lifestyle
FRAMELESS GLASS

DIY GUIDE

SITE MEASURE

1. Planning is the first step of any successful project.
2. We have a large range of sizes to allow for varying site requirements.
3. Simply decide where you would like your pool fence to be located.

Below are some great tips on measuring your site:

- The recommended distance from the edge of the pool is 1300mm or more - For fences closer than 1300mm, "earthing" must be considered
- Watch out for underground cables and pipes when core drilling
- Aim to use as many of the same sized panels as possible to ensure a great looking end product
- Use a steel tape measure to ensure correct measurements are taken
- If fixing to pavers, you need to form a concrete footing underneath & re-cement pavers to footing

MOVING & STORING GLASS

Glass panels must never touch, lie against or rest on concrete, tiles or any hard surface. If moving your glass panels, always ensure they sit on rubber, timber or preferably both. Although your glass is safety toughened, if treated incorrectly the panels will shatter into small granules.

MATERIALS

We can supply all of the fencing and extra components required.
For a standard fully frameless glass fence project, you will require:

- Glass panels and a glass gate
- Spigots and dress rings or domical covers
- Stainless steel hinges
- Stainless steel latch
- Grout
- Glass cleaner and cloth
- Dyna bolts (for base plate application)

TOOLS REQUIRED

You will require some basic tools in order to complete your fully frameless glass fence project installation:

- Steel tape measure
- String line or chalk line
- Core Driller (For core drill applications)
- Hammer drill (For base plate applications)
- Spirit level
- Allen key set
- Mats or blankets

LOCATION

RING BEFORE YOU BEGIN!

Simply consult your local council before installing a pool fence to ensure compliance with any local bi-laws. Council regulations vary from region to region and your local council can help with decisions on distances and heights of fences from neighbours and pavements. Mandatory safety regulations need to be strictly adhered to.

If your pool is part of a building application (eg extension or new home build) please ensure you speak with your builder and certifier to see if there are any special conditions you need to consider in relation to the installation of your pool fence.

CERTIFICATION

With the installation of a new fence or replacing an existing pool fence, you need to ensure that the fence is installed in accordance to AUS/NZ 1926.1 -2012. Please consult with your local council and certifier to ensure compliance. The glass fencing we supply to you is fully tested to meet AUS/NZ 1926.1 - 2012. Your local council and certifier will require a copy of these tests in most instances.

Please contact us directly so we can arrange the relevant test reports to be provided.

Important note: All tests are done under specific conditions. Please ensure you seek independent advice in relation to your specific install situation, especially if it is outside the specific conditions our testing has been done.

FOOTINGS

It is important that you ensure when fixing into concrete either by core drill or base plate that your existing footings or concrete slab are strong enough. The thickness of a concrete slab or the size of an individual footing needs to be dependent on the wind speed and soil type of your area. Please ensure you seek independent advice relating to your local area before installing your pool fence.

We have provided a guide below for installing new individual footings (under standard wind speeds) (measurements below are diam x depth mm)
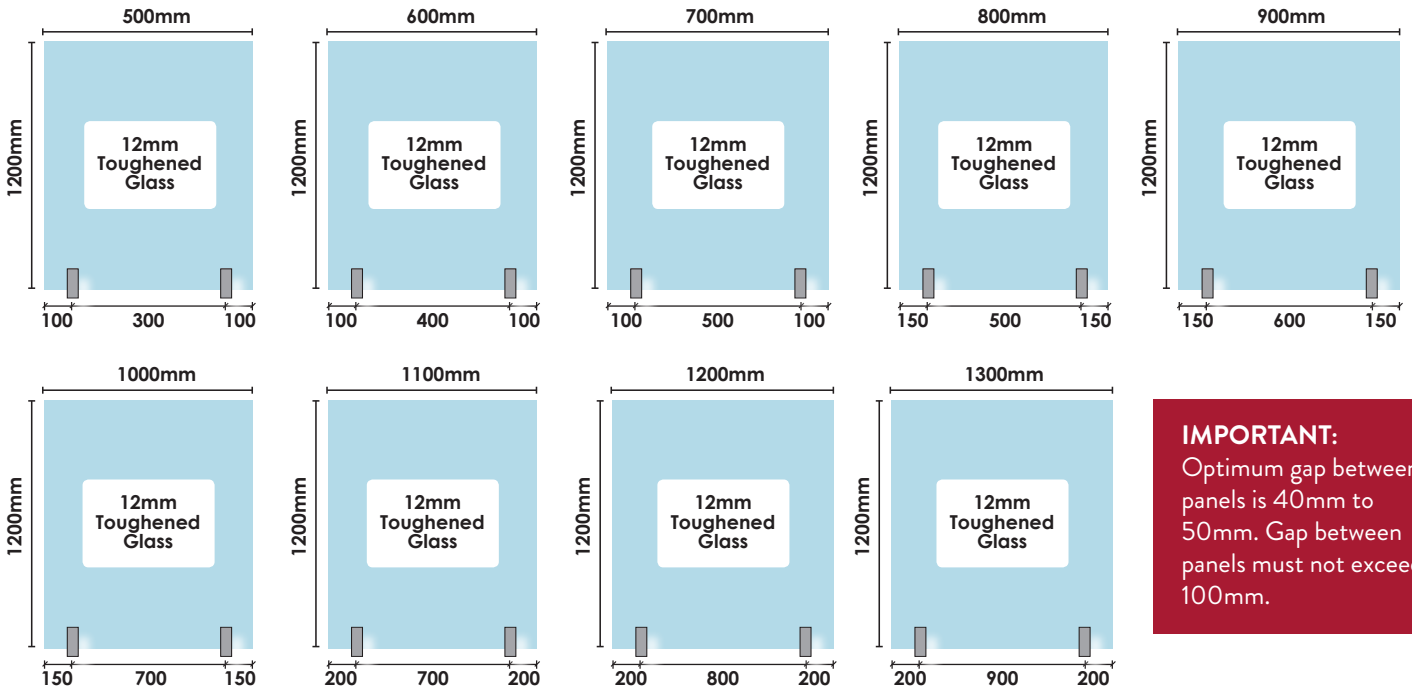
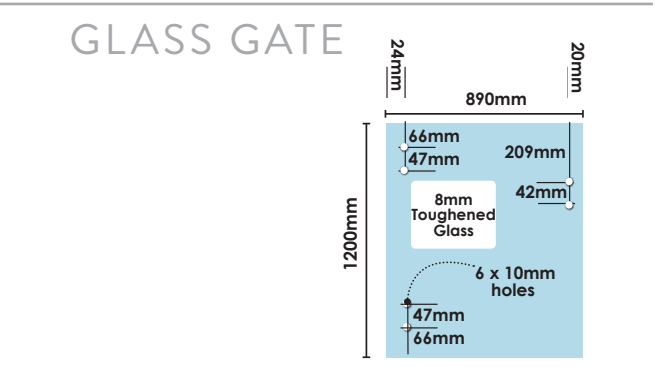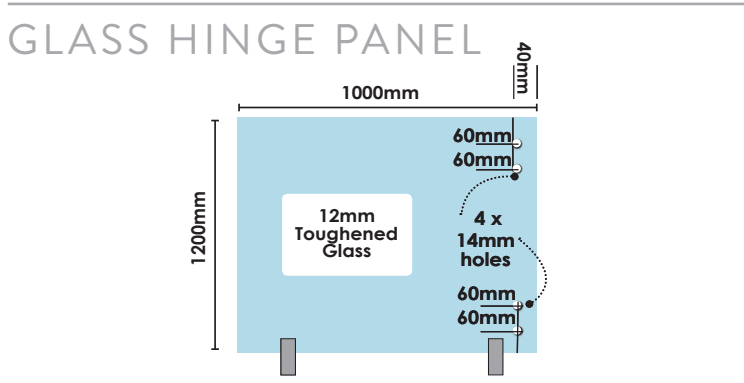| SOIL TYPE	DIAMETER	DEPTH
SANDY SOIL	Ø250mm	700mm
SANDY CLAY	Ø200mm	600mm
CLAY	Ø200mm	600mm

OTHER IMPORTANT POINTS:

- Concrete should be a minimum 20MPa strength
- Concrete should be level in centre to ensure correct install when fixing
- Individual footings should slope away at outer edges to ensure no build up of water that could damage fixings.
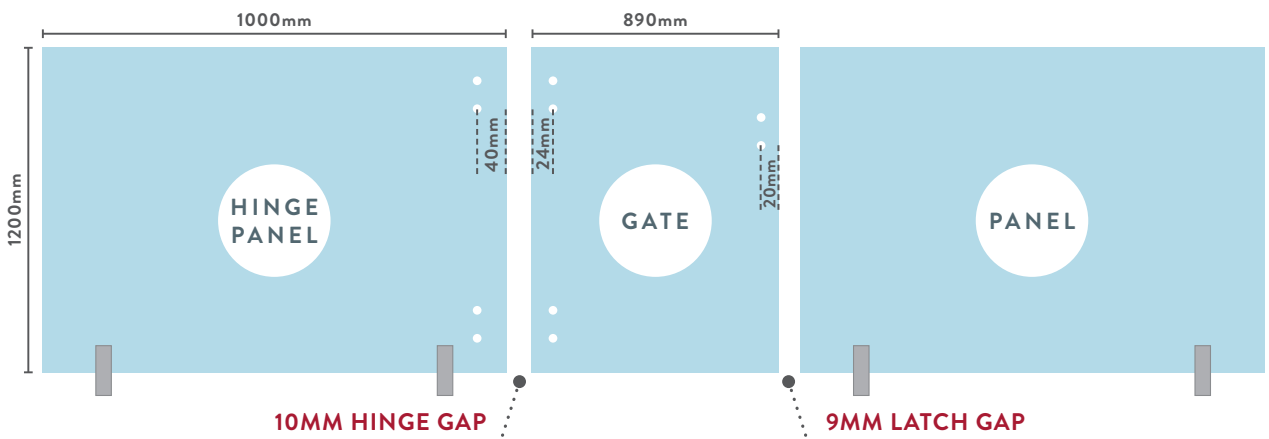
GLASS PANEL DIMENSIONS

Our glass panels are 1200mm in height and are made from 12mm thick Grade 'A' toughened glass.
Glass gates are 8mm thick and are also made from Grade 'A' toughened glass.
For added look and safety, glass panels have 2mm radius safety corners.
The 12mm thick glass panels are available in sizes from 500mm W x 1200mm H through to
1300mm W x 1200mm H

500mm
1200mm
12mm Toughened Glass
100 · 300 · 100

600mm
1200mm
12mm Toughened Glass
100 · 400 · 100

700mm
1200mm
12mm Toughened Glass
100 · 500 · 100

800mm
1200mm
12mm Toughened Glass
150 · 500 · 150

900mm
1200mm
12mm Toughened Glass
150 · 600 · 150

1000mm
1200mm
12mm Toughened Glass
150 · 700 · 150

1100mm
1200mm
12mm Toughened Glass
200 · 700 · 200

1200mm
1200mm
12mm Toughened Glass
200 · 800 · 200

1300mm
1200mm
12mm Toughened Glass
200 · 900 · 200

IMPORTANT:
Optimum gap between panels is 40mm to 50mm. Gap between panels must not exceed 100mm.

GLASS HINGE PANEL

40mm
1000mm
1200mm
12mm Toughened Glass
60mm
60mm
4 x 14mm holes
60mm
60mm

GLASS GATE

24mm
20mm
890mm
1200mm
66mm
47mm
209mm
42mm
8mm Toughened Glass
6 x 10mm holes
47mm
66mm

TYPICAL GATE AND PANEL SET UP

1000mm
890mm
1200mm
40mm
24mm
20mm
HINGE PANEL
GATE
PANEL

TIP: Use a friction latch & any size panel can be used as a latch panel

10MM HINGE GAP
9MM LATCH GAP

3

FIXING METHOD - **BASE PLATED**

1

Mark out the centre line of proposed glass fence with a chalk line. Determine spigot location based on a sheet size (spigot hole placement guides on pages 2 & 3). Use base plate as a template to mark out the hole positions and drill holes to suit.

**Note:** Do not exceed 100mm gaps between glass panels. Optimum gap is 40mm to 60mm

base plate

centre line of base plate
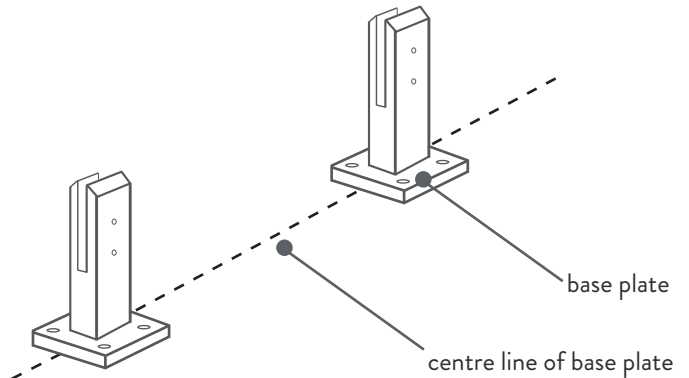
2

Now the base plated spigots can be fitted to the floor and plumbed via shims (not supplied) under the base plates. Be sure to tighten firmly as the smallest of movement at the base plate will result in noticeable movement at the bottom of the glass fence.

**Note:** Do not exceed 100mm gap from the fixing surface to the bottom of the glass

Tip: By setting the two outer spigots of your total span, a string line can be run in the 'throat' of the spigots, giving correct height for all spigots in between

string line

fixing surface

shims to suit (not supplied)
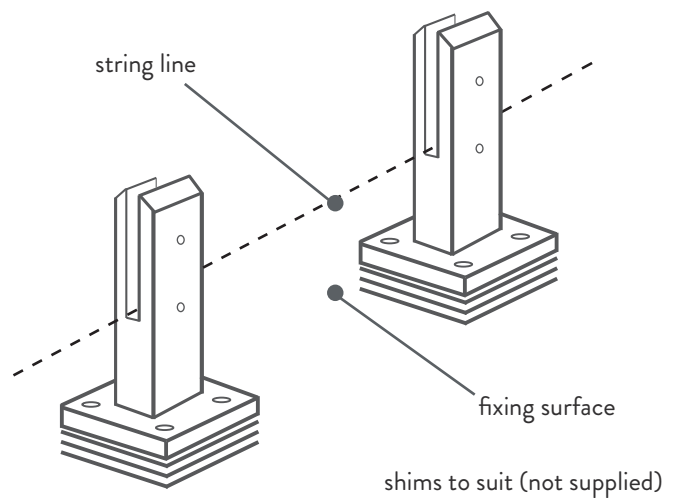
3

When all spigots are installed, slip domical cover the top of the spigot to hide fixings. It will be necessary to turn the adjustment screws on the spigot face all the way in to allow cover to pass over

Note: Same installation method applies to round base plate spigot
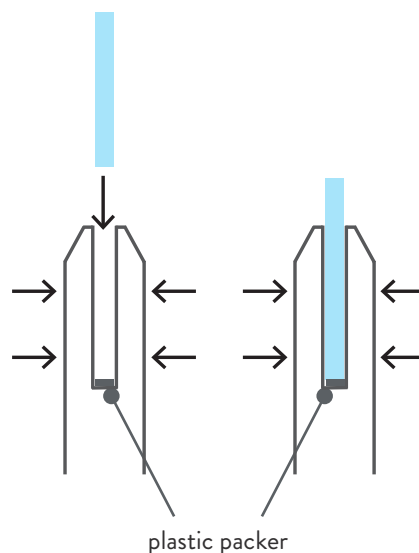
domical cover
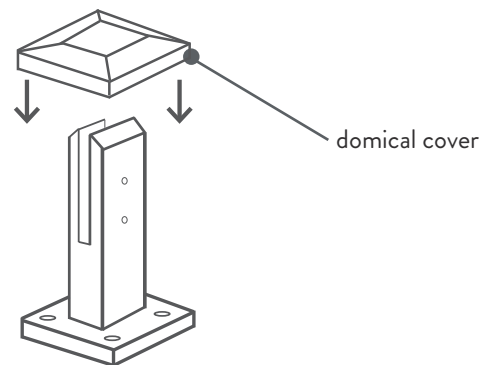
4

The glass is then installed to the spigots.

Place plastic packers between glass & spigot; at no stage should glass touch the metal

How friction adjustability works:

1. Place glass in spigot
2. Fix/tension glass from grub screw side with allen key

plastic packer

FIXING METHOD - **CORE DRILLED**

1

Mark out the centre line of proposed glass fence with a chalk line. Determine spigot location based on a sheet size (spigot hole placement guides on pages 2 & 3). Once spigot positions are marked, core drill a 76mm diameter hole at 110mm deep. Ensure no wiring or underground pipe will be affected. Remove the core and clean the any excess water & concrete which may obstruct spigot.
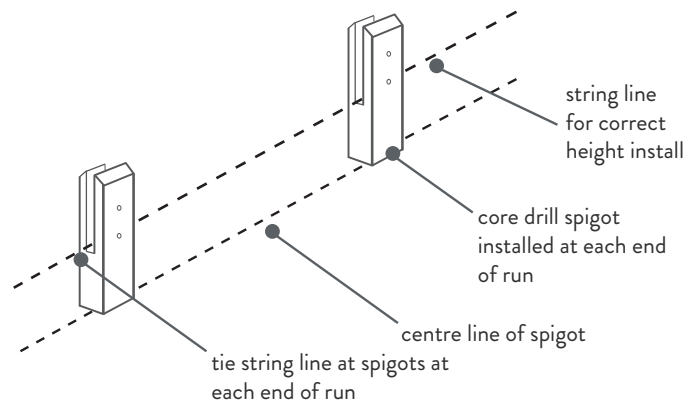
Note: Do not exceed 100mm gaps between glass panels. Optimum gap is 40mm to 60mm

core drill spigot location

centre line of spigot

core drill spigot location
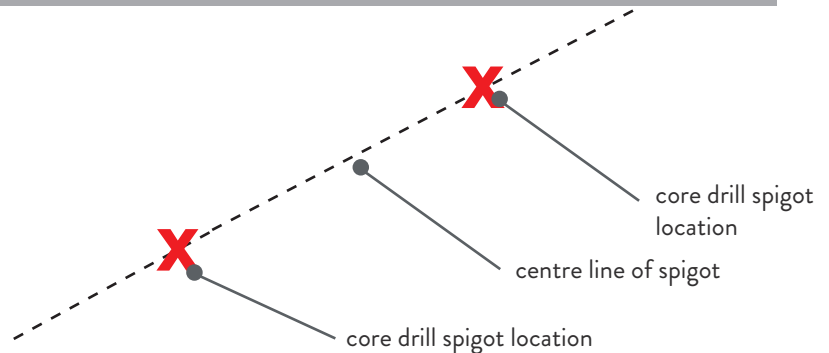
2

Check level of floor to determine the height of each spigot. We suggest installing a spigot at each end of a straight run and then use a string line to set the spigot heights inbetween.

Note: Do not exceed 100mm gaps from fixing surface to the bottom of the glass

string line for correct height install

core drill spigot installed at each end of run

centre line of spigot
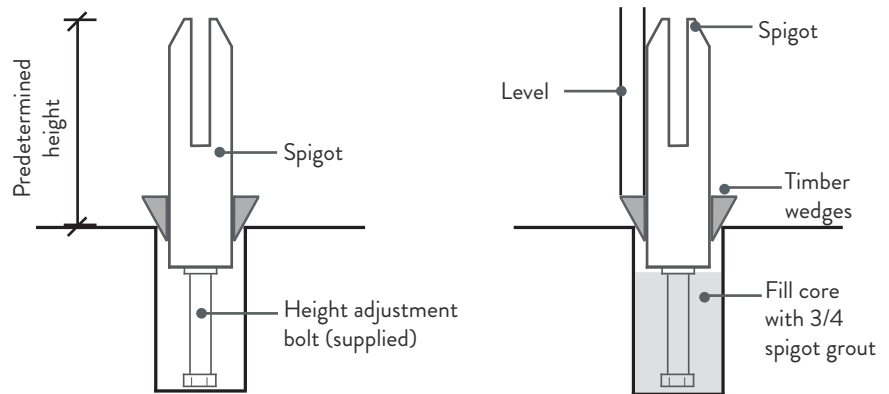
tie string line at spigots at each end of run

3

The following procedure is done one hole at a time. Mix the spigot grout in a small container (refer to manufacturer's specifications), enought to fill 3/4 of the hole. Position spigot in hole and hold in place using a small timber wedge until it is firm (approx 15 mins). While grout is wet, clean any excess with a wet sponge. When removing the timber wedges top up the core holes with grout. It is important to position spigots in the correct line as plumb as possible to minimise glass adjustment.

Tip: Ensure spigots are well protected from grout 'splatter' whilst installing

Note: Never use 'quick set cement' or similiar cement products. Your fence will fail using these products

Predetermined height

Spigot

Height adjustment bolt (supplied)

Spigot

Level

Timber wedges

Fill core with 3/4 spigot grout

IMPORTANT: Non-shrink grout must be used as concrete cement products may likely crack

4

When all spigots are installed slip dress ring over spigot. It will be neccesary to turn the adjusting screws on the spigot face all the way in to allow the dress ring to pass over.

Place plastic packers between glass & spigot; at no stage should glass touch the metal.

The glass is then installed to the sprigots.

How friction adjustability works:

1. Place glass in spigot

2. Fix/tension glass from grub screw side with allen key

Tip: If glass is slightly out of alignment, insert small plastic packers on respective side to adjust glass tilt

plastic packer
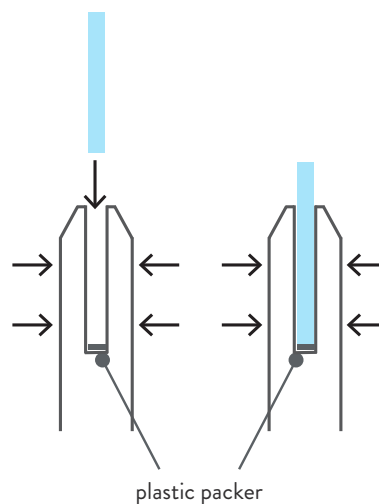
FIXING METHOD - *CORE DRILLED NO ADJUSTMENT BOLT*

1

Mark out the centre line of proposed glass fence with a chalk line. Determine spigot location based on a sheet size (spigot hole placement guides on pages 2 & 3). Once spigot positions are marked, core drill a 76mm diameter hole at 110mm deep. Ensure no wiring or underground pipe will be affected. Remove the core and clean the any excess water & concrete which may obstruct spigot.

Note: Do not exceed 100mm gaps between glass panels. Optimum gap is 40mm to 60mm

core drill spigot location

centre line of spigot

core drill spigot location
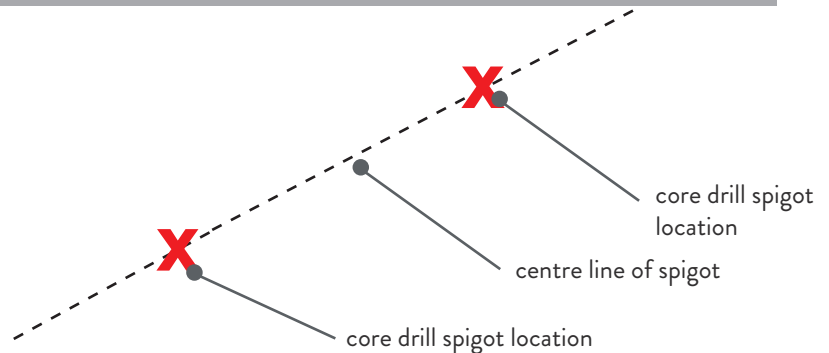
2

Before installing spigots into core holes, fit spigots to glass panels at correct spacing apart to suit core holes.

Slide dress rings onto spigots, then using masking tape, stick dress rings to just under glass panels.
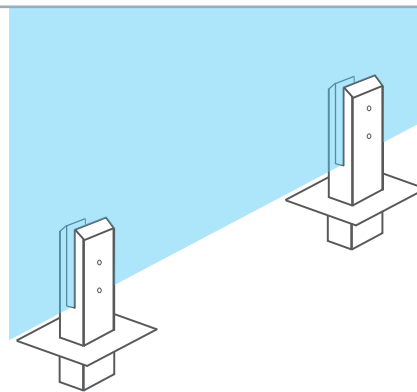
3

Mix the spigot grout in a small container (refer to manufacturer's specifications). Position glass panel with spigots and dress rings attached in hole with wood chocks under glass to leave gap between ground and glass panel. Pour spigot grout into core holes around spigots and hold in place until grout is firm (approx 15 mins). While grout is wet, clean any excess with a wet sponge. When removing the timber wedges top up the core holes with grout. It is important to position spigots in the correct line as plumb as possible to minimise glass adjustment.
Finally, remove masking tape and slide dress rings down to bottom of spigots.

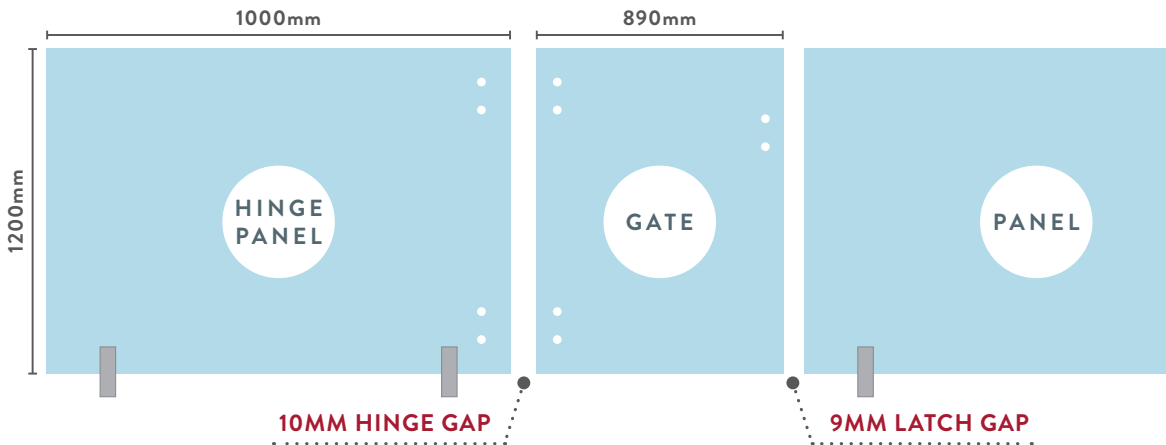**Tip:** Ensure spigots are well protected from grout 'splatter' whilst installing

Note: Never use 'quick set cement' or similiar cement products. Your fence will fail using these products

Predetermined height

Wood chocks

Fill core with spigot grout

Fill core with spigot grout
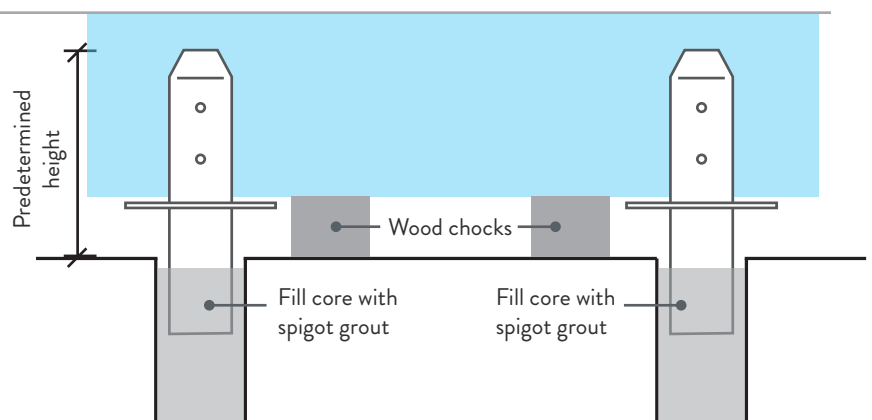
IMPORTANT: Non-shrink grout must be used as concrete cement products may likely crack

GATE LAYOUTS

GLASS TO GLASS APPLICATION

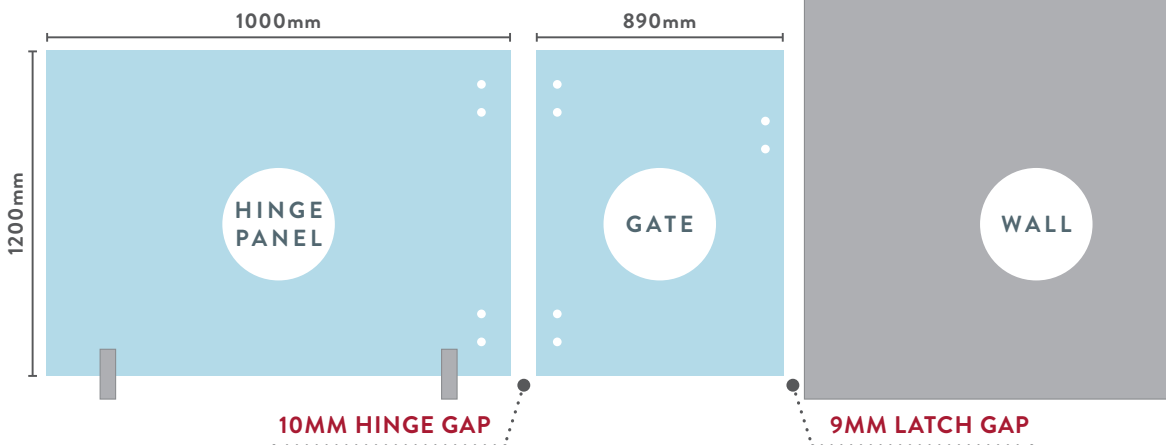**LATCH OPTION**

Glass to glass latch kit
Available in Polish finish

1000mm

890mm

1200mm

**HINGE
PANEL**

GATE

PANEL

HINGE OPTION

Glass to glass hinge kit
Available in Polish finish

10MM HINGE GAP

9MM LATCH GAP

IMPORTANT: Gate must swing AWAY from pool

GLASS TO WALL APPLICATION

LATCH OPTION
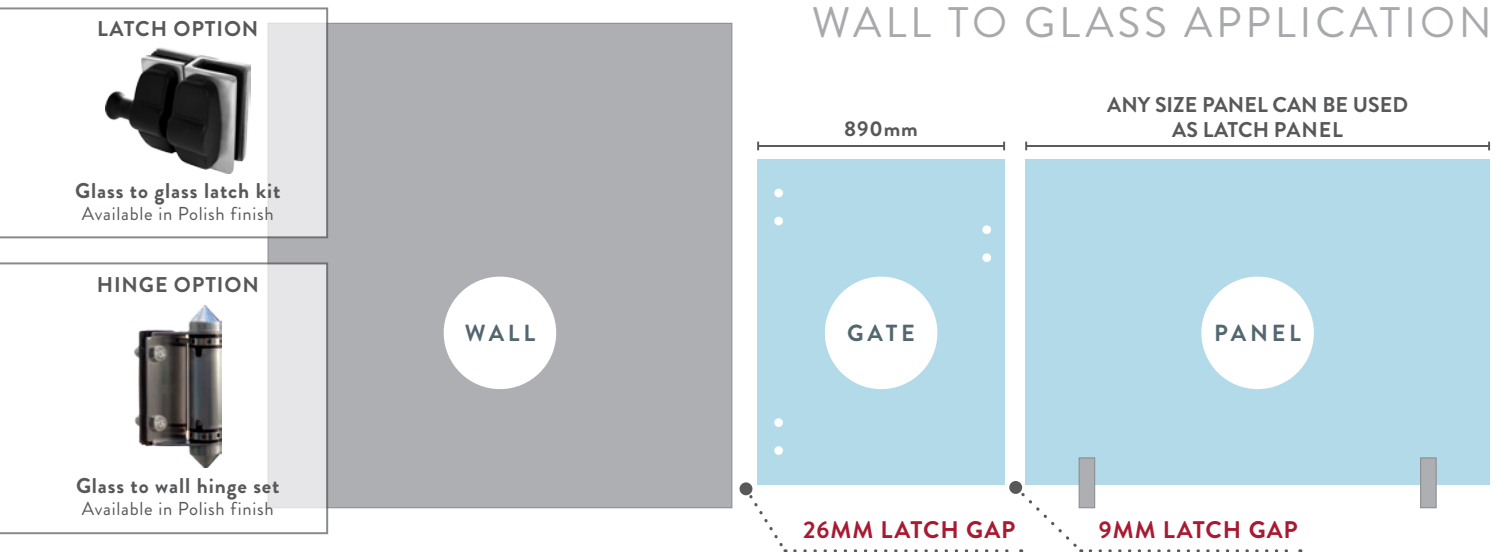
Glass to wall latch kit
Available in Polish finish

1000mm

890mm

1200mm

**HINGE
PANEL**

GATE

WALL

HINGE OPTION

Glass to glass hinge kit
Available in Polish finish

10MM HINGE GAP

9MM LATCH GAP

IMPORTANT: Gate must swing AWAY from pool

LIFESTYLE FRAMELESS GLASS — DIY GUIDE

GATE LAYOUTS

LATCH OPTION

Glass to glass latch kit
Available in Polish finish

HINGE OPTION

Glass to wall hinge set
Available in Polish finish

WALL

WALL TO GLASS APPLICATION

890mm

ANY SIZE PANEL CAN BE USED
AS LATCH PANEL

GATE

PANEL

26MM LATCH GAP

9MM LATCH GAP

IMPORTANT: Gate must swing AWAY from pool

GLASS TO 90º CORNER APPLICATION

HINGE OPTION

Glass to glass hinge set
Available in Satin or Polish finish

LATCH OPTION

Glass to glass 90º latch kit
Available in Polish finish

POOL SIDE

ANY SIZE PANEL CAN BE USED AS LATCH PANEL

HINGE PANEL
1000mm

GATE
890mm

10MM HINGE GAP

9MM LATCH GAP

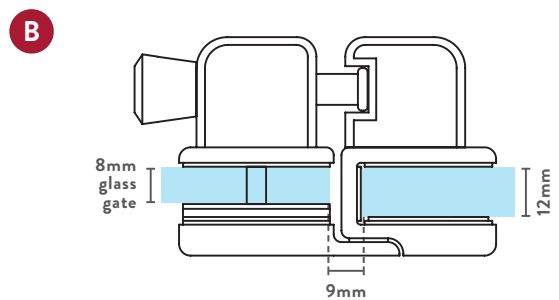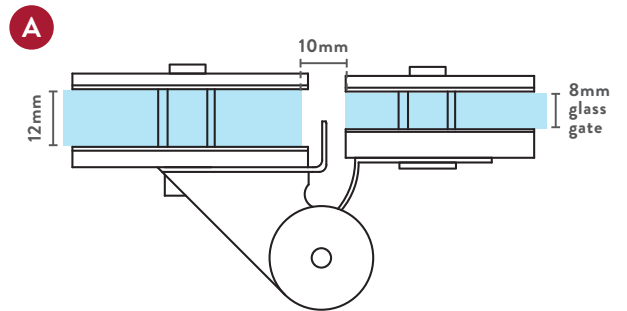**IMPORTANT:** Gate must swing AWAY from pool

DIY GUIDE
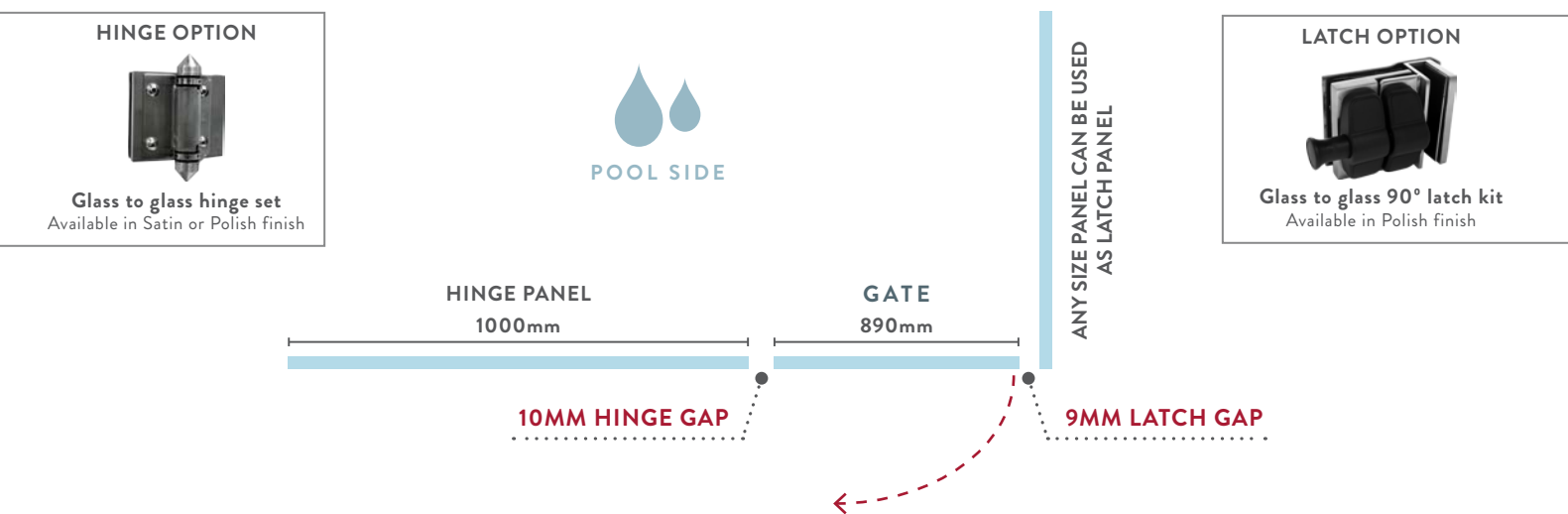
GATE HARDWARE LAYOUTS

GLASS TO GLASS APPLICATION

POOL SIDE

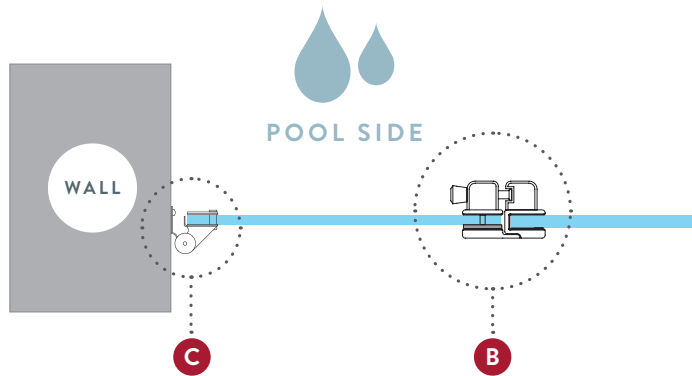**Note:** Extra packers (supplied) may be required to accommodate different glass thicknesses

IMPORTANT: Gate must swing AWAY from pool

A

10mm

12mm

8mm glass gate

B

8mm glass gate

12mm

9mm

GLASS TO WALL APPLICATION

POOL SIDE

WALL

C

B

Note: Extra packers (supplied) may be required to accommodate different glass thicknesses
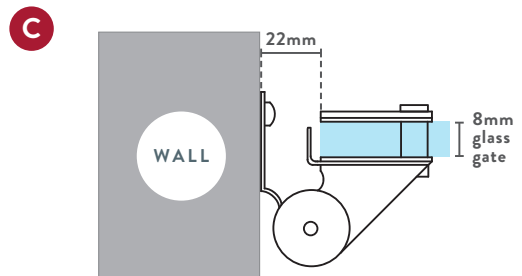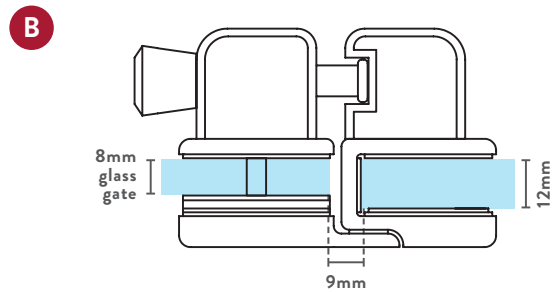
IMPORTANT: Gate must swing AWAY from pool

B

8mm glass gate

12mm

9mm

C

22mm

WALL

8mm glass gate

HINGE TENSIONING GUIDE

ADJUSTMENT HOLES

Hinge + **70mm tensioning tool** + **15mm stop**

1. With 70mm tensioning tool, remove the 15mm stop located in adjustment holes and bolt hinge to the hinge panel and gate

2. Install the latch hardware

3. Using the 70mm tensioning tool, re-apply tension to spring as required and insert 15mm stop into adjustment holes

IMPORTANT: Gate must self close from all opened positions to a latched position

FINISHING TOUCHES

Just a few more things to put the finishing touches on your new frameless glass fence:

1. Wipe down the glass panels with soapy water to ensure they are clean from any dirt or residue

2. Remove any excess dirt and tools from site and enjoy your pool safely with your new glass fence!

TIPS FOR GLASS HANDLING & INSTALLING

Glass handling should be done with the utmost care and attention.

Guidelines recommended include employing a number of checks prior to undertaking any activity:

- Ensure that there is sufficient room to maneuver the glass
- Check the weight prior to lifting, if too heavy, call for assistance or use other means
- Use safe lifting posture
- When lifting glass, it should be kept upright and movement smooth to avoid undue flexing

Recommended personal protective equipment used when undertaking activities with glass include :

- Suitable gloves (non-slip)
- Steel capped boots are always a good idea
- Safety glasses
- Suction cups and lifting devices (if large pieces of glass moved)
- Clothing should be tight fitting so no loose items can catch the glass causing trips and falls

Glass should be stored in dry conditions on its edge and should not come in contact with any substance harder than itself. Also, glass should be stored having an inclination of 3 degrees for static racks and 5-6 degrees for transportable racks and trolleys and in both cases supported evenly over its surface area. If glass is transported in a crate laying horizontally, unpack the glass as soon as possible and store in the recommended upright position with incline. Do not put glass bottom edge directly on the ground when storing upright – always put suitable timber/hard rubber blocks under the bottom edge so as to avoid chipping edges.