



FITTING INSTRUCTIONS

SVG20, SVG30, SVG83 sliding doors

PREPARATIONS

Please refer to your order or detailed sectional drawing (if requested) to assist you with the configuration of the system supplied and with identifying the profiles and their relative positions. Please read the following fully before commencing installation.

Recommended specialist tools/items for fitting of system:

- 4 or 6 inch level.
- 6ft level.
- 2.5mm, 3mm Allen keys
- Flat 28mm wide PVC glazing packers of varying sizes
- String line
- 4.5mm, 5mm & 8mm long series HSS drill bits
- Glazing wedge
- Gasket cutters
- Wide roll of DPC (if fitting a flush track system)
- Glass suckers

IMPORTANT NOTE

Unless the track is being fitted onto an aluminium sill or any other type of sill detail (e.g. cant brick, stone or timber sill etc.), SUNFLEX UK recommend the use of a wide damp proof membrane (DPC) laid down on top of the base and folded up at each end.

After installation of the frame the DPC can then be turned up the back inside face of the bottom track. The DPC, being wide is then left to trail down the front face of the base to form a flashing detail similar to a sill pressing or a leaded up-stand.

NOTE: Care must be taken to ensure the packers under the track are kept back flush with the front face of track so an adequate silicone pointing joint can be applied between the frame and the DPC. This helps to prevent the risk of water backtracking underneath the track.

The purpose of the DPC is to form a vertical damp barrier and prevent any water from being drawn back under the track and forming damp patches on the internal floor. For further reference, the recommended position of the DPC is shown on the sectional drawing (if requested) supplied at order confirmation.

LEVELLING OF THE BASE OF THE APERTURE

Firstly, use a small 4 or 6 inch level (depending on either twin or triple track frame being fitted) to check the front-to-back level of the base on which the door system is to be fitted.

Starting directly against the side wall and at approximately every 250mm intervals until the edge of the opposite side wall. Check the front-to-back level of the base and place a thin packer on either the front or back edge of the base as required to correct any discrepancy (see Photo 1).

Now, with a suitable long level, proceed to level across the width of the aperture again. Ensuring packers are placed directly at the ends of the aperture and on top of previously placed front-to-back packers at 250mm intervals (see Photos 2 & 3)

The height of the packing should allow a recommended minimum tolerance of 6mm between the top of the door system and the underside of lintel for a fitting tolerance.



Photo 1
Levelling & packing front to back

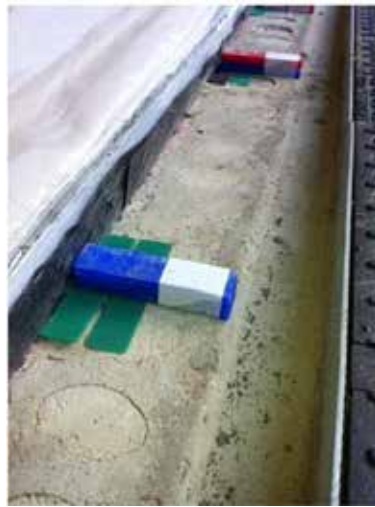


Photo 2
Packing left to right



Photo 3
Levelling left to right

COMPONENTS

The remaining outer frame sections, glazing beads and lock keep are flat packed in bubble wrap; take care if using a knife when unpacking these, as they are finished painted surfaces.

You will also be supplied with an accessory box, the contents of which are detailed below, and a roll of wedge gasket, as the system is always supplied unglazed.

TYPICAL CONTENTS OF ACCESSORY BOX

- Polythene bag containing Allen key blocks (for assembly of outer frame)
- D-handle set with screws and square shaft for main sliding panel (special-order feature handles will be pre-fitted).
- Set of keys (quantity depends on number of key locks on door system, three keys per lock).
- Polythene bag containing 70mm screws for securing fixed panels or plant on panels in position.
- Polythene bag containing rubber anti-draught blocks (quantity depends on number of panels)

- Polythene bag containing screws for lock keep.
- Polythene bag containing buffer stop and fixing screw (only when external handles have been specified).
- Individual polythene bags containing black PVC interlock end caps.
- Tube of structural glazing sealant (supplied on SVG20 & SVG30 only)

IDENTIFYING AND PREPPING OF OUTER FRAME SECTIONS

Ideally, lay unpackaged frame sections on trestles or on a protected surface area for ease of assembling the frame.

THE BOTTOM TRACK

The bottom track is easily identified as it will have drainage holes and the stainless steel running tracks fitted to it.

Dependent on the detail at the base of the opening determines if the track is going to be fixed down or simply bedded down with sealant on top of a previously packed and levelled base (we do not recommend fixing bottom track where fixings are puncturing a lead tray or similar detail)

NOTE: The fixing point through the bottom track is, importantly, only through the thermal break, if the track is being drilled anywhere else it will puncture the drainage channel.

As a guide, fixing should be approximately 125mm from each end and at a maximum of 1000mm in between, although of course if fitting directly to a base and not a sill, you may need to offer the track up to the aperture to mark fixing points, according to where fixings can be gained. After fixing the track down, check the level again of the track and importantly, the front-to-back level of the track, if this isn't correct it will compromise the alignment of the panels.

If sealing and fixing a sill onto the bottom track, fixings should also only be located through the thermal break on the bottom track and then into the sill section so the head of the screw fixings can be accessed easily should you need to reposition frame left and right on the sill after you have lifted frame into the opening. (sill should only be fixed to bottom track after the frame has been assembled and mitres correctly aligned, otherwise frame assembly will be compromised).

Offer the frame in to the opening and locate down onto previously levelled base and, using a suitably long level, plumb and mark frame position onto sidewalls. Proceed to drill and fix side jambs into the sidewalls of the structure, observing recommended fixing centres. Use suitable PVC glazing packers to space out tolerance gap between jamb and wall.

NOTE: It is good practice to pack both above and below each individual fixing to prevent flexing frame. Additionally, take care to ensure jambs do not twist if packing against uneven brickwork.

THE TOP TRACK

The fixing point through the top track on a twin track system is directly through the thermal break and on a triple track system it can be also in the outer channel. However, if fixing to the outer channel, the fixing must be counter sunk so as not to obstruct the plastic U-channel the clips in.

The recommended packing points are directly above the side jambs and at a maximum 500mm apart with fixing centres the same as the bottom track, 125mm from each end and a maximum of 1000mm apart.

THE LOCK JAMB

You may have one, two or no lock jambs at all, depending on the configuration of the door system ordered. As a guide, when you have a sliding panel closing against a wall jamb you will have a lock jamb. When supplied, it will be easily identified as it has cut outs for the lock system. The recommended fixing point on a twin track system is directly through the thermal break and on a triple track it can also be in the outer channel.

However, if fixing to the outer channel the fixing must be countersunk so as not to obstruct the black plastic U-channel that clips in. The recommended fixing centres are 150mm from each end and at a maximum of 500mm apart in between.

STANDARD SIDE JAMB

You may have one, two or no standard side jambs at all, depending on the configuration of the door system you have ordered. As a guide, when you have a fixed panel attaching to a side jamb you will have a standard jamb. When supplied, unlike the lock jamb it has no cut outs, just a plain jamb section.

The recommended fixing point on a twin track system is directly through the thermal break and on a triple track system it can also be in the outer channel, however if fixing through the outer channel the fixings must be countersunk so as not to obstruct the black plastic U-channel the clips in. The recommended fixing centres are 150mm from the each end and spaced at maximum 800mm apart.

WHEN FITTING A FRAME WITH AN ADDITIONAL SILL SECTION

The sill section will be packaged separately from the rest of the outer frame. It is normally supplied 100mm longer than the width of the door system to allow for the sill to be cut around each end of the aperture to form a horn, if required.

The sill should be cut to size and then sealed and screwed onto the bottom of the slider frame track once the frame has been put together. The fixings holding the sill onto the bottom track should be located through the thermal break on the bottom track and into the sill section so the head of the screw fixings can be accessed easily should you need to reposition the frame left or right on the sill after you have lifted the frame into the opening.

ASSEMBLING THE OUTER FRAME

Ideally, lay unpackaged frame sections out on trestles or on a protected surface

area for ease of assembling. Check, double check and check again that you have the correct side jamb sections on each side, especially the lock jamb.

Check against drawings whether the main sliding panel is on the inner or outer track and that you have the corresponding lock jamb to this. Where you have a configuration of panels sliding and closing on each side on the same track, it is very easy to get the two lock jambs upside down or on the wrong sides.

If unsure, measure the distances from the bottom of one of the door panels to the centre of the locking points and then check this against the cut-outs in the jambs to make sure that they align.

With the frame sections laid out correctly assemble the outer-frame, one corner at a time. Ensure each mitre joint, while assembling, is sealed with a suitable silicone sealant. Fasten the joint together with Allen key blocks (found in accessory pack); locate pointed end of block into square hole in frame, ensuring the grub screw is accessible from the adjacent outer edge.

Tighten Allen key blocks using 2.5mm/3mm Allen key (not supplied). Slacken and tighten Allen key blocks on adjacent sides of the mitre to gain perfect alignment of the mitred corner.

Offer the frame into the levelled base and, using a suitably long level, plumb and mark frame position onto sidewalls. Proceed to drill and fix side jambs into the sidewalls of the structure, observing recommended fixing centres. Use suitable PVC glazing packers to space out tolerance gap between jamb and wall.

It is good practise to pack both above and below each individual fixing to prevent flexing frame, additionally take care to ensure jambs do not twist if packing against uneven brickwork.

The ideal end result of packing and fixing side jambs is that you are left with a similar tolerance gap between frame and wall on each side of aperture. Once this has been achieved, then you can proceed to fix the bottom track and then pack and fix the top track.

Use packers to ensure top track is a constant distance from bottom track across its entire width and the track is not twisting forward or backwards on an un-level lintel. Using a small 4-inch level on the underside of the top track is the best way to identify this.

NOTE: On wider systems, it is recommended a string line is used when fixing top and bottom tracks to ensure tracks are straight and not bowed.

After frame fixing is complete, the black plastic u-channel can be clipped into the frame to disguise the fixings. Before inserting the u-channel, silicone in the corners of the bottom track and around each individual drainage slot to prevent water from getting between the channel and the track and running out the corners of the frame into the fabric of the building.

When clipping plastic u-channel in place, start with the sides first, followed by top and lastly the bottom; ensuring that the drainage holes in the black plastic align with the cut-outs in the bottom of the frame and any silicone which has spread

into the slots is removed to leave the drainage clear.

LABELLING OF PANELS

At SUNFLEX UK we label our panels with a simple number always counted from Left to Right, for example a 4-panel system will be labelled 1-4 from left to right.

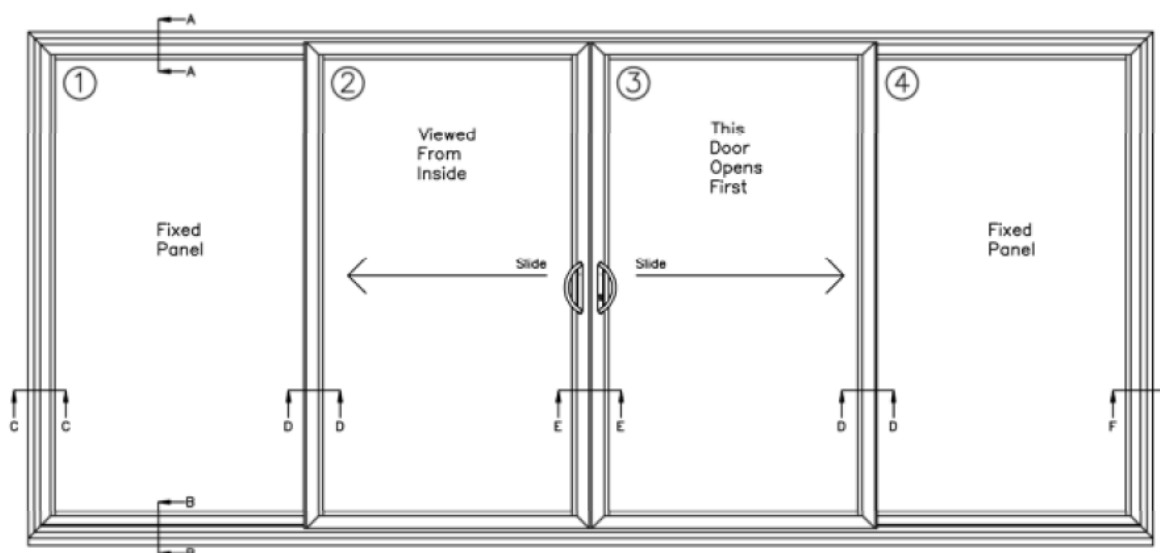


Photo 4
Labelling of panels

When there are multiple sets, the default label will detail SET A, SET B, etc. which will be on frame packs as well as panels, so you can ensure the correct panels end up in the correct frame. If particular set references were provided with your order, these may be detailed on the packaging.

Refer to your order or detailed sectional drawing (if requested) to note the configuration and placement of panels.

PANEL TYPES AND THEIR CONNECTION & INSERTION INTO FRAME

Starting with the outer most panel on the external track or plant-on panel (if applicable), insert the panel as instructed below, using the drawing to note the configuration and placement. Glaze and gasket the first panel before inserting the next panel then repeat with remaining panels, glazing each one before inserting the next.

PLANT-ON FIXED PANELS

The plant-on, fixed panel attaches onto the front face of the outer frame. If the plant-on panel is going to project beyond the face of the brickwork, it is recommended to seal the frame behind first against the wall before attaching the panel.

To install, firstly run a thin bead of silicone around the front face of the outer-frame in the area the plant-on panel is going to attach, then sit the bottom inside

lip of the plant-on panel onto the external ledge of the bottom track as close to the end of the frame where it locates as possible.

Next, stand up the panel, ensuring the top inside lip of the plant-on section fits underneath the external ledge of the top track so the panel is sitting back flush against the outer-frame.

With assistance, slide the panel fully into the corner of the outer-frame. Then, whilst making sure the panel is held fully into the corner and against the face of the frame so it cannot spring back, drill and screw into the front face of the outer-frame through the pre-drilled holes in the plant on profile to attach. Use a 4.5mm long series drill and 70mm screws from accessory box for this task. Finally, clip in pre-cut cover profile to disguise screw fixings.

STANDARD FIXED PANEL

Prior to insertion, file the top edges of the punched cut-out on the interlock profile attached to the side of the panel so that this cannot mark the frame when being lifted into position.

Check order/drawing of configuration to ensure exact position of the fixed panel and whether it is locating on the inner or outer track. If attaching to the outer track, it is best to insert the panel from the outside. If the panel is sitting on the inner track then it is easier to insert from the inside.

Panels insert into the frame by lifting the panel up into the required track at the head, up righting and then allowing the panel to sit down onto the bottom track.

Once inserted, slide the panel into the corner of the frame where it has to be fixed into position. To fix the panel to the frame use a 4.5mm long series drill bit and 70mm screws from the accessory box.

Firstly, drill and fix the side of the panel through the grey packers located down the side and then through the packers in the bottom. Finally slide the 85mm x 30mm black PVC spacing block into location between head track and top of fixed panel and drill and screw through panel and block into head track to secure the head of the panel.

SLIDING PANELS

When attaching a sliding panel prior to insertion, file the top edges of the punched cut out on the interlock profile attached to the side of the panel so that this cannot mark the frame when being lifted into position. On lead panels remove the plastic insert on the top closing edge, refit after the panel has been inserted.

Check order/drawing of configuration to ensure exact position of the panel, whether it is locating on the inner or outer track. If attaching to the outer track it is best to insert the panel from the outside; if the panel is sitting on the inner track then it is easier to insert from the inside.

Panels insert into the frame by lifting the panel up into the required track at the head, up righting, and then allowing the panel sit down onto the bottom track.

SLIDING PANELS WITH CENTRE MEETING STILE OR CORNER POST

When a sliding panel has a meeting stile or corner post attached to it, it must be removed to allow the panel to be inserted into the frame and then reattached.

Care must be taken when reattaching not to have the section sitting too low so that it incurs added resistance from the stainless steel track when sliding the panel. At this stage it is important to ensure the panel is sliding freely, which may be compromised if the head track is not at a consistent distance above the bottom track.

FITTING OF LOCK KEEP

Usually the lock keep is supplied in one piece, although on taller doors it may be supplied in two pieces and may require trimming to length.

Fix to locking side of outer-frame, which has cut-outs for the lock, using screws provided in the accessory box, measure up from the top of the bottom track to the centre of one of the locking cams on the panel and then check that you have the same measurement to the centre of the corresponding locking point on the keep.

The lock-keep should be fitted to the frame before glazing of the panels commences to determine if main panel reaches the keep and locks easily without the need to adjust the position of the fixed panel.

When fitting the lock-keep to a meeting stile, attach with M4x10mm machine screws from accessory box into small, grey PVC fixing plates which will already be located in the meeting stile.

After fitting the lock-keep; check locking operation of door. If any problems are experienced, check panel is meeting parallel to the outer frame and lock-keep and also that the vertical height alignment of the lock keep to the locking cam points (mushroom heads) on the door panel is correct.

Mushroom heads on the ends of the locking cams can be adjusted in and out, but this shouldn't be necessary.

Once you have inserted all the panels, fit the lock keep in order to carry out a dry run before glazing. If there is then an issue with locking or too much side-to-side play in the panels when locked, then the position of the fixed panel can be adjusted either away from to further into the side jamb to resolve this.

If you ever have to adjust the mushroom heads on the locking bar then thread-lock must be reapplied, as without the mushroom heads will simply loosen and fall off.

GLAZING OF PANELS

Ideally, the panels should be glazed and wedged up one at a time as they are inserted into the frame, always starting with the outermost panel first.

All the slim interlock profiles have to be bonded onto the edge of the glass.

GLAZING PANELS WITH A SINGLE SLIM INTERLOCK TO ONE SIDE

Firstly, start by placing a 5mm packer onto each of the packing points at the bottom of the panel. Then stick 2mm glazing packers into the channel of the slim interlock, spacing packers evenly apart in four points down the side of the profile.

Next apply the bonding sealant only in the centre-third of the channel of the interlock and into each edge of the channel where the glass panes will come into contact with the sealant.

Check over the glass unit to be inserted in the panel, clean the edges and face edges of the glass panel to remove any lumps of sealant.

Insert the glass unit into the door panel by firstly tucking the unit into the interlock section and then swing the unit round to sit flat into the panels and on top of the bottom packers.

Insert 4mm glazing packers between glass and interlock to facilitate insertion of the wedge gasket into the interlock and then, using a long level on the edge of the panel, check for straightness; use a rubber mallet to correct, as necessary.

Once straight, insert packers down opposite side to straighten and silicone packers in place. Insert the glazing beads, hold beads in place with blue packers, which also assists when inserting the wedge gasket.

Check once again that slim interlock is perfectly straight and hasn't altered while inserting the wedge gasket in the rest of the panel.

GLAZING PANELS WITH A SLIM INTERLOCK TO BOTH SIDES

As before, place a 5mm packer onto each of the packing points at the bottom of the panel.

Measure the distance between the back of the two interlock profiles where the glass is to be inserted. Next measure the maximum width of the glass unit, making allowance if the glass is slightly stepped. Calculate the size of packers required to stick down the sides of both interlocks that will leave you your glass sizes plus 2-3mm tolerance between packer faces.

Loosen and back off by approximately 20mm all the screws located at top and bottom of **only one** of the interlock profiles. Tap this interlock profile across to the backed off screws to make space for the glass to be inserted.

Check over the glass unit to be inserted in the panel, clean the edges and face edges of the glass panel to remove any lumps of sealant. Apply the bonding sealant only in the centre-third of the interlock channel to both of the interlocks and into each edge of the channel where the glass panes will come into contact with the sealant.

Insert the glass unit into the door panel by firstly tucking the unit into the interlock that remains firmly fixed on to the bottom and top rails and then swing the unit round to sit flat into the panel and onto the bottom packers.

Tap the backed off interlock back into position and onto the side of the glass and proceed to gradually tighten the top and bottom screws back up, in stages, until the profile is fully located back onto the ends of the top and bottom rails.

Check panel alignment to adjacent panel, increase/decrease bottom packing to adjust. When correct, insert 4mm glazing packers between glass and interlock to facilitate insertion of the low-line wedge gasket into the interlock.

Fit the low-line wedge gasket into both the interlocks and then, using a long level on the edge of the panel, check for straightness; use a rubber mallet to correct as necessary. Once straight, check panel alignment again to adjacent panel and, if correct, insert the top and bottom glazing beads. Hold beads in place with 5mm blue packers to assist when inserting the wedge gasket.

Check for straightness once again after inserting wedge gaskets to ensure the slim interlocks are perfectly straight and haven't altered while inserting the wedge gasket in the rest of the panel.

LEAD DOOR PANELS

On the handle sides of panels above 2.2m, it is recommended to seal down the edge of the panel in the centre to the glass with a neutral cure silicone sealant to bond the edge of panel to glass to prevent the side of the panel being bowed out during operation of the door.

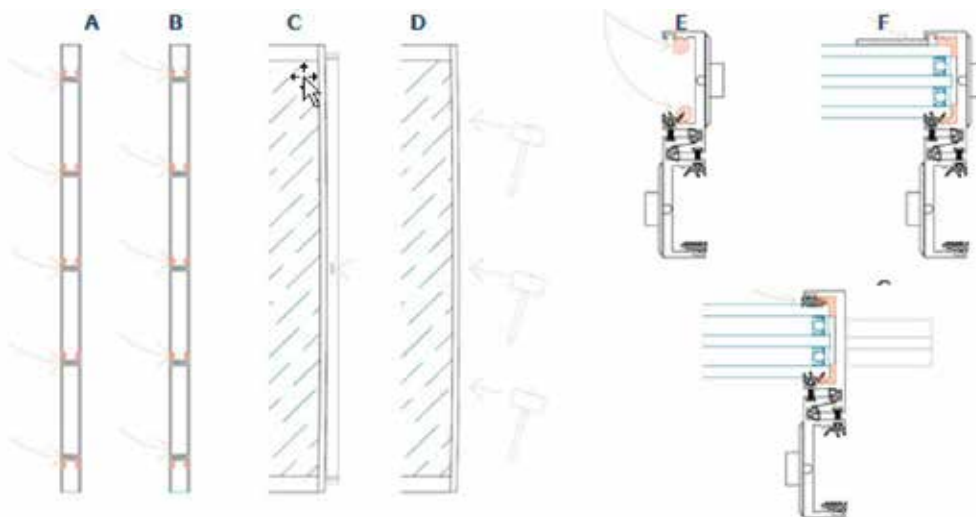


Photo 5
Location of gaskets



Photo 6
Insert packers to secure bead and facilitate gasket insertion.

FITTING THE WEDGE GASKET

The wedge gasket is ideally cut and inserted in individual pieces. Starting with the top and bottom sections and then with the sides.

These must be shaped at the ends to neatly abut the top and bottom sections (gasket cutters are recommended for this task). Before starting, ensure the gasket is clean and grit-free so as not to scratch the glass. Care must be taken not to cut gasket too short or exactly to size as shrinkage will occur.

As a guide the gasket should be cut approximately 20mm longer for every 1m of length with the excess equalled out over the complete length. Use glazing packers inserted between the glass and the profile edge/glazing bead to facilitate the wedge gaskets insertion.

Start from one end and work to the other, removing the spacing packers previously inserted as you work along and pushing the gasket back on itself to compress and use up the excess. A soapy water spray is also recommended to assist with the insertion of the gasket and a neatly cut timber block is also an asset to ensure it has a neat, flawless appearance.

Having inserted the wedge gasket, check again that the interlock profile is straight and adjust if necessary.

FITTING OF ANTI-DRAUGHT BLOCKS

Fit 'anti-draught' rubber blocks from accessory box. These are required to be fitted above and below at each interlocking junction.

The block has to have a slit cut in it at one end to allow it to push into the leg of the tread-plate approximately 20mm.

On the bottom track sealing blocks silicone should be pumped through the centre hole of the block to seal it within the track and prevent water from being able to track past. Top blocks can be screwed in position.

Mark position, where required, with door in the closed position then slide open the door for ease of sealing / fixing.

NOTE: See photo 7 for location.



Photo 7
Please note the bottom brush block must be sealed into the track with silicone to prevent water passing beside the block

FITTING OF PANEL BUFFER STOP



Photo 8
Buffer position

A panel buffer stop is only supplied when lead sliding panels are ordered with external handles to prevent the handle damaging the adjacent panel when fully slid back.

The buffer stop should be drilled and fixed to the bottom rail, ideally on the inside face of the adjacent panel, 33mm from the bottom of the panel to the centre of the fixing position and a sufficient distance along to allow for the handle plus an additional 15mm clearance.

THRESHOLD AND HEAD TRACK COVERS (TREAD-PLATES)

If the configuration of door system has fixed panels then you will be supplied with tread plates for the top and bottom tracks of the system. Tread-plates should only be fitted after all the panels have been glazed, endcaps fitted to the sliding panels and the door operation been checked to ensure panels are sliding freely and locking nicely into the lock keep.

Doors must be in a closed, locked position when checking the length of the tread-plate and adjust if necessary.

Next insert the shaped end of the threshold into the side jamb and using a thin packer between the opposite end of the threshold and the edge of the panel to prevent damage, lower the threshold down into position.

On long threshold covers it is possible to bow the threshold up in the centre to ease fitting. With the threshold in position, use a mallet and wooden block to locate threshold down fully into the top groove of the track.

CENTRE TREAD-PLATE.

On triple tracks the centre tread-plate should be fitted first. The tread-plate is pre-cut to fit around the side jamb on one side and to abut the black PVC endcap of the centre sliding panel on the other.

NOTE: If the tread-plate is cut in too tight it can affect the locking of the system.

OUTER TREAD-PLATE

The outer track tread-plate, if abutting a sliding panel, is again pre-cut to fit around the side jamb on one side and to abut the panel endcap on the other.

If the outer tread-plate is abutting a fixed panel then it should fit up tight to the edge of the fixed panel; again, use a thin packer between the end of the threshold and the edge of the panel when lowering down into position to avoid damage. Silicone seal the tread-plate where it abuts the side of the panel and cut the black panel end cap to fit on top.

NOTE: The brushpile on the outer tread-plate needs to be cut and removed in the area where it clips on to the centre tread-plate.

NOTE: if you have already fitted the anti-draught blocks, then the bottom leg of the threshold cover will need to be notched over this, as if not done this will prevent the cover from fully clipping down into position.

FIT THE END CAPS / ANTI-LIFT BLOCKS

Lastly, fit the black end caps to top and bottom on each side of panel that requires them.

FINISHING

We recommend:

- Gaps under the track or sill that are too large to silicone are cement 'pointed'
- Expanding foam is applied around heads and side of frame to fill any gaps between outer-frame and structural opening
- A silicone seal or trim is used around the outer-frame to finish the structural opening as required.

APPENDIX

SVG20, SVG30, SVG83 sliding doors

SNAGGING

PANELS DIFFICULT TO INSERT INTO FRAME

- a) Check that the panel guides have been removed from the top corners on fixed panels and meeting stile removed off slave sliding door on centre opening configurations.
- b) Check both the bottom track and the head track alignment to ensure that they are not bowing or twisted up or down.
- c) Check that the outer frame mitres has not been put together poorly, thus reducing the overall height of the outer frame that the panels have to locate into.
- d) Check the stainless steel insert in the bottom track is fully located down into the track (use rubber mallet so as not to damage it).

PANELS HEIGHT APPEARS TO BE TOO SHORT, PANELS ONLY JUST LIPPING ONTO HEAD TRACK (PANELS SHOULD LIP ONTO HEAD TRACK 7–8MM)

- a) When assembling the outer frame using the adjustable Allen key blocks, check that the mitres have been put together properly and are slightly stepped, increasing the frame height. The Installer, when putting the outer frame together, must check mitre alignment on both faces of the frame and also check the frame height size against drawing.
- b) Check bottom track is level, front-to-back, and not twisted down.
- c) Check head track is level and not bowed or twisted upwards.

BLACK PVC U-CHANNEL INSERTS NOT MEETING CORRECTLY IN CORNERS AND APPEAR TO BE SHORT OR ARE NOT FULLY CLIPPING INTO OUTER FRAME

- a) Outer frame mitres not put together, extending the width of the frame.
- b) Track insert plastics not put into frame correctly. There is an order and a technique to putting these in (refer to fitting instructions).
- c) Check frame fixings are recessed and not proud of surface of frame.

- d) Check there was no debris in track before inserting. Track should be hoovered and wiped clean before inserting.
- e) If, after checking the above points, the track plastics still appear to be short, ensure the gap is sealed up with black silicone and left at the locking end of the system as this will then be covered by the tread plates that insert into the top and bottom tracks (unless you have a configuration where all panels slide).

ON SVG20/SVG30 SYSTEM, WHEN BONDING SIDE OF GLASS AND INSERTING WEDGE GASKET INTO INTERLOCK PROFILE, CAN'T GET SIDE OF INTERLOCK PROFILE STRAIGHT, PANEL SIDE IS BOWING OUT

- a) If glazing an end panel, ensure there are no packers down the opposite side of the panel, this then allows the glass to move across in order to get interlock side straight. Always get interlock side wedged up and straight before inserting packers into opposite side.
- b) If glazing an intermediate panel with an interlock on both sides, then too larger packers have been inserted into interlock prior to inserting glass. Remove interlock off side of glass and reduce packer size.

ALL PANELS SEEM STIFF TO SLIDE

- a) Check your order. If you have ordered the system for an exposed location, the panels will be supplied with a rubber seal instead of a brush seal. The rubber seals provide a higher weather performance for the given location, but increase the sliding resistance of the panel against the outer frame.

NOTE: The sliding performance will improve with a silicone spray lubricant and once the gasket seals have bedded in. Alternatively, you can change the seal back to brush pile.

- b) Check tracks are not bowed.
- c) Check that the glazing packers under the glass unit at the bottom are placed directly on top of all of the black PVC glazing supports. The glazing supports are positioned directly on top of the wheel blocks.

On larger panels you will have two wheels in each corner of the panel to take the extra weight of the glass. It is vitally important that glazing packers are placed directly on all the glazing supports above the wheels.

Failure to do this will compromise the sliding performance of the door panel and cause possible wheel failure.

- d) Check glass units are not excessively bowed within panels. Check this with a level on the face of the glass panel. This can appear worse on hot days. Bowed glass will increase the resistance of a sliding panel, especially if panel has been fitted with rubber seals for an exposed location. Change panel seals to brush and/or replace faulty glass units.

JUST ONE OF THE PANELS SEEMS STIFF TO SLIDE WHEN COMPARED TO OTHERS

- a) Check tracks are not bowed.
- b) Check the glass unit in this panel is not bowed. Check this with a level on the face of the glass panel. This can appear worse on hot days. Bowed glass will increase the resistance of a sliding panel, especially if the panel has been fitted with rubber seals for an exposed location. Change panel seals to brush and/or replace faulty glass units.
- c) Check that the glazing packers under the glass unit at the bottom are placed directly on top of all of the black PVC glazing supports. The glazing supports are positioned directly on top of the wheel blocks and on larger panels you will have two wheels in each corner of the panel to take the extra weight of the glass. It is vitally important that glazing packers are placed directly on all the glazing supports above the wheels.

Failure to do this will compromise the sliding performance of the door panel and cause possible wheel breakdown.

THE SLIDING DOOR PANEL THAT IS FITTED WITH EITHER A MEETING RAIL OR CORNER POST IS MORE DIFFICULT TO SLIDE THAN THE OTHER PANELS (MORE RESISTANCE)

- a) Check the head track is not bowed down and is tight against the brush pads located on top of the post or meeting rail. Check that the distance between the tracks remain a constant distance throughout the width of the system. If you are not able to re-align the head track, cutting a small amount off the top of the profile is probably the only solution.
- b) Check the meeting rail or corner post is not sitting too low on the side of the door panel. Loosen screws and re-tighten with the profile positioned higher on the panel.

LEAD DOOR IS DIFFICULT TO LOCK, BUT FEELS A LITTLE EASIER IF YOU PUSH THE PANEL USING THE HANDLE TOWARDS THE KEEP WHEN OPERATING THE LOCK. GIVES THE IMPRESSION THAT THE PANELS NEED TO BE A FEW MILLIMETRES WIDER FOR THE OUTER FRAME

- a) Check vertical alignment between side of door panel and lock keep. This must be even from top to bottom and not bowed. Correct, as required, by increasing/decreasing packing under the glass panel.
- b) Check the alignment of the panels at all the interlock points because if they are out of vertical alignment (even slightly), the overall width of the panels is being reduced.
- c) Check that, if you have cut and fitted track infill plates, these have not been cut in too long, preventing the sliding panel from fully reaching the lock keep.
- d) If you have a fixed door panel that you have screwed into position and, following which, you did not carry out a check of the door system locking with all the panels inserted into the frame before glazing, then the cause may be that the fixed panel has been secured too far over and needs packing off the side jamb slightly to allow the lead sliding door to fully reach into the lock keep.

ON A FLUSH STACKING SYSTEM

THE PANELS WHEN IN A FLUSH- STACKED OPEN POSITION ARE NOT VERTICALLY IN LINE WITH EACH OTHER, BUT ARE IN VERTICAL ALIGNMENT WHEN THE PANELS ARE CLOSED UP AND INTERLOCKS FULLY ENGAGED

- a) Bottom track not packed properly, not packed level front-to-back, not packed at enough points across width, causing the misalignment.

LEAD SLIDING PANEL NOT PARALLEL TO SIDE CLOSING JAMB

- a) Firstly, check the bottom track is packed correctly. Check that the track has been packed at sufficient intervals along its length, to prevent track bowing down under the weight of the glazed panels. Also, check the front-to-back level of the track that, at the points of the wheels, it is level and not leaning forward or back.
- b) After checking and correcting the track in point a, if the issue remains correct by either increasing or decreasing the packing under either corner of the glass panel, this will in turn adjust the vertical alignment.

SIDE OF PANEL DOWN THE HANDLE SIDE IS BOWING OUT

- a) Insert a packer along the top rail between the glass unit and the panel. This process will flex the side of the panel in towards the glass; increase packer size until the side of the panel is straight.
- b) On tall door sets, down the handle side of the panel, it is recommended that after inserting packers and ensuring the side of the panel is straight, the gap between the glass and the side of the panel is silicone-sealed down with a neutral cure sealant to prevent bowing during panel operation.

CENTRE PANEL/PANELS HAS EXCESSIVE SIDE-TO-SIDE MOVEMENT WHEN SYSTEM CLOSED AND LOCKED

- a) If the door configuration has fixed panels this has been caused by the installers not carrying out a check before glazing. All panels should be inserted into the frame before glazing with lock keep fitted, to check if there is any excess play. If it is felt that there is excessive play, then simply remove the packing blocks down the sides of the fixed panel or panels, allowing these panels to be fitted closer into the jambs, eliminating the excessive play.
- b) When all panels are sliding, it's important that after assembling the outer frame that the width of the frame is checked against the manufacturing size. This is necessary as when you are assembling the frame with the Allen key blocks, it's very easy to extend the width of the frame without noticing, this leads to the side-to-side play being beyond what is considered acceptable.

Please note there must be an amount of side-to-side play in panels to cater for expansion and contraction; the more panels a system has, the more tolerance is likely.

WATER VISIBLE IN INTERNAL AREA OF BOTTOM TRACK

- a) Check the rubber sealing blocks have been fitted into the bottom track.
- b) Check the rubber sealing blocks have been positioned correctly in relation to the interlock of the doors panels.
- c) Check that the rubber blocks have been silicone-sealed around properly; their purpose is to form a dam in the bottom track, preventing water running into the internal visible area of the track. Please note: in very adverse weather conditions, water may still pass past the sealing blocks into the internal visible area of the track. But this visible area is still part of the door system's drainage system.

- d) Check drainage slots are clear and not blocked.
- e) Does the door system have a head drip? If the system is installed on an exposed face of a building (e.g. no soffit overhang), a head drip profile should be ordered and fitted.
- f) Check bottom track installed level, front-to-back (e.g. track not leaning back compromising drainage).
- g) Incorrect specification of door ordered for given location. Please note: when specifying a door system for an exposed location, the configuration of two panels sliding on a twin track with a plant-on panel will outperform in terms of weather rating, a triple track system with two sliding panels and one fixed.
- h) The weather conditions at certain times are too extreme and are exceeding the door system's design parameters.

DAMP PATCHES ON PLASTERWORK AT BOTTOM CORNERS OF FRAME

- a) When fitted with a sill section, the sill has not been sealed properly on to the bottom track.
- b) Check that installer has not fixed frame down through the drainage channel in the bottom track.
- c) Installer has not sealed the mitres/corners of the track when putting the frame together and before inserting black u-channel plastic.

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