

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 Glass Pool Gate System uses 10mm or 12mm Toughened Glass panels. The system suitable for Glass to Glass gates (Juralco Minipost and Infinity systems) or for Post to Glass (Juralco EDGE system)**

- Note 1** This system utilises adjustable hydraulic self closing hinges (non hold open) and a magnetic latch. The Hydraulic hinges are available in two types.  
1 - Glass to Glass type, suitable for Juralco Mini Post and Infinity Balustrade systems - 12mm Glass  
2 - Wall or Post to Glass type, suitable for Juralco EDGE Balustrade system - 10mm Glass
- Note 2** If the Fence requested is to enclose an area containing water greater than 400mm deep it must comply with the relevant legislation, which as from Jan 2017 is the Building Code clause F9 and section 162C of the Building Act. The Juralco Glass Pool Gate system complies.
- Note 3** For 10mm and 12mm toughened Glass, as applicable. Glass must have a minimum strength of 100MPa. All edges polished



### **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.

Our Ref: 20800

Tuesday, March 10, 2020

Greg Swain  
Juralco Aluminium Building Products  
PO Box 21 867  
Henderson  
Auckland 0650

Dear Greg,

**RE: POOL HINGE TESTING**

As requested we have observed tests carried out on the Juralco Glass Pool Gate System (part numbers HH90, HH180, JET/PL 90 & JET/PL180) self closing hydraulic hinges and magnetic latches.

Based on our observations we are satisfied that the pool gate hinge and latch systems mentioned above conform to NZS8500:2006 – Safety Barriers and Fences Around Swimming Pools, Spas and Hot Tubs, and the Fencing Of Swimming Pools Act 1987. The dimension and set-out requirements of the 'Juralco Glass Pool Gate System' manual and NZS8500:2006 must be adhered to by the installer.

The gate hinges must be adjusted to close automatically in accordance with NZS8500, taking into account the wind zone. If necessary the installer must give the pool gate system special consideration to higher wind loadings which may require the gate to be fitted with an additional hinge or hinges.

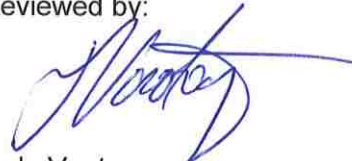
We trust this provides the information that you are seeking.

Yours faithfully,



Mark Alsop  
BE (Civil) MEngNZ

Reviewed by:



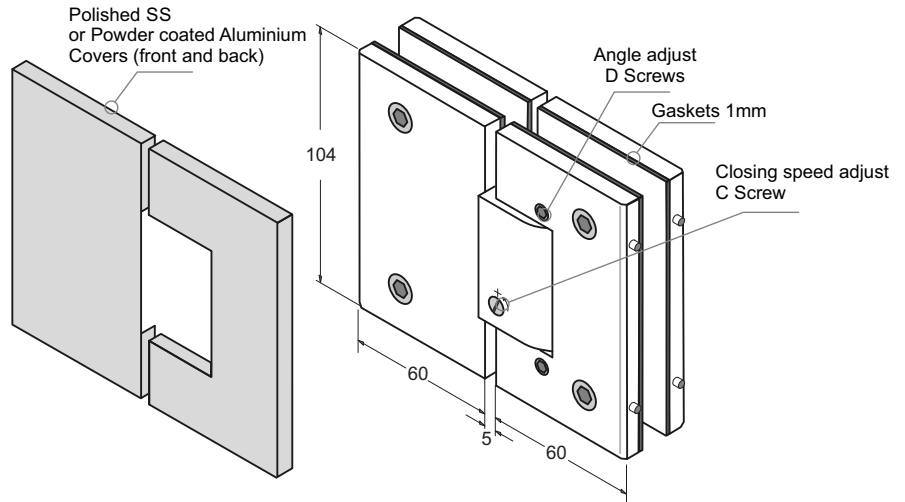
Jade Vaotogo  
BE (Civil) CMEngNZ CPEng



**Juralco Glass to Glass Hydraulic Hinges and Latches for Pool Gates  
using 12mm Toughened Glass  
For Mini Post and Infinity Balustrade systems**

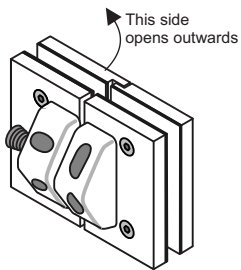
**Glass to Glass SS Hinge  
12mm Glass**

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

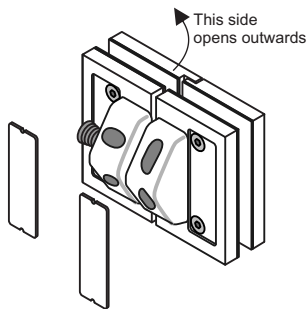


**Glass to Glass Latches**

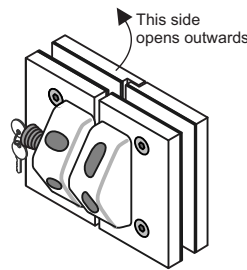
Note :Can be assembled as RH or LH



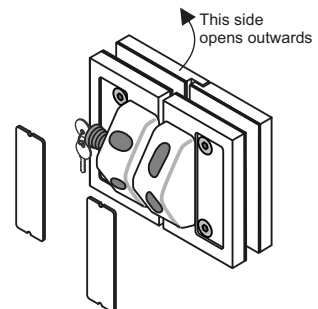
Clamp Plates SS  
Latch Non Locking type  
Part No JET/PL 180/PSS



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

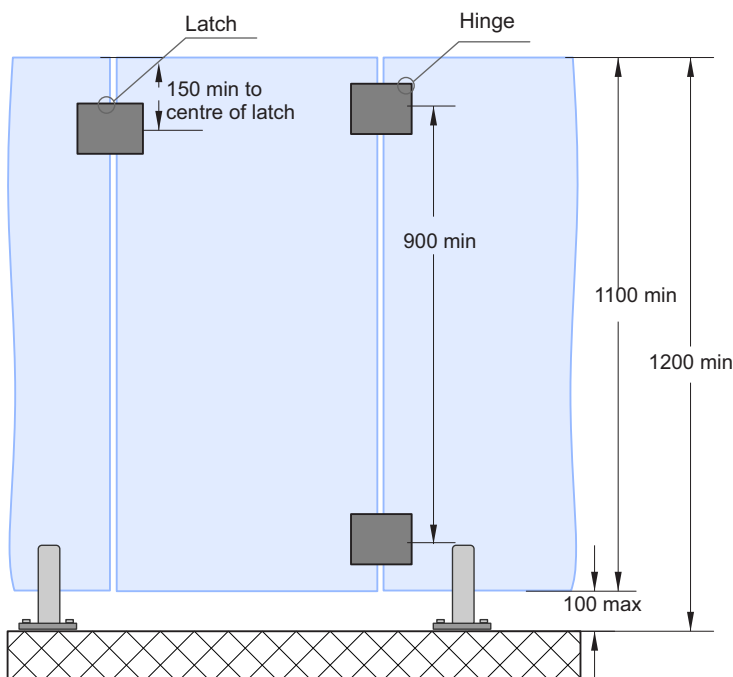


Clamp Plates SS  
Latch Locking type  
Part No JET/PL 180CLK/PSS



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

**Latch and Hinge Positions**



**Specifications..**

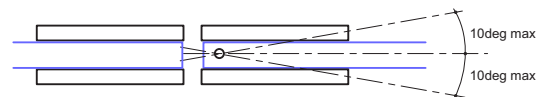
Glass Thickness 12mm  
Hinge and Latch packers, 1.0mm each side  
Gate width max = 900mm  
Gate Height max = 1250mm  
Gate Weight max = 65 kg  
Hinge - Auto close. Adjustable Closing Speed and angle.  
Non Hold open  
Latch, Side pull magnetic. Gap = 8mm min -12mm max  
Gate to open outwards; Latch to be mounted on inside.  
Installation to conform to NZS8500:2006

**Closing Speed Adjust**

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

**Angle Adjust**

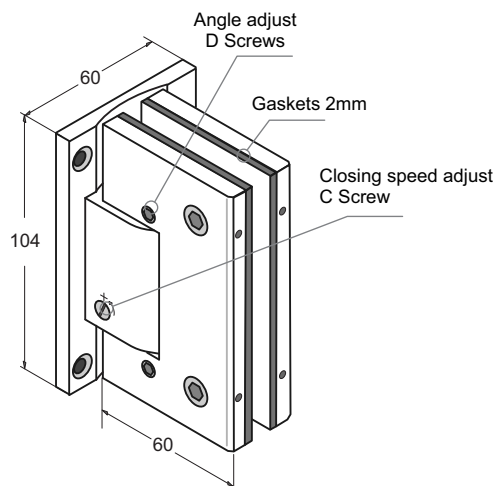
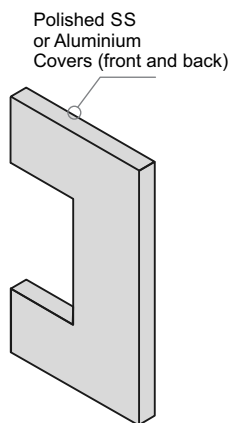
- Remove the covers
- Using a M3 allen key, loosen the two D screws 360deg.
- Adjust the angle ( +, - 10 deg max)
- Tighten both firmly at correct angle



# Juralco Wall or Post to Glass Hydraulic Hinges and Latches for Pool Gates For EDGE Balustrade systems using 10mm Toughened Glass

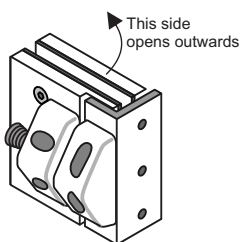
Wall or Post to Glass  
SS Hinge, 10mm Glass

Powder Coated - Part No JET/HH90/SCC  
Polished SS - Part No JET/HH90/PSS

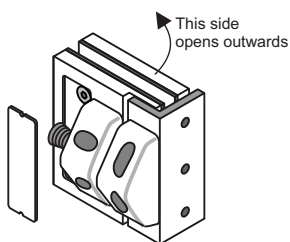


Wall or Post to Glass Latches

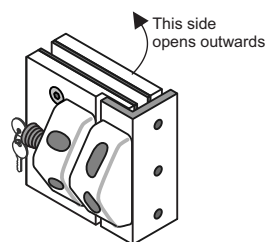
Note : Can be assembled as RH or LH



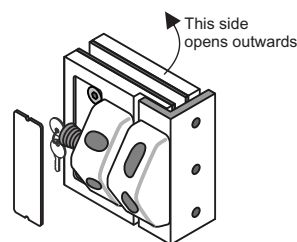
Clamp Plates SS  
Latch Non Locking type  
Part No JET/PL 90/PSS



Clamp Plates Powder Coated  
Latch Non Locking type  
Part No JET/PL 90/SCC



Clamp Plates SS  
Latch Locking type  
Part No JET/PL 90KLK/PSS



Clamp Plates Powder Coated  
Latch Locking type  
Part No JET/PL 90KLK/SCC

Latch and Hinge Positions

**Note : The Hydraulic hinges and Latch must be attached directly to the EDGE posts**

## Closing Speed Adjust

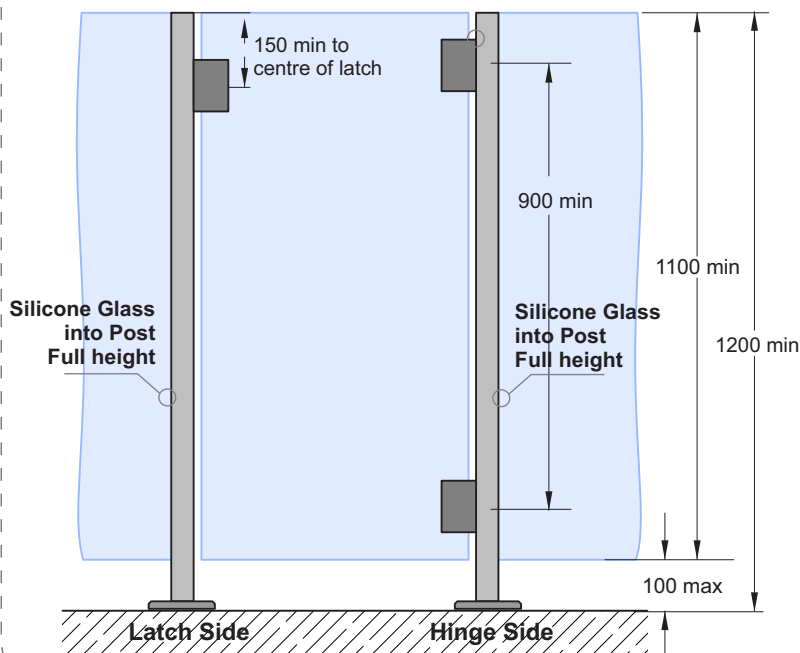
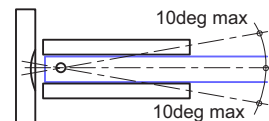
- Remove the covers
- Slotted screwdriver, turn Screw C
- Clockwise = slower.
- Synchronise both hinges for equal speed.

## Specifications..

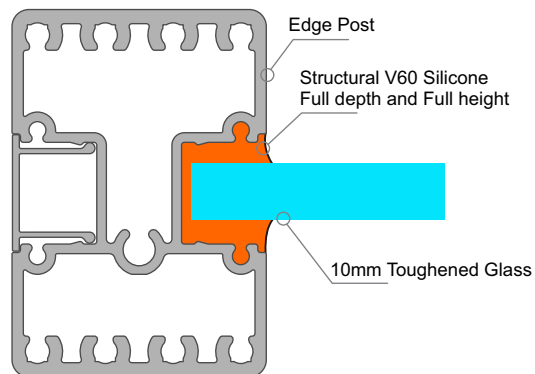
Glass Thickness 10mm  
Hinge and Latch packers, 2.0mm each side  
Gate width max = 800mm  
Gate Height max = 1250mm  
Gate Weight max = 65 kg  
Hinge - Auto close. Adjustable Closing Speed and angle.  
Non Hold open  
Latch, Side pull magnetic. Gap = 8mm min -12mm max  
Gate to open outwards; Latch to be mounted on inside.  
Installation to conform to NZS8500:2006

## Angle Adjust

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



**Note re : Silicone Glass into Post - Full Height**



To prevent the Post pulling away from the Glass as the Gate opens it is essential to attach the Glass to the Post with Structural V60 Silicone to the Full depth on both sides and to the Full height of the Post. Allow a minimum of 48hrs to cure hard. Use small packers top and bottom to centralise the Glass in the Pocket.



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**Juralco Glass Pool Gate System**

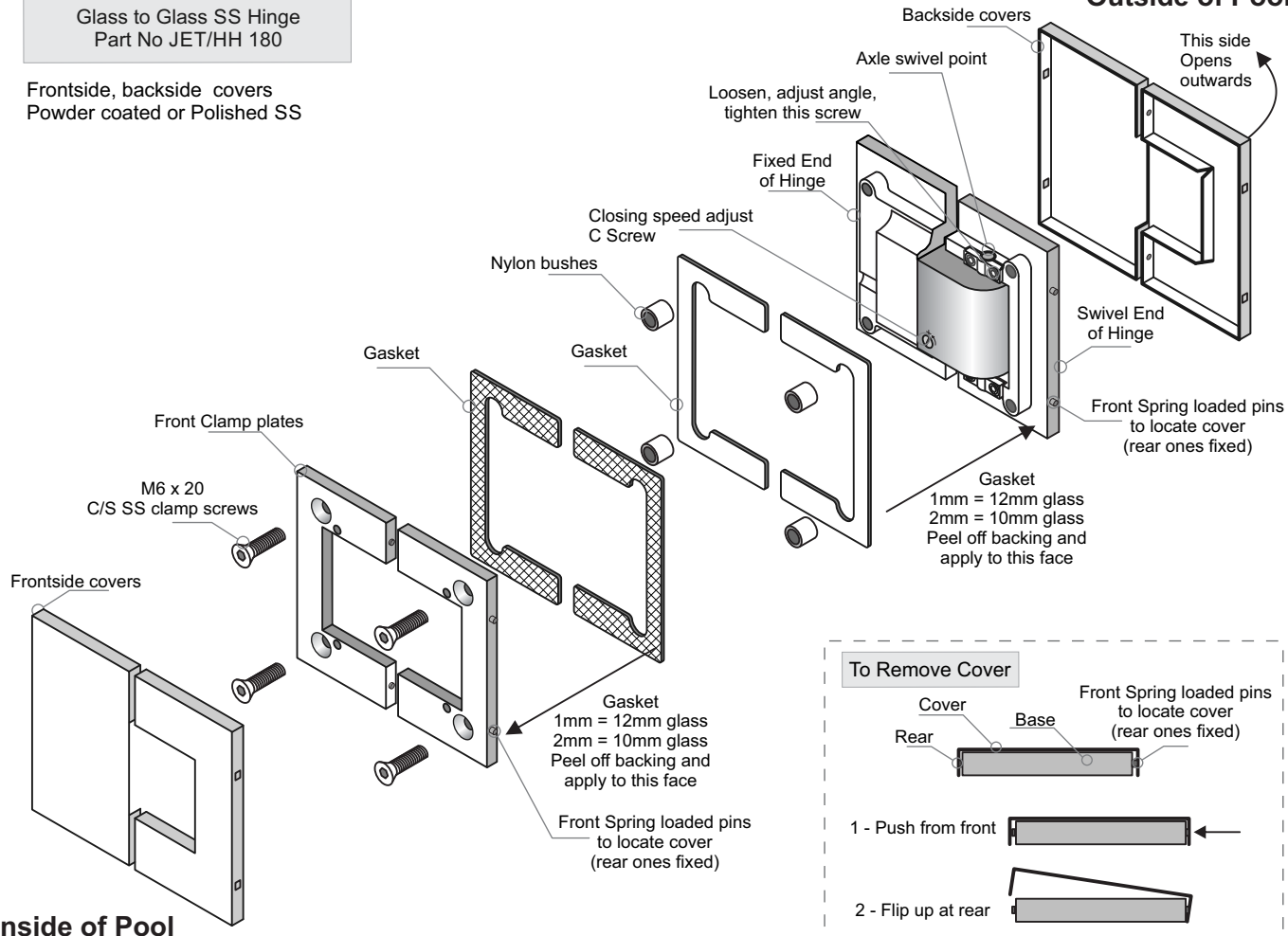
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## Juralco Glass Pool Gate System - Hinges and Parts

### Glass to Glass SS Hinge Part No JET/HH 180

Frontside, backside covers  
Powder coated or Polished SS

**Outside of Pool**

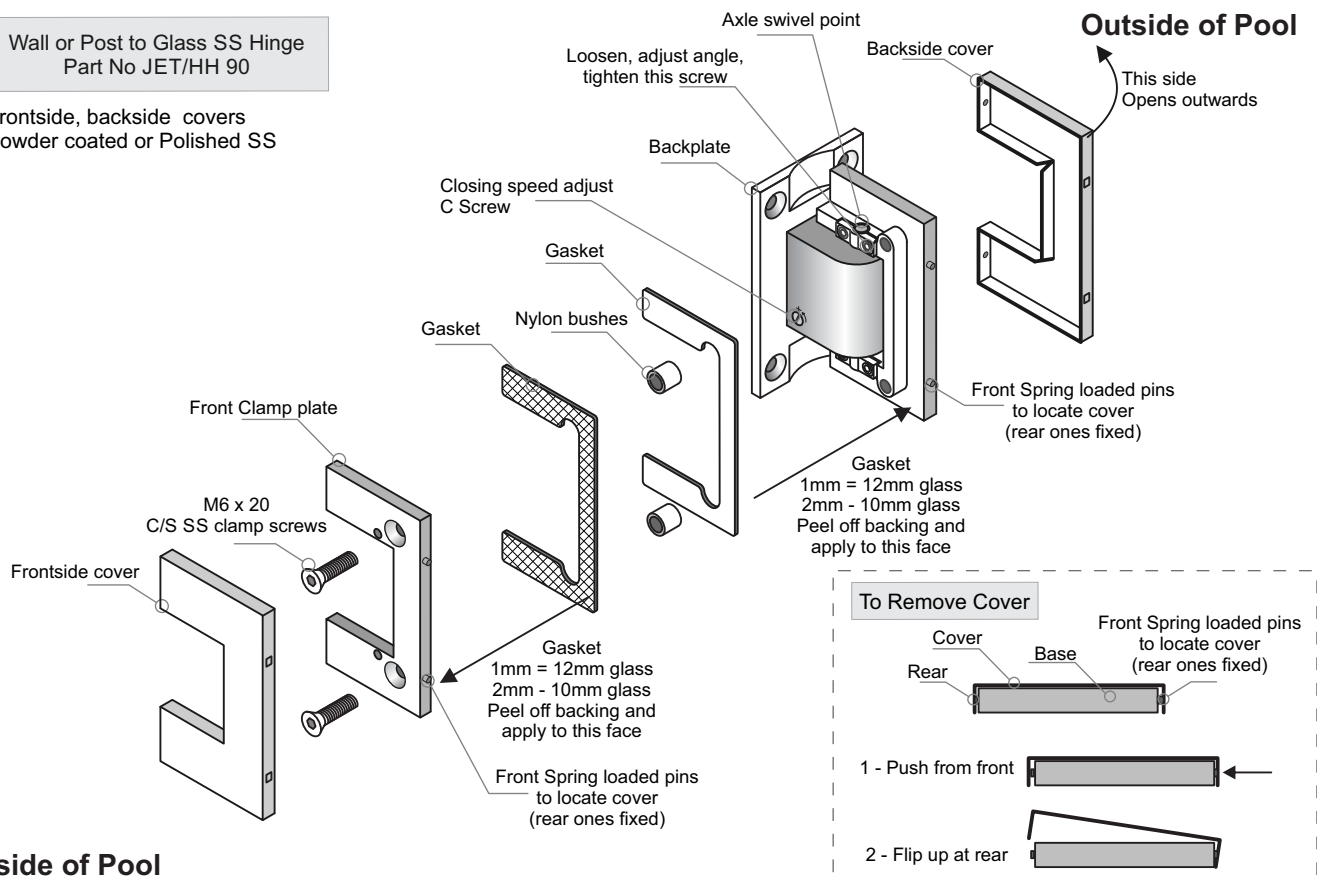


**Inside of Pool**

### Wall or Post to Glass SS Hinge Part No JET/HH 90

Frontside, backside covers  
Powder coated or Polished SS

**Outside of Pool**



**Inside of Pool**



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**Juralco Glass Pool Gate System**

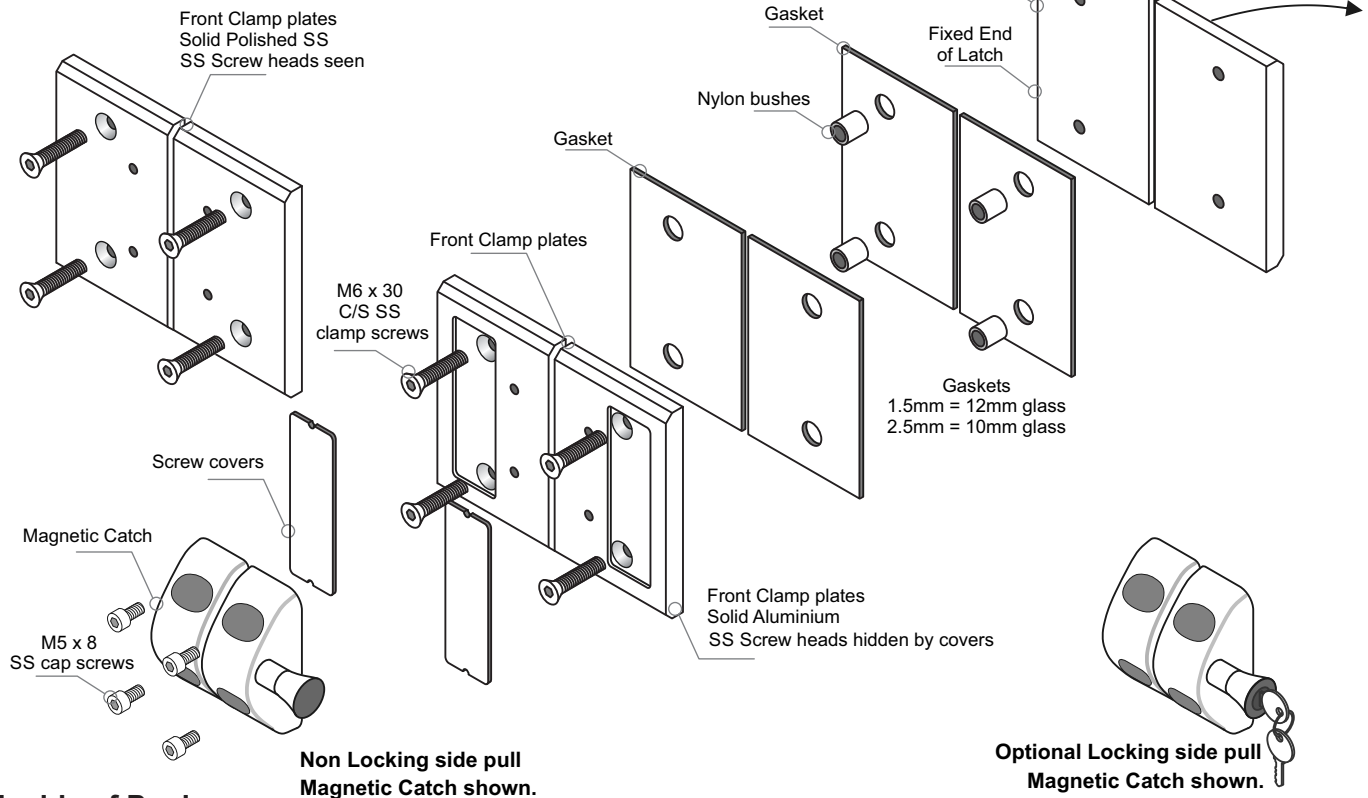
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## Juralco Glass Pool Gate System - Latch and Parts

### Glass to Glass Pool Gate Latch

Latch - Non Locking or Locking type  
Clamp Plates - Powder coated or Polished SS  
See p4 for Part No's

### Outside of Pool

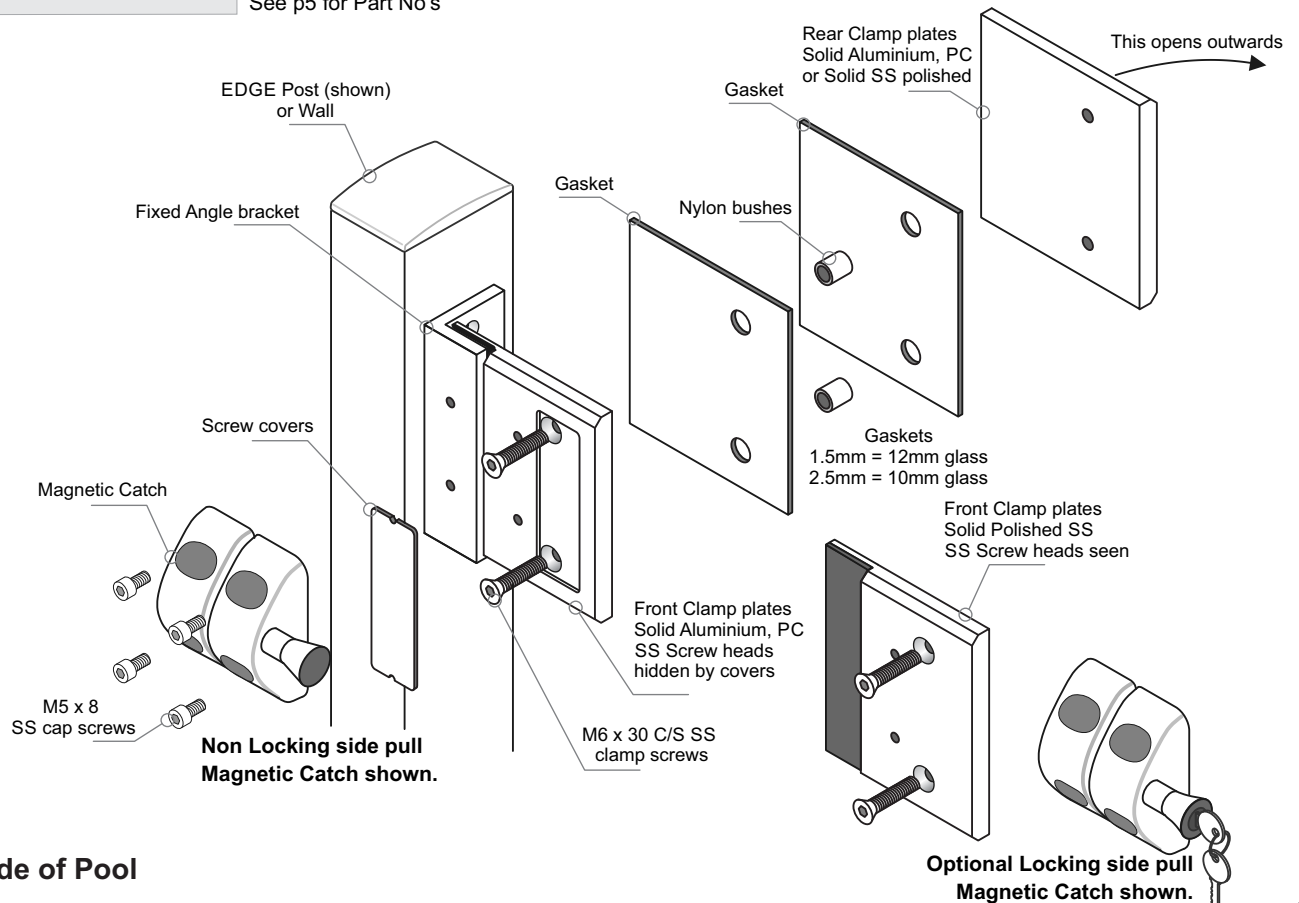


### Inside of Pool

### Wall or Post to Glass Pool Gate Latch

Latch - Non Locking or Locking type  
Clamp Plates - Powder coated or Polished SS  
See p5 for Part No's

### Outside of Pool



### Inside of Pool

## Juralco Glass Pool Gate System - Side Pull Latch Fitting

### PLEASE CAREFULLY READ ALL OF THE INSTRUCTIONS PRIOR TO INSTALLATION

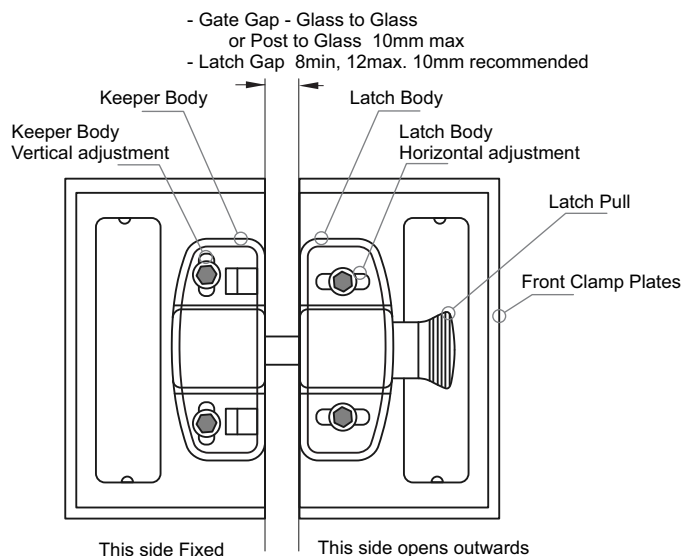
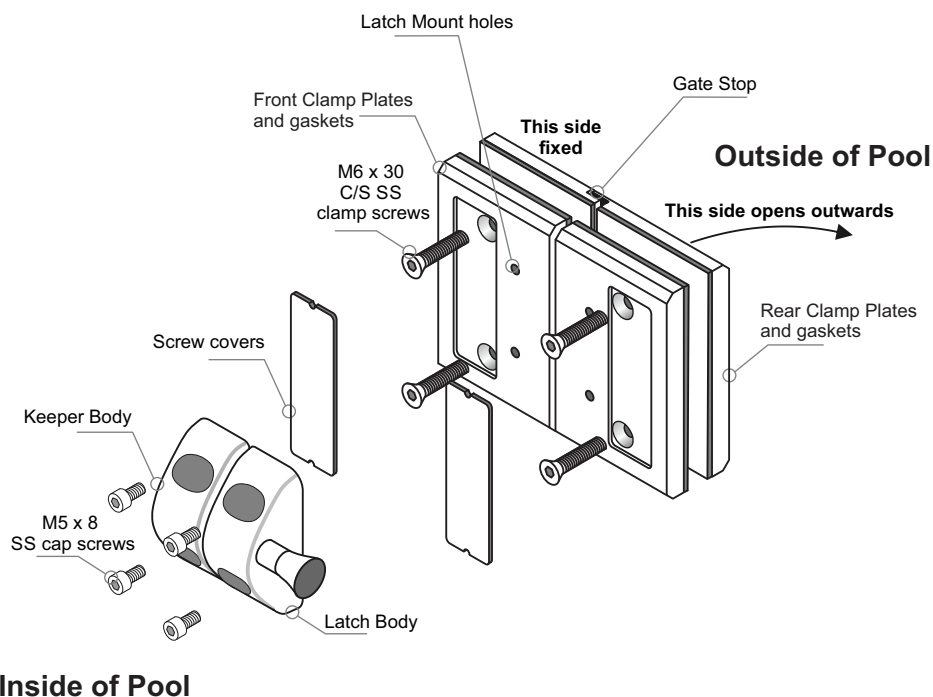
#### Step 1 - Mounting the Side Pull Latch on a gate - Glass to Glass instructions below. Modify slightly for Glass to Post.

- First attach the 2 x Front and 2 x Back Clamp Plates (using the Gaskets and Nylon bushes to protect the Glass) to the Glass.  
Nip up the M6 x 30SS screws
- The Side Pull Latch to be mounted on the inside of the Gate (Front Clamp plates)
- Use the M5 x 8 cap screws supplied to lightly fix the Keeper and Body of the Side pull latch to the Front Clamp Plates.  
The Latch body on the Gate and the Keeper body on the Fixed side.
- The Glass Gap to be 10mm max. The Latch Gap to be 8mm min. 12mm max -10mm recommended
- Use the Vertical adjustment slots on the Keeper Body to line up the Latch.
- Use the Horizontal adjustment slots on the Latch Body to create the correct gap. Nip up tight, clip 4 x caps in place.

#### Step 2 - Testing the Side pull latch

It is important to test the latching of the Side pull latch by shutting it at various speeds or, in case of a self-closing gate, letting go from various operating angles. The latch should engage properly. If not check the following:

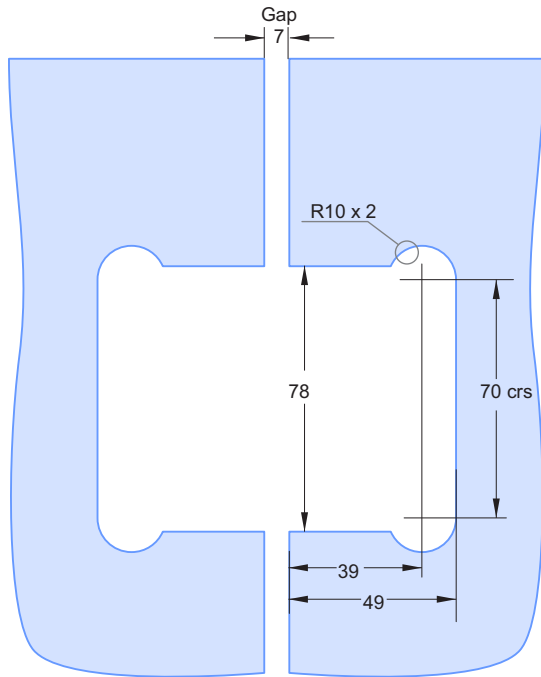
- Make sure the gate is hung properly and the gate and fence post are parallel.
- Make sure the latch pin sits in the center of the latch pin recess in the Keeper body.
- Make sure the tension on the self-closing hinges, is not too low or too high.





## Juralco Glass Pool Gate System - Glass Cutouts

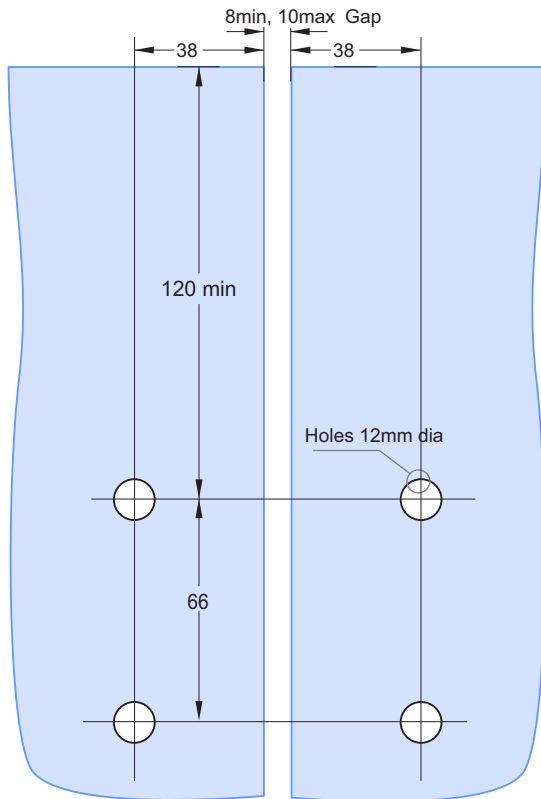
### Hinge - Glass to Glass



#### Hinge notes

- Glass gap 7mm (not adjustable)
- Adjust closing speed to ensure gate closes from a stationary point 150mm from the closed position.
- Gate must open outwards

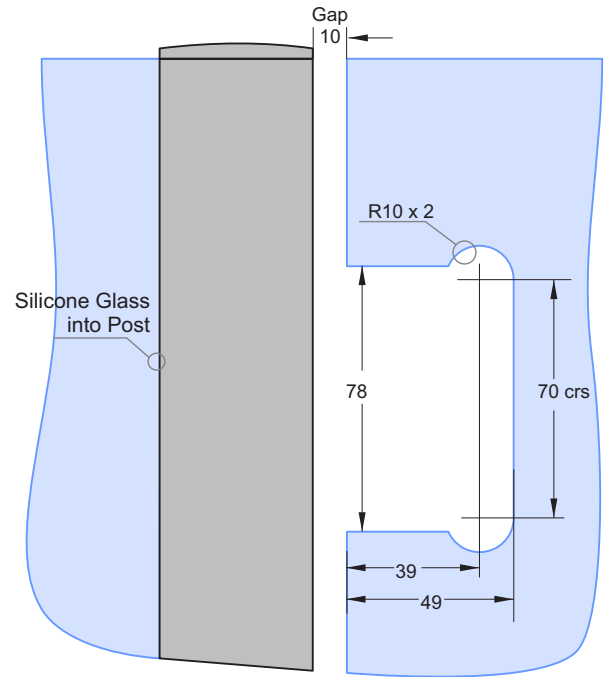
### Latch - Glass to Glass



#### Latch notes

- Glass gap 10mm max. Holes 12mm dia
- Latch to be mounted on inside of gate and latch C/L must be at least 150mm from top.

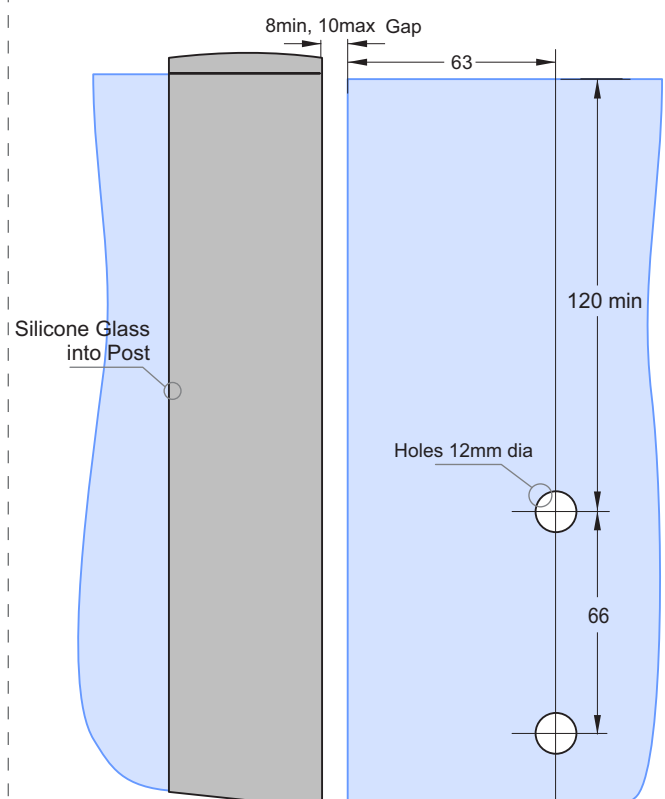
### Hinge - Wall or Post to Glass



#### Hinge notes

- Glass gap 10mm (not adjustable)
- Adjust closing speed to ensure gate closes from a stationary point 150mm from the closed position.
- Gate must open outwards

### Latch - Wall or Post to Glass

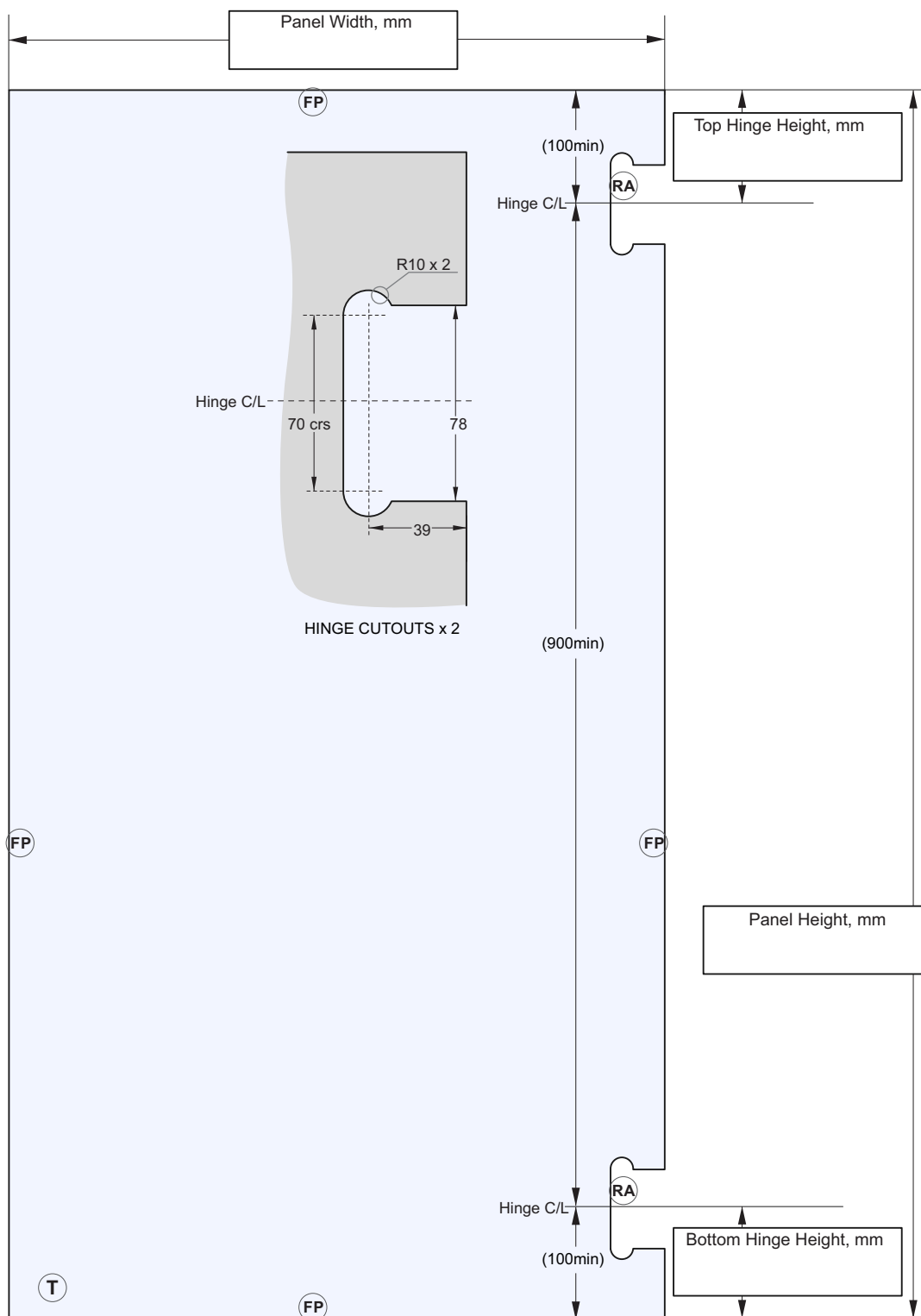


#### Latch notes

- Glass gap 10mm max. Holes 12mm dia
- Latch to be mounted on inside of gate and latch C/L must be at least 150mm from top.

## Glass Order Sheet 1

### Gate - Fixed Glass - Hinge Panel



**Notes :**

- All Edges Flat Polish, or as per balance of this order
- Toughened Mark at Bottom Left

All measurements based on **1100mm high Gate, 100mm gap under**

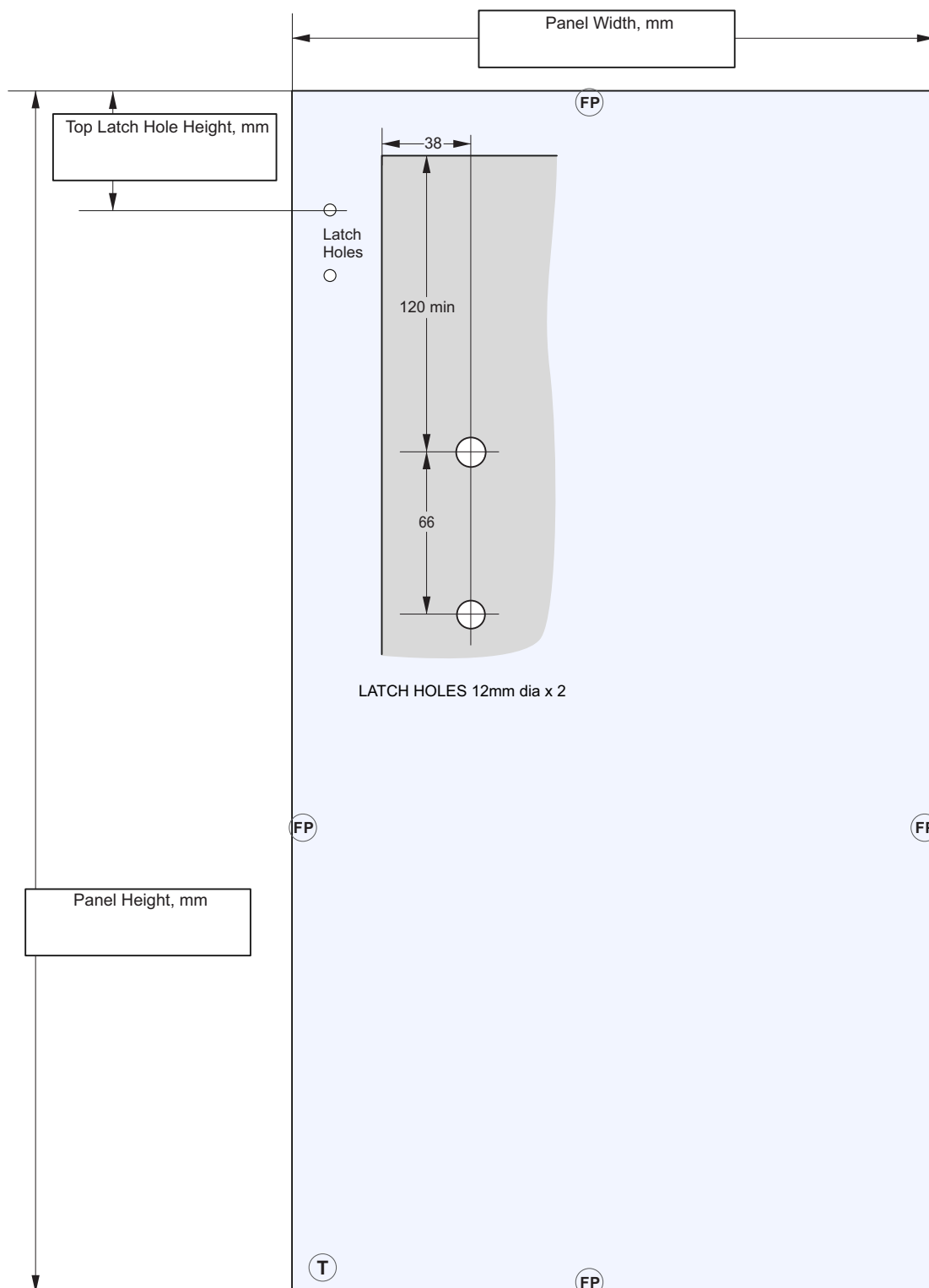
- Toughened Stamp **(T)**
- Flat Polish Edges **(FP)**
- Rough Arris Edges **(RA)**





## Glass Order Sheet 3

### Gate - Fixed Glass - Latch Panel



**Notes :**

- All Edges Flat Polish, or as per balance of this order
- Toughened Mark at Bottom Left

All measurements based on **1100mm high Gate, 100mm gap under**

- Toughened Stamp **(T)**
- Flat Polish Edges **(FP)**
- Rough Arris Edges **(RA)**



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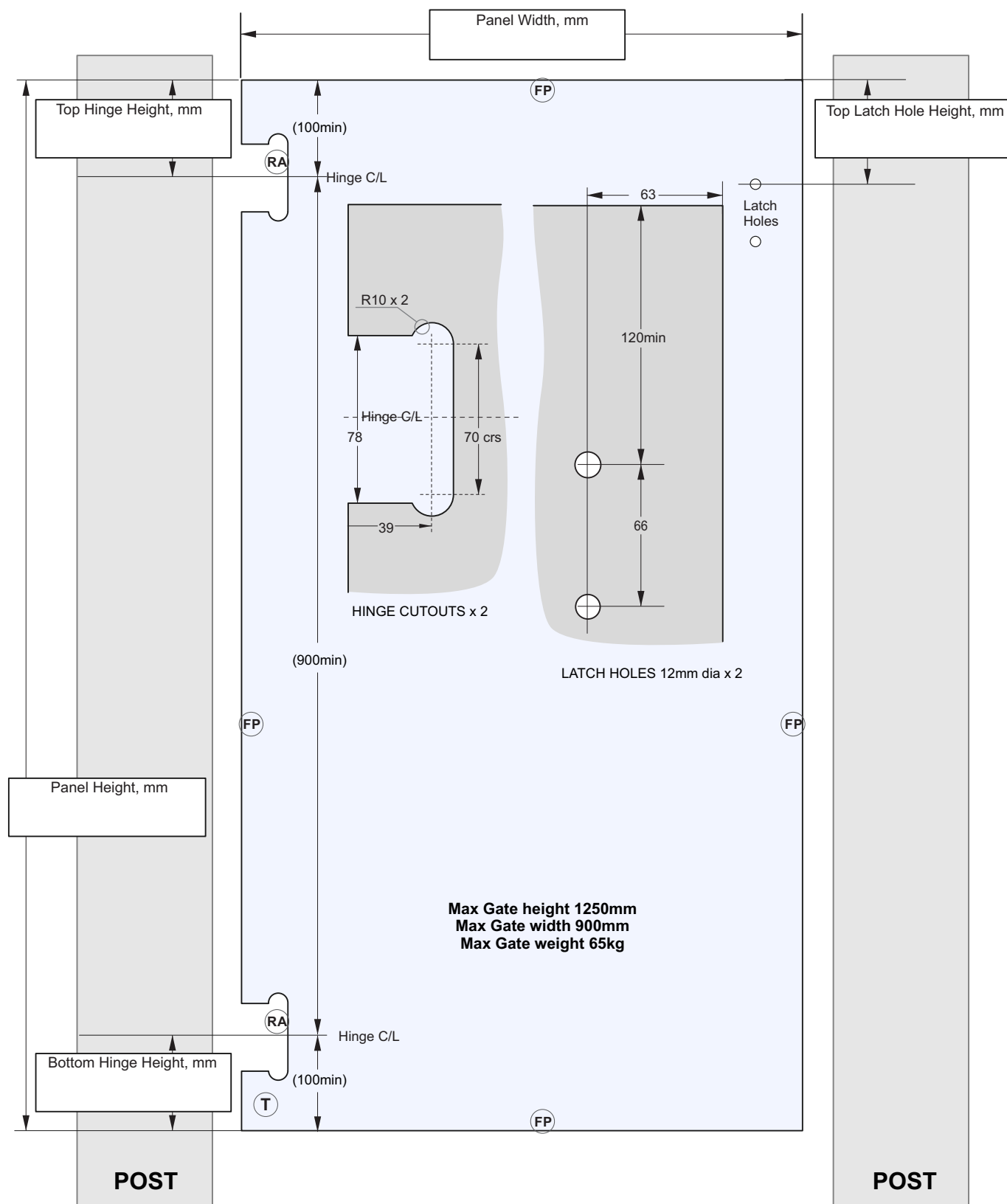
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# Glass Order Sheet

**Gate - Hinged Gate Panel only (for Post to Glass)**



Notes :

- All Edges Flat Polish, or as per balance of this order
- Toughened Mark at Bottom Left

All measurements based on **1100mm high Gate, 100mm gap under**

- Toughened Stamp **(T)**
- Flat Polish Edges **(FP)**
- Rough Arris Edges **(RA)**

## Juralco Glass Pool Gate System - Glass Care and Maintenance

### Glass Cleaning and Maintenance

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

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

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

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

### Scratches and Metal Scrapers

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

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

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

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

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

### **Glass Cleaning, Do's and Don'ts**

#### **DO NOT..**

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

#### **DO...**

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

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

All above reprinted with permission from Metro Glass Tech



# Juralco Glass Pool Gate System - Powder Coating Care and Maintenance

## Powder Coating Installation Care

### **Warning re use of solvents:**

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

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

### **Joinery Protection during Installation:**

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

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

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

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

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



## Powder Coating Maintenance

### **External - Maintenance Program:**

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

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

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

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

### **Cleaning your powder coating:**

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



### **Restoring weathered or scratched surfaces:**

Repair of Scuffed or Scratched surfaces

Dulux Spray Cans are available in all colour card colours.

Repair of Small Scratches or Chips.

Dulux Dabsticks are ideally suited for the repair of small scratches.

Dabsticks may not be available in all colour card colours.

Repair of Weathered areas .

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



Contact Dulux Powder Coatings , ph 0064 9 441 8244

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**Juralco Glass Pool Gate System**

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