Fitting Of Subcill

Profile DF703, DF704, DF705, DF713, DF716, DF717, DF718, DF719

Drainage paths through the sub-cill can be seen on the illustration alongside, so care must be taken to ensure they are not obstructed and that screw fixings do not penetrate these areas.

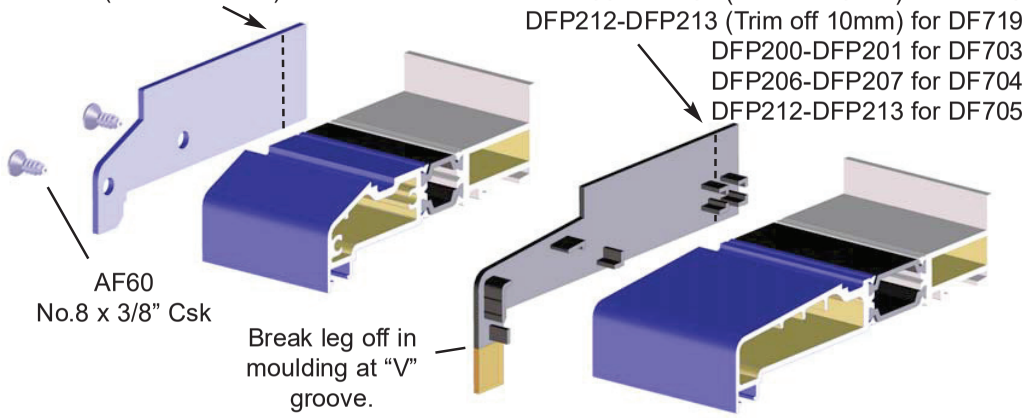
When positioning the frame to the subcill, silicone sealant must be gunned as shown to ensure that a watertight joint is created on the inside of the frame. Seal under the head of any fixing screws to prevent water ingress and seal DFP267 hole plugs into position.

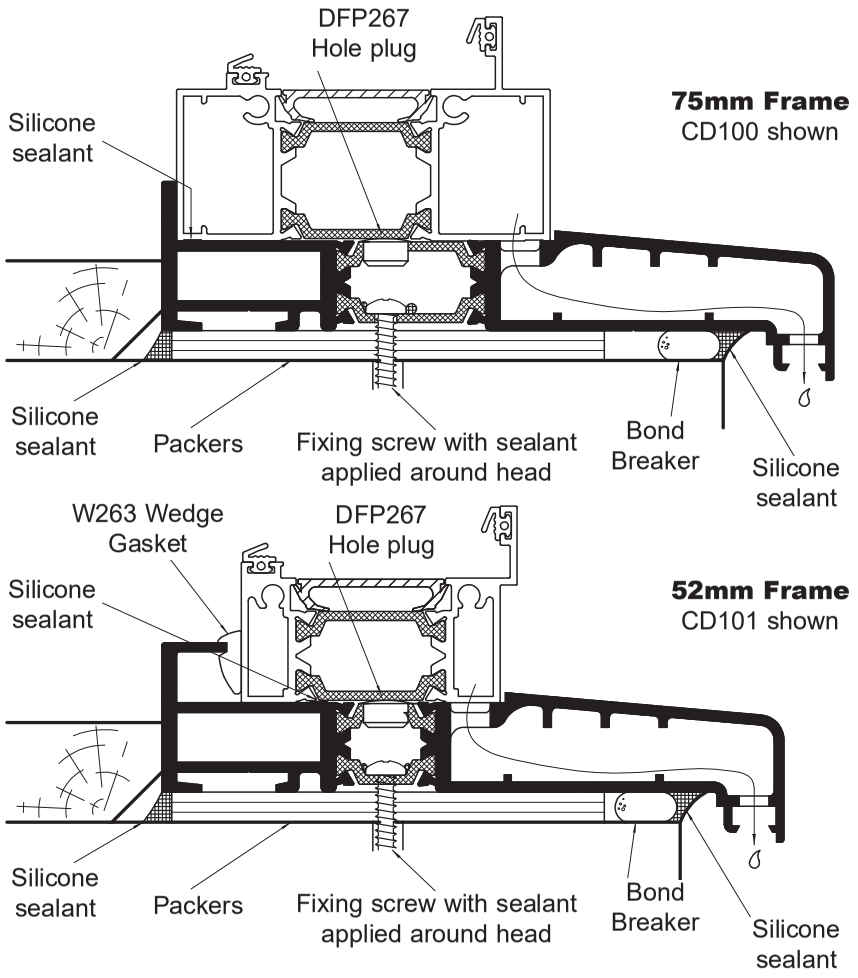
Subcill end caps must be fully sealed then pushed into position, or as for DF713 or DF716, fully sealed and secured into position using No.8 x 3/8" csk screws.

Subcill End Caps

DFC484 for DF713
DFC484 (Trim off 10mm) for DF716

DFP200-DFP201 (Trim off 10mm) for DF717
DFP206-DFP207 (Trim off 10mm) for DF718
DFP212-DFP213 (Trim off 10mm) for DF719
DFP200-DFP201 for DF703
DFP206-DFP207 for DF704
DFP212-DFP213 for DF705





Installation - Frame

Fitting Frame Into Aperture

It is vitally important that the cill is laid flat and level to achieve good performance. Jambs must be vertical in both planes, and no twist or other distortion allowed in the frame.

Prior to installing the frame, the opening should be checked to ensure that it is free of debris, and that any projecting brickwork has been trimmed back.

Any damaged damp proof membranes should be replaced or additional membranes incorporated.

When the opening was originally measured a suitable gap should have been allowed around the door, this will allow the door to be packed to ensure that it is plumb and square within the opening.

Ideally the frame should be bedded on mortar.

The frame can then be positioned in the opening and held square by packing at the very corners of the frame, taking care not to damage or deform the frame profiles.

To check for squareness, measure the diagonals from corner to corner, these diagonal dimensions should not differ by more than 1 or 2mm, if they do then adjust the packing until the frame is square within the opening.

The lay of the frame in to out can be checked by using a spirit level on the jambs. On replacement applications, the correct position of the frame might not align with the original. This will require some remedial work to make good the plaster reveal around the frame on the inside as well as any render that is present on the outside.

Fixing of Frame

The first fixing must always occur within 150mm of the corner of the unit and then at no more than 600mm centres (do not over-tighten fixings), the type and frequency depends on the expected applied loadings.

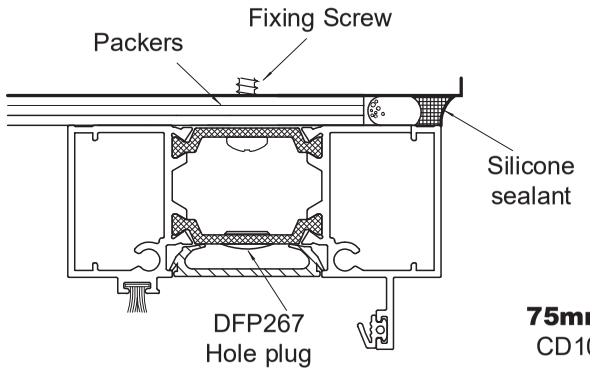
Packing will be required at the fixing points to prevent distortion of the frame. Drilled holes in the frame should be sealed and DFP267 hole plugs fitted.

Note fixings and hole plugs are not supplied with door kits.

Foam Fixing

Fixing foam can be used in conjunction with screw and lug fixing, but must not be used as an alternative to mechanical fixing.

Care must be taken not to allow the foam to come into contact with the painted finish, and as such the use of some form of masking tape would be advisable. Permanent staining will be caused if the foam contacts the frame.

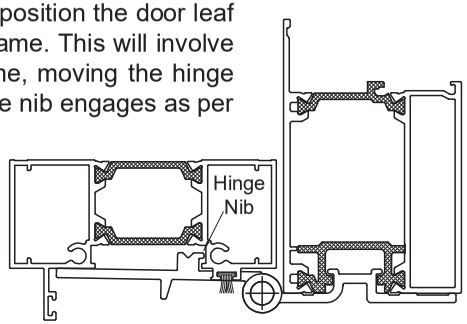


75mm Frame
CD100 shown

Installation - Door Leaf

Hanging Of Door Leaf

With the hinges attached to the door leaf, position the door leaf so that the hinges engage into the outerframe. This will involve inserting the hinge fully into the outerframe, moving the hinge back then pulling forward, so that the hinge nib engages as per detail shown.



Note that the door leaf hinge fixing holes are slotted, and by loosening the leaf to hinge fixings. The hinges can be adjusted up or down so that the hinges align up with the outerframe preparations.

Once in position, secure the hinge to the outerframe with No.8 csk self tap screws. Then screw in the hinge adjustment grubscrews, hand tight only.

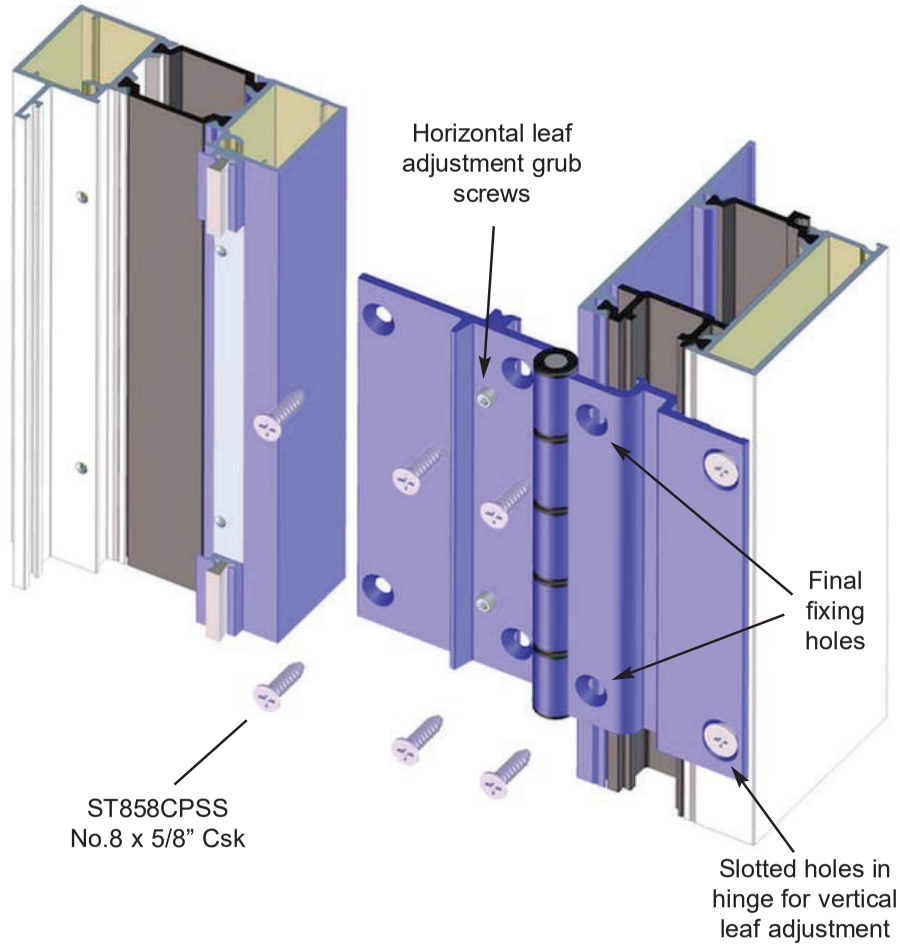
DO NOT SCREW REMAINING HINGE/ LEAF FIXING SCREWS AT THIS STAGE!

Close the door and check the leaf to frame gap on all four sides, making hinge adjustments if necessary.

Horizontal adjustment can be performed by loosening the frame fixing screws and making adjustments by screwing in or out the grub screws located in the hinge. Re-tighten the frame fixing screws after adjustment has been made

Vertical adjustment can be performed by loosening the leaf fixing screws and raising or lowering the door leaf. Re-tighten the leaf fixing screws after adjustment has been made.

Once satisfactory leaf adjustment has been made, drill 3.2 dia holes in the final fixing holes in the door leaf and secure with the remaining two No.8 csk self tap screws.



Door Leaf Glazing

Open in doors.
CWC055 or CWC070 retained gasket is inserted into the glazing bead, and is cut square with the horizontal beads, and mitred with the vertical beads. Care should be taken to ensure the seal is not stretched during fitting.

Open out doors.
Self adhesive retained gasket CDC145 is applied to the rails and is square cut. CDC146 self adhesive retained gasket is applied to the stiles and mitered/joined with CDC145. Care should be taken to ensure the seal is not stretched during fitting, and aluminium surfaces must be clean prior to the gasket being applied.

Glazing
Position the adjustable glazing packers into the door leaf using packer positions shown. A small amount of silicone sealant may be used to retain there position, however care must be taken to ensure that the sealant does not obstruct any of the drainage paths.

After the glazing packers have been positioned, the glass is now carefully offered in and the adjustable glazing packers tightened to retain the glass centrally within the opening. Care should be exercised so that the packers are not over tightened.

Once the glass is positioned correctly within the opening and the door leaf checked to ensure that it is square, the beads can be fitted. Begin by inserting the top and bottom glazing beads, and then the sides. It is very important that the joints between beads are carefully sealed with Henkel Terostat sealant to form an airtight junction.

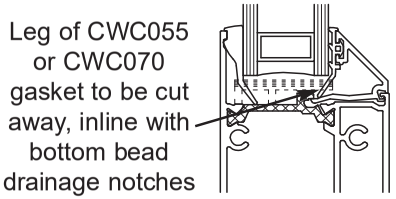
A plastic wedge should be pressed between the glass and the frame, forcing the glass towards the retained gasket. This will ease the glazing process for the wedge gasket.

Glaze out doors.
CDC142 vertical wedge gasket is wedged between the stiles/glass and is square cut. For the horizontal wedge gasket, Remove the 2mm tear off strip from CDC142 and wedge between the rails/glass and mitere/join with the vertical wedge gasket located in the stiles.

Glaze in doors.
Remove the 2mm tear off strip from CDC142 vertical wedge gasket and wedge between the vertical bead/glass with the ends square cut. For the horizontal wedge gasket, Remove the 2mm tear off strip from CDC142 and wedge between the horizontal beads/glass and mitere/join with the vertical wedge gasket.

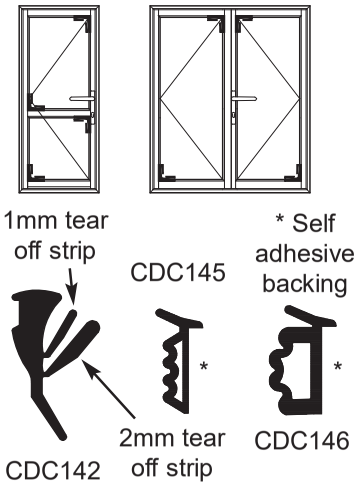
Care should be taken to ensure the seal is not stretched during fitting and Henkel Terostat sealant must be applied to the gasket corners to ensure a good airtight joint is achieved. Note that if the wedge gasket compression is too great, the 1mm tear off strip can be removed.

Typical Glaze In Detail



Typical Glaze Out Detail

Typical Packer Positions

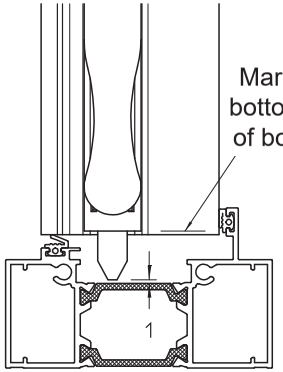


Installation - Door Leaf

Double Door (Std) Flushbolt Assembly

The flushbolt is fitted at the top and bottom of the slave leaf.

Position the flushbolt onto the slave leaf, and with the flushbolt in the locked position. Mark the bottom of the flushbolt whilst maintaining a 1mm gap between the locking pin and the outerframe, see detail (DO NOT drill a clearance hole in the polyamide for the flushbolt).



Note that for low threshold doors, the flushbolt bottom is positioned flush with the bottom of the stile.

With the flushbolt in the unlocked position, secure the flushbolt to the stile with DFP1699 polyamide self drill screws (DO NOT drill pilot holes and take care not to strip the threads when tightening).

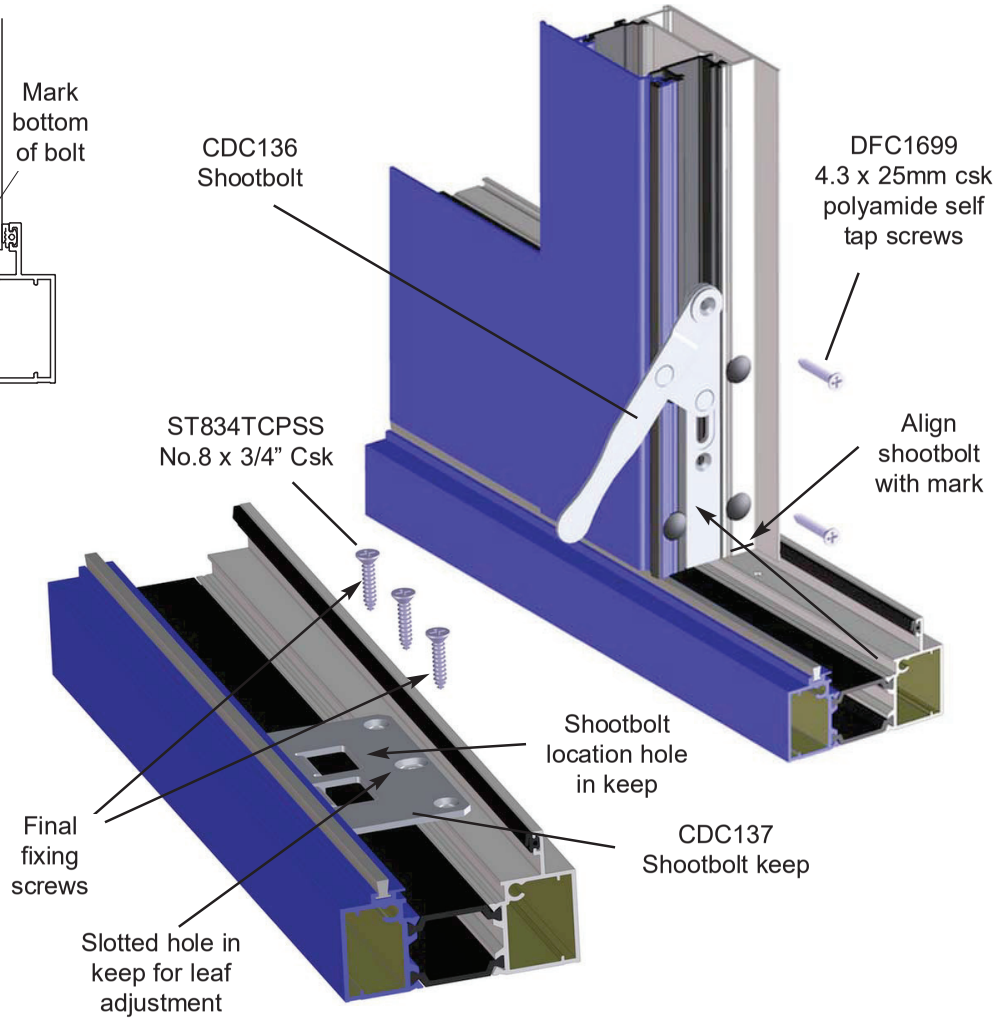
Flushbolt/Shootbolt Keeps

Flushbolt/Shootbolt keeps are fitted in the head and cill of double doors, but only at the head of low threshold doors.

Check handing, and then position the keep so that the centre slotted hole aligns up with the pre-drilled fixing hole in the head/cill.

Secure keep with No.8 csk self tap screw in the centre hole only, and then check slave leaf flushbolt/shootbolt operation. The keep position can be adjusted by loosening the centre fixing screw, sliding forwards or backwards and then re-tightening.

When satisfactory flushbolt operation has been obtained, drill 3.2 dia fixing holes through the remaining two fixing holes in the keep. And secure with No.8 csk self tap screws.



Installation - Door Leaf - Frame

Hook And Latch Keep Assembly

Hook and latch keeps are fitted to the locking jamb on single doors and on the slave stile on double doors.

Check handing, and then position keeps so that the slotted adjustment holes align with the pre-drilled fixing holes. Secure keeps with No.8 csk self tap screws in the pre-drilled holes only, and then check door leaf locking operation. The keep positions can be adjusted by loosening the adjustment screws, sliding forwards or backwards and then re-tightening.

When satisfactory door leaf locking operation has been obtained, drill 3.2 dia fixing holes through the remaining fixing holes in the keeps. And secure with No.8 csk self tap screws.

Keep Pack Usage...	CDP122	52mm Outerframe LH OO / RH OI
	CDP222	52mm Outerframe LH OI / RH OO
	CDP124	75mm Outerframe LH OO / RH OI
	CDP224	75mm Outerframe LH OI / RH OO
	CDP127	Double doors

Seals And Trims

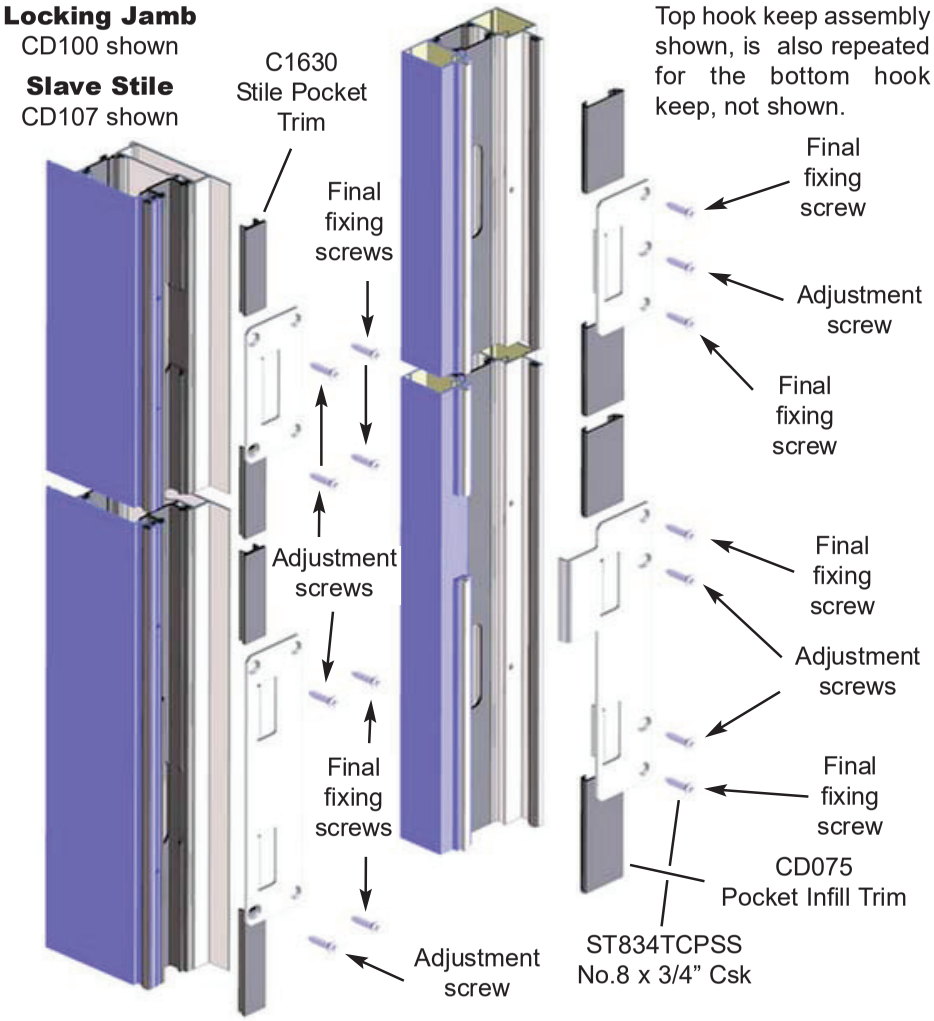
When satisfactory door assembly/operation has been finalised, the remaining seals and trims can be fitted.

Using general arrangements as a guide...

C1630 Trim is fitted to all stiles, flush with the ends and cut around the lock and keeps.

Woolpile DFC1450 is fitted at the head, CDC147 is fitted in the jambs and is cut around keeps and hinges.

DFC1103 or DFC1208 frame/vent seal is fitted in the outerframe and meeting stiles, taking care not to stretch during fitting.



Security Blocks

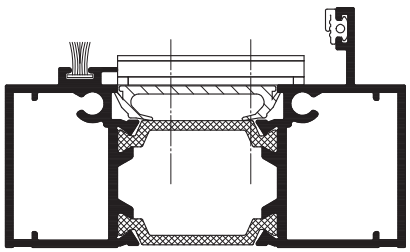
For enhanced security, security blocks are to be fitted opposite both hinges, or as near as possible if there is an obstruction.

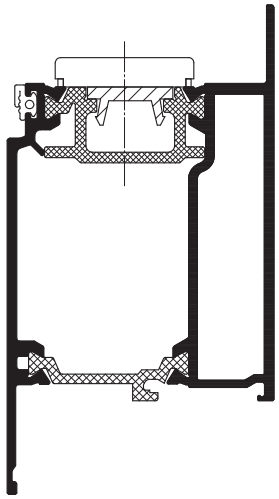
Position the blocks onto the profile, then secure in place with the self drill, self tap screws. Do not drill a pilot hole or overtighten, these screws.

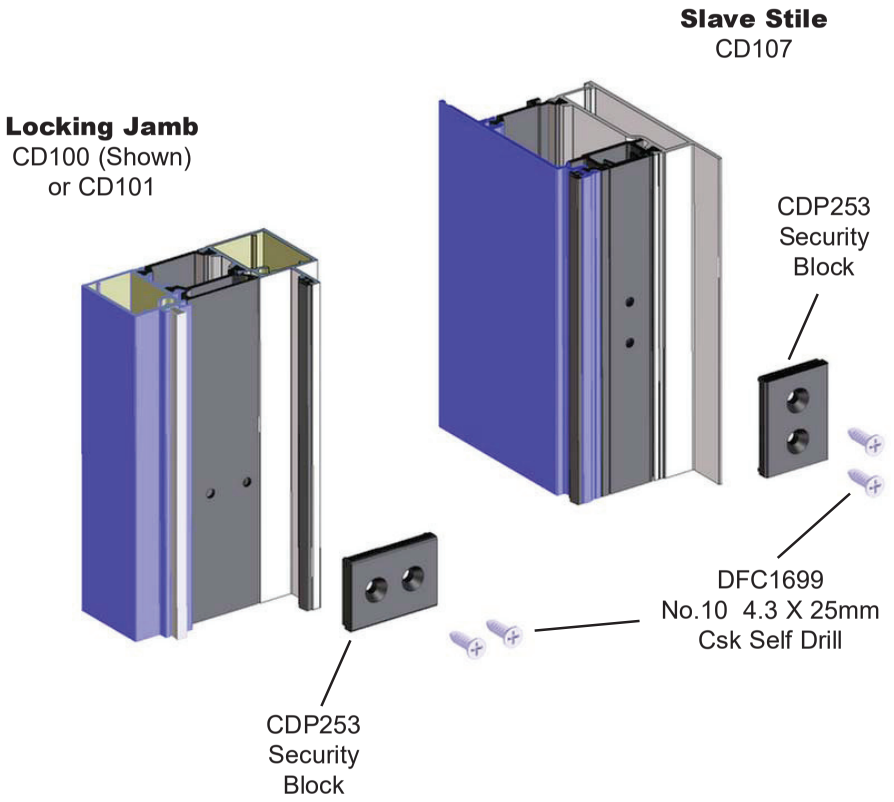
Two blocks are fitted to the locking jamb on single doors, with the security block being located horizontally.

Two blocks are fitted to the slave stile on double doors, with the security block being located vertically.

See positional detail below.







Finishing Off

Sealing

The recommended sealant for the exterior is Low Modulous Neutral Cure Silicone Sealant. Backing foam should be used where the perimeter gap is over 5mm. Where the gap is within the 5mm range, a neat application of silicone is all that is required on the outside.

A final check of the internal and external perimeter seals should be undertaken. Any weak spots that are identified should be rectified and tooled to a high visual finish. Any excess sealant must be cleaned off of the finished surfaces using appropriate cleaner.

Cleaning After Installation

If excess sealant is to be cleaned off. Ensure that any solvent used will not damage any of the metal finishes, synthetic rubbers or plastics which may be present.

Warning

Take particular care if there is any cement or plaster on the aluminium. It is harmful to the metal finish and should be washed off while still wet. DO NOT RUB or particles of grit will permanently damage the metal or paint finish.

Routine Cleaning

No aluminium finish is “Maintenance Free” and hence should be cleaned at regular intervals.

Product should be washed down with warm water containing a mild detergent at least once a year. In areas where airborne contaminants are more concentrated than usual - near the sea, around swimming pools, or in place where in industrial air pollution is a known hazard - the products should be cleaned every three months or more frequently if requested by the powder coat manufacturer for that specific location.

When cleaning the products, it is a wise precaution to check that all hardware fixing screws are tight, and that all parts are free from damage. At the same time, and at least annually, make sure that drainage paths are not blocked by airborne debris, or other ‘foreign’ bodies.

Maintenance

The hardware fitted to Sapa products does not need ‘calendar’ servicing but should be maintained on ‘as necessary’ basis. Thus items such as door locks and hinges, which have been lubricated in manufacture and/or installation should be treated with the appropriate lubricant when they show signs of stiffening up in use, or if they have been left unused for a considerable time.

Regular checks to be carried out on the locking gear and hinges, at least once a year or more frequently depending upon the hostility of the environment, i.e. coastal regions or dusty environments.

Operation

In order to preserve functionality of the door, and to guarantee security, it is imperative the directives listed below are observed.

- *Intermittent operation or sudden unexplained impairment of the functioning of any item of hardware should be investigated immediately by a person familiar with the product and repairs/adjustments be effected before user safety or product function is jeopardised.*

- *Replacement of faulty or damaged parts should be carried out by an experienced person using the correct parts.*

- *Where an item is still covered by the warranty given by the fabricator or installer of the product, requests for remedial work under such guarantees must, in the first instance, be referred to that person or company.*