



Contemporary Fence, Gate and Pool Fence System

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

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

The Juralco Contemporary Fence and Gate system is designed to provide an economical, light weight secure fencing system manufactured from corrosion proof aluminium extrusion. Typical applications would include Pool enclosures, Schools, Kindergartens and any area requiring security and protection.

General Description

Please note - The General Fence and Gate Systems do not need a PS1. However the Pool Fence system does. See the special Pool Fence section at the rear of this manual.

- This Fencing system is constructed completely from Aluminium extrusions
- A variety of Hinges and Lockware is available for differing uses.
- Fences come as fully welded pre-constructed panels, 1000,1200,1350,1500 and 1800mm high x 2400mm long.
- Standard gates are of the same construction, but 1247mm or 1547mm high x 997mm wide.
- Gates and Panels can be custom made, including double vehicle access gates.
- Standard Colour Black, but may be powder coated a colour of your choice.
- The components of this fencing system are suitable for compliance to the Building Code clause F9/AS1 and section 162C of the Building Act.



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Note: The only part of this manual requiring a PS1 is covered in the Pool Fence and Gate section p26 - 38

masterspec partner
Section 8432JS

Index

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	Materials	8 - 13	Shows all Extrusions and Components	
	Hinge Install	14 - 15	Hinge Install details	
	Gates	16 - 19	Shows Gate details, incl rising hinges for sloping ground.	
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	Cutting	24	Shows Cutting tables for Fences and Gates	
	Installation	25	Shows Installation details	
Section 2 Pool Fences And Gates	Pool Fences PS1	26 - 38	Shows Pool, Fence and Gate requirements for a PS1	
Powder coat (Applies to both sections)	Powder coat	39	Instructions for the care of Powder coated surfaces	

Important instructions for Powder Coatings near Salt Water

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

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

Important instructions for Powder Coating - Attachment to structures

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

Powder Coating Warranty

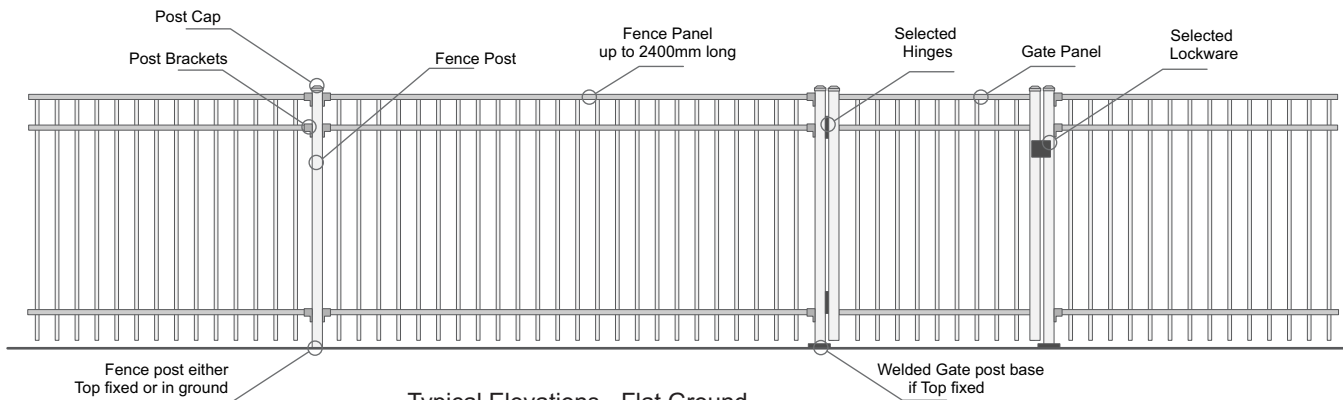
The Dulux powder coating warranty period is conditional upon being maintained in accordance with the Dulux 'Care and Maintenance Instructions'. Contact your installer for a copy (or download from Dulux) of the Care and Maintenance instructions or refer to the back page of this manual.

Contemporary Fence and Gate System - General

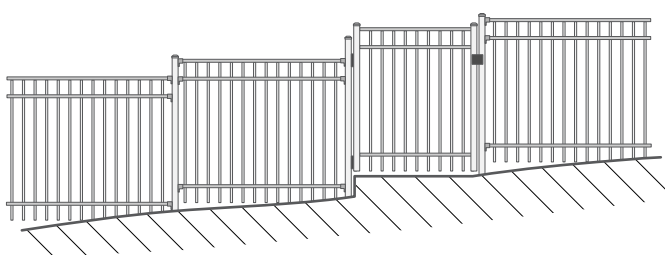
Section 1
General Fences
and Gates

General Description

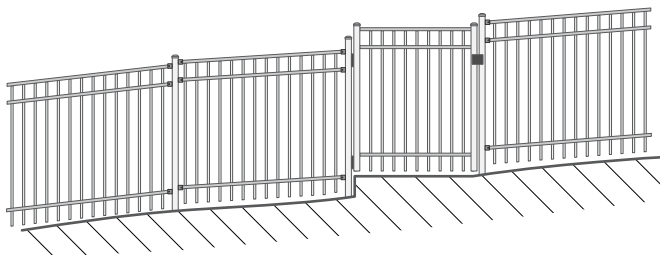
All Fence panels and Gates constructed from Standard Panels 1000, 1200mm, 1350, 1500mm and 1800mm High. All 2400mm long



Typical Elevations - Flat Ground
(for Swimming Pools, all Panels Suitable except 1000mm high)

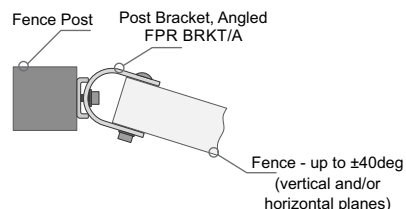
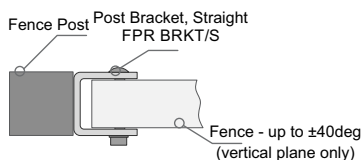
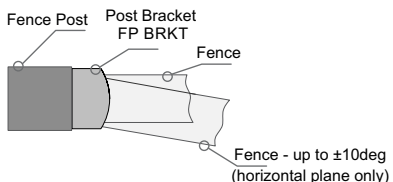


Typical Elevations - Sloping Ground - Stepped
(for Swimming Pools 1200 Panel Not Suitable)

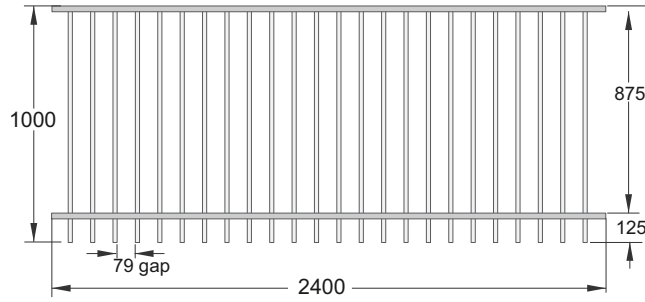


Typical Elevations - Sloping Ground - Racked Panel
(Only available for 1200mm high Panels, 500mm rise over 2400mm max = 12deg)

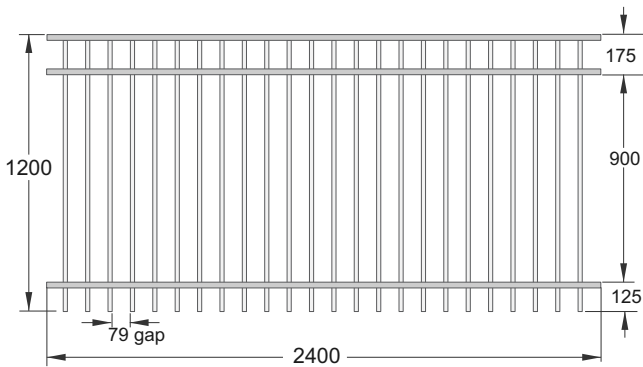
Refer later pages for more information on Swimming Pool requirements



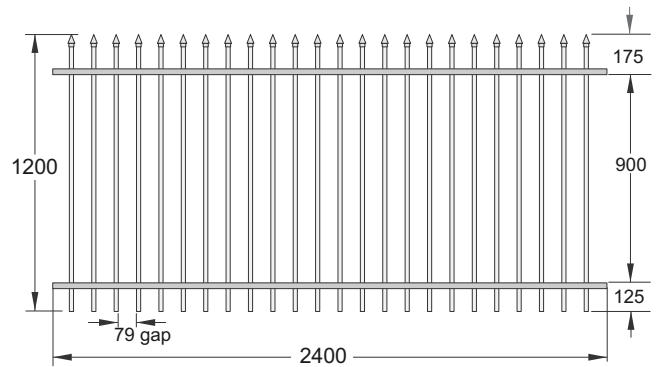
**Contemporary Fence and Gate System - Standard Fence, Gate Panels
Residential and Pool**



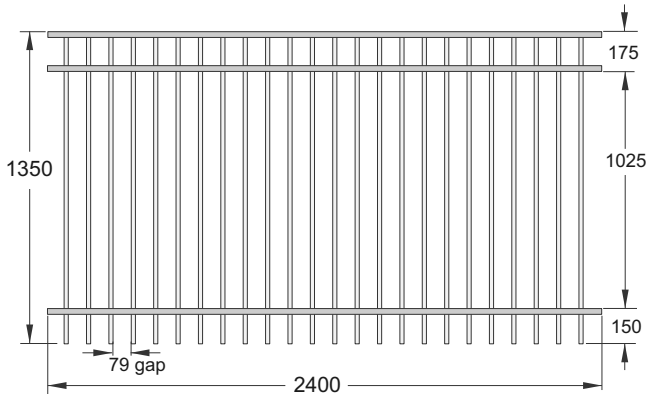
FENCE PANEL
FP 10 Boundary Fencing Only
Not suitable for Swimming Pools



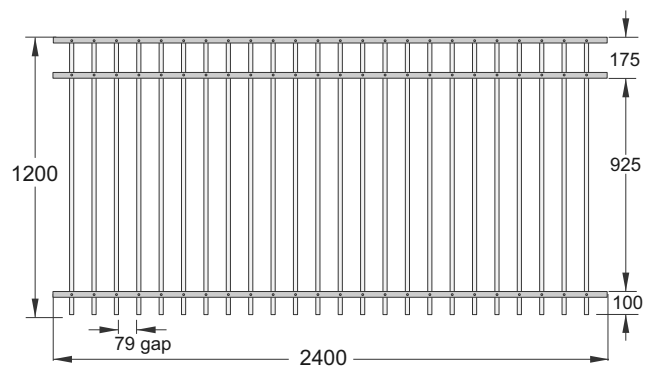
FENCE PANEL (suitable for Pools)
FP 12



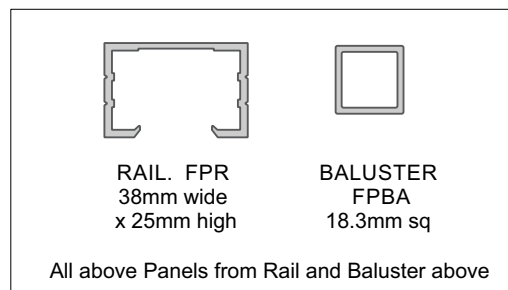
FENCE PANEL with ARROWHEADS
FP 12AH



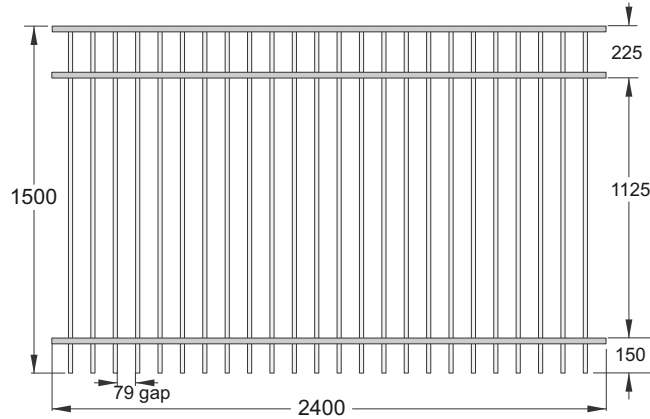
FENCE PANEL (suitable for Pools)
FP 135



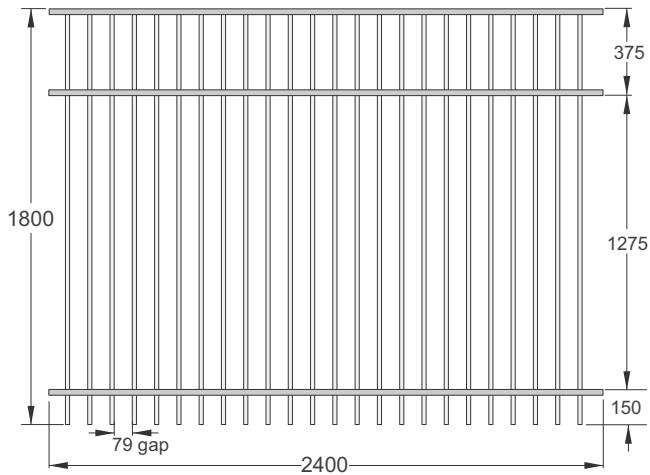
FENCE PANEL, RACKING (suitable for Pools)
FP 12R



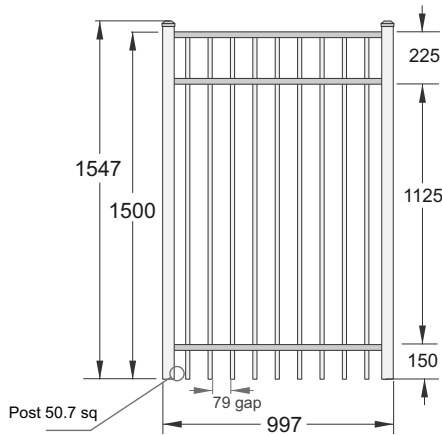
Contemporary Fence and Gate System - Standard Fence, Gate Panels Residential and Pool



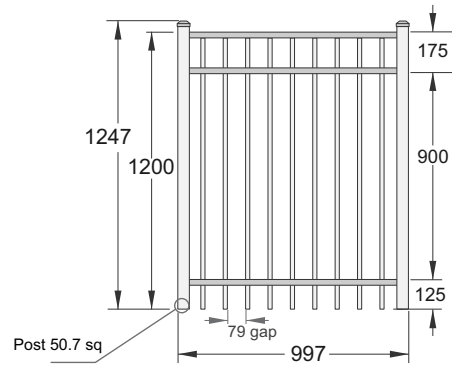
FENCE PANEL FP 15



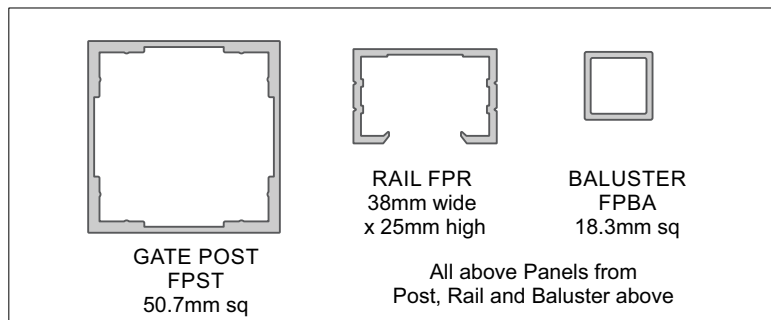
FENCE PANEL FP 18



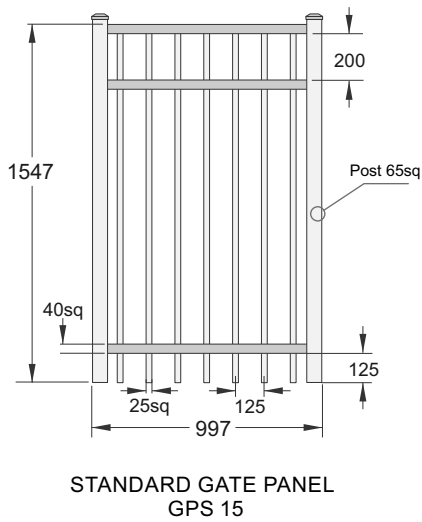
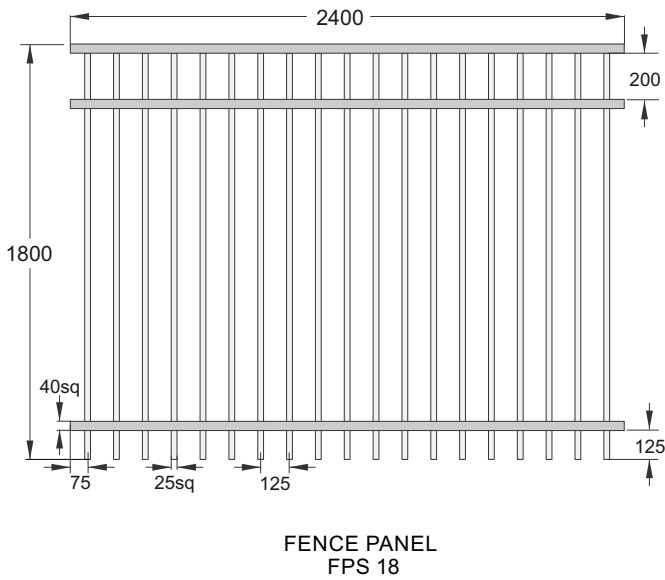
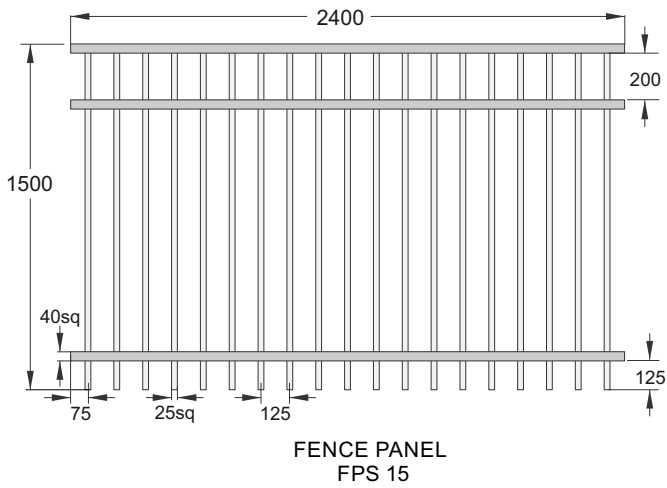
STANDARD GATE PANEL GP 15



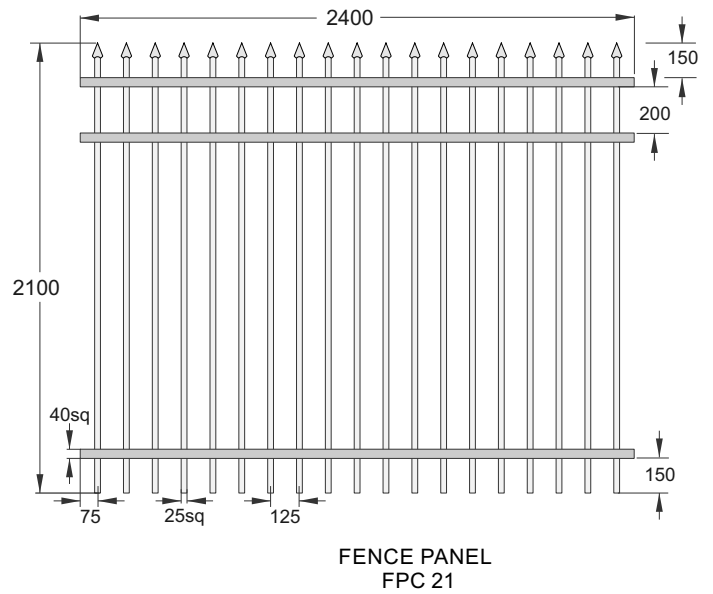
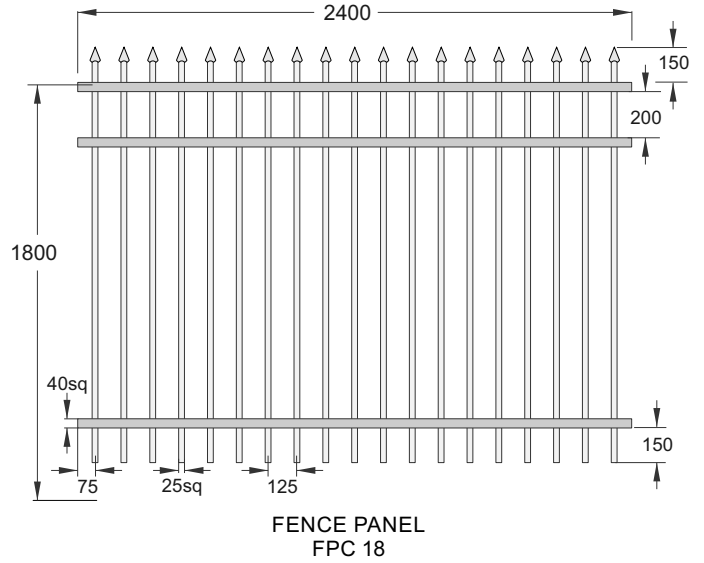
STANDARD GATE PANEL GP 12



**Park and School Care
Panels and Gate**



Commercial Panels



		BALUSTER JA192/5 25mmsq
		RAIL JGF/FPBRKT/40 40mm sq

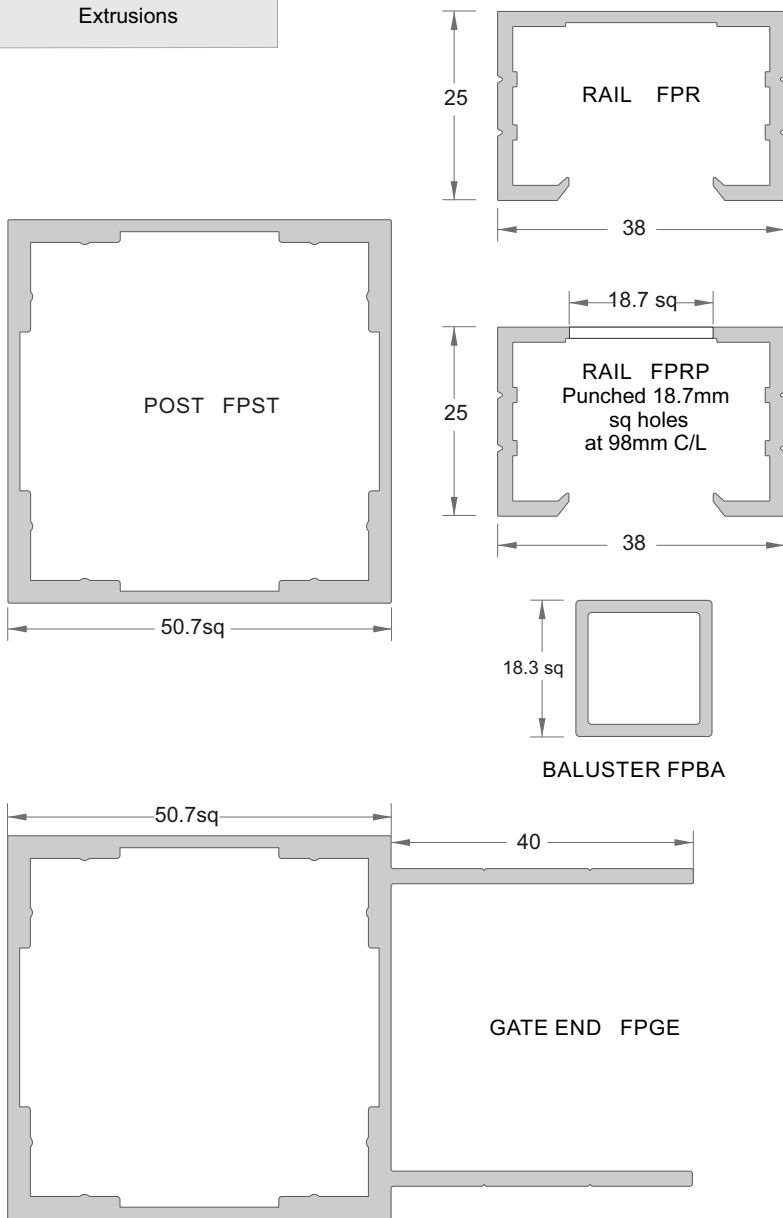
PARK and SCHOOL
GATE POST JA311/5
65mmsq x 3mm wall

All above Panels from Post, Rail and Baluster above

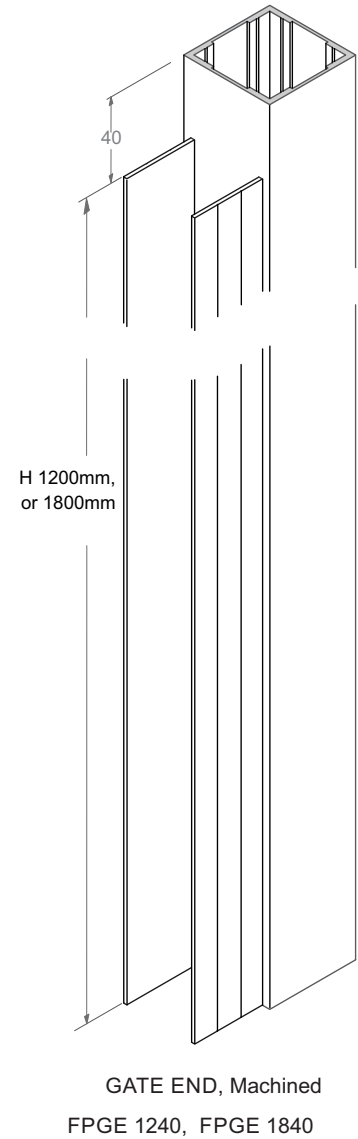
Contemporary Fence and Gate System - Extrusions, Components

Section 1
General Fences
and Gates

Extrusions



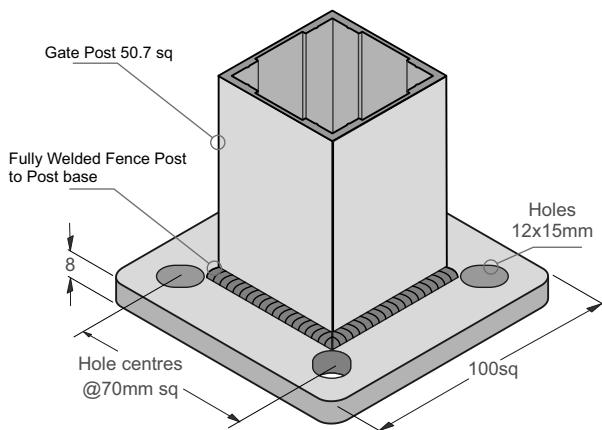
Gate End Extrusion



Gate Post, Base
Welded to Post

FPWBP/1.3
FPWBP/1.9

Fully Welded
Baseplate to
Lightweight Post



**A PVC Tape layer must be used
between Post base and Concrete**

(Not shown, square Posts)

FENCE PANEL POST
JA311/5
65mm Sq x 3mm

GATE POST JA197/5.8
75mm Sq x 3mm

GATE POST JA98/5.8
100mm Sq x 3mm



JURALCO

www.juralco.co.nz ph (09) 478 8018

Contemporary Fence and Gate System - Components

Section 1 General Fences and Gates

Post Cap JGF/CAP

Fits over Post 50.7mm sq

Post Cap JGF/CAP/65

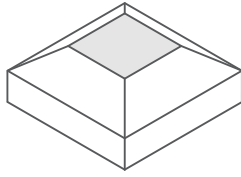
Fits over Post 65 mm sq

Post Cap JGF/CAP/75

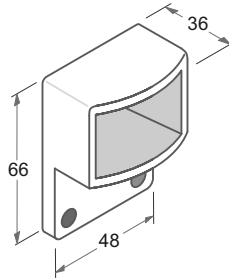
Fits over Post 75 mm sq

Post Cap JGF/CAP/100

Fits over Post 100 mm sq

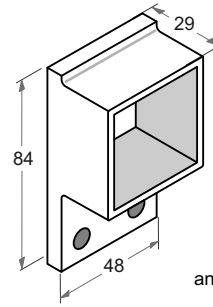


**Post Bracket
FP BRKT**



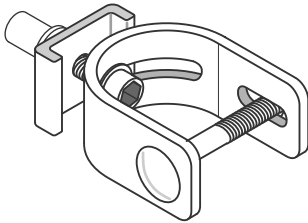
For Residential and Pool
(38 wide Rail)
Aluminium Body /Black PC

**Post Bracket
JGF/FPBRKT/40**

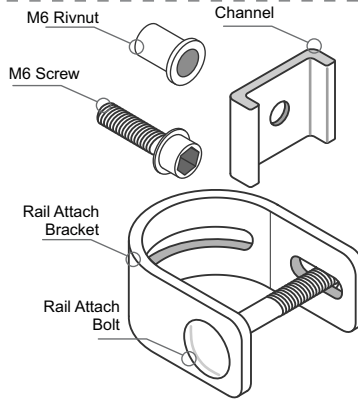


For Park
and School Care
(40sq Rail)
Aluminium Body

**Post Bracket, Angled
FPR BRKT/A**

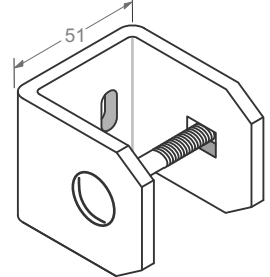


Rail connection, angle adjustable
0 - 40 deg, horizontal plane, ± 40deg, vertical plane



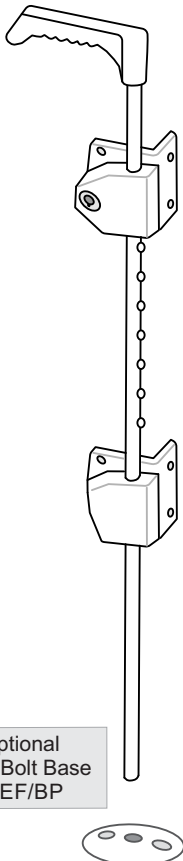
Aluminium Body /Black PC

**Post Bracket, Straight
FPR BRKT/S**



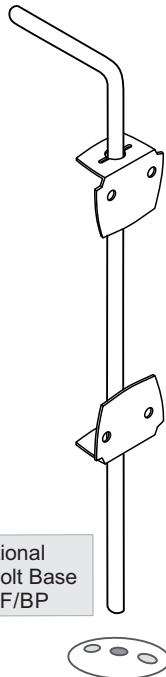
Suitable for 38 and 40 rails
Angle adjustable 0±40deg, vertical plane
Aluminium Body /Black PC

**Drop Bolt - Key Lockable
450mm OA, JEF/DB/450**



**Optional
Drop Bolt Base
J/EF/BP**

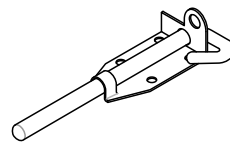
**Basic Drop Bolt
350mm OA, JEF/DB/350**



**Optional
Drop Bolt Base
J/EF/BP**

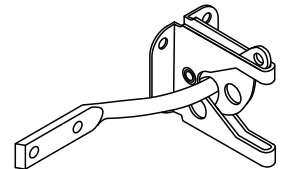
Galvanised Steel,
Black PC

**Basic Pad Bolt -100mm
JEF/BPB/BLK**



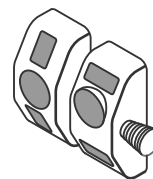
Galvanised Steel,
Black PC

**Basic Drop Latch
JEF/BGL/BLK**



Galvanised Steel,
Black PC

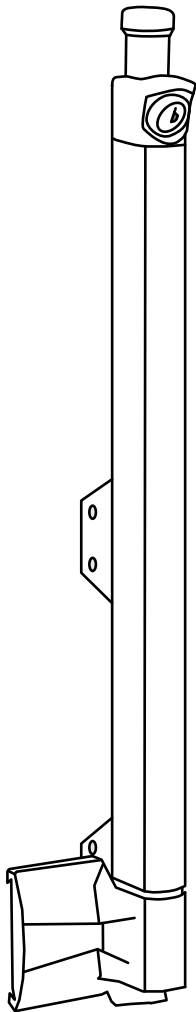
**Side Pull Latch
Nylon, Black JEF/SP**



Not suitable for Pool gates

Contemporary Fence and Gate System - Components

Magnetic Pool Gate Latch - 510mm
Nylon, Black JEF/APL

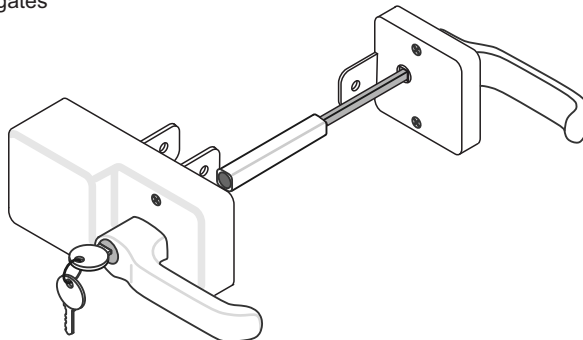


Suitable for Pool gates

Magnetic Lever Latch 39-120mm
Nylon, Black. (External Access)
JEF/MLL

Not suitable for Pool gates

Double Sided Magnetic Latch

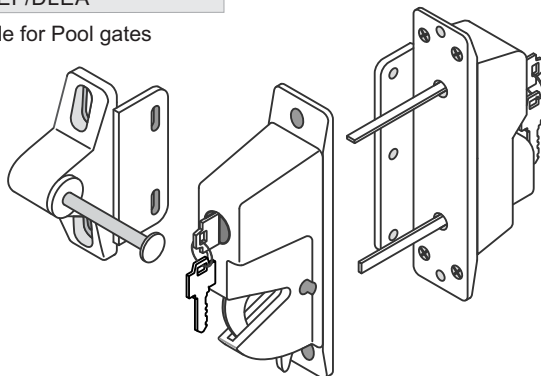


Unscrew and Reverse Lock Backplates for LH/RH installation

Universal Drop Latch and Striker
Nylon, Black. (External Access)
JEF/DLEA

Not suitable for Pool gates

Double Sided Gravity Latch

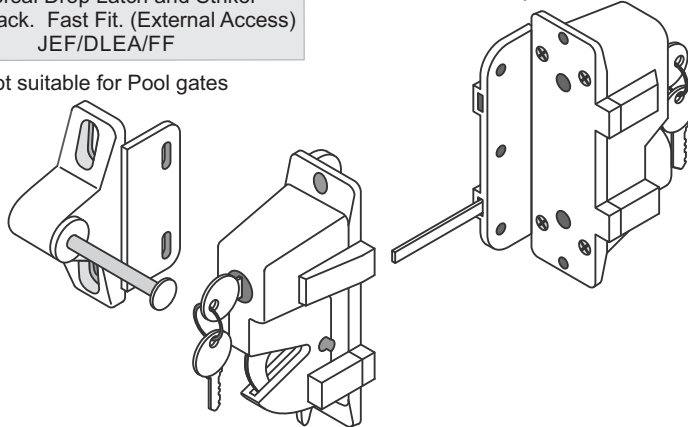


Unscrew and Reverse Lock Backplates for LH/RH installation

Universal Drop Latch and Striker
Nylon, Black. Fast Fit. (External Access)
JEF/DLEA/FF

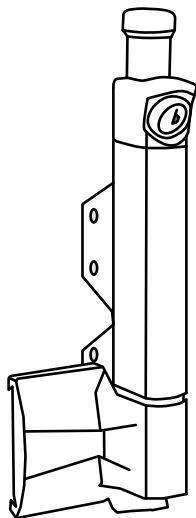
Not suitable for Pool gates

Double Sided Gravity Latch



Unscrew and Reverse Lock Backplates for LH/RH installation

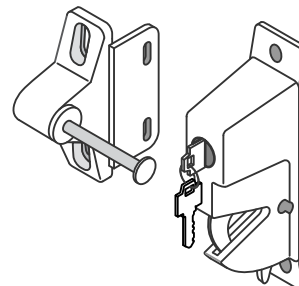
Magnetic Pet Latch - 260mm
Nylon, Black JEF/APETL



Not suitable for Pool gates

Universal Drop Latch and Striker
Nylon, Black
Part No JEF/DL

Not suitable for Pool gates



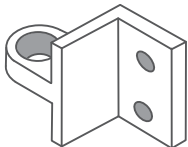
Unscrew and Reverse Lock Backplate for LH/RH installation

For all above refer to Manufacturers
data for correct installation procedures

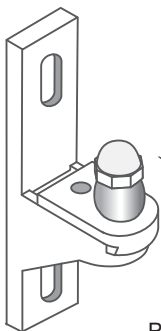
Contemporary Fence and Gate System - Components

Rising Gate Hinge Set
for a Single Leaf. For panels not
exceeding 70kg Bronze.
G18

Corner mount
on Gate



Gate attach, Top

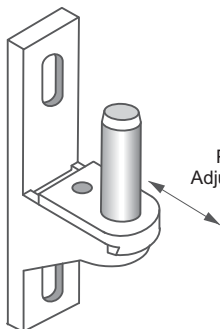


Pin Position
Adjustable, 24mm

Post attach, Top

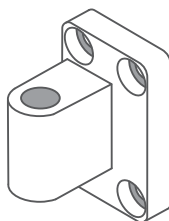
**Refer to pages 17-18
for Rising Gate hinge
details and calculations**

Hinge 14mm dia. For panels
not exceeding 80kg .Bronze
G10

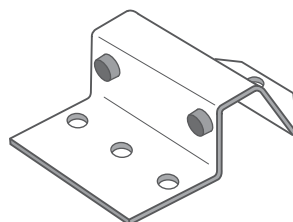


Pin Position
Adjustable, 24mm

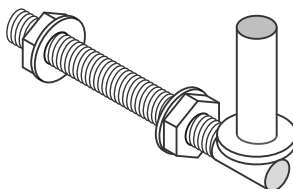
Hinge Socket 14mm dia. For panels
not exceeding 80kg .Bronze
G16



Double Hinged Gate Center Stop
304 SS
G20

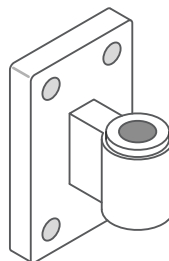


Hinge 13mm dia. For panels not
exceeding 40kg. 304 SS
G14

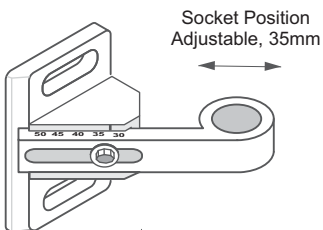


Male 13mm Pin for attaching to Gate.
95mm of M12 thread.

Hinge 13mm dia. For panels not
exceeding 40kg. Aluminium/PC
G13

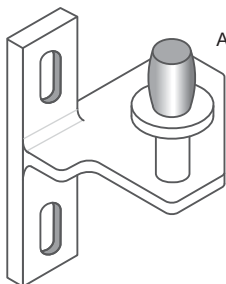


Female 13mm socket for attaching to Post.
Self lubricated Nylon Bearing,
4 x 8.5mm dia holes



Socket Position
Adjustable, 35mm

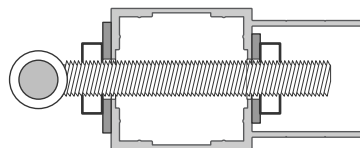
Gate attach, Bottom



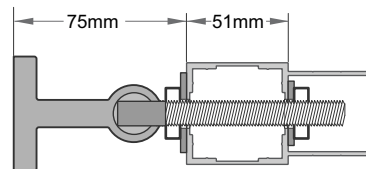
Pin Position
Adjustable, 65mm

Post attach, Bottom

**Refer to pages 17-18
for Rising Gate hinge
details and calculations**

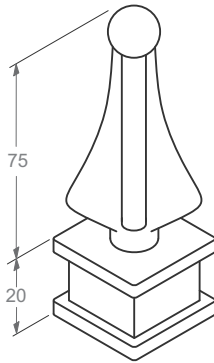


- Male pin attached to Gate End
- adjustable hinge pin CL from Gate
- use Heavy Washers/Hex nuts on both sides (supplied)
- hinge Gap allowance variable, check



Standard Hinge Gap
G13 + G14 SS Hinge

Cast Arrowhead
FPAH 1
95mm High x 28mm sq



Fits to top of Baluster- Tap over baluster, friction fit

Note - When using the Arrowheads,

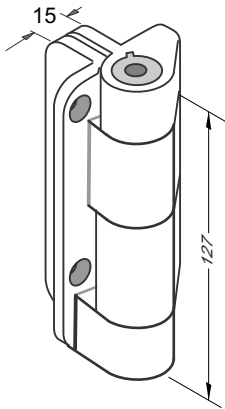
- 1 - Deburr inside baluster ends
- 2 - Mark a line 16mm down the baluster with a soft pencil
- 3 - Tap the arrow head gently down to the line.

Arrowheads are very difficult to remove once in place.

Contemporary Fence and Gate System - Components

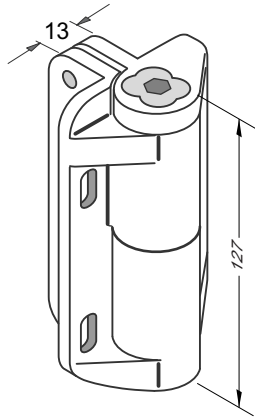
Section 1
General Fences
and Gates

Extra Heavy Duty
Adjustable Tension Hinge,
Legs. Nylon, Black. Pairs
JEF/AHEHD



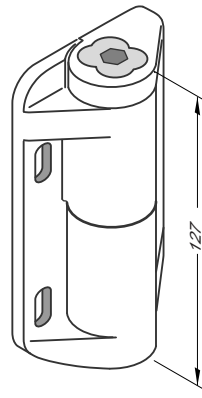
Self Closing
Max Weight 60kg/pair

Heavy Duty
Adjustable Tension Hinge,
Legs. Nylon, Black. Pairs
JEF/AHHD



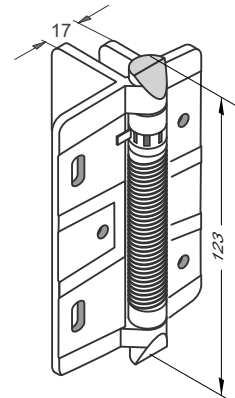
Self Closing
Max Weight 45kg/pair

Heavy Duty
Adjustable Tension Hinge,
No legs. Nylon, Black. Pairs
JEF/AHHD/WOL



Self Closing
Max Weight 45kg/pair

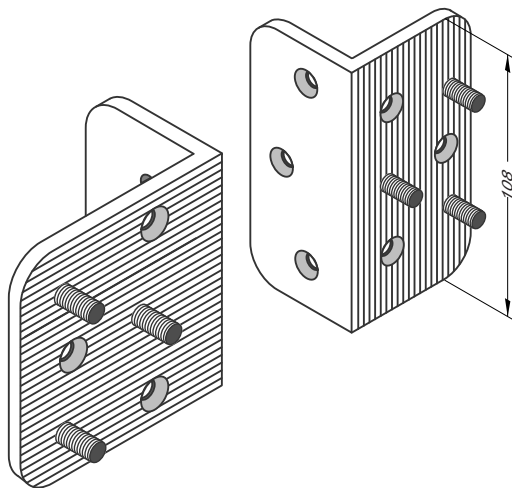
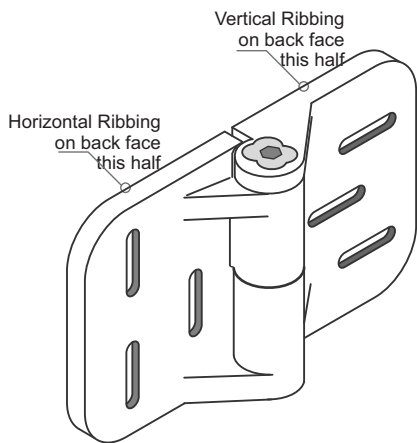
Light Duty
Fast Fix, Adjustable Tension
Nylon, Black. Pairs
JEF/AHFF



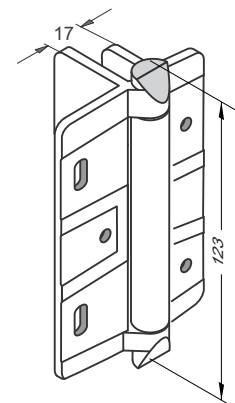
Self Closing
Max Weight 20kg/pair

Adjustable Tension Hinge, Adjustable Legs
Nylon, Black. Heavy Duty
JEF/AHHD/2ALS (Pairs)

Suitable for Driveway gates
Self Closing. Max Weight 45kg/pair.
Vertical adjustment 25mm. Horizontal adjustment 25mm



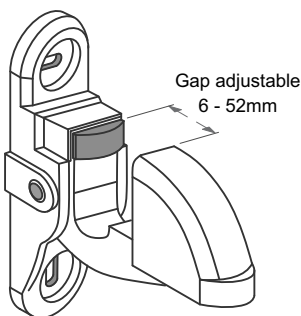
Light Duty
Fast Fix, Plain Hinge
Nylon, Black. Pairs
JEF/PHFF



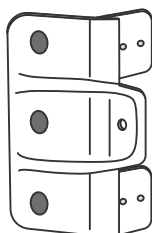
Self Closing
Max Weight 20kg/pair
Not suitable for Pool Gates

For all above refer to Manufacturers data for correct installation procedures

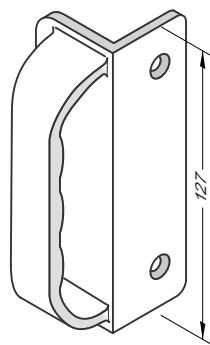
Parking Latch
Nylon, Black.
G21



Soft Gate Stop
Nylon, Black.
JEF/GS



Gate Handle
Nylon, Black.
JEF/GH



Heavy Duty Hinge
Toe Cap
JEF/AHHD/CAP

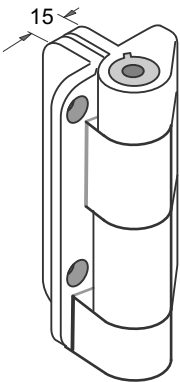


Safety Cap for
AHHD Heavy Duty Hinges
and AHHD/WOL Hinges

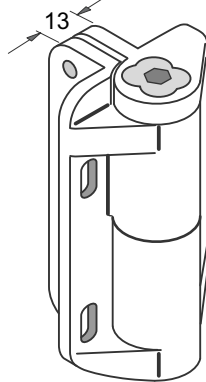
Extra Heavy Duty
Adjustable Tension Hinge,
Legs. Nylon, Black. Pairs
JEF/AHEHD

Heavy Duty
Adjustable Tension Hinge,
Legs. Nylon, Black. Pairs
JEF/AHHD

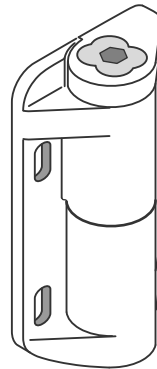
Heavy Duty
Adjustable Tension Hinge,
No legs. Nylon, Black. Pairs
JEF/AHHD/WOL



Self Closing
Max Weight 60kg



Self Closing
Max Weight 45kg/pair

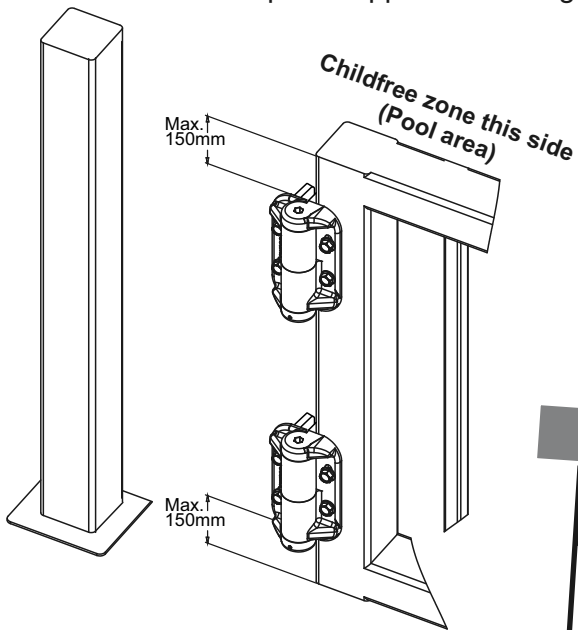


Self Closing
Max Weight 45kg/pair

Important Note:
Swimming pool gates, fences and their hardware systems are designed to aid and not substitute for adult supervision. To the extent this product is used around a pool, prior to installing, consult local licensing and safety authorities for approvals and/or requirements. This Hinge will operate properly only if installed in accordance with instructions.

START

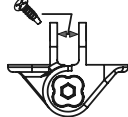
Fastener pack supplied with Hinge



Lay the gate flat.
Position Hinges more than 100mm from top/bottom edges.
Mark Hinge holes.
Mount Hinges to the Gate.
Hold the Gate/Hinges against post and mark holes then mount it.
Use all fasteners provided.

Note: Two types of fasteners are supplied. Use Countersunk screws here.

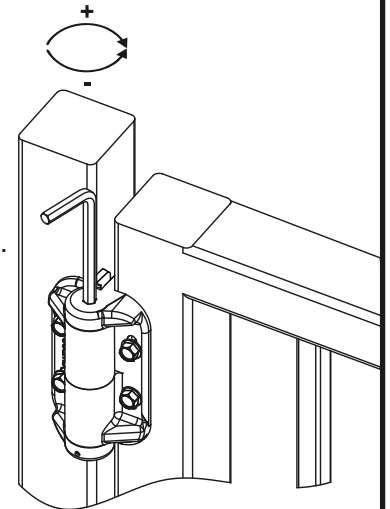
Note:
For JEF/AHHD type only



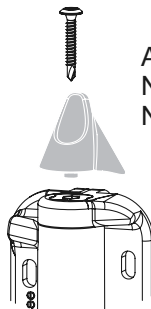
With Gate closed adjust the tension of both hinges. Using the 6mm allen key provided, rotate in 1/4 increments.

Turn clockwise to increase tension.
Turn it in the opposite direction to reduce tension.-

Warning:
Don't rotate tensioner more than two full turns.
Important:
Support the gate weight while adjusting tension



Add the Anti-Step cap to the bottom hinge. Note locator notch on both parts. Nip it up with a screwdriver. Slightly open gate 25mm to check the gate closes.

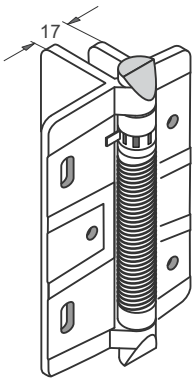


FINISH

Maintenance

- Annually inspect hinges or more frequently if the gate is used often.
- Only lubricate with powdered graphite lubricant. Do not use petroleum products

Fast Fix, Adjustable Tension
Nylon, Black. Pairs
JEF/AHFF



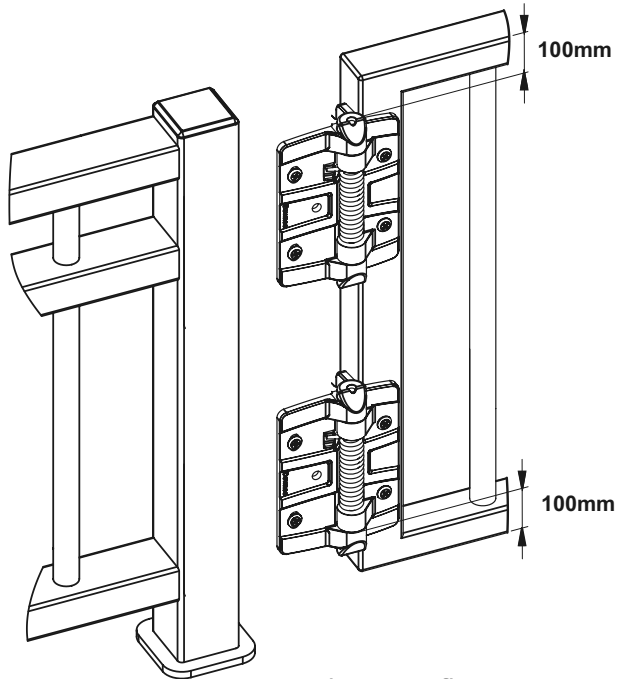
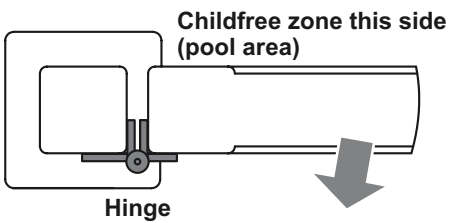
Self Closing
Max Weight 20kg/pair

Important Note:

Swimming pool gates, fences and their hardware systems are designed to aid and not substitute for adult supervision. To the extent this product is used around a pool, prior to installing, consult local licensing and safety authorities for approvals and/or requirements. This Hinge will operate properly only if installed in accordance with instructions.

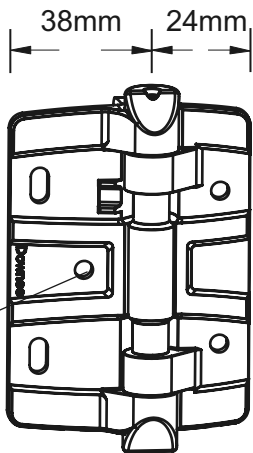
START

Gate Hinges must allow the gate to open away from the childfree zone.



Lay the gate flat.
Position Hinges more than 100mm from top/bottom edges.
Mark Hinge holes.
Mount Hinges to the Gate.
Hold the Gate/Hinges against the post and mark holes, then mount it.
Use all fasteners provided.

Longest leaf mounts to Fence Post



Make sure the gate doesn't swing past the fence.
Use a Gate Stop to avoid Latch & Hinge damage.

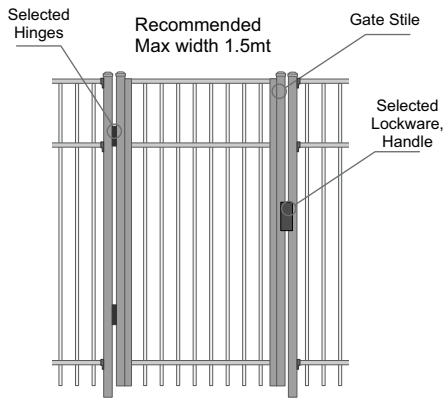
FINISH

Maintenance

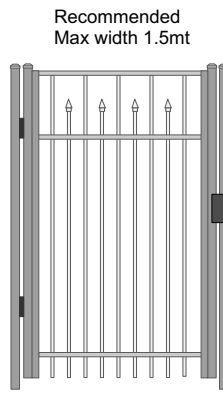
- Annually inspect hinges or more frequently if the gate is used often.
- Only lubricate with powdered graphite lubricant. Do not use petroleum products

Custom Gates

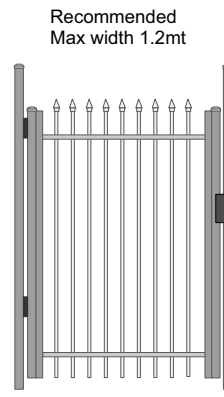
Gates can be made to custom sizes and shapes from either 900,1200,1350,1500 or 1800mm high fencing up to a maximum width of 1.5mt. See the following pages for a variety of Hinge and Lockware options. A Rising hinge is available for installation on sloping ground.



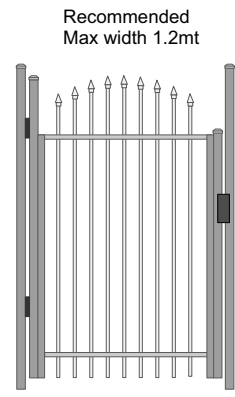
Typical Gate Plain



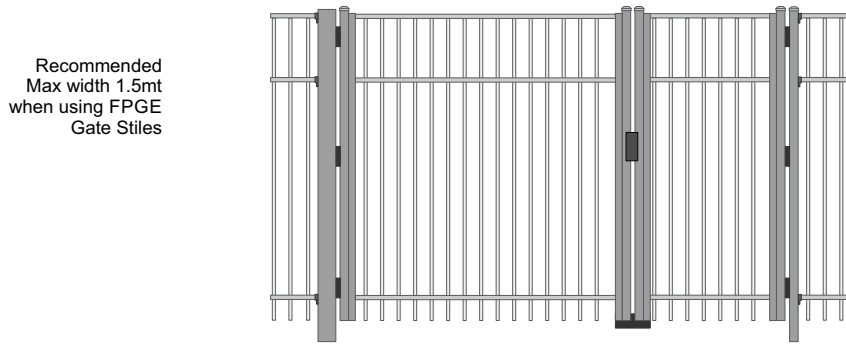
Plain top + Arrow



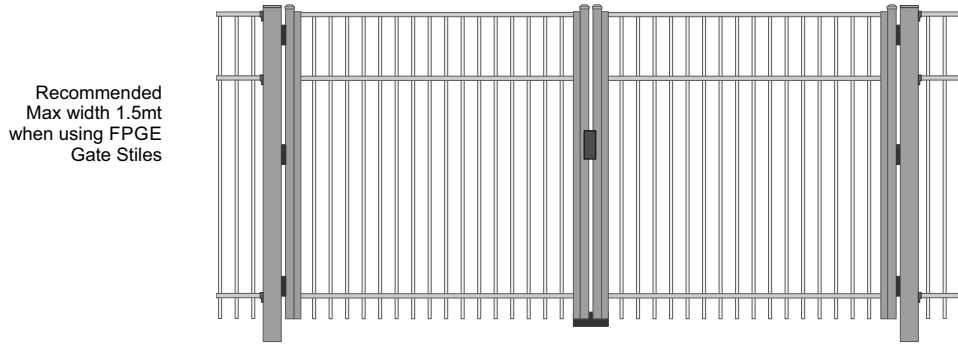
Plain + Arrow



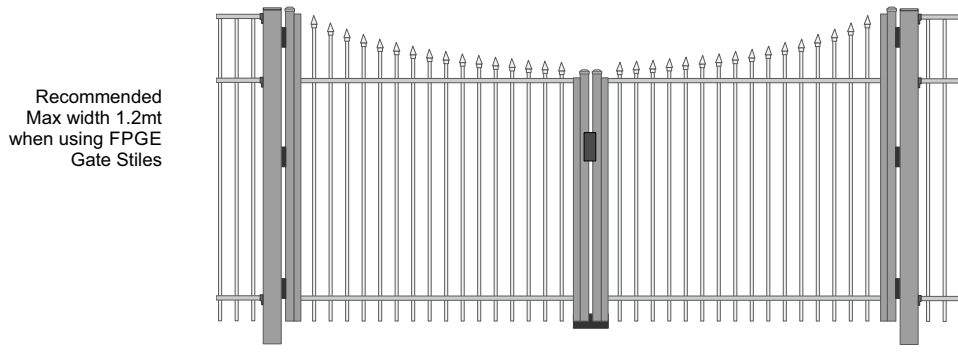
Round Arrow Attached Decorative Scroll work



Double Gate, incl Pedestrian access. Attached Decorative Scroll work



Double Gate, Plain

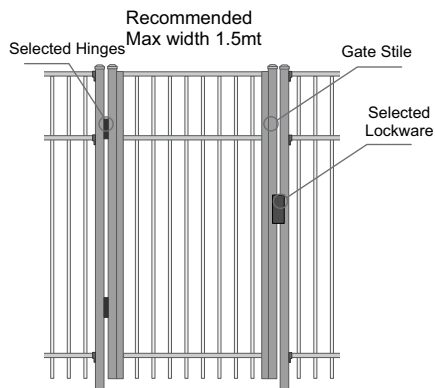


Double Gate, Scalloped. Arrow Head top

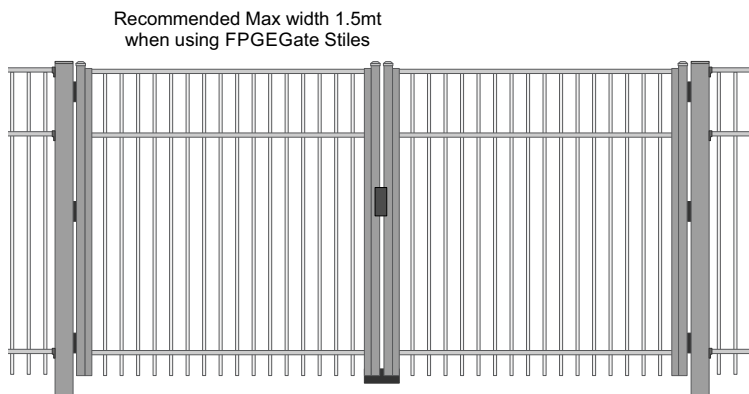
Custom Gates

Starting with the standard Fence Panels and using the Gate Stile custom Gates can be created. Use with standard hinges and Lockware.

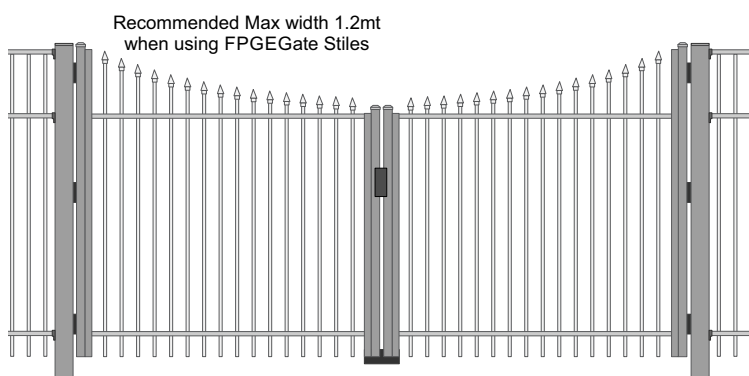
The same layouts apply to 1200mm high fences



Pedestrian Gate
- For 1000mm fencing
max Width is 900mm



Double Gate, Plain



Double Gate, Scalloped. Arrow Head top

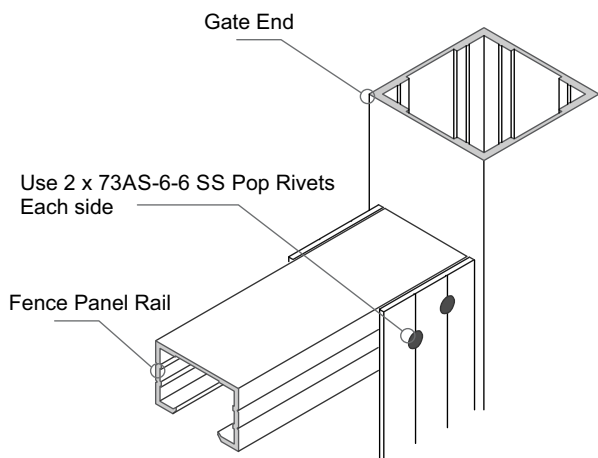
Use Post 100mm Sq (Part No JA 306) mounted in Ground for:

- 1200mm high Gates over 1.6m wide
- 1350mm high Gates over 1.4m wide and
- 1800mm high Gates over 1.2mm wide

Gates using the 100sq post should always have 3 x hinges per gate unless using the Rising Hinge

Gate End - Attach

The Gate End must be securely attached to the Fence Panel Rails. Use 4 x SS Pop rivets per Rail connection to Gate end

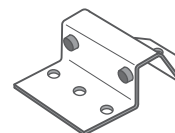


Note - For 1500 high fencing, cut down the 1840 long Gate Stile to 1540mm.

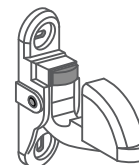
Note - For 1000 high fencing, cut down the 1240 long Gate Stile to 1040mm (max width 900mm)

Double Gate Stops

1 - In the Closed position always use a G20 Double Gate Center stop.

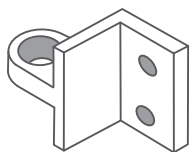





2 - In the Open position always use a G21 Parking latch. Pack up if necessary so the Gate ends rest on the latch.



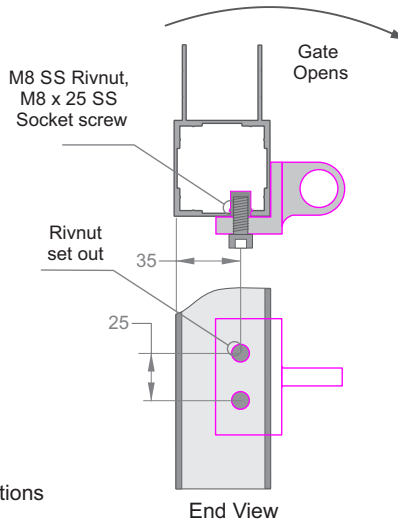
Contemporary Fence and Gate System - Rising Hinge Attach

Top Rising Hinge Bracket Attach to Gate Frame

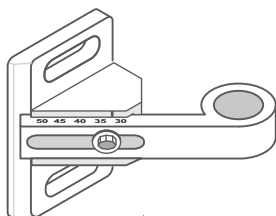





-  M8 x 20 SS
-  M8 x 14
-  M8 Rivnut

See next Page for Rising Hinge Calculations

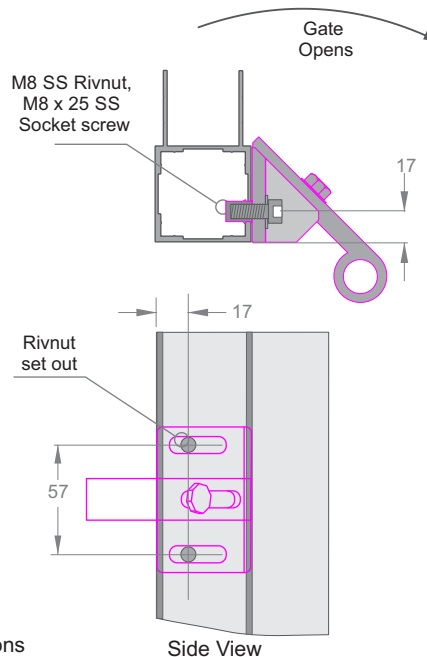


Bottom Rising Hinge Bracket Attach to Gate Frame



-  M8 x 20 SS
-  M8 x 14
-  M8 Rivnut

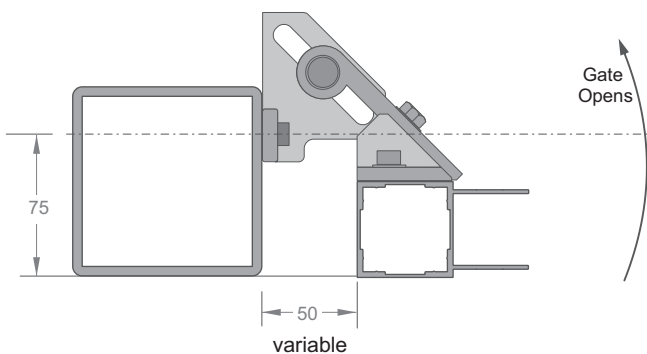
See next Page for Rising Hinge Calculations



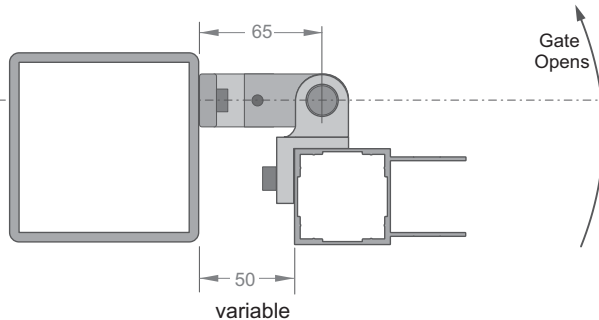
Contemporary Fence and Gate System - Rising Hinge Setout, Calculations

Rising Hinge Setout

POST 100mm Sq Part No JA 306
For gates over 1.6mm wide x 1200high
or gates over 1.2mm wide x 1800high

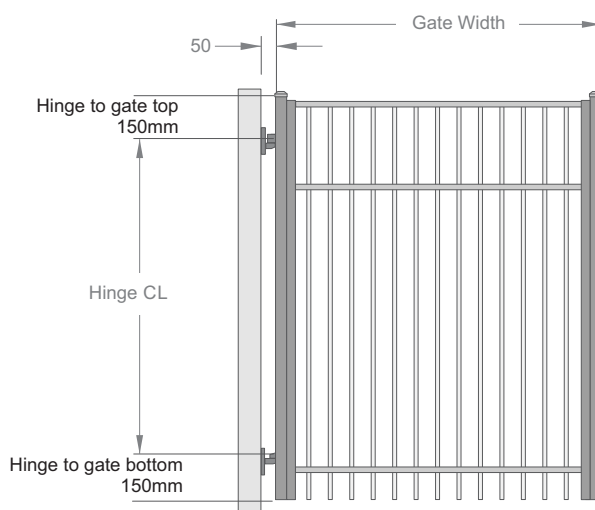
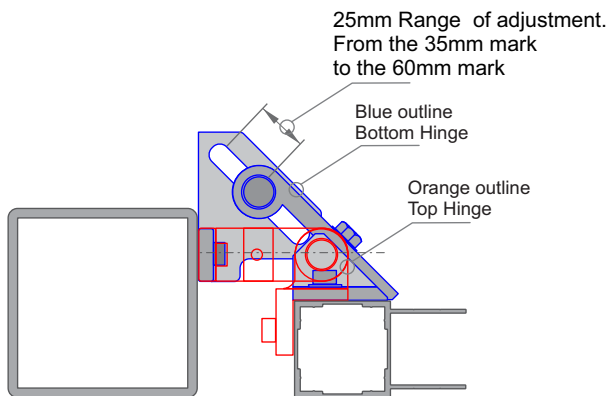


Bottom Hinge - Plan view



Top Hinge - Plan view

Rising Hinge Calculations, Level closed, raised open



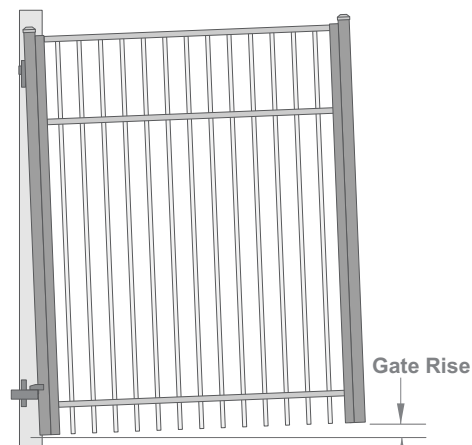
GATE CLOSED - Front view

GATE RISE CALCULATIONS

Bottom Hinge at Minimum, 35mm adjustment							
Gate Height	Hinge CL	Gate Width					
		1000	1200	1400	1600	1800	2000
1200	900	72	87	101	116	130	144
1350	1050	62	74	87	99	111	124
1500	1200	54	65	76	87	98	108
1650	1350	48	58	67	77	87	96
1800	1550	42	50	59	67	75	84

Bottom Hinge at Middle, 47mm adjustment							
Gate Height	Hinge CL	Gate Width					
		1000	1200	1400	1600	1800	2000
1200	900	94	113	132	151	170	189
1350	1050	81	97	113	130	146	162
1500	1200	71	85	99	113	128	142
1650	1350	63	76	88	101	113	126
1800	1550	55	66	77	88	99	110

Bottom Hinge at Maximum, 60mm adjustment							
Gate Height	Hinge CL	Gate Width					
		1000	1200	1400	1600	1800	2000
1200	900	117	140	163	187	210	233
1350	1050	100	120	140	160	180	200
1500	1200	88	105	123	140	158	175
1650	1350	78	93	109	124	140	156
1800	1550	68	81	95	108	122	135

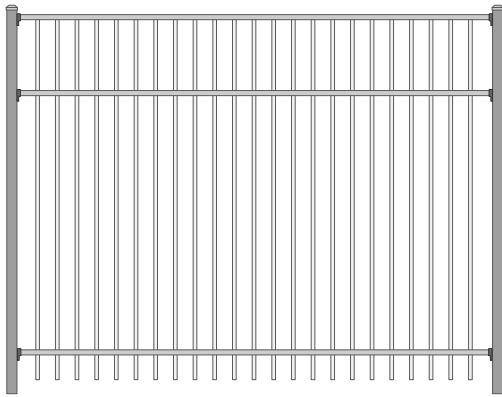


GATE OPEN - Side view

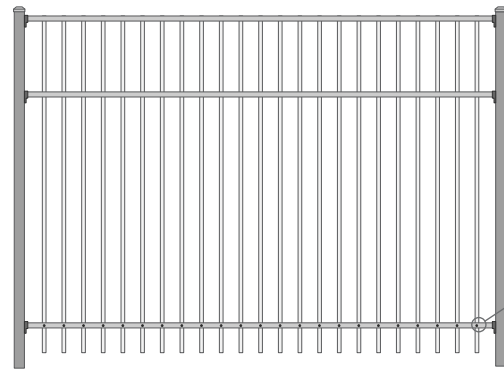
Contemporary Fence and Gate System - Custom Height

Custom Panels

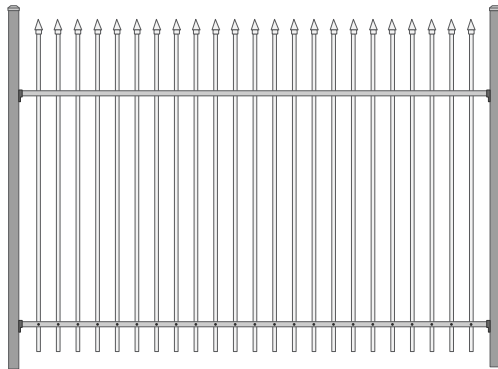
Starting with the standard Fence Panels and using the Pre punched Rail custom height Panels / Gates can be created.



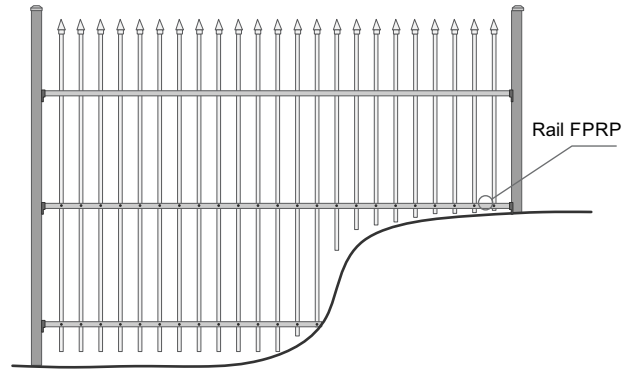
Standard Fence Panel



Custom Height Fence Panel

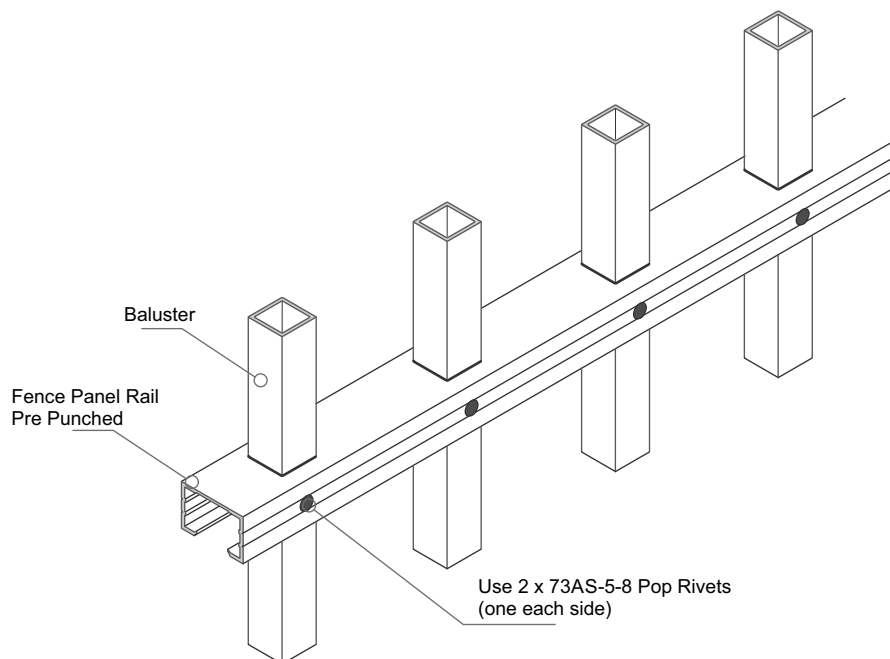


Custom Height Fence Panel, with ArrowHeads



Custom Height Fence Panel, over uneven ground

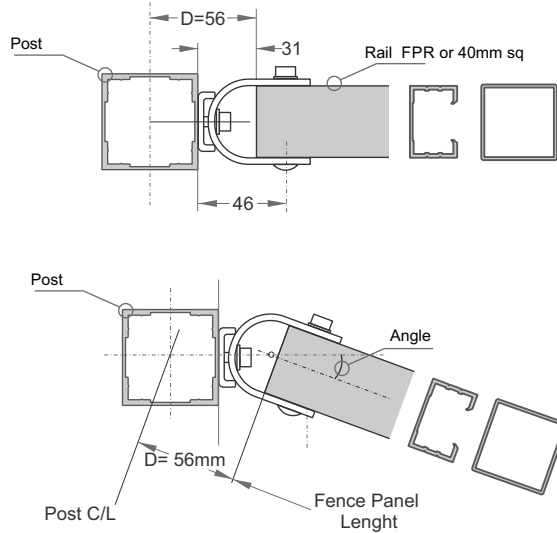
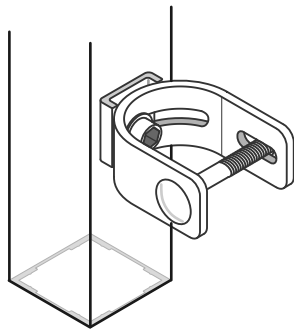
Using a Standard Fence panel, cut desired amount off the base. Then slide up the Pre punched Rail.
Drill through Rail / Baluster. Attach with Pop Rivets as below



Contemporary Fence and Gate System - Angle Bracket, Post Fixing

Angle Allowance
Bracket FPR BRKT/A

Bracket for all Racking and angled connections



Because of tolerances in Rail clamp bolt and Drilled hole, Dimension D will stay constant at 56mm regardless of angle

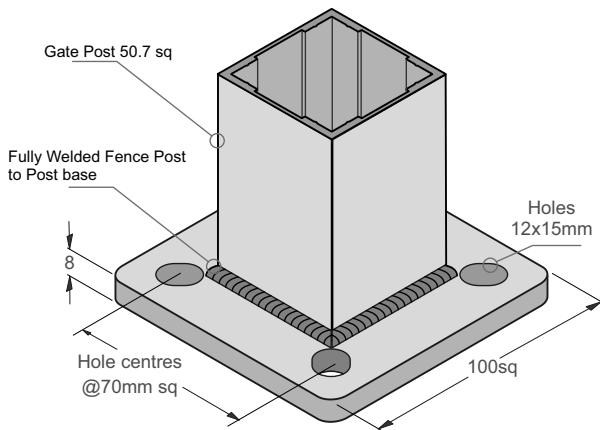
Post, Attach to Ground

Top Fixed Posts
Use welded base for ALL Gates

Gate Post, Base
Welded to Post

Fully Welded
Baseplate to Lightweight Post

Gate Post, Embed

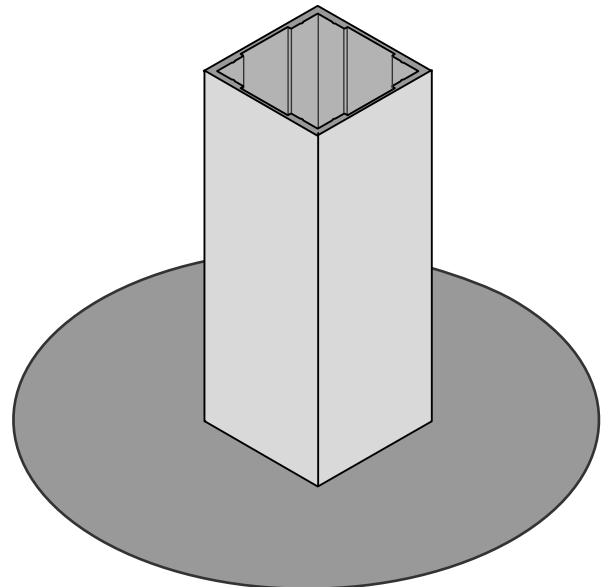


Part No's
FPWBP/1.3
FPWBP/1.9

Attach Post Base to Timber
- 4 x M10 x 105 Stainless Coach Screws

Attach Post Base to Concrete
- 4 x M10 x 120 Stainless Studs
Embedded 100mm min into 20MPa concrete
with Fischer FIS V

**A PVC Tape layer must be used
between Post base and Concrete**

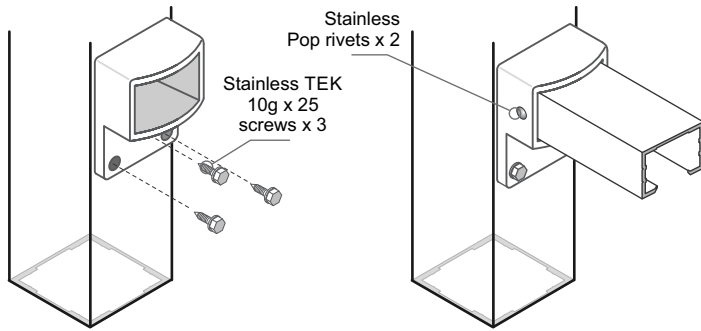


Attach Post into Concrete
- Post must be fully wrapped with PVC Tape
- Hole, minimum 200mm dia
- Depth, minimum 1/3 Post height
- Use Dricon Rapidset or similar

Contemporary Fence and Gate System - Fence Panel Fixing

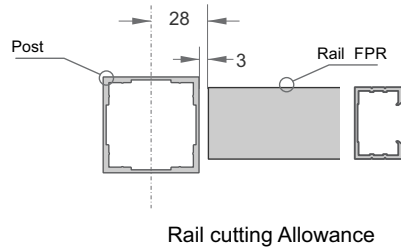
Attach to Fence to Post
Bracket FP BRKT

Standard Bracket for all normal Level, straight connections



Attach Post Bracket with
- 3 x Stainless TEK screws

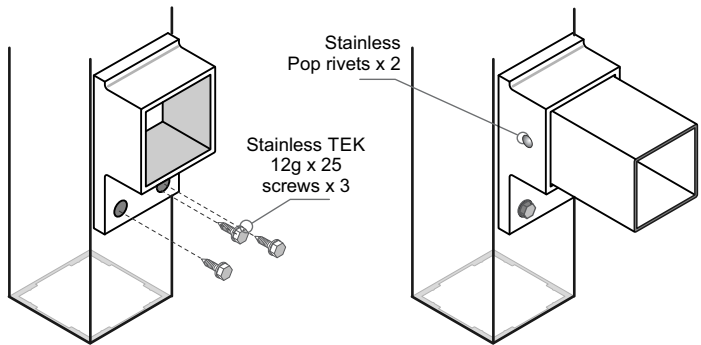
Attach Fence to Post bracket with
- 2 x Stainless pop rivets.
Fence can be up to 10deg angle
(horizontal plane) to Post Bracket



Rail cutting Allowance

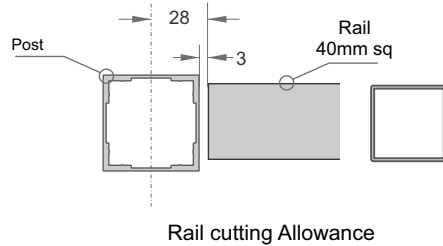
Attach to Fence to Post
Bracket FP/BRKT/40

Standard Bracket for all normal Level, straight connections



Attach Post Bracket with
- 3 x Stainless TEK screws

Attach Fence to Post bracket with
- 2 x Stainless pop rivets.

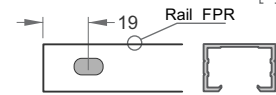
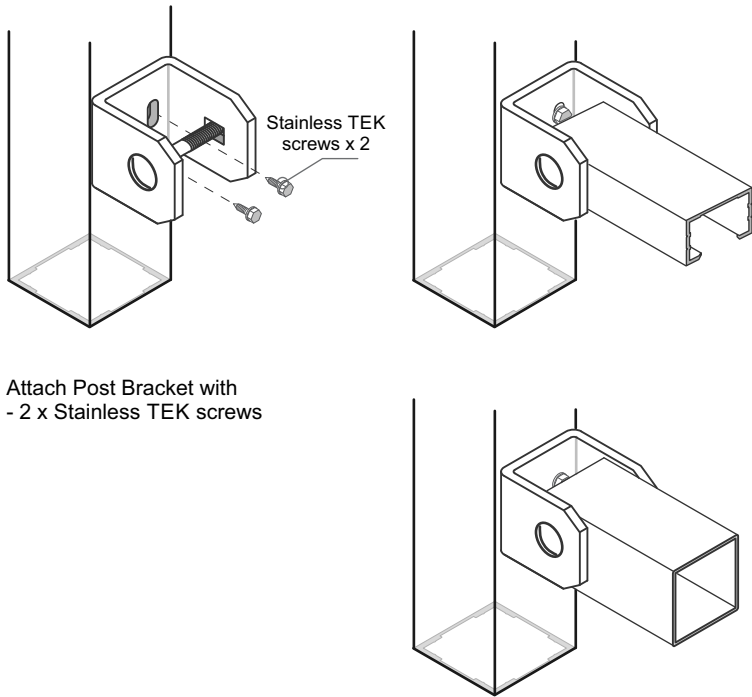


Rail cutting Allowance

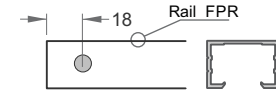
Contemporary Fence and Gate System - Fence Panel Fixing

Attach to Fence to Post
Bracket FPR BRKT/S

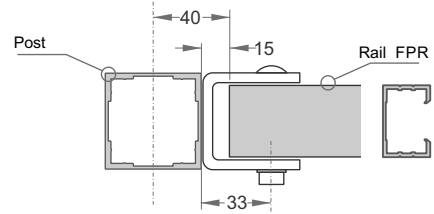
Bracket for all Racking and Straight connections
Suitable for 38 and 40 rails
Rail connection, angle adjustable
 ± 45 deg, Vertical plane only
Aluminium Body /Black PC



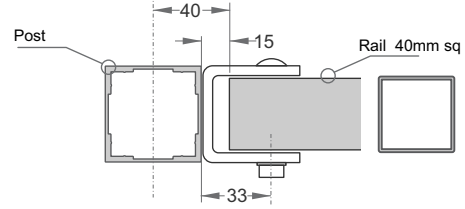
FPR Racking rail comes standard with a pre punched 14mm x 8mm Slot



If cutting drill hole 9mm dia



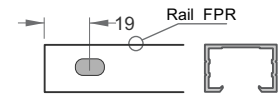
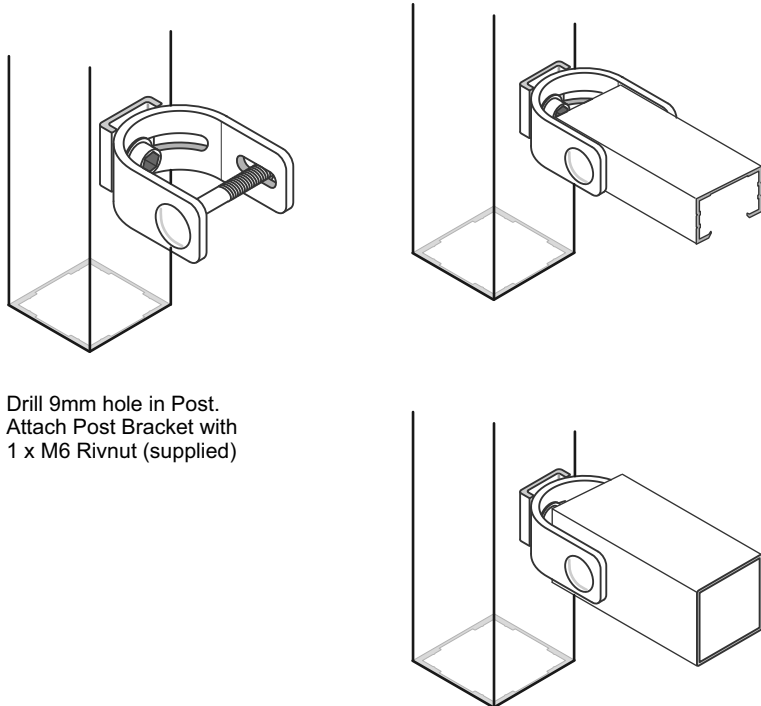
Rail cutting Allowance



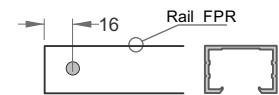
Rail cutting Allowance

Attach to Fence to Post
Bracket FPR BRKT/A

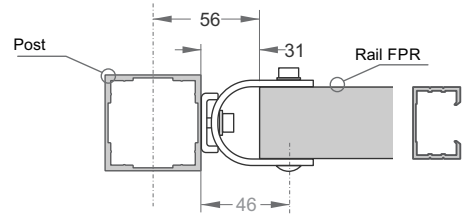
Bracket for all Racking and Angled connections
Suitable for 38 and 40 rails
Rail connection, angle adjustable
0 - 40 deg, horizontal plane, ± 40 deg, vertical plane
Aluminium Body /Black PC



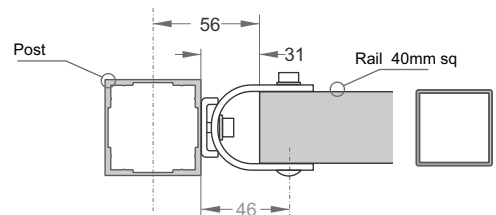
Racking rail comes standard with a pre punched 14mm x 8mm Slot



If cutting drill hole 8mm dia



Rail cutting Allowance



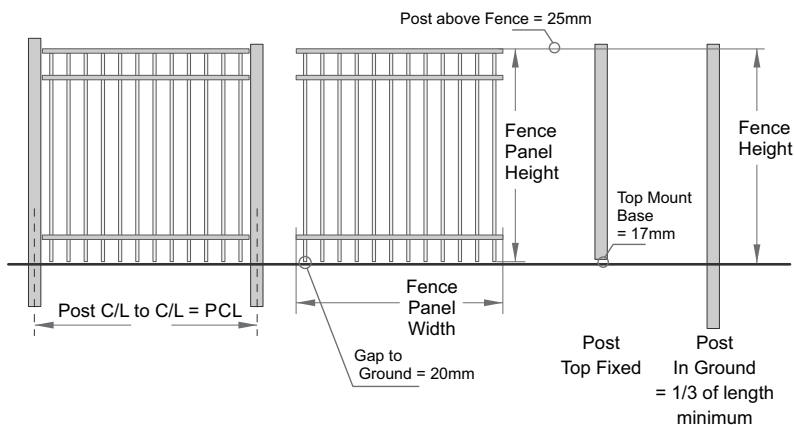
Rail cutting Allowance



Contemporary Fence and Gate System - Cutting

Fence Panels Width Cutting

End Posts can be either both 50.7mm sq
or 1 x 50.7mm and 1 x 100mm sq



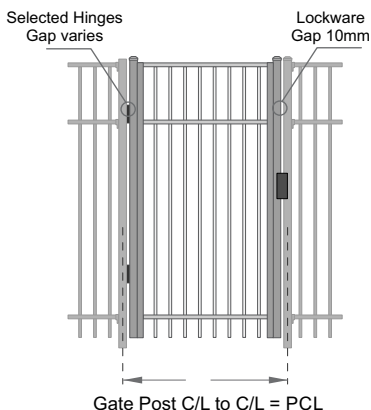
Full Width Fence Panel - 2400mm	Widths
Post C/l to C/L	PCL
PCL must be (Both 50.7 posts)	2456
PCL must be (1x50.7, 1x100 posts)	2481

Custom Width Fence Panel	Widths
Post C/l to C/L	PCL
Fence Panel width	FPW
FPW cut to - (Both 50.7 posts)	PCL - 56
FPW cut to - (1 x 50.7, 1 x 100 posts)	PCL - 81

Panel / Post Heights	Heights
Panel height choice - 1200,1500,1800 or custom height	
Fence Panel Height	FPH
Post Height, 50.7 Top Mount	FPH + 28
Post Height, 50.7, 100 In Ground	(FPH + 45) x 1.3

Gates - Single Width Cutting

Gate Posts normally both 50.7mm sq



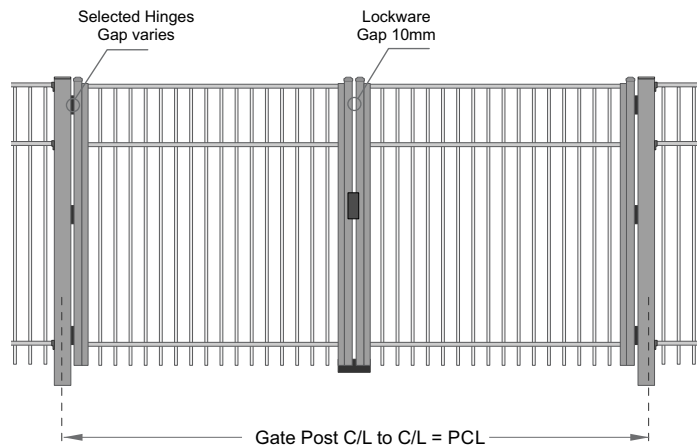
Standard Width Gate - 997 wide	Widths
Post C/L must be (Both 50.7 posts)	1059 + HG
Hinge Gap = HG as below	

Custom Width, Single Gate	Widths
Gate Post C/l to C/L	PCL
Fence Panel cut width	FPW
Hinge Gap width	HG
FPW cut to - (Both 50.7 posts)	PCL - HG - 165
FPW cut to - (Both 100 posts)	PCL - HG - 193
AH Hinge Gap = HG	19
AHHD Hinge Gap = HG	13
G13 + G14 Hinge Gap = HG	65

Check for Maximum Gate widths.
Use appropriate Gate Posts

Gates - Double Width Cutting

Gate Posts normally both 100mm sq



Custom Width, Double Gates	Widths
Gate Post C/l to C/L	PCL
Fence Panel cut width	FPW
Hinge Gap width	HG
FPW cut to - (Both 50.7 posts)	PCL/2 - HG - 110
FPW cut to - (Both 100 posts)	PCL/2 - HG - 138
AH Hinge Gap x 2 = HG	38
AHHD Hinge Gap x 2 = HG	26
G13 + G14 Hinge Gap x 2 = HG	130

Check for Maximum Gate widths.
Use appropriate Gate Posts



Setout

Set out and Installation

- 1- Use a string line on the ground and mark out the lines where the fence is to be located.
- 2 - Preassemble the Gate, Gate post and Hinges.
- 3 - Establish the gate position and mark out the gate post centres. These will be 1047mm + 10mm + Hinge gap (13 -19mm)
- 4 - At marked centres: Concreting - dig two gate holes approximately 200mmdia x 400 - 500mm deep.
For surface mounting, attach two Post Bases to Concrete/Timber using appropriate fasteners
- 5 - Support gate assembly with props, check for levels and squareness and concrete in to 200mm say.
Clearance under gate not to exceed 100mm.
- 6 - Install lockware, make sure all level/square and hinges/lockware all working smoothly.
- 7 - Then start installing fencing, panel and post, one unit at a time. Making sure all level and square.
Max under fence to ground gap 100mm.
- 8 - After all in place, check all for squareness. Finish concreting or tightening up base plates.
- 9 - Always leave site tidy and clean

Embed Concreting

Juralco recommends Dricon Rapid Set Concrete
For holes say 200mm dia x 450mm deep = 1 x 25kg bag Dricon per hole
- Does not apply to Pool Fences

Post must be fully wrapped with PVC Tape

- 1 - **Preparation** - Prepare the post hole, dig a little deeper than necessary the pack bottom with stones to bring post to correct height
 - Line hole with plastic in sandy soils. Position the post in the hole.
 - Thoroughly saturate the walls of the hole and the post, so they do not soak up water needed for the concrete.
- 2 - **Mixing** - Add recommended quantity of water to the hole, 4 litres per bag.
 - Pour RapidSetTM at a steady even rate around the post into the water. Take approximately 1 minute per bag.
 - Do not pour too fast. The idea is to wet the concrete as it falls to the bottom.
 - If more than one bag of RapidSetTM is needed per hole, work one bag at a time.
- 3 - **Finishing** - Sprinkle water on top of RapidSetTM if dry powder is visible.
- 4 - **Alignment** - Align post to desired position (Brace if necessary). RapidSetTM will harden in 15 minutes.
IMPORTANT NOTE: Once post is aligned allow RapidSetTM to harden undisturbed for 15 minutes.
- 5 - **Completion** - It will be able to stand reasonable force in 1 hour.
 - Wait at least one hour before working or straining on set post. A post with RapidSetTM can withstand hammering after 1 hour.

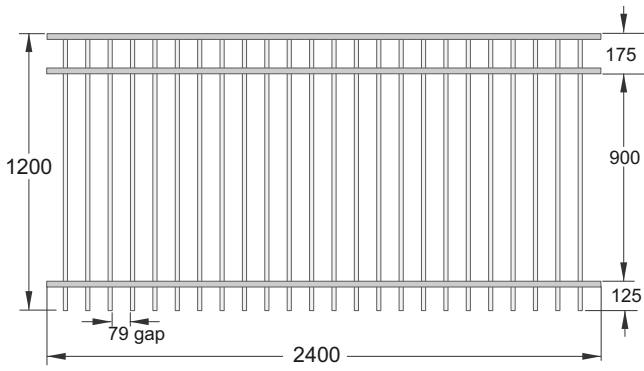
CONTEMPORARY POOL FENCE and GATE SYSTEMS

Note: This section covers the requirements for a PS1

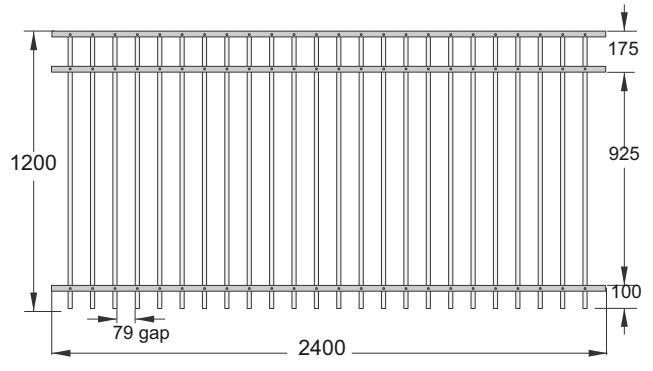
If the Fence requested is to enclose an area containing water greater than 400mm deep it must comply with the relevant legislation, which is the Building Code clause F9/AS1 and section 162C of the Building Act.

The components of this Juralco Pool Fence and Gate system are suitable for compliance to the Building Code clause F9/AS1 and section 162C of the Building Act.

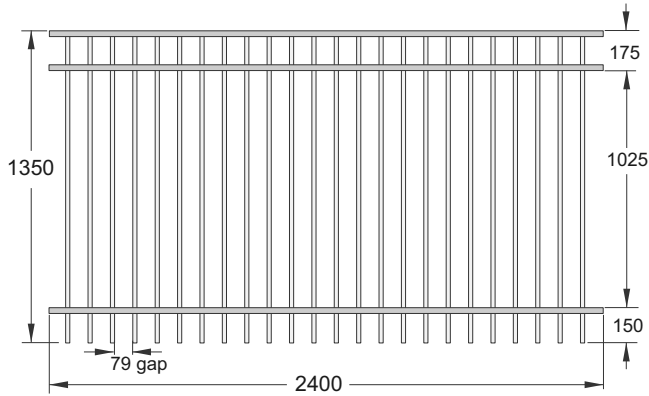
Contemporary Pool Fence and Gate System



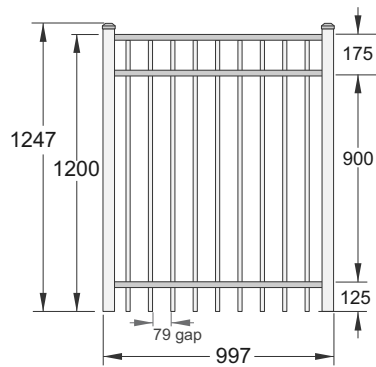
FENCE PANEL FP 12



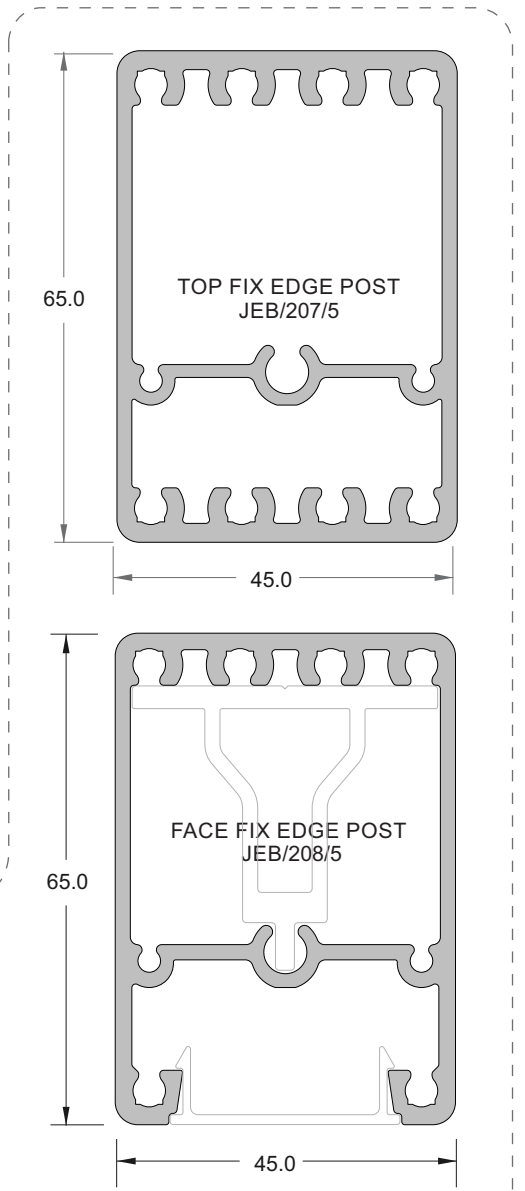
FENCE PANEL, RACKING FP 12R



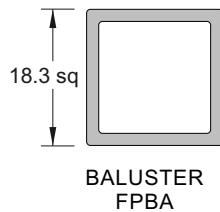
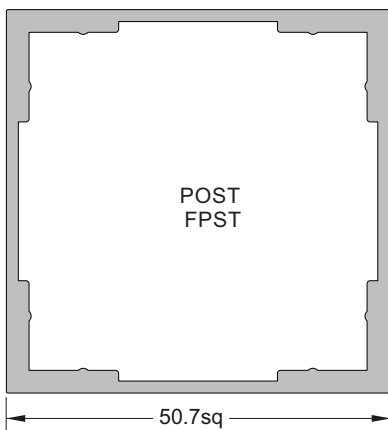
FENCE PANEL FP 135



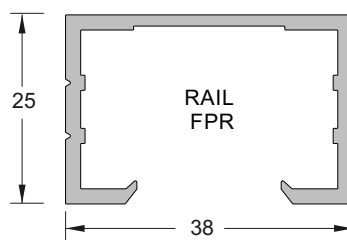
STANDARD GATE PANEL
GP 12



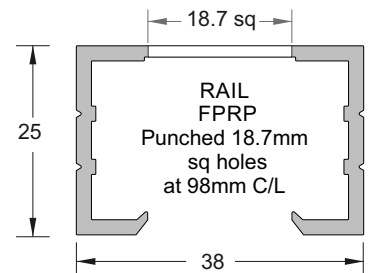
Extrusions



BALUSTER
FPBA



RAIL
FPR

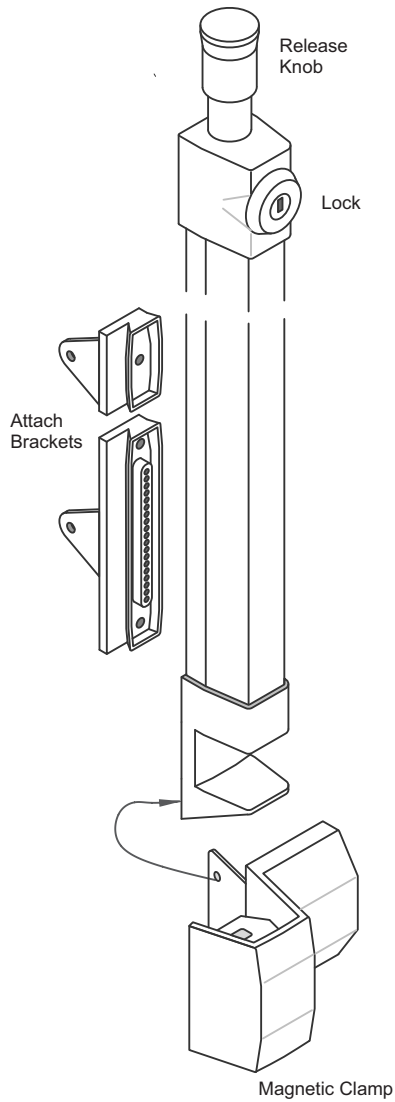


RAIL
FPRP
Punched 18.7mm
sq holes
at 98mm C/L

Contemporary Pool Fence and Gate System

Magnetic Pool Gate Latch
Nylon, Black
Part No JEF/APL

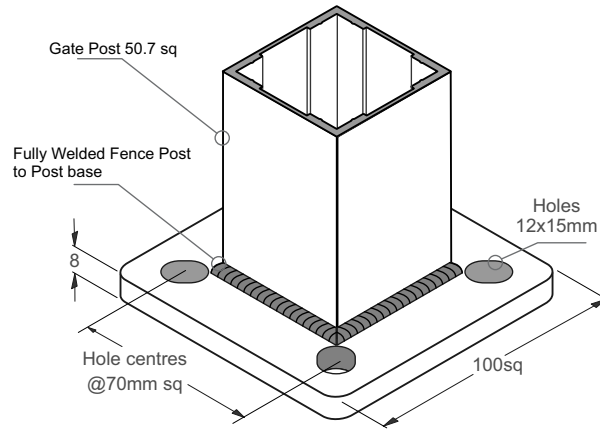
Latch - 540mm high OA



Suitable for Pool gates

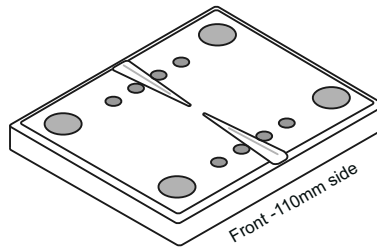
Gate Post, Base
Welded to Post
Part No FPWBP/1.3

Fully Welded
Baseplate to Lightweight Post
For mounting on Concrete only



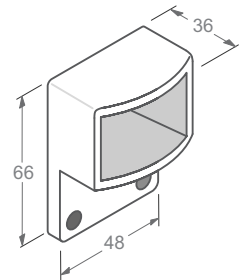
Note: Fully Welded Baseplate to Lightweight Post Mounting on Concrete only

EDGE Post Base plate
Part No JEC 221



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

Post Bracket
Part No FP BRKT



For Residential and Pool (38 wide Rail)
Aluminium Body /Black PC

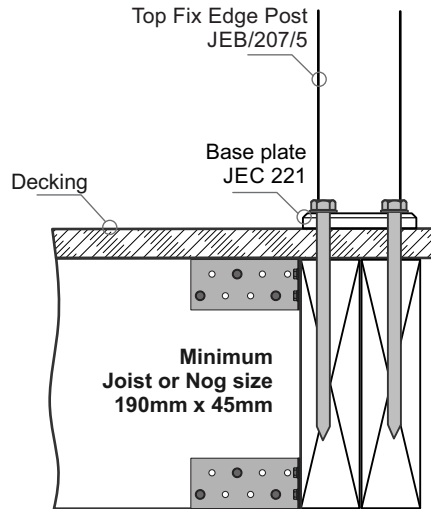
Typical TOP Fix to Timber - JEC 221, 110mm x 90mm, 4 hole Base Plate - M10 Coachscrews

**Up to and including
 Wind Zones**
 For Pool Fences only

Wind Zone	Post Spacing (max)
Extra High	2400

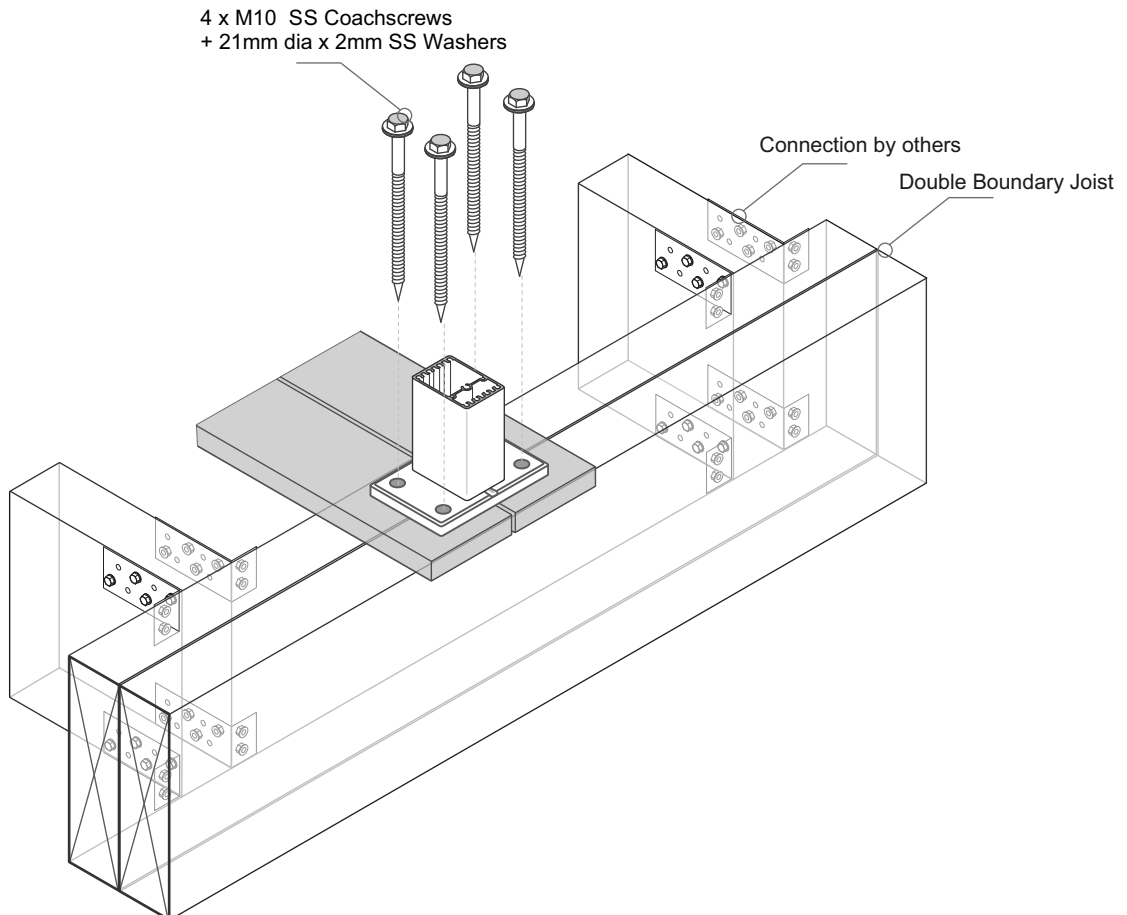
General Notes:

- 1 - All measurements mm
- 2 - Balustrade Height, above Deck
- 3 - Not for use where protecting a fall of 1.0m or more



Important Installation notes:

- 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 engagement into joists. All coachscrews predrill 6mm holes
- 4 - Bond all coachscrews with SIKA Supergrip to full depth
- 6 - EDGE post above for use with Pool Panels, FP12, FP12R and FP135
- 7 - All Fixings must be Stainless steel



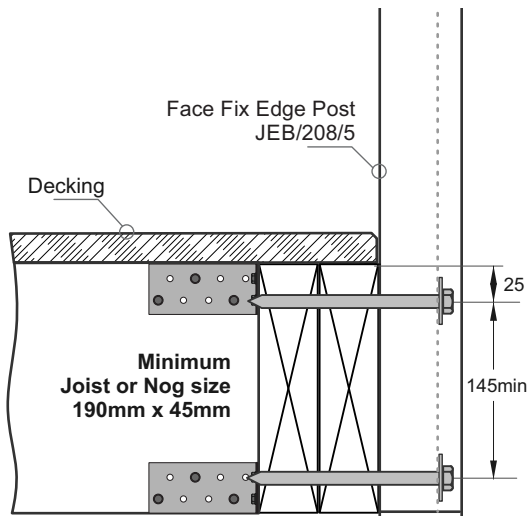
Typical FACE Fix Post to Timber - M10 Coachscrews

Up to and including
 Wind Zones
 For Pool Fences only

Wind Zones	Post Spacing (max)
Extra High	2400

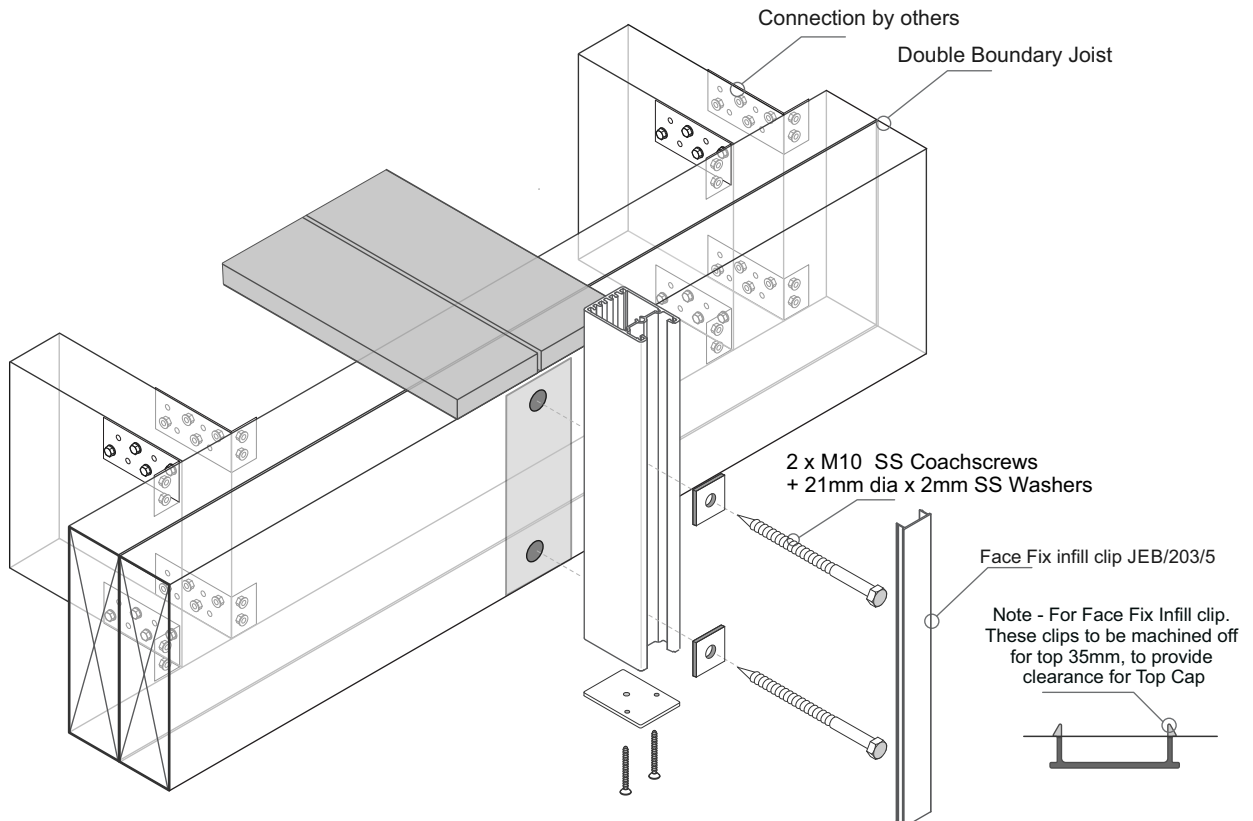
General Notes:

- 1 - All measurements mm
- 2 - Balustrade Height, above Deck
- 3 - Not for use where protecting a fall of 1.0m or more



Important Installation notes:

- 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 engagement into joists. All coachscrews predrill 6mm holes
- 4 - Bond all coachscrews with SIKA Supergrip to full depth
- 5 - EDGE post above for use with Pool Panels, FP12, FP12R and FP135
- 6 - All Fixings must be Stainless steel



Typical TOP Fix to Concrete - Welded Base/Post. 4 x Holes M10 SS Studs

**Up to and including
Wind Zones**
For Pool Fences only

Wind Zones	Post Spacing (max)
Extra High	2400

- General Notes:
- 1 - All measurements mm
 - 2 - Balustrade Height, above Deck
 - 3 - Not for use where protecting a fall of 1.0m or more

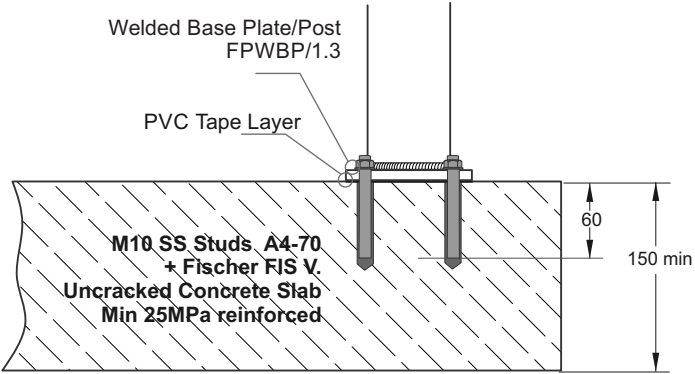


Installation details Fischer FIS V 300T

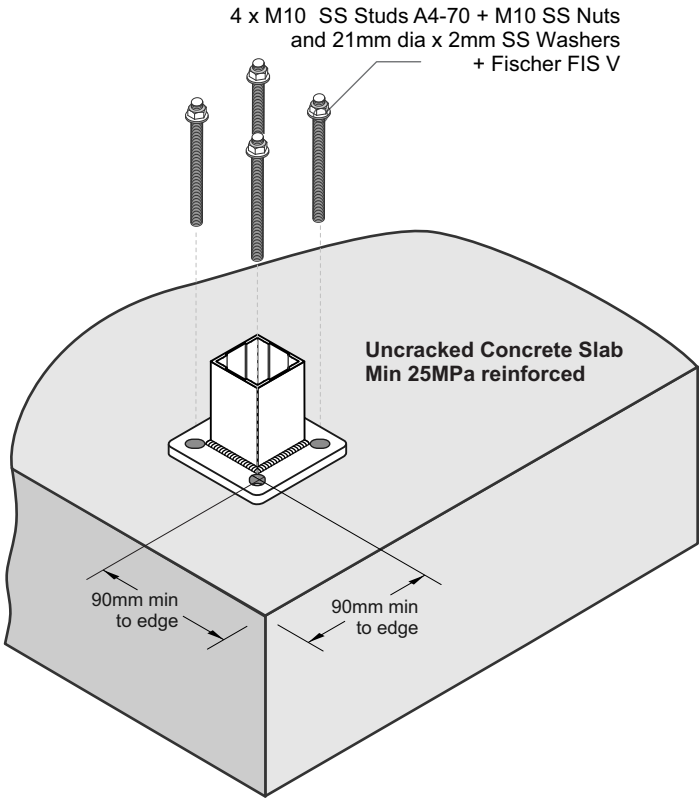
Thread diameter M10
 Drill hole diameter = 12 mm
 Drill hole depth = 70mm
 Anchorage depth = 60mm

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

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



- Important Installation Notes:**
- 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 - Welded Base/Post only suitable for Concrete
 - 6 - Use Threadlok on Nuts
 - 7 - Post above for use with Pool Panels, FP12 and FP12R only
 - 8 - All fixings must be Stainless Steel



Typical FACE Fix Post to Concrete - M10 Studs

Up to and including
Wind Zones
For Pool Fences only

Wind Zone	Post Spacing (max)
Extra High	2400

General Notes:

- 1 - All measurements mm
- 2 - Balustrade Height, above Deck
- 3 - Not for use where protecting a fall of 1.0m or more

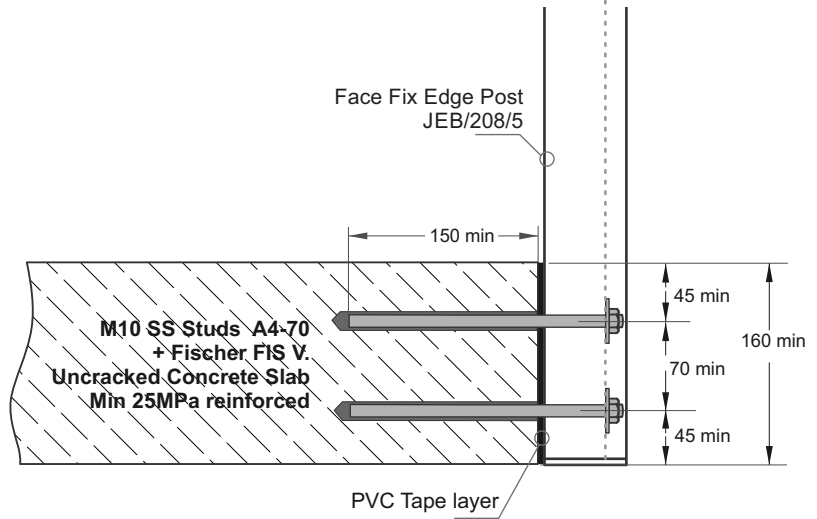


Installation details Fischer FIS V 300T

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

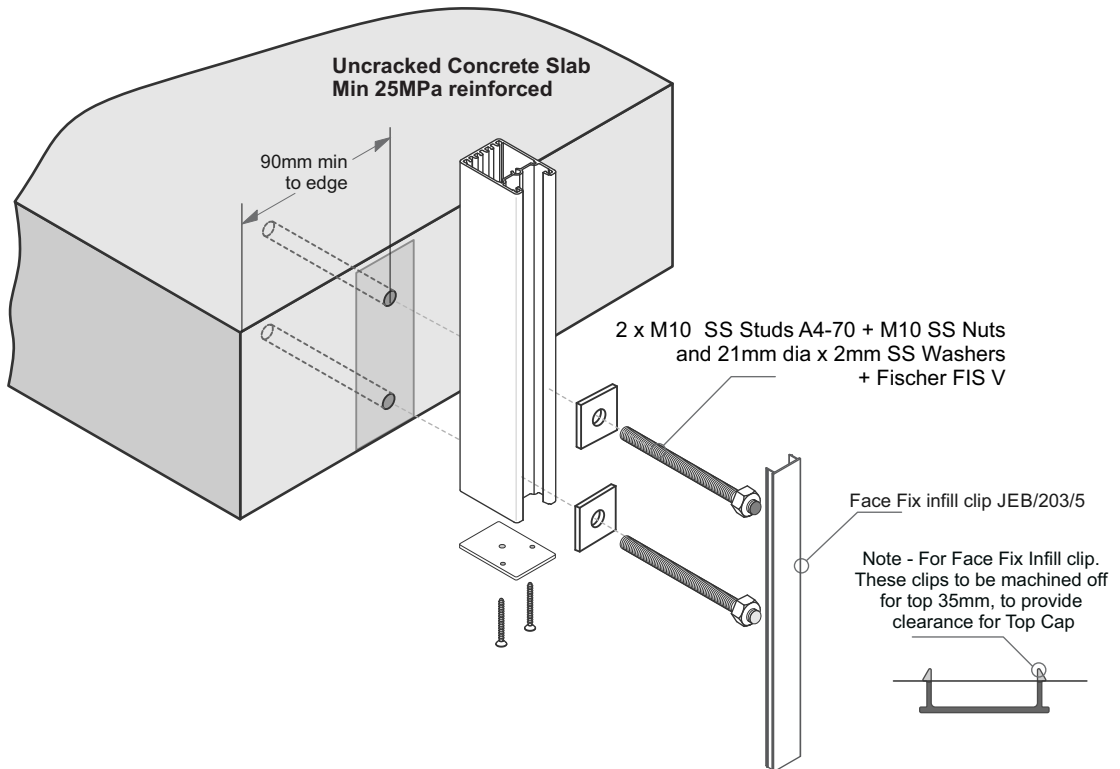
Drilling method Hammer drilling
 Drill hole cleaning 4 times blowing,
 4 times brushing,
 4 times blowing

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



Important Installation Notes:

- 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 - EDGE post above for use with Pool Panels, FP12, FP12R and FP135
- 6 - Use Threadlok on Nuts
- 7 - All fixings must be Stainless Steel

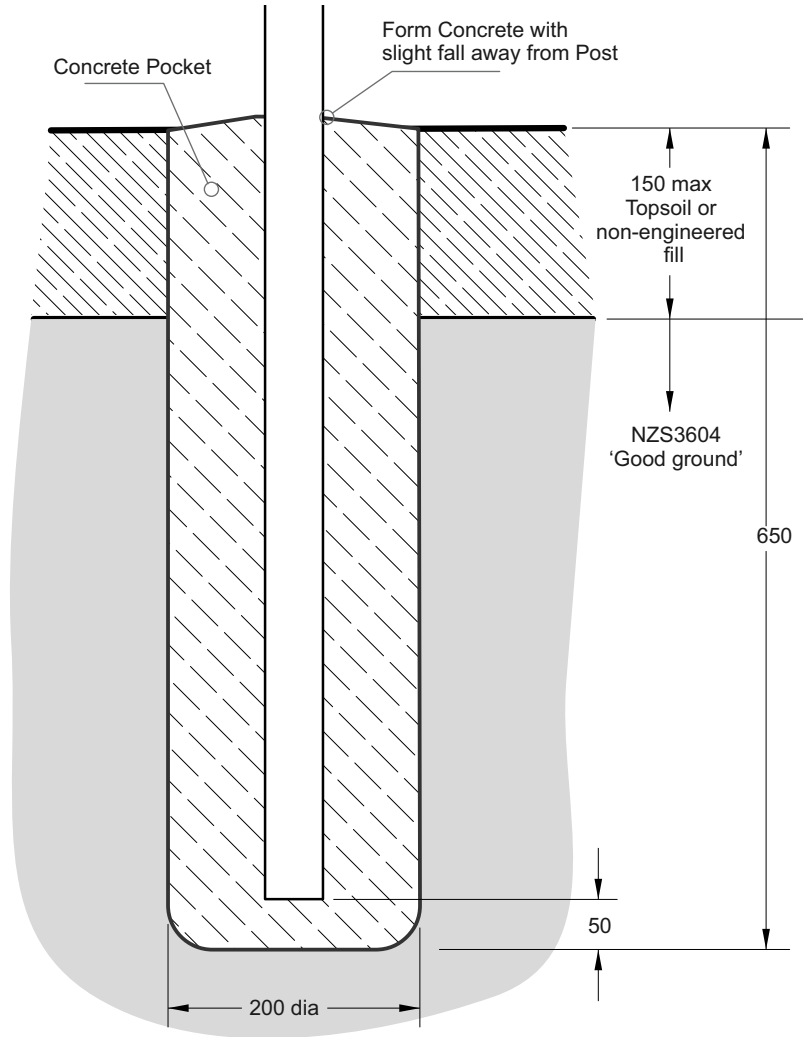


Typical Post Embed in Concrete

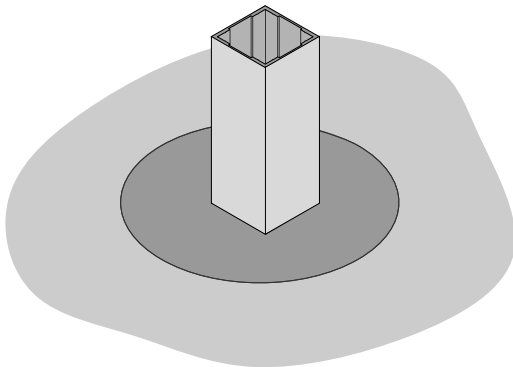
**Up to and including
Wind Zones**
For Pool Fences only

Wind Zone	Post Spacing (max)
Extra High	2400

- General Notes:
 1 - All measurements mm
 2 - Balustrade Height, above Deck
 3 - Not for use where protecting a fall of 1.0m or more



- Important Installation notes:**
- 1 - The Project Engineer must ensure the structure can support the appropriate loads
 - 2 - A PVC Tape layer must be fully wrapped around the Post
 - 3 - Use Dricon Rapidset concrete mix or similar
 - 4 - Post embedded centrally into a 200mm dia hole.
Concrete 25MPa min. All into flat 'good ground' as per NZS3604



If the Fence requested is to enclose an area containing water greater than 400mm deep it must comply with the relevant legislation, which is the Building Code clause F9/AS1 and section 162C of the Building Act.

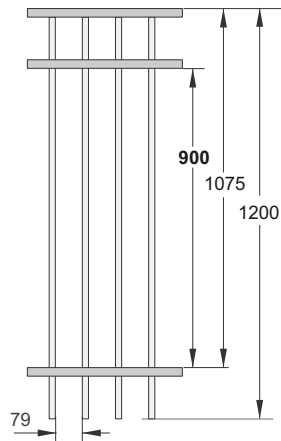
The components of this fencing system are suitable for compliance to the Building Code clause F9/AS1 and section 162C of the Building Act.

- 1 - The Pool fence may be a complete isolation barrier (4 x sides)
- 2 - or it may incorporate sections of an existing boundary fence
- 3 - and/or parts of the house.

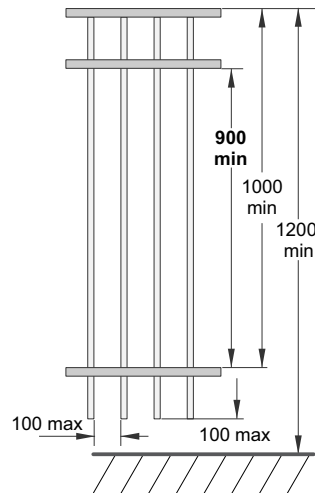
Important Note: The information shown is to be used as a guide only and does not represent full compliance with the requirements in NZBC Section F9 and the building Act Section 162C. Refer to F9/AS1 for additional information

1 - Fence Enclosure Requirements

Note: A Building Consent is required when installing or replacing a Swimming Pool Fence. Refer to NZBC Clause F9



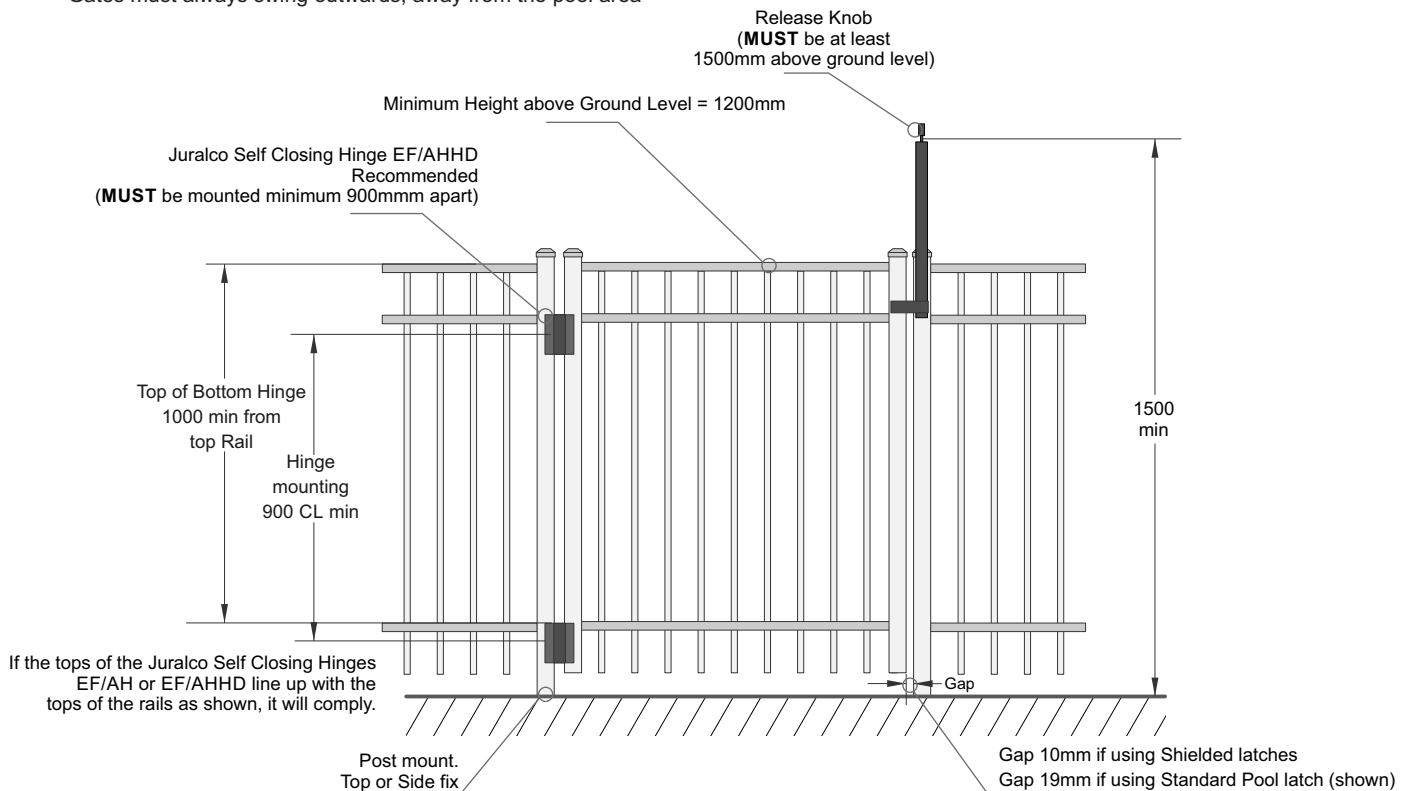
Juralco Fencing
Complies if mounted no more than 100mm above Ground Level



NZS 8500:2006 and NZ Building Code clause F9/AS1
Pool Fencing Requirements

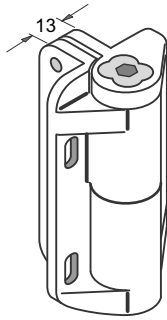
2 - Gate Requirements

- Gates must always swing outwards, away from the pool area



If the tops of the Juralco Self Closing Hinges EF/AH or EF/AHHD line up with the tops of the rails as shown, it will comply.

Heavy Duty
Adjustable Tension Hinge,
Legs. Nylon, Black. Pairs
Part No JEF/AHHD



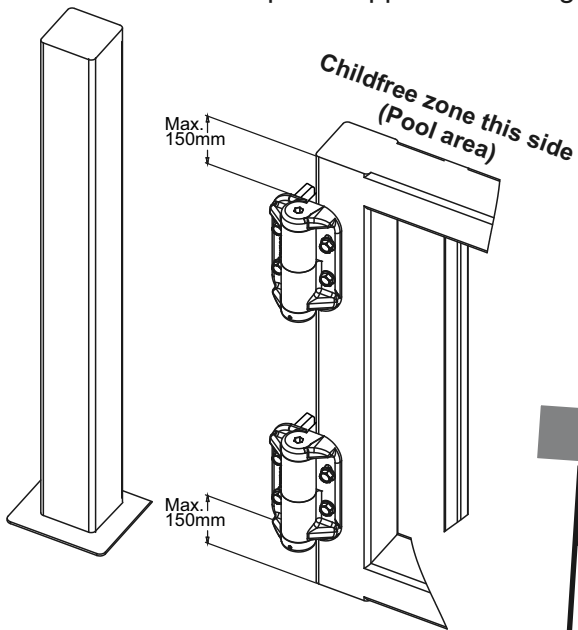
Self Closing
Max Weight 45kg

Important Note:

Swimming pool gates, fences and their hardware systems are designed to aid and not substitute for adult supervision. To the extent this product is used around a pool, prior to installing, consult local licensing and safety authorities for approvals and/or requirements. This Hinge will operate properly only if installed in accordance with instructions.

START

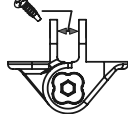
Fastener pack supplied with Hinge



Lay the gate flat.
Position Hinges more than 100mm from top/bottom edges.
Mark Hinge holes.
Mount Hinges to the Gate.
Hold the Gate/Hinges against post and mark holes then mount it.
Use all fasteners provided.

Note: Two types of fasteners are supplied. Use Countersunk screws here.

Note:
For JEF/AHHD
type only



With Gate closed adjust the tension of both hinges. Using the 6mm allen key provided, rotate in 1/4 increments.

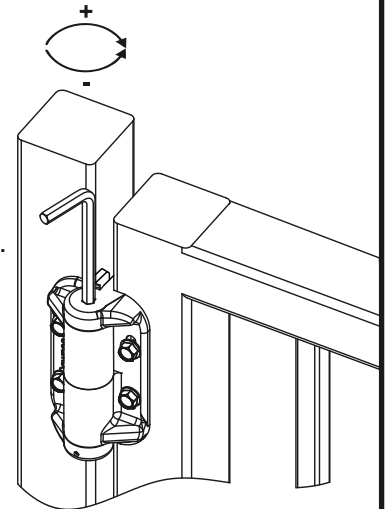
Turn clockwise to increase tension.
Turn it in the opposite direction to reduce tension.-

Warning:

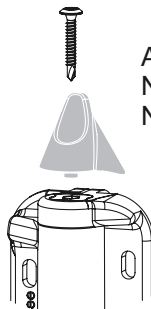
Don't rotate tensioner more than two full turns.

Important:

Support the gate weight while adjusting tension



Add the Anti-Step cap to the bottom hinge. Note locator notch on both parts. Nip it up with a screwdriver. Slightly open gate 25mm to check the gate closes.



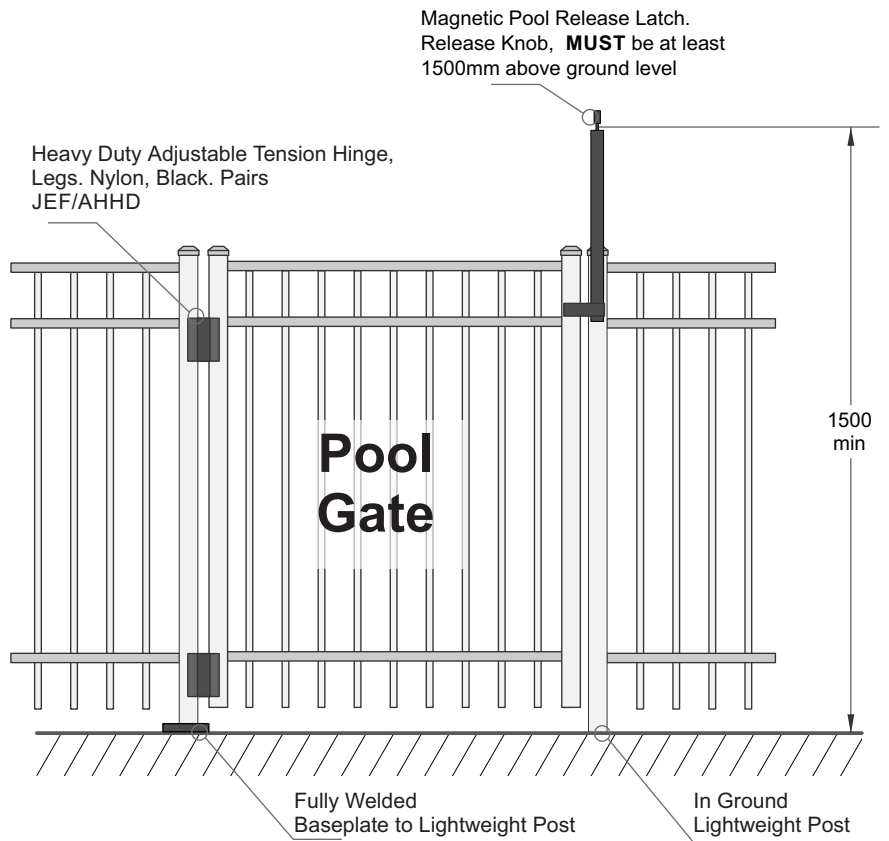
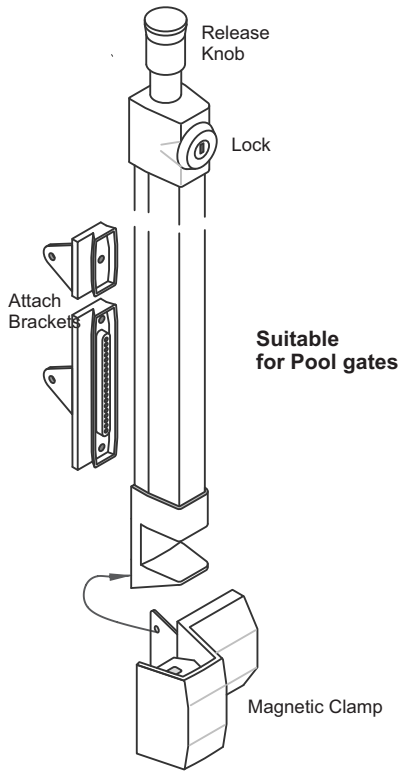
FINISH

Downee Maintenance

- Annually inspect hinges or more frequently if the gate is used often.
- Only lubricate with powdered graphite lubricant. Do not use petroleum products

Magnetic Pool Gate Latch
Nylon, Black
Part No JEF/APL

Latch - 540mm high OA



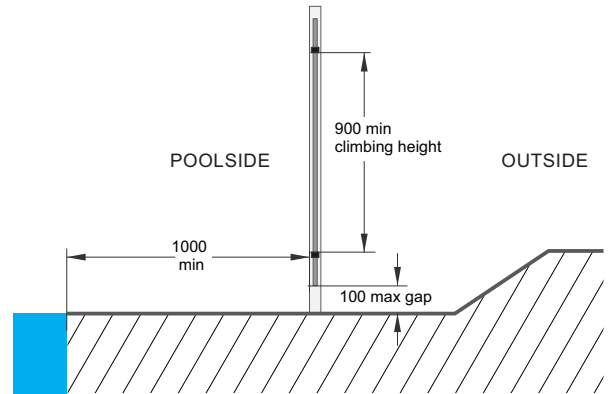
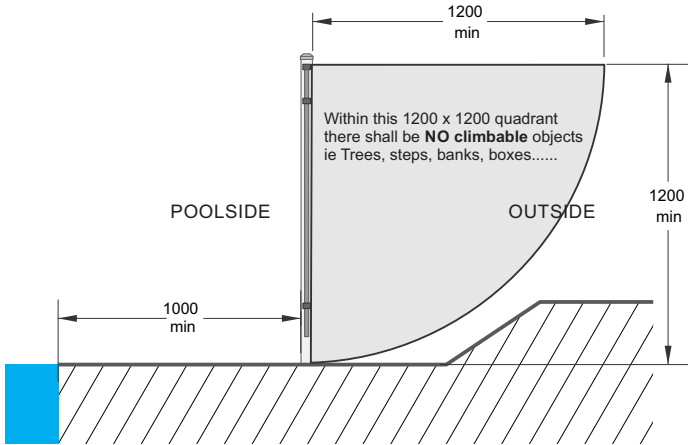
**Gates must always swing outwards,
away from the pool area**

3 - Location Requirements

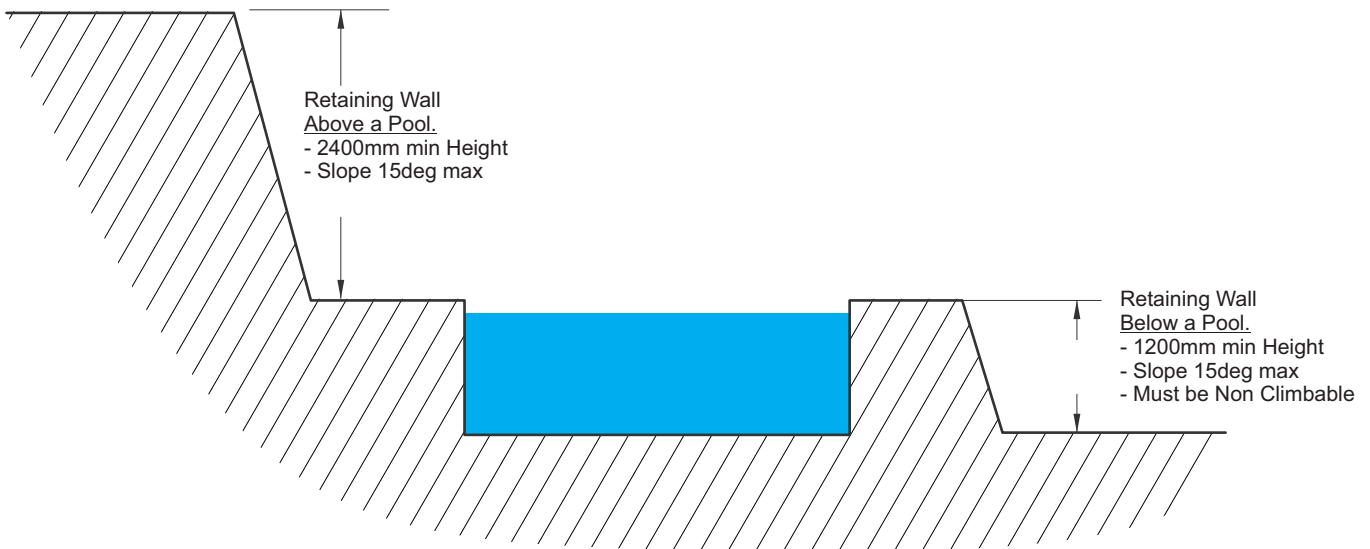
No part of the Pool enclosure must permit children to climb over a Pool enclosure fence. A Pool barrier that is located on a property boundary shall be not less than 1800mm high, measured from the ground level on the Pool side and be located not less than 1000mm horizontally from the waters edge.

- The three key measurements are 1200mm min height, a 100mm max gap under the fence and 900mm min climbing height

a - Effective Fence Height



b - Retaining Walls

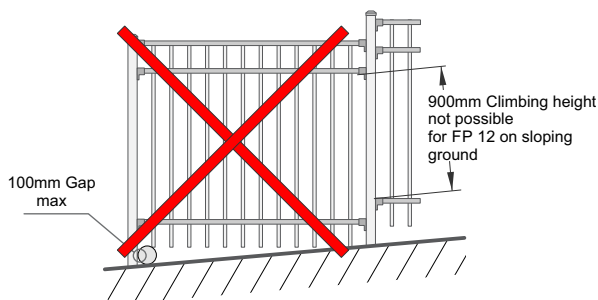
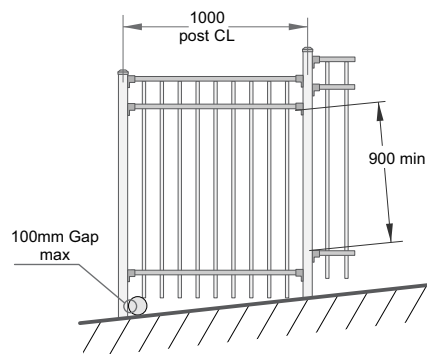
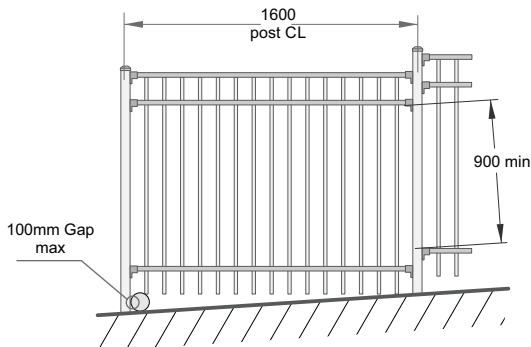
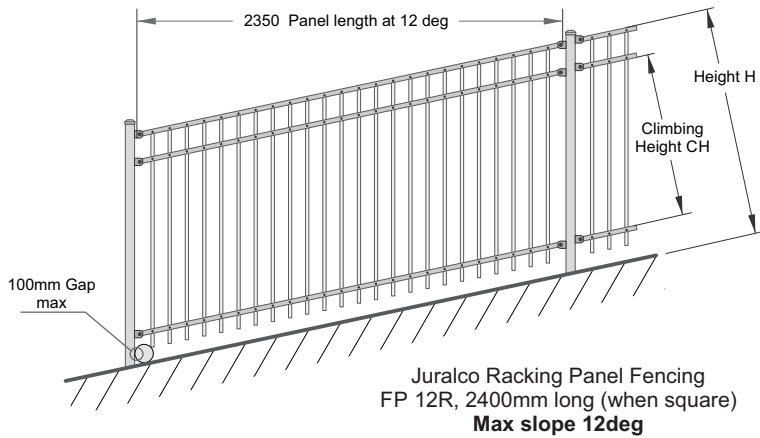


Important Note: The information shown is to be used as a guide only and does not represent full compliance with the requirements in NZBC Section F9 and the building Act Section 162C. Refer to F9/AS1 for additional information

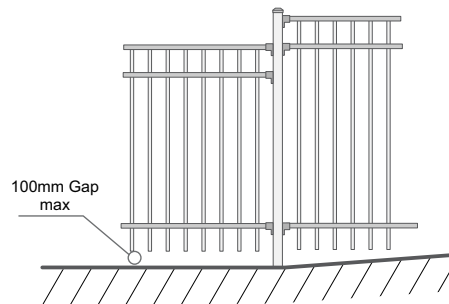
Pool Fencing on Sloping Ground

- All NZS height measurements are perpendicular to the ground, not vertical
- The three key measurements are 1200mm min height, a 100mm max gap under the fence and 900mm min climbing height

For Juralco Fencing being installed on sloping ground - use either the Racking Panel or the Level and Step method (unsuitable for FP12 fence)
The Racking Panel adjustable to the required slope up to 12 deg and is not welded.
Shown below are various possibilities, while maintaining a 100mm max gap under the fence.



Never use FP12 Fencing on sloping ground
Climbing height cannot be 900



WARNING

For Fences enclosing Swimming Pools, above or below Ground

While the construction of this fence complies with the Building Code clause F9/AS1 and section 162C of the Building Act the layout and installation must be approved by the owner and the local Council.

- Your layout is a recommendation only to the owner.
- It is the owners responsibility to ensure that the fence's layout complies with the local body regulations.
- The regulations can be subject to individual local body interpretation.
- It is up to the owner to ensure in each individual case that the pool fence meets the requirements of their local Council.
- Do not install without sighting the Council approval documentation.

Important Note: The information shown is to be used as a guide only and does not represent full compliance with the requirements in NZBC Section F9 and the building Act Section 162C. Refer to F9/AS1 for additional information

Powder Coating Installation Care

Warning re use of solvents:

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

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

Joinery Protection during Installation:

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

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

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

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

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



Powder Coating Maintenance

External - Maintenance Program:

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

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

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

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

Cleaning your powder coating:

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



Restoring weathered or scratched surfaces:

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

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

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



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