

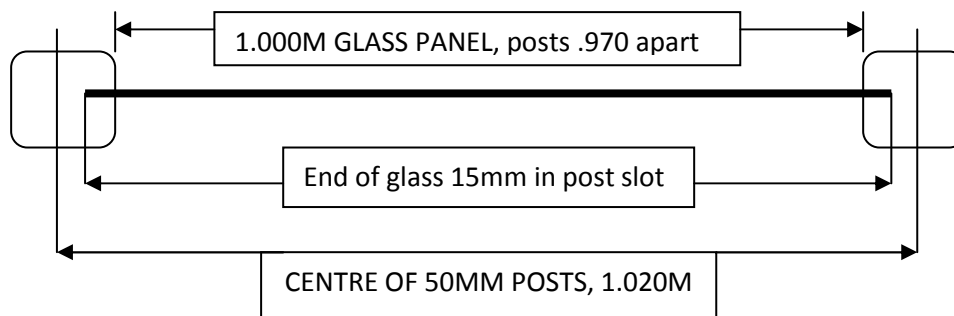
INSTALLATION GUIDE

SEMI 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 you fence on the concrete or timber surface.
2. Stretch a chalk line between marks parallel with the outside edge of slab or deck and 125mm in from edge (this may vary but we recommend 100mm in from edge to avoid breaking out the edge when core drilling). 125mm is the centre line of your fence.
3. Flick the chalk line.
4. Mark the centre of your 50mm end posts and put a cross on the chalk line. This is the centre of your core hole or flange post. (if inground, use marking paint but principle is the same).
5. Find the centre of the gate position and mark on the chalk line. Then measure 485mm each side of gate centre mark. This mark is the centre of your hinge and latch post (920mm between posts).
6. Then mark the centre of each intermediate post on chalk line. Keep in mind that if the glass panel is 1.000m for example, the glass fits into the post approx 15mm each end, therefore the distance between the posts is 970mm. To find the centre just add 25mm each end (half the 50mm post). Using a 1.000m panel of glass, the centre of each post will be at 1.020m. $1.000-30\text{mm}$ (glass in posts 15mm each end) $=970\text{mm}+50\text{mm}=1.020\text{m}$ centre of posts.



7. You are now ready to core drill your holes, dig your holes (in-ground) or bolt down your flanged posts. **Check your hole position before you drill. It is too late afterwards.**

STEP 2 **CORE DRILLING**

1. 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.
2. 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 bit in the correct position over the centre of the hole you have marked. Ensure that the water is running, not too much as it won't cut properly. Drill to a maximum depth of 120mm, 80 to 100mm is acceptable. Do not put too much downward pressure on the drill.
3. Break the concrete core out using a hammer with a wedge down beside the core. You can then pull the core out using BBQ tongs.
4. As you move along, hose off the cement slurry so that it doesn't stain or mark the surface.
5. Dry out holes.
6. You are now ready to set up your posts. The standard overall height to the top of the fence is 1.250m. You can vary this up or down to suit an uneven surface. Maximum allowable gap under the fence is 100mm.

STEP 3 **SETTING UP YOUR POSTS**

1. Put your cover plate on the bottom of the post, put masking tape on it to hold it up around 250mm above the surface. Sit your end posts in the core hole. Choc the post in place using timber wedges and plumb the posts so that they are vertical on two sides. Ensure that the post slot is facing the direction of the fence line.
2. Tie a string line between the posts 200mm up from the bottom and another one say 100mm down from the top. All intermediate posts should just touch the top and bottom string. This means all posts are plumb but you will still need to plumb them up on the glass slot side. An easy way to do this is to use a piece of timber cut to the length of the glass (less 30mm) and just space out the posts at the top and bottom using you plumb end post as a starting point.
3. Level the top of the posts by using a level on a straight edge. You can adjust the posts in any direction just by tapping the wedges.
4. When you are sure the posts are plumb & in the correct position to accept the glass panels, mix the grout as per the instructions and pour into the hole within 5mm of the surface.
5. When grout has almost gone off, remove timber wedges, then lower the cover plate to cover the core hole. You can silicon the cover plate down if you wish.
6. Cut block rubber into 2mm pieces and sit on top of infill at bottom of post, this is used to protect the glass from direct contact with the aluminium infill.

STEP 4 **HANDLING GLASS PANELS**

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.
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 fragments if it does shatter.

STEP 5 **INSERTING GLASS PANELS**

1. Lift glass above the posts and lower the panel down slowly while keeping the glass as level as possible. Keeping it level stops it binding against the inside of the post on one side or the other. It is important to minimise the chance of breakage. Sit the glass on the rubber seat positioned on top of the infill.
2. The hinge post slot should be filled with silicon after inserting the glass panel so that the weight of the glass gate does not pull the adjacent glass panel out of the post.

STEP 5 **RUBBER IN THE PANELS**

1. The ribbed side of the rubber fits against the glass. Put the rubber in a bucket of warm sudsy water. This makes the rubber soft and easy to use. Start at the top, leave 30 or 40mm of excess above the post, run the rubber down on both sides of the glass at the same time. Cut off to suit.
2. Fit post cap.

STEP 6 **FIT GATE**

1. Make sure the silicon has gone off in the hinge post.
2. Under AS1926.1-2007, the gate must always swing away from the pool.
3. Fit the latch to the glass gate as per instruction on the universal latch packet.
4. Fit the hinges to the gate, put two packers under the gate, wedge up until the top of the gate is level with the top of the glass panel adjacent. Screw or rivet hinges to the hinge post.
5. Sit back, grab a beer and admire your handy work.

EXAMPLE BELOW (not to scale).

