

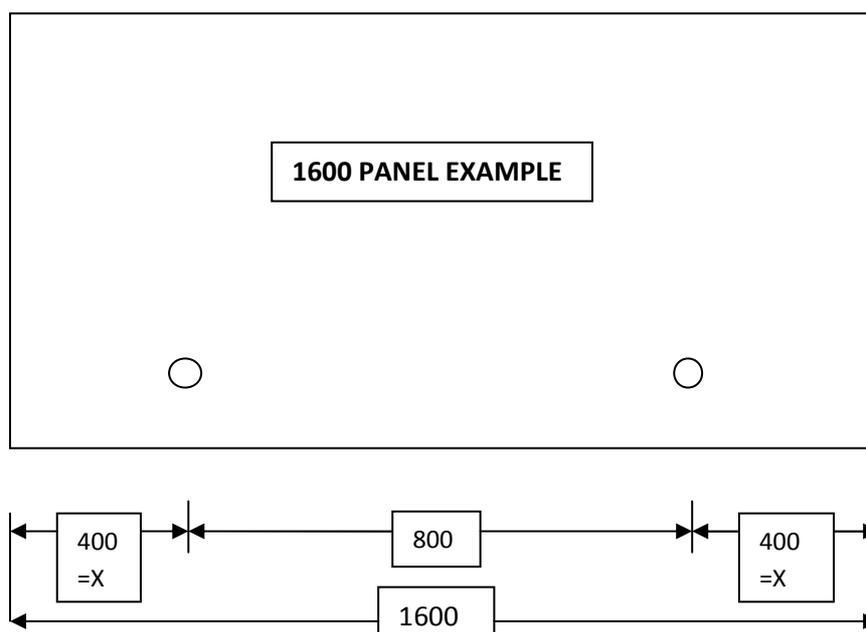
INSTALLATION GUIDE

FRAMELESS GLASS

STEP 1 SET OUT

The set out of your fence is the first and most important step to ensure the fence fits correctly.

1. Mark the outside extremities of your fence on the concrete or timber surface.
2. Stretch a chalk line between marks parallel with the outside edge of slab or deck and 106mm in from edge (this may vary but we recommend 100mm in from edge to avoid breaking out the edge when core drilling). 106mm is the centre line of your fence.
3. Flick the chalk line.
4. Mark the panel lengths on the chalk line, mark the gaps between panels.
5. The spigots are placed 25% in from each end of the glass panel.
 - **For example:** If a glass panel is 1600mm, the spigot hole centres are 400mm in from each end of the panel and 800mm between.
 - The formula to work out the centre of your core holes is to measure the length of the panel and divide by four = X.
 - X is the measurement from the end of the glass panel to the centre of the core hole.
 - **NOTE:** IT IS A GOOD IDEA TO CHECK MEASURE THE DISTANCE BETWEEN THE HOLES IN THE GLASS (X times 2) AS THEY CAN VARY A FEW MILLIMETRES.



6. This is the centre of your core hole or flange/in-ground spigot. (if in-ground, use marking paint or stake but principle is the same).
7. Find the centre of the gate position and mark on the chalk line. Then measure 462.5mm (465mm maximum) each side of gate centre mark. This mark represents the end of your hinge and latch panel or post (925mm opening for gate and clearance 930mm max).
8. You are now ready to core drill your holes, dig your holes (in-ground) or bolt down your flanged spigots once they have been attached to the glass.
 - **Check your core hole position before you drill. It is too late afterwards.**

STEP 2 **CORE DRILLING**

1. Before drilling, you should check your plans or check with the relevant local authority to ensure there is no electrical cables, plumbing etc beneath the surface.
2. When your fence is on a tiled or paved surface over concrete, we recommend core drilling as it is stronger than flanged and aesthetically more appealing.
3. Using a core drill is pretty simple but it is important to read any safety instructions provided by the hire company. The easiest way is to stand on a piece of timber or fibro with a suitable sized hole in the middle. This is used as a guide to hold the end of the core bit in the correct position over the centre of the hole.
4. Ensure that the water is running, not too much as it won't cut properly. Drill to a maximum depth of 110mm as the core will snap off at 100mm. 80 to 100mm is acceptable. Do not put too much downward pressure on the drill.
5. Break the concrete core out using a hammer and chisel by tapping gently to one side. Be careful as you can chip a tile. You can then pull the core out using BBQ tongs.
6. As you move along, hose off the cement slurry so that it doesn't stain or mark the surface.
7. Dry out holes.
8. You are now ready to stand up your fence. The standard overall height to the top of the fence is 1.250m but can vary. You can vary this up or down to suit an uneven surface or your own needs. Maximum allowable gap under the fence is 100mm.

STEP 3 **HANDLING GLASS PANELS AND WORKING SAFELY**

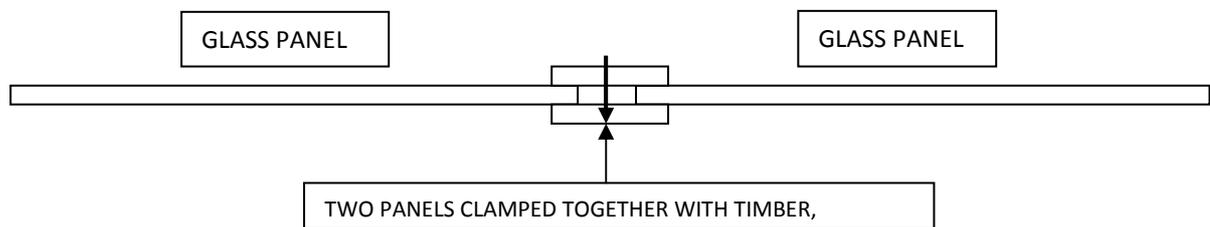
1. When handling glass, appropriate PPE should be worn such as safety glasses, steel capped boots, glass handling gloves and a leather apron. Glass sucker should be used when lifting glass. Ensure you use the correct lifting techniques.
2. Toughened glass **cannot** be cut or drilled or altered in any way after it has been toughened. The weakest part is the edges so be careful not to bump the edge on a hard surface. The glass is up to 5 times stronger than float glass and is designed to break into small chunks if it does happen to shatter when impacted.
3. Ensure all OHS requirements are adhered to.

STEP 4 **STANDING UP YOUR GLASS FENCE**

1. The ideal gap under a frameless fence is 50mm but may vary depending on the surface levels or your requirements.
2. Lay your glass on a flat even surface with a blanket or something soft under it.
3. Bolt (Square) or clamp (Round) the spigots to the glass panel, don't forget to use the plastic tube that goes over the bolt to separate it from the glass. In the case of round friction

spigots, just tighten the grub screw against the rubber back stainless steel spacer. The rubber is positioned against the glass.

4. Put your cover plate on the bottom of the spigot, tape it up to hold it up just under the glass.
5. Put packing timber blocks on the chalk line to sit the glass on.
6. Stand the glass up and evenly lower the spigots into the core hole until the glass sits on the timber blocks. Plumb the glass so that is vertical and level.
7. Brace the first panel of glass so that it is stable, level and plumb. As a handy tip, use fine timber wedges on top of your timber blocks to level panels.
8. Use timber approx 200mm long to use as clamps to hold the glass in a straight line. Put them on either side of the glass and put a screw through the gap between adjoining glass panels or use a clamp to keep panels in a straight line, repeat along the line, do not over tighten.



9. You may need to brace the glass panels from the top down at an angle or clamp the first one to something solid close by. Always ensure there is a buffer between the glass and any metal.
10. When you are sure the panel is plumb and level, mix the grout as per the instructions and pour into the hole to within 5mm of the surface.
11. Lower the cover plate over the core hole. You can silicon the cover plate down if you wish.
12. Do not allow the fence to move or to be touched for 24 hours to allow the grout to set properly.

STEP 5 FIT GATE

1. Gate opening size is 925mm (930mm maximum) for a standard gate.
2. Under AS1926.1-2007, the gate must always swing away from the pool.
3. Fit the latch to the glass gate as per the drawing provided.
4. Fit the hinges to the gate, put two 50mm packers under the gate, wedge up until the top of the gate is level with the top of the glass panel adjacent. Screw the hinges to the hinge panel.
5. Sit back and admire your handy work.

EXAMPLE BELOW (not to scale).

