

RAKAIA CHANNEL INSTALLATION GUIDE

IMPORTANT

Please read carefully through this installation guide prior to starting the setting out of your new fence. Setting out the fence accurately and correctly will be the difference between a good and a great result.

BelAire®
DESIGNER FENCING

...make it your own!

DESIGN VERSATILITY | BUILT TO LAST | EASY CONSTRUCTION

INTRODUCTION

Thank you for choosing one of our quality products. We are the industry leaders in frameless glass. This product will provide you with years of trouble free protection if installed in accordance with these directions.

The recommendations detailed in this guide produced by BelAire are formulated along the lines of good building practice. They are not intended to be an exhaustive statement of all the relevant data. Further, as the success of projects depend on factors outside the control of BelAire (e.g. Quality of workmanship, particular design, detail requirements, etc), BelAire accepts no responsibility for, or in connection with, the quality of the projects or their suitability when completed.

If you are in any doubt please seek independent advice or contact BelAire. We are always happy and available to answer questions regarding installation no matter how small or insignificant you think they may be.

Technical and installation advice is available on 0800 235 2473

WHY CHOOSE BELAIRE?

CLEAR

BelAire frameless glass pool fencing and balustrade is invisibly superior - it's crystal clear without the green tint you get with inferior brands. Enjoy lounging by the pool on the deck with nothing to interrupt your view. Relax behind a strong, effective wind barrier and take in all-day sunshine as BelAire casts no shadows!

SAFE

With uninterrupted views, you'll always be able to keep your eye on the kids as they play in the pool. And with 12mm thick toughened safety glass with polished bevel edges, you'll know they'll also be safe and sound outside the fence. Our gates also use a self-closing hinge with a side pull latch, so you'll know they'll never be left open by mistake.

VERSATILE

BelAire can be installed on a variety of surfaces, including tiled areas, pavers, timber decks, concrete and across landscaped areas - making it a truly versatile option for pools, water features, patios, decking, and natural settings. The modern architectural look can also be customised from our selection of elegant, corrosion-resistant, mini posts, latches and hinges to match your property.

EASY

It's so simple to clean and maintain - with no frames to collect water and dust, and with corrosion-resistant hardware throughout, it will remain sparkling with minimum effort. It's also simple to install - most home owners would find the system quick and easy to install using basic tools that they would have in their shed. If you'd rather get someone else to install it, we have a list of preferred installers throughout NZ. Call us on 0800 235 2473 and we will put you in touch with an installer in your area.

COMPLIANT

Our toughened safety glass that comes with the PAS Mark AS/ NZS 2208 marking on every panel. Should you require a PS1 to submit with you pool or building permit request, you can download one from our website:

www.belairefencing.co.nz

You will require a handrail on your balustrade or pool fencing if there is a drop of more than 1m on one side. Scenik slimline handrails are manufactured from polished stainless steel to create a sophisticated finish that does not diminish the appearance of your glass fencing. They are also very strong and fully compliant to F4 and NZS 4223:2016.



IMPORTANT!

Throughout this installation guide you will see information boxes marked as **IMPORTANT**. We recommended the reader pays particular attention to them to ensure a satisfactory installation and the long term performance of the products.

BEFORE YOU BEGIN

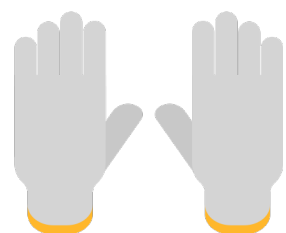
Consult your local council before installing fence or balustrade to ensure compliance with any local by-laws. Council regulations vary from region to region and your local council can help with decisions on specific compliance details of fences and balustrades.

Mandatory safety regulations need to be strictly adhered to.

! TOOLS REQUIRED

To help make your installation project go well, each stage of this installation guide lists which tool will be required.

Below is what you'll need before you begin:

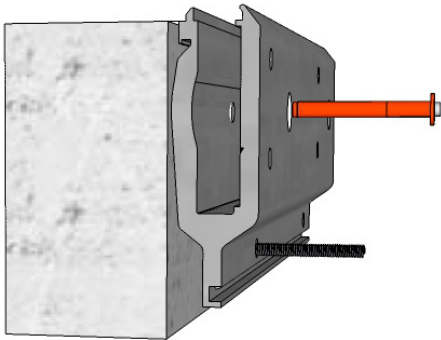


CHANNEL FIXINGS

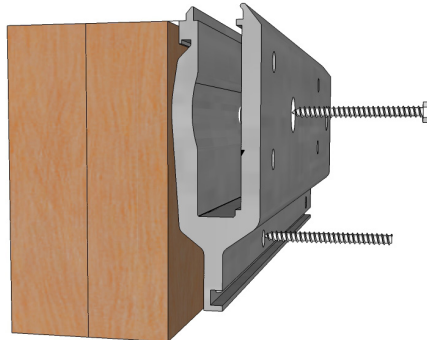
AT A GLANCE

Below is a guide to show what type of fixings are required for the Channel:

A. Concrete Application



B. Timber Application



YOU WILL NEED:

- Channel
- Fixings

Rakaia Channel

PART NO: SCECH (Rakaia Channel x 3m section)

A - CONCRETE

Top Fixing - SCECCSK Nylon Concrete Anchor

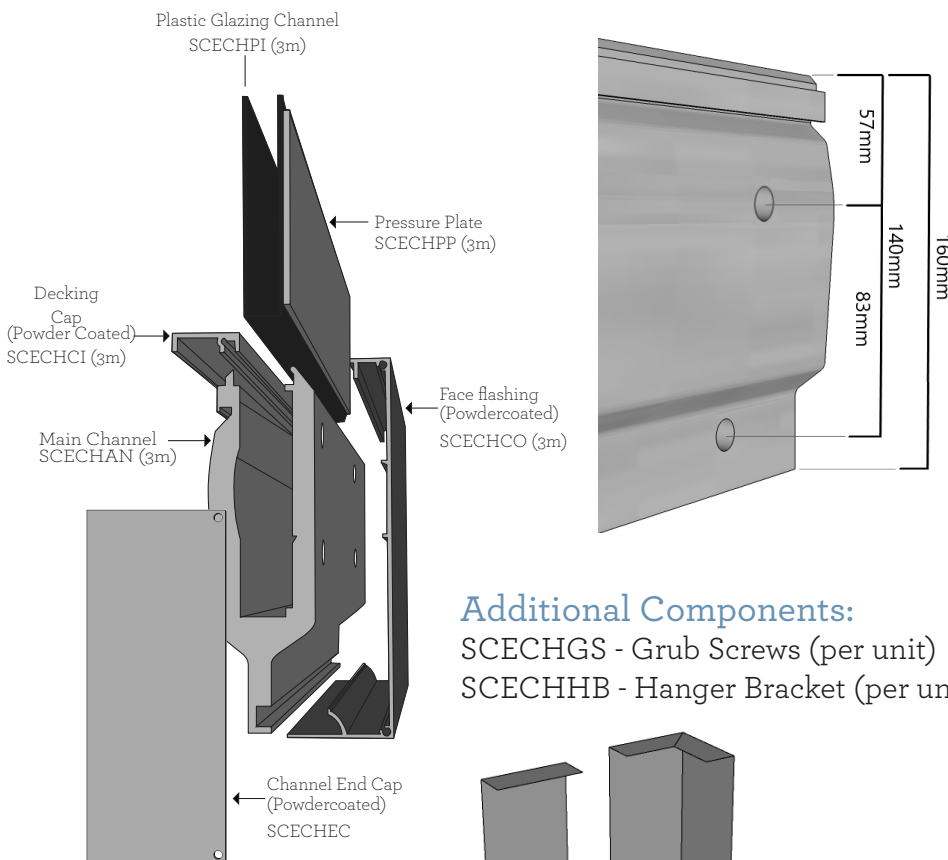
Bottom Fixing - SCETHR10-10mm threaded rod and Chemset 2 x 1/2 nuts either side of the channel tongue and 2 nuts (1 half nut) 1 x square washers either side of the timber joist.

B - TIMBER

Top Fixing - SCETCSK -140mm Countersunk SPAX Timber Coach Screw.

Bottom Fixing - M10 threaded rod 2 x 1/2 nuts either side of the channel tongue and 2 nuts (1 half nut) + square washers either side of the timber joist. (Alternatively - If you can't get to the inside of the joist then use the below) M10 Lag Screw 160mm long with 2 x 1/2 nuts either side of the channel tongue.

CHANNEL COMPONENTS:

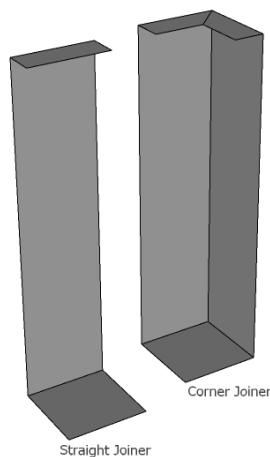


Additional Components:

SCECHGS - Grub Screws (per unit)
SCECHHB - Hanger Bracket (per unit)

! IMPORTANT!

If these fixings methods shown here are not viable for your application, please contact BelAire Fencing for further instructions.



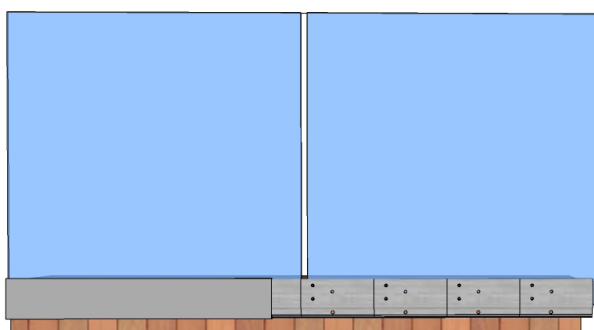


GLASS PANEL SIZES

PANEL SIZE GUIDE

Refer to the table below for guidance on the panel sizes.

Rakaia Glass Channel



Order Code	Width	Height	Thickness	Sqm	Glass Weight KGS	Corner Radius
SCE0312PP	300mm	1200mm	12mm	0.36	11kg	2mm
SCE0412PP	400mm	1200mm	12mm	0.48	14kg	2mm
SCE0512PP	500mm	1200mm	12mm	0.60	18kg	2mm
SCE0612PP	600mm	1200mm	12mm	0.72	22kg	2mm
SCE0712PP	700mm	1200mm	12mm	0.84	25kg	2mm
SCE0812PP	800mm	1200mm	12mm	0.96	29kg	2mm
SCE0912PP	900mm	1200mm	12mm	1.08	32kg	2mm
SCE1012PP	1000mm	1200mm	12mm	1.20	36kg	2mm
SCE10512PP	1050mm	1200mm	12mm	1.26	37kg	2mm
SCE1112PP	1100mm	1200mm	12mm	1.32	38kg	2mm
SCE11512PP	1150mm	1200mm	12mm	1.38	41kg	2mm
SCE1212PP	1200mm	1200mm	12mm	1.44	43kg	2mm
SCE12512PP	1250mm	1200mm	12mm	1.50	45kg	2mm
SCE1312PP	1300mm	1200mm	12mm	1.56	47kg	2mm
SCE13512PP	1350mm	1200mm	12mm	1.62	49kg	2mm
SCE1412PP	1400mm	1200mm	12mm	1.68	50kg	2mm
SCE14512PP	1450mm	1200mm	12mm	1.74	53kg	2mm
SCE1512PP	1500mm	1200mm	12mm	1.80	54kg	2mm
SCE15512PP	1550mm	1200mm	12mm	1.86	56kg	2mm
SCE1612PP	1600mm	1200mm	12mm	1.92	58kg	2mm

Rakaia Channel

PART NO: SCECHCH (Rakaia)

DISTANCES:

Deck Edge to Glass: 19mm

Deck Edge to Center of Glass:
25mm

Channel Flashing Height: 165mm

Bottom of glass to top of finished
deck level : 102mm

! IMPORTANT!

If these fixings methods shown here are not viable for your application, please contact BelAire Fencing for further instructions.

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CHANNEL INSTALLATION

YOU WILL NEED:

- Pencil
- Tape measure
- Chalk line/string-line

STEP 1

Work out the location of the glass channel and what height it will be mounted to.

Take the small L shape brackets (Fig 1) and set them in place to be flush with the top of the finished deck level. These small brackets will be used to hang the channel onto. This will make the installation a lot easier. Once brackets are in place you can sit the channel down onto the brackets to set your channel in place. Keep the channel back at least 10mm from any external corner, internal corners you will need to keep the channel back 80mm. Be careful though, as the channel is not securely fastened to the wall at this point, meaning any knock could move the channel off the brackets and could cause harm!

Fig.1

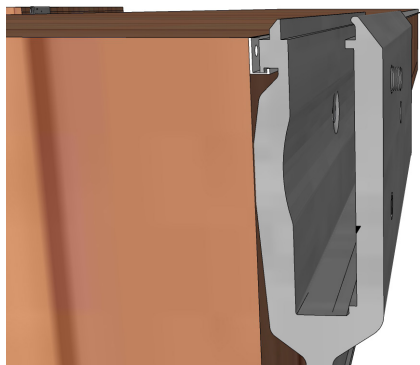
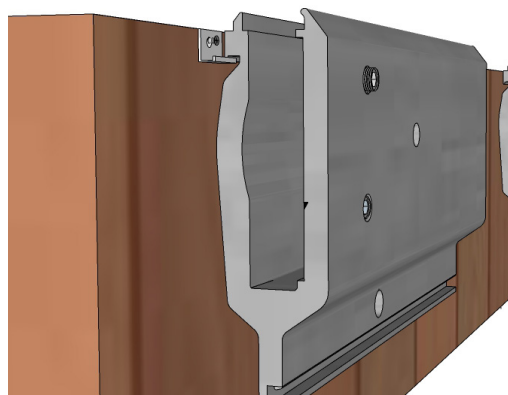


Fig.2

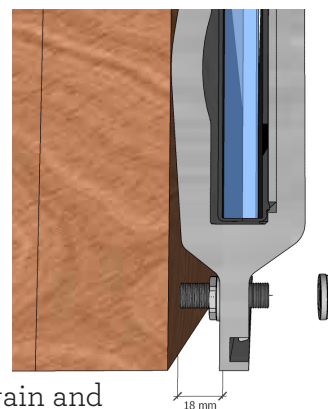
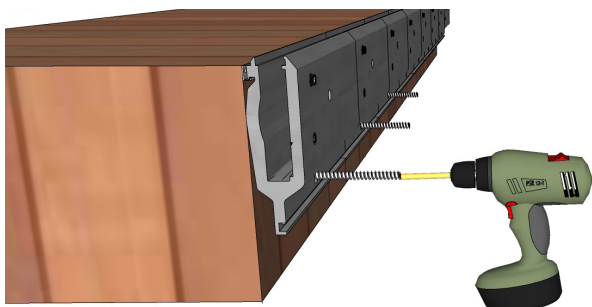


! IMPORTANT!

- When you are at a corner, you need to take special care to get the channel sitting at exactly the same height on both runs of balustrade.
- If the channel is sitting at different heights you will have some issues when it comes to place your channel covers on.

STEP 2

Now that the channel is in place you can mark and drill all the bottom holes and install the bottom fixings. If the deck is plumb then screw the fixing in until only 42mm is left sticking out from the face of the deck.



Once the bottom fixings are in place, then remove the channel again and wind on the half nut (if you are using a threaded rod you will need to fit 1 square washer and 1 half nut on to fix the rod in place) then fit a 2nd half nut until the outside face of the nut is sitting at 18mm from the face of the deck.

! IMPORTANT!

- Fixings on concrete surfaces requires a minimum of **100mm** from edge of concrete to your fixings.
- Be careful, as the channel is not securely fastened to the wall at this point and any knock could move the channel of the brackets and could cause harm!

CHANNEL INSTALLATION

YOU WILL NEED:

- Pencil
- Tape measure
- Chalk line/string-line

STEP 03

Fixing the channel into place.

Now remove the hanging brackets if you have used them so you can sit the channel back on over the 10mm bottom fixings.

The channel is sitting in place, you can now check the levels. Once you are happy with the levels, screw on the bottom outside nut to hold the channel loosely in place for now.

Once the channel is all set back into place, you can now fix in all the top fixings through and into the back side of the channel (fig.2).

Fig.1

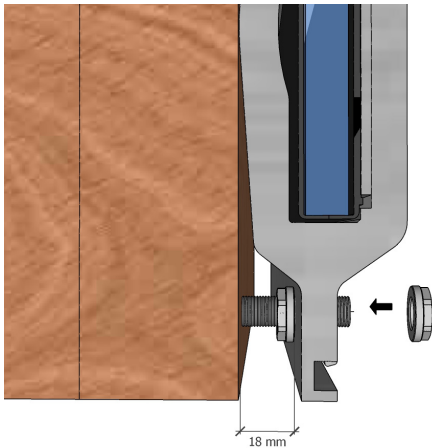
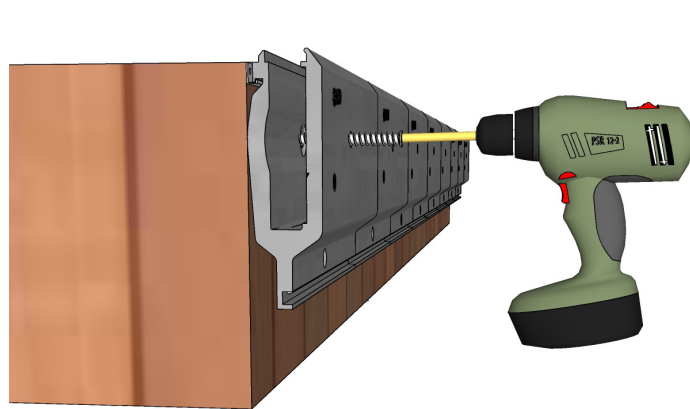
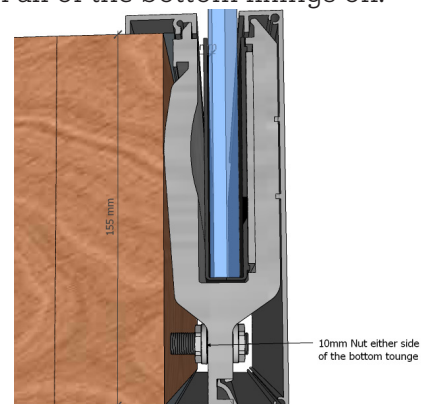
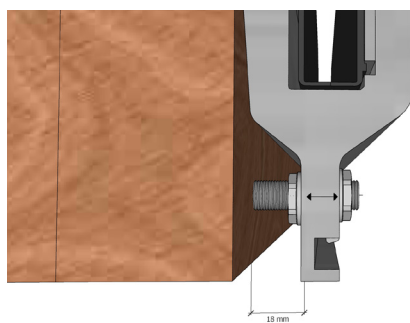


Fig.2



STEP 04

Now with the top fixings in, the channel can be made plumb by adjusting the bottom nuts in and out on the channel to get the glass sitting plumb. It will be easier to line it all up with the glass installed. When it is all looking plumb you can now tighten all of the bottom fixings off.



! IMPORTANT!

- Fixings on concrete surfaces requires a minimum of 100mm from edge of concrete to your fixings.
- Not all surfaces are constructed in the same way so please double check the dimensions will work on your layout.

GLASS INSTALLATION

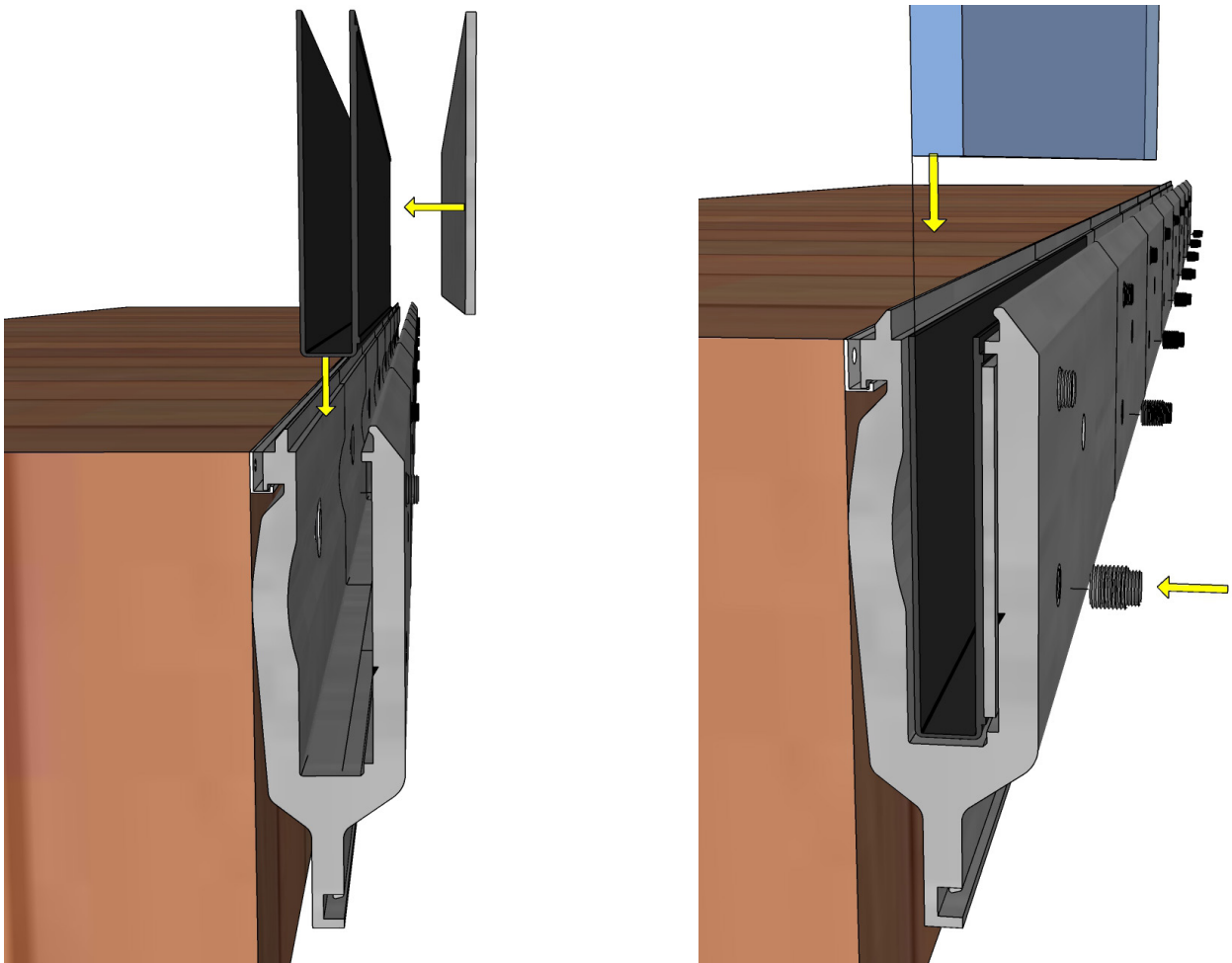
STEP 05

Installing the Glass

You can now carefully install the glass.

To do this, you need to slot in the plastic glazing sleeve along with the Aluminium pressure plate as shown below.

Once these are in place, you can now start installing the glass panels and tightening the pressure grub screws off along the balustrade. You can tighten the grub screws up very tight onto the pressure plate, which applies the pressure on, to hold the glass firmly in the channel.



! IMPORTANT!

- Fixings on concrete surfaces requires a minimum of 100mm from edge of concrete to your fixings.
- Not all surfaces are constructed in the same way so please double check the dimensions will work on your lay out.

YOU WILL NEED:

- Gloves
- Tape measure
- Allen keys

CHANNEL CAPPING

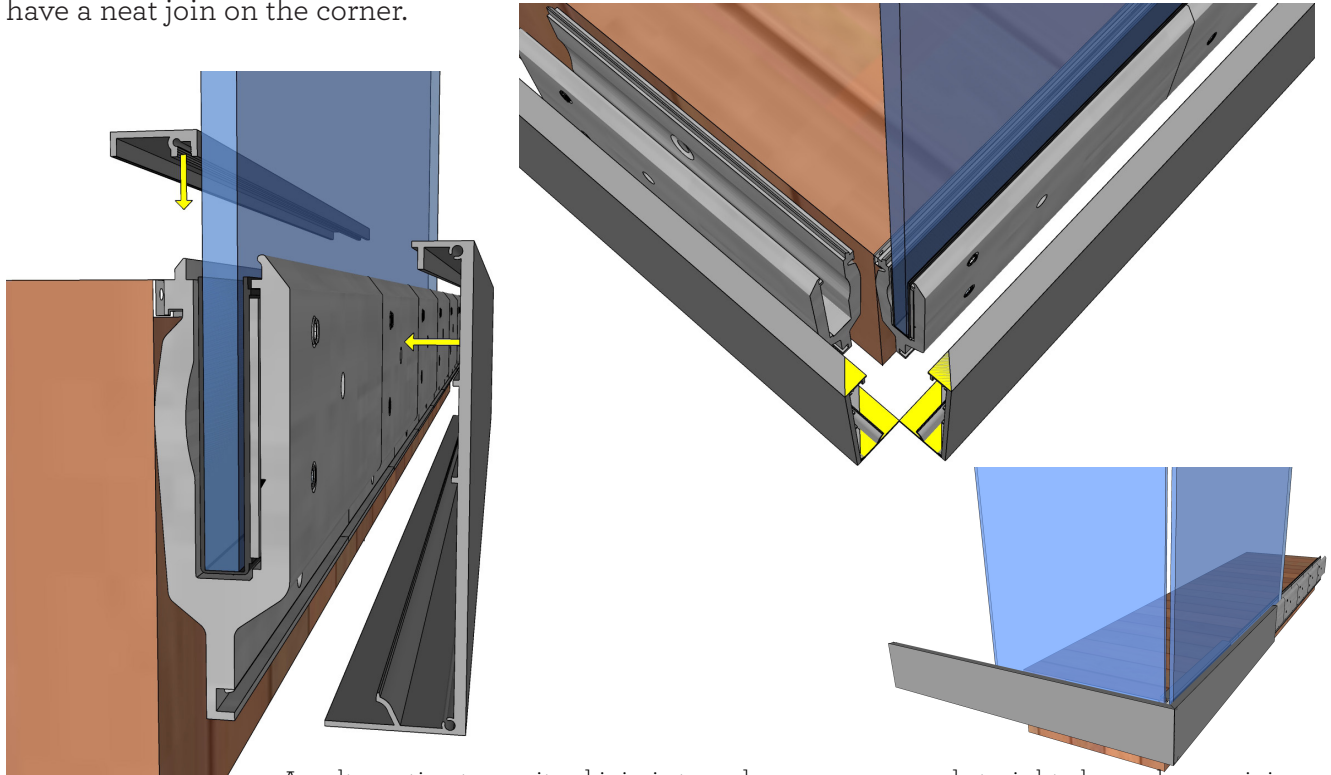
STEP 06

Fixing the channel into place.

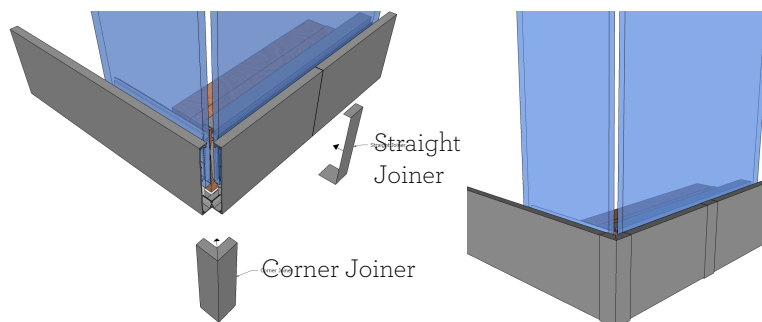
YOU WILL NEED:

- Pencil
- Tape measure
- Chalk line/string-line

Final stage of the install is to clip on the channel covers and install the channel end caps. The large front cover is simply pushed into place and will clip in to sit neatly on the face of the channel. On a 90 degree corner you will need to mitre cut each channel cover to 45 degrees to have a neat join on the corner.



An alternative to a mitred joint is to order our corner and straight channel cover joiners as below. These Joiners simply get siliconed onto the face of the channel.



! IMPORTANT!

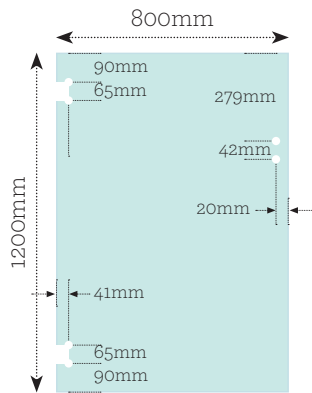
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GLASS INSTALLATION

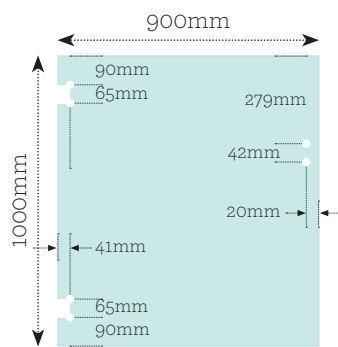
GATE PANEL RANGE & INSTALLATION INSTRUCTIONS

BELAIRE GATE PANELS

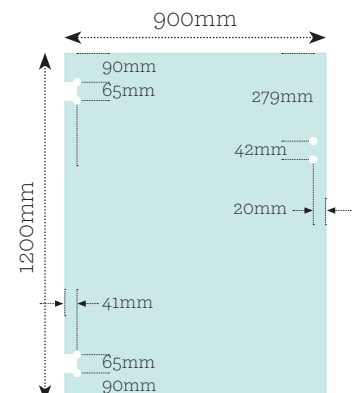
- 8 & 10mm thick clear toughened glass
- Corner radius: 2mm
- 10mm supplied as standard



Order Code: SCE0812GP PH
Glass weight: 19.9kg



Order Code: SCE0910GP PH
Glass weight: 21.6kg



Order Code: SCE0912GP PH
Glass weight: 28kg

INSTALLATION STEP-BY-STEP

Follow the guide below for easy installation.

1. Prep Hinges

Release any tension that may be on the spring hinges.

2. Prep Glass

Ensure that the plastic packers have been inserted in the holes of the glass to prevent the steel from coming in contact with the glass.

3. Install

Fit hinge set to the hinge panel and gate panel.

4. Fit Gate Latch

Fit gate latch to the gate panel, (ensure the plastic packers are inserted in the holes of the gate panel as per step 2).

Ensure latch is aligned correctly or it won't close correctly.

5. Tension Hinges

Using the Allen key that was supplied with the hinge set, turn the dial one click clockwise to tension the spring inside the hinge.

To decrease the tension, apply pressure to the Allen key to push the dial inwards; the dial will naturally want to unwind, then remove the Allen key when you get to the desired tension.

6. Adjust Hinge

Tension both top and bottom hinges equally, and only one increment at a time.

***CAUTION**, do not over-tension the hinges!

TROUBLE SHOOTING GUIDE

Below are some commonly asked questions or potential problems you may experience, if you have any questions that are not below, feel free to touch base with one of the team members from BelAire.

Can I Pack Underneath My Channel?

Yes you can. We do not recommend any more than 3-5mm. If you exceed this then the cover plate may begin to lift off the ground and rattle.

Why Does My Gate Not Latch?

If your latch components are not completely aligned then this can cause the latch to not close properly. Unscrew the latch receiver and adjust the height accordingly.

If the gap between the gate and the latching panel/wall is too large the magnet may not activate and cause the gate latch to fail.

Why Are My Hinges Not Self Closing?

These may not have been set up correctly. Over time your hinge may need to be re-tensioned. You can do this by removing the caps on the top of the hinges and, with the use of an allen key, the spring can be tightened by turning clockwise.

Re-insert the small pin to hold the tension in place.

Why Has My Gate Dropped?

For the gate hardware to be fitted to the glass, sufficient clearances need to be made, with these clearances given you will get a small amount of drop in the gate over time as things settle, we have an acceptable tolerance of up to 5mm.

My Glass Has a Bow in it...

This is caused during the toughening process, New Zealand has a standard tolerance of up to 6mm per metre.

Are Glass Fence Panels Strong?

Our glass panels are 12mm thick and made from toughened glass. It is highly unlikely to break unless handled poorly. Panels can/will shatter if the edges have been chipped from miss-handling the glass. Sliding the glass sideways in the channel can also cause the glass to break.

When installing glass, extreme care must be taken.

How Do I Get My Glass Straight?

See page 9 description.

Do Glass Fencing or Balustrades Require Maintenance?

Glass fencing, whether it's around your garden or pool, is very low maintenance and only requires cleaning occasionally to maintain it's clear appearance. Our Aluminium channel system will only require the occasional clean to keep it like new.

Are Glass Pool Gates Secure for Children?

Yes. Our auto-latching pool gates meet New Zealand's standards for safety, protecting children from entering your pool area unsupervised.





For more information, call us to speak to one of our friendly team:

0800 235 2473

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