

INFINIGLIDE

Minimal Sliding Door Installation Guide

February 2018



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GENERAL INSTALLATION INSTRUCTIONS

ASSEMBLY INSTRUCTIONS

IMPORTANT. Read these assembly instructions before beginning any installation work. Install as recommended otherwise the door unit may not function properly and any warranty, written or implied, will be void.

QUALIFICATIONS

The assembly instructions are only for the attention of qualified installers who are trained and qualified in window and doors installation techniques, and are aware of the manufacturer's recommendations for the system used.

TRANSPORT AND STORAGE

Parts that could come loose during transportation can be damaged or cause accidents.

All packaging should be opened to allow the goods to be inspected must be closed and properly sealed for further transport.

Any goods that will be further transported must be loaded safely and securely.

INCOMING GOODS

All goods received must be inspected for any transport damage prior to being removed from the vehicle. The goods received must match the delivery note.

Any wet packaging may cause damage to the goods, and therefore must be removed immediately.

SITE SURVEY

It is important to check the conditions on site before starting the assembly.

- Check for any apparent defects and deficiencies around the structural opening. If any defects are found, then the customer must be notified, and agreement reached as to who is responsible for rectifying these defects prior to the new window/door installation.
- Check structural conditions such as the wall construction, the load capacity or adhesiveness of the edges for adhesive sealing systems, evenness, building moisture, a possibility for load transfer and mounting, constructional tolerances and height reference points.
- Check for contractual agreements, supplied assembly detail, planning guidelines, heat protection, humidity proofing, and interferences to other assembly sections.

ATTENTION! *The fixing materials are not part of the scope of supply. The installer must decide on which fixing materials to use after assessing the given substructure. If any supplied fixing materials are used. The installer must ensure that the fixing materials are suitable for the respective substructure and that assembly is completed correctly.*

HANDOVER

All operating, assembly and adjustment instructions as well as maintenance and care guidelines must be delivered to the user when briefing them. It is essential to train the user on the function of the supplied product and provide instruction on the directions for safety and use. Incorrect operation or failure to observe the instructions may lead to damage and accidents. The customer must store the instructions carefully and hand them over to the new owner in the event of sale.

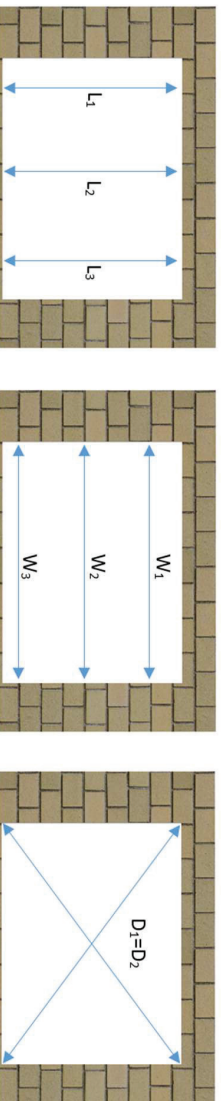
RECOMMENDED TOOLS

- Appropriate fixings into structural opening.
- Mixed selection of frame packers.
- Mixed selection of glazing packers.
- Rubber mallet or plastic mallet
- Set of HSS drill bits.
- Drill / SDS hammer drill.
- Saw for cutting aluminium sill.
- Long spirit level
- String line
- Laser Level
- Tape measure
- No.2 Pozi drive
- 2.5mm; 3mm; 4mm Allen keys.
- Gloves
- Vacuum Cups
- Paper Towels
- Utility Knife
- Low modulus Silicone and applicator gun
- Structural Silicone (Dow Corning 791 or Equal Approved) and applicator gun.
- Sealing Washers (e.g. EPDM Bonded Washers)
- Set Square.
- Trestle Tables x4

1. SITE SURVEY

a. Opening inspection

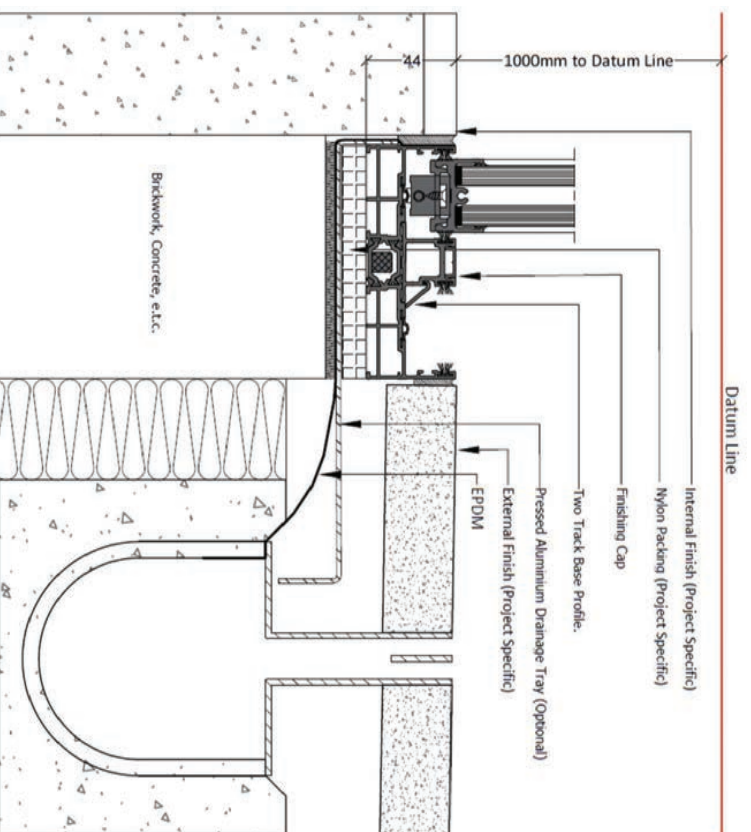
- The aperture for the new doors must be flat, level, straight, plumb and square at every single side. There should be a solid structure to fix the frame.
- The aperture load bearings must not be transferred to any part of the frame when fitted.
- Prepare the aperture by making sure it is clean.
- Remove any old silicone and brush down the threshold.
- The internal and external reveal sizes should be checked and any variations taken into consideration.
- Check the aperture's height, width and diagonals to ensure the opening is equal on all sides and square.
- Generally three measurements should be taken with the smallest used to determine manufacturing sizes.



- Use tape measure to verify the aperture overall height and width. Rake at least three measurements.
- Smallest height and width measurement will determine the overall frame manufacturing size.
- Verify the aperture is square by measuring and comparing the diagonals.

b. Internal / external finished floor level and datum line position

- Select a point within the agreed/existing structure from where the builder can determine the internal finished floor level i.e. tiles, carpet, timber.
- Using laser level, set a datum line at 1000mm from the finished floor level.
- Mark the datum line on each jamb of the aperture.
- Use this datum line to aid in surveying to ensure the internal FFL aligns correctly against the bottom outer-frame of the door – concealing it if desired.
- If the position of the outside floor level is critical (e.g. if a completely sunken base detail is to be used) repeat this procedure for the external finished floor level, taking into account the final position of tiles, decking, or similar external finishes.

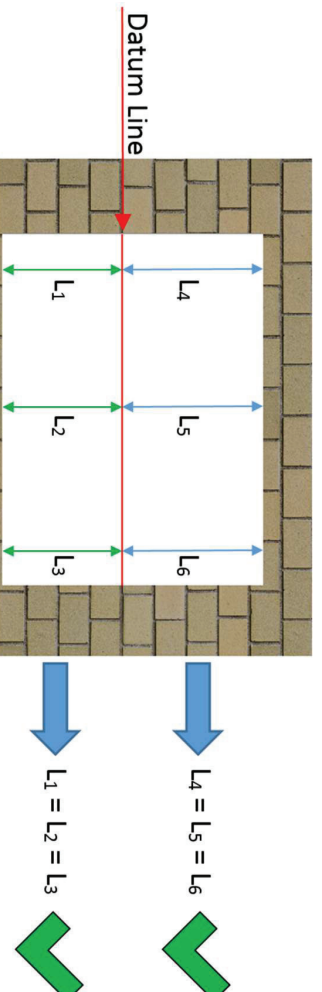


c. Concealed / flush perimeter frame detail

- The door system is designed so the outer-frame can be completely concealed on all four sides of the aperture – if this detail is to be used on your project, ensure this is discussed with the architect/builder at an early stage so that internal and external finishes can be planned accordingly.
- Internal finishes to the head and jambs (typically plaster-board or plaster skim) must be completed after the door set is installed to ensure exact coverage.
- External finishes to the head and jambs (face-brick, render, cladding, e.t.c.) must be completed after the door set is installed to ensure exact coverage.
- Refer to the factory drawing when specifying the height and depth of profiles.
- Check if the existing threshold needs to be lowered taking into account if the internal edge of the aluminium frame, or set at a certain height to suit new internal or external finished floor levels.

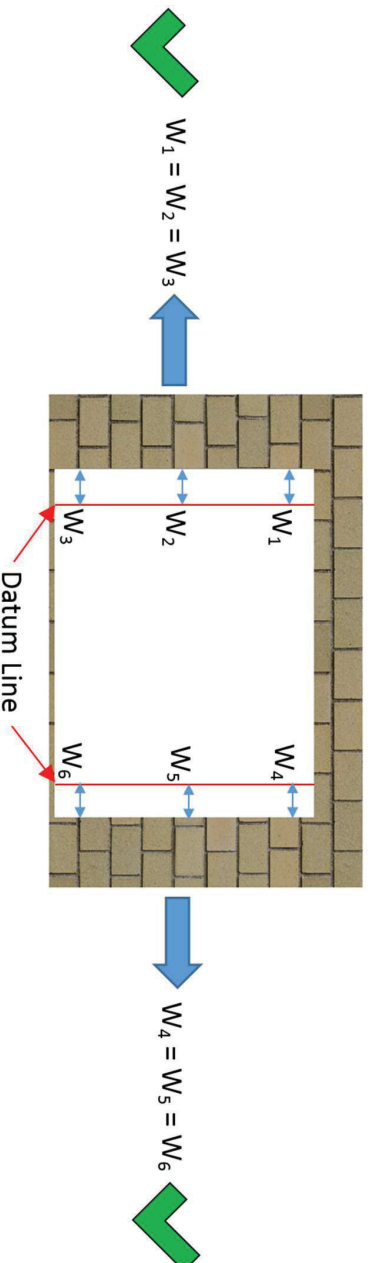
d. Aperture height inspection using datum line

- From the laser datum line measure the distance to the threshold at left, centre and right positions where new bi-fold door will sit on.
- Each of the bottom measurements should be uniform. If not then the threshold is not level and structure should be releveled.
- Form the original datum line position (set at 1000mm) measure the distance to the top underside of the aperture at left, centre and right positions.
- Each of the top measurements should be uniform. If not then aperture at the top is not level and the adjustment to the manufacturing height of the frame must be made.



e. Jamb Inspection

- Set a vertical laser datum line position at 250mm from the jamb.
- Take measurements from top, middle and bottom of the laser line to the face of the jamb.
- Each horizontal measurements should be equal. If not, then the jamb is not plumb and adjustment to the manufacturing frame width must be made.
- Repeat jamb inspection for the opposing side.



f. Manufacturing sizes

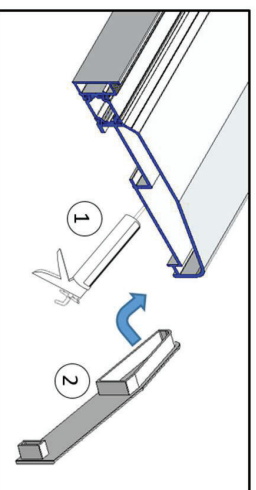
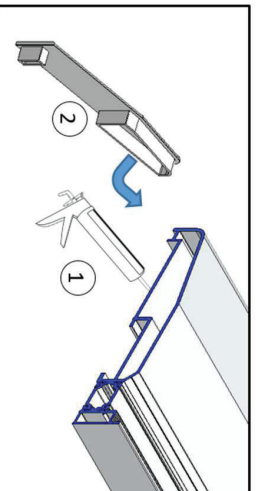
- Allow the aperture to be 10-15 mm wider and 10-15 mm higher than the overall frame size of the ordered unit. It is important that the opening size for new frame is correct.
- The height of the doors is measured from the bottom of the outer-frame and not from the finished floor.

2. DRAINAGE DETAILING

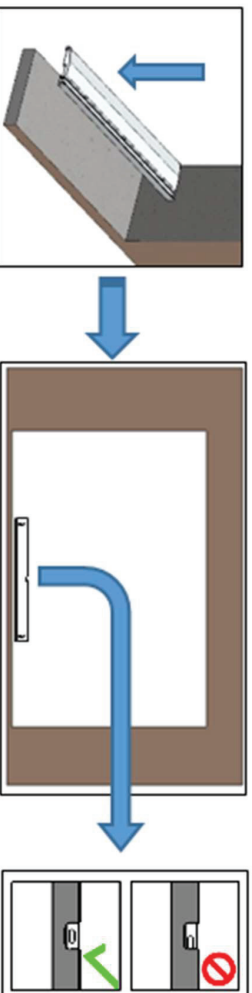
- The type of drainage detail to be used should be determined and agreed with the builder at the beginning of the project.
- A sub-cill detail is typically used on a traditional brick or concrete upstand where there is a step down to the external floor level.
- A level threshold detail is used to produce a completely flush run-through of the internal and external floor finishes.
- All types of cill should be positioned to leave a minimum overhang of 25mm
- The installer should determine how sub-cills should be fitted, taking into account features such as horns.

a. Sub-cill installation (2-Track Only)

- Check the sub-cill for drainage slots, make sure they are clean and not blocked by any debris, clean if necessary.
- Using low modulus silicone seal the ends of the sill section and then install the end caps .

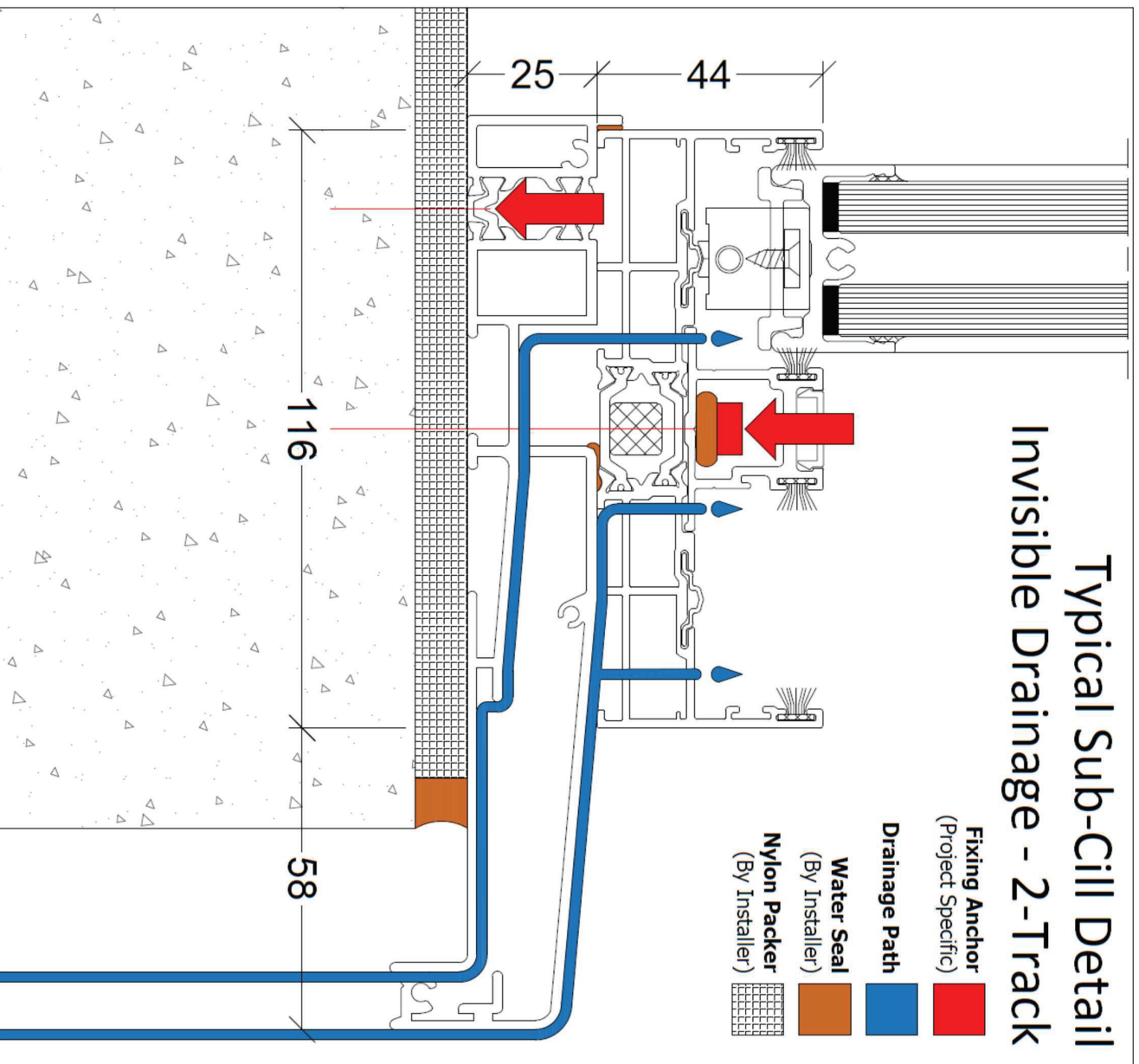


- Place the sub-sill on to the aperture.
- Use a spirit/laser level or a string line to assess the level of the sub-sill.
- Temporarily place the required packers under the sill, check the level and adjust if necessary



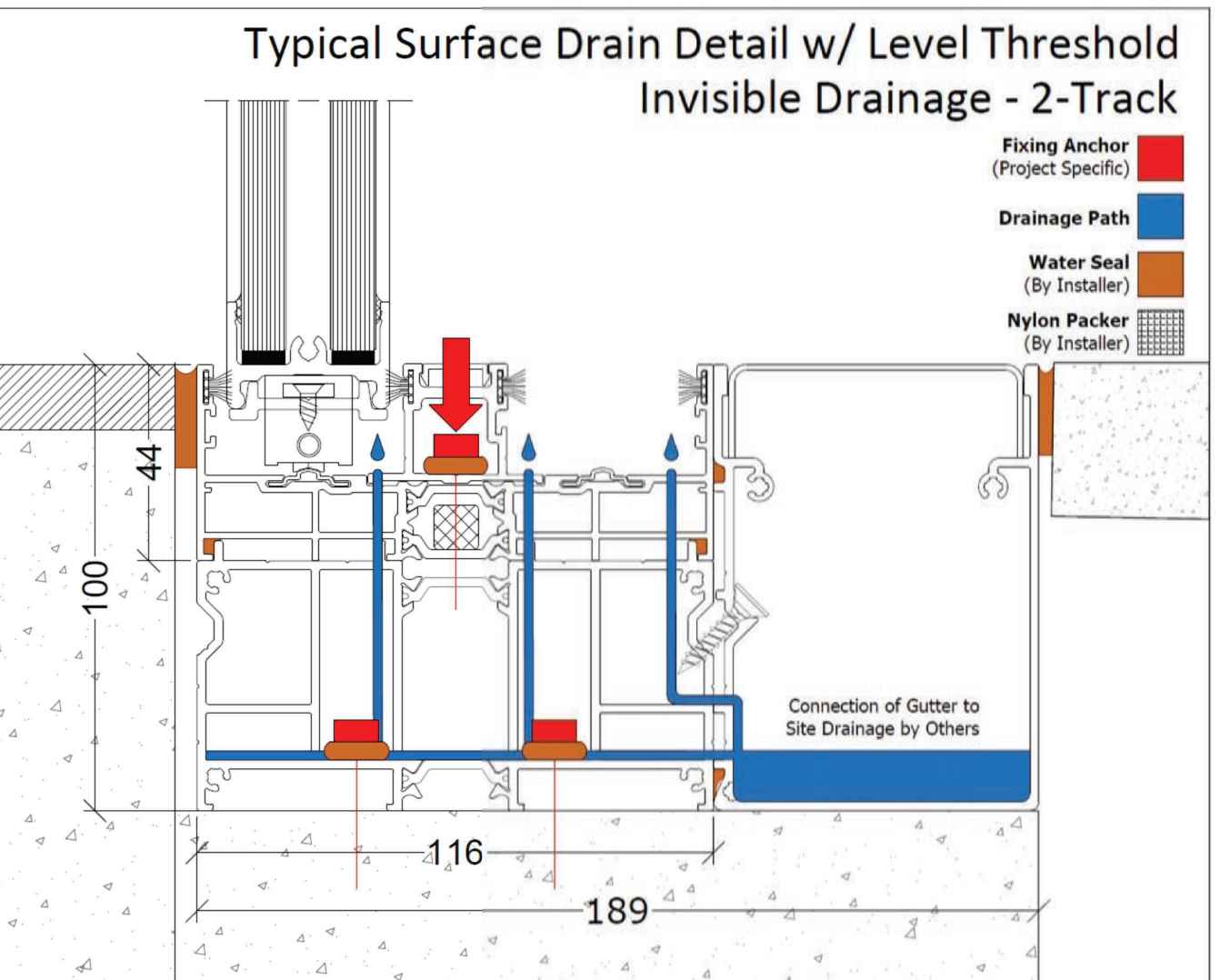
- Use specified fixings to fix the sill through the thermal break at minimum 150mm from each end, and spacing every 300mm centres.
- Fill each fixing hole with low modulus silicone before inserting the fixing.
- Double check for level and adjust if necessary.
- Apply a continuous line of low modulus silicone

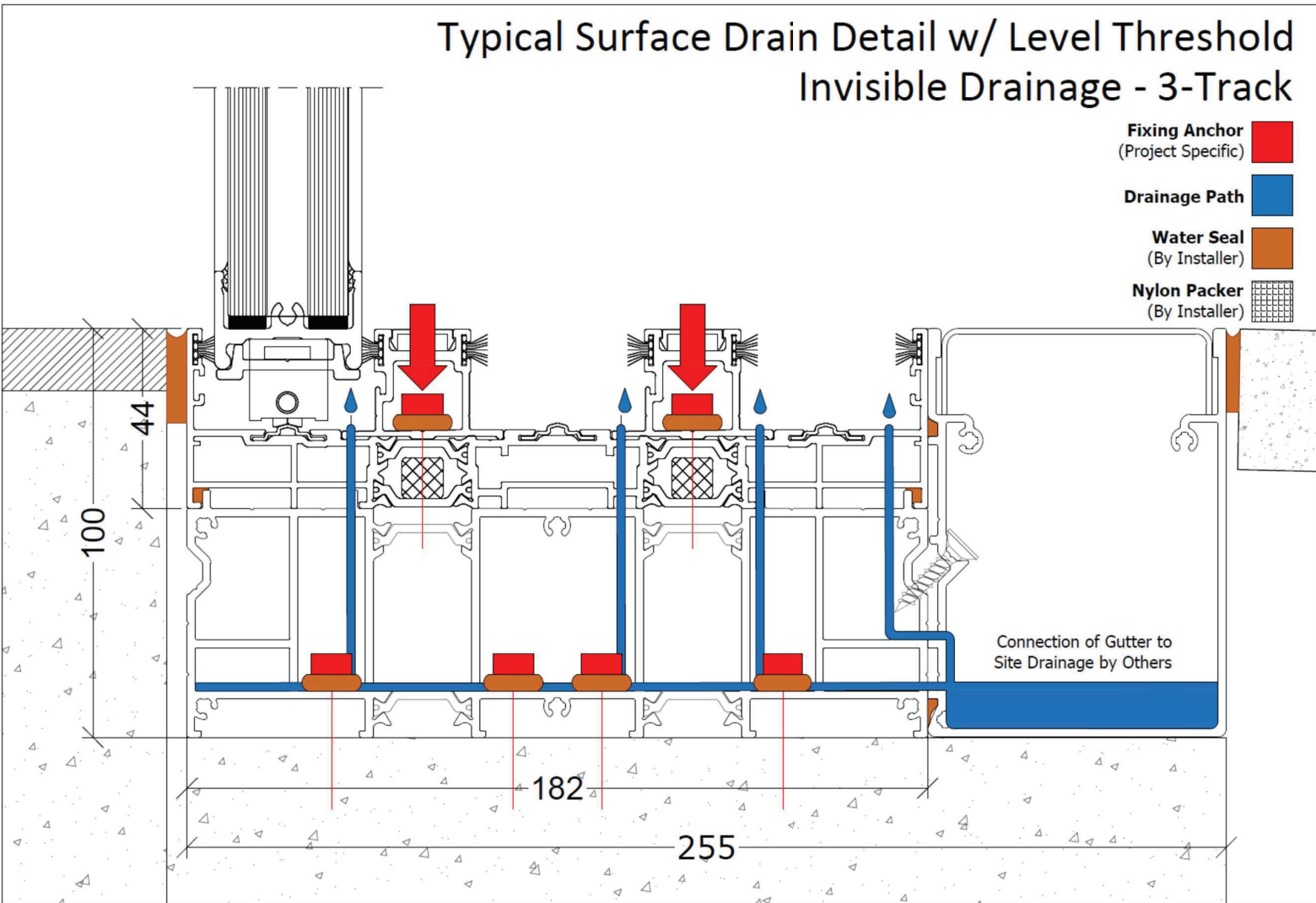
Typical Sub-Cill Detail Invisible Drainage - 2-Track



b. Surface drain installation w/ level threshold

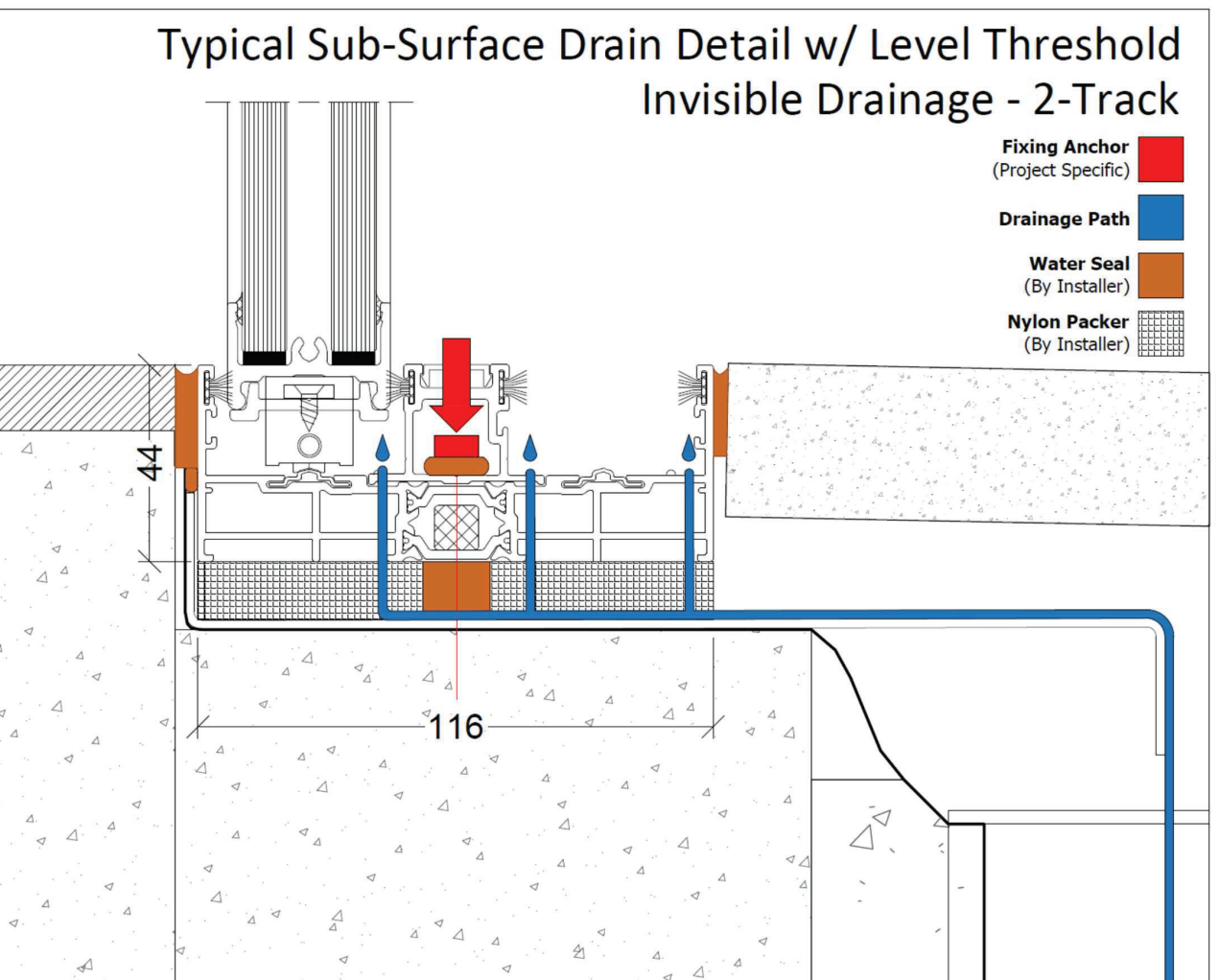
- Check the recess allowed for the sunken detail is correct in height / depth and allows sufficient tolerance for packing and levelling the door to accommodate minor variations.
- Fit the provided end caps to the drainage base and lay it in position, packing with structural shims where necessary to ensure it is 100% level. Once a perfect level has been achieved, fix the drainage base downwards to the structure, ensuring all screw heads are sealed with silicone or EPDM bonded washers.
- Run a bead of silicone down the entire length of the drainage base on both sides, as indicated. Lower the outrigger onto the drainage base and fix it with suitable fixings. Double check the door threshold is level.
- Fit the provided end caps to the drain / gutter, and prepare it with continuous beads of silicone as shown in the installation detail. Lay the gutter in place ensuring it is flush with the door threshold and that all drainage slots align. Screw the gutter to the drainage base where indicated with self tapping screws.
- Connect the gutter to the site drainage if this forms part of your scope of works. The exact method will be site specific and suitable tubes, membranes, e.t.c. must be sourced separately.
- Clip the stainless steel tread plate into the gutter and water-test the finished detail.



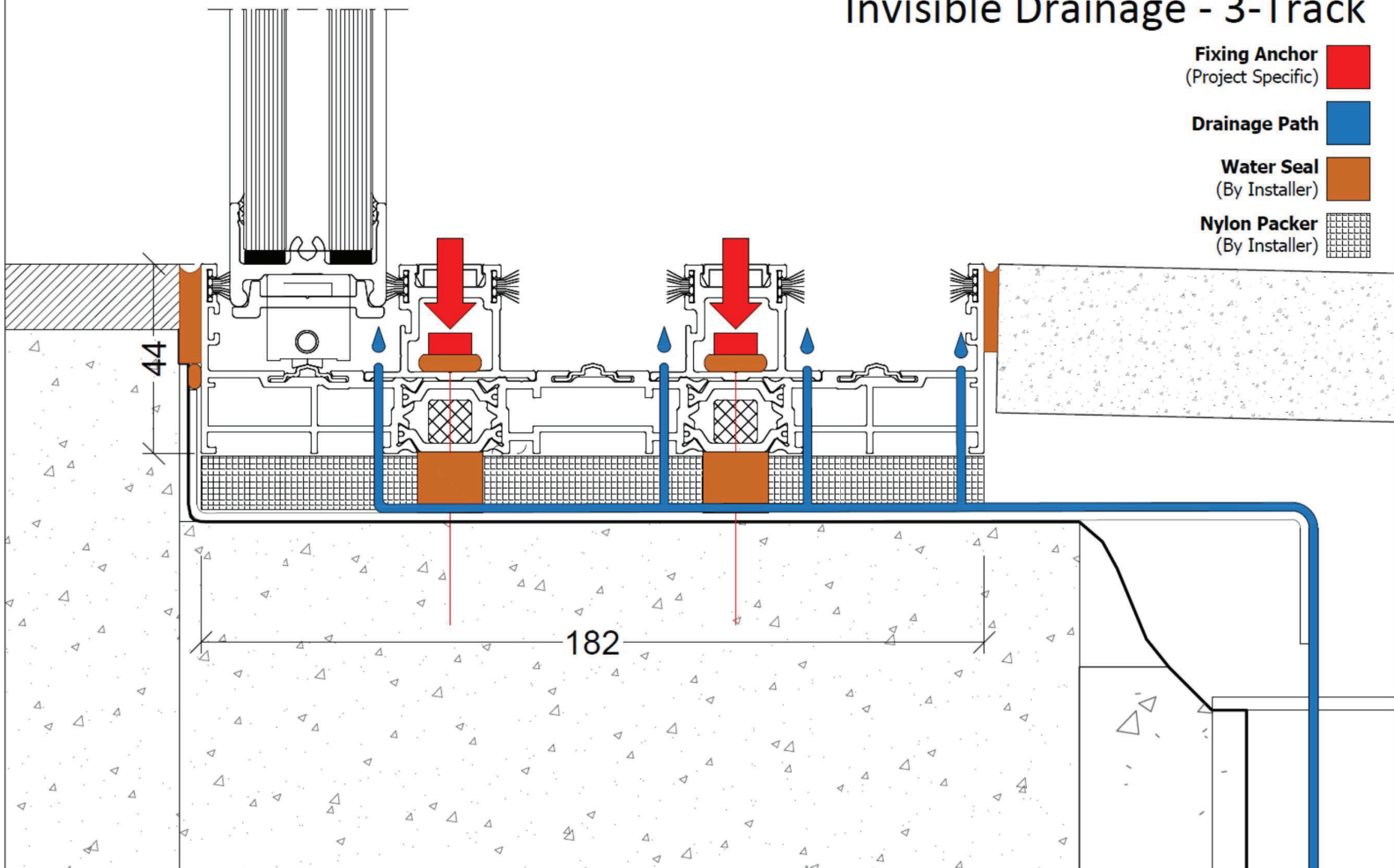


c. *Sub-Surface drain installation w/ level threshold*

- Check the recess allowed for the sunken detail is correct in height / depth and allows sufficient tolerance for packing and levelling the door to accommodate minor variations.
- Ensure the sub-surface drain or soakaway that will take the water run-off from the doors has been installed in the correct position and will be suitable for the depth of EPDM and drainage tray which have been supplied for the project.
- Clean, prepare and prime the area in accordance with the EPDM manufacturer guidelines.
- Install the EPDM in accordance with the manufacturer guidelines. Ensure it is bonded securely in several places, is carefully returned at the ends of the reveal and reaches fully into the site sub-surface drain.
- If you are using a bespoke drainage tray, install it according to manufacturer guidelines. Ensure there is a minimum 1 in 20 slope towards the sub-surface drain to prevent pooling.
- If you chose to pre-install nylon packers at this stage, ensure they are sat onto a continuous bed of low modulus silicone, and then silicone pointed on all sides. You may also pre-drill the packers for fixing anchors and fill the holes with low modulus silicone.
- Before door installation proceeds further, water-test the finished drainage detail checking that all water is expelled into the sub-surface drain.

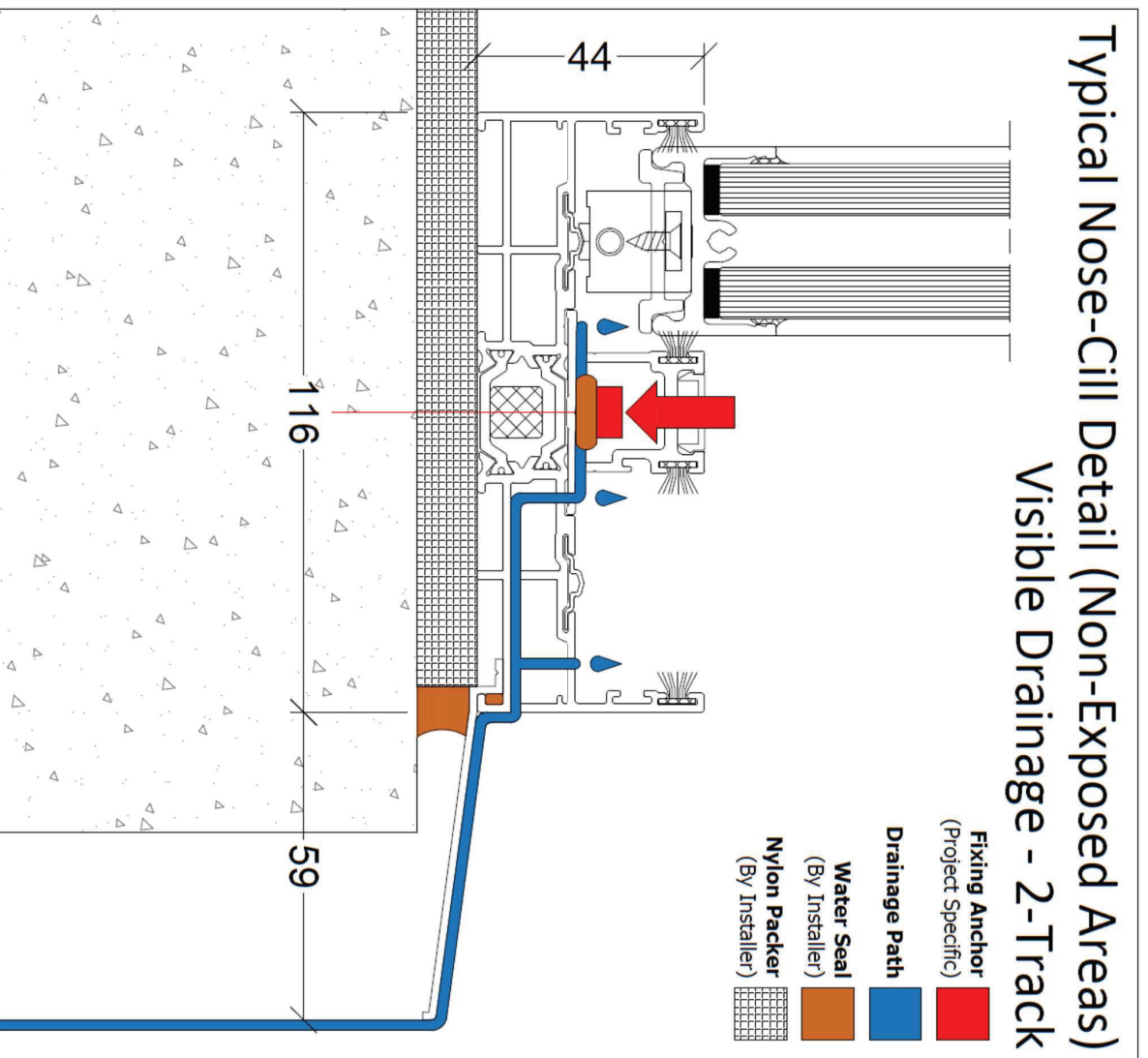


Typical Sub-Surface Drain Detail w/ Level Threshold Invisible Drainage - 3-Track



d. *Nose-Cill installation (Non-exposed areas only)*

- **Note: This detail is only suitable for areas which will not receive direct rainfall such as protected reveals and sheltered patios.**
- Locate the bottom outer-frame piece and check face drainage slots are present and not blocked by debris.
- Place the profile on a trestle table or other clean, flat surface with the underside facing upwards.
- Position the cill-nose against the outer-frame profile and align it correctly. Ensure you are positioning it on the **outside face** of the outer-frame (look for face-drainage slots to be certain).
- Pre-drill suitable pilot holes through the fixing leg of the cill-nose and the first aluminium skin of the outer-frame **only**. Minimum 300mm centres.
- Apply a continuous line of low-modulus silicone against the outerframe where the cill-nose will sit. Also apply silicone to each of the pilot holes in the cill-nose.
- Fix the cill-nose in its final position with suitable, stainless steel self-tapping screws.

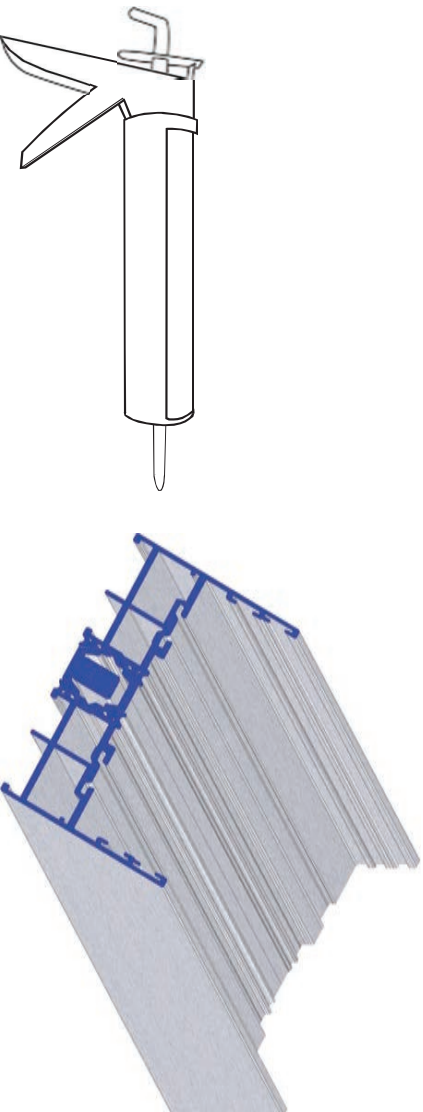


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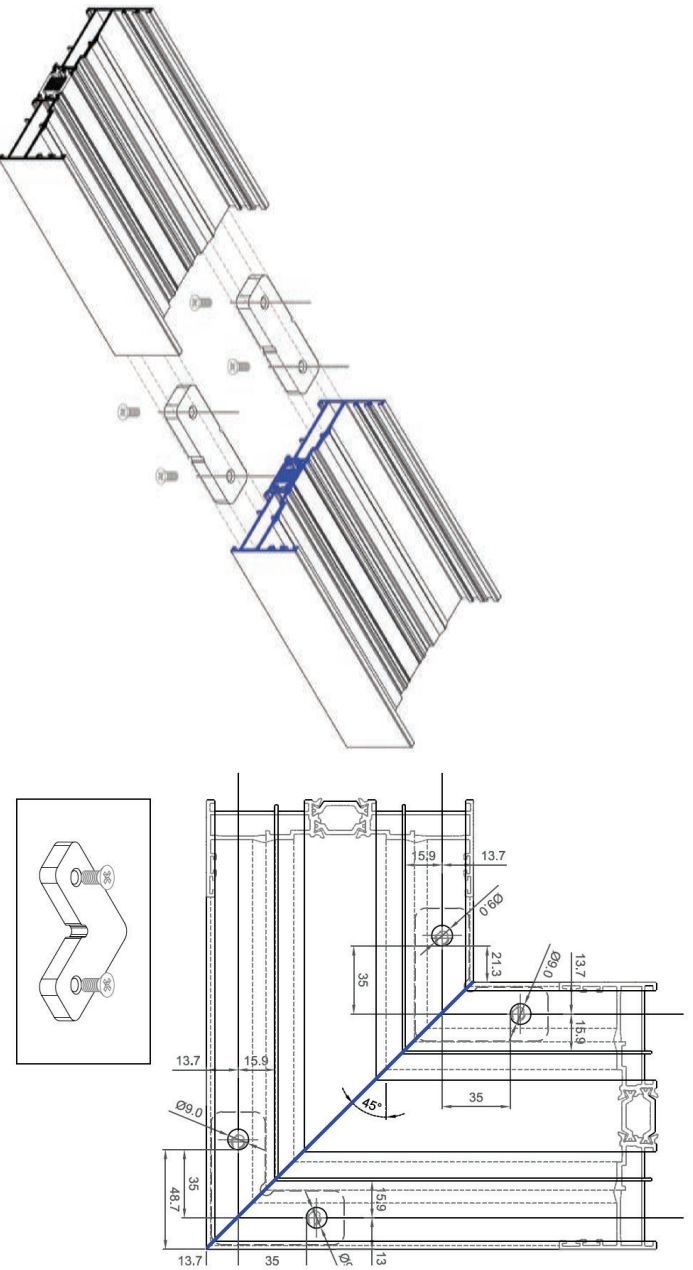
3. FRAME ASSEMBLY AND INSTALLATION

a. *Outer frame assembly*

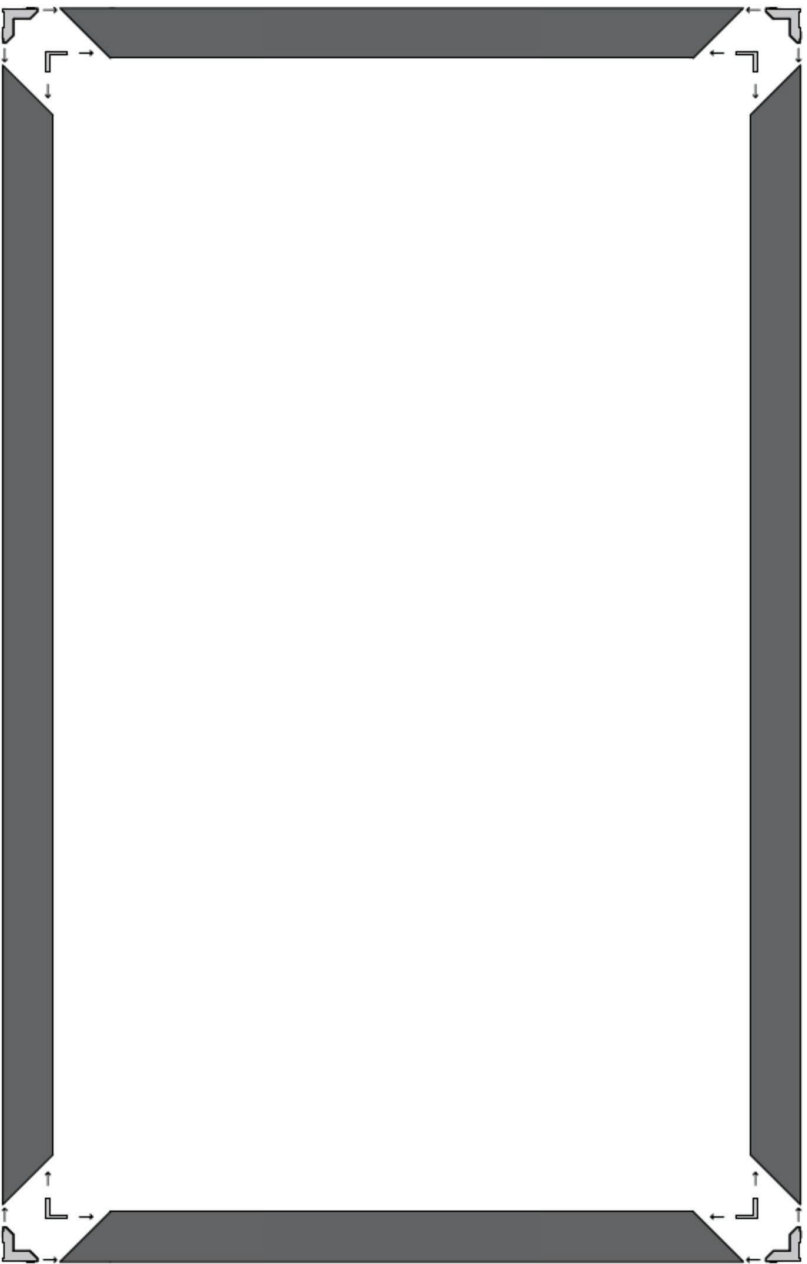
- Apply low modulus silicone at all outer frame connection joints and between the frame components.



- Oversized frame sections will be supplied butt-jointed with inline connectors and 90-degree corner frames will be supplied mited with corner connectors - these joints must also be sealed

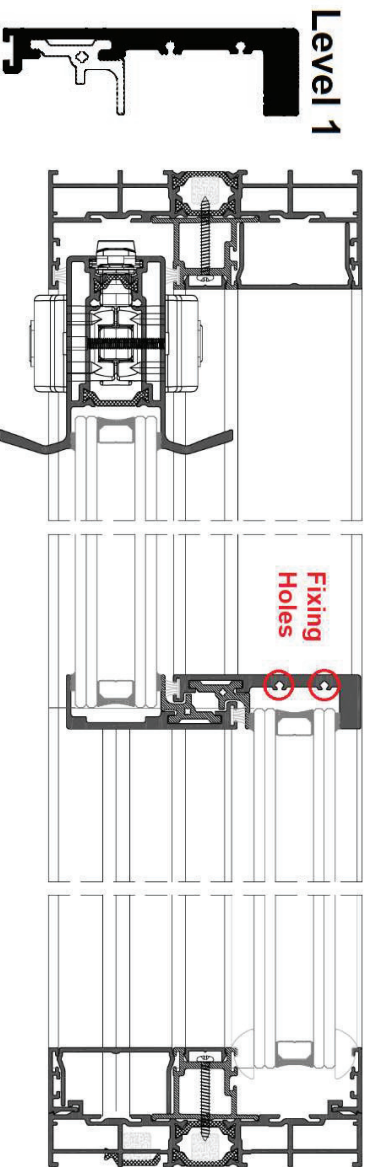


- Connect the outer-frame corners using included chevrons and mechanical cleats with integral allen-head screws.
- Align the frame by adjusting the screws, if necessary. Any silicone excess should be wiped off at this stage.
- Repeat same process to all four outer frame corners.



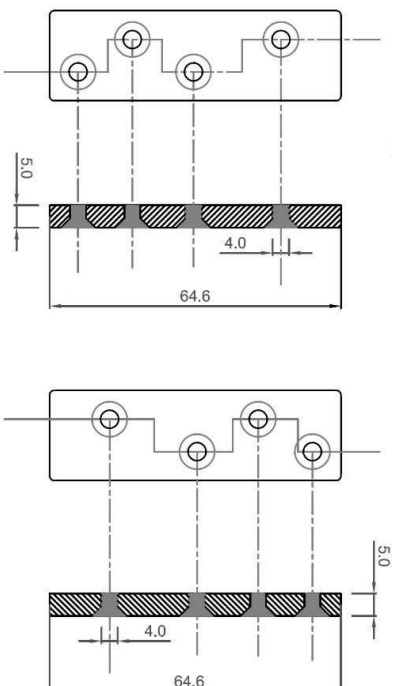
b. Additional steps for doors with fixed lights

- If the door-set being installed contains one or more fixed lights, the fixed mullions that about them must be fitted into the outer-frame **before** it is installed into the opening.
- Find the position on the top and bottom outer-frames where fixed mullions should be installed using the project cross-section drawings as a guide.
- Level 1 mullions will have fixing holes pre-drilled in the outerframe in line with the mullion position. Simply lay the assembled outer-frame flat on trestle tables, place the level 1 mullion in position and fix through the frame into the screw-ports with two supplied self tapping screws at each end.

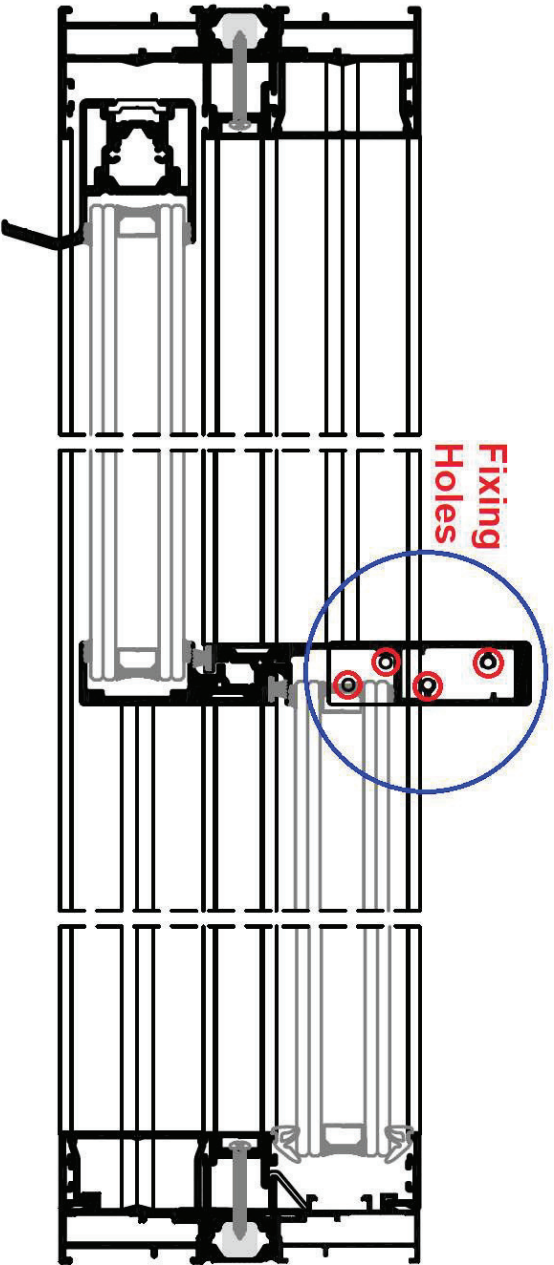


- Level 2 and Level 3 Interlocks / mullions will have fixing holes pre-drilled in the outerframe and the bottom rib of the frame notched out in line with the mullion position to accommodate a fixing bracket. Lay the assembled outer-frame flat on trestle tables, place the mullion in position, fix the supplied bracket to the screw-ports in the mullion with two self-tapping screws and then fix the bracket to the outer frame with two self-tapping screws through the remaining two holes in the bracket. **You may need to cut away some of the rubber fins of the interlock sealing pads to allow the mullion to seat properly.**

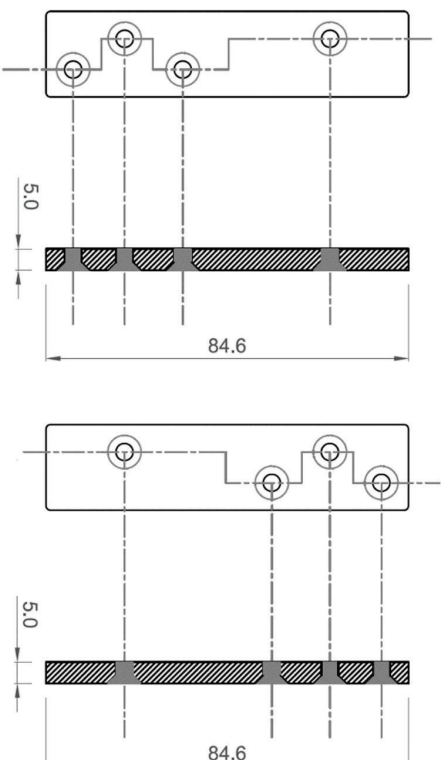
Level 2



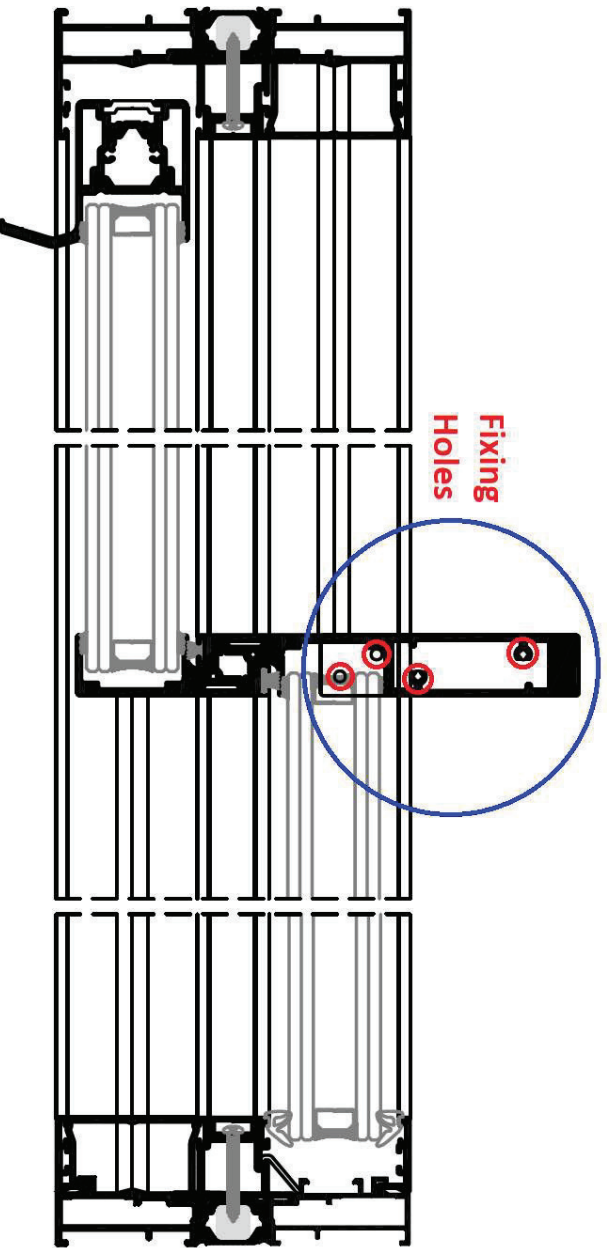
Fixing
Holes



Level 3

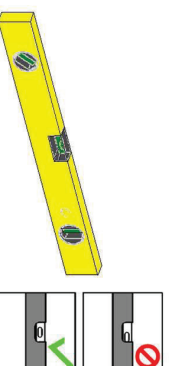
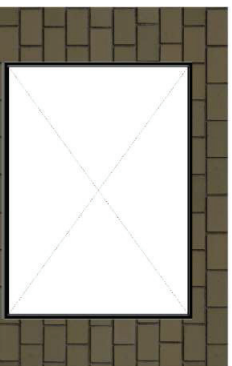
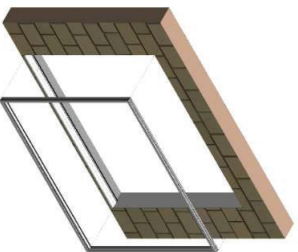


Fixing
Holes



c. *Outer frame installation*

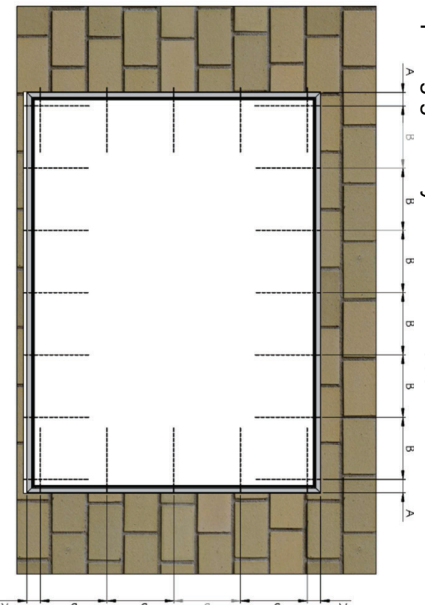
- Insert the frame into prepared structural opening ensuring the drainage faces the outside of the reveal. If the door-set contains fixed-lights, the removable beading to outer-frame jambs should also face outwards.
- Pack as necessary to ensure that the frame is held plumb and square inside the opening.
- Run a silicone bead along the sub-sill rebate and any other areas requiring a water seal indicated on the relevant drainage detail to ensure the juncture is weather-tight.



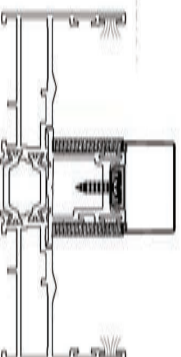
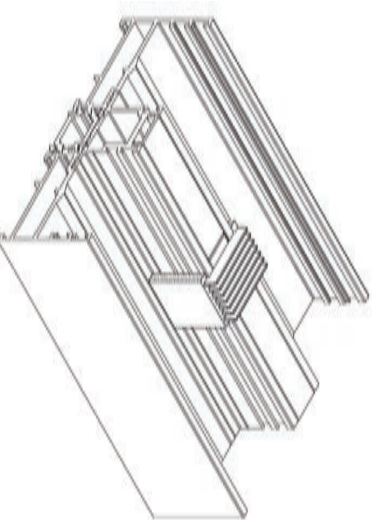
- Pack out all fixing points to ensure fixings are tight and fully supported.
- Secure the frame using suitable fixing anchors and plugs. **The heads of all screws which penetrate sub-cills, drainage trays or EPDM must be sealed using low modulus silicone and/or sealing washers to ensure water does not leak through into the sub-frame**

A = Anchor distance from corner of frame approximately 150mm.

B = Anchor spacing generally at maximum 300 mm.



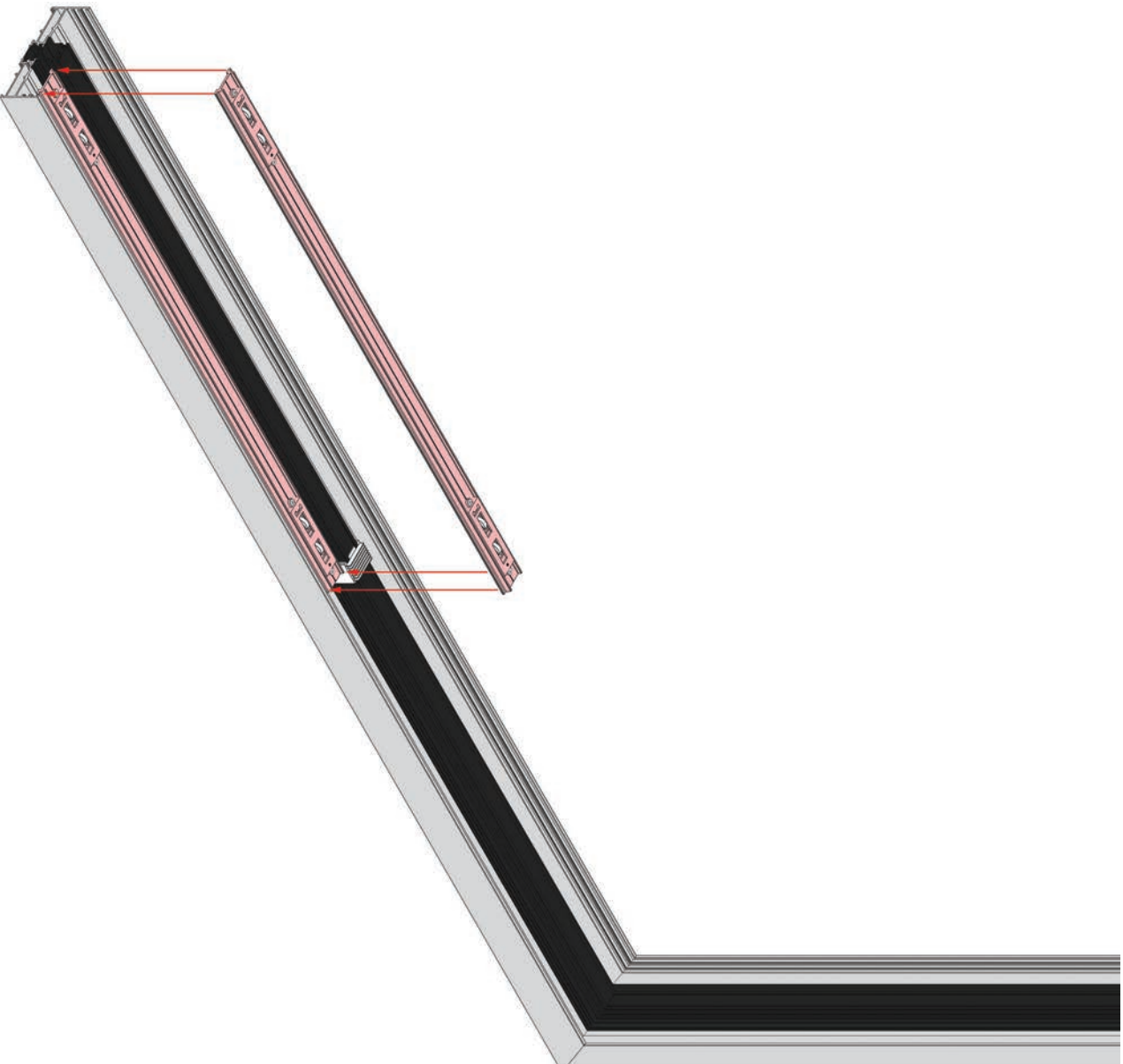
- Ensure the top and bottom frame remain plumb and square over the complete length.
- Using low modulus silicone ensure that the perimeter is sealed against water penetration on the inside and outside of the opening.
- Clean away all debris from the bottom track, particularly the stainless steel rail.
- Check the interlock sealing pads at the top and bottom of the frame are all present and have not been damaged during transit or assembly.



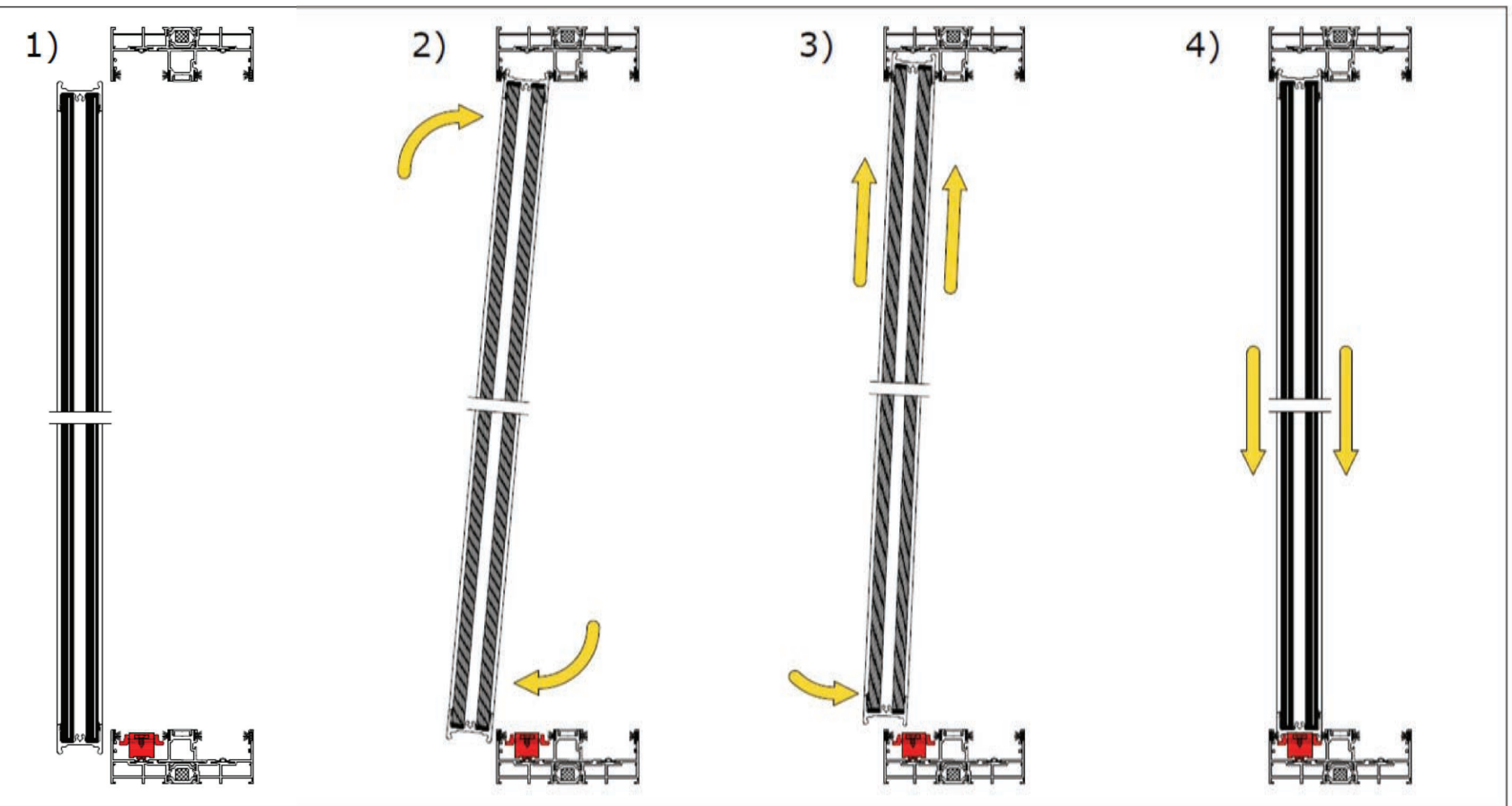
4. DOOR SASH INSTALLATION

a. *Insert and adjust sashes*

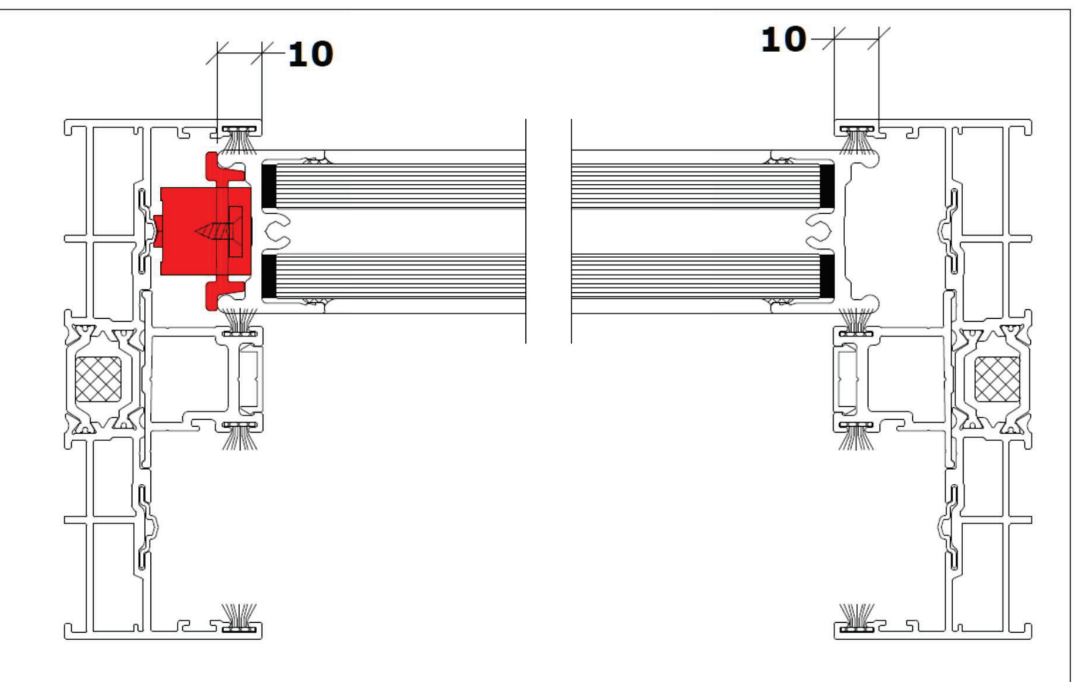
- Locate the roller carriage profiles and insert into outer-frame where each sash will sit.



- Offer up the pre-glazed sashes to the outer-frame, shuffle into the top rebate and drop onto the roller carriage profiles ensuring they locate firmly in place.

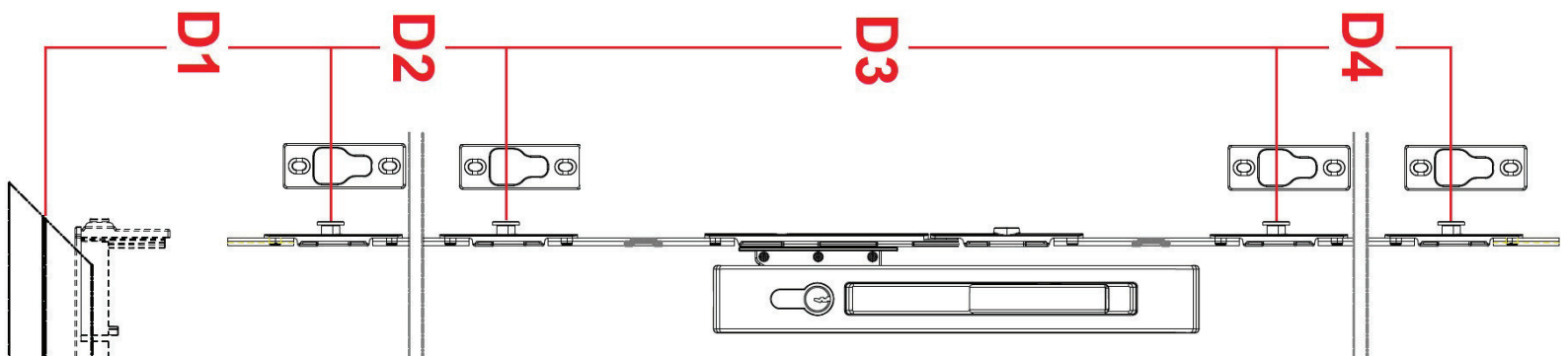
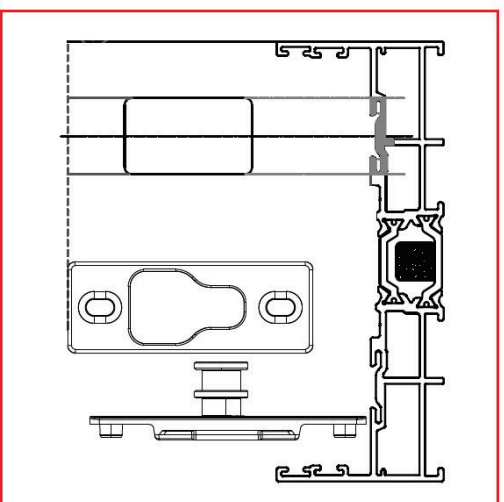
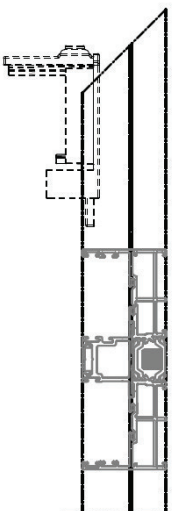


- Check the coverage of each sash at the top and bottom and ensure there is a 10mm overlap with the outer-frame. If adjustment is necessary, remove the sash and use an allen key on the grub screw of the roller carriage to raise or lower the sash position.

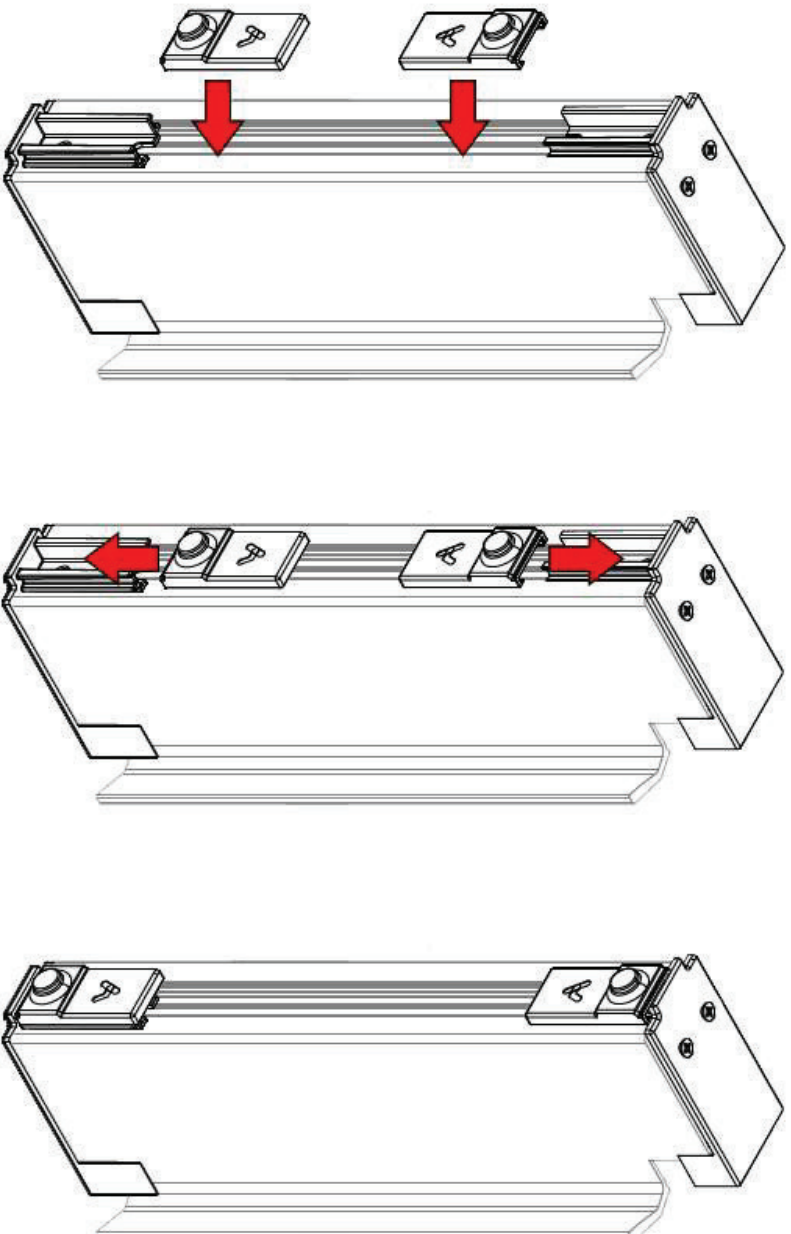


b. Fit and adjust keeps

- Check the handle is in the open position (lever pointing upwards).
- Measure the height from the base of the outer-frame to the centre-line of the **first** locking cam.
- Mark this height onto the opposite outer-frame jamb with a pencil.
- Position the first keep so that the centre of the opening lines up with the centre-line you have marked on the jamb.
- Insert the smallest of the three supplied keep packers (mm) into the back of the keep. Screw the keep to the jamb in position using the supplied self-tapping screws. Ensure that the keep is centred and level.
- Check the keep is positioned correctly by closing the door and flipping the lever downwards into the locked position. The lock operation should be smooth with little resistance.
- If the lock binds or the handle takes too much force to close, this indicates that the keep is not positioned correctly. Double check the locking cam is entering the keep at the centre of the opening and re-position the keep if necessary. Small adjustments to the centring of the cam can be made by turning the cam with an allen key.
- Once the operation of the lock against the first keep is satisfactory, repeat the process for each of the remaining three keeps.



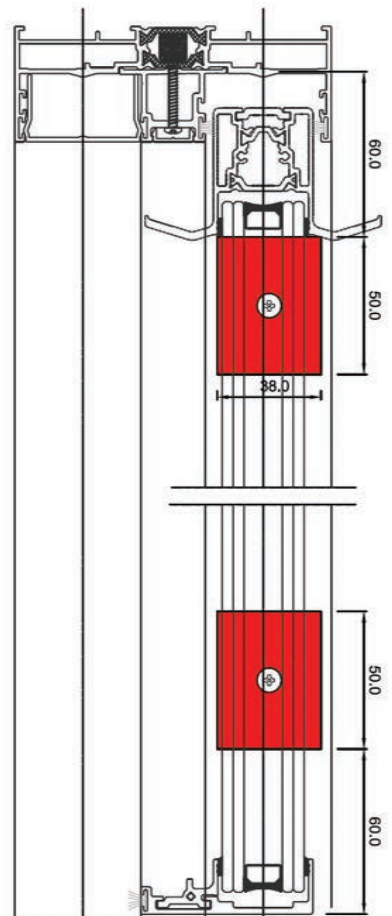
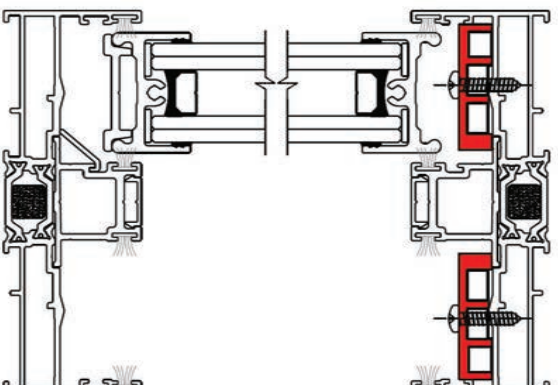
- Once all sashes are locking correctly with all keeps installed, fit the supplied rubber protective bumpers to the top and bottom of the locking jambs by sliding them over the built-in lip



- Finally, close and lock the all doors and double check that the 20mm interlocks line up correctly, presenting a single sight-line when viewed face-on. Some variation in final sash size is to be expected due to the nature of the structural bonding process. If the interlocks do not line up perfectly, this can be adjusted by removing the packer behind the keeps, or substituting them for one of the larger sizes of packer, depending on which direction the interlocks need to be moved in.

c. *Fit anti-lift blocks*

- Locate the 50mm x 38mm black plastic anti-lift blocks in the accessory pack.
- Slide sashes to their open positions.
- Fix two anti-lift blocks to the outer-frame rebate above each sash with self-tapping screws. The blocks should be positioned 60mm from the inner frame rebate or from the edge of the interlock as shown in the diagram below.
- Once the blocks are fitted, slide the sashes back to their closed positions. If the sashes need to be removed at any point in the future for maintenance, the anti-lift blocks must be removed first.



5. FIXED LIGHT INSTALLATION

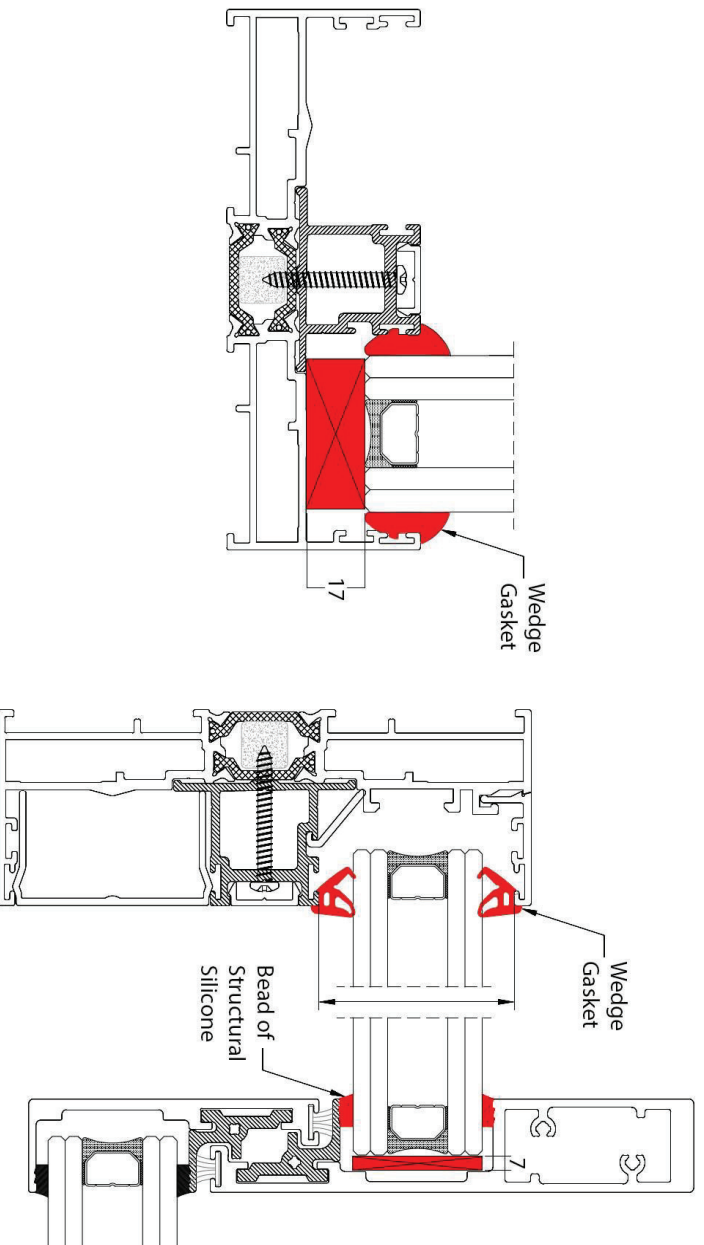
a. Shuffle glaze units

- Remove beading from the outer-frame jambs where fixed lights are to be installed
- Prepare the glazing rebate by pre-inserting 7mm glazing packers into the mullion and 17mm glazing packers into the bottom outer-frame - there will be no access to do this once the glass unit is shuffled into place. The glazing packers can be held in place with a blob of low-modulus silicone if needed.
- Shuffle the glass unit into the glazing rebate using the same method employed for the sashes. Pack the remaining jamb with glazing packers. It is critical that a consistent coverage of **7.5mm** is achieved on all four sides.

b. Gasket & silicone point

- Once the glass unit is correctly positioned and packed, gasket the top, bottom and jamb of the unit with the supplied wedge gasket. This is required on **both sides** of the glass unit (inside and outside).
- Finally, apply a bead of structural silicone between the glass and the 20mm mullion. This is required on **both sides** of the glass unit (inside and outside). Use of a silicone tool is recommended for a consistent finish.

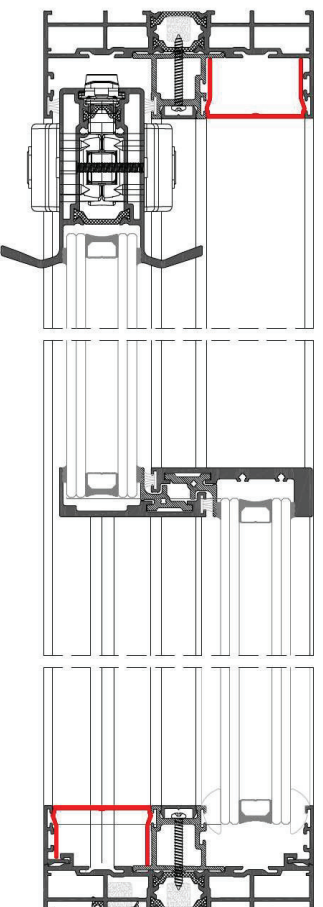
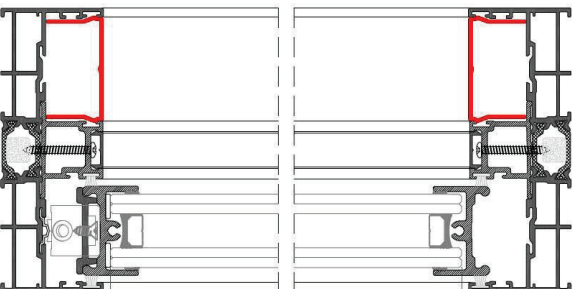
Structural silicone Dowsil 895 or equivalent. This sealant is NOT supplied by Arkay Windows



6. FINISHING

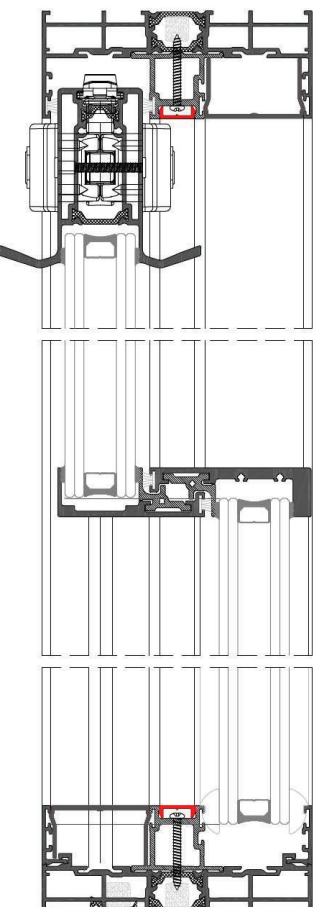
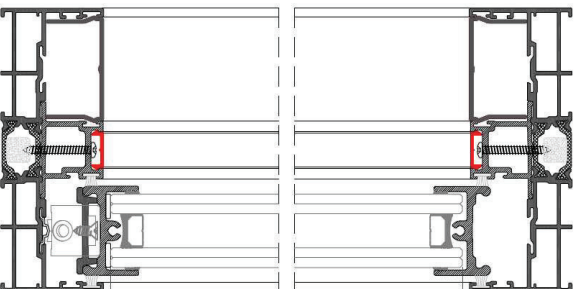
a. Outer-frame cover caps

- Clip the vertical cover caps into the outer frame jambs. These are pre-cut to size.
- Clip the horizontal cover caps into the outer frame at the top and bottom (where applicable). These are pre-cut to size but may need additional trimming on site depending on installation tolerances.



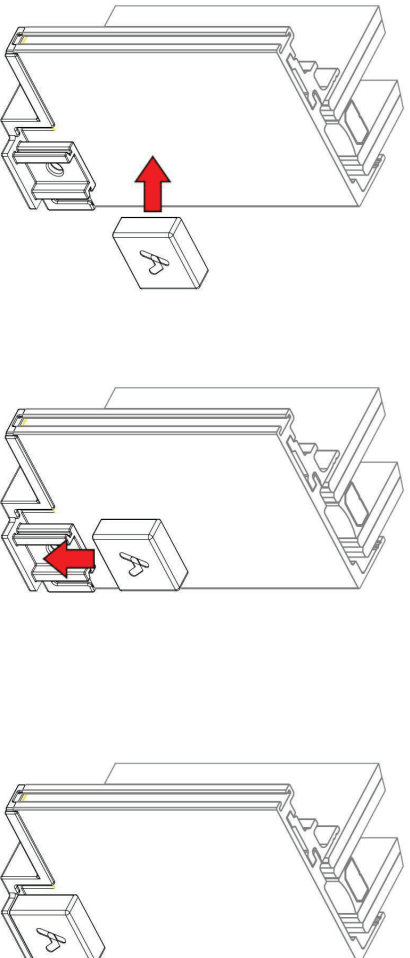
b. Thermal-break cover caps

- Clip the small black cover caps into the thermal break on all four sides. They should be cut around interlock sealing pads.

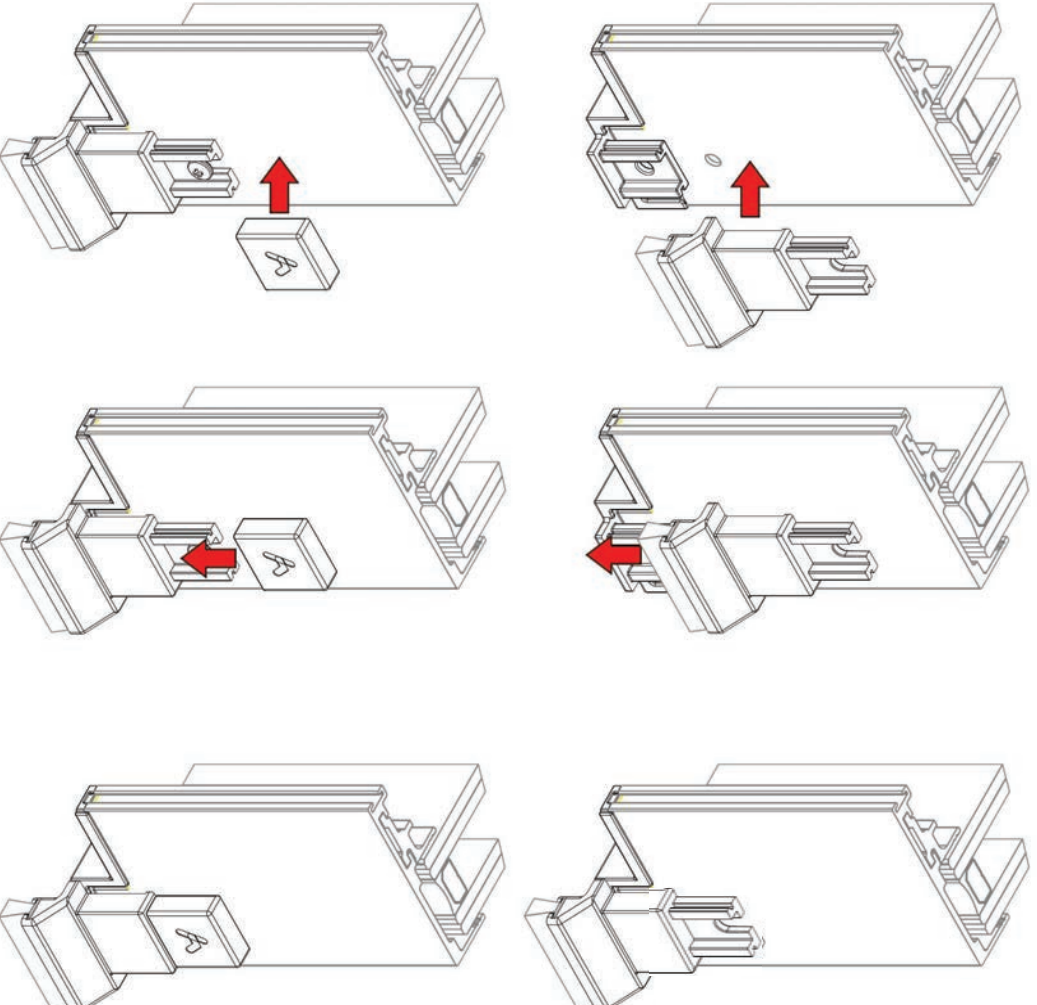


c. Sash cover pieces

- For all sashes on **2-track door-sets** and the **inner/outer sashes on 3-track door-sets**, slide the plastic cover plate over the built-in lip as shown

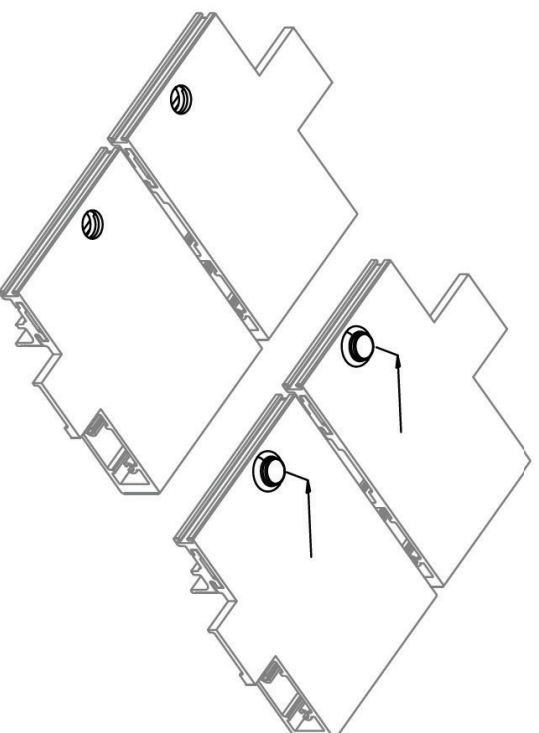
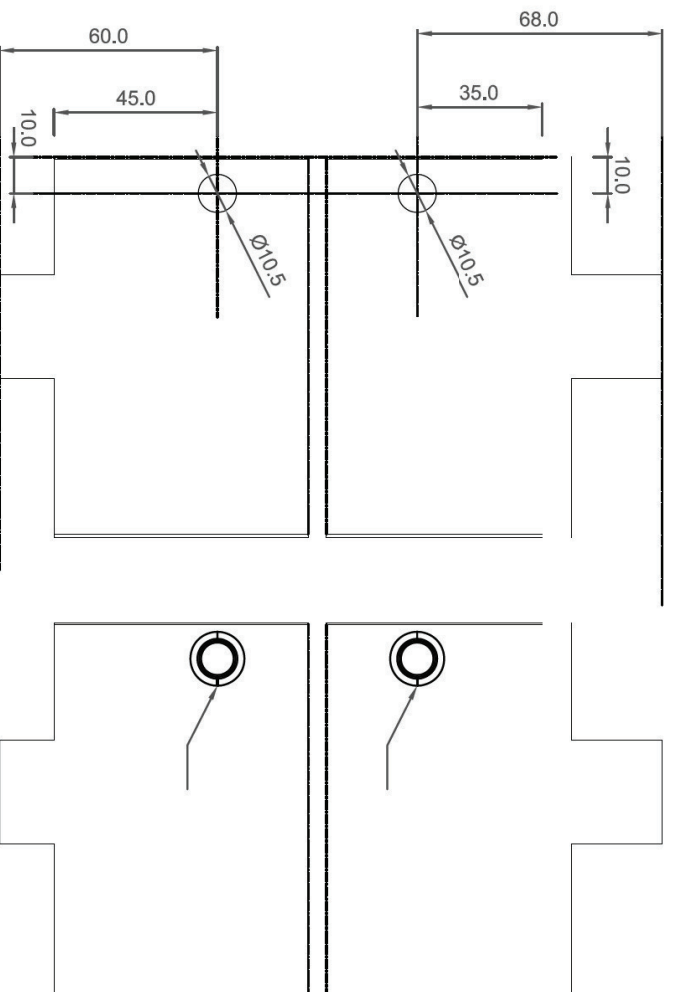
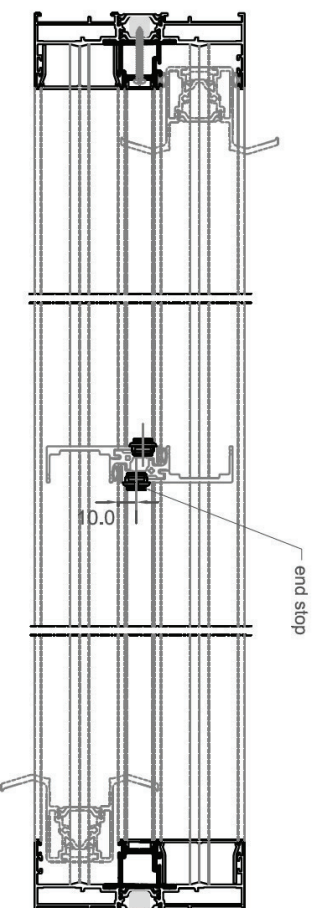


- For sashes on the **middle track of 3-track door-sets only**, slide the brush piece over the built-in lip. Secure with a self-tapping screw and then slide the plastic cover plate over the lip of the brush piece as shown.



d. Door Stops

- Push supplied rubber stops into pre-prepared 10.5mm Holes in interlocks.



FINISHING TOUCHES

- Check that the handles and locking mechanisms operate smoothly on each door.
- Check the sliding action is smooth and free running.
- Check that the locks engage correctly when closed.
- Check that cover trims and caps are all present and that there are no screws missing.
- Check the weather seal and ensure that the doors are fully sealed with no visible gaps.
- Clean the bottom track and ensure it is free of any debris.
- Ensure that the homeowner is instructed and knows exactly how to use and look after minimal sliding doors.

OPERATION AND MAINTENANCE

Opening and closing operation for minimal sliding doors

To open doors

- Unlock the door by turning the key
- Release the locking mechanism by flipping the lever downwards
- Pull the door open using the integrated handle bar profile
- Middle sliding panes will stack and slide with the adjacent panes. They do not have independent locks or handles.

To close doors

- Pull the door closed using the integrated handle bar profile. Ensure the sash is pushed tight against the frame.
- Engage the locking mechanism by flipping the lever upwards. If the operation of the lever is stiff, the doors is most likely not pushed fully into the closed position.
- Lock the door by turning the key.

Maintenance

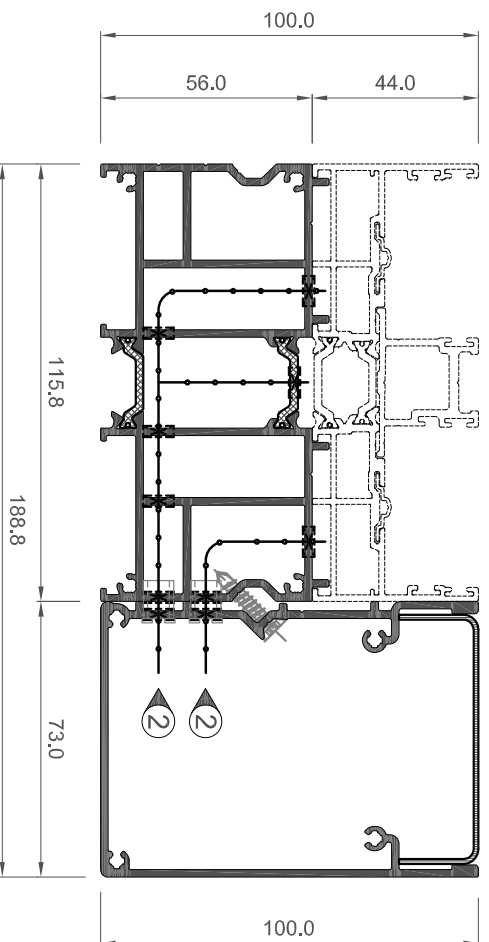
- Ensure top and bottom tracks are kept clean and free of any debris or foreign objects that can stop the function of the sliding door.
- Ensure all door locking mechanisms are kept clean and any moving parts are regularly lubricated with light machine oil at least once a year.
- Powder coated aluminium profiles should be cleaned with warm water and mild household detergent at least once a year.

SALIDA DE AGUAS EN MARCOS - SISTEMA CON CANALETA DE RECOGIDA. MARCO EMBUTIDO

Solución de drenaje recomendada para zonas expuestas

DRAINAGE IN FRAME - SYSTEM WITH PICKUP DUCT. EMBEDDED FRAME

Drainage solution recommended for exposed areas



2

Salida de aguas hacia canaleta, taladro de Ø8 mm.

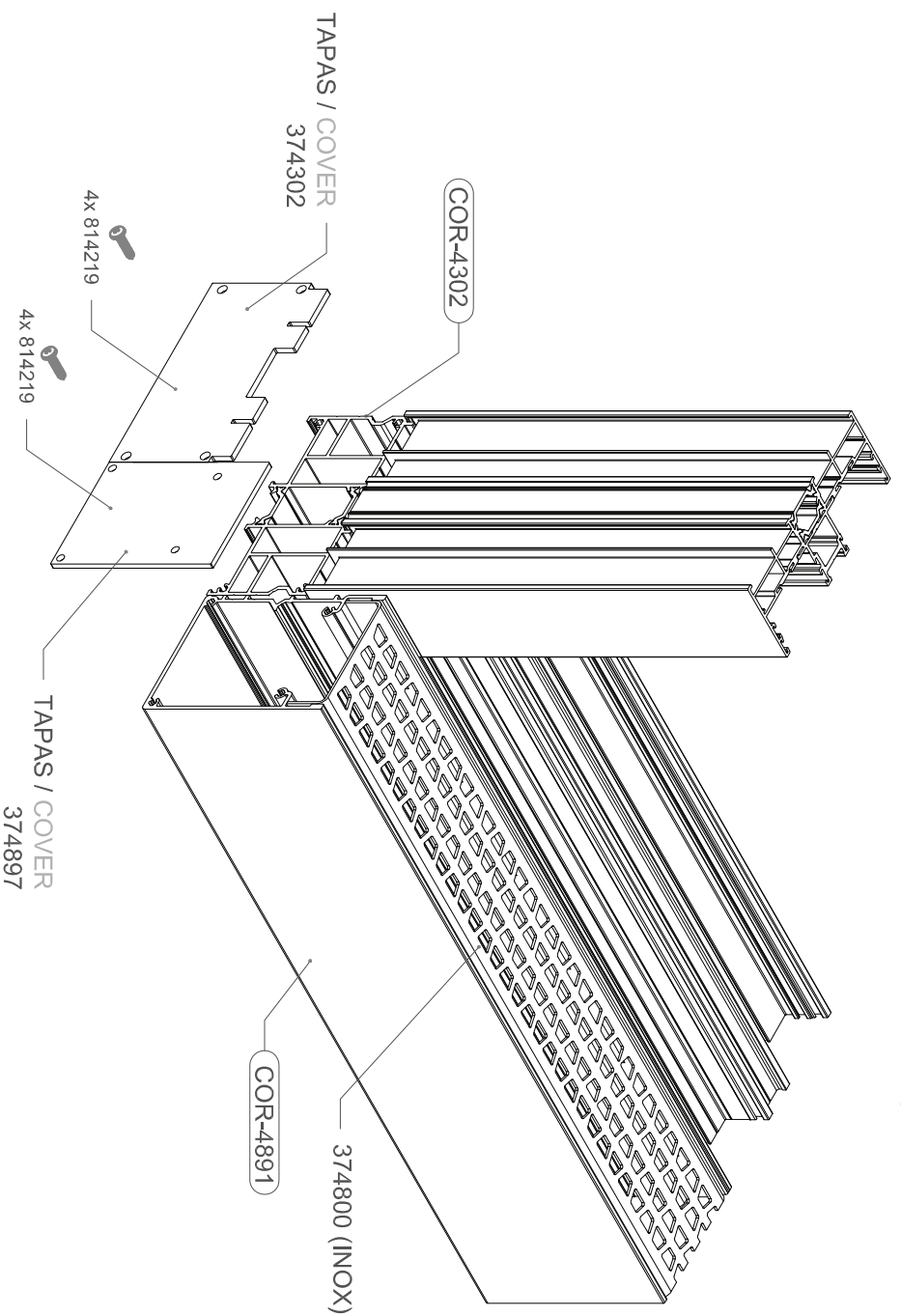
Horizontal inferior: Situar a 120 mm de los extremos, otro a L / 2 y cada 500 mm.

Water exit to gutter Ø8 mm drill.

Bottom horizontal: Position 120 mm to the ends, another L / 2 and every 500 mm.



Tubo de drenaje ref. 310100
Drainage tube ref. 310100

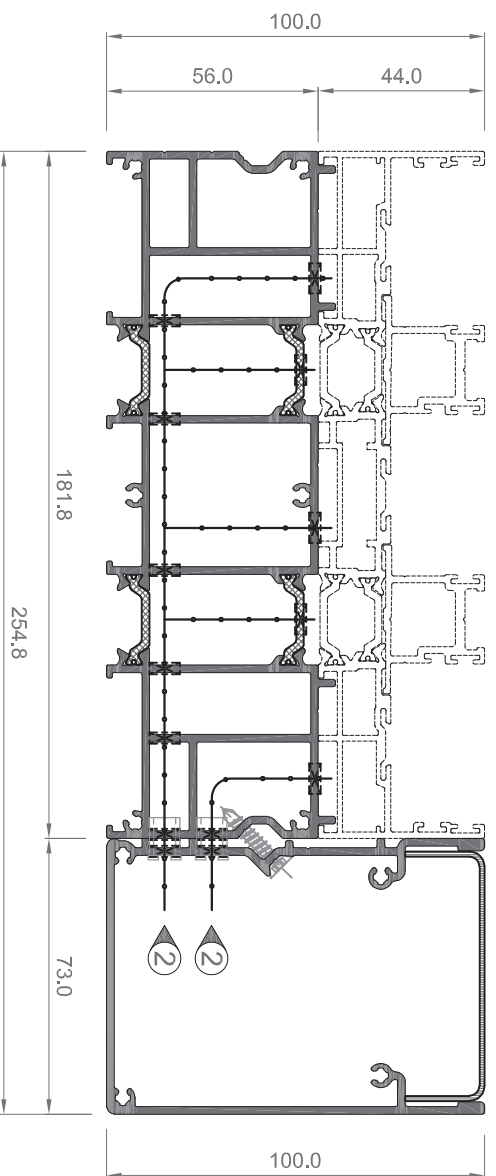


SALIDA DE AGUAS EN MARCOS - SISTEMA CON CANALETA DE RECOGIDA. MARCO EMBUTIDO

Solución de drenaje recomendada para zonas expuestas

DRAINAGE IN FRAME - SYSTEM WITH PICKUP DUCT. EMBEDDED FRAME

Drainage solution recommended for exposed areas



2)

Salida de aguas hacia canaleta, taladro de Ø8 mm.

Horizontal inferior: Situar a 120 mm de los extremos, otro a $L/2$ y cada 500 mm.

Water exit to gutter Ø8 mm drill.

Bottom horizontal: Position 120 mm to the ends, another L / 2 and every 500 mm.

REALIZAR A MANO
TO BE DONE MANU

TO BE DONE MANUALLY

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Tubo de drenaje ref. 310100
Drainage tube ref. 310100

