



# Frameless Pool Fences, Gates and Wind Break Screens

Frameless glass fencing is unobstructive, easy to maintain, and is extremely difficult to scale and climb, perfect for pool enclosures. A number of configurations are possible, fitted with corrosion resistant stainless steel or aluminium fittings.







# Frameless Pool Fences, Gates and Wind Break Screens

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#### **AREA ICONS KEY:**

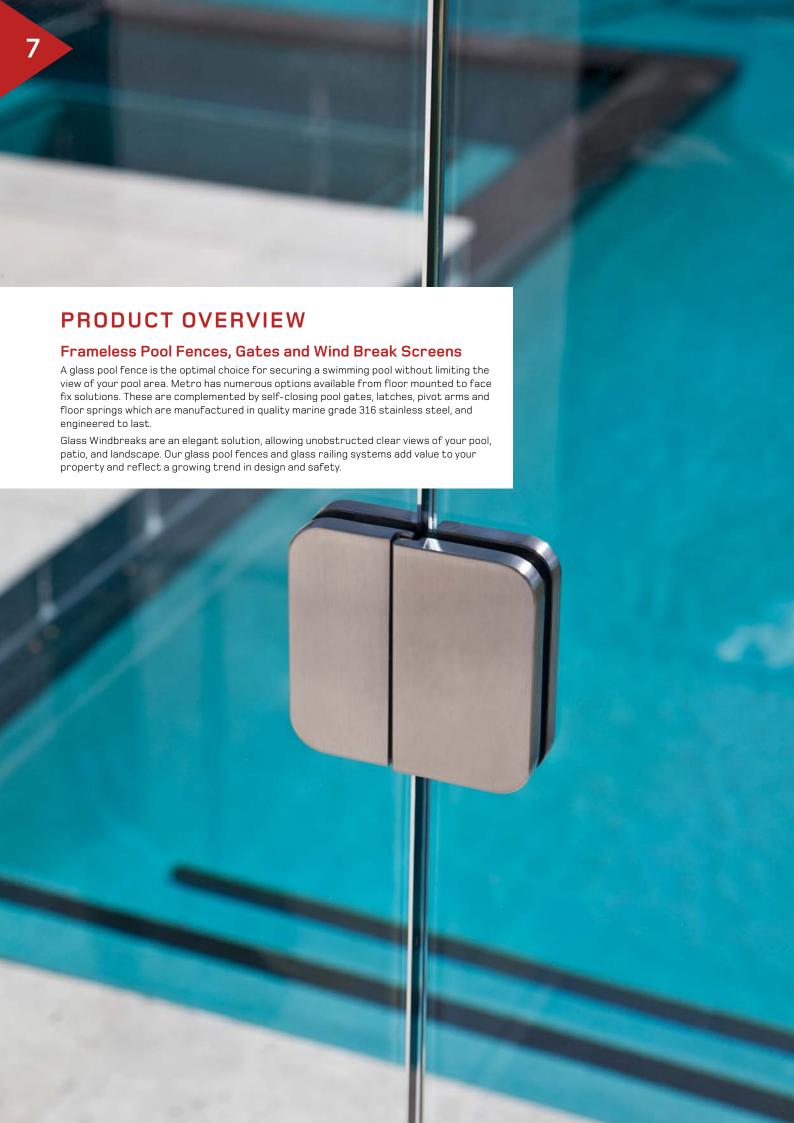








DOORS DOORS





#### **Guideline to Pool Fencing Regulations**

A fence is required to enclose an area containing water more than 400mm deep. It must comply with pool safety legislation (NZBC clause F9 and 162C of the building Act).

- ▶ A pool fence may be a complete isolation barrier (4 Sides).
- ▶ Or it may incorporate parts of the house.
- And or sections of an existing boundary fence, where it permits.

No part of the pool enclosure should allow children to climb over the pool fence, including climbable objects such as tables, rocks, trees.

#### **Pool Gates**

- Minimum 1200mm high and at least a 1200mm arc from any permanent projection or object permanently placed on the ground outside.
- Must open outward, away from the pool area.
- Must self-close and latch into position.
- Any release latch is required to be 1500mm above ground level/or 300mm down the inside of the gate (1200+300=1500).
- Recommended 10-12mm thick TEMPAFLOAT® Toughened Safety Glass. (Matches Hinges) (In Accordance with Wind Zone).
- ► There shall be no openings in the pool gate that a 100mm diameter sphere could pass through.

#### **Pool Fencing**

- Minimum 1200mm high and at least a 1200mm arc from any permanent projection or object permanently placed on the ground outside.
- ► Recommended 10-12mm thick TEMPAFLOAT® Toughened Safety Glass. (Matches Hinges) (In Accordance with Wind Zone)
- ▶ Where local fencing is also balustrading (protecting a fall of 1000mm or more) it must comply with the "Balustrading" regulation AS/NZS 1170:2002, NZS 4223.3.2016, NZ Building Code B1, B2, F2, F4 and F9, where applicable.
- ▶ There shall be no openings in the pool fence that a 100mm diameter sphere could pass through.

#### **Support Inquiries**

► Metro Technical phone (09) 927 3000 or email technical@metroglass.co.nz



# **Standard Pool Gate Components**

Pivot Arms (Top and Bottom Patches), Sealing Compound, Grout.

		0:			_			
Product	Model	Sizes mm	Finish	Material	Туре	Application	Area	
PATCH TO PATCH POOL GATE PIVOT	301133	240x29mm	PSS	316 STAINLESS STEEL	PIVOT ARM	POOL GATE PIVOT ARM	Pool Gates	
ARM	301134	240x29mm	SSS		FIXING:	1 TV GT ATTIVI		
*Used with two MP20 Patch Fittings		GLASS THICKNESS: 10-12mm	ON REQUEST: POWDERCOAT		PATCH TO PATCH		USED WITH X2 MP20 TOP PATCH FITTING	Internal 8 External
							-	
GLASS TO GLASS	301135	140x75mm	PSS	316 STAINLESS	PIVOT ARM	POOL GATE	Pool	
PATCH POOL GATE PIVOT ARM	301136	140x75mm	SSS	STEEL	FIXING:	PIVOT ARM	Gates	
© •		GLASS THICKNESS: 10-12mm	ON REQUEST: POWDERCOAT		GLASS TO PATCH	USED WITH X2 MP20 TOP PATCH FITTING	Internal 8 External	
WALL MOUNT	301144	84x60mm	PSS	316 STAINLESS STEEL	PIVOT ARM  FIXING:  WALL TO  PATCH	POOL GATE PIVOT ARM	Pool	
TO PATCH POOL GATE PIVOT ARM	301143	84x60mm	SSS				Gates	
•		GLASS THICKNESS: 10-12mm	ON REQUEST: POWDERCOAT			USED WITH X2 MP20 TOP PATCH FITTING	Internal 8 External	
TOP PATCH	301092	164x50x30mm	ANOD NATURAL	316 STAINLESS STEEL	TOP PATCH FITTING	GLASS PATCH TO PIVOT ARM	Pool	
FITTING	301093	164x50x30mm	PSS				Gates	
/	301094	164x50x30mm	SSS				Internal &	
		GLASS THICKNESS: 10-12mm	ON REQUEST: POWDERCOAT				External	
OZONE	301077	Non Hold Open	SSS	316 STAINLESS	HYDRAULIC	POOL GATE	Pool	
HYDRAULIC BOTTOM PATCH		GLASS THICKNESS: 12mm	ON REQUEST: POWDERCOAT	STEEL	BOTTOM PATCH FIXING: PATCH TO PATCH	SELF CLOSING	Gates Internal 8 External	
BTS84 FLOOR SPRING	500583	15NM (Weak Strength)	SSS	316 STAINLESS STEEL	HYDRAULIC FLOOR	STD PIVOT DOOR	Internal & External	
HYDRAULIC PATCH KIT	500581	25NM (Std Strength)	SSS		MOUNTED PATCH FITTING			
		Non Hold Open GLASS THICKNESS: 8-12mm Max Door	ON REQUEST: POWDERCOAT					
		Weight 100kg						

ADDITIONAL: LATCH SELECTION REQUIRED

(Refer Handle selection table for additional options).

NOTE: Allowance must be made in the glass panel for cut out holes (Latch).



## **Standard Pool Gate Components**

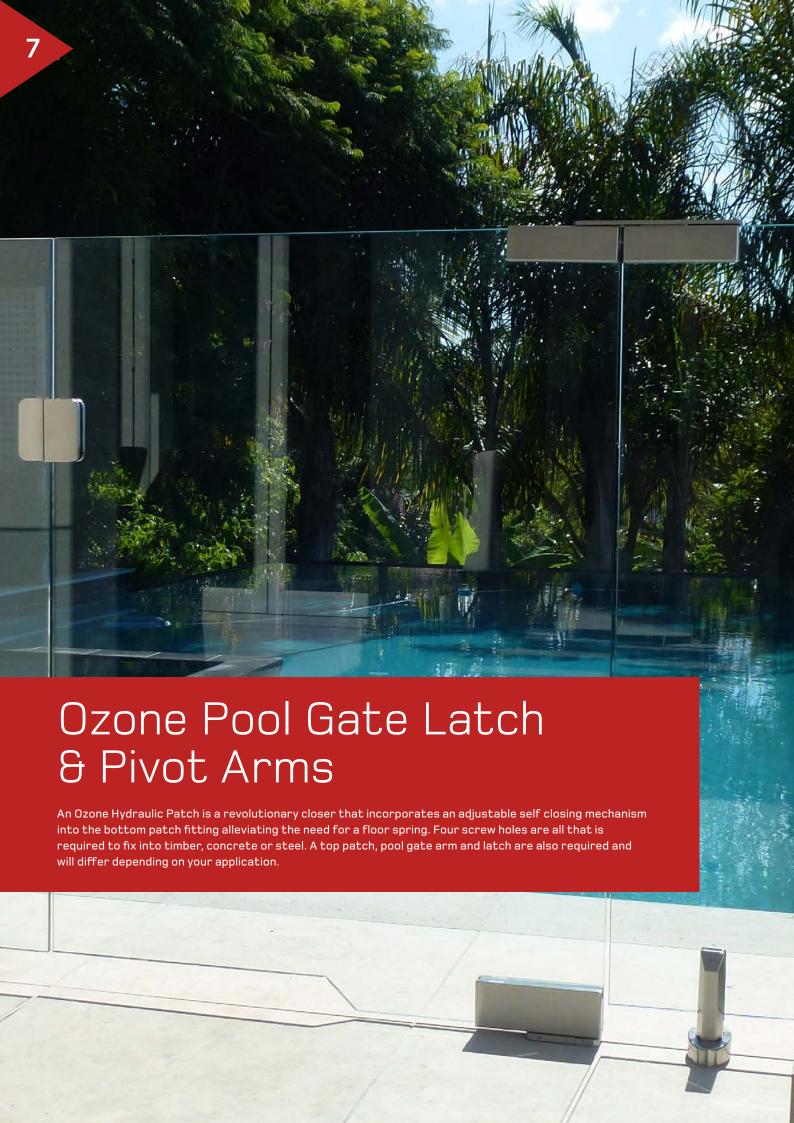
Pivot Arms (Top and Bottom Patches), Sealing Compound, Grout.

Product	Model	Sizes mm	Finish	Material	Туре	Application	Area
MFX840 FLOOR SPRING	300549	15NM (Weak Strength)	SSS	316 STAINLESS STEEL	HYDRAULIC FLOOR MOUNTED PATCH FITTING	STD PIVOT DOOR	Internal & External
HYDRAULIC PATCH	300547	25NM (Std Strength)	SSS				
· 6=		Non Hold Open GLASS THICKNESS: 8-12mm 307mm x 108mm x 40mm	ON REQUEST: POWDERCOAT		*Supplied with std 5mm extended spindles		
FLOOR SPRING SEALING	300552	145/435ml	N/A	N/A	SEALING COMPOUND	PROTECT FLOOR SPRING	Pool Gates
COMPOUND					COMPOUND	SUITS COMPONENT: MFX840 BTS84  FLOOR SPRINGS	Internal & External
SIKA GROUT	300005	25kg Bag	N/A	N/A	GROUT	LEVEL FLOOR SPRING	Pool Gates
200 W.							Internal & External

## ADDITIONAL: LATCH SELECTION REQUIRED

(Refer Handle selection table for additional options).

NOTE: Allowance must be made in the glass panel for cut out holes (Latch).











## **Key Features**

- ▶ Hydraulic self closing bottom patch fitting.
- ► Glass Mounted Pivot Arm (Inline).
- ▶ Glass Mounted Pivot Arm (90 degrees to Glass).
- ▶ Wall Mounted Pivot Arm.
- ▶ Post Mounted Pivot Arm.
- ► Top Patch Fitting.
- ▶ Pool Gate Latch 180 degree glass to glass (Inline).
- ▶ Pool Gate Latch 90 degree.
- ▶ Suits 12mm glass thickness.
- ► Adjustable closing speed.
- External and internal application.
- ▶ 316 or 2205 Satin Stainless Steel Finish as standard. Special colours available on request.
- ▶ Powder coated special colours available.

#### **Support Inquiries**

► Metro Technical phone (09) 927 3000 or email technical@metroglass.co.nz



#### **Ozone Plus EN5**

- ► High Strength Hydraulic Patch.
- ► For more information, please refer to the Frameless Commercial Doors Section 3, page 386.



## **Ozone Pool Gate Components**

Pivot Arms (Top and Bottom Patches), Sealing Compound, Grout.

Product	Model	Sizes mm	Finish	Material	Туре	Application	Area
OZONE	301077	183x70mm	SSS	316 STAINLESS	HYDRAULIC	POOL GATE	Pool
HYDRAULIC BOTTOM PATCH		GLASS THICKNESS: 12mm	ON REQUEST: POWDERCOAT	STEEL	BOTTOM PATCH  FIXING: PATCH TO PATCH		Gates Internal & External
OZONE WALL	301138	84x60mm	SSS	2205 STAINLESS	PIVOT ARM	POOL GATE	Pool
MOUNT TO PATCH POOL GATE PIVOT ARM		GLASS THICKNESS: 12mm	ON REQUEST: POWDERCOAT	STEEL	FIXING: WALL TO PATCH	USED WITH X1 MP20 TOP PATCH FITTING	Gates Internal 8 External
OZONE POST	301139	109x59mm	SSS	2205 STAINLESS	PIVOT ARM	POOL GATE	Pool
MOUNT TO PATCH POOL GATE PIVOT ARM		GLASS THICKNESS: 12mm	ON REQUEST: POWDERCOAT	STEEL	FIXING: POST TO PATCH	PIVOT ARM  USED WITH  X1 MP20 TOP  PATCH FITTING	Gates Internal 8 External
OZONE 90	301140	74x110mm	SSS	2205 STAINLESS	PIVOT ARM	POOL GATE	Pool
DEGREE GLASS MOUNT TO PATCH POOL GATE PIVOT ARM		GLASS THICKNESS: 12mm	ON REQUEST: POWDERCOAT	STEEL	FIXING: 90 DEGREE GLASS TO PATCH	PIVOT ARM  USED WITH  X1 MP20 TOP  PATCH FITTING	Gates Internal 6 External
TOP PATCH	301092	164x50x30mm	ANOD NATURAL	316 STAINLESS	TOP PATCH FITTING	H GLASS PATCH TO PIVOT ARM	Pool
FITTING	301093	164x50x30mm	PSS	STEEL			Gates Internal &
4	301094	164x50x30mm	SSS				External
		GLASS THICKNESS: 10-12mm	ON REQUEST: POWDERCOAT				
BASE PLATE	301124	5mm	SSS	316 STAINLESS	PIVOT ARM	POOL GATE	Pool
0 0	301123	10mm	SSS	STEEL	FIXING:	PIVOT ARM	Gates
		*5mm increases clearance to 17mm	ON REQUEST: POWDERCOAT		GLASS TO PATCH	USED WITH X2 MP20 TOP PATCH FITTING	Internal 8 External
		increases clearance to 22mm					

ADDITIONAL: LATCH SELECTION REQUIRED

(Refer Handle selection table for additional options)

**NOTE:** Allowance must be made in the glass panel for cut out holes (Latch)









## Laguna (High Strength) Gate Hinge (For Doors 1000mm in width) Key Features

- Self-closing gate hinges designed to close gates up to 1000mm wide.
- ▶ Suits 10 12mm glass thickness.
- ▶ Adjustable closing speed.
- External and internal application.
- ▶ Hinges are non-hold open.
- ▶ Glass to Glass.
- ▶ Wall to Glass.
- ▶ Right hand or Left Hand Opening.
- > 316 Satin or Polished Stainless Steel Finish as standard.



## Malibu Gate Hinge (For Doors 900mm in Width) Key Features

- Self-closing gate hinges designed to close gates up to 900mm wide.
- ▶ Suits 10 12mm glass thickness.
- ► Adjustable closing speed.
- External and internal application.
- ▶ Hinges are non-hold open.
- ► Glass to Glass.
- ▶ Wall to Glass.
- ► Right hand or Left Hand Opening.
- ▶ 316 Satin or Polished Stainless Steel Finish as standard. Special colours available on request.
- ▶ Powder coated special colours available.

#### Support Inquiries

► Metro Technical phone (09) 927 3000 or email technical@metroglass.co.nz



## Laguna / Malibu - Pool Gate Hinges

Pivot Arms (Top and Bottom Patches), Sealing Compound, Grout.

Product	Model	Sizes mm	Finish	Material	Туре	Application	Area
LAGUNA POOL	300786	159 x 110mm	SSS	316 STAINLESS	DOOR HINGE	PIVOT DOOR	Pool
GATE HINGE	300785	159 x 110mm	PSS	STEEL	NON HOLD	11701 20011	Gates
(HIGH STRENGTH)		GLASS THICKNESS:			OPEN FIXING:		Internal & External
		10-12mm Max Gate Width 1000mm			GLASS TO GLASS		Ш
LAGUNA POOL	300790	110x 77x60mm	SSS	316 STAINLESS	DOOR HINGE	PIVOT DOOR	Pool
GATE HINGE	300789	110x 77x60mm	PSS	STEEL	NON HOLD OPEN		Gates Internal &
(HIGH STRENGTH)		GLASS THICKNESS: 10-12mm  Max Gate			FIXING: WALL TO GLASS		External
	300792	Width 1000mm	SSS				
LAGUNA POOL GATE HINGE		110x 77x60mm		316 STAINLESS DOOR HINGE STEEL NON HOLD	PIVOT DOOR	Pool Gates	
(HIGH STRENGTH)	300791	GLASS THICKNESS: 10-12mm  Max Gate Width 1000mm	PSS		OPEN (OFFSET BACKPLATE) FIXING: WALL TO GLASS		Internal 8 External
MALIBU POOL	300774	125 x 104mm	SSS	316 STAINLESS	DOOR HINGE	PIVOT DOOR	Pool
GATE HINGE	300773	125 x 104mm	PSS	STEEL NON HOLD OPEN		Gates	
(HIGH STRENGTH)		GLASS THICKNESS: 10-12mm Max Gate Width 900mm			FIXING: GLASS TO GLASS		Internal & External
MALIBU POOL	300782	104x60x60mm	SSS	316 STAINLESS	DOOR HINGE	PIVOT DOOR	Pool
GATE HINGE	300781	104x60x60mm	PSS	STEEL	NON HOLD OPEN		Gates
(HIGH STRENGTH)		GLASS THICKNESS: 10-12mm Max Gate Width 900mm			FIXING: WALL TO GLASS		Internal & External
MALIBU POOL	300780	104x60x60mm	SSS	316 STAINLESS	DOOR HINGE	PIVOT DOOR	Pool
GATE HINGE	300780	104x60x60mm	PSS	STEEL	NON HOLD	רועטו טטטא	Gates
(HIGH STRENGTH)		GLASS THICKNESS: 10-12mm  Max Gate Width 900mm			OPEN (OFFSET BACKPLATE) FIXING: WALL TO GLASS		Internal & External

**HINGE GLASS CUT OUT.** (Refer to Hinge Cut Out details for Hinge Glass Preparation)

 $\ensuremath{\text{NOTE:}}$  Allowance must be made in the glass panel for cut out holes

ADDITIONAL: LATCH SELECTION REQUIRED. (Refer Handle selection table for additional options)

**NOTE:** Allowance must be made in the glass panel for cut out holes (Latch)

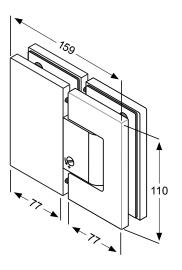


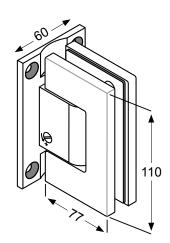


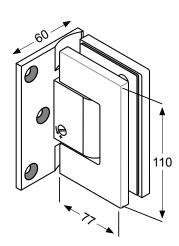
## FRAMELESS COMMERCIAL DOORS

## Installation / Fitting Instructions

## Laguna Hydraulic Door Hinges

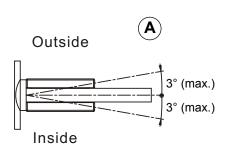


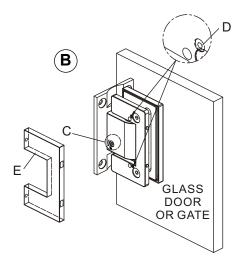




## Door alignment

- 1. Remove covers (E)
- 2. Loosen allen screws by 360° (D)
- 3. Adjust to required angle and retighten allen screws (D)
- 4. (C) is slotted speed valve.





These self closing hydraulic gate hinges are designed to close gates up to 1000mm wide in external and in internal installations. They are designed to be used with the range of MFG Mag Latches for pool gates. Hinges are Non Hold Open. The hinges are available in both glass to glass and glass to post/wall models and both models are Non Handed, meaning they can be hung on either side of the gate opening.

Gaskets are provided so the glass gate and side panels can be 10mm or 12mm toughened glass.

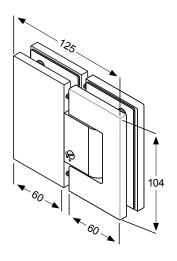
- 1. Remove clip on covers and install the hinges. Ensure all clearances are correct.
- 2. If gate requires alignment, loosen allen keys on both hinges by 360° as per detail B. Set the door to correct alignment and retighten allen screws.
- 3. To set closing speed, close slotted screws on both hinges then open both 1/4 of a turn. Then open or close slotted valves to obtain required closing speed. Take care to ensure the valves of each hinge are synchronized so they close at equal speed.
- 4. Install clip on covers.

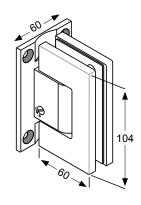


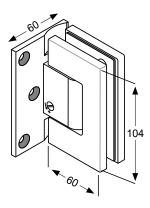
## FRAMELESS COMMERCIAL DOORS

## Installation / Fitting Instructions

## Malibu Hydraulic Door Hinges

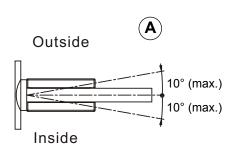


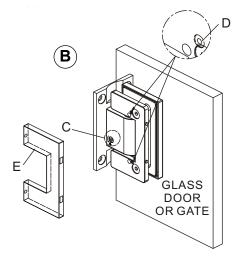




## Door alignment

- 1. Remove covers (E)
- 2. Loosen allen screws by 360° (D)
- 3. Adjust to required angle and retighten allen screws (D)
- 4. (C) is slotted speed valve.





These self closing hydraulic gate hinges are designed to close gates up to 900mm wide in external and in internal installations. They are designed to be used with the range of MFG Mag Latches for pool gates. Hinges are Non Hold Open. The hinges are available in both glass to glass and glass to post/wall models and both models are Non Handed, meaning they can be hung on either side of the gate opening.

Gaskets are provided so the glass gate and side panels can be 10mm or 12mm toughened glass.

- 1. Remove clip on covers and install the hinges. Ensure all clearances are correct.
- 2. If door requires alignment, loosen allen keys on both hinges by 360° as per detail B. Set the door to correct alignment and retighten allen screws.
- 3. To set closing speed, close slotted screws on both hinges then open both ¼ of a turn. Then open or close slotted valves to obtain required closing speed. Take care to ensure the valves of each hinge are synchronized so they close at equal speed.
- 4. Install clip on covers.





#### **Key Features**

- ► Glass to Glass.
- ► Glass to Post.
- ► Glass to Wall Latch.
- ► Glass to Round Post.
- ▶ 90degree Glass to Glass Latch.
- ▶ 316 Satin or Polished Stainless Steel Finish as standard. Special colours available on request.
- ▶ Powder coated special colours available.
- ► Suits 10 12mm glass.
- ▶ Magnetic Bolt lock options.
- ► Malibu Latches designed to match both the Malibu and Laguna series pool gate hinge design.

### **Support Inquiries**

▶ Metro Technical phone (09) 927 3000 or email technical@metroglass.co.nz



## **Pool Gate Latches**

Pivot Doors / Gates - Exterior Lockset

Doodust	Model	Cizoo mm	Cipioh	Matarial	Tune	Application	٨٩٥٥
Product	Model 300918	Sizes mm 105x100mm	Finish PSS	Material	Туре	Application	Area
POOL GATE LATCH (GLASS	300918	105x100mm	SSS	316 STAINLESS STEEL	POOL GATE LATCH*	PIVOT DOOR	External Pool
TO GLASS)	300917	105x100mm	ANOD NATURAL	*190 d	*180 degree		Fence
4	300317	GLASS	ON REQUEST:		(Glass to Glass)		
		THICKNESS: 10-12mm	POWDERCOAT		ulassj		
POOL GATE	300912	97x50mm	PSS	316 STAINLESS	POOL GATE	PIVOT DOOR	External
LATCH (GLASS TO POST)	300913	97x50mm	SSS	STEEL	LATCH*		Pool
101001	300911	97x50mm	ANOD NATURAL		*Glass to Post		Fence
		GLASS THICKNESS: 10-12mm	ON REQUEST: POWDERCOAT				U
POOLGATE	300915	85x100mm	PSS	316 STAINLESS	POOL GATE	PIVOT DOOR	External
LATCH (GLASS TO WALL	300916	85x100mm	SSS	STEEL	LATCH*		Pool Fence
	300914	85x100mm	ANOD NATURAL		*Glass to Post		
4		GLASS THICKNESS: 10-12mm	ON REQUEST: POWDERCOAT		or Wall		
POOL GATE LATCH (GLASS TO ROUND POST)	300921	83x100mm	PSS	STEEL	POOL GATE LATCH* *Glass to Round Post	PIVOT DOOR	External Pool Fence
	300922	83x100mm	SSS				
	300920	83x100mm	ANOD NATURAL				
		GLASS THICKNESS: 10-12mm	ON REQUEST: POWDERCOAT				L
POOL GATE	300909	115x100mm	PSS	316 STAINLESS	POOL GATE LATCH* *90 Degree (Glass to Glass)	PIVOT DOOR	External Pool Fence
LATCH 90 DEGREE (GLASS	300910	115x100mm	SSS	STEEL			
TO GLASS)	300908	115x100mm	ANOD NATURAL				
		GLASS THICKNESS: 10-12mm	ON REQUEST: POWDERCOAT			Ç	
MALIBU POOL	300900	128x103mm	PSS	316 STAINLESS	POOL GATE LATCH*	PIVOT DOOR	External
LATCH (GLASS TO GLASS)	300901	128x103mm	SSS	STEEL			Pool Fence
4		GLASS THICKNESS: 10-12mm	ON REQUEST: POWDERCOAT		*180 degree (Glass to Glass)		
MALIBU POOL	300902	95x103mm	PSS	316 STAINLESS	POOL GATE	PIVOT DOOR	External
LATCH (GLASS TO WALL)	300903	95x103mm	SSS	STEEL	LATCH		Pool Fence
		GLASS THICKNESS: 10-12mm	ON REQUEST: POWDERCOAT		*Glass to Post or wall		
OZONE POOL GATE LATCH (GLASS TO GLASS)	300906	104x60x60mm	SSS	2205 STAINLESS	POOL GATE	PIVOT DOOR	Pool
		GLASS	ON REQUEST:	STEEL LATCH*	LATCH*		Gates Internal 8 External
		THICKNESS: 10-12mm	POWDERCOAT		*180 degree		
000		Max Gate Width 900mm			(Glass to Glass)		

NOTE: Allowance must be made in the glass panel for cut out holes





## **Pool Gate Latches**

Pivot Doors / Gates - Exterior Lockset

Product	Model	Sizes mm	Finish	Material	Туре	Application	Area	
OZONE POOL GATE LATCH 90	300907	90x75mm	SSS	2205 STAINLESS	POOL GATE	PIVOT DOOR	External Pool Fence	
DEGREE (GLASS		GLASS	ON REQUEST: POWDERCOAT	STEEL	LATCH*			
TO GLASS)		THICKNESS: 12mm	POWDERCOAL		*90 Degree (Glass to			
					Glass)			
OZONE POOL	300905	65x74mm	SSS	2205 STAINLESS POOL GATE	PIVOT DOOR	External		
GATE LATCH (GLASS TO POST)		GLASS	ON REQUEST:		STEEL	LATCH		Pool Fence
		THICKNESS: 10-12mm	POWDERCOAT		*Glass to Post or wall			
MAGNA LATCH	300899	60x73mm	N/A	BLACK*	POOL GATE	PIVOT DOOR	External	
(MAGNETIC GATE LATCH)				*Molded polymers 8 stainless steel	*Glass Gate Hardware Kit designed to fit 50mm round posts		Pool Fence	

NOTE: Allowance must be made in the glass panel for cut out holes











NOTE: If protecting a fall greater than a metre, please refer through to the Balustrade section.

#### **Key Features**

- Custom designed to fit your space, windbreaks can be used for commercial and residential properties.
- ► Shut out unexpected winds or rain and keep them closed in Winter to stay warm but without interrupting the view.
- Frameless glass windbreaks allow you to enjoy your favourite place all year round.

#### **Types**

 Our Windbreak and Privacy Screen system works in conjunction with our balustrade systems. Please view Section 1 for selection and specification.

#### Scope of Use

- ▶ Protection from the elements including but not limited to wind, rain, sun. Our frameless glass windbreaks can be applied in many different ways. From protecting your outdoor dining area to a contemporary apartment building zoning solution.
- Windbreaks can also be used as Privacy screens for modern apartment buildings consisting of communal and zoned spaces aimed at enhancing the inner-city lifestyle.
- Windbreaks require extra consideration for wind loadings dependent on the size of the screen and support required to resist the implied loads.

#### **Support Inquiries**

► Metro Technical phone (09) 927 3000 or email technical@metroglass.co.nz