

#JURALCO

JURALCO EDGE® BALUSTRADE SYSTEMS



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 EDGE® Balustrading Systems is an architectural balustrade system designed to provide a wide range of design options in both contemporary glass and in more conventional aluminium metal balusters.

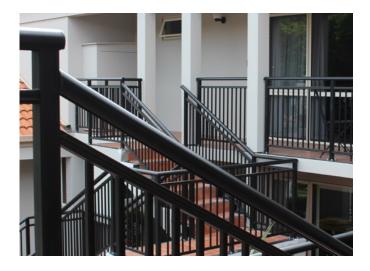
The Juralco EDGE® Balustrade system is an architectural balustrade system designed to provide a range of modern design options in both glass and aluminium. Mounting to a deck can be done a variety of ways to timber, concrete, steel, and to waterproof membranes.

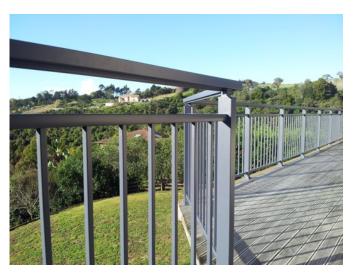
Toughened Glass infills can be 6mm or 10mm, either fully framed (6mm) or semi frameless (10mm) with handrails either top or side mounted. Toughened 13.2mm Laminated glass can be used for semi frameless applications.

For a more traditional look Vertical metal infills are available in 17mm sq and 49mm, 60mm and 123mm slats, all in powder coated colour of your choice. All designs are available with a variety of handrails. Tables are shown for various baluster spacings, heights and wind zones.

All mountings and installation recommendations conform to the latest AS/NZS1170 and NZS 4223.3.2016 regulations.

Our installers are all very experienced and can recommend a balustrading system to fit your design requirements and budget.







Top left illustration - Top Mount EDGE® Balustrade with Metal Balusters Bottom left illustration - Top Mount EDGE® Balustrade with Metal Balusters Illustration above - Face Fixed EDGE Balustrade with Laminated glass, to Concrete

Cover illustration - Face Fixed EDGE® Semi Frameless Balustrades

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Complies With AS/NZS 1170:2002, NZS 4223.3.2016, NZ Building Code B1, B2, F2 ,F4 and F9 Complies with French Standard NF P01-013 (1988-08)

EDGE® Balustrade is for Domestic and Residential Occupancy types A, A Other and C3 only Occupancy Types as per AS/NZ 1170.1.2002. <u>Not suitable for Commercial C3</u> applications

Code	Type of Occupancy for part of the building or structure	Specific Uses	Glass
А	Domestic and Residential activities	All areas within or serving exclusively one dwelling including stairs, landings etc, but excluding external balconies and edges of roofs.	6mm,10mm Toughened Glass and
A Other, C3	Areas without obstacles for moving people and not susceptible to over crowding	Stairs, landings, external balconies, edges of roofs etc.	13.2mm Toughened Laminated Glass

- Note 1 Glass 6mm, 10mm Toughened Safety Glass and 13.2mm Toughened Laminated Glass Glass must have a minimum strength of 100MPa. All edges polished.
- Note 2 Juralco Balustrade Systems building code compliance documentation requires all balustrade installations are to be completed in accordance with the requirements of our authorised installer certification.
- Note 3 All Semi Frameless glass Balustrades must have an Top or Side mounted Handrail to conform to NZS 4223.3.2016, except for 13.2mm Toughened Laminated Glass applications as per this manual. Handrails not necessary for Swimming Pools.

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#JURALCO EDGE

Juralco EDGE® Balustrade System - Specifications and Surface finishes

1.Scope- This specification details the documents the Juralco EDGE® 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 finishings.

2. NZBC Compliance

- The Juralco EDGE[®] Balustrade System has been reviewed by Lautrec Technology Group Ltd to demonstrate compliance with the structural requirements of the New Zealand Building Code and AS/NZS 1170: 2002 occupancy A, A Other and C3, NZS 3604 Low, Medium, High, Very High and Extra High Wind Zones.
- The Structural Engineering design includes the requirements of B1 Structure, B2 Durability, F2 Hazardous material and F4 Safety from falling, all from the Building Code.
- Verification Method B1 / VM1, B2/AS1, F4 / AS1.
- All glass used in the Juralco EDGE® Balustrade System must conform to AS/NZS 2208.
- Complies with NZS 4223.3.2016

3. Manufacturer's Documents

- The Juralco EDGE[®] 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 EDGE® System
- Aluminium extrusions, components and hardware unless specified are manufactured to 6060 T5 specifications
- Stainless Steel components, hardware, fixings all components to 316 grade
- Glass all glass used in the Juralco EDGE[®] Balustrade System must conform to the specifications as listed in the Juralco EDGE[®] 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 EDGE[®] Balustrade System must only be installed in accordance with the Juralco EDGE[®] Balustrade System manual
- Any deviation from that specified in the Juralco EDGE® manual must only be in accordance with the site specific PS1 with site specific calculations and drawings listing the non standard details
- The Juralco EDGE® Balustrade System must only be fabricated/installed by a Juralco approved fabricator
- Upon completion of the installation the fabricator must supply the owner with a PS3 (Construction)

Important information - Powder Coating systems.

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

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

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

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

Important information - Anodised Coatings.

<u>Anodised Systems.</u> The standard Anodised thickness used by Juralco is 12 micron and is suitable for single story sites greater than 100 metres from high tide.. For any multi storey buildings use 20 micron coatings. Use 25 micron for installations less than 100 metres from high tide level and for prestigious residential and commercial developments.

Standard Juralco colours are Natural and Bronze. Note - Anodising prices listed in Juralco price books are for the standard 12 micron systems. For thicker coatings, and other colours prices on application. Also, for coloured coatings there will be colour variations from batch to batch.

Attachment to structures An PVC layer or similar material spacer must be used to separate Anodised aluminium items from all concrete and steel structures. Failure to do so may lead to the chemicals in the structure affecting the aluminium base

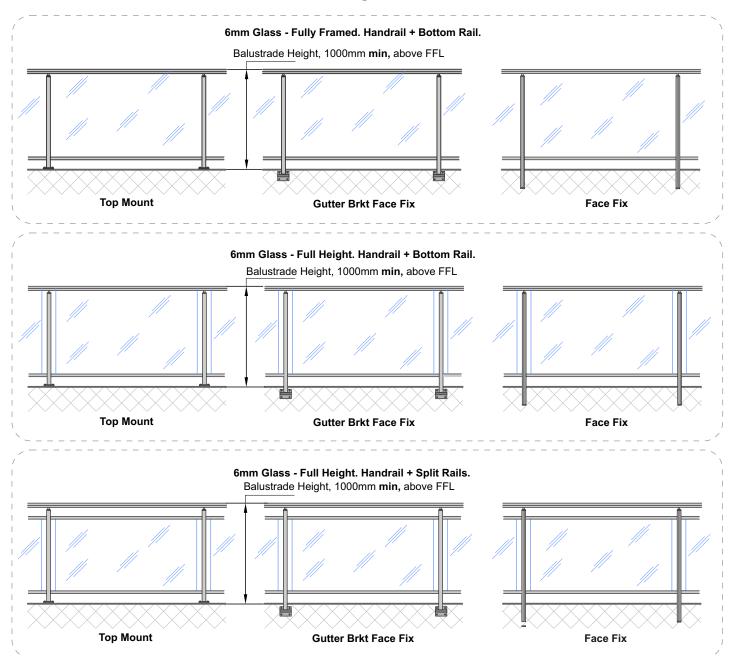
<u>Care</u> Aluminium oxide is amphoteric in nature. Therefore, any cleaning products used on anodised surfaces must be ph neutral so that they do not react chemically with the coating. Cleaning products should be <u>throughly rinsed</u> from surfaces as soon as possible.

Stubborn contamination can usually be removed using a non-scratch cleaning pad and water or a gentle solvent.



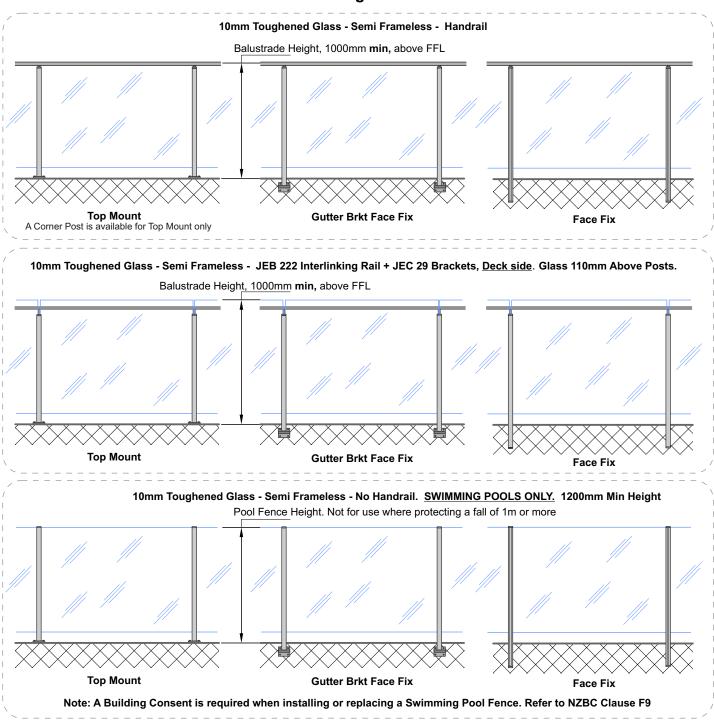


For 6mm Toughened Glass

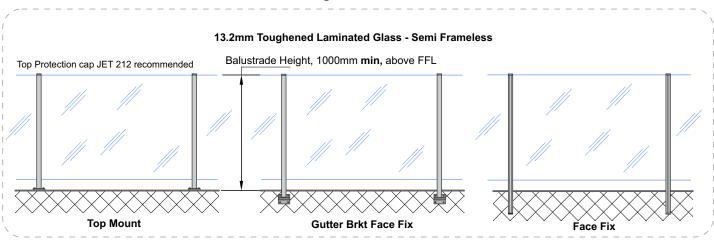


Juralco EDGE® Balustrade System - Layouts

For 10mm Toughened Glass

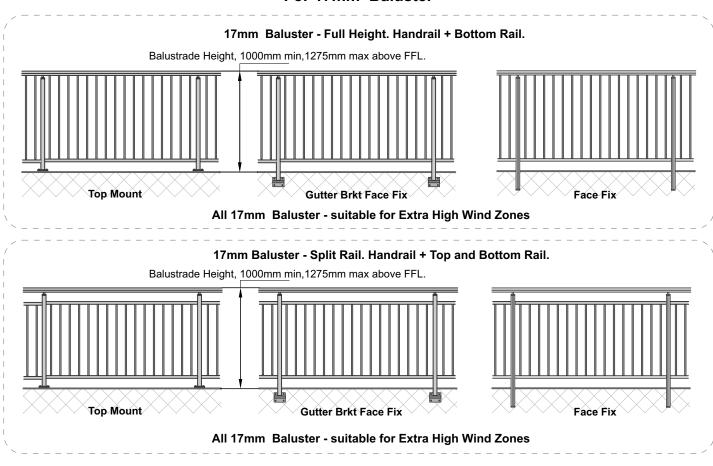


For 13.2mm Toughened Laminated Glass

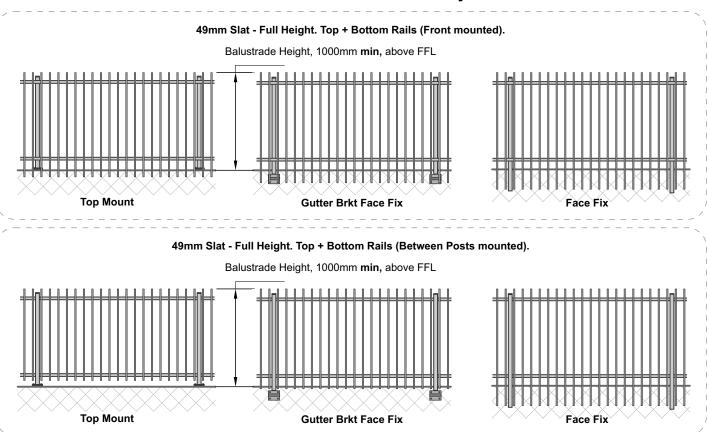




For 17mm Baluster

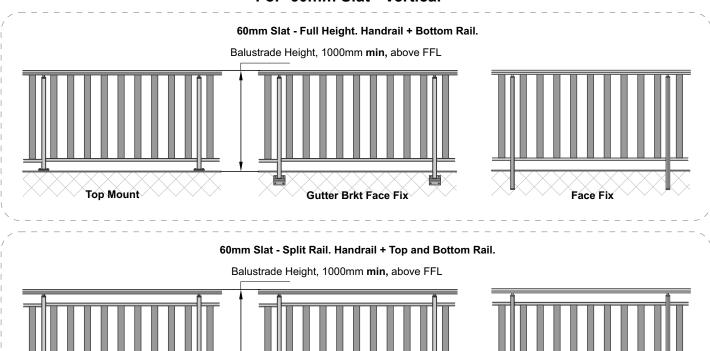


For 49mm Slat - Vertical. Stecca System



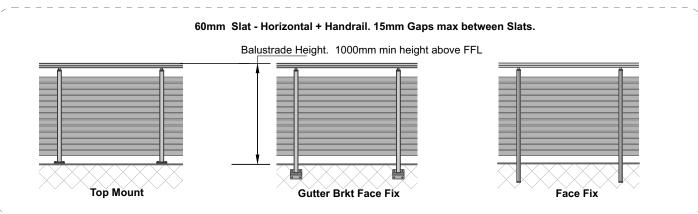


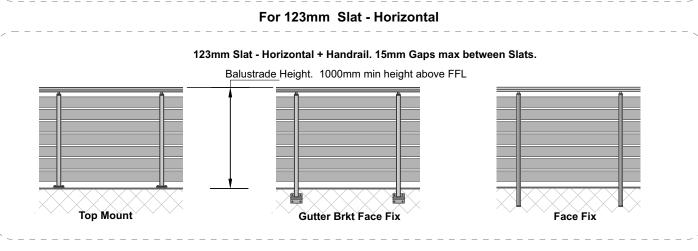
For 60mm Slat - Vertical



For 60mm Slat - Horizontal

Gutter Brkt Face Fix





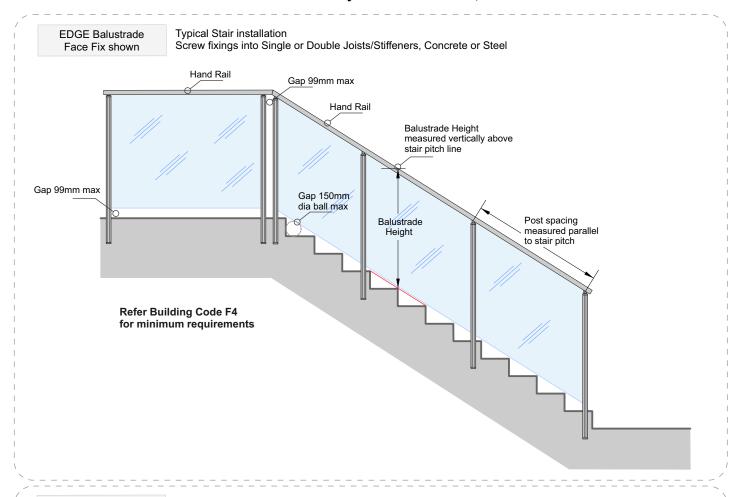
Top Mount

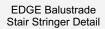
Face Fix

EDGE

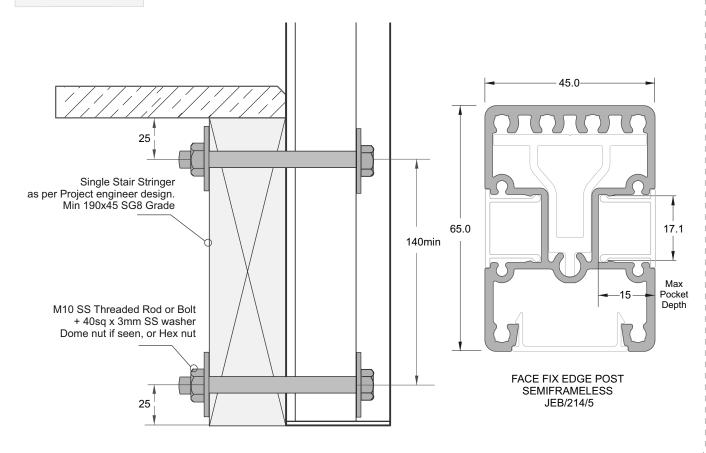
Juralco EDGE® Balustrade System

Juralco EDGE® Balustrade System Stair Setouts, Construction

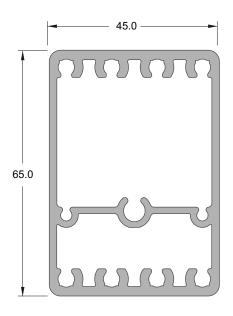




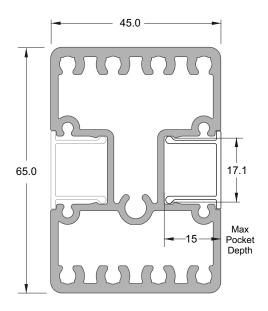
Stair structure to be designed by others to resist Balustrade actions as per NZS1170.1 Table 3.3 Applicable to Internal Residential applications only



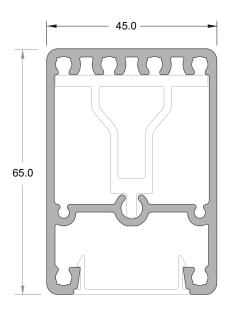




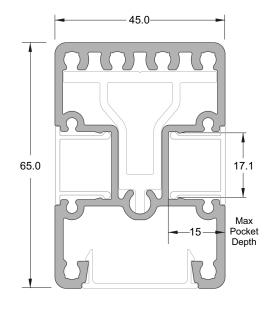
TOP FIX EDGE POST JEB/207/5



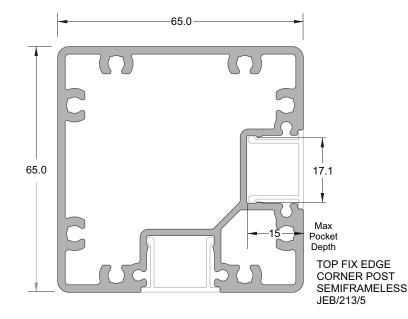
TOP FIX EDGE POST SEMIFRAMELESS JEB/212/5

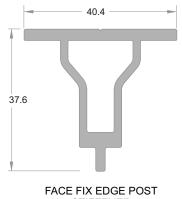


FACE FIX EDGE POST JEB/208/5



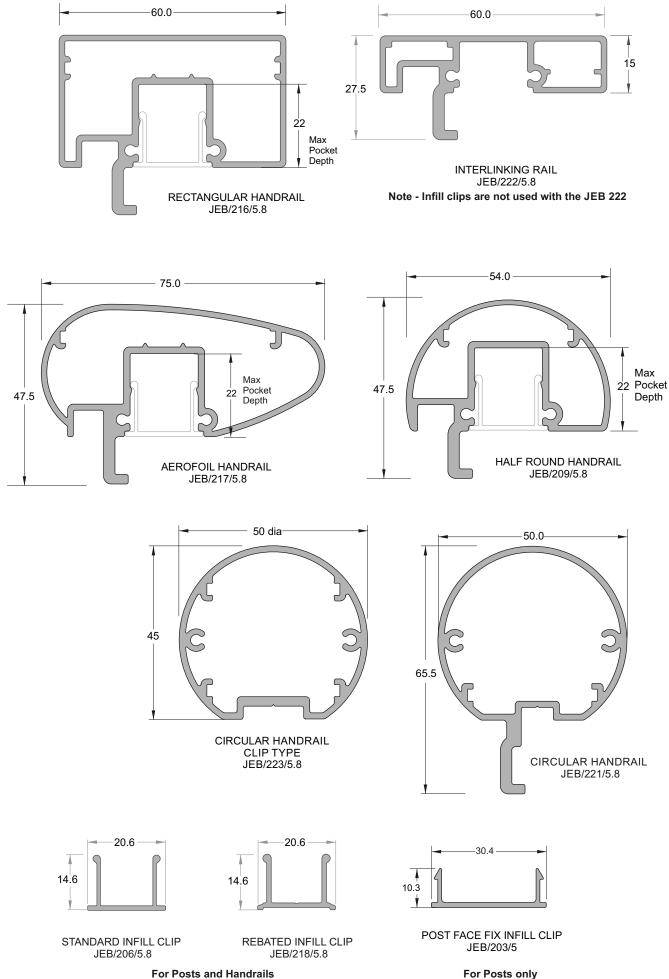
FACE FIX EDGE POST SEMIFRAMELESS JEB/214/5





FACE FIX EDGE POST STIFFENER JEB/205/5

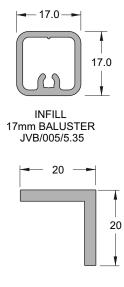




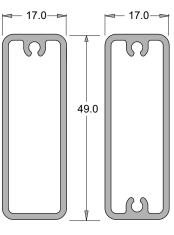
For Posts only

#JURALCO EDGE

Juralco EDGE® Balustrade System - Extrusions

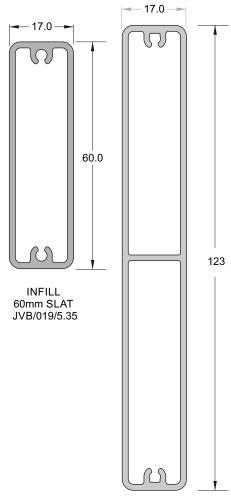


WATER DEFLECTION ANGLE JA118/5

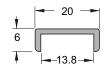


INFILL 49mm SLAT (Single Screw) JVB/030/5.35

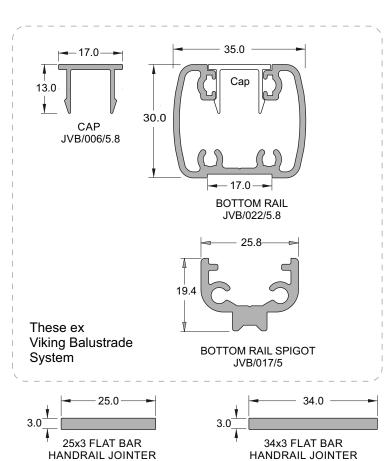
INFILL 49mm SLAT (Double Screw) JVB/018/5.35



INFILL 123mm SLAT JGF/2227/5.8



TOP PROTECTION CAP for 13.2mm Laminated Glass JET212 (attach with JET 330 DS Tape)



Std or Rebatted Max Pocket Infill Clip Depth 32.0 **BOTTOM RAIL** Part No JEB/202/5.8 32.0 17.0 13.0 HEAVY DUTY BOTTOM RAIL SPIGOT **BOTTOM RAIL** SPIGOT JEB/210/5 JET/917/5 (NOT Suitable Semi (Suitable all Posts) Frameless Posts) 56.5

56.5x3 FLAT BAR

HANDRAIL JOINTER

Part No JA189/5

36.0

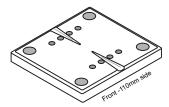


Part No JA174/5

Part No JA188/5



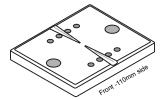
Base plate JEC200



110mm x 100mm x 12mm - 4 x holes

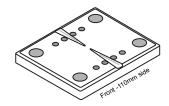
Base plate JEC201

For Concrete and Steel only



110mm x 90mm x 12mm - 2 x holes

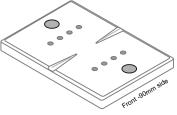
Base plate JEC221



110mm x 90mm x 12mm - 4 x holes

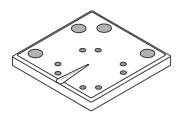
Base plate JEC232

For Concrete and Steel only



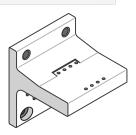
128mm x 90mm x 12mm - 2 x Holes 14mm dia

Base plate - Corner Post JEC222



110mm x 110mm x 12mm - 4 x holes x 14mm dia

Base plate JEC137/65

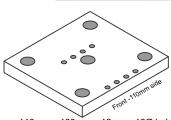


120mm wide x 135mm high - 4 x holes

Base plate JEC206

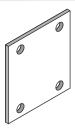
These two Plates form a pair. For Floating decks only on a concrete base

Base plate Offset Corner Post JEC207



120mm x 100mm x 15mm - M10 and M12 (all blind) threaded 110mm x 100mm x 12mm - 13Ø holes

Gutter Bracket Spacer JEC139



135mm x 120mm x 5mm thick

Post Bottom Cap



Handrail Clamp

Post/Baseplate Screw JVBHTSCREW/50x10

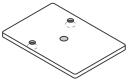
This Screw MUST be used when attaching Posts to Baseplates or Gutter Brackets



50mm SS High Tensile PK C/S sq drive screw



Hidden Fix



45mm x 65mm - Fits under face Fix Posts Attach with No 6 x 12 C/S SS PK screws

M8 x 20 SS Grub screw

Square Washer JVB SQWSH



40mm sax 3mm SS

Face Fix Spacer JVB125/30mm





Face Fix Spacer

JVB125/15mm

Face Fix Spacer JVB125/10mm



38mm dia x 30mm long.

38mm dia x 15mm long.

38mm dia x 10mm long.

38mm dia x 3mm

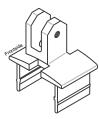
EPDM Spacer Washer

JVB126





Handrail Mount JEC23



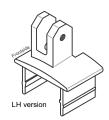
Angled Hand Rail Mount - Double Pocket Fits over Post. 66mm x 46mm

Handrail Mount JEC24



Angled Hand Rail Mount - No Pocket Fits over Post. 66mm x 46mm

Handrail Mount JEC25RH or LH



RH version

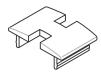
Angled Hand Rail Mount - Single Pocket, LH & RH Fits over Post. 66mm x 46mm

Top Cap JEC20



Fits over Post. 66mm x 46mm

Top Cap JEC21



Double Pocket Fits over Post. 66mm x 46mm

Top Cap JEC22



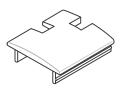
Single Pocket. RH/LH symmetrical Fits over Post. 66mm x 46mm

Top Cap - Corner Post JEC27



Fits over Post. 66mm x 66mm

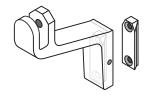
Top Cap Notched - Corner Post JEC28



Double Pocket Fits over Post. 66mm x 66mm

Handrail assembly JEC29/Kit





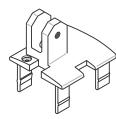
Includes 2 x grub screws

Corner Post, Handrail Mountl JEC30



No Pockets - Fits over Post. 66mm x 66mm

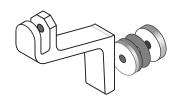
Corner Post, Handrail Mount JEC31



Pockets - Fits over Post. 66mm x 66mm

Handrail assembly JET48/Kit

For Glass Panel mounting



Includes all components

Circular Handrail Clip JEC38



Attach. 2 x No 8 x 12 C/S, SS PK Screws

For Circular Handrail JEB/223

Juralco EDGE® Balustrade System - Components



3mm Glazing Wedge JEC10/100

For 10mm Glass

5mm Glazing Wedge JECW8/75

For 8mm Glass and 13.2mm Laminated Glass

7mm Glazing Wedge JECW6/75

For 6mm Glass



100mt Roll - PVC



75mt Roll - PVC



Glazing D Seal JECDSEAL/100



8mm deep x 9.5mm wide x 100mt Roll Semi Rigid PVC





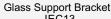
Back Seal JET/BSEAL/100

For 13.2mm Laminated Glass



Attach Post Сар to Post top

Use with JESCREW 14g to attach



Nylon

Use with JEC14GWASHER to attach Post cap to Post top



14g x 50mm SS PK Cap screw

EPDM Washer JEC14GWASHER

Post cap to Post top



11mm dia x 14g





17mm x 13mm x 32mm long. Attaches to Post with 2 x No 8 x 16 SS PK Screws

Glazing Wedge. Brown Tip JVBWedge/Brown/75

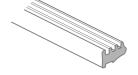
For use with Viking Bottom Rail

Backing Seal JVBBackWedge/500

For use with Viking Bottom Rail

Glazing Block JVB108

For use with Viking Bottom Rail





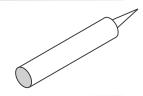
17mm high x 9mm x 50mm long.

Plastic Packer - Glass

Thickness Part No H/PP1.5 1.5mm H/PP2 2mm H/PP3 3mm H/PP4 4mm H/PP5 5mm

SIKA Supergrip Part No JECSUPERGRIP30

For All Coach screws fixings



Rhodorsil V60 Clear Silicone Part No H/RTV419098

Construction Silicone

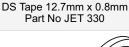
Bottom Rail Bracket Part No JEC 14

Attaches **Bottom Rail** to Timber

Bottom Rail 90 deg Spigot Part No JEC 12

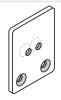
Cut down to suit. 35x13.5, 52x13.5

Joins Bottom Rail at 90 deg



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Attach Top Protection Cap



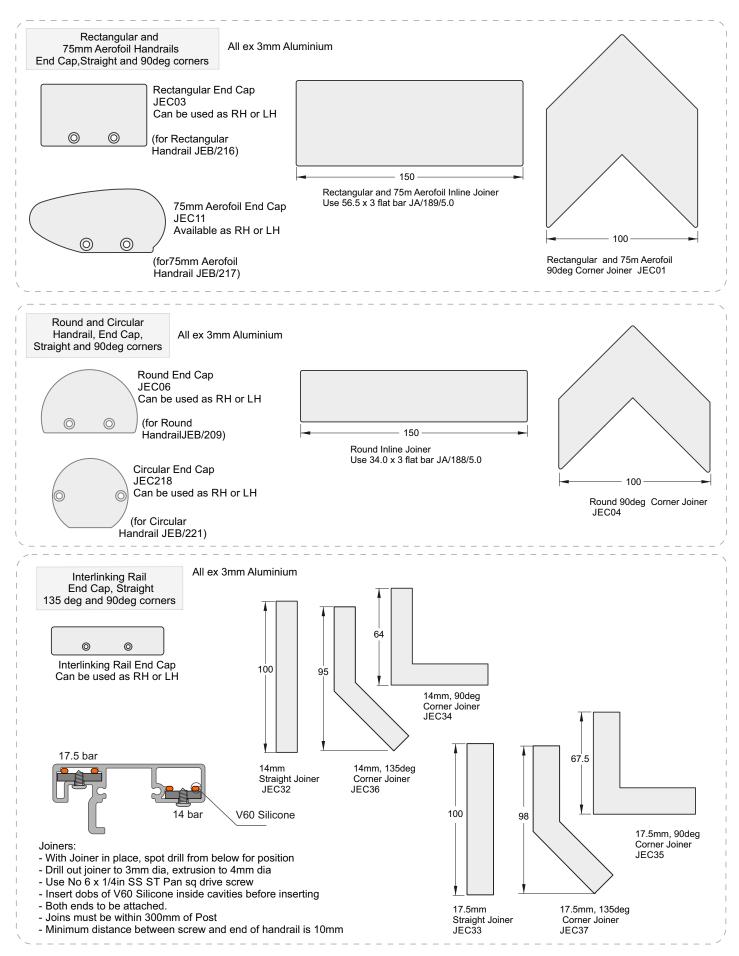
50mm x 38mm x 3mm thick. 76mm x 76mm.



Double sided 12.7mm wide x 33mt Roll









Juralco EDGE® Balustrade System

Interlinking and Handrails Rail conforming to NZS 4223.3.2016 and Building Code Clause B1.3.4



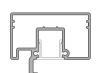
INTERLINKING RAIL JEB/222/5.8



AEROFOIL HANDRAIL JEB/217/5.8



ROUND HANDRAIL JEB/209/5.8



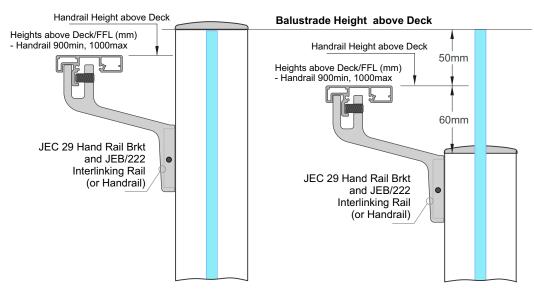
RECTANGULAR HANDRAIL JEB/216/5.8



CIRCULAR HANDRAIL JEB/221/5.8

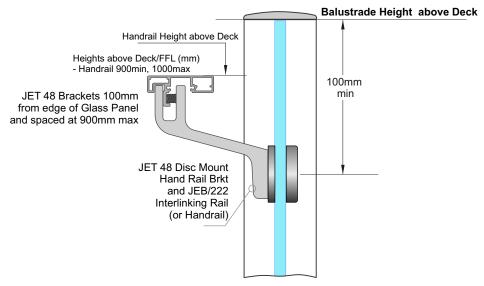
Suitable Interlinking and Handrails

Semi Frameless and Frameless - Interlinking or Handrails on Deck side JEB/222 shown, but any Handrails from above suitable.



Rail End Plates not Needed

Rail End Plates not Needed



Rail End Plates (or EDGE End Post) definitely Needed

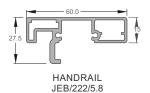
Important Note: <u>Applies to JET48 Disc Mount Bracket to Glass only.</u>
All Interlinking rails, at their ends must be attached to a Building Structure using Rail End Plates or to an Edge Post attached to the Deck structure. Applies to Handrails used as Interlinking Rails.





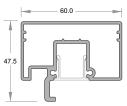
Juralco EDGE® Balustrade System Interlinking and Handrails End Plates for attaching to a Wall

End Caps all ex 3mm Aluminium

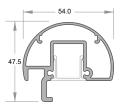


47.5

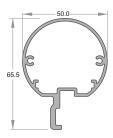
AEROFOIL HANDRAIL JEB/217/5.8



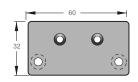
RECTANGULAR HANDRAIL JEB/216/5.8



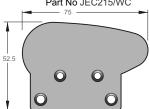
HALF ROUND HANDRAIL JEB/209/5.8



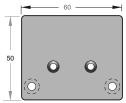
CIRCULAR HANDRAIL JEB/221/5.8



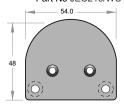
HANDRAIL
WALL ATTACH END PLATE
Part No JEC215/WC



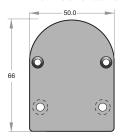
HANDRAIL WALL ATTACH END PLATE Part No JEC217/WC



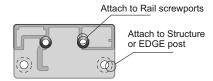
HANDRAIL WALL ATTACH END PLATE Part No JEC216/WC



HANDRAIL WALL ATTACH END PLATE Part No JEC209/WC



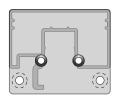
HANDRAIL WALL ATTACH END PLATE Part No JEC221/WC



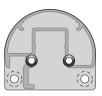
For RH and LH



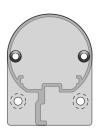
For RH and LH



For RH and LH



For RH and LH



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 Timber Wall

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

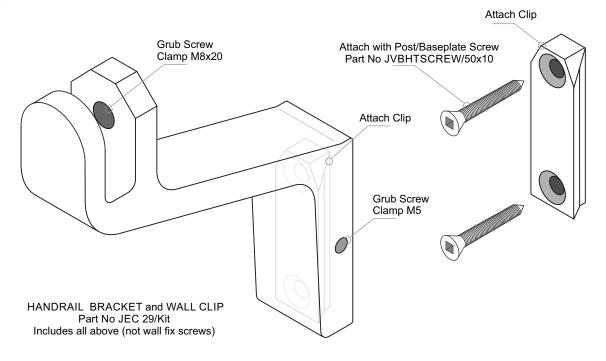
Note: Fixing to Juralco EDGE Post

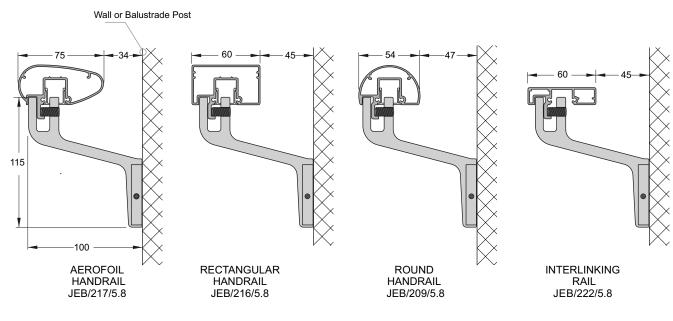
- use 2 off 8g x 25 SS PK Screws

Note: Fixing to Concrete Wall

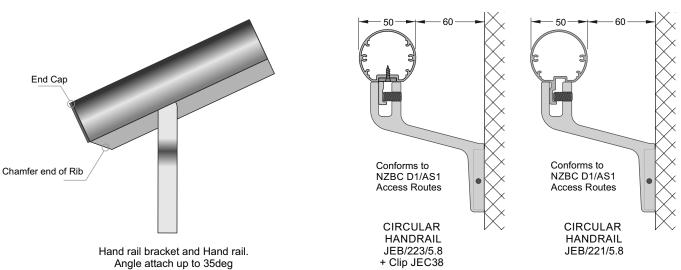
- use 2 off M6 x70 SS Screw Anchors
- Solid Concrete min 20Mpa
- Block wall Concrete filled/Reinforced
- 140mm min Wall thickness
- 70mm min distance to Horizontal Edge
- 100mm min distance to Vertical Edge
- Blockwork wall must be corefilled /reinforced and is to be designed and detailed in accordance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



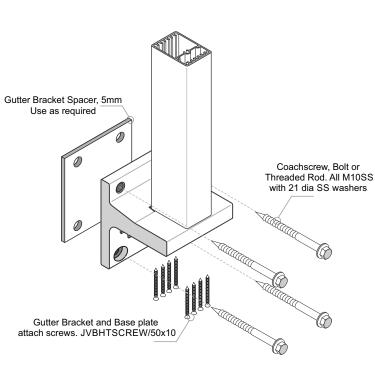




Hand rail bracket and Hand rails

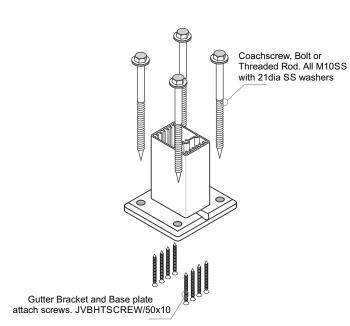






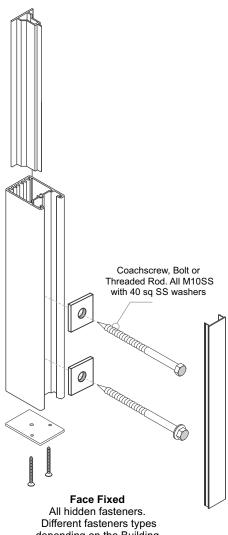
Gutter Bracket - Face Fixed

Suitable for Waterproofed Decks and any overhanging decks. Allows for Guttering to run under. Different fasteners types depending on the Building substrate

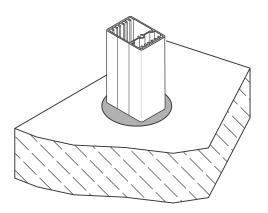


Top Mount

Base Plates in a variety of sizes. Different fasteners types depending on the Building substrate. Includes a 90deg Semi Frameless Corner Post



depending on the Building substrate



Base Fix - Concrete only. Post cemented permanently in place



Typical TOP Fix to Timber - JEC 221, 110mm x 90mm, 4 hole Base Plate - M10 SS Coachscrews

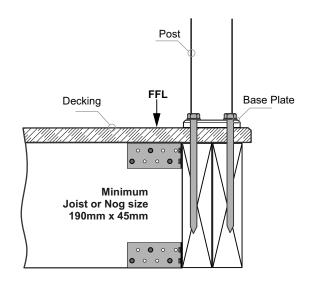
Balustrade Dimensions by Wind Zone.

(Up to and including Very High Wind Zone					
	Balustrade Height above FFL, mm					
1000	1050	1100	1150	1200	1250	1300 max
1400	1350	1300	1250	1200	1150	1100
	Post Spacing max, mm					

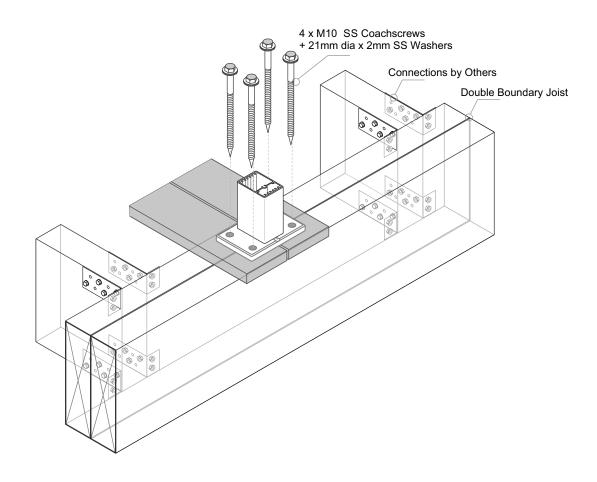
Up to and including Extra High Wind Zone					
General Balustrades	17mm Balusters only				
Balustrade Height, mm	Balustrade Height, mm				
1200 max	1000 min - 1275 max				
1000	1480				
Post Spacing max, mm	Post Spacing max, mm				

General Notes:

- 1 All measurements mm
- 2 Domestic Occupancy only A, A other and C3.
- 3 Balustrade Height measured above Deck/FFL. 1000mm min
- 4 Wind Zones as per NZS 3604:2011



- 1 The Project Engineer must ensure the structure can support the appropriate loads
- 2 Substructure shown indicatively only. Timber SG8 minimum strength
- 3 Coachscrew engagement into joists 150mm. All coachscrews predrill 6mm holes
- 4 Bond all coachscrews with SIKA Supergrip to full depth
- 5 All Fixings must be Stainless steel



Typical FACE Fix Post to Timber - M10 SS Coachscrews

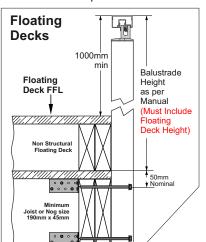
Balustrade Dimensions by Wind Zone.

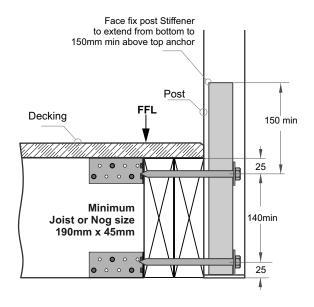
	Up to and including Very High Wind Zone					
	Balustrade Height above FFL, mm					
1000	1050	1100	1150	1200	1250	1300 max
1400	1350	1300	1250	1200	1150	1100
	Post Spacing max, mm					

Up to and including Extra High Wind Zone General Balustrades Coachscrews as shown NOT SUITABLE. Must use Bolts

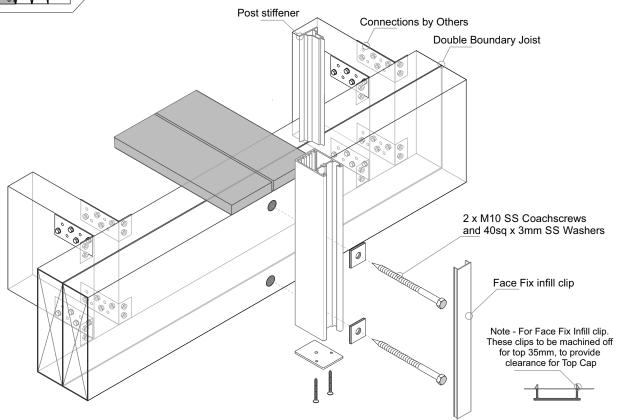
General Notes:

- 1 All measurements mm
- 2 Domestic Occupancy only A, A other and C3.
- 3 Balustrade Height measured above Deck/FFL. 1000mm min
- 4 Wind Zones as per NZS 3604:2011





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



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

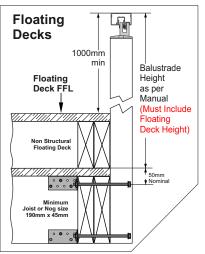
Balustrade Dimensions by Wind Zone.

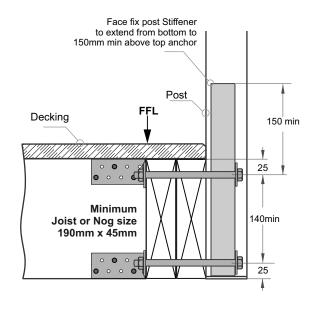
·	Up to and including Very High Wind Zone						
	Balustrade Height above FFL, mm						
1000	1050	1100	1150	1200	1250	1300 max	
1400	1400 1350 1300 1250 1200 1150 1100						
	Post Spacing max, mm						

Up to and including Extra High Wind Zone					
General Balustrades	17mm Balusters only				
Balustrade Height, mm	Balustrade Height, mm				
1200 max	1000 min - 1275 max				
1000	1480				
Post Spacing max, mm	Post Spacing max, mm				

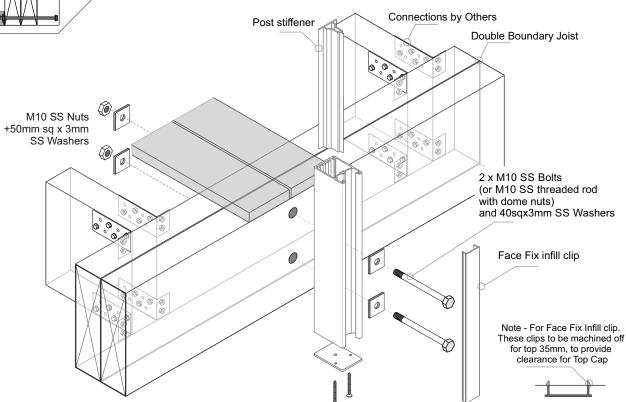
General Notes:

- 1 All measurements mm
- 2 Domestic Occupancy only A, A other and C3.
- 3 Balustrade Height measured above Deck/FFL. 1000mm min
- 4 Wind Zones as per NZS 3604:2011





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





Typical FACE Fix to Timber - JEC 137/65, Gutter Bracket - M10 SS Coachscrews

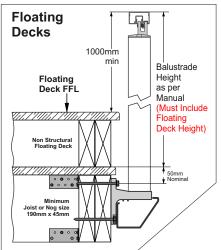
Balustrade Dimensions by Wind Zone.

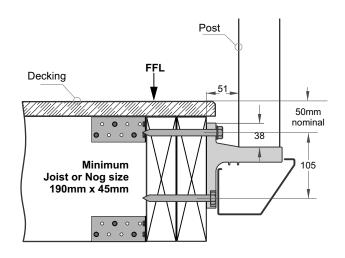
Up to and including Very High Wind Zone						
Balustrade Height above FFL, mm						
1000	1050	1100	1150	1200	1250	1300 max
1500	1450	1400	1350	1300	1250	1200
Post Spacing max, mm						

Up to and including Extra High Wind Zone General Balustrades Coachscrews as shown NOT SUITABLE. Must use Bolts

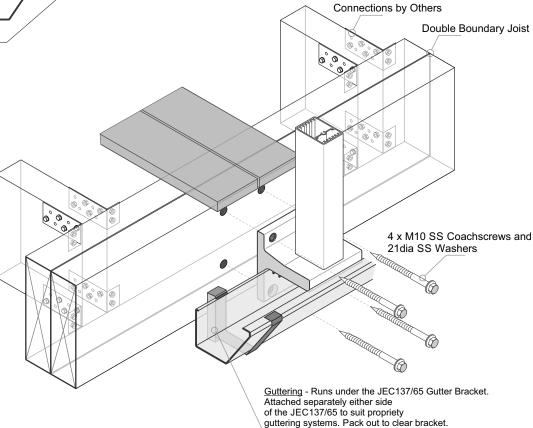
General Notes:

- 1 All measurements mm
- 2 Domestic Occupancy only A, A other and C3.
- 3 Balustrade Height measured above Deck/FFL. 1000mm min
- 4 Wind Zones as per NZS 3604:2011





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





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

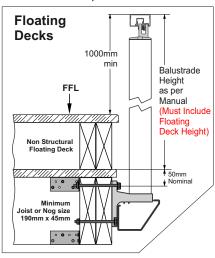
Balustrade Dimensions by Wind Zone.

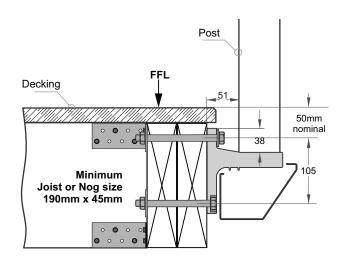
	Up to and including Very High Wind Zone					
	Balustrade Height above FFL, mm					
1000	1000 1050 1100 1150 1200 1250 1300 max					
1500	1500 1450 1400 1350 1300 1250 1200					
	Post Spacing max, mm					

Up to and including Extra High Wind Zone					
General Balustrades	17mm Balusters only				
Balustrade Height, mm	Balustrade Height, mm				
1200 max	1000 min - 1275 max				
1000	1480				
Post Spacing max, mm	Post Spacing max, mm				

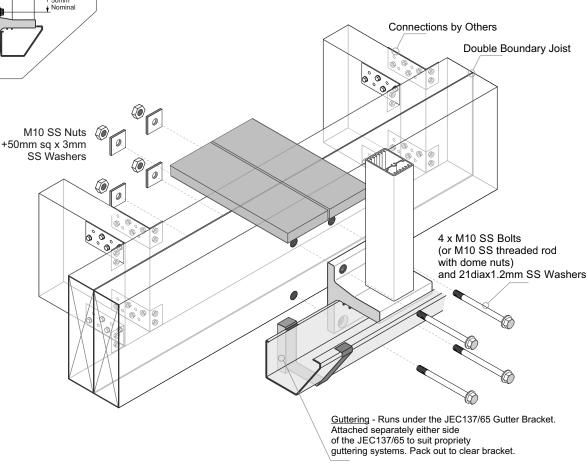
General Notes:

- 1 All measurements mm
- 2 Domestic Occupancy only A, A other and C3.
- 3 Balustrade Height measured above Deck/FFL. 1000mm min
- 4 Wind Zones as per NZS 3604:2011





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





Typical TOP Fix to Steel with Timber Deck - JEC 221, 110mm x 90mm, 4 hole Base Plate - M10 SS Bolts

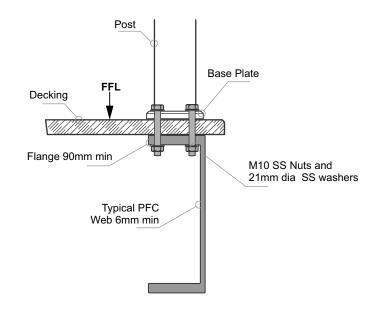
Balustrade Dimensions by Wind Zone.

Up to and including Very High Wind Zone						
Balustrade Height above FFL, mm						
1000	1050	1100	1150	1200	1250	1300 max
1500	1450	1400	1350	1300	1250	1200
Post Spacing max, mm						

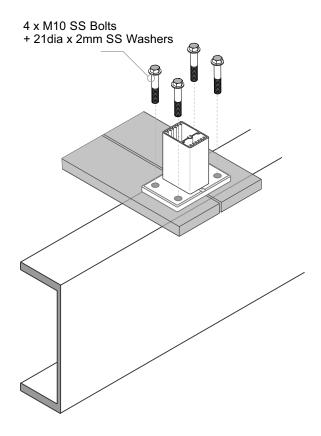
Up to and including Extra High Wind Zone					
General Balustrades	17mm Balusters only				
Balustrade Height, mm	Balustrade Height, mm				
1200 max	1000 min - 1275 max				
1000	1480				
Post Spacing max, mm	Post Spacing max, mm				

General Notes:

- 1 All measurements mm
- 2 Domestic Occupancy only A, A other and C3.
- 3 Balustrade Height measured above Deck/FFL. 1000mm min
- 4 Wind Zones as per NZS 3604:2011



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





Typical TOP Fix to Steel - JEC 201, 110mm x 90mm, 2 hole Base Plate - M12 SS Bolts

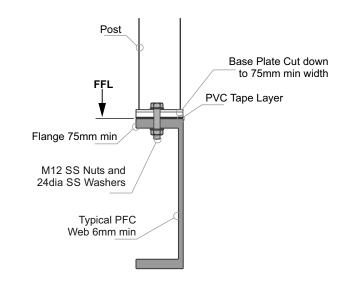
Balustrade Dimensions by Wind Zone.

Up to and including Very High Wind Zone						
Balustrade Height above FFL, mm						
1000 1050 1100 1150 1200 1250 1300 max						1300 max
1500 1450 1400 1350 1300 1250 1200						
Post Spacing max, mm						

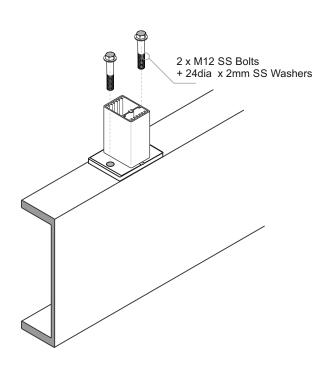
Up to and including Extra High Wind Zone NOT SUITABLE.

General Notes:

- 1 All measurements mm
- 2 Domestic Occupancy only A, A other and C3.
- 3 Balustrade Height measured above Deck/FFL. 1000mm min
- 4 Wind Zones as per NZS 3604:2011



- 1 The Project Engineer must ensure the structure can support the appropriate loads
- 2 Substructure shown indicatively only
- 3 The Baseplate can be cut down to 75mm wide
- 4 Both Base plate and PFC must be aligned, with Bolt at C/L
- 5 A PVC tape layer must be placed between the Baseplate and Steel
- 6 All fixings must be Stainless steel





Typical FACE Fix Post to Steel - M10 SS Bolts

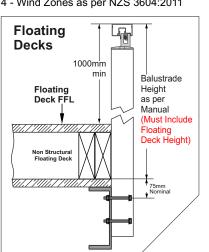
Balustrade Dimensions by Wind Zone.

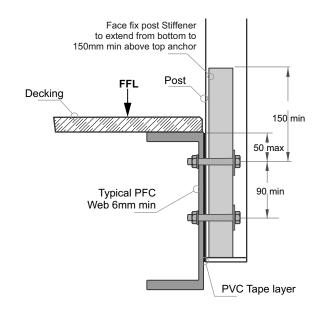
	Up to and including Very High Wind Zone						
	Balustrade Height above FFL, mm						
100	1000 1050 1100 1150 1200 1250 1300 max						1300 max
150	1500 1450 1400 1350 1300 1250 1200						
	Post Spacing max, mm						

Up to and including Extra High Wind Zone				
General Balustrades	17mm Balusters only			
Balustrade Height, mm	Balustrade Height, mm			
1200 max	1000 min - 1275 max			
1000	1480			
Post Spacing max, mm	Post Spacing max, mm			

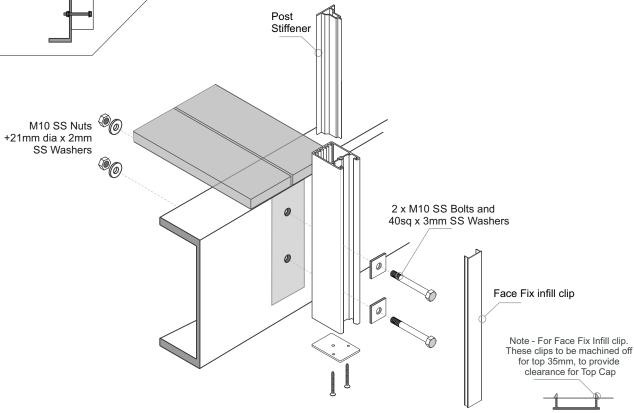
General Notes:

- 1 All measurements mm
- 2 Domestic Occupancy only A, A other and C3.
- 3 Balustrade Height measured above Deck/FFL. 1000mm min
- 4 Wind Zones as per NZS 3604:2011





- 1 The Project Engineer must ensure the structure can support the appropriate loads
- 2 Substructure shown indicatively only
- 3 A PVC tape layer must be placed between the Post and Steel
- 4 All fixings must be Stainless steel





Typical FACE Fix Post to Steel + Wooden Packers - M10 SS Bolts

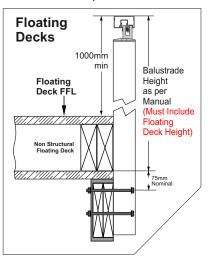
Balustrade Dimensions by Wind Zone.

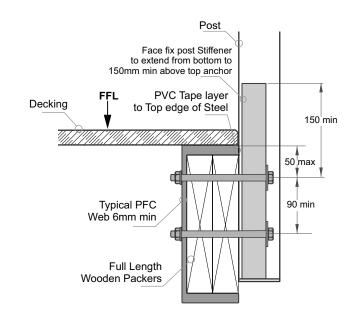
ı	Up to and including Very High Wind Zone						
	Balustrade Height above FFL, mm						
1000	1000 1050 1100 1150 1200 1250 1300 max						
1500	1500 1450 1400 1350 1300 1250 1200						
	Post Spacing max, mm						

Up to and including Extra High Wind Zone				
General Balustrades	17mm Balusters only			
Balustrade Height, mm	Balustrade Height, mm			
1200 max	1000 min - 1275 max			
1000	1480			
Post Spacing max, mm	Post Spacing max, mm			

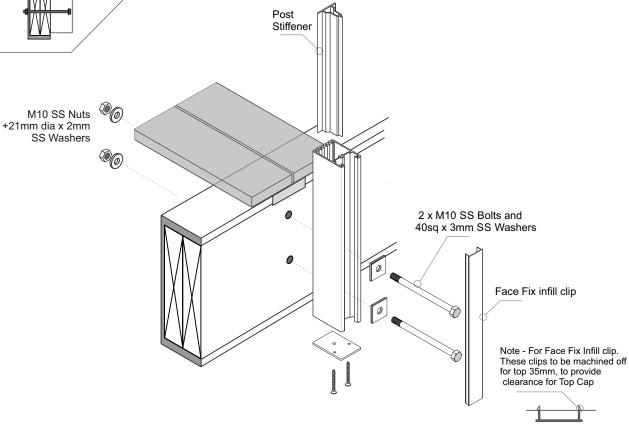
General Notes:

- 1 All measurements mm
- 2 Domestic Occupancy only A, A other and C3.
- 3 Balustrade Height measured above Deck/FFL. 1000mm min
- 4 Wind Zones as per NZS 3604:2011





- 1 The Project Engineer must ensure the structure can support the appropriate loads
- 2 Substructure shown indicatively only. Timber SG8 minimum strength
- 3 A PVC Tape layer must be installed between the Post and the Top Steel Flange
- 4 All Fixings must be Stainless steel





Typical FACE Fix Post to Steel + Wooden Packers - M10 SS Bolts

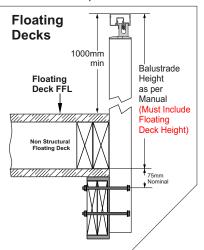
Balustrade Dimensions by Wind Zone.

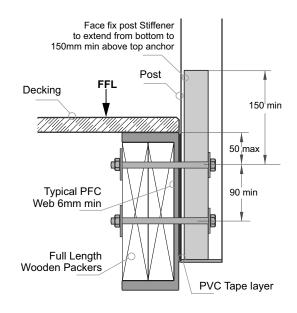
Up to and including Very High Wind Zone						
Balustrade Height above FFL, mm						
1000 1050 1100 1150 1200 1250 1300 max						1300 max
1500 1450 1400 1350 1300 1250 1200						
Post Spacing max, mm						

Up to and including Extra High Wind Zone				
General Balustrades	17mm Balusters only			
Balustrade Height, mm	Balustrade Height, mm 1000 min - 1275 max			
1200 max				
1000	1480			
Post Spacing max, mm	Post Spacing max, mm			

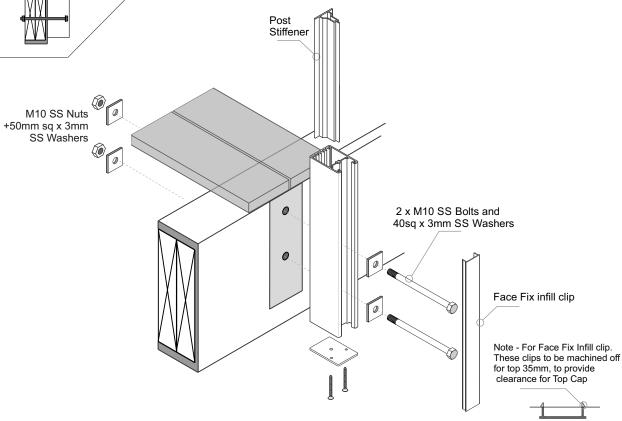
General Notes:

- 1 All measurements mm
- 2 Domestic Occupancy only A, A other and C3.
- 3 Balustrade Height measured above Deck/FFL. 1000mm min
- 4 Wind Zones as per NZS 3604:2011





- 1 The Project Engineer must ensure the structure can support the appropriate loads
- 2 Substructure shown indicatively only. Timber SG8 minimum strength
- 3 A PVC Tape layer must be installed between the Post and Steel
- 4 All Fixings must be Stainless steel





Typical FACE Fix to Steel - JEC 137/65, Gutter Bracket - M10 SS Bolts

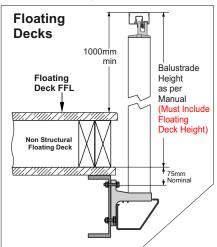
Balustrade Dimensions by Wind Zone.

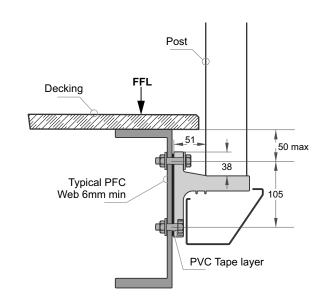
Up to and including Very High Wind Zone						
Balustrade Height above FFL, mm						
1000 1050 1100 1150 1200 1250 1300 max						1300 max
1500 1450 1400 1350 1300 1250 1200						
Post Spacing max, mm						

Up to and including Extra High Wind Zone				
General Balustrades	17mm Balusters only			
Balustrade Height, mm	Balustrade Height, mm			
1200 max	1000 min - 1275 max			
1000	1480			
Post Spacing max, mm	Post Spacing max, mm			

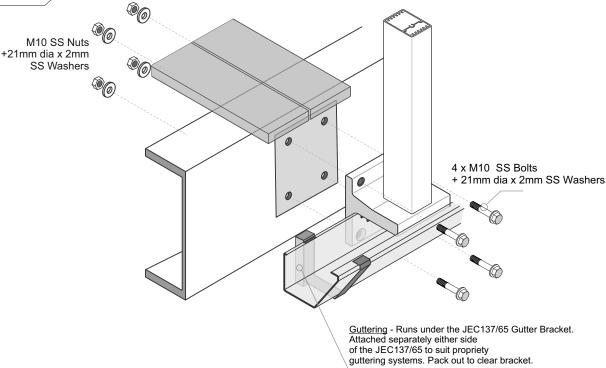
General Notes:

- 1 All measurements mm
- 2 Domestic Occupancy only A, A other and C3.
- 3 Balustrade Height measured above Deck/FFL. 1000mm min
- 4 Wind Zones as per NZS 3604:2011





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





Typical TOP Fix to Concrete - JEC 200, 110mm x 100mm, 4 hole Base Plate - M10 SS Studs

Balustrade Dimensions by Wind Zone.

Up to and including Very High Wind Zone							
Balustrade Height above Deck, mm							
1000	1000 1050 1100 1150 1200 max						
1300	1250	1200	1150	1100			
Post Spacing max, mm							

Up to and including Extra High Wind Zone				
General Balustrades	17mm Balusters only			
Balustrade Height, mm	Balustrade Height, mm			
1200 max	1000 min - 1275 max			
1000	1480			
Post Spacing max, mm	Post Spacing max, mm			

General Notes:

- 1 All measurements mm
- 2 Domestic Occupancy only A, A other and C3.
- 3 Balustrade Height measured above Deck/FFL. 1000mm min
- 4 Wind Zones as per NZS 3604:2011



Installation details Fischer FIS V 300T

Thread diameter M10

Drill hole diameter = 12 mm

Drill hole depth = 100 mm

Anchorage depth = 90 mm

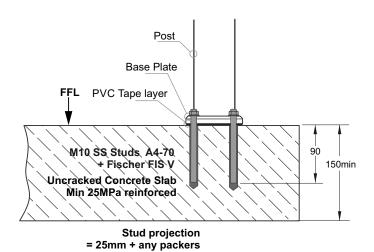
Drilling method
Drill hole cleaning

Hammer drilling 4 times blowing,

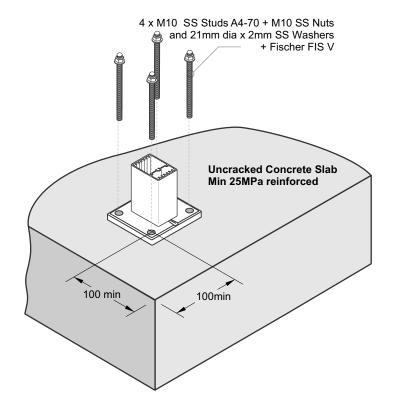
4 times brushing,

4 times blowing

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



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





Typical TOP Fix to Concrete - JEC 201, 110mm x 90mm, 2 hole Base Plate - M12 SS Studs

Balustrade Dimensions by Wind Zone.

Jp to and including Very High Wind Zone					
Balustrade Height above Deck, mm 1000 1050 1100 1150 1200 max					
1070	1020	970	920	870	
Post Spacing max, mm					

Up to and including Extra High Wind Zone			
General Balustrades	17mm Balusters only		
Balustrade Height, mm	Balustrade Height, mm		
1200 max	1000 min - 1275 max		
740	960		
Post Spacing max, mm	Post Spacing max, mm		

General Notes:

- 1 All measurements mm
- 2 Domestic Occupancy only A, A other and C3.
- 3 Balustrade Height measured above Deck/FFL. 1000mm min
- 4 Wind Zones as per NZS 3604:2011



Installation details Fischer FIS V 300T

Thread diameter M12

Drill hole diameter = 14 mm

Drill hole depth = 120mm

Anchorage depth = 110mm

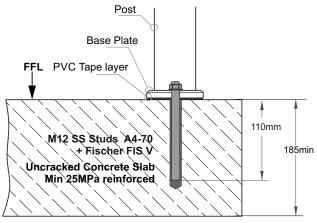
Drilling method
Drill hole cleaning

Hammer drilling 4 times blowing,

4 times brushing,

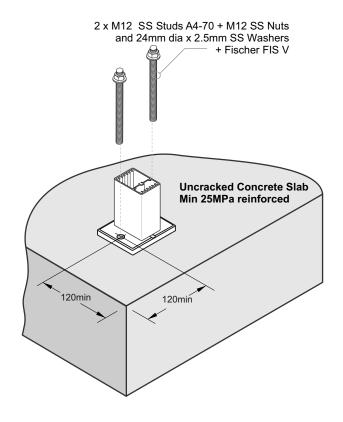
4 times blowing

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



Stud projection = 25mm + any packers

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





Typical TOP Fix to Concrete - JEC 232, 128mm x 90mm, 2 hole Base Plate - M12 SS Studs

Balustrade Dimensions by Wind Zone.

Up to and including Very High Wind Zone						
	Balustrade Height above Deck, mm					
	1000	1050	1100	1150	1200 max	
	1300	1250	1200	1150	1100	
	Post Spacing max, mm					

Up to and including Extra High Wind Zone			
General Balustrades	17mm Balusters only		
Balustrade Height, mm	Balustrade Height, mm		
1200 max	1000 min - 1275 max		
1000	1480		
Post Spacing max, mm	Post Spacing max, mm		

General Notes:

- 1 All measurements mm
- 2 Domestic Occupancy only A, A other and C3.
- 3 Balustrade Height measured above Deck/FFL. 1000mm min



Installation details Fischer FIS V 300T

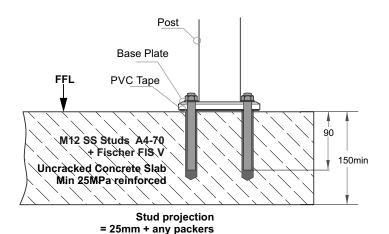
Thread diameter M12 Drill hole diameter = 14 mm Drill hole depth = 100 mm = 90 mm Anchorage depth

Drilling method Drill hole cleaning Hammer drilling

4 times blowing, 4 times brushing,

4 times blowing

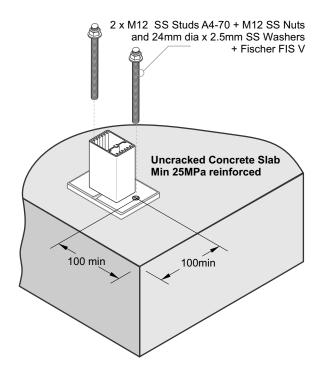
No borehole cleaning required in case of using a hollow drill bit, e.g. fischer FHD.



- 1 The Project Engineer must ensure the structure can support the appropriate loads
- 2 Substructure shown indicatively only
- 3 Fixings must engage into the structural slab
- 4 A PVC Tape layer must be installed between the Baseplate and Concrete
- 5 Use Threadlok on Nuts

Important Installation Notes:

6 - All fixings must be Stainless Steel





Typical TOP Fix to Concrete - JEC 205 +207, 120mm x 100mm, 2 hole Base Plate - M12 SS Studs

Balustrade Dimensions by Wind Zone.

Up to and including Very High Wind Zone				
Balustrade Height above Deck, mm				
1000	1050	1100	1150	1200 max
970	920	870	820	770
Post Spacing max, mm				

Up to and including Extra High Wind Zone

NOT SUITABLE

General Notes:

- 1 All measurements mm
- 2 Domestic Occupancy only A, A other and C3.
- 3 Balustrade Height measured above Deck/FFL. 1000mm min
- 4 Wind Zones as per NZS 3604:2011



Installation details Fischer FIS V 300T

Thread diameter M12
Drill hole diameter = 14 mm
Drill hole depth = 90 mm
Anchorage depth = 80 mm

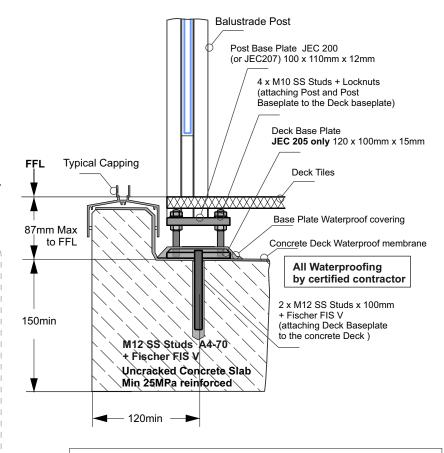
Drilling method
Drill hole cleaning

Hammer drilling 4 times blowing,

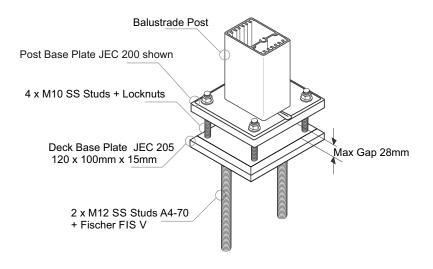
4 times brushing,

4 times blowing

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



- 1 The Project Engineer must ensure the structure can support the appropriate loads
- 2 Substructure shown indicatively only
- 3 All fixings must engage into the structural slab
- 4 A PVC Tape layer must be installed between the Base plate and Concrete
- 5 Waterproofing membrane final details and certification by others
- 6 All fixings must be Stainless steel





Typical TOP Fix to Concrete - Embed Post in Concrete Slab

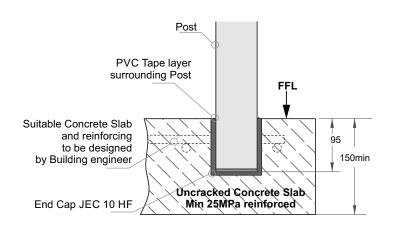
Balustrade Dimensions by Wind Zone.

Up to and including Very High Wind Zone				
Balustrade Height above Deck, mm				
1000	1050	1100	1150	1200 max
1300	1250	1200	1150	1100
Post Spacing max, mm				

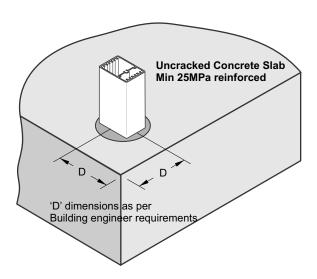
Up to and including Extra High Wind Zone			
General Balustrades	17mm Balusters only		
Balustrade Height, mm	Balustrade Height, mm		
1200 max	1000 min - 1275 max		
1000	1480		
Post Spacing max, mm	Post Spacing max, mm		

General Notes:

- 1 All measurements mm
- 2 Domestic Occupancy only A, A other and C3.
- 3 Balustrade Height measured above Deck/FFL. 1000mm min
- 4 Wind Zones as per NZS 3604:2011
- 5 Only suitable for Ground Level sites. NOT elevated



- 1 The Project Engineer must ensure the structure can support the appropriate loads
- 2 Substructure shown indicatively only
- 3 A PVC Tape layer must completely surround the Post
- 4 Mortar pocket 70mm sq or 85mm dia.
 Avoid mortar splashes on exposed aluminium. Wash off immediately.





Typical FACE Fix Post to Concrete - M10 SS Studs

Balustrade Dimensions by Wind Zone.

Up to and including Very High Wind Zone							
Balustrade Height above Deck, mm							
1000	1050	1100	1150	1200 max			
1300	1250	1200	1150	1100			

Post Spacing max, mm

Up to and including Extra High Wind Zone				
General Balustrades	17mm Balusters only			
Balustrade Height, mm	Balustrade Height, mm			
1200 max	1000 min - 1275 max			
1000	1480			
Post Spacing max, mm	Post Spacing max, mm			

General Notes:

- 1 All measurements mm
- 2 Domestic Occupancy only A, A other and C3.
- 3 Balustrade Height measured above Deck/FFL. 1000mm min
- 4 Wind Zones as per NZS 3604:2011



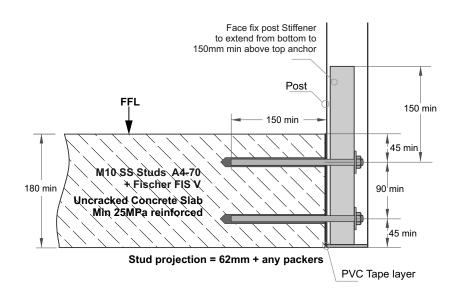
Installation details Fischer FIS V 300T

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

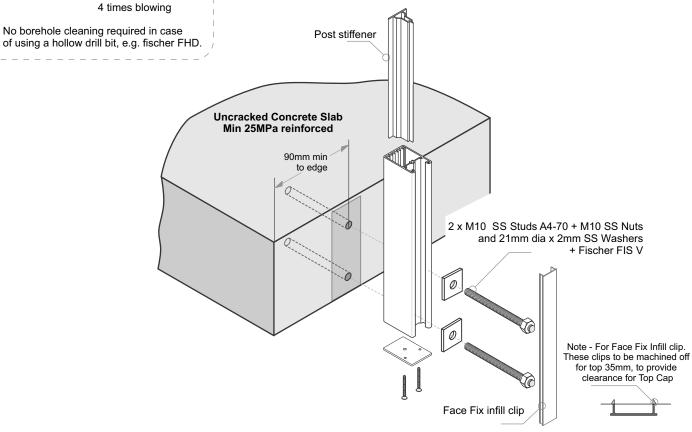
Drilling method Drill hole cleaning Hammer drilling 4 times blowing,

4 times brushing,

No borehole cleaning required in case



- 1 The Project Engineer must ensure the structure can support the appropriate loads
- 2 Substructure shown indicatively only
- 3 Fixings must engage into the structural slab
- 4 A PVC Tape layer must be installed between the Post and Concrete
- 5 Use Threadlok on Nuts
- 6 All fixings must be Stainless Steel





Typical FACE Fix to Concrete - JEC 137/65, Gutter Bracket - M10 SS Studs

Balustrade Dimensions by Wind Zone.

Up to and including Very High Wind Zone							
	Balustrade Height above Deck, mm						
	1000	1050	1100	1150	1200 max		
	1300	1250	1200	1150	1100		
		Doot	Cnacina	may mm			

Up to and including Extra High Wind Zone				
General Balustrades	17mm Balusters only			
Balustrade Height, mm	Balustrade Height, mm			
1200 max	1000 min - 1275 max			
1000	1480			
Post Spacing max, mm	Post Spacing max, mm			

General Notes:

- 1 All measurements mm
- 2 Domestic Occupancy only A, A other and C3.
- 3 Balustrade Height measured above Deck/FFL. 1000mm min
- 4 Wind Zones as per NZS 3604:2011



Installation details Fischer FIS V 300T

Thread diameter M10

Drill hole diameter = 12 mm

Drill hole depth = 150 mm

Anchorage depth = 140 mm

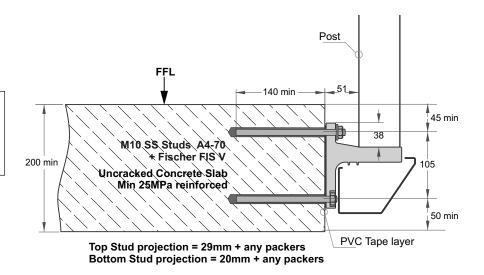
Drilling method
Drill hole cleaning

Hammer drilling

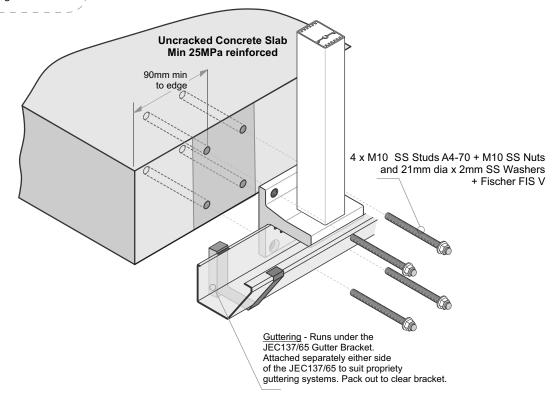
4 times blowing, 4 times brushing,

4 times blowing

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



- 1 The Project Engineer must ensure the structure can support the appropriate loads
- 2 Substructure shown indicatively only
- 3 Fixings must engage into the structural slab
- 4 A PVC Tape layer must be installed between the Gutter Bracket and Concrete
- 5 Use Threadlok on Nuts
- 6 All fixings must be Stainless Steel



Typical TOP Fix to Timber - JEC 221, 110mm x 90mm, 4 hole Base Plate - M10 SS Coachscrews or Bolts

The pre NZS3604:2011 mounting details are included for older, existing buildings. New buildings must comply with NZS3604:2011- Double Boundary Joists

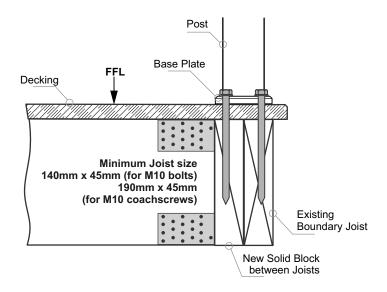
Balustrade Dimensions by Wind Zone.

ι	Up to and including Very High Wind Zone							
	Balustrade Height above FFL, mm							
	1000	1050	1100	1150	1200			
	1400	1350	1300	1250	1200			
	Post Spacing max, mm							

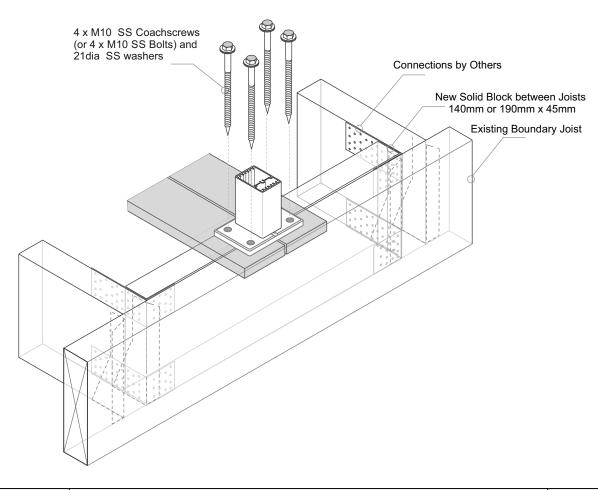
Up to and including Extra High Wind Zone

General Notes:

- 1 All measurements mm
- 2 Domestic Occupancy only A, A other and C3.
- 3 Balustrade Height measured above Deck/FFL. 1000mm min
- 4 Wind Zones as per NZS 3604:2011



- 1 The Project Engineer must ensure the structure can support the appropriate loads
- 2 Substructure shown indicatively only. Timber SG8 minimum strength
- 3 Coachscrews 130mm min engagement into joists, predrill 6mm holes.
- 4 Bond all coachscrews with SIKA Supergrip to full depth
- 5 All Fixings must be Stainless steel





Typical TOP Fix to Timber - JEC 200, 110mm x 100mm, 4 hole Base Plate - M10 SS Coachscrews or Bolts

The pre NZS3604:2011 mounting details are included for older, existing buildings. New buildings must comply with NZS3604:2011- Double Boundary Joists

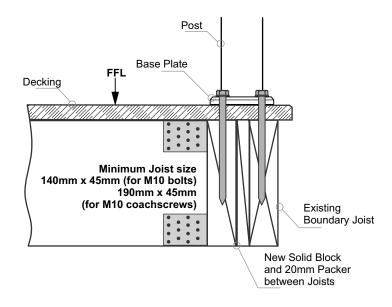
Balustrade Dimensions by Wind Zone.

Up to and including Very High Wind Zone							
	Balustrade Height above FFL, mm						
	1000	1050	1100	1150	1200		
	1400	1350	1300	1250	1200		
	Post Spacing max, mm						

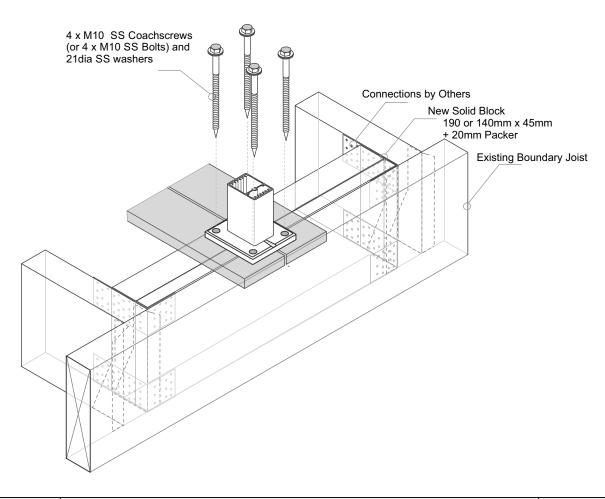
Up to and including Extra High Wind Zone

General Notes:

- 1 All measurements mm
- 2 Domestic Occupancy only A, A other and C3.
- 3 Balustrade Height measured above Deck/FFL. 1000mm min
- 4 Wind Zones as per NZS 3604:2011



- 1 The Project Engineer must ensure the structure can support the appropriate loads
- 2 Substructure shown indicatively only. Timber SG8 minimum strength
- 3 Coachscrews 130mm min engagement into joists, predrill 6mm holes.
- 4 Bond all coachscrews with SIKA Supergrip to full depth
- 5 All Fixings must be Stainless steel



Typical FACE Fix Post to Timber - M10 SS Coachscrews

The pre NZS3604:2011 mounting details are included for older, existing buildings. New buildings must comply with NZS3604:2011- Double Boundary Joists

Balustrade Dimensions by Wind Zone.

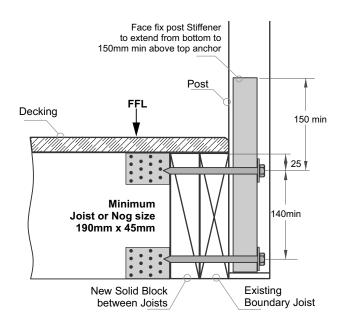
ι	Up to and including Very High Wind Zone							
	Balustrade Height above FFL, mm							
	1000	1050	1100	1150	1200			
	1400	1350	1300	1250	1200			
	Post Spacing max, mm							

Up to and including Extra High Wind Zone

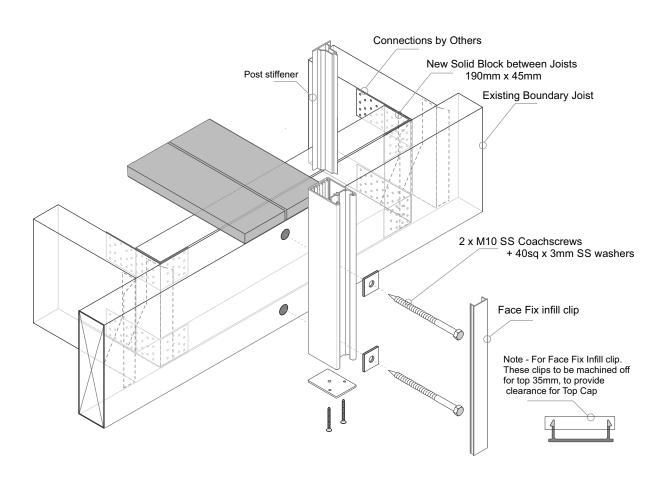
NOT SUITABLE.

General Notes:

- 1 All measurements mm
- 2 Domestic Occupancy only A, A other and C3.
- 3 Balustrade Height measured above Deck/FFL. 1000mm min
- 4 Wind Zones as per NZS 3604:2011



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



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

The pre NZS3604:2011 mounting details are included for older, existing buildings. New buildings must comply with NZS3604:2011- Double Boundary Joists

Balustrade Dimensions by Wind Zone.

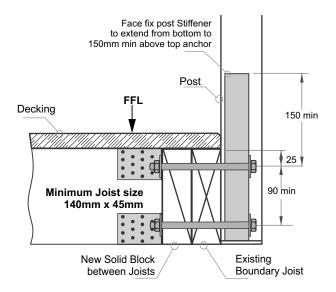
Up to and including Very High Wind Zone							
	Balustrade Height above FFL, mm						
	1000	1050	1100	1150	1200		
	1400	1350	1300	1250	1200		
	Post Spacing max, mm						

Up to and including Extra High Wind Zone

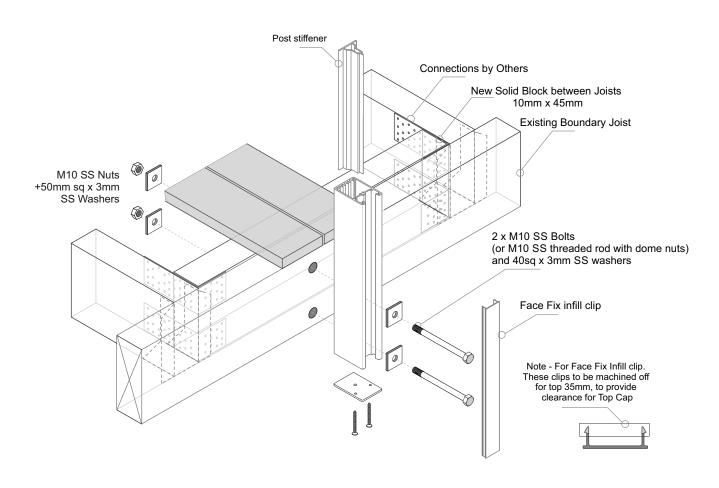
NOT SUITABLE.

General Notes:

- 1 All measurements mm
- 2 Domestic Occupancy only A, A other and C3.
- 3 Balustrade Height measured above Deck/FFL. 1000mm min
- 4 Wind Zones as per NZS 3604:2011



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



Typical FACE Fix to Timber - JEC 137/65, Gutter Bracket - M10 SS Coachscrews

The pre NZS3604:2011 mounting details are included for older, existing buildings. New buildings must comply with NZS3604:2011- Double Boundary Joists

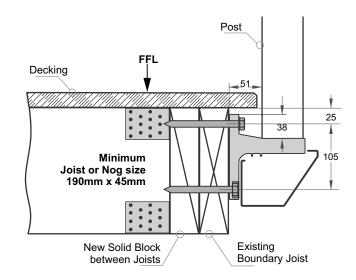
Balustrade Dimensions by Wind Zone.

Up to and including Very High Wind Zone							
	Balustrade Height above FFL, mm						
	1000	1050	1100	1150	1200		
	1400	1350	1300	1250	1200		
	Post Spacing max, mm						

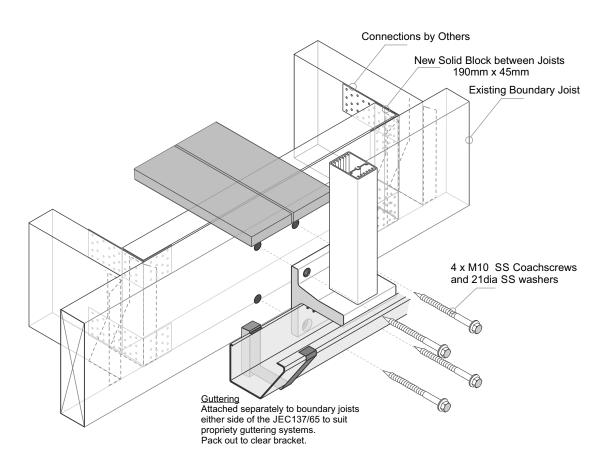
Up to and including Extra High Wind Zone

General Notes:

- 1 All measurements mm
- 2 Domestic Occupancy only A, A other and C3.
- 3 Balustrade Height measured above Deck/FFL. 1000mm min
- 4 Wind Zones as per NZS 3604:2011



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



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

The pre NZS3604:2011 mounting details are included for older, existing buildings. New buildings must comply with NZS3604:2011- Double Boundary Joists

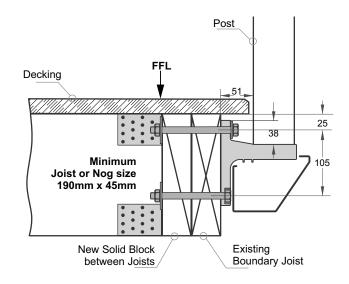
Balustrade Dimensions by Wind Zone.

ι	Up to and including Very High Wind Zone							
	Balustrade Height above FFL, mm							
	1000	1050	1100	1150	1200			
	1400	1350	1300	1250	1200			
	Post Spacing max, mm							

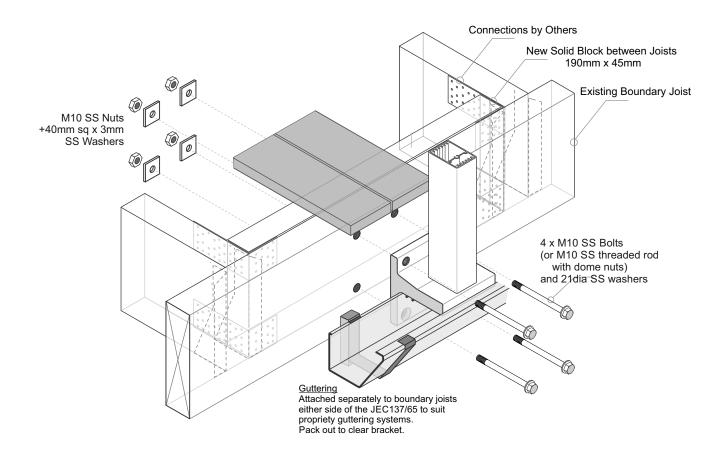
Up to and including Extra High Wind Zone

General Notes:

- 1 All measurements mm
- 2 Domestic Occupancy only A, A other and C3.
- 3 Balustrade Height measured above Deck/FFL. 1000mm min
- 4 Wind Zones as per NZS 3604:2011



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

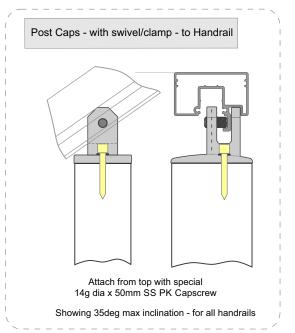


Post Caps - no swivel/clamp

Use for 10mm Toughened Glass with Handrail, or 13.2mm Laminated Glass with no Handrail. Top Protection Cap recommended

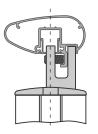


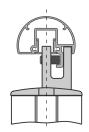
All tap fit

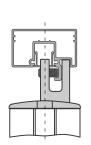


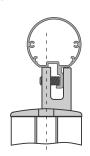
Handrail Attach

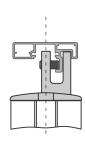
All handrails fixings identical - clamp attach with M8 grubscrew



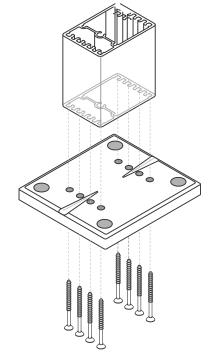


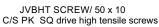




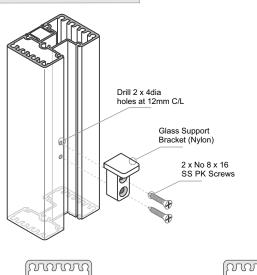


Baseplate to Post Attach

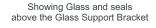


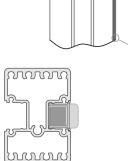


Glass Support Attach









Showing Standard Infill below Glass Support Bracket

Glass Edge

Use appropriate Plastic Packer

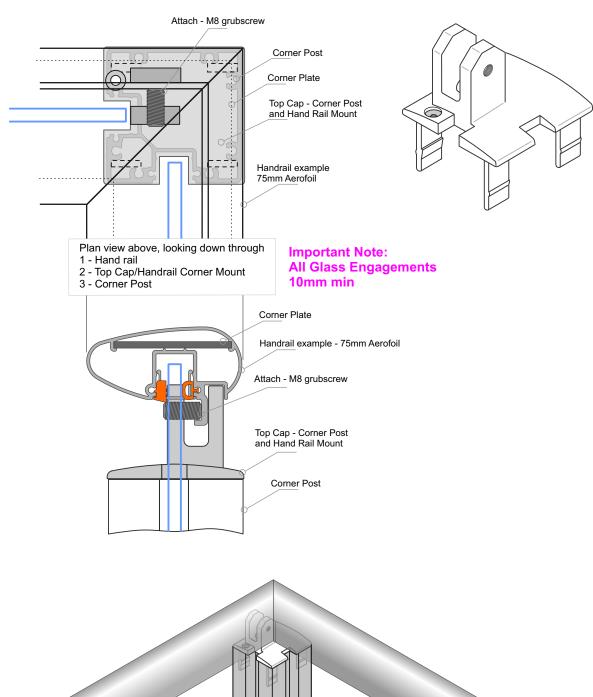
10

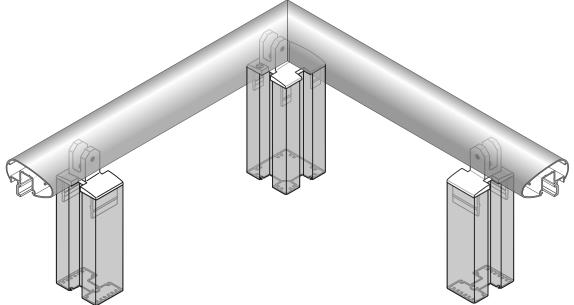
12

Standard Infill below Glass Support Bracket

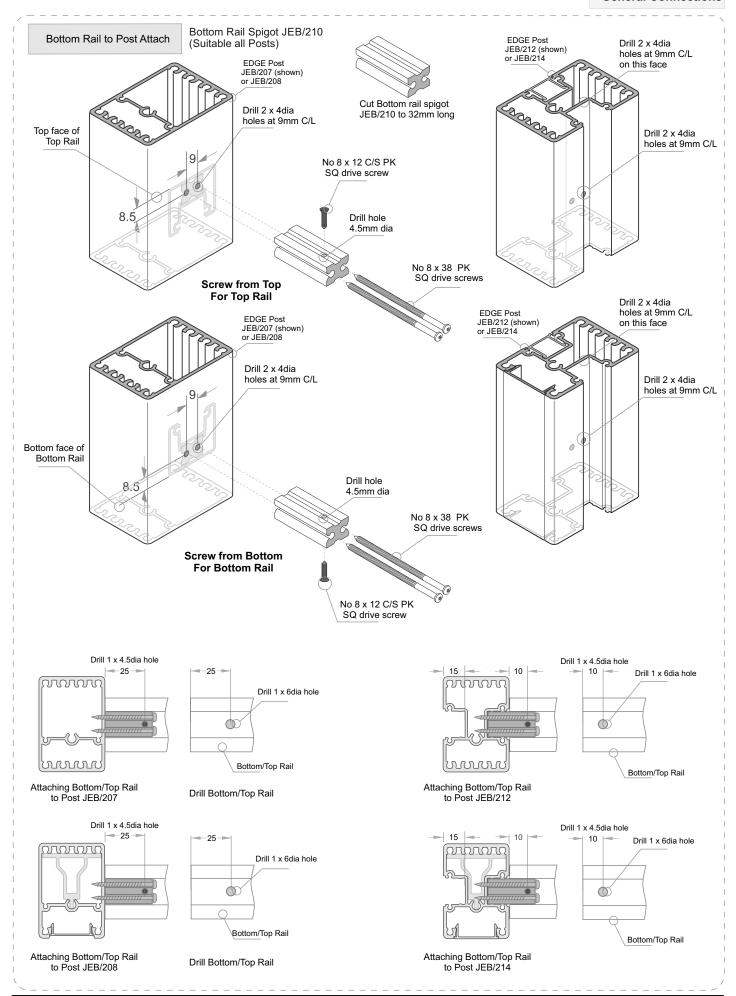
Handrail Attach at Corner Post

All handrails fixings identical - clamp attach with M8 grubscrew

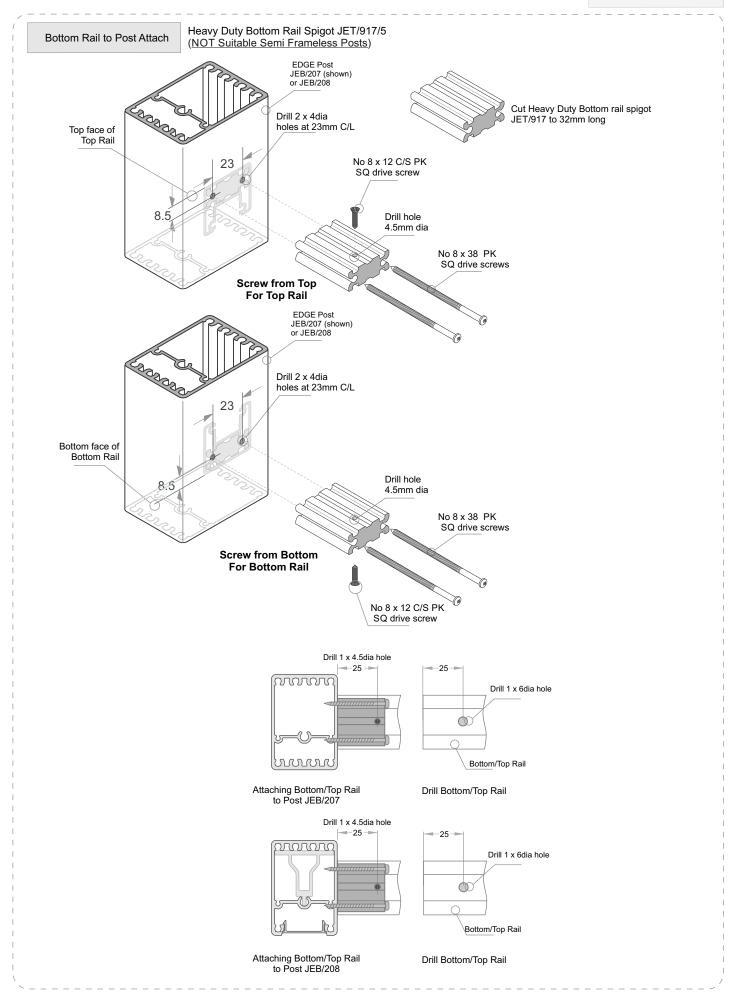






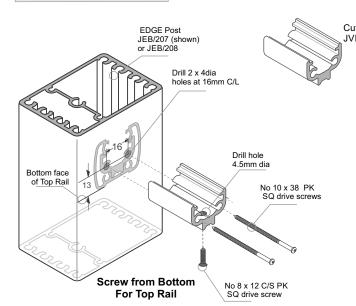


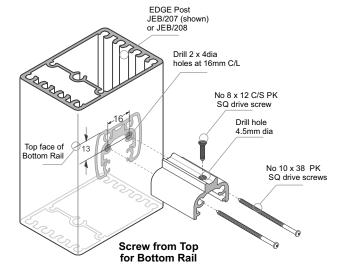




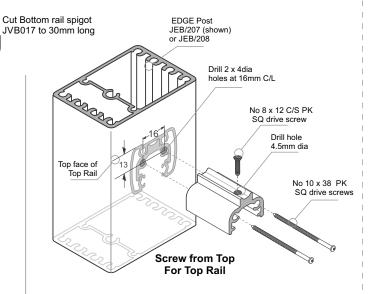
Bottom Rail to Post Attach (Viking Components)

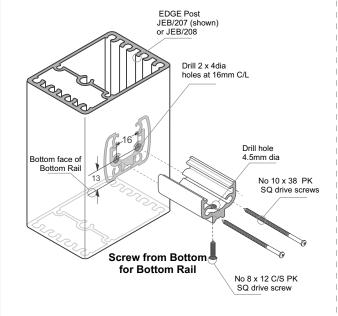
Viking Bottom Rail Spigot JVB017 (NOT Suitable Semi Frameless Posts)



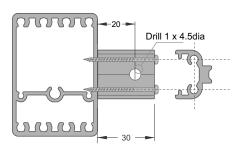




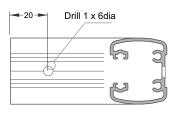




This Setout for Glass Installations



Attaching Bottom or Top Rail TOP Fix Edge Post. PN JEB/207/5 or FACE Fix Edge Post. PN JEB/208/5 Not suitable for Semiframeless Posts

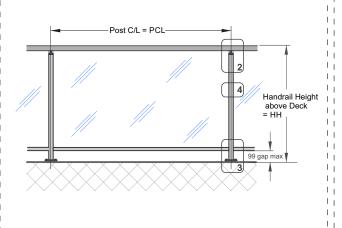


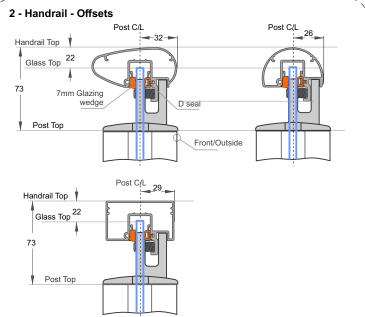
Drill Bottom Rail, Top rail if needed



6mm Toughened Glass - Fully Framed. Handrail + Bottom Rail. Top Mount

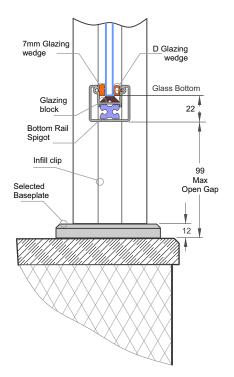
1 - Refer Post Mounting type and installation Wind zone. Then choose Balustrade Height and max Post spacing.



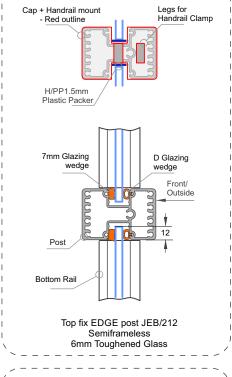


Important Note: All Glass Engagements 10mm min

3 - Height offsets



4 - Glass, Width Offsets

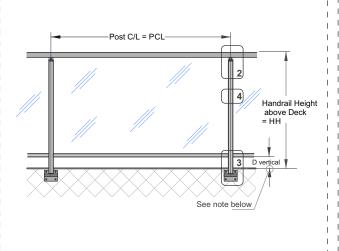


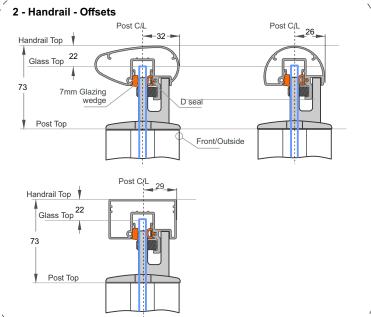
- a Hand Rail = Use maximum lengths
- b Post, Cut to
 - = HH-73-12 = HH 85
- c Bottom Rail, Cut to
 - = PCL-2x22.5 = PCL 45
- d 6mm Glass height
 - = HH-2x22-99 = HH 143
- e 6mm Glass width
 - = PCL- 2x12 = PCL 24
 - or tight distance between posts at deck level + 24mm



6mm Toughened Glass - Fully Framed. Handrail + Bottom Rail. Gutter Brkt Face Fix

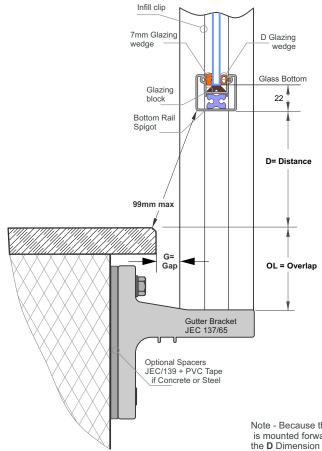
1 - Refer Post Mounting type and installation Wind zone. Then choose Balustrade Height and max Post spacing.





Important Note: All Glass Engagements 10mm min

3 - Height offsets

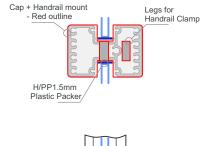


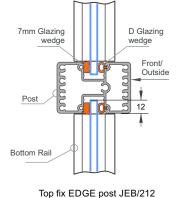
Note - Because the Bottom Rail is mounted forward of the Deck Edge the **D** Dimension is no longer 99mm.

D max values for a 99mm Opening to the deck

- G Gap = 10mm, D = 96mm
- G Gap = 20mm, D = 92mm
- G Gap = 30mm, D = 88mm
- G Gap = 40mm, D = 82mm
- G Gap = 50mm max, D = 75mm

4 - Glass, Width Offsets



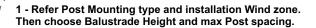


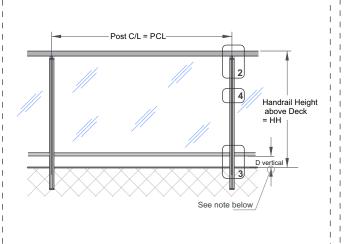
Top fix EDGE post JEB/212 Semiframeless 6mm Toughened Glass

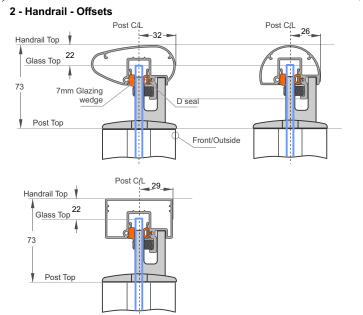
- a Hand Rail = Use maximum lengths
- b Post, Cut to
 - = HH-73+OL
- c Bottom Rail, Cut to
 - = PCL-2x22.5 = PCL 45
- d 6mm Glass height
 - = HH-2x22-99 = HH 143
- e 6mm Glass width
 - = PCL- 2x12 = PCL 24
 - or tight distance between posts at deck level + 24mm



6mm Toughened Glass-Fully Framed. Handrail + Bottom Rail. Face Fix

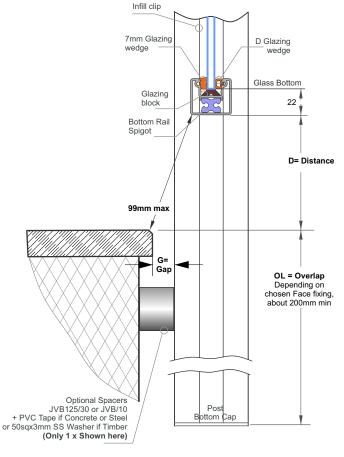






Important Note: All Glass Engagements 10mm min

3 - Height offsets



Note - Because the Bottom Rail is mounted forward of the Deck Edge the **D** Dimension is no longer 99mm.

D max values for a 99mm

Opening to the deck G Gap = 10mm, D = 96mm

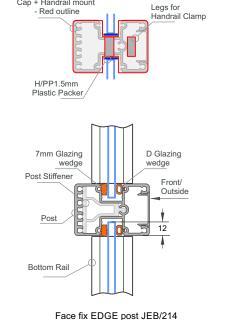
G Gap = 20mm, D = 92mm

G Gap = 30mm, D = 88mm

G Gap = 40mm, D = 82mm G Gap = 50mm max, D = 75mm

4 - Glass, Width Offsets

Cap + Handrail mount



5 - Cutting, nominal

a - Hand Rail = Use maximum lengths

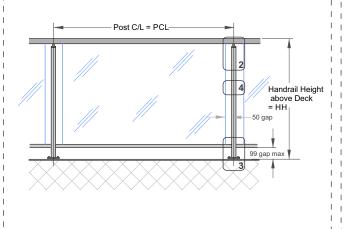
Semiframeless 6mm Toughened Glass

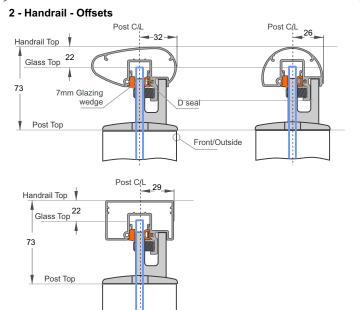
- b Post, Cut to
 - = HH-73+OL
- c Bottom Rail, Cut to
 - = PCL-2x22.5 = PCL 45
- d 6mm Glass height
 - = HH-2x22-D = HH 44 D
- e 6mm Glass width
 - = PCL- 2x12 = PCL 24
 - or tight distance between posts
 - at deck level + 24mm



6mm Toughened Glass - Full Height. Handrail + Bottom Rail. Top Fix

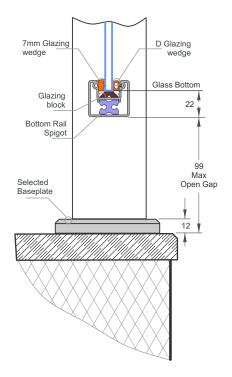
1 - Refer Post Mounting type and installation Wind zone. Then choose Balustrade Height and max Post spacing.



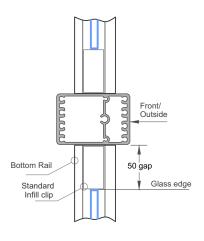


Important Note: All Glass Engagements 10mm min

3 - Height offsets



4 - Glass, Width Offsets

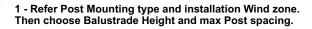


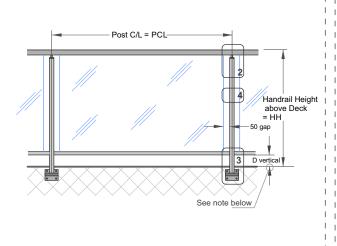
Top fix EDGE post JEB/207 Semiframeless 6mm Toughened Glass

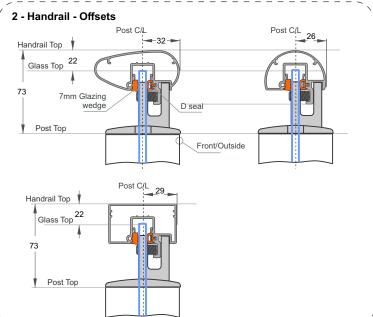
- a Hand Rail = Use maximum lengths
- b Post, Cut to
 - = HH-73-12 = HH 85
- c Bottom Rail, Cut to
 - = PCL-2x22.5 = PCL 45
- d 6mm Glass height
 - = HH-2x22-99 = HH 143
- e 6mm Glass width
 - = PCL-2x22.5-2x50 = PCL 145



6mm Toughened Glass- Full Height. Handrail + Bottom Rail. Gutter Brkt Face Fix

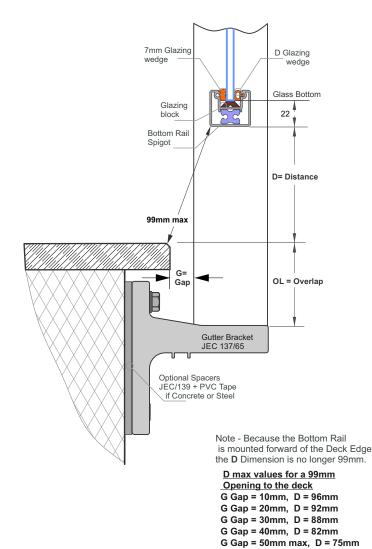




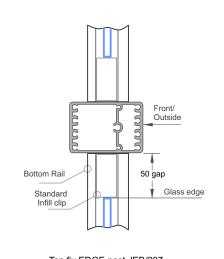


Important Note: All Glass Engagements 10mm min

3 - Height offsets



4 - Glass, Width Offsets

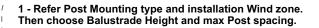


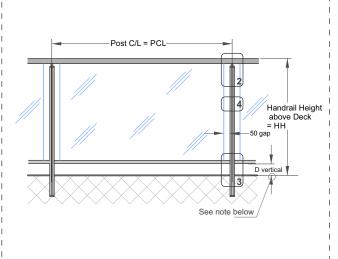
Top fix EDGE post JEB/207 Semiframeless 6mm Toughened Glass

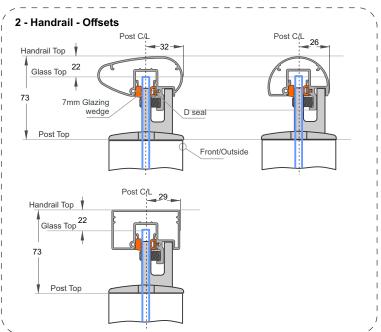
- a Hand Rail = Use maximum lengths
- b Post, Cut to
 - = HH-73+OL
- c Bottom Rail, Cut to
 - = PCL-2x22.5 = PCL 45
- d 6mm Glass height
 - = HH-2x22-D = HH 44 D
- e 6mm Glass width
 - = PCL-2x22.5-2x50 = PCL 145



6mm Toughened Glass - Full Height. Handrail + Bottom Rail. Face Fix

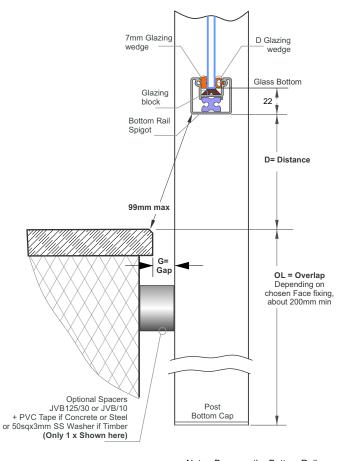






Important Note: All Glass Engagements 10mm min

3 - Height offsets



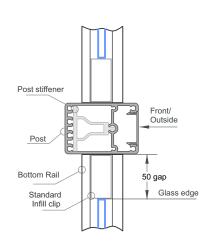
Note - Because the Bottom Rail is mounted forward of the Deck Edge the **D** Dimension is no longer 99mm.

D max values for a 99mm

Opening to the deck

- G Gap = 10mm, D = 96mm
- G Gap = 20mm, D = 92mm
- G Gap = 30mm, D = 88mm
- G Gap = 40mm, D = 82mm
- G Gap = 50mm max, D = 75mm

4 - Glass, Width Offsets



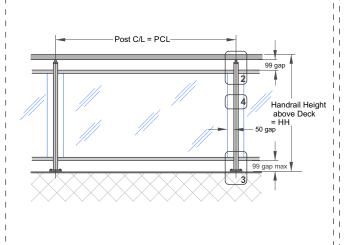
Face fix EDGE post JEB/208 Semiframeless 6mm Toughened Glass

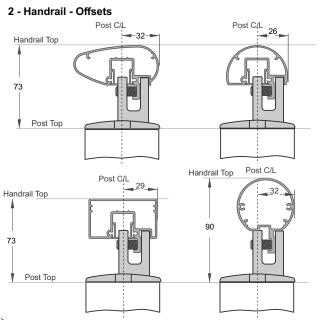
- a Hand Rail = Use maximum lengths
- b Post, Cut to
 - = HH-73+OL
- c Bottom Rail, Cut to
 - = PCL-2x22.5 = PCL 45
- d 6mm Glass height
 - = HH-2x22-D = HH 44 D
- e 6mm Glass width
 - = PCL-2x22.5-2x50 = PCL 145



6mm Toughened Glass - Full Height. Handrail + Split Rails. Top Fix

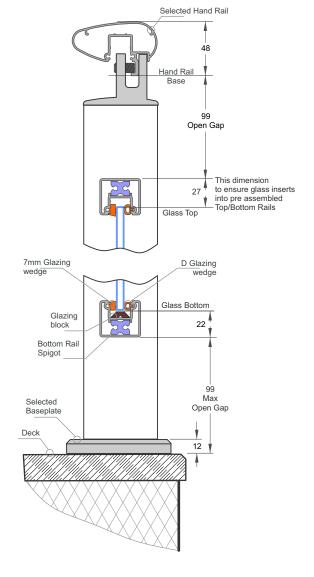
1 - Refer Post Mounting type and installation Wind zone. Then choose Balustrade Height and max Post spacing.



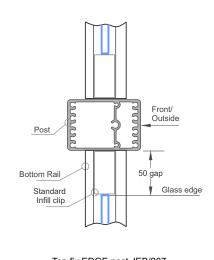


Important Note: All Glass Engagements 10mm min

3 - Height offsets



4 - Glass, Width Offsets

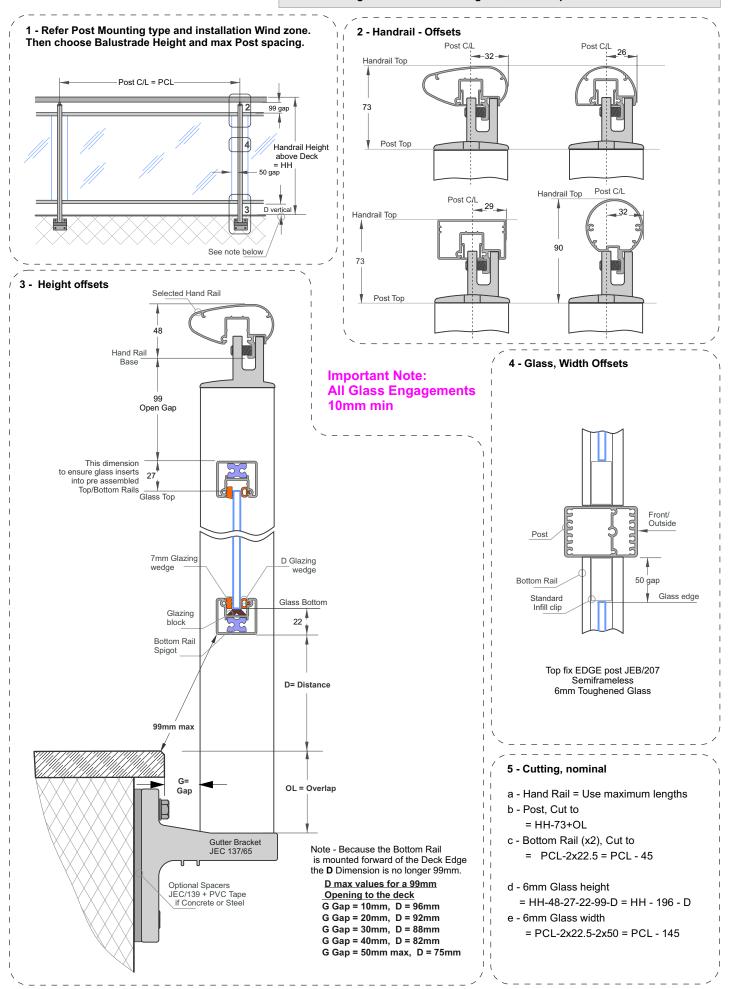


Top fix EDGE post JEB/207 Semiframeless 6mm Toughened Glass

- a Hand Rail = Use maximum lengths
- b Post, Cut to
 - = HH-73-12 = HH 85
- c Bottom Rail (x2), Cut to
 - = PCL-2x22.5 = PCL 45
- d 6mm Glass height
 - = HH-27-22-2x99-48 = HH 295
- e 6mm Glass width
 - = PCL-2x22.5-2x50 = PCL 145

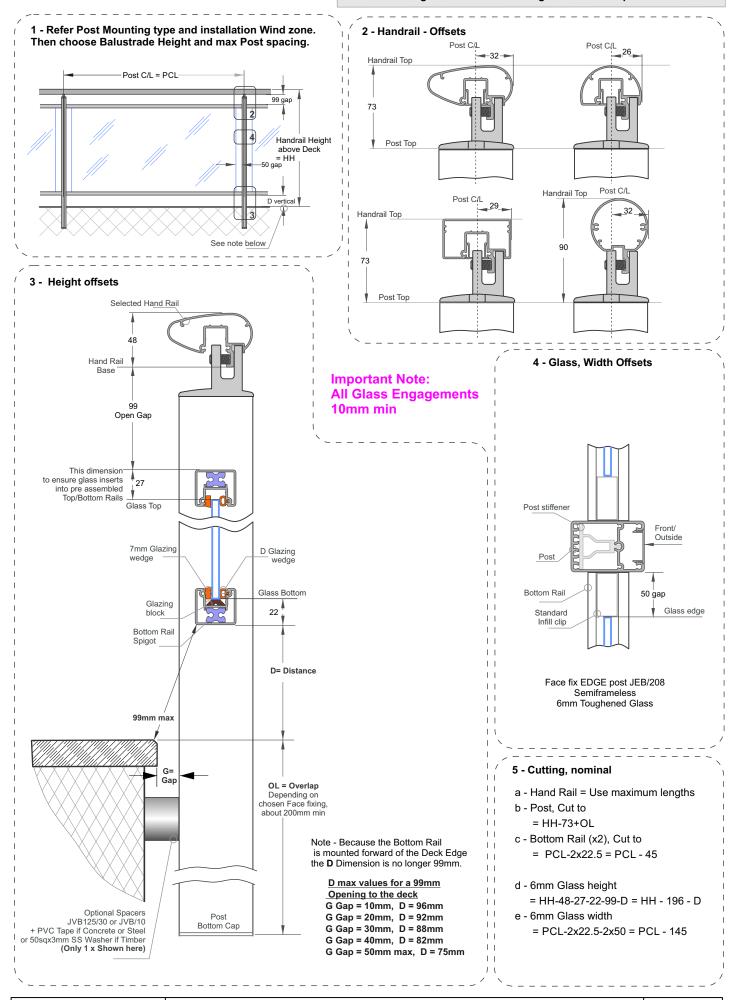


6mm Toughened Glass - Full Height. Handrail + Split Rails. Gutter Brkt Face Fix





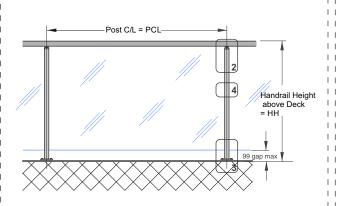
6mm Toughened Glass - Full Height. Handrail + Split Rails. Face Fix



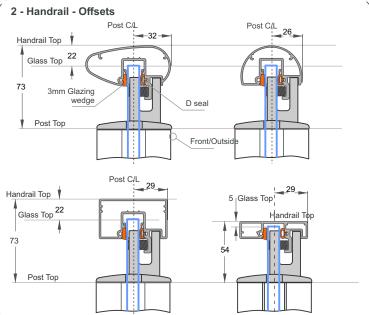


10mm Toughened Glass - Semi Frameless + Handrail. Top Fix

1 - Refer Post Mounting type and installation Wind zone. Then choose Balustrade Height and max Post spacing.

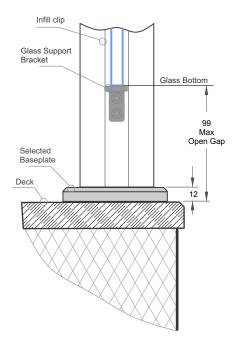


A Corner Post is available for 10mm Glass, Inline - Semi Frameless. Top Mount only with 110mm sq JEC 222 Baseplate

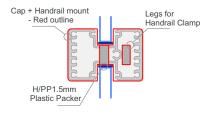


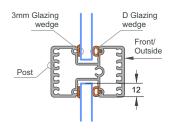
Important Note: All Glass Engagements 10mm min

3 - Height offsets



4 - Glass, Width Offsets



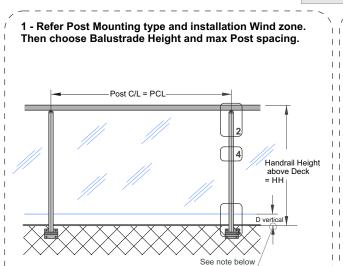


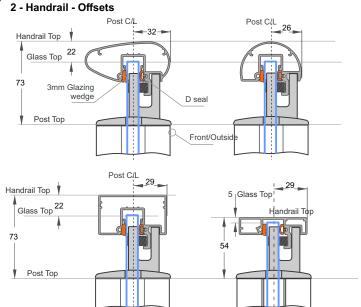
Top fix EDGE post JEB/212 Semiframeless 10mm Toughened Glass

- a Hand Rail = Use maximum lengths
- b Post, Cut to =HH-54-12
- c 10mm Glass height
 - = HH 104
- d 10mm Glass width
 - = PCL- 2x12 = PCL 24
- or tight distance between posts at deck level + 24mm



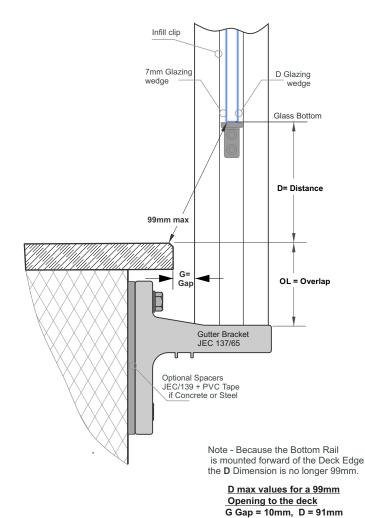
10mm Toughened Glass - Semi Frameless + Handrail. Gutter Brkt Face Fix



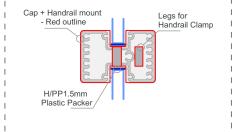


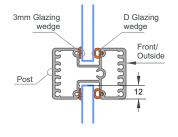
Important Note: All Glass Engagements 10mm min

3 - Height offsets



4 - Glass, Width Offsets





Top fix EDGE post JEB/212 Semiframeless 10mm Toughened Glass

5 - Cutting, nominal

- a Hand Rail = Use maximum lengths
- b Post, Cut to
 - = HH-54+ OL
- c 10mm Glass height
 - = HH-5-D
- d 10mm Glass width
 - = PCL- 2x12 = PCL 24
 - or tight distance between posts
 - at deck level + 24mm

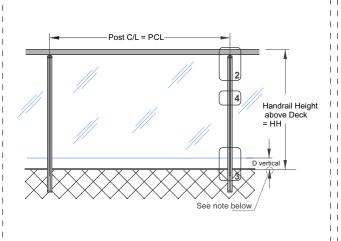
G Gap = 20mm, D = 86mm

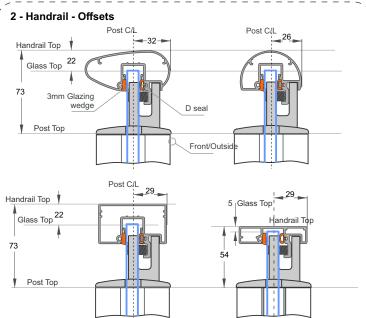
G Gap = 30mm, D = 80mm G Gap = 40mm, D = 72mm G Gap = 50mm max, D = 61mm



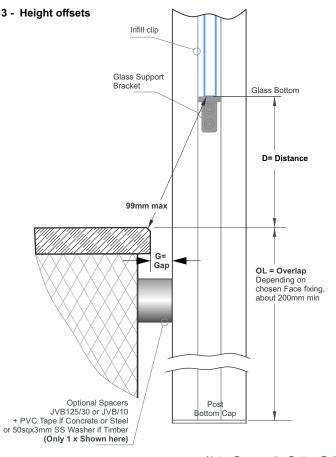
10mm Toughened Glass - Semi Frameless + Handrail. Face Fix

1 - Refer Post Mounting type and installation Wind zone. Then choose Balustrade Height and max Post spacing.





Important Note: All Glass Engagements 10mm min



Note - Because the Bottom Rail is mounted forward of the Deck Edge the D Dimension is no longer 99mm.

D max values for a 99mm Opening to the deck

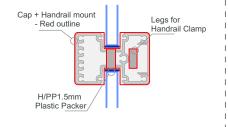
G Gap = 10mm, D = 91mm

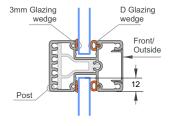
G Gap = 20mm, D = 86mm

G Gap = 30mm, D = 80mm

G Gap = 40mm, D = 72mm G Gap = 50mm max, D = 61mm

4 - Glass, Width Offsets





Face fix EDGE post JEB/214 Semiframeless 10mm Toughened Glass

5 - Cutting, nominal

a - Hand Rail = Use maximum lengths

b - Post, Cut to = HH-54+OL

c - 10mm Glass height = HH-5-D

d - 10mm Glass width

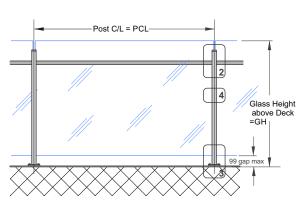
= PCL- 2x12 = PCL - 24

or tight distance between posts at deck level + 24mm

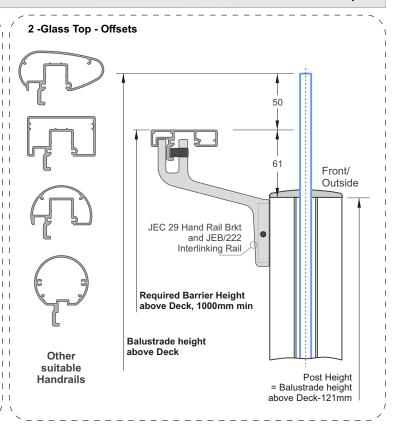


10mm Toughened Glass - Semi Frameless + JEC 29 Bracket mounted on Post + Handrail. Top Fix

Refer Post Mounting type and installation Wind zone. Then choose Balustrade Height and max Post spacing.

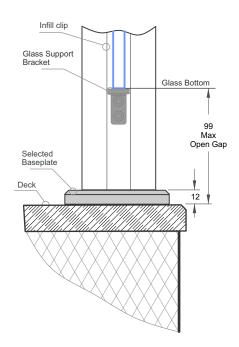


A Corner Post is not suitable available for this configuration

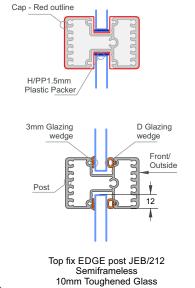


Important Note: All Glass Engagements 10mm mir

3 - Height offsets



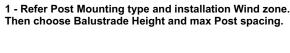
4 - Glass, Width Offsets

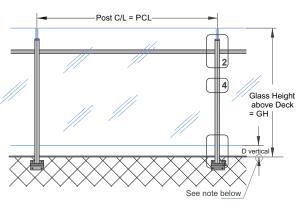


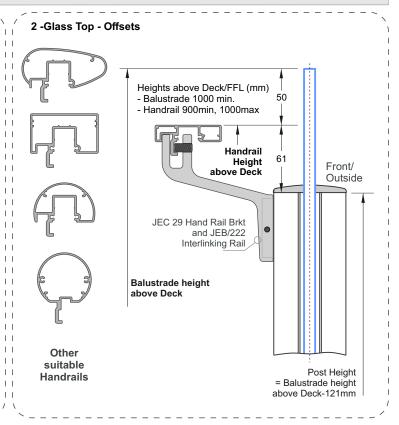
- a Hand Rail = Use maximum lengths
- b Post, Cut to
 - = 840 min
- c 10mm Glass height
 - = GH 99
- d 10mm Glass width
 - = PCL- 2x12 = PCL 24
 - or tight distance between posts
 - at deck level + 24mm



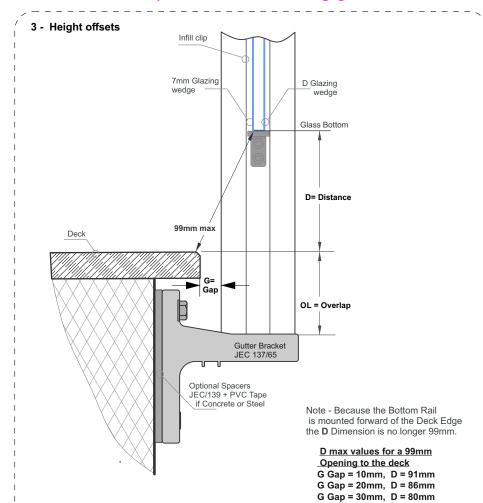
10mm Toughened Glass - Semi Frameless + JEC 29 Bracket mounted on Post + Handrail. Gutter Brkt Face Fix



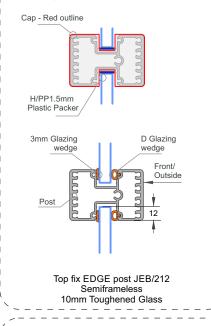




Important Note: All Glass Engagements 10mm min



4 - Glass, Width Offsets



5 - Cutting, nominal

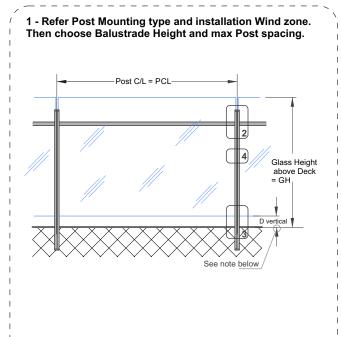
- a Hand Rail = Use maximum lengths
- b Post, Cut to
 - = 850 + OL
- c 10mm Glass height
 - = GH-D
- d 10mm Glass width
 - = PCL- 2x12 = PCL 24
 - or tight distance between posts
 - at deck level + 24mm

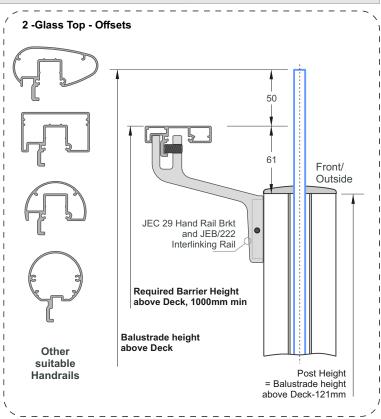
G Gap = 40mm, D = 72mm

G Gap = 50mm max, D = 61mm

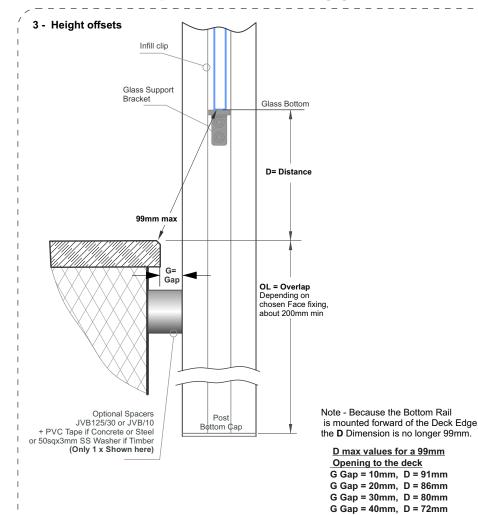


10mm Toughened Glass - Semi Frameless + JEC 29 Bracket mounted on Post + Handrail. Face Fix

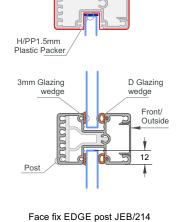




Important Note: All Glass Engagements 10mm min



4 - Glass, Width Offsets Cap - Red outline



Face fix EDGE post JEB/214 Semiframeless 10mm Toughened Glass

5 - Cutting, nominal

- a Hand Rail = Use maximum lengths
- b Post, Cut to
 - = 850 + OL
- c 10mm Glass height
 - = GH-D
- d 10mm Glass width
 - = PCL- 2x12 = PCL 24
 - or tight distance between posts at deck level + 24mm

G Gap = 50mm max, D = 61mm

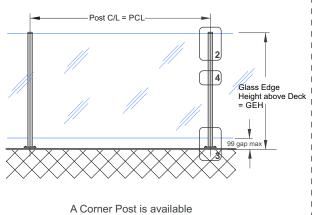


13.2mm Toughened Laminated Glass - Semi Frameless. Top Fix

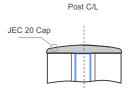
1 - Refer Post Mounting type and installation Wind zone. Then choose Balustrade Height and max Post spacing.

Top Protection Cap JET 212 between Posts highly recommended

Inline - Semi Frameless. Top Mount only with 110mm sq JEC 222 Baseplate



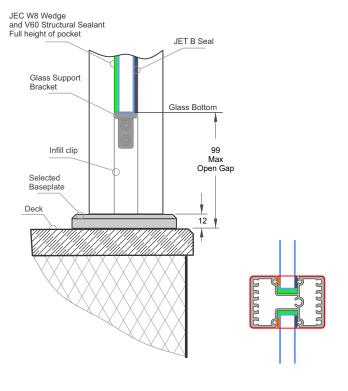
2 -Glass Top - Offsets



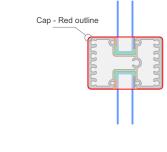
Glass Flush to top of Post

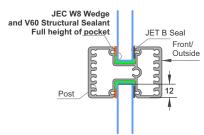
Important Note: All Glass Engagements 10mm min

3 - Height offsets



4 - Glass, Width Offsets





Top fix EDGE post JEB/212 Semiframeless 13.2mm Laminated Toughened Glass

- a Post, Cut to = GEH -12
- b 13.2mm Glass height = GEH- 99
- c 13.2mm Glass width = PCL- 2x12 = PCL - 24
- or tight distance between posts at deck level + 24mm

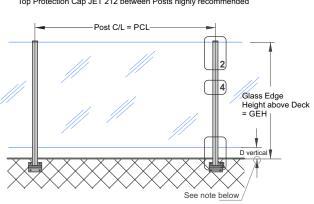




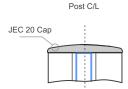
13.2mm Toughened Laminated Glass - Semi Frameless. Gutter Brkt Face Fix

1 - Refer Post Mounting type and installation Wind zone. Then choose Balustrade Height and max Post spacing.

Top Protection Cap JET 212 between Posts highly recommended



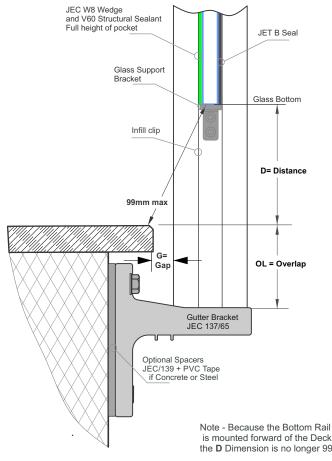
2 -Glass Top - Offsets



Glass Flush to top of Post

Important Note: All Glass Engagements 10mm min

3 - Height offsets



is mounted forward of the Deck Edge the ${\bf D}$ Dimension is no longer 99mm.

D max values for a 99mm Opening to the deck

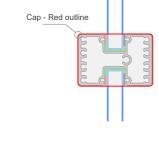
G Gap = 10mm, D = 91mm

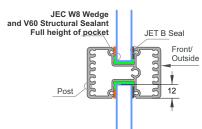
G Gap = 20mm, D = 86mm

G Gap = 30mm, D = 80mm G Gap = 40mm, D = 72mm

G Gap = 50mm max, D = 61mm

4 - Glass, Width Offsets





Top fix EDGE post JEB/212 Semiframeless 13.2mm Laminated Toughened Glass

5 - Cutting, nominal

a - Post, Cut to

= GEH+ OL

b - 13.2mm Glass height

= GEH-D

c - 13.2mm Glass width

= PCL- 2x12 = PCL - 24

or tight distance between posts

at deck level + 24mm

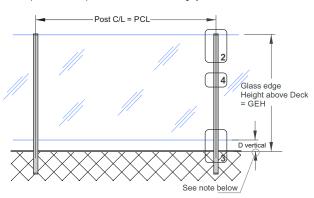
2 - Glass Top - Offsets

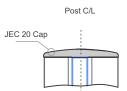


13.2mm Toughened Laminated Glass - Semi Frameless. Face Fix

1 - Refer Post Mounting type and installation Wind zone. Then choose Balustrade Height and max Post spacing.

Top Protection Cap JET 212 between Posts highly recommended

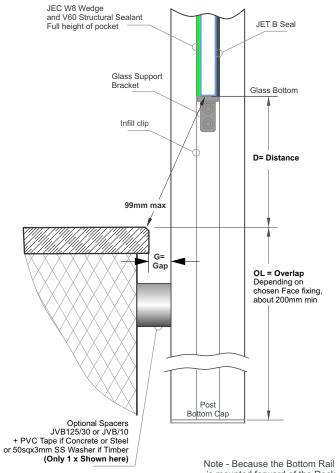




Glass Flush to top of Post

Important Note: All Glass Engagements 10mm min

3 - Height offsets



Note - Because the Bottom Rail is mounted forward of the Deck Edge the **D** Dimension is no longer 99mm.

D max values for a 99mm Opening to the deck

G Gap = 10mm, D = 91mm

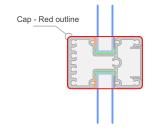
G Gap = 20mm, D = 86mm

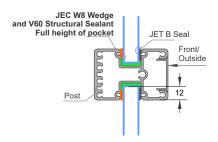
G Gap = 30mm, D = 80mm

G Gap = 40mm, D = 72mm

G Gap = 50mm max, D = 61mm

4 - Glass, Width Offsets





Face fix EDGE post JEB/214 Semiframeless 13.2mm Laminated Toughened Glass

5 - Cutting, nominal

a - Post, Cut to

= GEH + OL

b - 13.2mm Glass height

= GEH-D

c - 13.2mm Glass width

= PCL- 2x12 = PCL - 24

or tight distance between posts

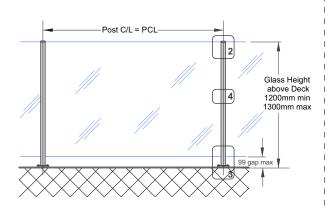
at deck level + 24mm





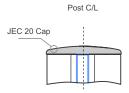
10mm Toughened Glass - Semi Frameless - No Handrail. SWIMMING POOLS ONLY. 1200mm Min Height

1 - Refer Post Mounting type and installation Wind zone. Then choose Balustrade Height and max Post spacing.



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

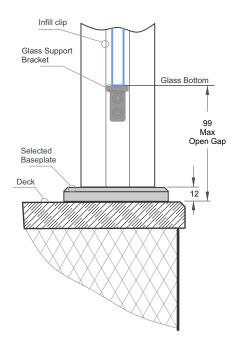
2 -Glass Top



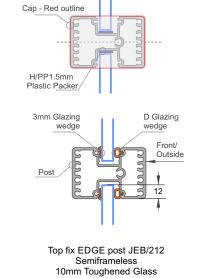
Glass Flush to top of Post

Important Note: All Glass Engagements 10mm min

3 - Height offsets



4 - Glass, Width Offsets



5 - Cutting, nominal

- a Post, Cut to
 - = 1200-12
- b 10mm Glass height
 - = 1100
- c 10mm Glass width
 - = PCL- 2x12 = PCL 24

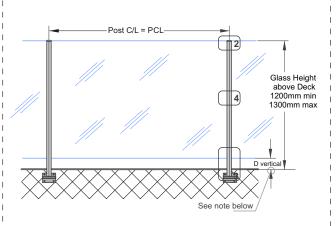
or tight distance between posts

at deck level + 24mm



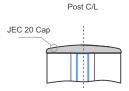
10mm Toughened Glass - Semi Frameless - No Handrail. SWIMMING POOLS ONLY. 1200mm Min Height

1 - Refer Post Mounting type and installation Wind zone. Then choose Balustrade Height and max Post spacing.



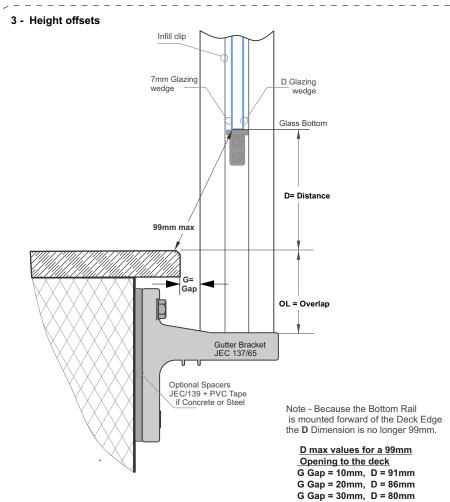
Applies to Swimming Pools as of Jan 2017 Complies with the Building Code Clause F9 and section 162C of the Building Act. Applies to Pool Fences not protecting a fall of 1.0m or more

2 -Glass Top - Offsets

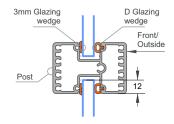


Glass Flush to top of Post

Important Note: All Glass Engagements 10mm min



4 - Glass, Width Offsets Cap - Red outline H/PP1.5mm Plastic Packer



Top fix EDGE post JEB/212 Semiframeless 10mm Toughened Glass

5 - Cutting, nominal

- a Post, Cut to
 - = 1200 + OL
- b 10mm Glass height
 - = 1200 D
- c 10mm Glass width
 - = PCL- 2x12 = PCL 24
- or tight distance between posts at deck level + 24mm



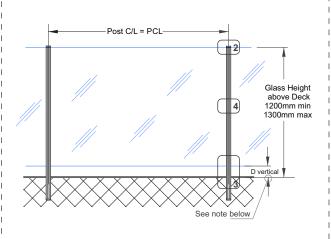
G Gap = 40mm, D = 72mm G Gap = 50mm max, D = 61mm

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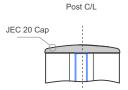
10mm Toughened Glass - Semi Frameless - No Handrail. SWIMMING POOLS ONLY. 1200mm Min Height

1 - Refer Post Mounting type and installation Wind zone. Then choose Balustrade Height and max Post spacing.



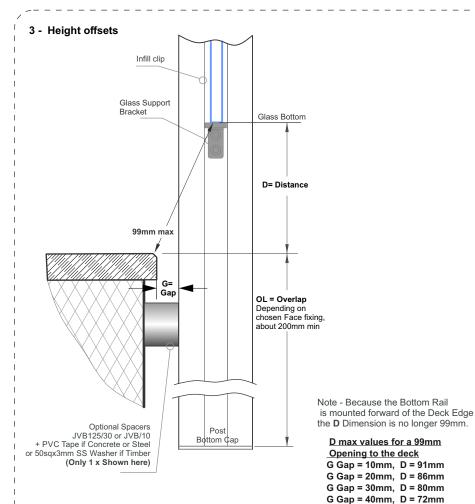
Applies to Swimming Pools as of Jan 2017 Complies with the Building Code Clause F9 and section 162C of the Building Act. Applies to Pool Fences not protecting a fall of 1.0m or more

2 -Glass Top - Offsets

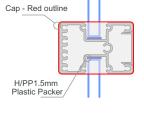


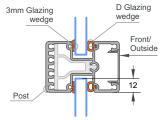
Glass Flush to top of Post

Important Note: All Glass Engagements 10mm min



4 - Glass, Width Offsets





Face fix EDGE post JEB/214 Semiframeless 10mm Toughened Glass

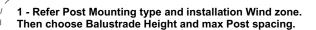
5 - Cutting, nominal

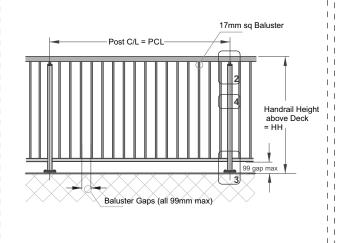
- a Post. Cut to
 - =1200 + OL
- b 10mm Glass height
 - = 1200 D
- c 10mm Glass width
 - = PCL- 2x12 = PCL 24
 - or tight distance between posts
 - at deck level + 24mm

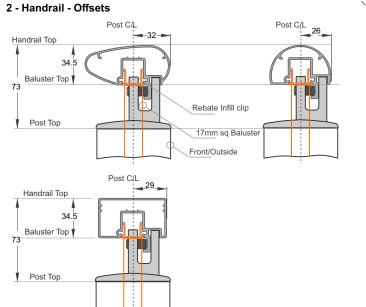
G Gap = 50mm max, D = 61mm



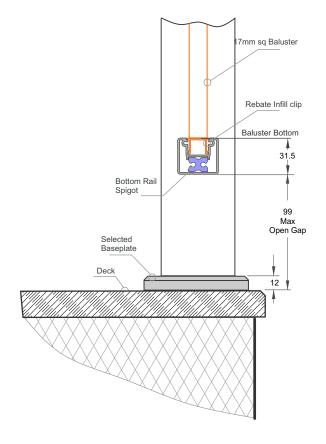
17mm Baluster - Full Height. Handrail + Bottom Rail. Top Fix



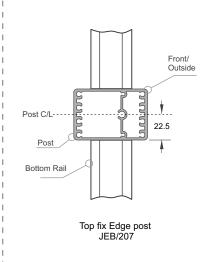




3 - Height offsets



4 - Width Offsets



5 - Cutting, nominal

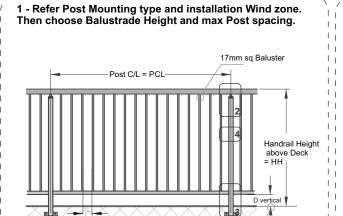
a - Hand Rail = Use maximum lengths

_ = = = = = = = = = = = = = =

- b Post, Cut to
 - = HH-73-12 = HH 85
- c Bottom Rail, Cut to
 - = PCL-2x22.5 = PCL 45
- d 17mm sq Baluster, Cut to
 - = HH-34.5-31.5-99 = HH 165

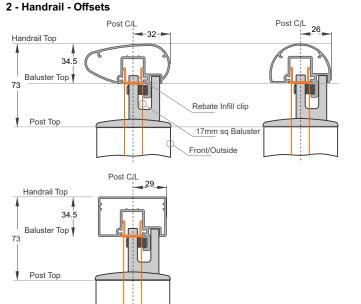


17mm Baluster - Full Height. Handrail + Bottom Rail. Gutter Brkt Face Fix

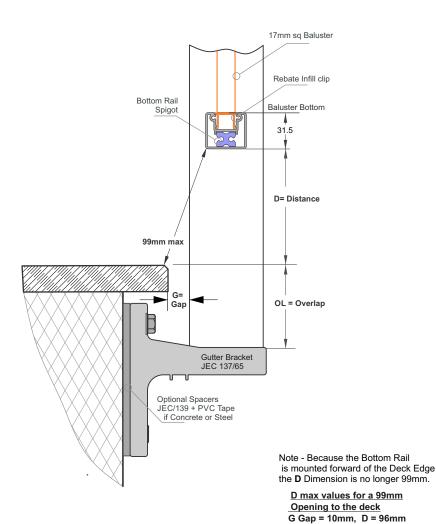


Baluster Gaps (all 99mm max)

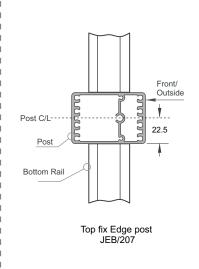
See note below



3 - Height offsets



4 - Width Offsets



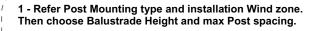
5 - Cutting, nominal

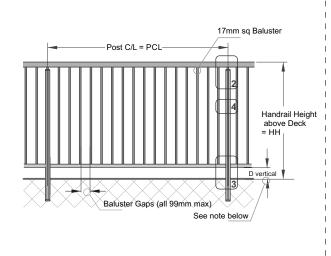
- a Hand Rail = Use maximum lengths
- b Post, Cut to
 - = HH-73+OL
- c Bottom Rail, Cut to
 - = PCL-2x22.5 = PCL 45
- d 17mm sq Baluster, Cut to
 - = HH-34.5-31.5-D = HH 66 D

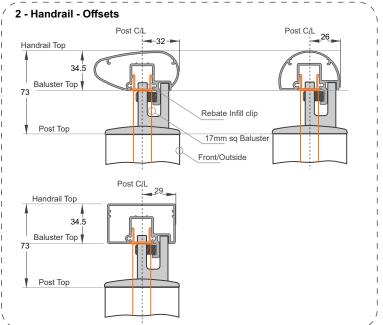
G Gap = 20mm, D = 92mm G Gap = 30mm, D = 88mm G Gap = 40mm, D = 82mm G Gap = 50mm max, D = 75mm



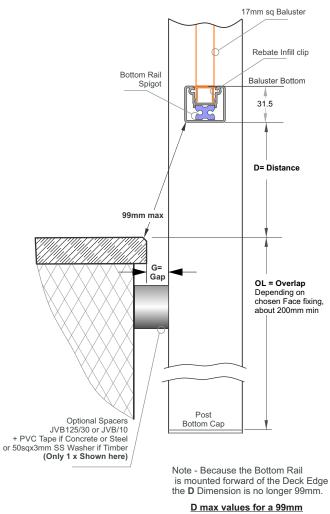
17mm Baluster - Full Height. Handrail + Bottom Rail. Face Fix



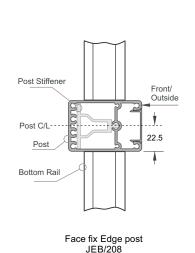




3 - Height offsets



4 - Width Offsets



5 - Cutting, nominal

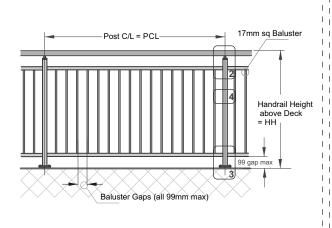
- a Hand Rail = Use maximum lengths
- b Post, Cut to
 - = HH-73+OL
- c Bottom Rail, Cut to
 - = PCL-2x22.5 = PCL 45
- d 17mm sq Baluster, Cut to
- = HH-34.5-31.5-D = HH 66 D

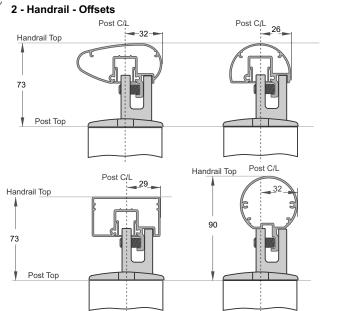
- Opening to the deck G Gap = 10mm, D = 96mm
- G Gap = 20mm, D = 92mm
- G Gap = 30mm, D = 88mm
- G Gap = 40mm, D = 82mm



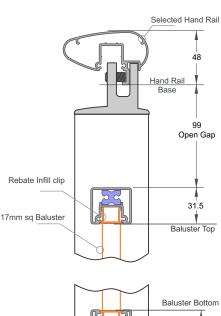
17mm Baluster - Split Rail. Handrail + Top and Bottom Rail. Top Fix

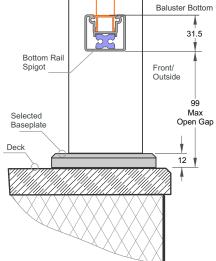
1 - Refer Post Mounting type and installation Wind zone. Then choose Balustrade Height and max Post spacing.



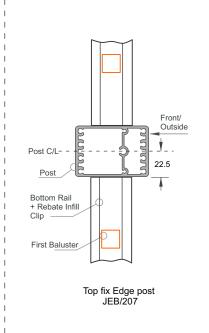


3 - Height offsets





4 - Width Offsets

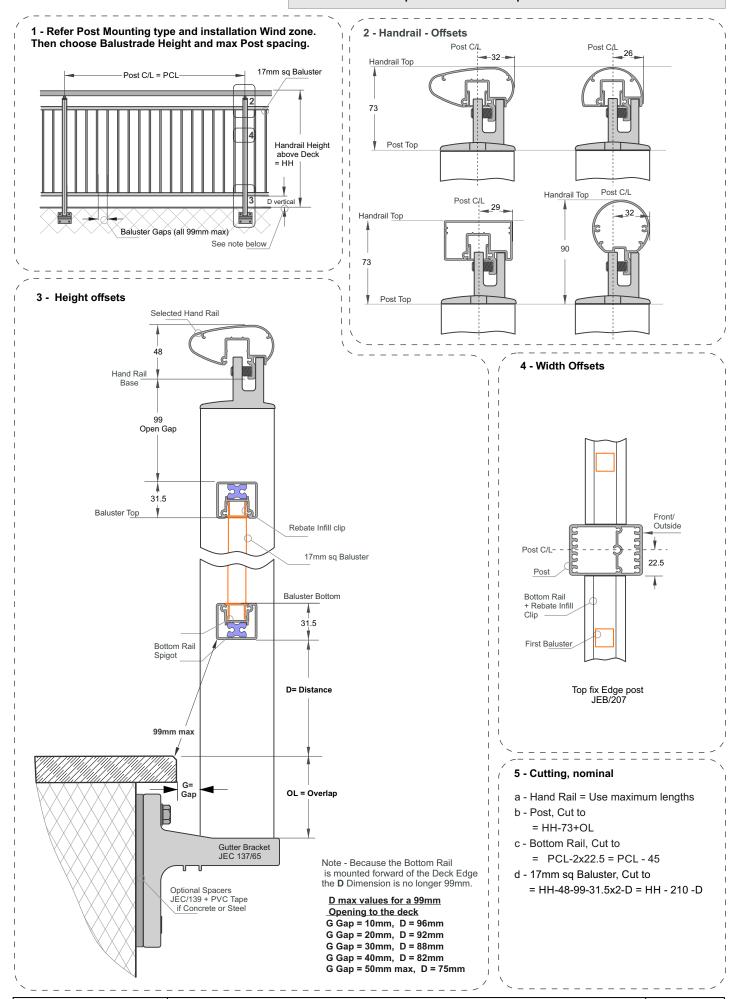


5 - Cutting, nominal

- a Hand Rail = Use maximum lengths
- b Post, Cut to
 - = HH-73-12 = HH 85
- c Bottom Rail, Cut to
 - = PCL-2x22.5 = PCL 45
- d 17mm sq Baluster, Cut to
 - = HH-48-99x2-31.5x2 = HH 309

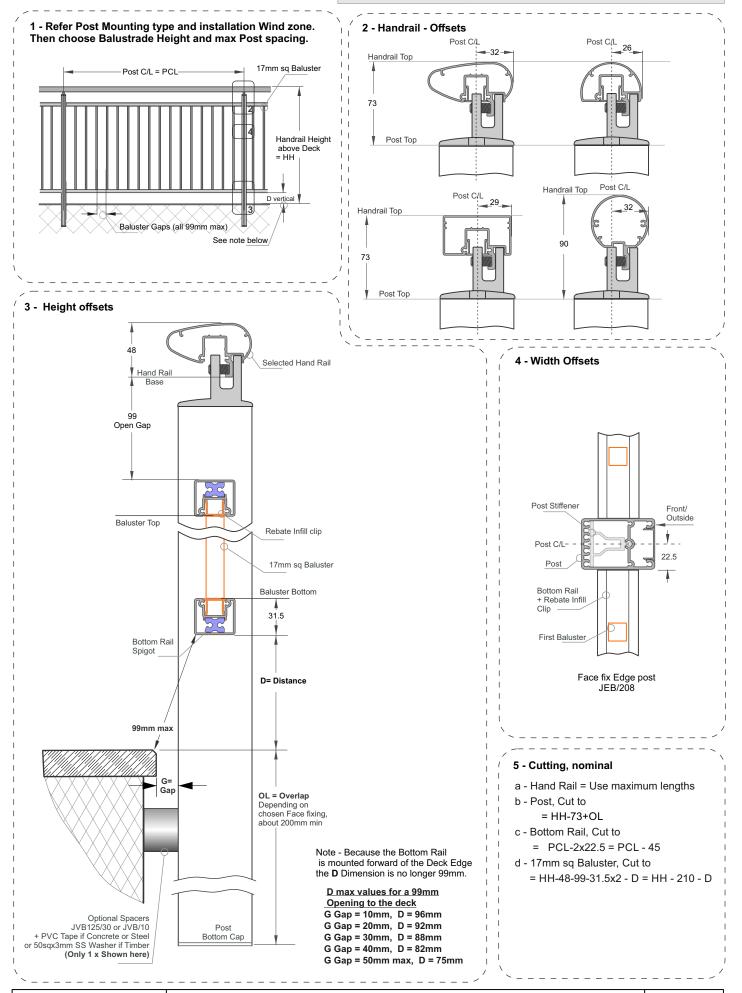


17mm Baluster - Split Rail. Handrail + Top and Bottom Rail. Gutter Brkt Face Fix



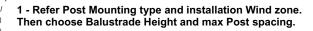


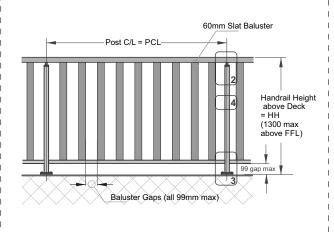
17mm Baluster - Split Rail. Handrail + Top and Bottom Rail. Face Fix

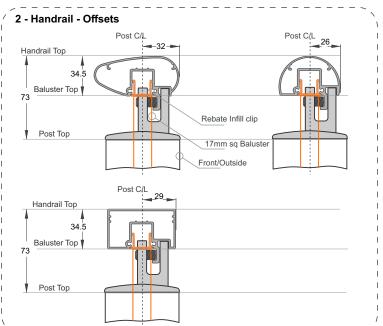




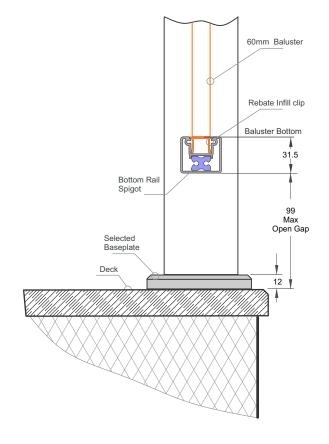
60mm Slat - Full Height. Handrail + Bottom Rail. Top Fix



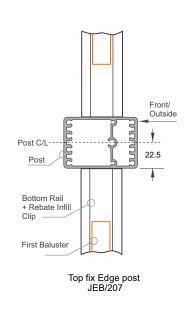




3 - Height offsets



4 - Width Offsets

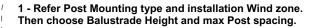


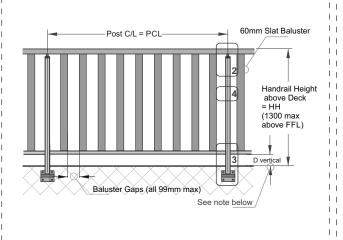
5 - Cutting, nominal

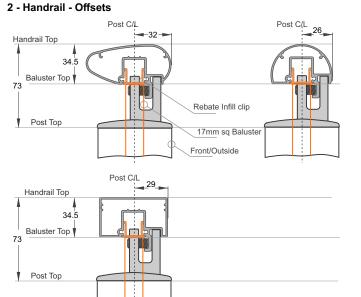
- a Hand Rail = Use maximum lengths
- b Post, Cut to
 - = HH-73-12 = HH 85
- c Bottom Rail, Cut to
 - = PCL-2x22.5 = PCL 45
- d 60mm Slat Baluster, Cut to = HH-34.5-31.5-99 = HH - 165



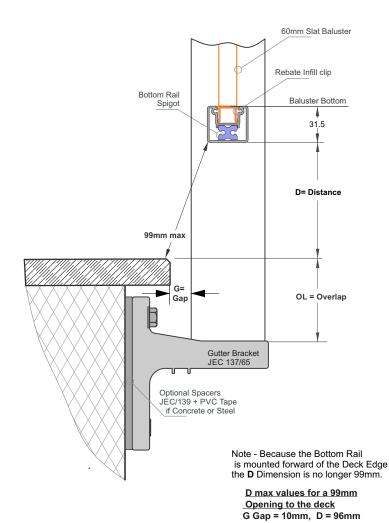
60mm Slat - Full Height. Handrail + Bottom Rail. Gutter Brkt Face Fix



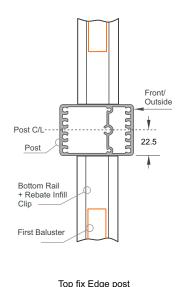




3 - Height offsets



4 - Width Offsets



Top fix Edge post JEB/207

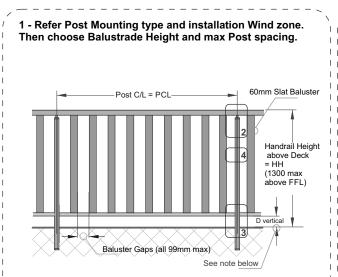
5 - Cutting, nominal

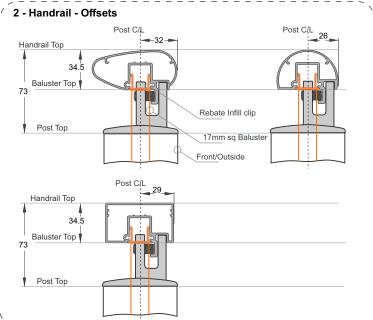
- a Hand Rail = Use maximum lengths
- b Post, Cut to
 - = HH-73+OL
- c Bottom Rail, Cut to
 - = PCL-2x22.5 = PCL 45
- d 60mm Slat Baluster, Cut to
 - = HH-34.5-31.5-D-OL= = HH-66-D-OL

G Gap = 20mm, D = 92mm G Gap = 30mm, D = 88mm G Gap = 40mm, D = 82mm G Gap = 50mm max, D = 75mm

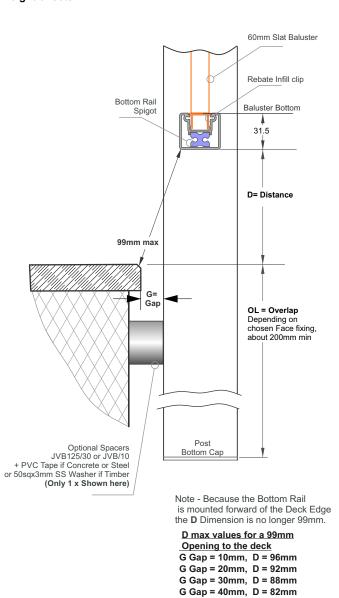


60mm Slat - Full Height. Handrail + Bottom Rail. Face Fix

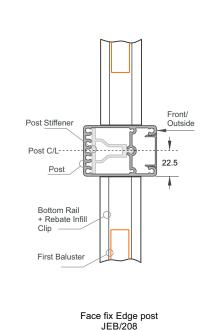




3 - Height offsets



4 - Width Offsets



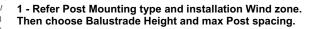
5 - Cutting, nominal

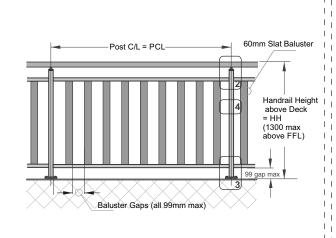
- a Hand Rail = Use maximum lengths
- b Post, Cut to
 - = HH-73+OL
- c Bottom Rail, Cut to
 - = PCL-2x22.5 = PCL 45
- d 60mm Slat Baluster, Cut to = HH-34.5-31.5-D = HH - 66 - D

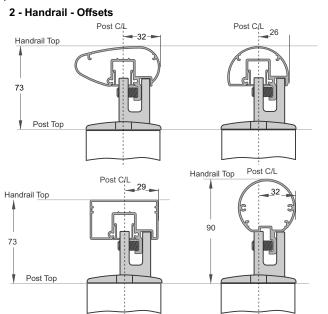
G Gap = 50mm max, D = 75mm



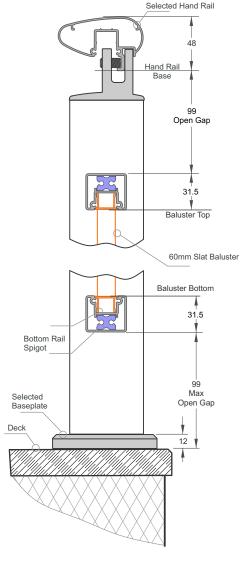
60mm Slat - Split Rail. Handrail + Top and Bottom Rail. Top Fix



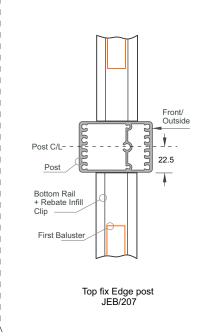




3 - Height offsets



4 - Width Offsets

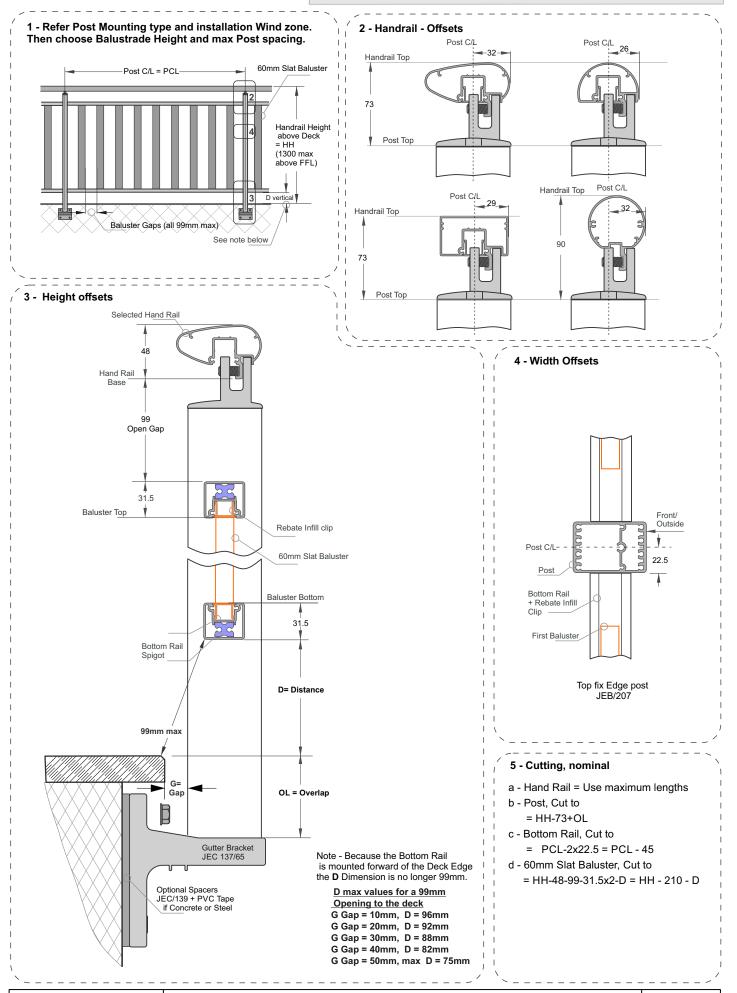


5 - Cutting, nominal

- a Hand Rail = Use maximum lengths
- b Post, Cut to
 - = HH-73-12 = HH 85
- c Bottom Rail, Cut to
 - = PCL-2x22.5 = PCL 45
- d 60mm Slat Baluster, Cut to
 - = HH-48-99x2-31.5x2 = HH 309

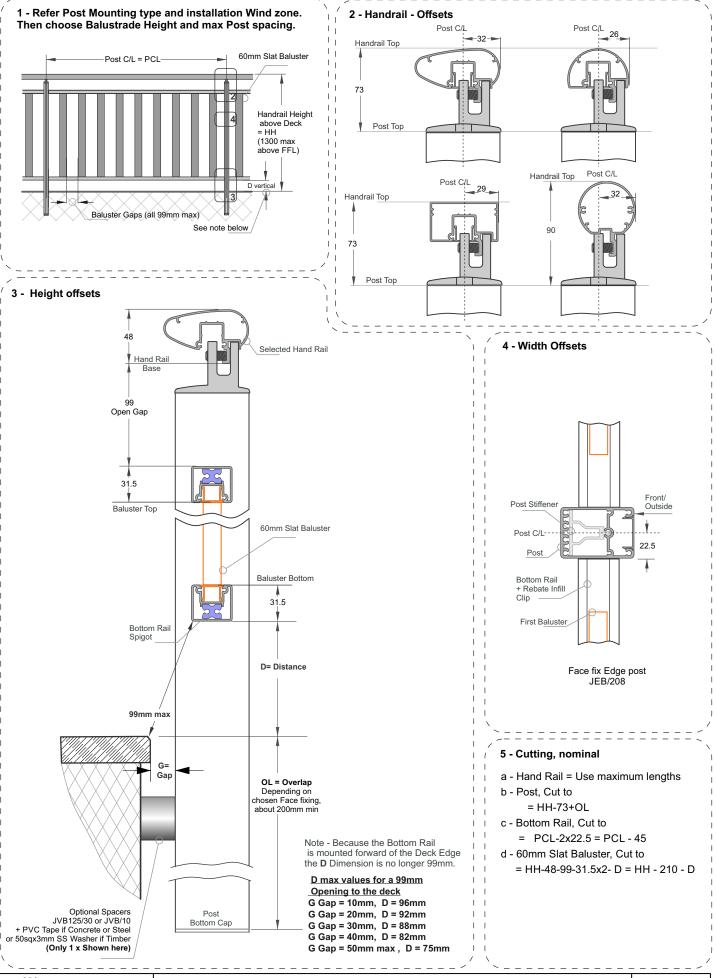


60mm Slat - Split Rail. Handrail + Top and Bottom Rail. Gutter Brkt Face Fix





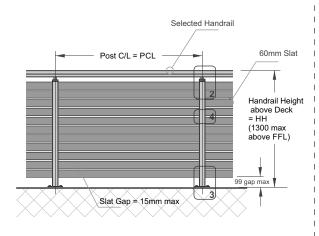
60mm Slat - Split Rail. Handrail + Top and Bottom Rail. Face Fix

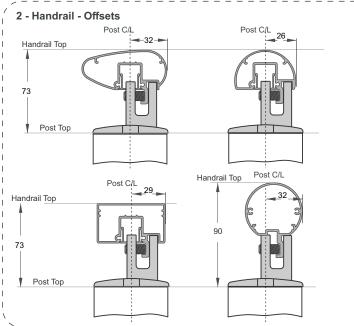




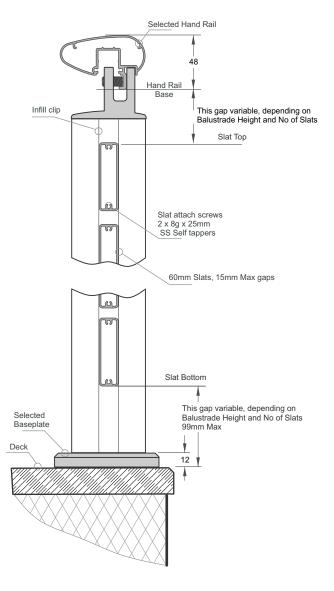
60mm Slat - Horizontal + Handrail. Top Fix

1 - Refer Post Mounting type and installation Wind zone. Then choose Balustrade Height and max Post spacing.

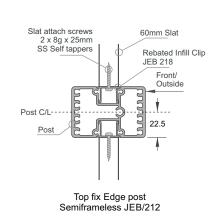




3 - Height offsets



4 - Width Offsets

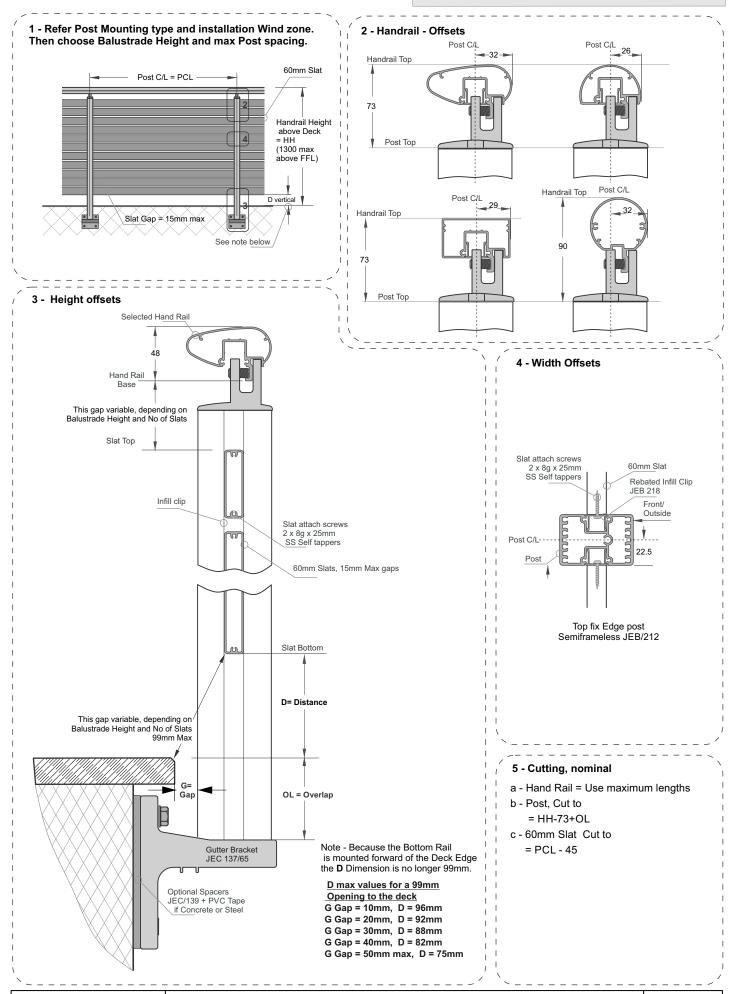


5 - Cutting, nominal

- a Hand Rail = Use maximum lengths
- b Post, Cut to
 - = HH-73-12 = HH 85
- c 60mm Slat Cut to
 - = PCL 45

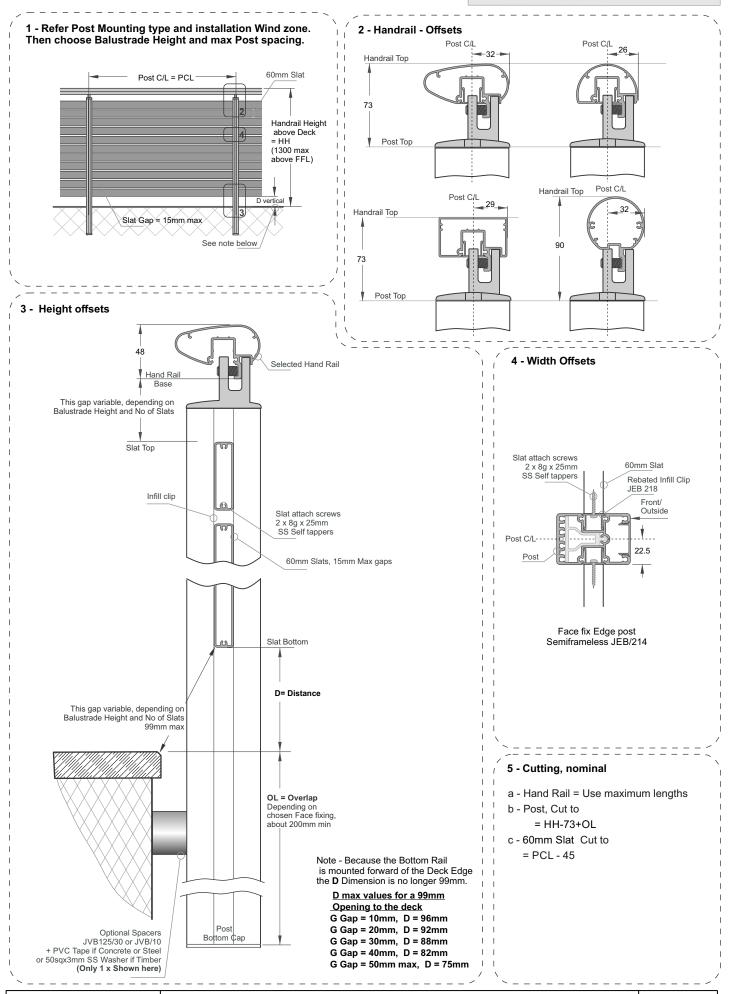


60mm Slat - Horizontal + Handrail. Gutter Brkt Face Fix





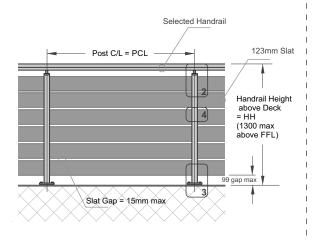
60mm Slat Horizontal + Handrail. Face Fix

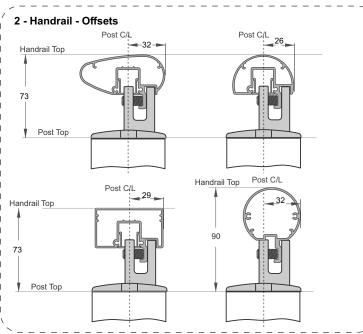




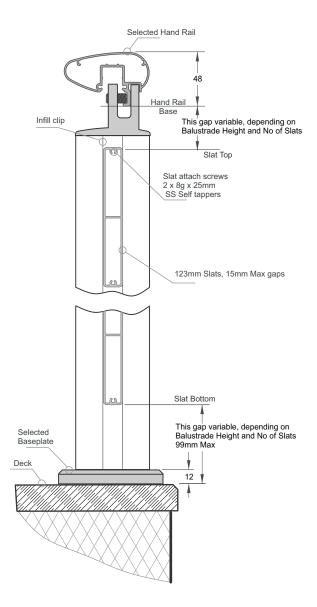
123mm Slat - Horizontal + Handrail. Top Fix

1 - Refer Post Mounting type and installation Wind zone. Then choose Balustrade Height and max Post spacing.

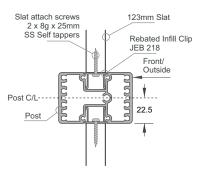




3 - Height offsets



4 - Width Offsets



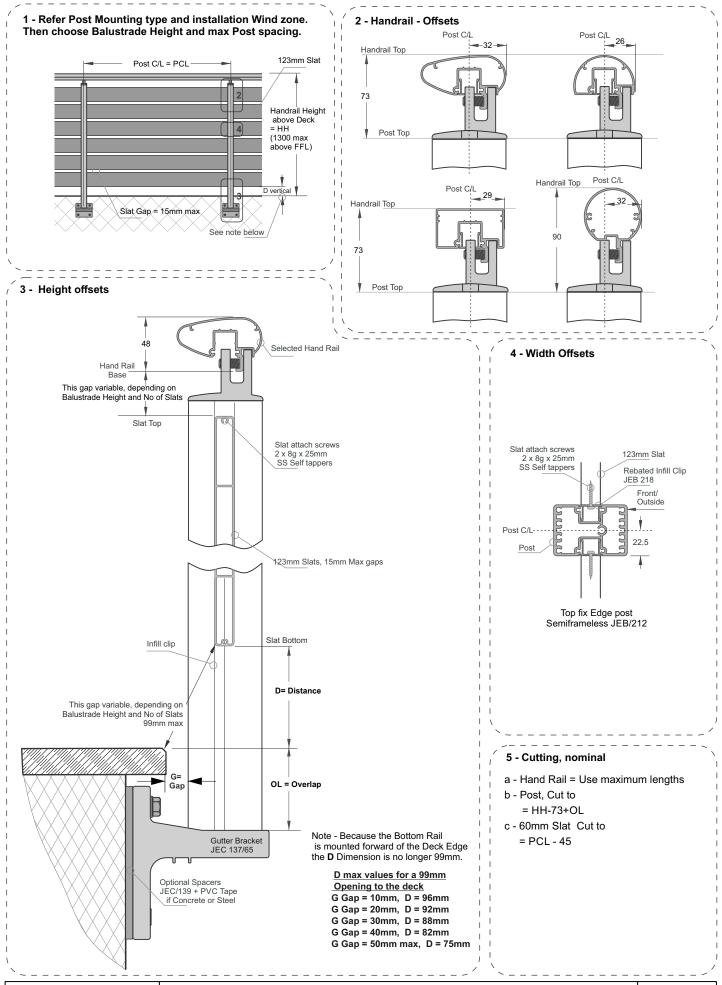
Top fix Edge post Semiframeless JEB/212

5 - Cutting, nominal

- a Hand Rail = Use maximum lengths
- b Post, Cut to
 - = HH-73-12 = HH 85
- c 123mm Slat Cut to
 - = PCL 45

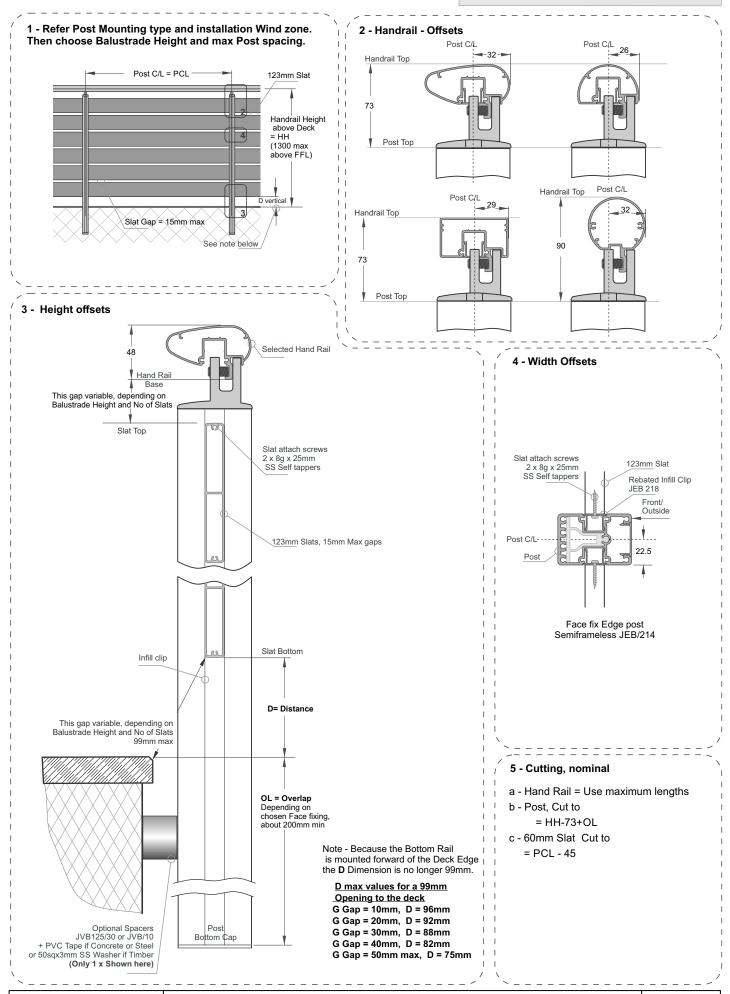


123mm Slat - Horizontal + Handrail. Gutter Brkt Face Fix



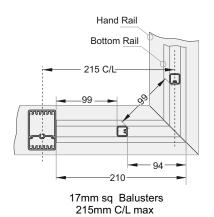


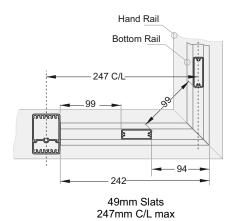
123mm Slat Horizontal + Handrail. Face Fix

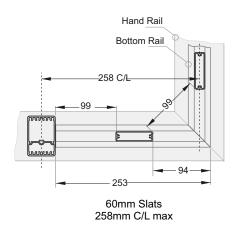




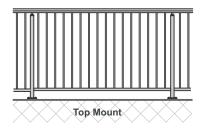
These Set out constraints apply to all 17mm sq Balusters, 49mm and 60mm Slats

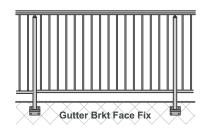


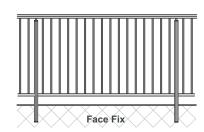




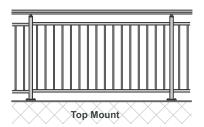
17mm Baluster - Full Height. Handrail + Bottom Rail. Top Mount, Gutter Brkt Face Fix or Face Fix

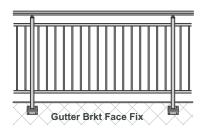


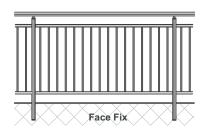




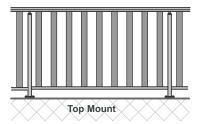
17mm Baluster - Split Rail. Handrail + Top and Bottom Rail. Top Mount, Gutter Brkt Face Fix or Face Fix

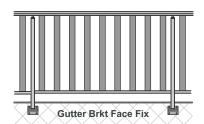


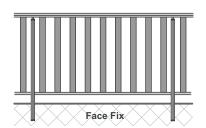




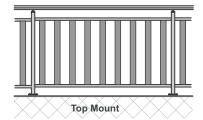
49mm or 60mm Slat - Full Height. Handrail + Bottom Rail. Top Mount, Gutter Brkt Face Fix or Face Fix

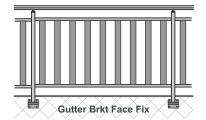


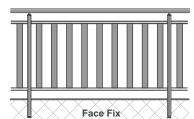




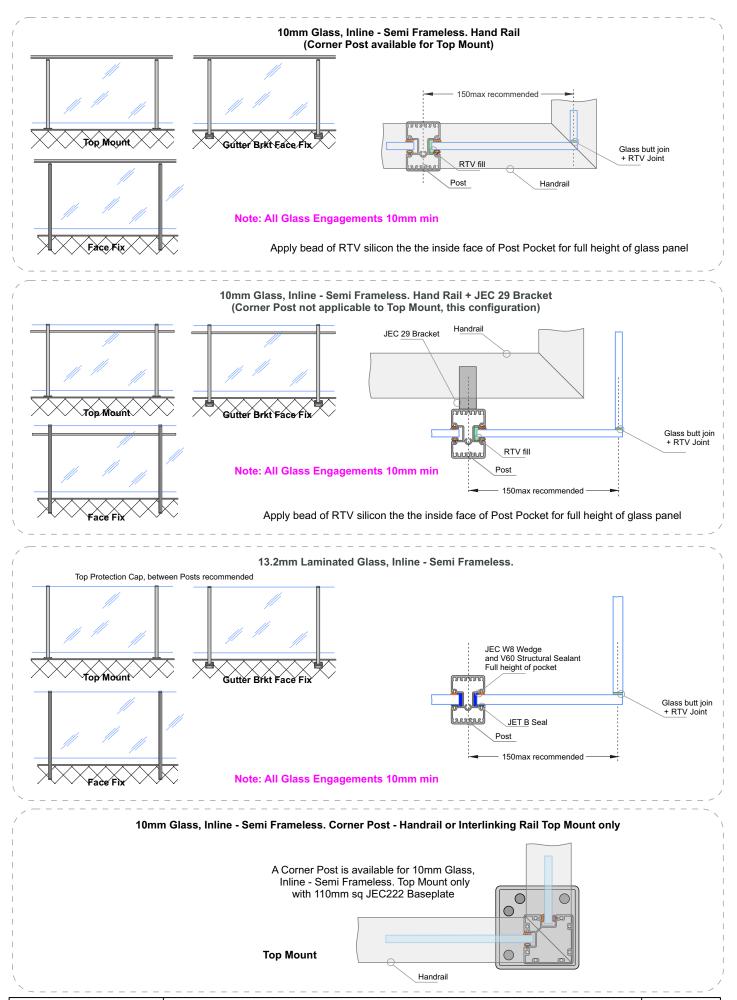
49mm or 60mm Slat - Split Rail. Handrail + Top and Bottom Rail. Top Mount, Gutter Brkt Face Fix or Face Fix







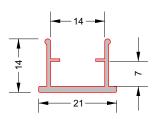




EDGE

Specials Section

Juralco EDGE® Balustrade System - Handrail Lighting



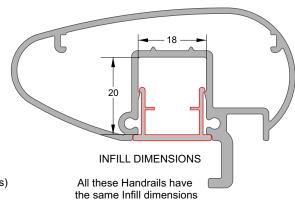
EDGE LED OPAL DIFFUSER Part No JEC44/3/Opal

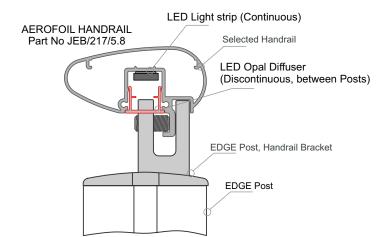
LED Opal Diffuser (Discontinuous, between Posts)



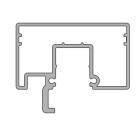
LED STRIP C/w DS tape (Size to suit)

LED Light strip (Continuous)









RECTANGULAR HANDRAIL Part No JEB/216/5.8

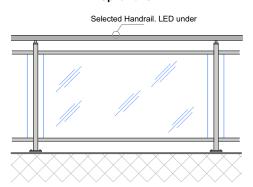


ROUND HANDRAIL Part No JEB/209/5.8

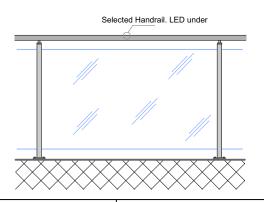
Other Suitable Handrails

EDGE Balustrade LED Lighting Options

6mm Toughened Glass - Full Height. Handrail + Split Rails.

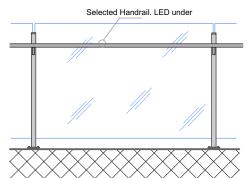


13.2mm Laminated Toughened Glass - Semi Frameless.



Baluster - Split Rail. Handrail + Top and Bottom Rail. Selected Handrail. LED under Shown 17mm sq Baluster Shown

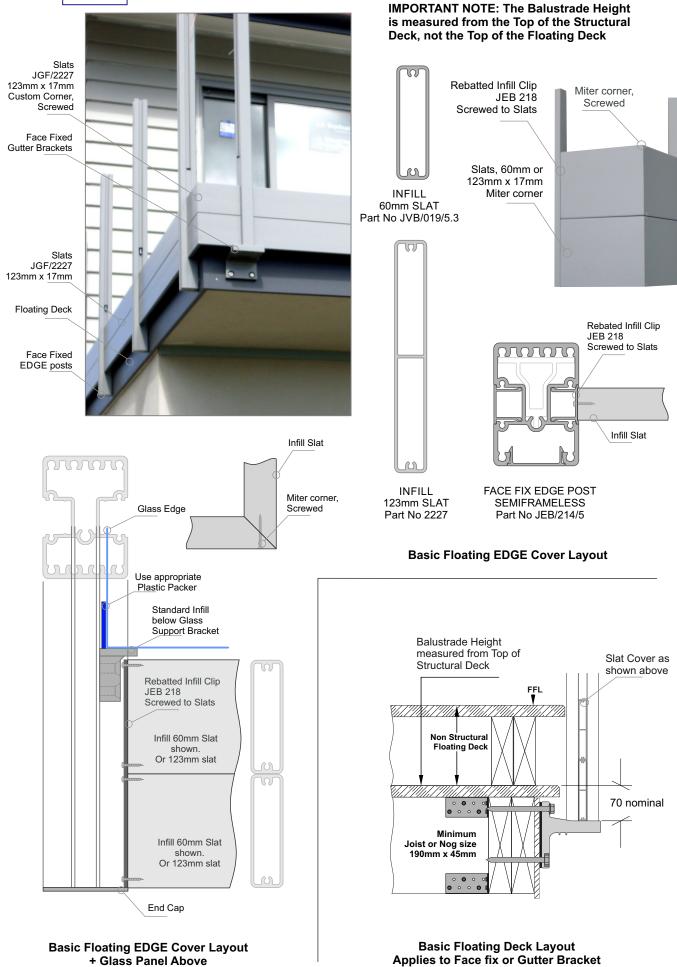
10mm Toughened Glass - Semi Frameless + JEC 29 Bracket mounted on Post + Handrail.









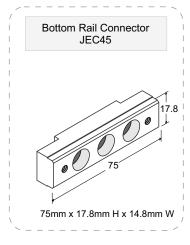


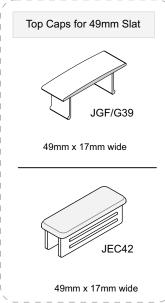


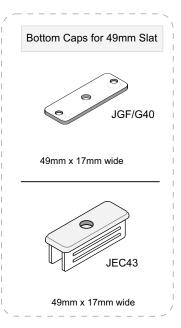


Juralco EDGE® Balustrade System Stecca Balustrade - Components

Stecca Balustrade System - Components

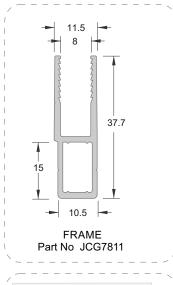


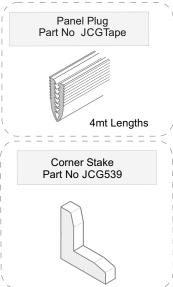




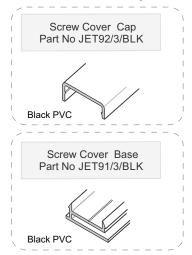
Lamerra™ Balustrade System - Components

For ALL, Panel Insert System





For Panel Face Fix Screwed Panel System

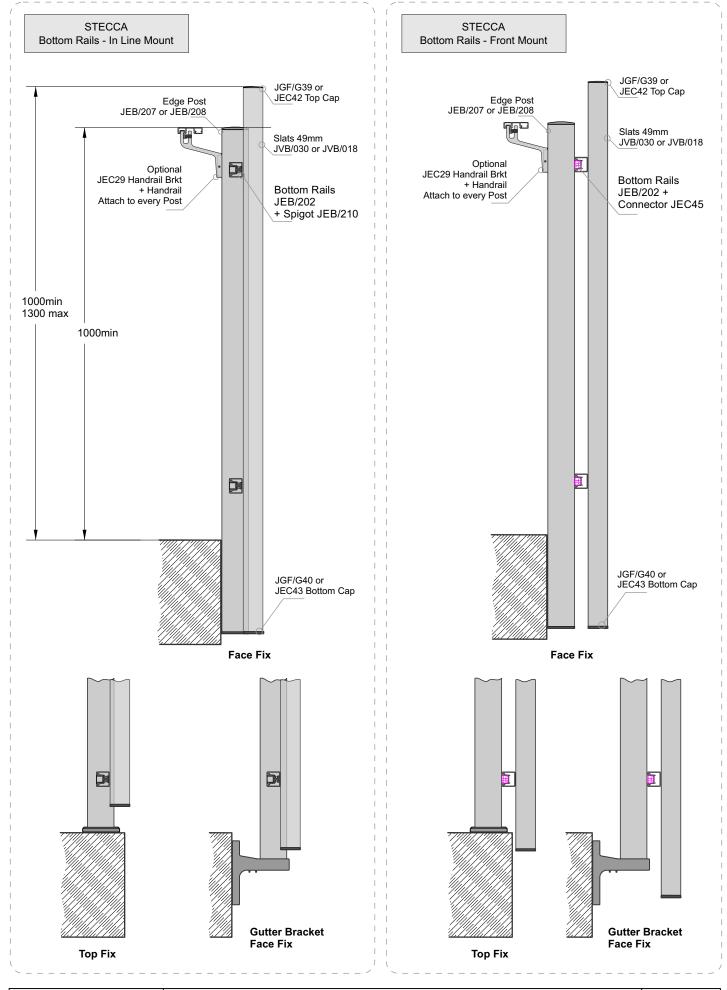


FRAME Part No JCG7811



Juralco EDGE® Balustrade System Stecca Balustrade

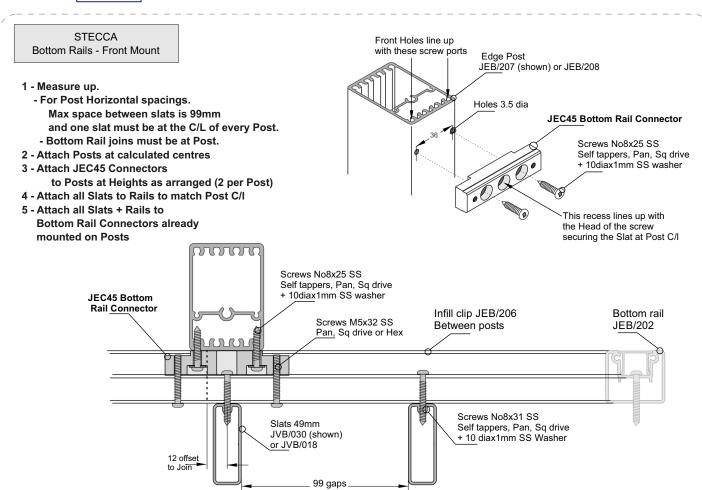




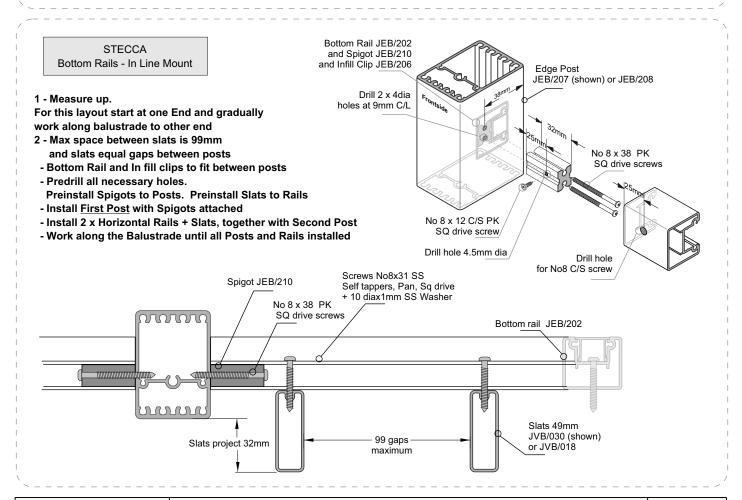




Juralco EDGE® Balustrade System STECCA Construction Details



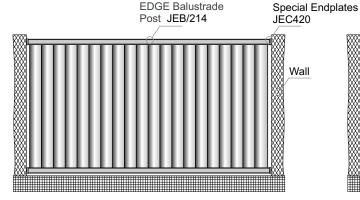
maximum



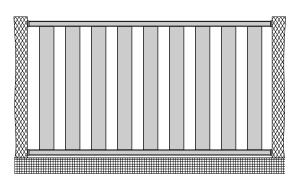




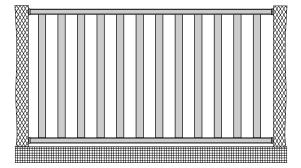
Juralco EDGE® Balustrade System Vertical Louvre/Slat/Glass Configurations For Fixing between Walls or Structural Posts



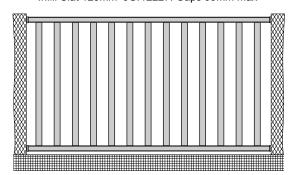
Louvre 120mm JGF/2231 Overlapped



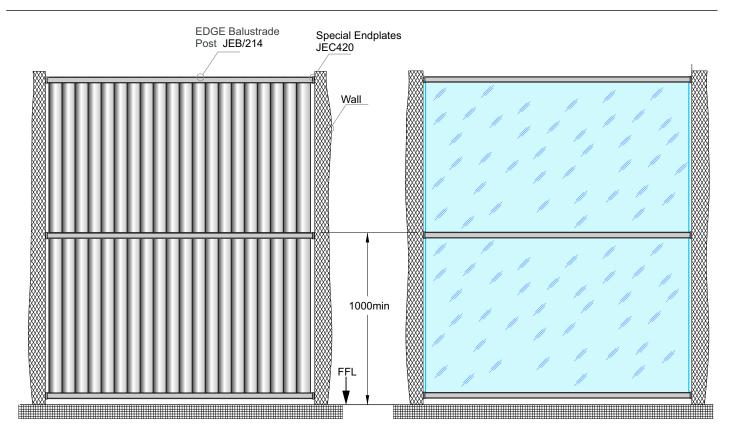
Infill Slat 123mm JGF/2227. Gaps 99mm max

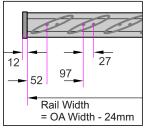


Infill Slat 60mm JVB/019 Gaps 99mm max



Infill Slat 49mm JVB/018 Gaps 99mm max





Louvre 120mm JGF/2231 Overlapped Width 2000mm max. Height 2400mm max

Max Widths for different Wind Zones	
Up to and including Medium WZ	2000mm
Up to and including High WZ	1700mm
Up to and including Very High WZ	1500mm
Up to and including Extra High WZ	1400mm

10mm Toughened Glass Width 2000mm max. Height 2400mm max Refer Wind Zone limitations

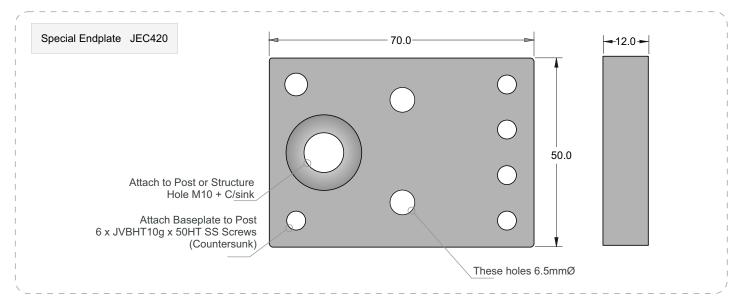
Note: Glass Engagements 10mm min







Juralco EDGE[®] Vertical Louvre/Slat/Glass Configurations Fixing between Walls or Structural Posts. Special Endplate JEC420



Important Installation Notes:

- **1 Attaching to Timber.** 4 total (ie 2 x ea ends) M10 x 100 SS C/s Socket drive Coachscrews central in a 90mm stud Sika Supergrip to full depth. + 2 x 12g x 50mm SS Woodscrews
- 2 Attaching to Steel. 2 x M10 x 40 C/s SS Socket drive Machine Screws and Nut+ 2 x M6 SS Bolts
- $\textbf{3-Attaching to Concrete.} \ \ 2 \ x \ \text{M10 Fischer FIS V Fasteners + M10} \ x \ 40 \ \ \text{C/s SS Socket drive Machine Screw}$
 - + 2 x M6 Fischer FIS V Fasteners + M6 x 30 SS Socket drive Machine Screws

Note: Fixing Options assume End Plates fixed directly to supporting structure

NZBC Compliance

- The Juralco Edge Vertical Louvre, Slat and Glass System has been reviewed by Lautrec Technology Group Ltd to demonstrate compliance with the structural requirements of the New Zealand Building Code and AS/NZS 1170: 2002. Occupancy A, B, E, C3,
- NZS 3604 Up to and including Low, Medium, High, Very High Wind Zones. Up to a max Design Wind Speed of 50m/sec but not exceeding a Design Wind Pressure of 1.5kPa
- The Structural Engineering design includes the requirements of B1 Structure, B2 Durability and F4 Safety from falling of the Building Code
- Verification Method B1 / VM1, B2/AS1, F4 / As1, F2 Hazardous Building Materials
- Gaps all less than 100mm.

Alternative Fixings, if required

- The Specific Engineering Design should be able to resist G = 0.5kN Vertical Load. and Wu = 2.44kN Face load

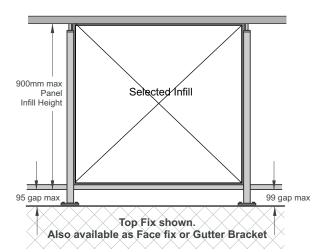






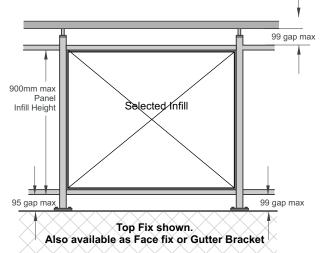
Juralco EDGE[®] Balustrade System LAMERRA™ Balustrade

Height, Width, Wind Zones all as per EDGE® Balustrade



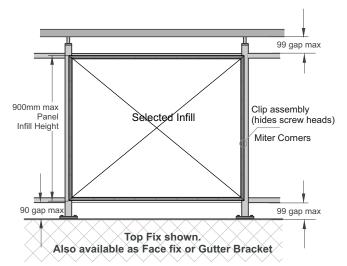
Option 1

- Metal Panel Inset , fully recessed into all 4 x sides
- Posts. Edge Framless
- Bottom Rail at base, Handrail at Top
- Bottom Rail, normal C/L mount
- Note the Smaller bottom gap for Face fix



Option 2

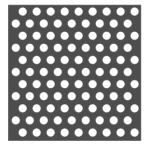
- Metal Panel Inset , fully recessed into all 4 x sides
- Posts. Edge (hidden fixing)
- Bottom Rail at Top and Base
- Bottom and Top Rail, normal C/L mount
- Note the Smaller bottom gap for Face fix
- Can use Round Handrail+Mini clip



Option 3

- -Metal Panel, Screw Face Fixed all 4 x sides
- Posts. Edge (Face fix- exposed Fixings)
- Bottom Rail at Top and Base, Front mounted
- Note the Smaller bottom gap for Face fix
- Can use Round Handrail+Mini clip
- Clip assembly to hide Screw heads

Clearguard Perforated Panel Specs



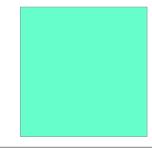
Specifications:

Combined Security and Insect Screen.
Rigid perforated sheet 2.0mm, Hardened
Open area 32%. Sizes 2000, 2400mm
x 750, 900,1200mm Wide
Finish, Black Powdercoat, SCC

Sheet perforations, Full size

Aluminium Sheet Ordering Codes		
750mm x 2000mm		
750mm x 2400mm		
900mm x 2000mm		
900mm x 2400mm		
1200mm x 2000mm		
1200mm x 24000mm		
2400mm x 1200mm		

Plain Panel Specs Rigid Sheet



Aluminium Sheet Ordering Codes		
JAS/101440	1200 x 2400 x 2.5mm	
Can be BLK or SCC	5052 H34	

Specifications:

Combined Security and Insect Screen. Rigid perforated sheet 2.0mm, Hardened Open area 32%

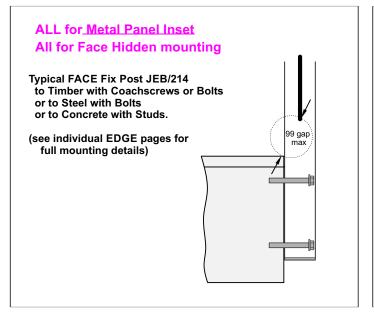
Size 2400mm x 1200 Only

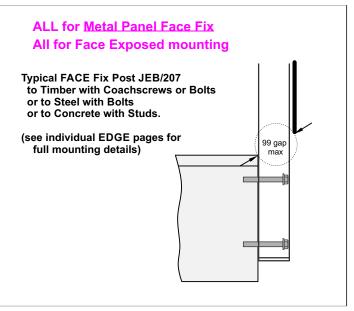
Finish, Black or any Powdercoat Colur



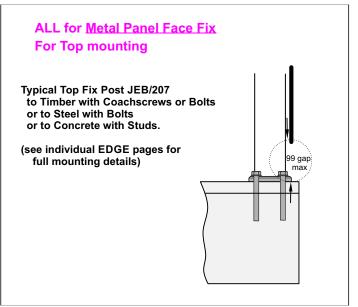


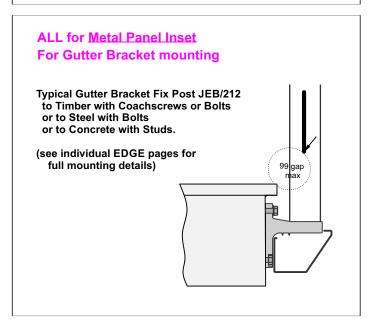
Juralco EDGE[®] LAMERRA™ Balustrade System Mounting to Structures.





ALL for Metal Panel Inset For Top mounting Typical Top Fix Post JEB/212 to Timber with Coachscrews or Bolts or to Steel with Bolts or to Concrete with Studs. (see individual EDGE pages for full mounting details)











Juralco EDGE[®] LAMERRA™ Balustrade System <u>Metal Panel Inset</u> - Assembly. Options 1&2

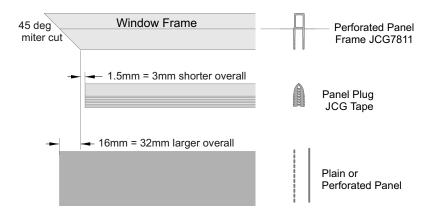


Cutting the Metal Sheet

After measuring Post C/L spacings and Height, then making appropriate deductions

Cutting

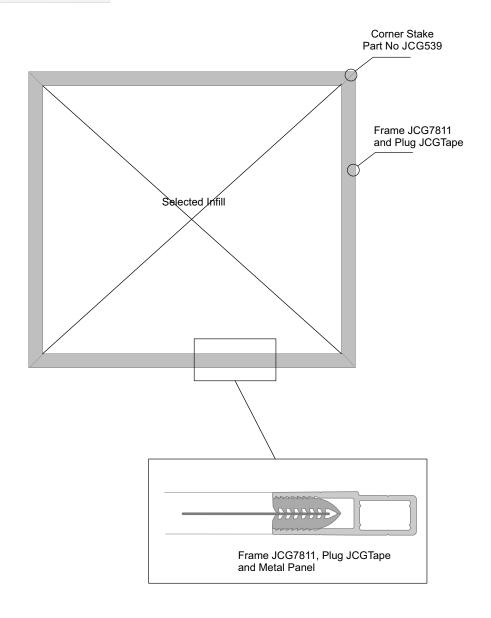
- 1- Cut Frame to measurements at exact 45 deg miters.
- 2 Cut PVC plugs to length, straight cuts.
- 3 Cut mid rails (optional), straight cuts.
- 4 Cut metal sheet, square on all four sides.
- 5 After cutting the offsets should be as drawn.



Note: IT IS VERY IMPORTANT THAT THE SHEET IS CUT EXACTLY SQUARE AND STRAIGHT



Assemble Frame around Metal Panel



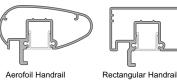




Juralco EDGE® LAMERRA™ Balustrade System Metal Panel Inset - Assembly. Options 1&2



For Top fix, Face Fix or Gutter Bracket. Hidden Fixings



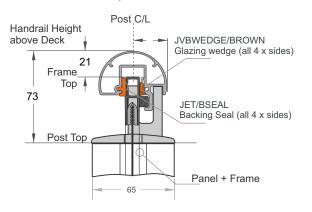


JEB/217

Rectangular Handrail JEB/216

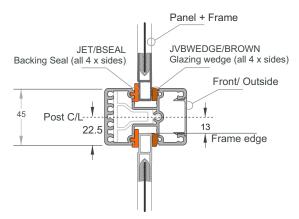
Half Round Handrail JEB/209

Available Handrails, for Panel Inset into Handrail





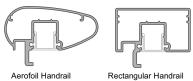
For Top fix, Face Fix or Gutter Bracket. Hidden Fixings

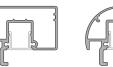


Option 2 Panel + Frame, Heights

JEB/217

For Top fix, Face Fix or Gutter Bracket. Hidden Fixings





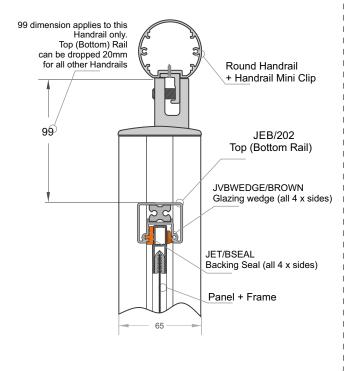
Rectangular Handrail JEB/216





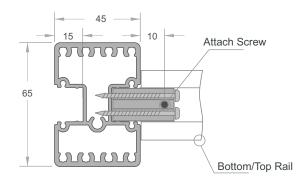


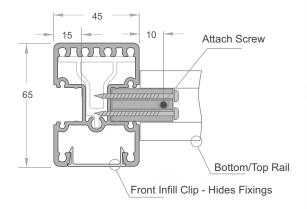
All Handrail types available for this configuration





This Panel Fixing style allows for Hidden Fixings





EDGE POST. 45mm x 65mm JEB/212 To be used for Panel Inset as mounted Top Fix only

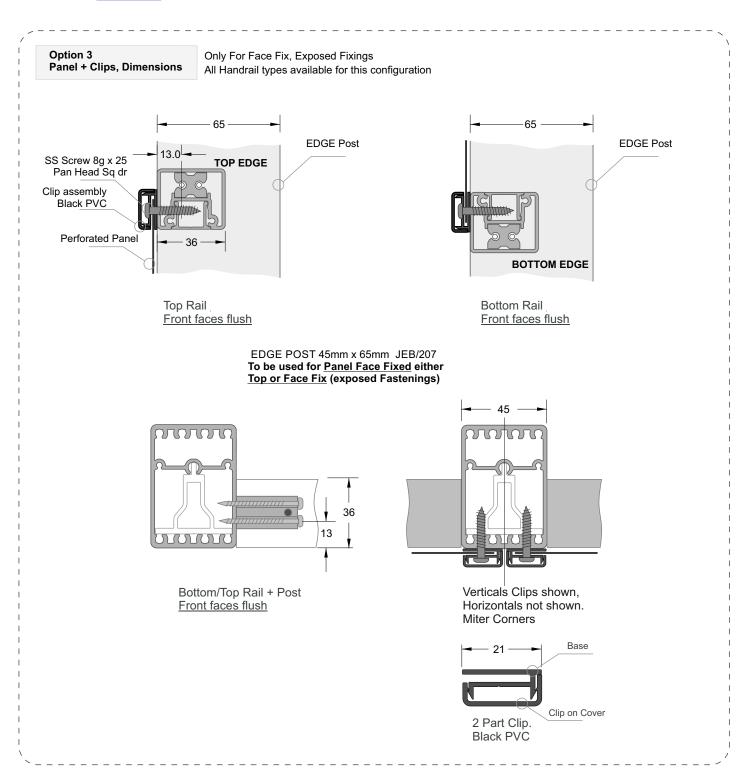
EDGE POST 45mm x 65mm JEB/214

To be used for Panel Inset as mounted Face Fix only





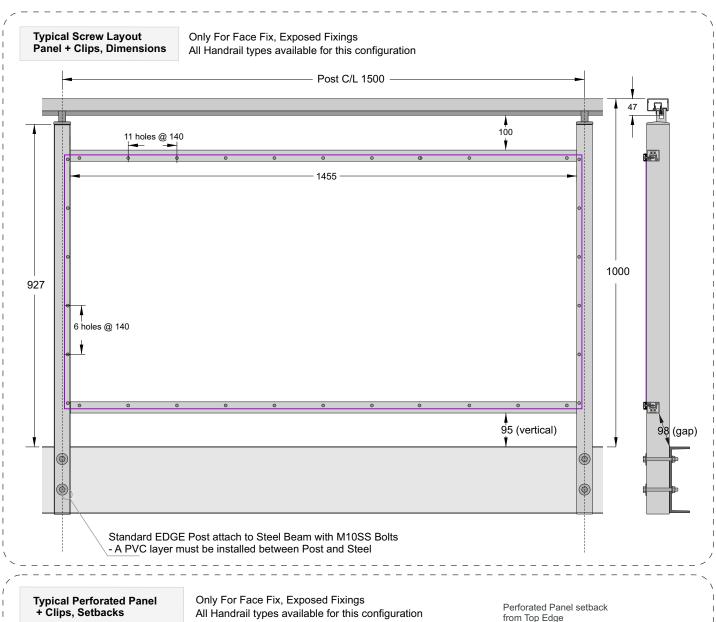
Juralco EDGE[®] LAMERRA™ Balustrade System <u>Metal Panel Face Fixed</u> - Assembly. Option 3

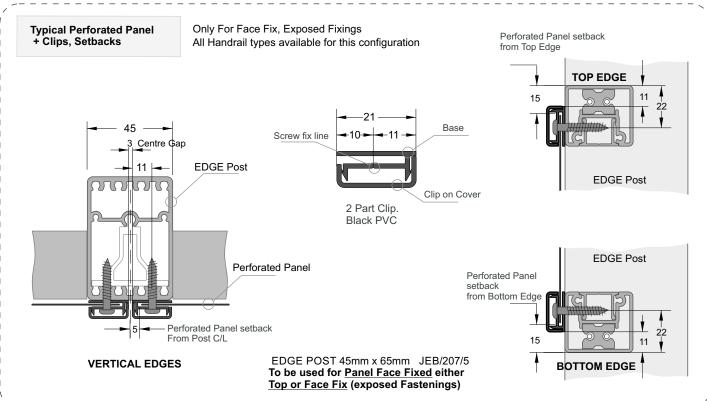






Juralco EDGE[®] LAMERRA™ Balustrade System <u>Metal Panel Face Fixed</u> - Screw Fixing Details



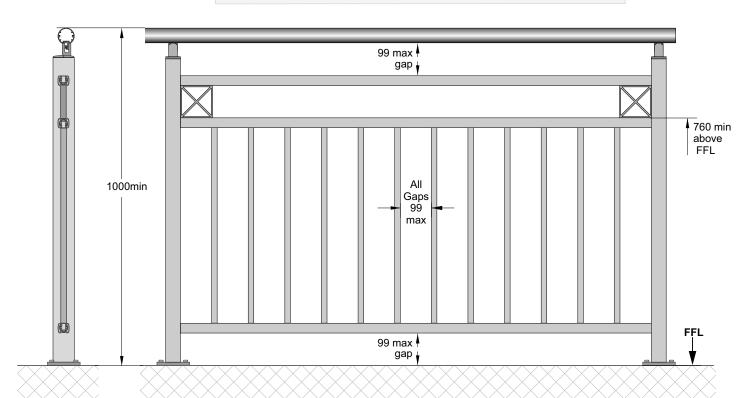


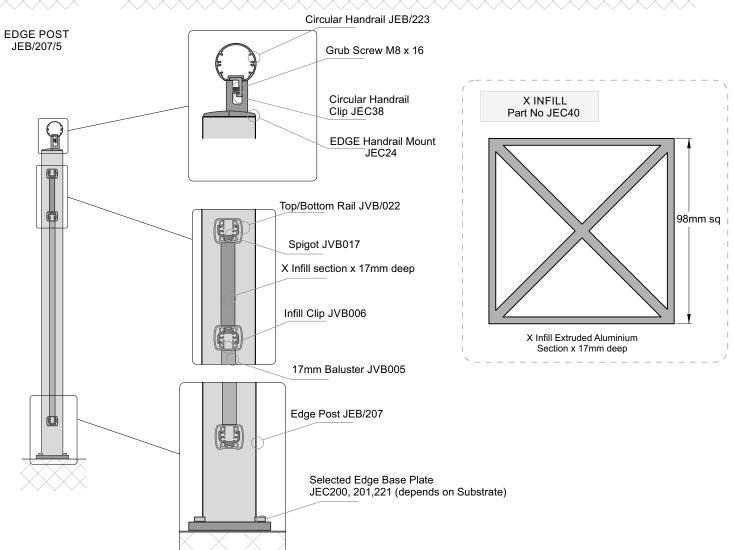




Juralco EDGE® Balustrade System X Balustrade - Layout

17mm Baluster - Split Rail. Handrail + Top and Bottom Rail. Top Mount







Juralco EDGE® Balustrade System Powder 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 I2 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 <u>masked or covered</u> 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 <u>simple, regular</u> 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 <u>must</u> 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 EDGE® 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 squeege 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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