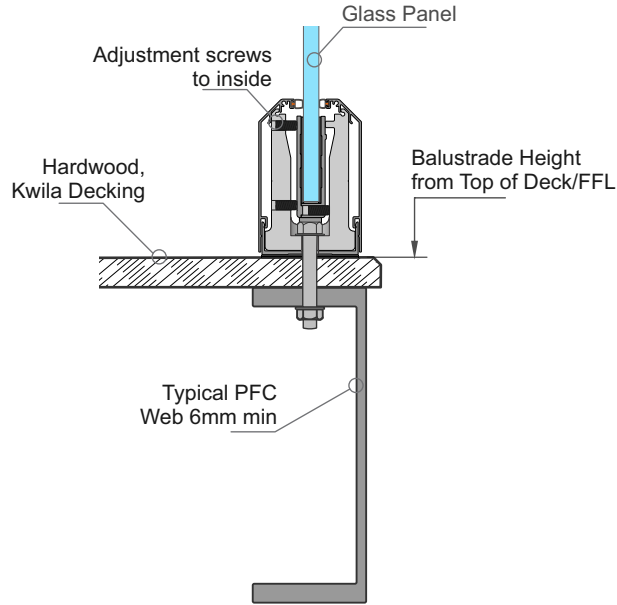
Extra High Wind Zone Pool Fence only

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

Glass Thickness, Type	Fence Height (max)	Clamp Spacing (max)	Glass Thickness, Type	Fence Height (max)	Clamp Spacing (max)
12T	1250	500	15T	1250	500

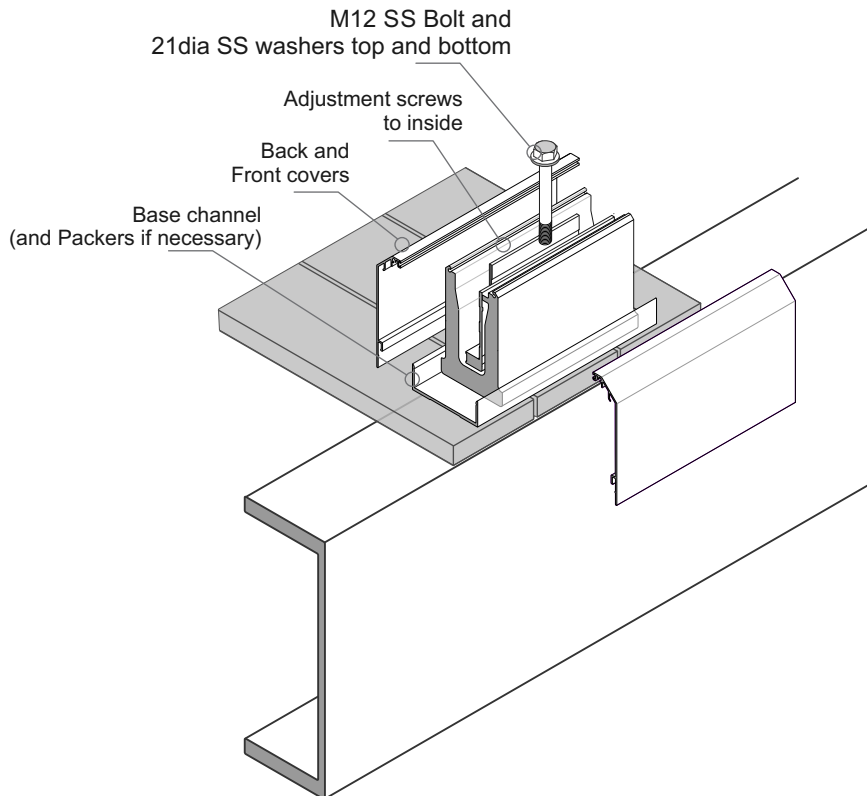
General Notes:

- 1 - Glass thickness, mm
Glass type T= Toughened, L = Laminated, SG = SentryGlas
- 2 - All measurements mm
- 3 - Refer to Elevations for Min/Max Panel widths and the use of Top Interlinking Rails (T and L only) or Stiffener Brackets (L and SG only)



Important Installation Notes:

- 1 - A Project engineer must ensure the structure can support the appropriate loads
- 2 - All fixings must be Stainless Steel



Typical TOP Fix directly to Steel - M12 SS Bolt or M12 SS Threaded Rod

Very High Wind Zone
 - Residential A, A Other and C3 only

Extra High Wind Zone
 - Commercial B, E and C3 only

Glass Thickness, Type	Balustrade Height (max)	Clamp Spacing (max)	Glass Thickness, Type	Balustrade Height (max)	Clamp Spacing (max)
12 T	1200	500	15.2L	1150	500
15 T	1300	400	17.2L	1300	400

Glass Thickness, Type	Balustrade Height (max)	Clamp Spacing (max)
13.52SG	1050	350
17.52SG	1200	350

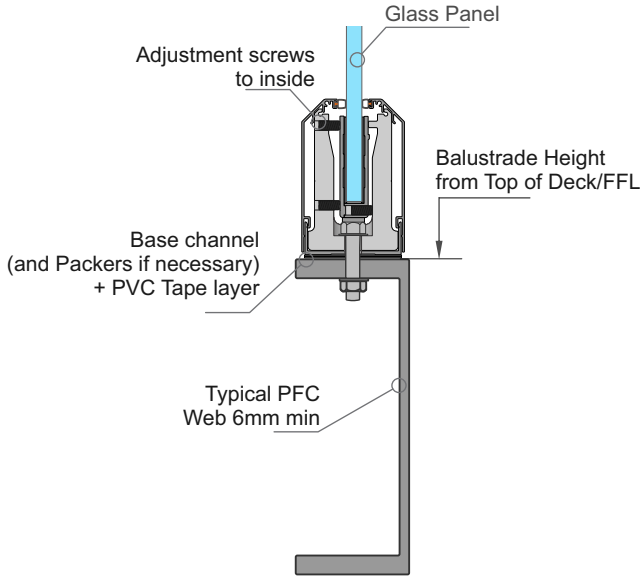
Very High Wind Zone Pool Fence only **Extra High Wind Zone Pool Fence only**

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

Glass Thickness, Type	Fence Height (max)	Clamp Spacing (max)	Glass Thickness, Type	Fence Height (max)	Clamp Spacing (max)
12T	1250	500	15T	1250	500

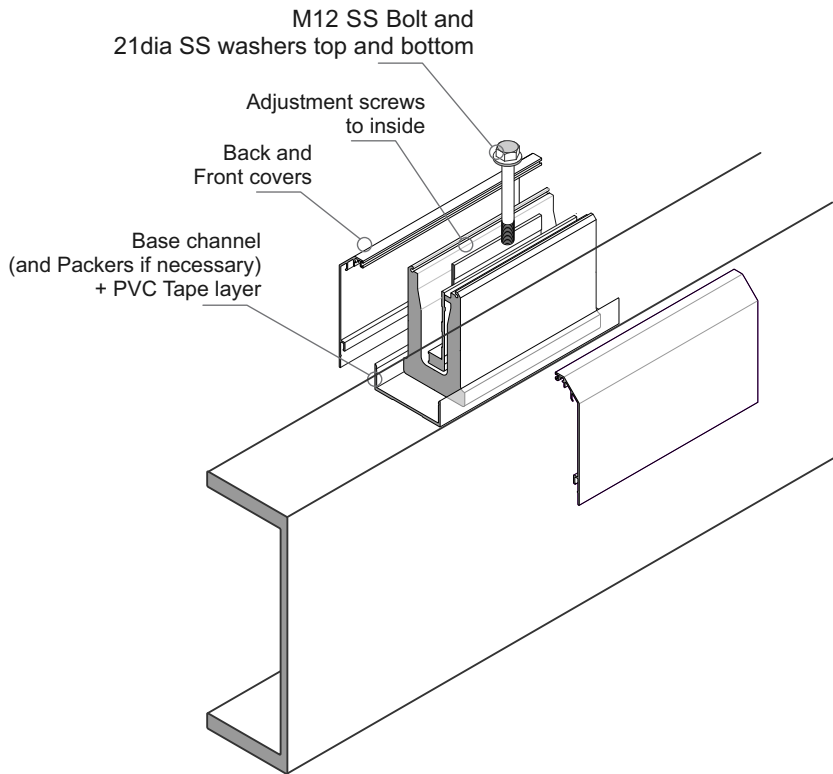
General Notes:

- 1 - Glass thickness, mm
Glass type T= Toughened, L = Laminated, SG = SentryGlas
- 2 - All measurements mm
- 3 - Refer to Elevations for Min/Max Panel widths and the use of Top Interlinking Rails (T and L only) or Stiffener Brackets (L and SG only)



Important Installation Notes:

- 1 - A Project engineer must ensure the structure can support the appropriate loads
- 2 - An PVC, Rubber or Foam Tape layer must be installed between the Base Channel and Steel
- 3 - All fixings must be Stainless Steel



Typical TOP Fix to Concrete - M12 SS Threaded Rod Stud

Very High Wind Zone

- Residential A, A Other and C3 only

Extra High Wind Zone

- Commercial B, E and C3 only

Glass Thickness, Type	Balustrade Height (max)	Clamp Spacing (max)	Glass Thickness, Type	Balustrade Height (max)	Clamp Spacing (max)
12 T	1200	500	15.2L	1150	500
15 T	1300	400	17.2L	1300	400

Glass Thickness, Type	Balustrade Height (max)	Clamp Spacing (max)
13.52SG	1050	350
17.52SG	1200	350

Very High Wind Zone Pool Fence only

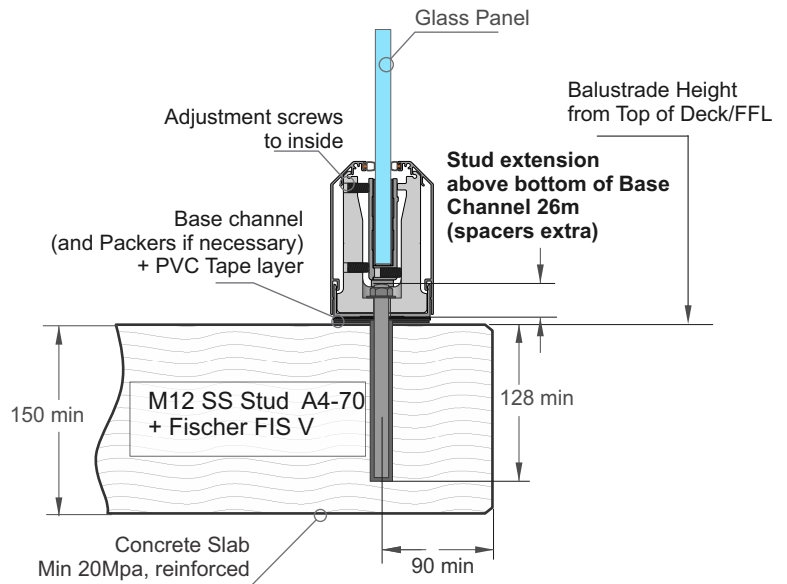
Extra High Wind Zone Pool Fence only

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

Glass Thickness, Type	Fence Height (max)	Clamp Spacing (max)	Glass Thickness, Type	Fence Height (max)	Clamp Spacing (max)
12T	1250	500	15T	1250	500

General Notes:

- 1 - Glass thickness, mm
Glass type T= Toughened, L = Laminated, SG = SentryGlas
- 2 - All measurements mm
- 3 - Refer to Elevations for Min/Max Panel widths and the use of Top Interlinking Rails (T and L only) or Stiffener Brackets (L and SG only)



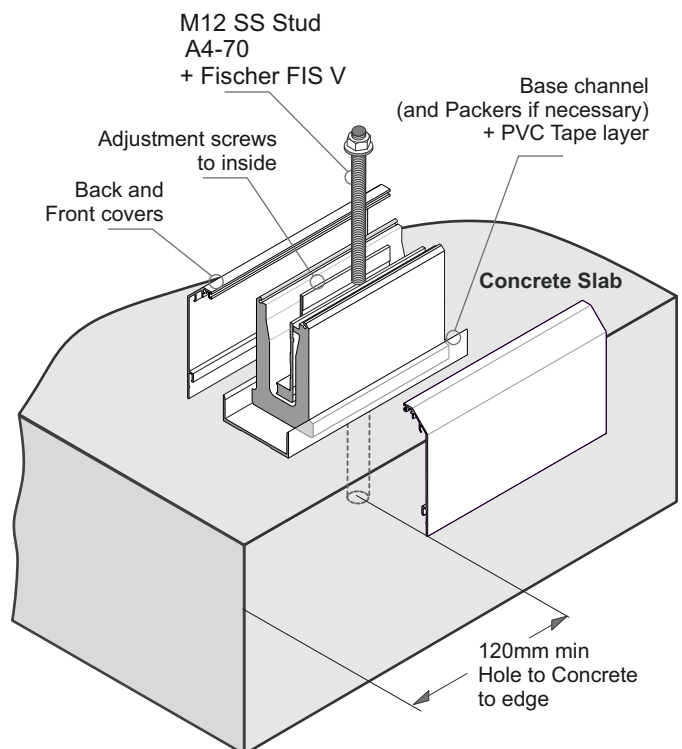
Important Installation Notes:

- 1 - A Project engineer must ensure the structure can support the appropriate loads
- 2 - An PVC Tape layer must be installed between the Base Channel and Concrete
- 3 - All fixings must be Stainless Steel



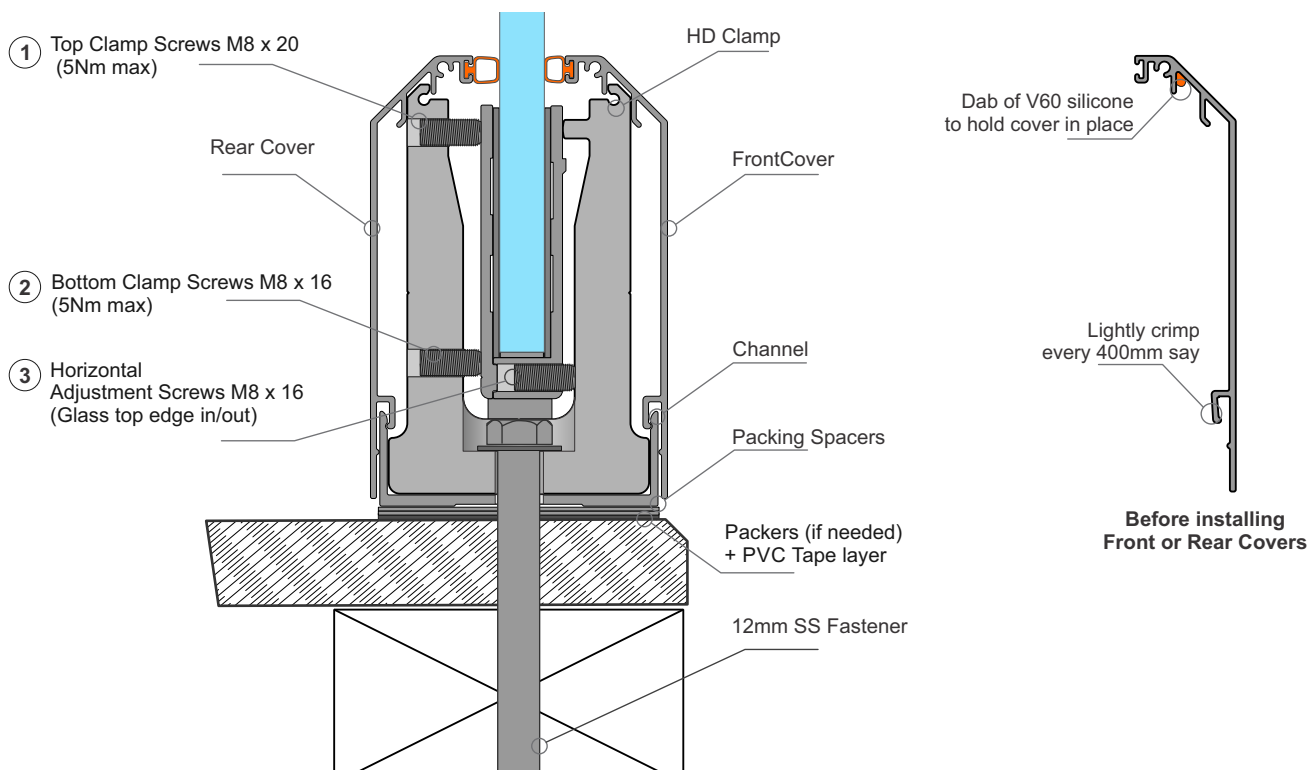
Installation details Fischer FIS V

Thread diameter	M 12
Drill hole diameter	= 14 mm
Drill hole depth	= 128 mm
Anchorage depth	= 120 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.	
Installation type	Push-through installation
Maximum torque	T _{inst,max} = 40.0 Nm
Socket size	19 mm
Total fixing thickness, max	t _{fix} = 8 mm
Volume of resin per drill	12 ml/6 scale divisions



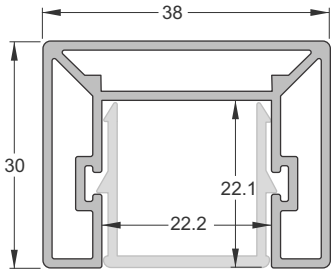
Infinity Balustrade Top Fix Installation procedure using 1 or 5mm Spacer Plates on a Deck

- 1 - Mark out attachment points on Channel section, after site measure up.
Pre-drill say 14mm dia at attach points and No8C/S in between
 - 2 - Place a nail at C/L of each end of channel run. Attach string line. Place Channel on deck. Lightly screw in position with No8 C/s screws
 - 3 - Measure vertical height to deck at ea attach point. Calculate spacers needed to bring channel level. See the different spacer layout for Timber decks as opposed to Steel or concrete.
 - 4 - Set heights with spacers, including an PVC Tape layer to Deck. Tighten No8 screws to firmly locate channel on deck.
Channel should now be firm and level.
 - 5 - At corners the channel should be chamfered, to provide a neat join.
 - 6 - Pre drill Deck for appropriate fastener, through channel. Vacuum or blow away debris.
 - 7 - Place HD Clamps in place (adjust screws to inside). Fine tune spacers. Fasten all down very firmly.
For Coachscrews into Timber, Sika Supergrip to full depth.
 - 8 - Place Front cover in place, incl bulb seal. Lightly crimp bottom tag, and a dab of V60 silicone at top.
Corners should be neatly chamfered
-
- 9 - Fit Glass panels into position. As the channel is level, there are no provision for Glass vertical adjustment
 - 10 - Lightly nip the top 2 grub screws on the HD clamp to hold the glass vertical.
 - 11 - Adjust the 4 lower grub screws on the HD clamp and Glass clamp assemblies for top edge Horizontal alignment
 - 12 - When glass panels are in the correct position tighten top and bottom clamp screws on HD clamp (5.0Nm max)
 - 13 - Install Rear cover incl bulb seal. Lightly crimp bottom tag, and a dab of V60 silicone at top.
Corners should be neatly chamfered
 - 14 - Fit End plates as required

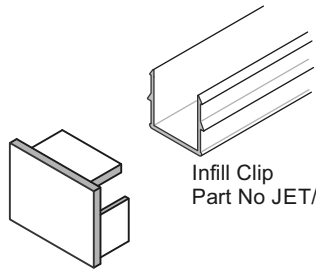


Juralco Edgetec® Infinity Balustrade System
Interlinking Top Rail conforming to NZS 4223.3.2016
and Building Code Clause B1.3.4

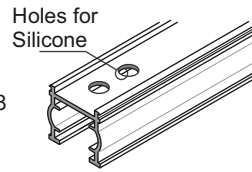
This page applies to 12mm and 15mm Toughened Glass only



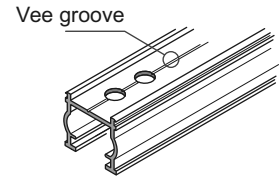
Interlinking Top Rail Extrusion
 Part No JET/220/5.8
 Also showing Infill Clip, for use in between Glass Panels



Infill Clip
 Part No JET/215/5.8



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



Interlinking Top Rail Gasket for 15 mm Toughened Glass
 Part No JET /Gasket 15/2.9

Application Notes:

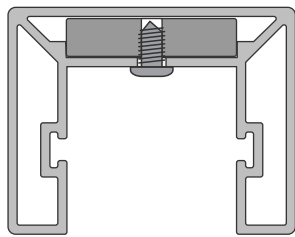
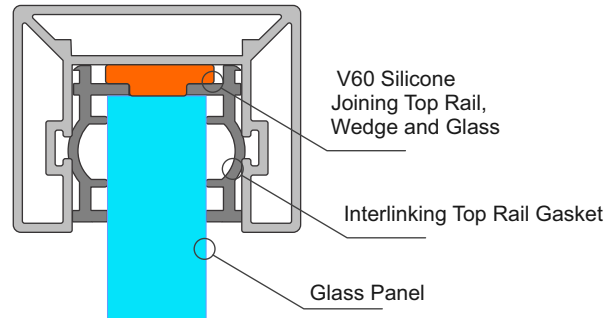
- Cut short lengths of Gasket (50mm) and place say every 700mm.
- Cut/adjust Interlinking rail to correct dimensions, test in place.
- Remove all, install full cut lengths of Gasket to glass top edge

- 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.

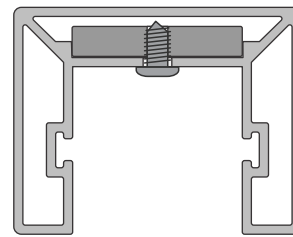
Note: Ends must be attached to structure or post,
 - Joins must have a suitable joiner plate

12mm Glass and Gasket shown



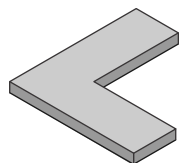
Joiners both 22.5 x 5mm Aluminium

- 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
 - Both ends must be attached.
 - Joins, where required must be at the end of Glass Panels

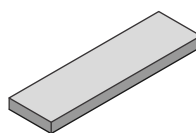


End Plate Tabs all 22.5 x 4mm SS.

- 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
 - End Plate must be securely attached to Post or structure.

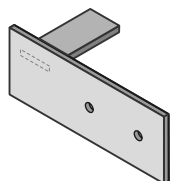


Interlinking Top Rail Corner Joiner
 75x75x5mm
 Part No JET 31

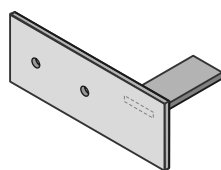


Interlinking Top Rail Straight Joiner
 80x22.8x5mm
 Part No JET 30

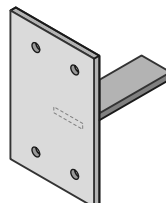
Joiners both 22.5 x 5mm Aluminium



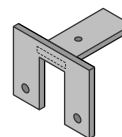
Interlinking Top Rail Wall type End Plate
 SS. 120x45mm
 Part No JET 40LH



Interlinking Top Rail Wall type End Plate
 SS. 120x45mm
 Part No JET 40RH



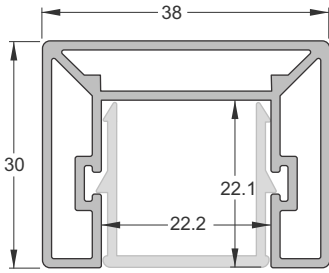
Interlinking Top Rail Wall type End Plate
 SS. 100x65mm
 Part No JET 41



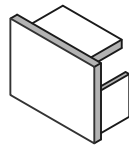
Interlinking Top Rail End Bracket
 SS. 60mm x 46mm
 Part No JET 42

All for attaching to Posts or Structures

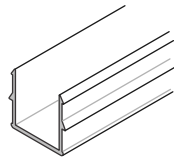
Juralco Edgetec® Infinity Balustrade System
Interlinking Top Rail conforming to NZS 4223.3.2016
and Building Code Clause B1.3.4



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

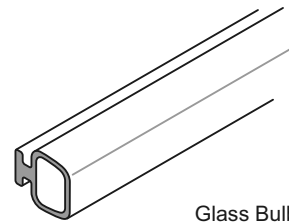


Interlinking Top
 Rail End Cap
 Part No JET 37



Infill Clip
 Part No JET/215/5.8

**This Page applies to 15.2mm and 17.2mm
 Laminated Safety Glass only**

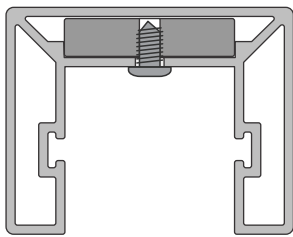
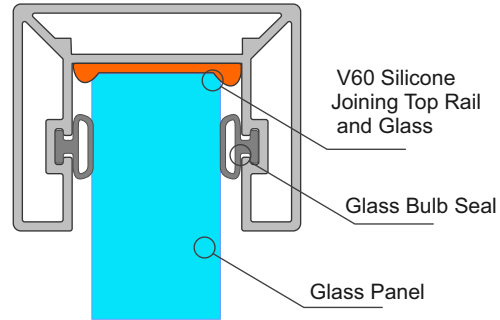


Glass Bulb Seal
 Part No JET/IB/CVRBLB250

Application Notes:

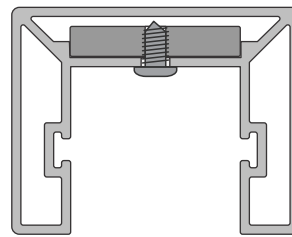
- Assemble Top Rail + Joiners and suitable End plates
- Place Full lengths of Bulb seal in place.
- Place blobs of V60 silicone along top edge of Glass at similar spacings to Gasket on previous page.
- Then place Top Rail extrusion and bulb seals firmly onto Glass.
- Tape all down, wait 24 hrs to fully bond. Clean up.

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



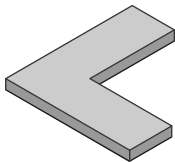
**Joiners both 22.5 x 5mm
 Aluminium**

- 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

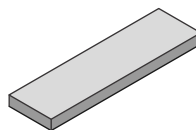


**End Plate
 Tabs all 22.5 x 4mm SS.**

- 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.

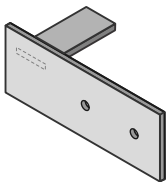


Interlinking Top Rail
 Corner Joiner
 75x75x5mm
 Part No JET 31

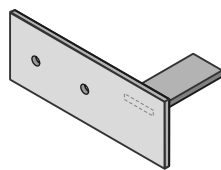


Interlinking Top Rail
 Straight Joiner
 80x22.8x5mm
 Part No JET 30

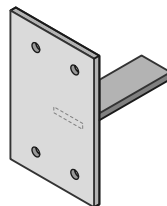
Joiners both 22.5 x 5mm Aluminium



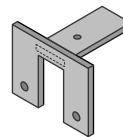
Interlinking Top Rail
 Wall type End Plate
 Rectangular type
 120x45mm, SS
 Part No JET 40LH



Interlinking Top Rail
 Wall type End Plate
 Rectangular type
 120x45mm, SS
 Part No JET 40LH



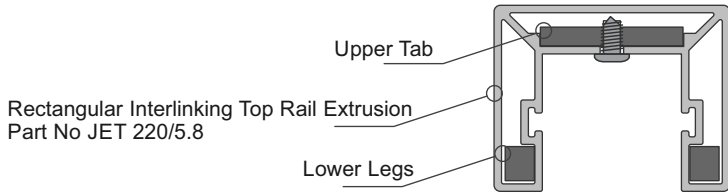
Interlinking Top Rail
 Wall type End Plate
 Rectangular type
 100x65mm, SS
 Part No JET 41



Interlinking Top Rail
 Wall type End Plate
 Rectangular type
 60x46mm, SS
 Part No JET 42

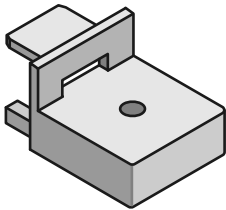
**All for attaching to
 Posts or Structures**

Juralco Edgetec® Infinity Balustrade System Rectangular Interlinking Top Rail Connectors



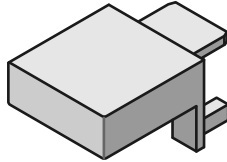
- Swivel Kits: (After cutting extrusions to length)
- With Swivel in place, spot drill from below for position
 - Drill out Swivel to 3mm dia, extrusion to 4mm dia
 - Use No6 x 1/4in SS ST Pan sq drive Screw
 - Both sides must be attached.
 - Join together with the M6 x 20 C/S SS Screw

Interlinking Top Rail
Horizontal Fixed
90 deg Connector
Part No JET 45A

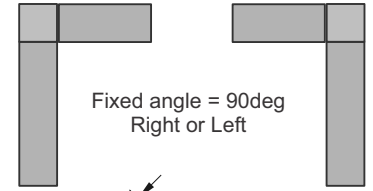
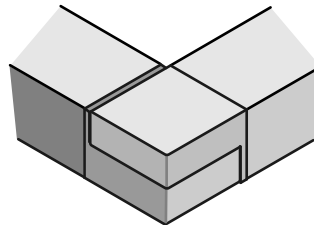


M6 x 25 C/S
SS machine screw

Interlinking Top Rail
Horizontal Fixed
90 deg Connector
Part No JET 45B



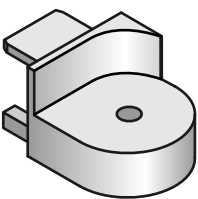
Rectangular Interlinking Top Rail
Horizontal Fixed 90deg Kit
Part No JET220/90deg Corner Kit
(JET 45A and B + screw)



19mm

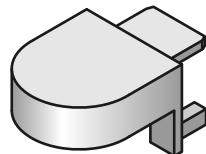
Glass corner
Gap = 19mm min

Interlinking Top Rail
Horizontal 0 - 90deg
Swivel Connector
Part No JET 46A

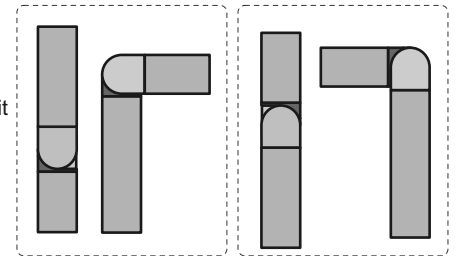
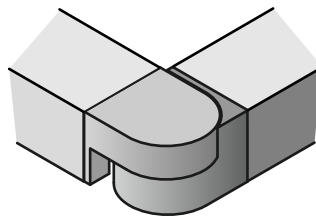


M6 x 25 C/S
SS machine screw

Interlinking Top Rail
Horizontal 0 - 90deg
Swivel Connector
Part No JET 46B



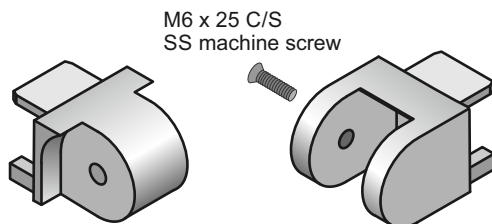
Rectangular Interlinking Top Rail
Horizontal 0 - 90 deg Right/Left
Swivel Connector Kit
Part No JET220/Horizontal Adj Corner Kit
(JET 46A and B + screw)



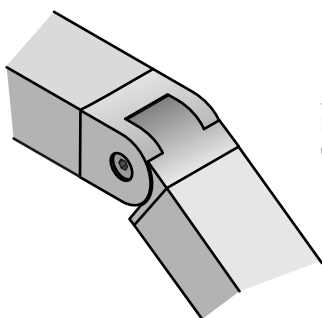
19mm

Glass corner
Gap = 19mm min

Interlinking Top Rail
Vertical 35deg up
to 35 deg down
Swivel Connector
Part No JET 47A

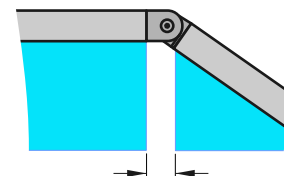


Interlinking Top Rail
Vertical 35deg up
to 35 deg down
Swivel Connector
Part No JET 47B

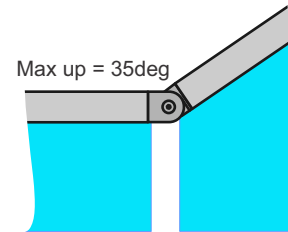


Interlinking Top Rail 35 deg down
Swivel Connector Kit
Part No JET220/Vertical Adj Corner Kit
(JET 47A and B + screw)

Max down = 35deg

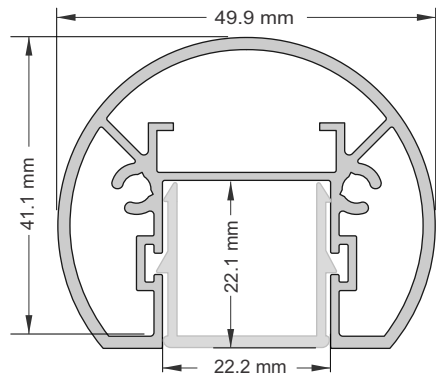


Gap 30mm min
40mm recommended

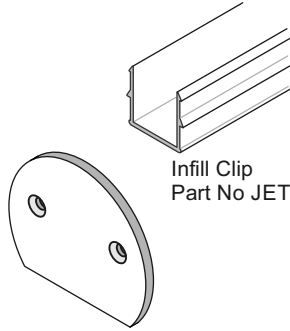


Gap 30mm min
40mm recommended

Juralco Edgetec® Infinity Balustrade System
Round Interlinking Top Rail conforming to NZS 4223.3.2016
and Building Code Clause B1.3.4

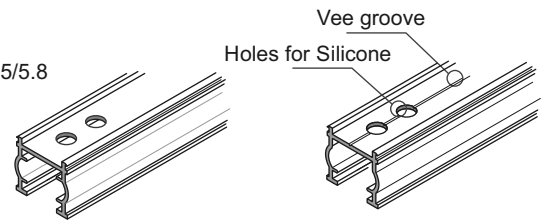


Round Interlinking Top Rail Extrusion
 Part No JET/211/5.8
 Also showing Infill Clip, for
 use in between Glass Panels



Round Interlinking
 Top Rail End Cap
 Part No JET/231

**This page applies to 12mm and 15mm
 Toughened Glass only**



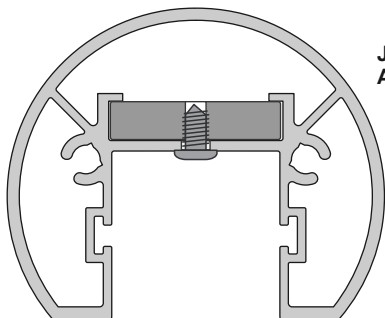
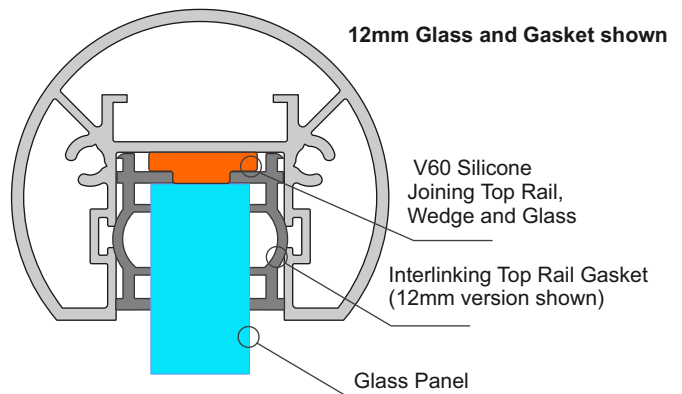
Interlinking Top Rail Gasket
 for 12 mm Toughened Glass
 Part No JET /Gasket 12/2.9

Interlinking Top Rail Gasket
 for 15 mm Toughened Glass
 Part No JET /Gasket 15/2.9

Application Notes:

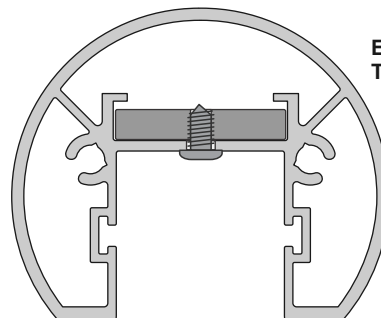
- Cut short lengths of Gasket (50mm) and place say every 700mm.
- Cut/adjust Interlinking rail to correct dimensions, test in place.
- Remove all, install full cut lengths of Gasket to glass top edge
- Assemble Top Rail + Joiners and suitable End plates
- Place blobs of V60 silicone in every Gasket hole
- 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



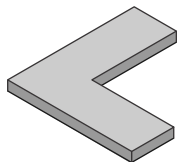
**Joiners both 22.5 x 5mm
 Aluminium**

- 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
 - Both ends must be attached.
 - Joins, where required must be at the end of Glass Panels

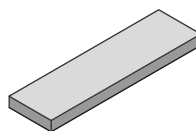


**End Plate
 Tabs all 22.5 x 4mm SS.**

- 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
 - End Plate must be securely attached to Post or structure.

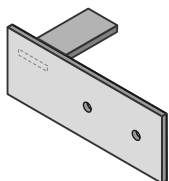


Interlinking Top Rail
 Corner Joiner
 75x75x5mm
 Part No JET 31

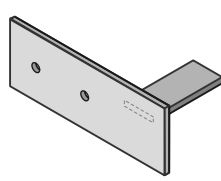


Interlinking Top Rail
 Straight Joiner
 80x22.8x5mm
 Part No JET 30

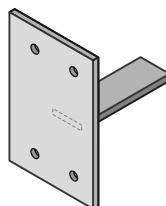
Joiners both 22.5 x 5mm Aluminium



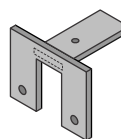
Interlinking Top Rail
 Wall type End Plate
 SS. 120x45mm
 Part No JET 40LH



Interlinking Top Rail
 Wall type End Plate
 SS. 120x45mm
 Part No JET 40RH



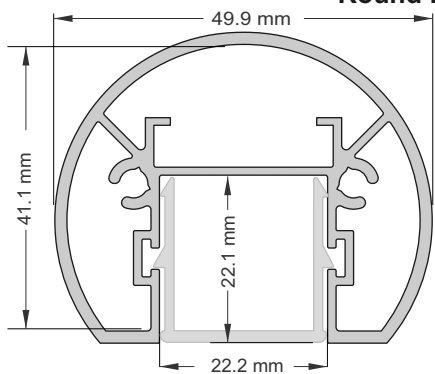
Interlinking Top Rail
 Wall type End Plate
 SS. 100x65mm
 Part No JET 41



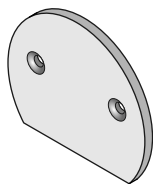
Interlinking Top Rail
 End Bracket
 SS. 60mm x 46mm
 Part No JET 42

**All for attaching to
 Posts or Structures**

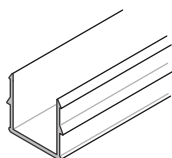
Juralco Edgetec® Infinity Balustrade System
Round Interlinking Top Rail conforming to NZS 4223.3.2016
and Building Code Clause B1.3.4



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

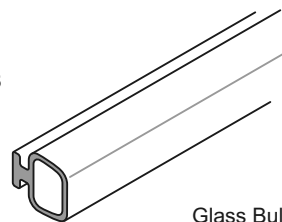


Round Interlinking
 Top Rail End Cap
 Part No JET 231



Infill Clip
 Part No JET/215/5.8

**This Page applies to 15.2mm and 17.2mm
 Laminated Safety Glass only**

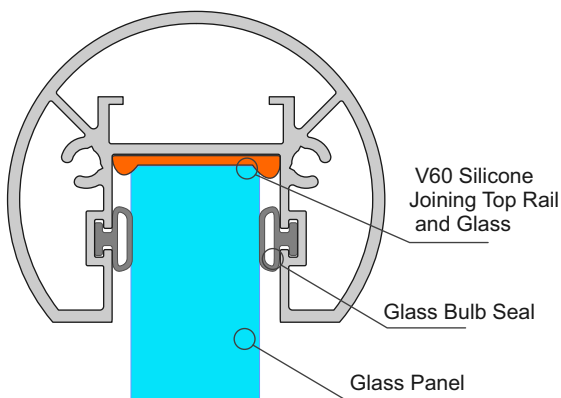


Glass Bulb Seal
 Part No JET/IB/CVRBLB250

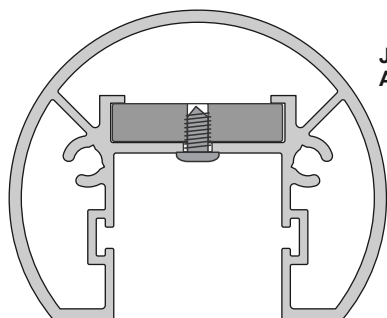
Application Notes:

- Assemble Top Rail + Joiners and suitable End plates
- Place Full lengths of Bulb seal in place.
- Place blobs of V60 silicone along top edge of Glass at similar spacings to Gasket on previous page.
- Then place Top Rail extrusion and bulb seals firmly onto Glass.
- 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

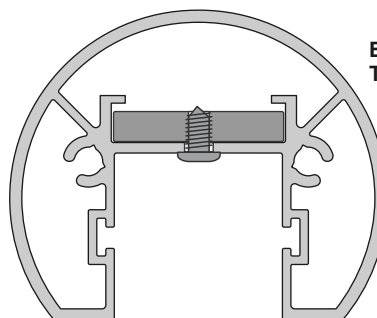


V60 Silicone
 Joining Top Rail
 and Glass
 Glass Bulb Seal
 Glass Panel



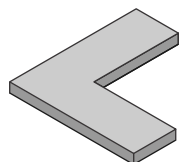
**Joiners both 22.5 x 5mm
 Aluminium**

- 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

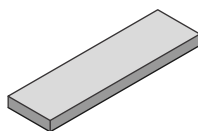


**End Plate
 Tabs all 22.5 x 4mm SS.**

- 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.

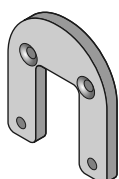


Interlinking Top Rail
 Corner Joiner
 75x75x5mm
 Part No JET 31

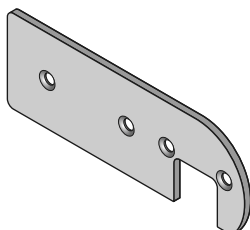


Interlinking Top Rail
 Straight Joiner
 80x22.8x5mm
 Part No JET 30

Joiners both 22.5 x 5mm Aluminium



Interlinking Top Rail
 Wall type End Plate
 Circular type
 58x50x5mm, Al
 Part No JET 232

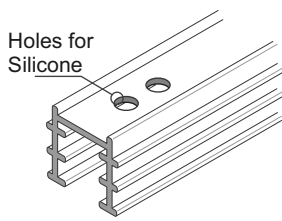


Interlinking Top Rail
 Wall type offset End Plate
 Circular type
 42x120x3mm, Al
 C/s both sides = RH or LH
 Part No JET 233

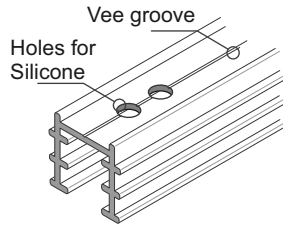
**All for attaching to
 Posts or Structures**

Juralco Edgetec® Infinity Balustrade System
SS Interlinking Top Rail conforming to NZS 4223.3.2016
and Building Code Clause B1.3.4

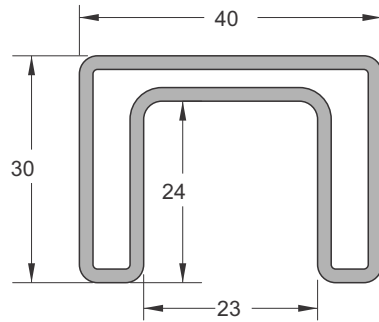
This page applies to 12mm and 15mm Toughened Glass and 15.2mm and 17.2mm Laminated Glass only



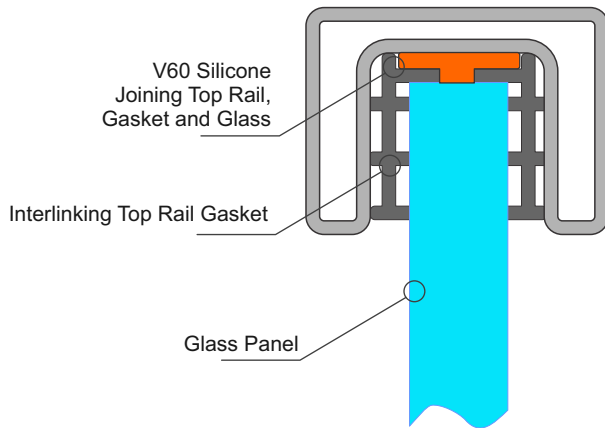
SS Interlinking Top Rail
12mm Glass Gasket
Part No JET/430GT/12/2.9



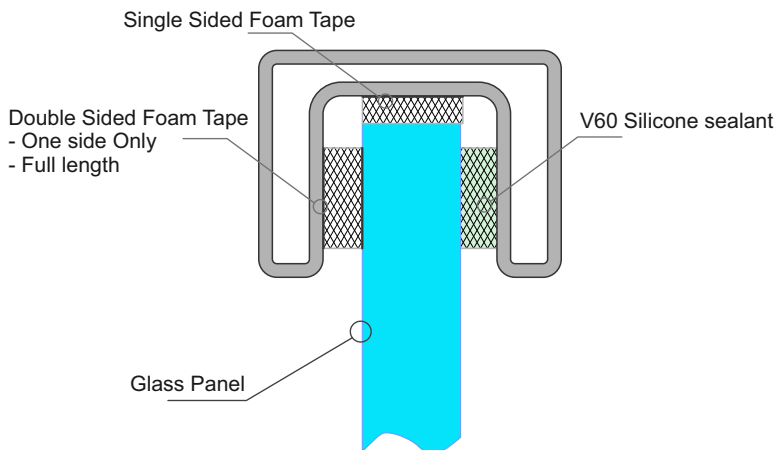
SS Interlinking Top Rail
15mm Glass Gasket
Part No JET/430GT/15/2.9



SS INTERLINKING TOP RAIL
Part No JET/430/PSS/5.8

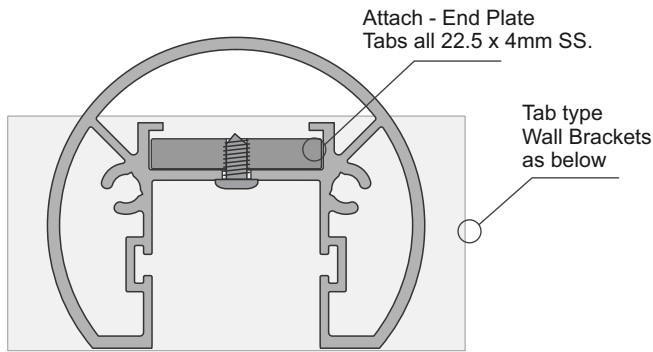


Use Gasket for 12mm and 15mm Toughened Glass

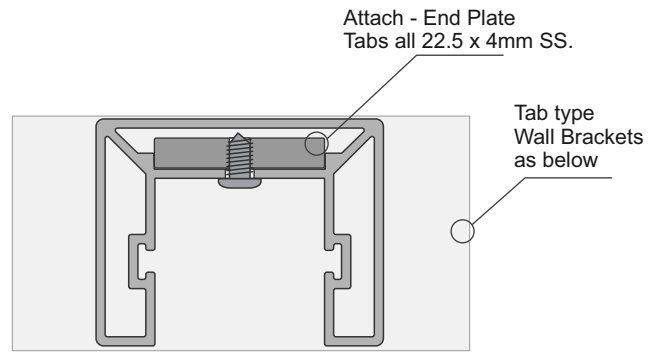


Use Foam Tape for 15.2mm and 17.2mm Laminated Glass

**Juralco Edgetec® Infinity Balustrade System
Interlinking Top Rail End Bracket Attachments**



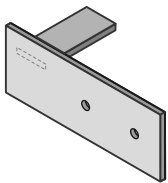
Round Interlinking Top Rail Extrusion
Part No JET/211/5.8



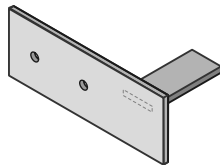
Interlinking Top Rail Extrusion
Part No JET/220/5.8

Applies to these Interlinking Top Rails

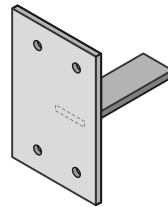
Interlinking Top Rail End Bracket Options - Both types above - Tab attach Type



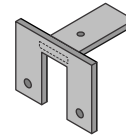
Interlinking Top Rail
Wall type End Plate
SS. 120x45mm
Part No JET 40LH



Interlinking Top Rail
Wall type End Plate
SS. 120x45mm
Part No JET 40RH

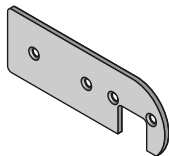


Interlinking Top Rail
Wall type End Plate
SS. 100x65mm
Part No JET 41



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

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
Part No JET 233



Interlinking Top Rail
Wall type End Plate
Round Rail type only
50x58x5mm, Al
Part No JET 232

General Notes:

- All fixings to be Stainless Steel
- EPDM 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 10g 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 NZ3603 or NZ3604

Note : Fixing to Juralco EDGE Post

- use 2 off 8g x 25 SS PK Screws

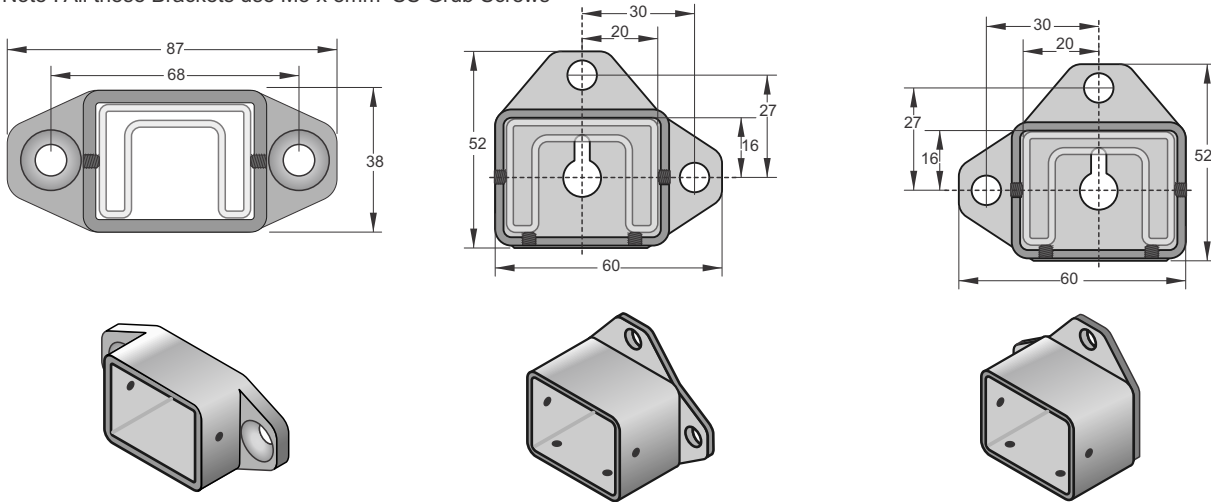
Note : Fixing to Concrete Wall

- 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

**Juralco Edgetec® Infinity Balustrade System
SS Interlinking Top Rail Connectors**

**Juralco Frameless Glass Balustrade System
Polished SS Interlinking Rail - Fixing to Wall or End Post**

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



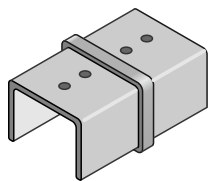
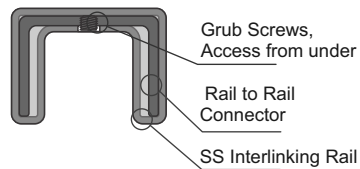
WALL BRACKET 2 FIX SS2205
Part No JET436/PSS
87mm x 37mm x 25mm deep

WALL BRACKET 2 FIX - RH SS2205
Part No JET437/RH/PSS
52mm x 60mm x 33mm deep

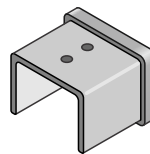
WALL BRACKET 2 FIX - LH SS2205
Part No JET437/LH/PSS
52mm x 60mm x 33mm deep

**Juralco Frameless Glass Balustrade System
Polished SS Interlinking Rail - Rail Connections**

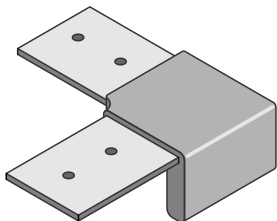
Note : All these Brackets use M5 x 6 SS Grub Screws.
If necessary these holes must be Drilled + tapped M5, as shown.
The under side of the Interlinking Rail must be drilled
M6/7 to match M5 tapped holes positions, for access to Grub screws
- Joins, where required must be at the end of Glass Panels



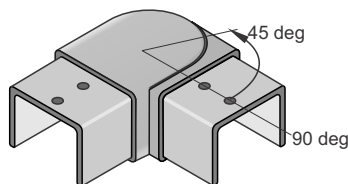
180deg INLINE JOINER SS2205
Part No JET431/PSS
60mm x 40mm x 30mm deep



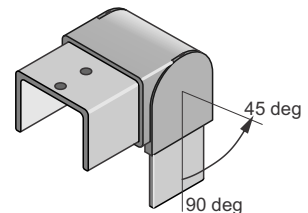
END CAP SS2205
Part No JET432/PSS
33mm x 40mm x 30mm deep



90deg JOINER SS2205
Part No JET433/PSS
95mm x 95mm x 30mm deep

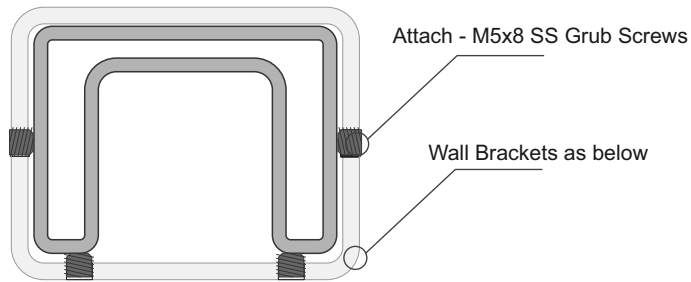


90 - 45 deg HORIZONTAL JOINER SS2205
Part No JET434/PSS
70mm x 70mm x 30mm deep



90 - 45 deg ADJUSTABLE VERTICAL JOINER SS2205
Part No JET435/PSS
60mm x 60mm x 40mm wide

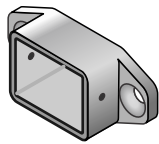
**Juralco Edgetec® Infinity Balustrade System
Interlinking Top Rail End Bracket Attachments**



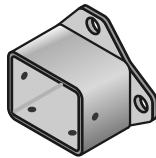
SS INTERLINKING TOP RAIL
Part No JET/430/PSS/5.8

Applies to this Interlinking Top Rail

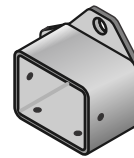
Interlinking Top Rail End Bracket Options



Wall Bracket 2205
Part No JET/436/PSS
87mm x 37mm x 25mm deep



Wall Bracket RH 2205
Part No JET/437/RH/PSS
52mm x 60mm x 33mm deep



Wall Bracket LH 2205
Part No JET/437/LH/PSS
52mm x 60mm x 33mm deep

General Notes:

- All fixings to be Stainless Steel
- EPDM 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 NZ3603 or NZ3604

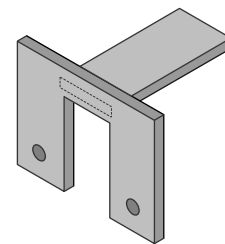
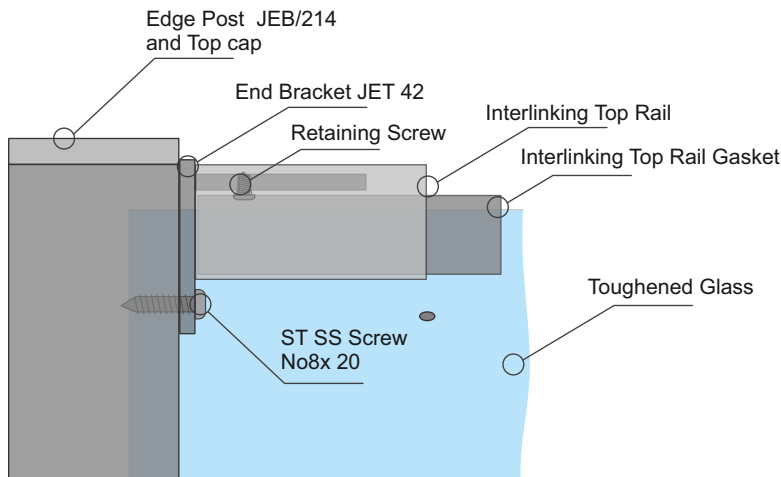
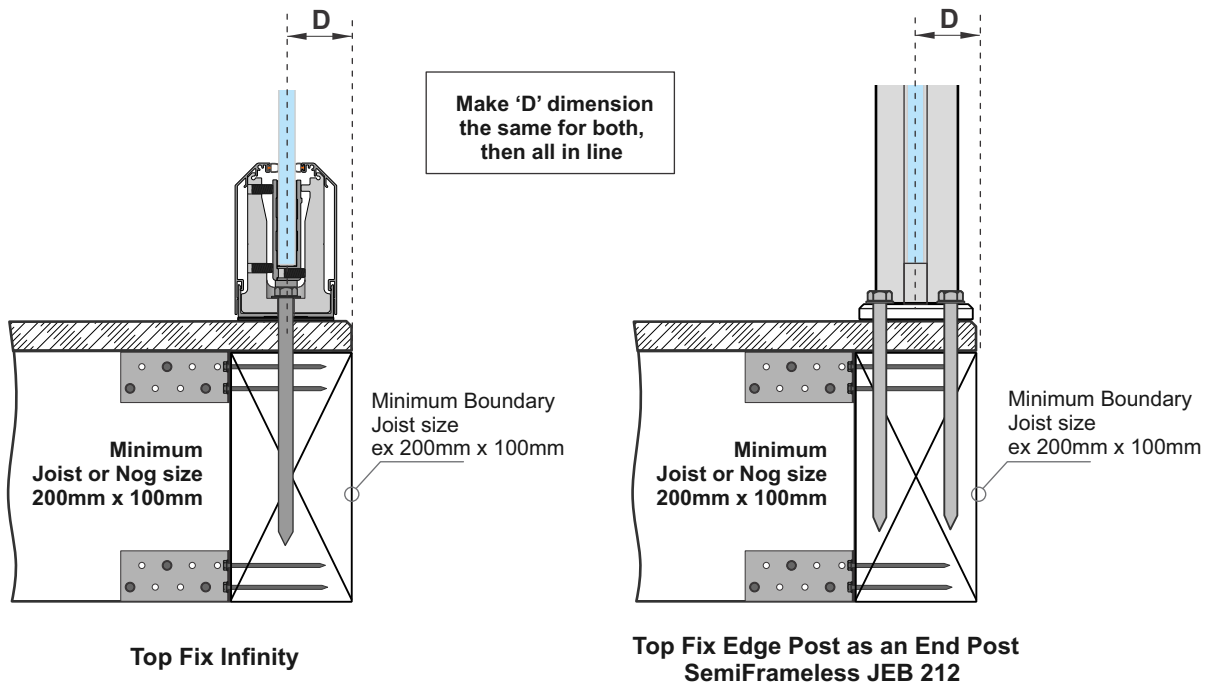
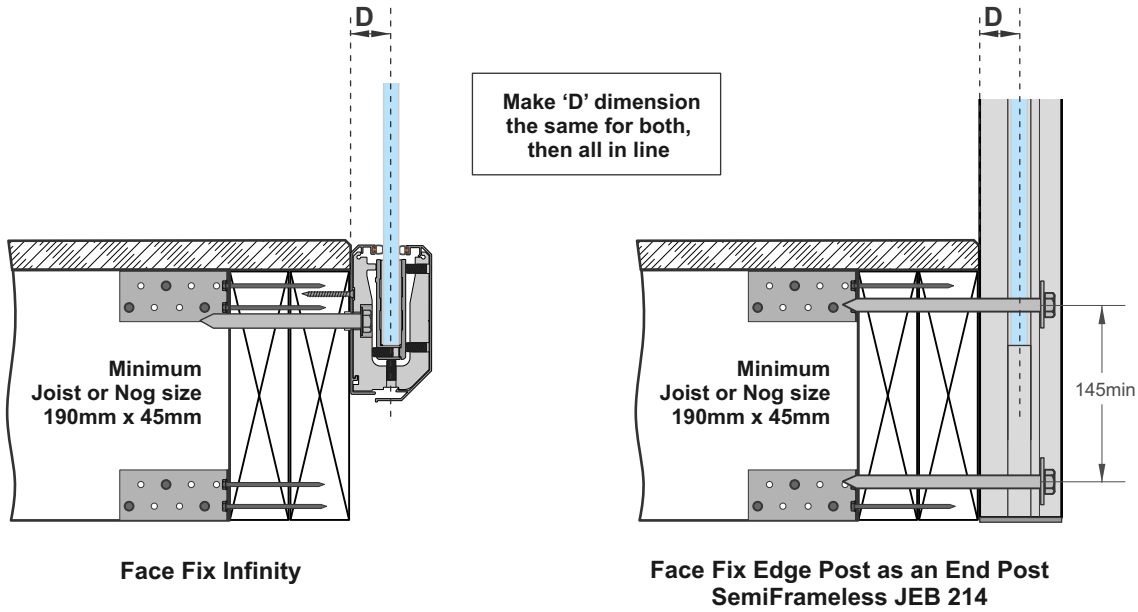
Note : Fixing to Juralco EDGE Post

- 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

Juralco Edgetec® Infinity Balustrade System
Interlinking Top Rail conforming to NZS 4223.3.2016 and Building Code Clause B1.3.4
For attaching to a Edge balustrade Post where Wall fixing not suitable



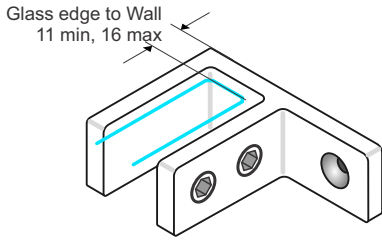
Interlinking Top Rail to Post
 Part No JET 42
 60mm wide x 46mm deep

Side Elevation View - Post JEB/214

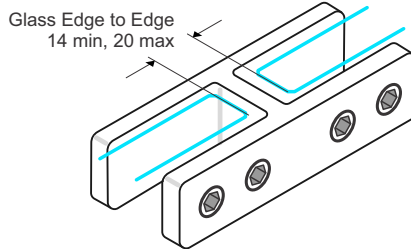
Juralco Edgetec® Infinity Balustrade System Glass Stiffener Brackets

Top Edge, Frameless
Glass Stiffeners
12mm - 15.2mm Glass

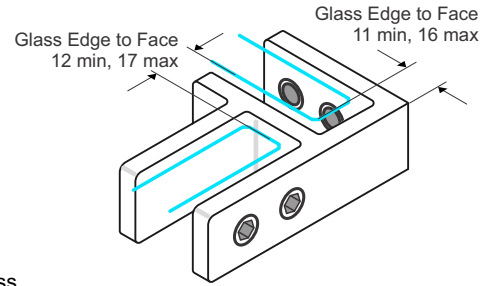
- For Laminated or SentryGlass only. Not for Toughened Glass. No Holes in Glass required.
- Install 200mm max from Glass Top edge
- Supplied as a kit, with screws, a variety of Gaskets and a SS clamp Plate
- Duplex 2205 SS construction. Polished, Satin or Powder coat SCC Finishes



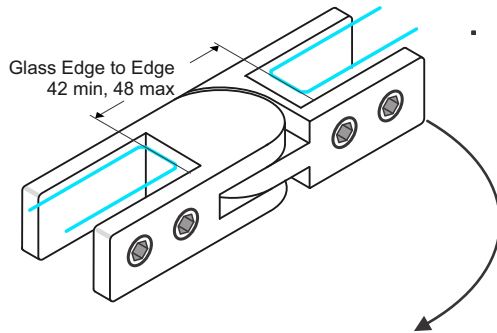
90 Deg Glass to Wall
75x505x25mm
Part No JET72/PSS
Part No JET72/SSS
Part No JET72



180 Deg Glass to Glass
70x34x25mm
Part No JET71/PSS
Part No JET71/SSS
Part No JET71



90 deg Glass to Glass
65x55x25mm
Part No JET70/PSS
Part No JET70/SSS
Part No JET70

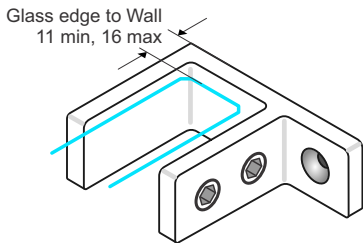


90 - 180 Deg
Adjustable Glass to Glass
135x34x25mm
Part No JET73/PSS
Part No JET73/SSS
Part No JET73

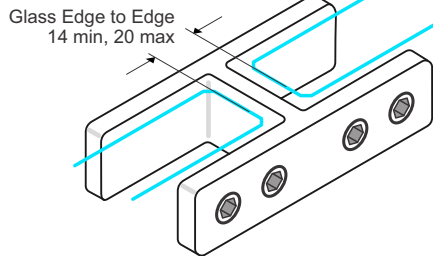
Series 70 Glass Stiffener Brackets, Gaskets, Plates			
Thickness	Green Pack	Yellow Pack	Steel Plate
12mm	0	2	1
13.52mm	2	0	1
15, 15.2mm	2	0	1

Top Edge, Frameless
Glass Stiffeners
17.2mm - 17.52mm Glass

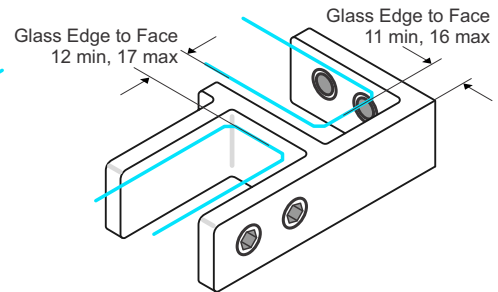
- For Laminated or SentryGlass only. Not for Toughened Glass. No Holes in Glass required.
- Install 200mm max from Glass Top edge
- Supplied as a kit, with screws, a variety of Gaskets and a SS clamp Plate
- Duplex 2205 SS construction. Polished, Satin or Powder coat SCC Finishes



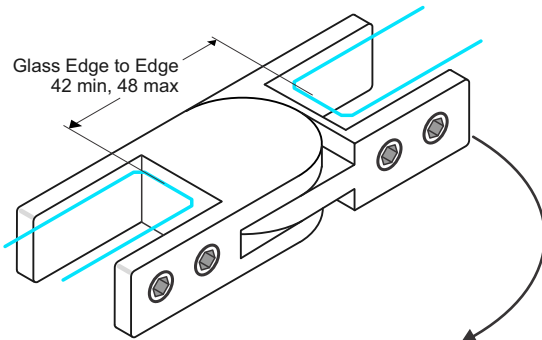
90 Deg Glass to Wall
65x55x25mm
Part No JET82/PSS
Part No JET82/SSS
Part No JET82



180 Deg Glass to Glass
103x39x25mm
Part No JET81/PSS
Part No JET81/SSS
Part No JET81



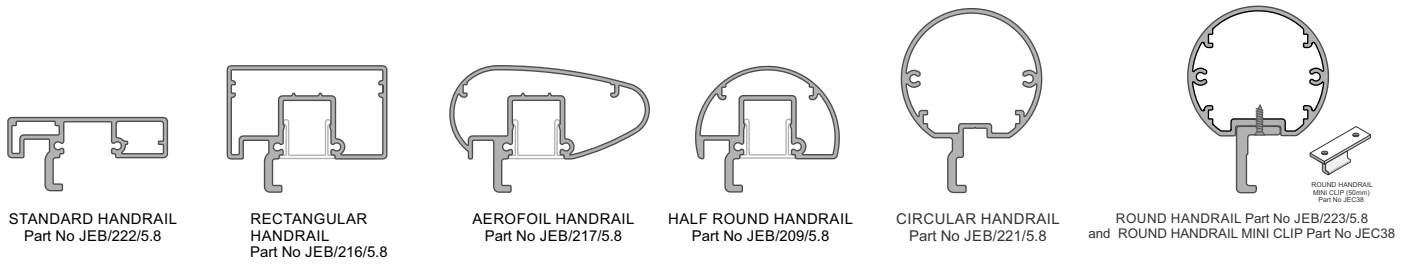
90 deg Glass to Glass
88x55x25mm
Part No JET80/PSS
Part No JET80/SSS
Part No JET80



90 - 180 Deg Adjustable
Glass to Glass
145x39x25mm
Part No JET83/PSS
Part No JET83/SSS
Part No JET83

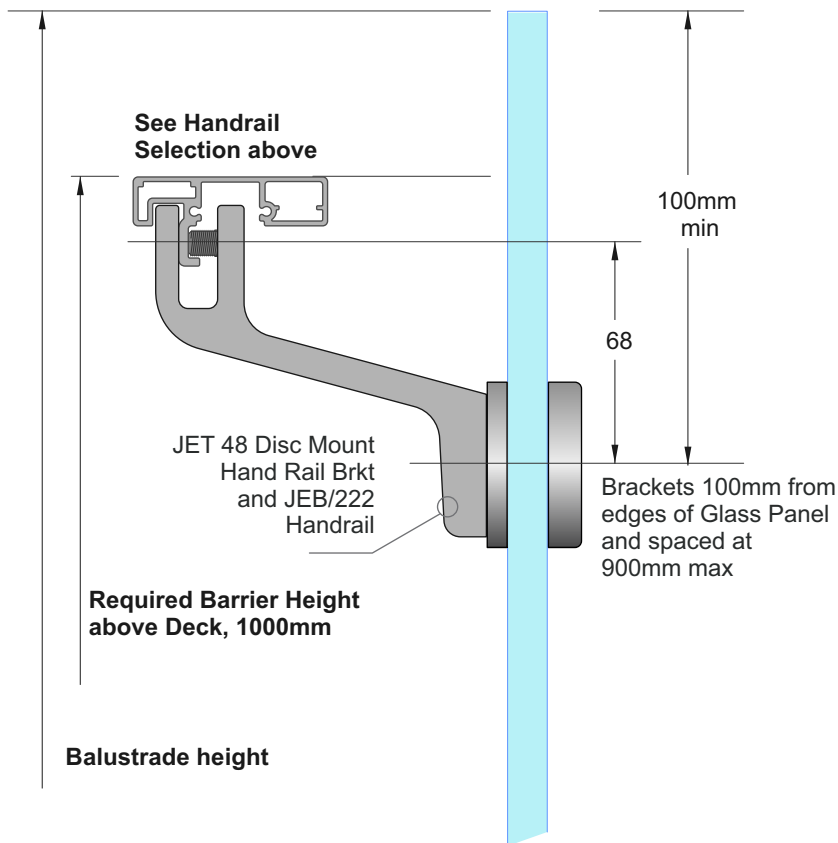
Series 80 Glass Stiffener Brackets, Gaskets, Plates			
Thickness	Green Pack	Yellow Pack	Steel Plate
17.2, 17.52mm	0	2	1

Juralco Edgetec® Infinity Balustrade System Handrails



All these from the EDGE Balustrade manual

Standard Handrail (JEB 222 shown) + JET 48 Disc Mount Brackets, Deck side mount



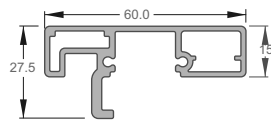
Frameless Glass Systems

Juralco Edgetec® Infinity Balustrade System

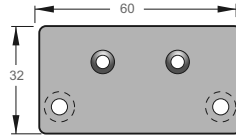
Handrail End Plates for Attaching to a Structure or Edge Deck mounted Post

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

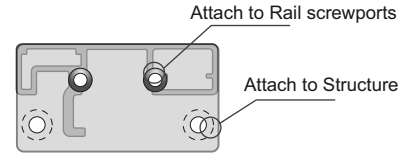
End Caps all ex 3mm Aluminium



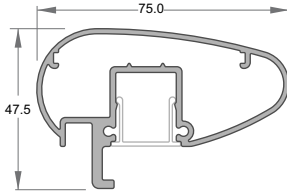
HANDRAIL
Part No JEB/222/5.8



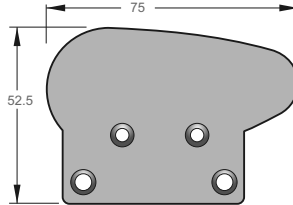
HANDRAIL WALL ATTACH END PLATE
Part No JEC215/WC



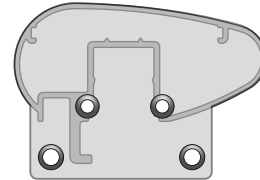
For RH and LH



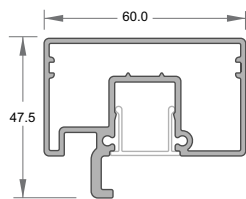
AEROFOIL HANDRAIL
Part No JEB/217/5.8



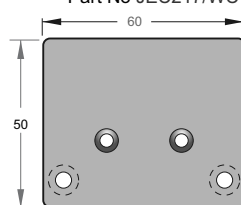
HANDRAIL WALL ATTACH END PLATE
Part No JEC217/WC



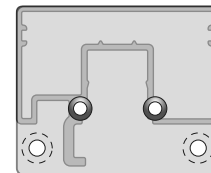
For RH and LH



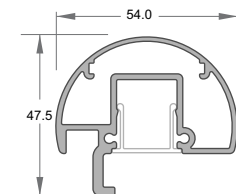
RECTANGULAR HANDRAIL
Part No JEB/216/5.8



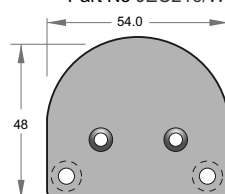
HANDRAIL WALL ATTACH END PLATE
Part No JEC216/WC



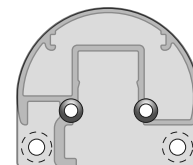
For RH and LH



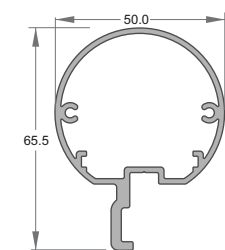
HALF ROUND HANDRAIL
Part No JEB/209/5.8



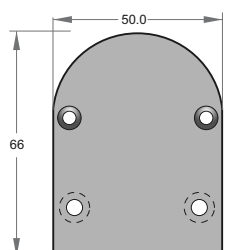
HANDRAIL WALL ATTACH END PLATE
Part No JEC209/WC



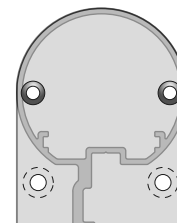
For RH and LH



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* = 0.9kN, 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 Juralco EDGE Post

- use 2 off 8g x 25 SS PK Screws

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 NZ3603 or NZ3604

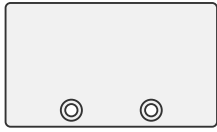
Note : Fixing to Concrete Wall

- 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

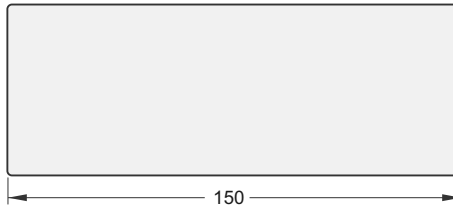
Juralco Edgetec® Infinity Balustrade System Handrail Components

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

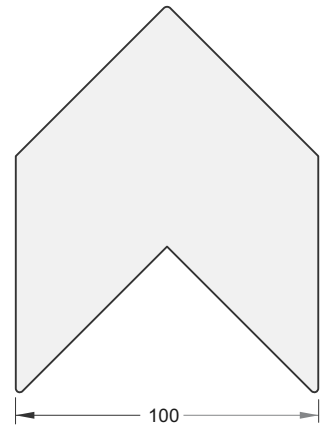
All ex 3mm Aluminium



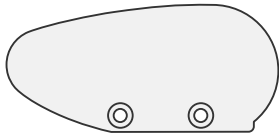
Rectangular End Cap
Part No JEC 03
Can be used as RH or LH



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



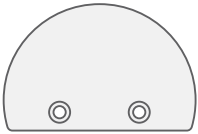
Rectangular and 75mm Aerofoil
90deg Corner Joiner Part No JEC 01



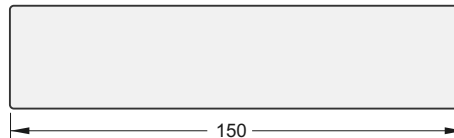
75mm Aerofoil End Cap
Part No JEC 11
Available as RH or LH

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

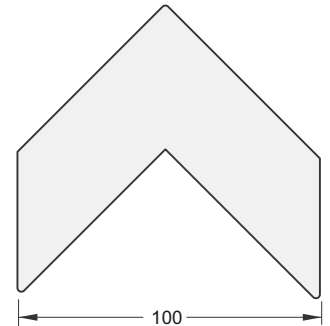
All ex 3mm Aluminium



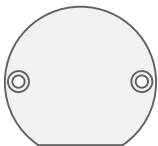
Round End Cap
Part No JEC 06
Can be used as RH or LH



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



Round 90deg Corner Joiner
Part No JEC 04



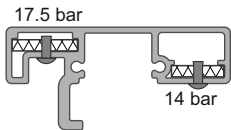
Circular End Cap
Part No JEC 208
Can be used as RH or LH

Standard Handrail End Cap, Straight 135 deg and 90deg corners

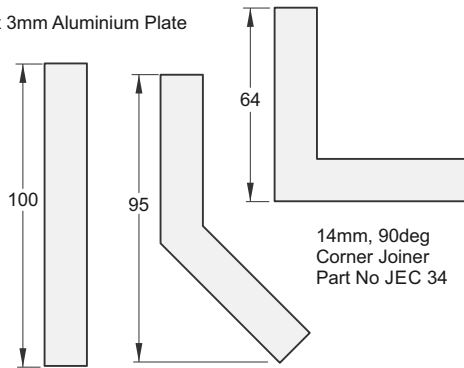
All ex 3mm Aluminium Plate



Standard Handrail End Cap
Part No JEC 18
Can be used as RH or LH



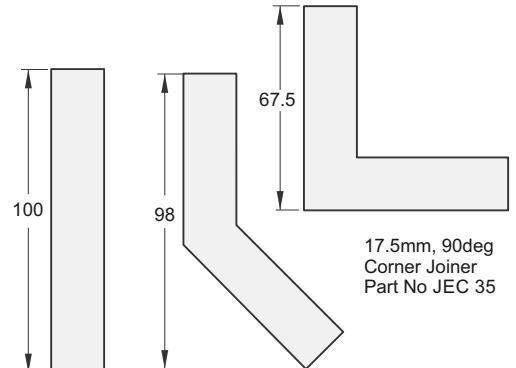
Use 2 x Rivets to each end of each Bar



14mm
Straight Joiner
Part No JEC 32

14mm, 135deg
Corner Joiner
Part No JEC 36

14mm, 90deg
Corner Joiner
Part No JEC 34



17.5mm
Straight Joiner
Part No JEC 33

17.5mm, 135deg
Corner Joiner
Part No JEC 37

17.5mm, 90deg
Corner Joiner
Part No JEC 35

Juralco Edgetec® Infinity Balustrade System Glass Care and Maintenance

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® Infinity 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 display 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	