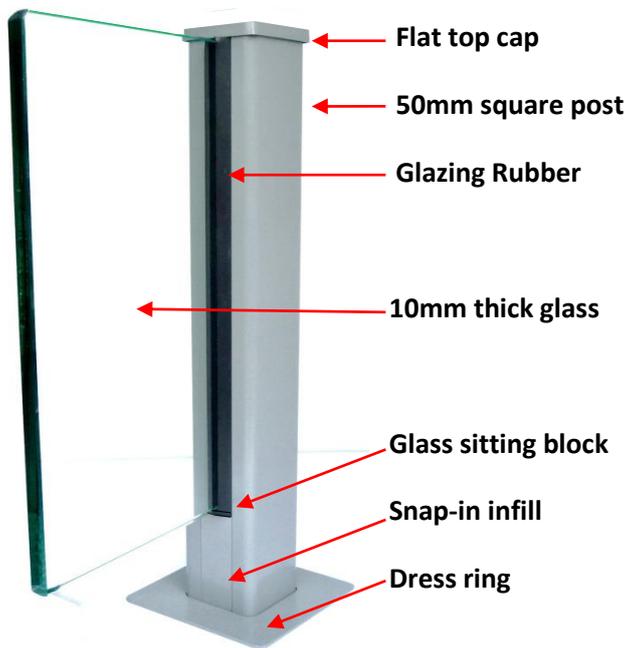


Ordering Semi-frameless Glass System



Standard post

1400mm long for setting in core drilled holes in concrete floor
1800mm long for setting into concrete footings in soft ground



100mm x 100mm x 10mm thick base plates

Firmly secured to any post with 4 x stainless steel screws supplied.
For screwing to timber deck or fixing to concrete with Dyna bolts

Posts

Choose height of post.
Choose fixing method (base or no base)
Choose from 2 way, 1 way, 90 degree, 135 degree and half posts.
Choose Satin Black or Silver Pearl powder coat.

Glass

Choose from our range of 10mm toughened glass panels.
Remember glass panel width **plus 16mm** equals centre of post to centre of post dimensions.
Choose 8mm toughened glass gate, if required. (Three widths available)
Remember to **add 35mm** more to the gate width you have chosen. This will then be the measurement between the inside edges of latch and hinge posts to allow the hinges and latch to fit the opening.

Hinges

For gates you require 1 set of **square post to glass** stainless steel hinges.

Latch

You require **1 square post to glass latch** (available with Black or Silver strike plate)

Caps 1 top cap per post.

Dress rings 1 per post.

Glazing rubber 2 lengths per post.

Glass sitting block 1 per post.

Snap-in infill strips 1 standard 1400mm long strip will cut down to fit at least 12 glass carrying posts.



Please read before starting installation

Installation Instructions for Semi-frameless Glass Fencing

Site Measure

Plan your ideal fence position including approximate positions of gates.

Draw out the shape of your fencing perimeter writing down the total length of each side.

From our [10mm glass panel list](#) choose a combination of widths to suit your sizes.

Note: Glass panel widths are made 16mm less than exact post to post centres on our square posts.

A Example 1284mm wide glass = 1300mm centre to centre post

B Example 1234mm wide glass = 1250mm centre to centre post.

} See figure 4

Using post to post centres obtain closest match to your overall measurements.

For gates you will need to leave a gap with a post to post centre of 85mm wider than the chosen gate width.

If fitting a post to a wall you need to add 25mm from centre of that post to the wall.

Use 180 degree, 135 degree and 90 degree posts to obtain any angles within your fence line.

Note: If you have a specific opening that a mixture of standard sizes won't fully cover, (e.g. between two walls or between two roof support posts) you can build your fence leaving a gap between each end post and the walls as long as it is less than 100mm (pool compliance)

Preparation

Lay out a string line or chalk line to create the perimeter of your fence.

Installing into Soft ground

Mark the centre to centre post measurements with a small stake or marker spray. Dig holes approx 200mm wide x 400-500mm deep (depending on soil stability) with string lines in place, **set tight at 25mm away from the centre of fence line** you can now position each (1800mm long) post in the holes. You can now position the posts in the centre of the fence line by lining the outside edge of the post with the string line.

One method is to set in concrete all corner posts first, then, when dry, run the string line around the corner posts to allow for easy leveling of all internal posts. Make sure that posts are leveled and plumb and **most importantly** that your post to post centre measurements are accurate.

Remember centre post to centre post measurements are **16mm more** than the glass panel widths.

Note: For glass gates the centre to centre post measurement is **85mm wider** than your chosen gate width.

Installing into concrete slab

Lay out a string line showing the **centre line** of your fence. Carefully mark the centre to centre post measurements with a cross using a pencil or indelible marker pen (**please check and re check!**)

Remember centre post to post measurements are **16 mm more** than the glass panel widths.

Note: For glass gates the centre to centre post measurement is **85mm wider** than your chosen gate width.

You will now require a **core drill**; this can be hired at your local tool hire company. You will need a core drill bit sized between 74mm to 76mm diameter. These machines are water cooled and fit to your garden hose. Ask for a guide which will stop the drill skimming off the concrete when first cutting. The general rule is to allow the diamond bit to cut without too much downward pressure; water should be more than a dribble but not full on.

Drill down to 80mm-100mm depending on thickness of tiles/concrete, the bit will cut through steel reinforcing.

To remove the core use a cold chisel or old wood chisel, carefully tap down the sides of the core, as the pressure on the core builds it should snap off at the base of the cut, otherwise chisel out until clean.

You will have purchased Sika Grout HES or similar and are now ready for post installation.

You will need 4 x wooden wedges for each post these can be any timber and can be easily knocked up with a drop saw.

Size is not critical approx 50mm long x20mm wide tapering down to nothing. These are to tap in round the bottom of the post to support whilst it is drying and are to be removed after drying.

Mix the Sika Grout in a small container (An old ice cream plastic container is ideal) using a small amount of water at a time mix the grout to a smooth but **runny** consistency. This compound has quick dryers in it so do not mix too much at a time and use quickly. Get set up with 2 men, posts unpacked, wedges, 1.2 metre builders level, wet cloth (to clean up overspill) and string line.

Note: If there is a gate in the fencing section that you are installing **PLEASE SEE GATE INSTALLATION FIRST**

Make sure that your original crosses marked on concrete have been renewed, select the first post, fill the first post hole to approx 20mm from top of hole (grout must be free running) place the post into the hole, centre the post as per your marks on the concrete, make sure that the middle of the glass channel is centered with your centre string line marking. Whilst one person is holding the post at top with builders level pressed to the post length, person two will slip in one wooden wedge down each side of post and tap down into the core hole. Person one will then move the post to make fine adjustments to plumb, level and centering.

Please be very accurate with your posts glass measurements (keep within + - 2mm tolerance)

Your posts will usually be set hard between half an hour and one hour depending on weather, remove wedges and fill any gaps in core hole if required. Clean area around post base and drop down cover rings over post. Continuous retesting with a string line across the centres of each post as they are fixed will ensure a perfect straight line.

Installing onto a timber deck

Your posts will have a welded base with 4 fixing holes. Secure to deck with our 316 stainless steel screws or your own stainless steel coach screws. There must be a suitable strength timber under the deck boards. If you are building the deck, or can get access under, work out where your posts will sit and fit noggins between the timber joists directly under each post. These can simply be off cuts of joist anywhere between 50mm and 60mm thick and 150mm to 250mm wide. Cut these to fit between the joists and turn them on their side so the wide face is hard up against the underside of the deck boards and is directly under the post position, then secure into the joists each side with baton screws. This will ensure a strong screw fixing to carry the weight of the fence above.

Position the posts, mark and pre-drill holes through the deck into the noggins with a 6mm drill, then drill through the **deck boards only** with a 10mm drill bit; this will stop any splitting when screwing in.

Level up the post with shims under the base if required; use thin aluminium (drinks can ideal) or old Colourbond sheet.

Note: If there is a gate in the fencing section that you are installing **PLEASE SEE GATE INSTALLATION**

Applies to soft ground, core drilled concrete, and timber deck installations

When completely dry or secured, run a tight string line around the top section of whole fence. Raise and tie the string line at one end post at 1260mm from the ground level. From this starting point, using a builder's level, raise or lower the string line to create a level string line, all the way round the fence.

Once this has been done take another string line and attach to the same end post at 1200mm down from the top string line, run this string line all the way round the bottom section of the fence posts making sure it is level and 1200mm down from the top string line all the way round.

Check and see if the gap between the bottom string line and ground level is less than 100mm all the way round (pool regulations). If the gap is slightly more than 100mm in places because of sloping ground you can drop the top string line and bottom string line by the same amount to lower the whole fence. Alternatively you can raise the ground under the larger gaps and firm down to less than 100mm or step the glass down in stages.

If the bottom string line is too low in some positions raise the top and bottom string line up equally until you have gaps all round not too close to the ground and not exceeding 100mm. You can now fit the snap-in infill that will hold up the glass panels. The infills have been supplied in 1400mm lengths for you to cut down to size.

You have two options for fitting the infills:

A If the concrete around the post base has a solid surface you can measure from the concrete up to the bottom string line on each post, this is the size required to be cut for each infill.

B If the concrete is loose and flakey you can cut a small length of infill, snap into the post channel and carefully hammer down into the concrete footing until it is solidly bedded, then measure from the top of this infill up to the bottom string line, this is the size required to be cut for each infill.

Snap in the infills, make sure they are all the way down and sit the black plastic glass protectors onto the top of the infills. You are now ready to fit the glass.

Glass Installation

Your glass panels have either been delivered by hand and are resting on timber or rubber blocks or by crate.

- Note:**
- A** Our glass panels are polished all round for safe handling.
 - B** 10mm glass is **heavy** you will always need at least two men to install.
 - C** The glass panels must never be placed down onto hard surfaces, use old carpet or wooden blocks.
 - D** Lay glass on its edge and lean at an angle against a wall or secure surface.
 - E** Make sure that the etched ID markings are at the bottom of each glass panel before fitting.

Put two extra blocks on the ground next to where you are installing your first panel. Bring the panel to these blocks, with one man each side, lift glass to just above the posts and drop down into the channels, **slowly slide down the glass, keeping level**, until it rests on the plastic glass protectors.

Follow this procedure for all other panels. If your infill measurements are slightly out you can level up individual glass panels by re-cutting infill or raise by adding extra plastic glass protectors, as required.

To secure the glass panels fit the black rubber gasket to each side. Fit all the rubbers on the inside face of the fence first, starting from the bottom of each post and making sure that the yellow coloured centre web of the gasket slides in to the thin groove in the post, push in all the way up leaving the excess top rubber over-hanging. These rubbers should push in easily as there will be no pressure on them.

Then fit all rubbers on the outside face of the fence. These rubbers are wedge shape and will need to be pushed in under pressure. The best tool for this is a handle with plastic wheel that can be bought for pushing in standard fly- screen rubber; it is cheap and available in most hardware stores.

For easier fitting, first spray a weak solution of washing up liquid and water down the glass edges.

Final Finishing

You now have posts that are oversize and need to be cut down. (Please note this is the way professional installations are carried out, it is almost impossible to pre-line up post heights when first setting in concrete, especially if the floor is not level and a small mistake would entail major removal and reworks!)

Mark the posts at 5mm above the glass line; this is where to cut the posts.

If your fence has only a few posts, you may want to use a standard hacksaw.

The posts are multi chamber thick aluminium so for a speedier job on a larger fence we recommend a reciprocating saw with a medium tooth metal blade, using cutting oil. You can hire these at any tool hire company. Take extreme care when starting the cut as the blade may tend to skim away from the cut. Several windings of thick tape under the cut line can help and also give some protection to the powder coating.

When posts have been cut down, you can for extra security (especially if your measurements are slightly out and glass widths are slack) apply window and glass silicone down each gap between post and glass for approx 50mm into channel, this will stop any sideways movement in the post channel. Then push on the new lipped aluminium cap to complete.

Gate Installation

Important information regarding gate hinged posts. As the hinge post carries the full weight of the 8mm toughened glass gate, professional installers usually set the hinge post with a negative angle.

In other words set the hinge post so it angles away from the gate opening at the top by approximately 5mm (using a standard 834mm wide gate this measurement is 920mm centre to centre post at bottom and approx 925mm at top).

This reverse angle will then help the post to hold the weight of the gate glass when fitted.

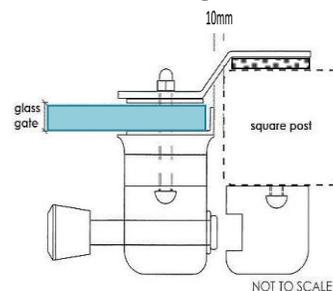
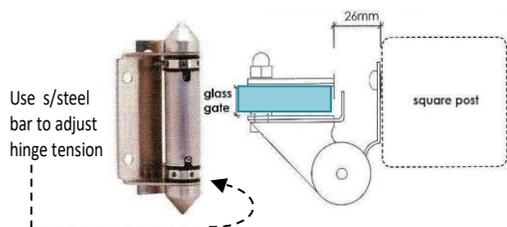
Note: pool gates must open away from pool

Fit the two stainless steel hinges and Magnalatch side pull as per the detailed drawings attached.

Note: Use the four loose bolts, nuts and spacers in the box. Fit a selection of thick and thin wooden blocks on the ground to make up to exact level of adjacent glass panels. Sit glass gate onto the blocks and make final adjustments to level. Push both hinge plates against the flat edge of post, adjust so gate is sitting level and in the centre of post and mark fixing hole positions on post.

Drill 4 x 3mm holes through the post and screw hinges in with 4 x stainless steel short hex head screws as supplied in the hinge box. With hinge pins replaced, hinge re-tensioned and gate closed, line up latch the receiver on the back of the latch post with latch on the glass gate. Mark and drill holes for 2 x black self tapping screws from the Magnalatch packet. Screw in latch receiver to post and adjust up or down to match height of gate latch.

Push in black plastic screw covers to complete gate installation.

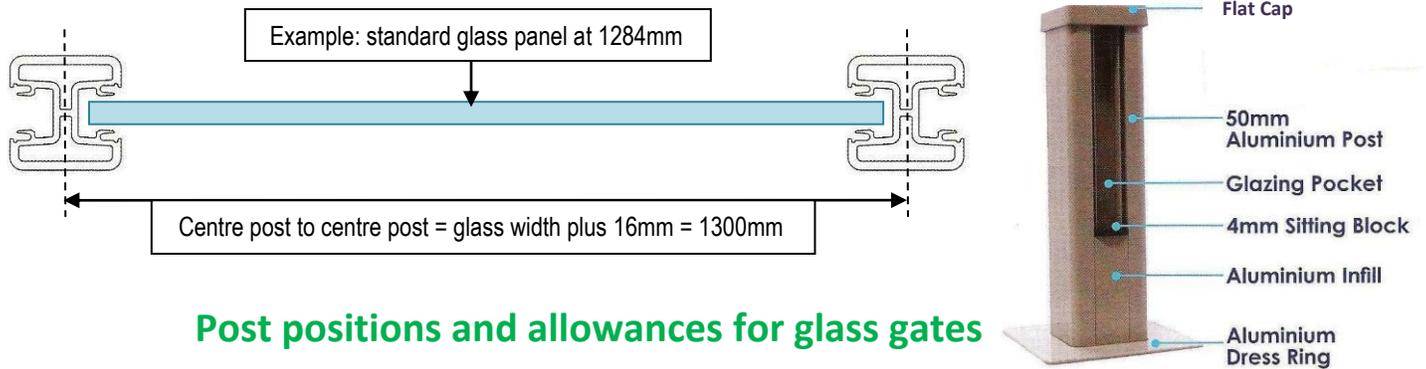


Use 2x 25mm bolts and nuts (loose in box)
 Take 2x flat black rubber glass protectors and 2x clear plastic sleeves from bag. Fit sleeves through glass and flat rubber protector between each hinge plate and glass, slide through bolts, fit nuts and tighten.
 Keep 4x pan head screws and s/steel hinge adjusting bar in box, discard other items. Repeat process with 2nd hinge

Assemble side pull Magnalatch as per enclosed instructions. Making sure flat rubber glass protectors are inserted each side of glass. Fit to glass with latch pull on pool side of gate and strike plate on outside of pool. Place bolts through assembly and tighten. Fit self adhesive rubber pad to striker plate. Close gate; align catch plate, drill and screw in with 2x black self tapping screws provided. Adjust and fit screw covers.

Figure 4

Post positions required for standard glass panel widths



Post positions and allowances for glass gates

hinge option

Master Range Square Post Hinge Set of 2

50mm Square Post To 50mm Square Post

Square Post Hinge

D&D Side Pull Latch Kit

811mm, 920mm or 975mm depending on gate chosen

centre of hinge post to centre of latch post

gap

Glass gate width 750mm, 834mm or 890mm

gap

25mm

26mm

10mm

25mm

Latch Post

hinge option

Master Range Wall/Square Post Hinge Set of 2

Wall To 50mm Square Post

Square Post Hinge

D&D Side Pull Latch Kit

811mm, 895mm or 951mm depending on gate chosen

wall to centre of latch post

gap

Glass gate width 750mm, 834mm or 890mm

gap

26mm

10mm

25mm

Latch Post

hinge option

Master Range Square Post Hinge Set of 2

50mm Square Post To Wall - Latching To A Wall

Square Post Hinge

D&D Glass To Wall Latch Kit

811mm, 895mm or 951mm depending on gate chosen

centre of hinge post to wall

gap

Glass gate width 750mm, 834mm or 890mm

gap

25mm

26mm

9mm

Hinge Post

Wall

Note: Gates must open away from pool