

BSC94

### **Optio** Inline Sliding Door Installation Guide



**Experts in Aluminium** 

aluk.co.uk

OFFER FREE EXPERT TRAINING FOR ANY OF OUR PARTNERS WISHING TO GIVE THEIR TEAMS THE SKILLS REQUIRED TO EVERY TIME! GET IN TOUCH WITH US TO

Like all our aluminium systems, our experts have designed it with flexibility and installation simplicity in mind, helping you save precious time on the job and to deliver a first class result at the first time of asking.

Over the following pages you'll find a comprehensive step-by-step guide to installing the BSC94 system. From initial aperture checking through to final sealing, we've covered everything you'll need to know in order to achieve an exceptional finish - even throwing in some top tips along the way.

# 4LU

# Installing trust

Thanks for choosing the AluK BSC94 Optio door system.

# Before you get started

### > Check your order!

We understand time is money, but before getting stuck into the job carefully unpack your order and check everything tallies up with the order from your fabricator.

### > The right tools for the job

Like you we don't believe in blaming our tools, so here's all the equipment you'll need close at hand before starting the installation process. As you'll be working with heavy glass, we also recommend using the PPE listed below.

### TOOLS

- 1 Laser level
- 2 3mm Allen key
- 3 Gasket sheers
- 4 Silicone and small joint sealant\* and applicator gun
- 5 Plastic / Rubber hammer
- 6 Glazing paddle
- 7 Glazing suction cup
- 8 Cordless drill
- 9 Long spirit level
- **10** Selection of frame and glazing packers of various thicknesses

Tools required but not shown are:

- > 13mm HSS or blade type drill bit
- > 25mm self-tapping screws
- > Proprietary fixings to fit the sub seal and the frame to the substrate
- > Long series 3.5mm drill bit
- > SDS drill with appropriate size drill bits for your preferred frame fixings
- Tape measure
- > AluK sealant wipes part number T50003

### PPE

- 1 Safety goggles
- 2 Protective gloves
- 3 Wrist and lower arm sleeves
- 4 Safety shoes
- PPE required but not shown:
- > Hi-vis jacket and hard hat





### 1. Check aperture



### > 1.1

To obtain a true reading measure horizontally at the top, middle and bottom of the opening.



> 1.2 Next, measure the vertical dimensions at each end of the opening and again in the centre.



> 1.3 Finally measure the diagonals. Once you're satisfied that all the measurements are acceptable proceed to fitting the sub-cill (Step 2).



> 21

Ensure the end caps are sealed and fitted to the extrusion. If not, fill the ends of the sub-cill with silicone sealant to form a dam and apply sealant around the perimeter of the profile then screw the end caps onto the sub-cill.

### Assembling the outer frame on site? > Here's what to do

- > 1 Before assembling the outer frame remove the central plastic channel. It's advisable the frame is fixed before the channels are inserted.
- > 2 Cut back any protective tape approximately 50mm from the mitred corners.
- **3** The external cleat chamber in the threshold section must be filled with sealant at each end of the profile to form a dam. (Pictured).
- > 4 Apply sealant around the mitre to only one of the two mating surfaces. (Pictured).
- **5** Insert the cleats and chevrons (braces). Refer to page 5.01 of the BSC94 Technical Manual for cleat, chevron sizes and part numbers.
- **>** 6 Bring the sections together and insert and tighten the cleat blocks, ensuring the faces of the sections are flush.
- > 7 Clean off any excess sealant with AluK wipe.





> 2.3 Recheck and adjust the packers as required and bed on a suitable material. Check for bowing in the cill by using a laser level or spirit level (or old school builder's string line).

# > 2.4

# Simon's expert tip

"To stop your packers from moving around when packing the cill simply apply a small blob of sealant to help hold them in place before fixing."

# 2. Fitting the sub-cill



### > 2.2

Ensure the sub-cill is level, using packers if necessary.



Give it a final level check and adjust if necessary. Once you're happy the sub-cill is level it's time to fix it to the cill.

Fixing centres for the sub-cill should be 100 - 150mm in from each end and a maximum of 600mm thereafter.



### 3. Frame fitting







> 3.2 Check frame is plumb and level.



> 3.3 Pack frame as required ensuring it's central in the opening.



> 3.4

Remove the plastic channel at jamb and head, making sure to recheck to ensure frame is plumb, level and square.



> 3.5 Don't forget, fixing centres should be 100 - 150mm in from each end and a maximum of 600mm thereafter. Drill and counter-bore pilot holes through the thermal break.



Insert perimeter fixings and pack frame (ideally use u-shaped packs). Be careful not to over tighten as this may deform the frame. Check again for plumb, level and squareness.



> 3.7

When you're completely satisfied the frame is fitted plumb, level and square, replace the plastic channel around the frame.



Insert the drainage pieces into the central channel. These should be sealed with a small amount of sealant before insertion and lightly tapped home to ensure they're seated correctly.



> 4.1 Lift first door leaf into position and seat on track. Don't forget, if working from the outside this will be the internal leaf. Operate the door a few times to ensure a smooth action.



second door leaf.



> 4.4

If not already fitted, install the lock keep by sliding the locking panel up to the outer frame of the slave panel. Next, mark the centre of the locking mushroom to the outer frame/slave panel. Finally, fit the lock keep central to the centre mark on the locking mushroom.



> 4.5



> 4.7 Fit drainage cover caps (if not already fitted).



▶ 4.8

### 4. Door fitting



Repeat the process for the



> 4.3 Fit lock spindle and handles (if not already fitted).

Check the position of the buffer stops and fit.





Finally, fit/refit the head drip.

# 5. Glazing



> 5.1

Check to make sure the captive glazing gasket has been fully fitted with no gaps at the corners, then seal with a butyl sealant in the corners.



> 5.2

Position glazing packs on the setting blocks fitted above the rollers and offer glass into the aperture, using approved manual and glass handling techniques.



Pack glass down the sides (two each side - one at the top and bottom of each stile and not central).



> 6.1 Seal the frame to the substrate using a proprietary sealant.



▶ 6.2



> 5.4 Next up, carefully fit the bead.



Fit the wedge gasket, ensuring the gasket isn't stretched and is cut oversize by 10mm per meter. Remember to force into the corners first and then loop from the centre towards the corners.



> 5.6 Give the system a final check to ensure smooth operation of both the doors and lock.

# Simon's expert tip

"If the gasket is being a little tricky to get in – use a spray bottle with a weak dilution of soapy water to aid the process."



### 6. Sealing and cleaning

Clean down the frame and glass with a proprietary cleaner to remove any excess sealant.

2016/TR/Install/bsc94/1

# Expertise you can call on

Our sales, technical and customer service teams are always on hand to provide the support, training and expertise you need, when you need it most.

For any assistance with the system or installation please contact your supplier directly.

Should you wish to get more information about further free training or about working with our products, just give us a call on **01633 81 04 40** or email **info@aluk.co.uk** and our team will be happy to help.



aluk.co.uk

**Experts in Aluminium**