

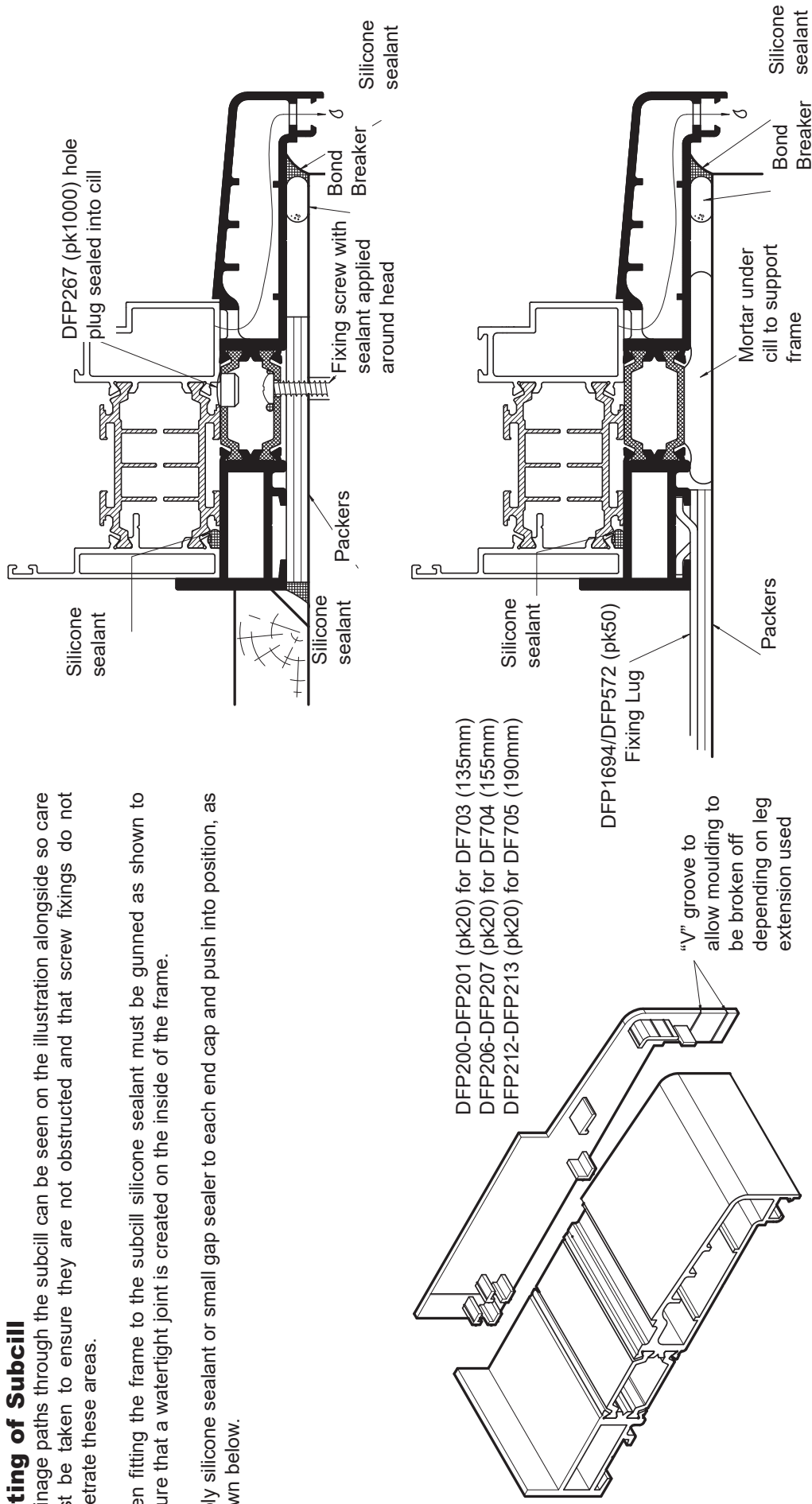
INSTALLATION - SUBCILLS

Fitting of Subcill

Drainage paths through the subcill 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 fitting 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.

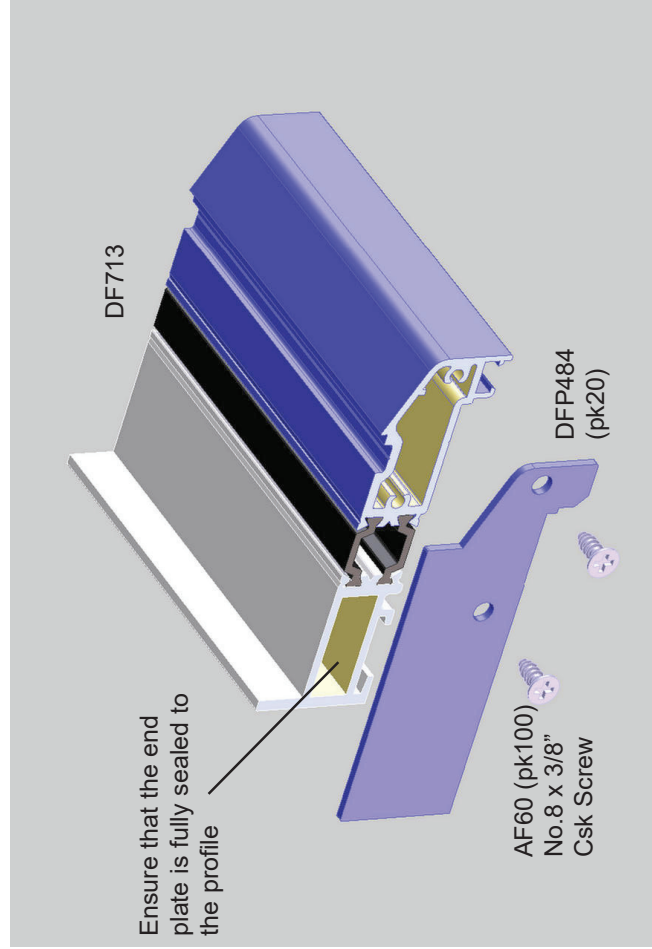
Apply silicone sealant or small gap sealer to each end cap and push into position, as shown below.



INSTALLATION - SUBCILLS

Assembling the 100mm Subcill

The DF713 subcill must have the DFP484 (pk20) aluminium end plate sealed and screwed to each end of the profile. Care must be taken to ensure that the end of the subcill is fully sealed to the plate to prevent any water that enters the subcill penetrating to the structure. The DFP484 (pk20) should be secured using 2 off No.8 x 3/8" Csk screws.



Fitting Frame To Aperture

It is vitally important that the cill is laid flat and level to achieve good performance. Jambos 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 window, this will allow the window 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 jambos. 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.

INSTALLATION - FRAME

Fixing of Frames

The first fixing must always occur within 150mm of the corner of the unit then at not 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 where there is a possibility of moisture penetration around the screw.

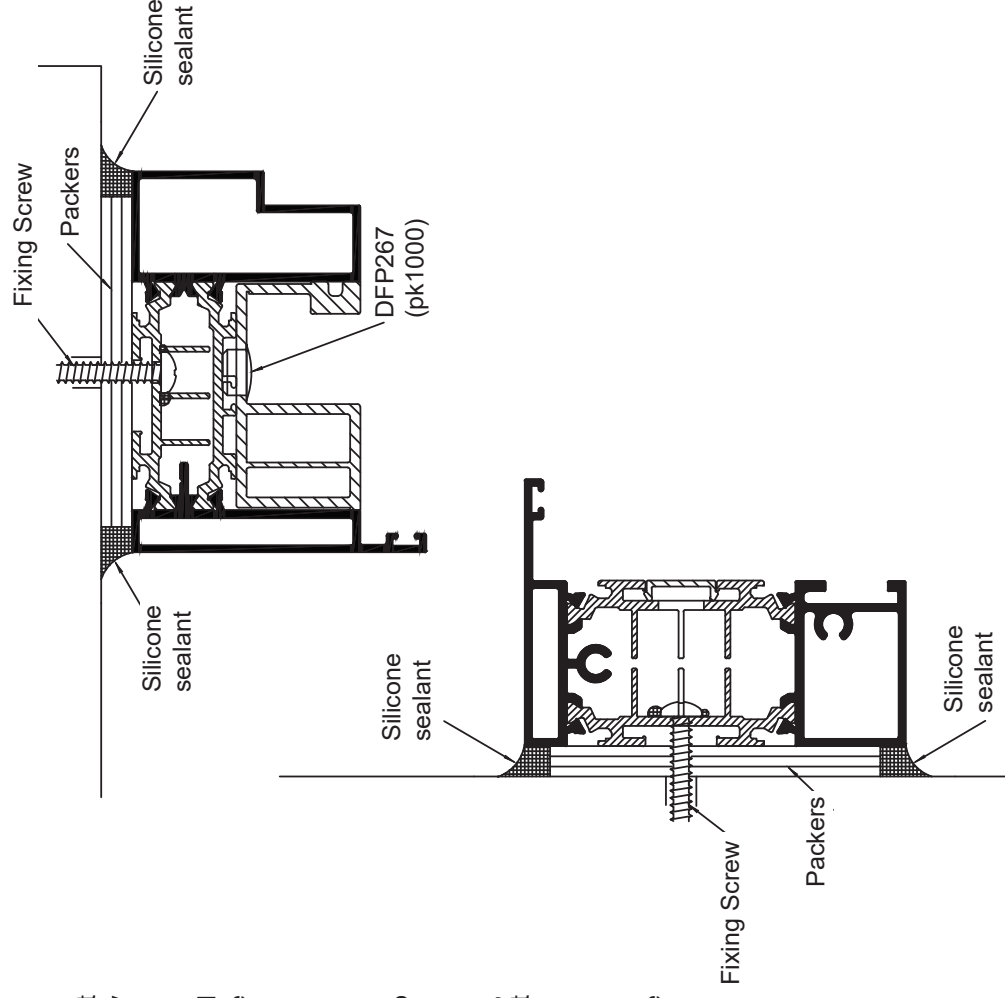
Fixing of Frames - Foam Fixing

Fixing foam can be used in conjunction with screw fixing, but is not an alternative to screw fixing.

Care must be taken not to allow the foam to come in 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.

*****IMPORTANT*****

DO NOT apply perimeter silicone seal at this stage. The jambs of this door are adjustable after installation and doing so will prevent adjustment.



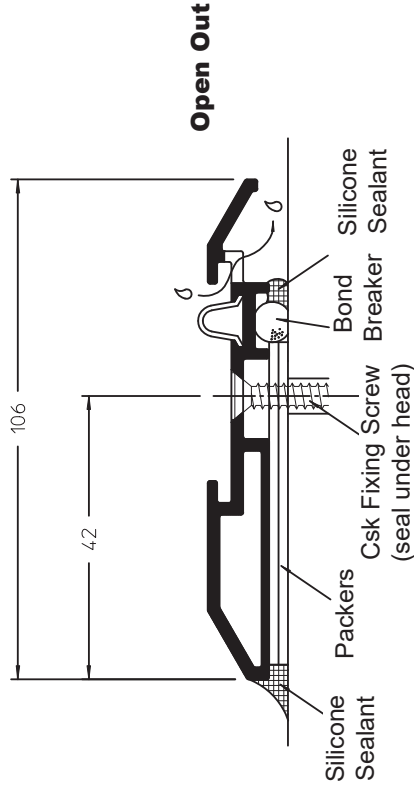
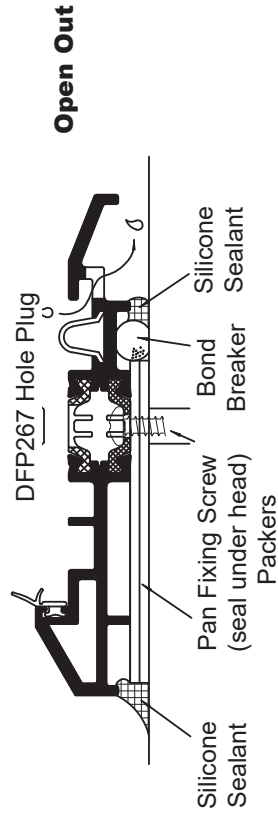
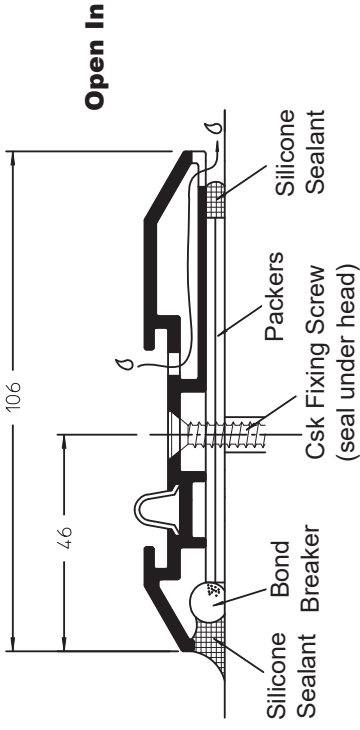
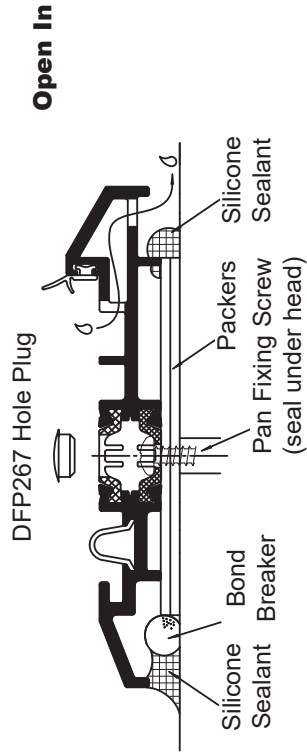
INSTALLATION - LOW THRESHOLD

*** IMPORTANT ***

Both low thresholds **MUST** be fitted on a flat/level, solid surface. This is extremely important for doors to operate effectively, and also for doors to seal correctly when in the closed position.

Threshold fixings are to be located at a maximum of 600mm centres, using appropriate fixing screws. With the threshold seating onto a full mortar bed between packers.

Fully seal under all screw heads.

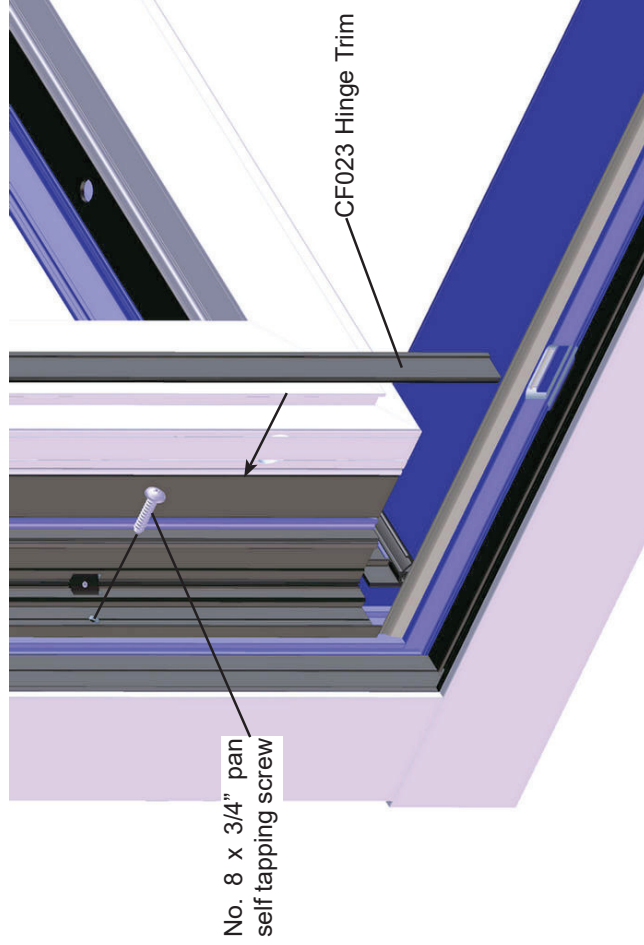


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INSTALLATION - LEAF

Hanging of First Leaf

The first leaf should have the hinge already fitted to the hanging side. If it is not already fitted, see page 5-13. Offer the leaf up to the hanging jamb. Open the hinge and fix into the jamb through the bottom fixing hole using No. 8 x 3/4" pan self tapping screw. Drill 3.0 dia through remaining fixing holes into jamb and fix with the same screws. Fit CF023 hinge trim as shown below.



Hanging of Further Panes

Lift top guide of second pane into head track channel, then lift bottom rollers onto track, as shown below (Fig. 1). Slide pane to meet first pane (Fig. 2), then attach hinges to first pane using No. 8 x 3/4" pan self tapping screws starting at the bottom pre-drilled fixing hole as before. Continue and repeat process with further panes (Fig. 3)

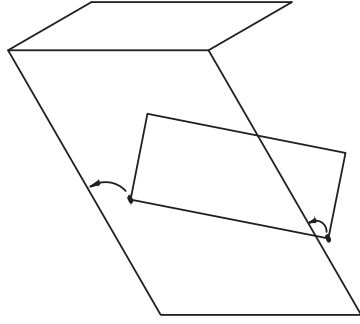


Figure 1

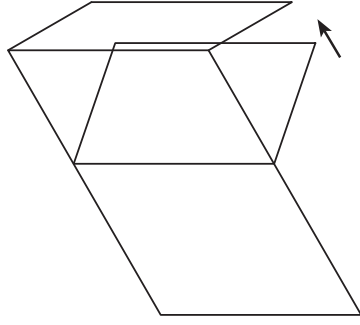


Figure 2

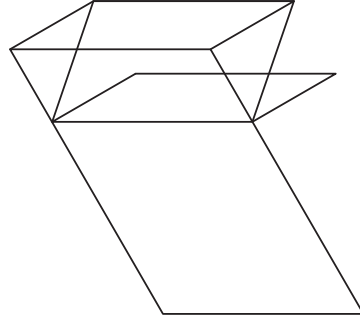


Figure 3

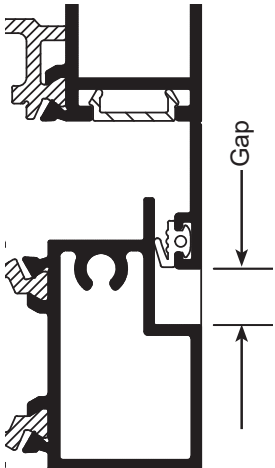
INSTALLATION - LEAF

Fitting of Lock Strikes

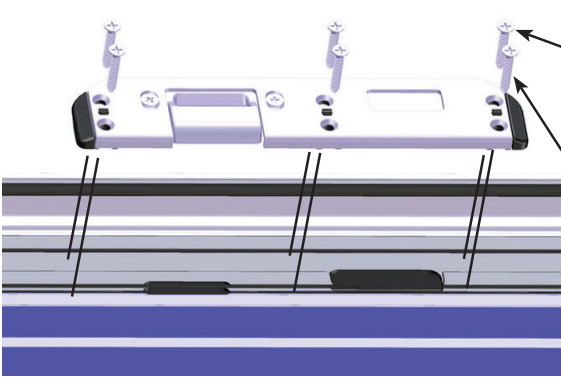
There are two thicknesses of keep packer (2 & 6mm). To determine which packers are required, close the locking leaf against the locking jamb/slave stile. Then measure the gap between the leading edge of the lock stile rebate and the jamb/meeting stile.

See table below to determine which packer is required -

Gap	Packer
4 to 7mm	2mm
>7 to 10mm	6mm



Clip packers into back of each keep. Align front edge of keep with rear of upstand in leading edge of jamb or meeting stile. Set height of keep to align with slots already prepared in jamb/stile. Drill 3.5 dia holes through front holes in keep (into aluminium) and fix with No. 8 x 1" csk self tappers. Fix rear holes (into polyamide) using DFC1699 self piercing/tapping screws.

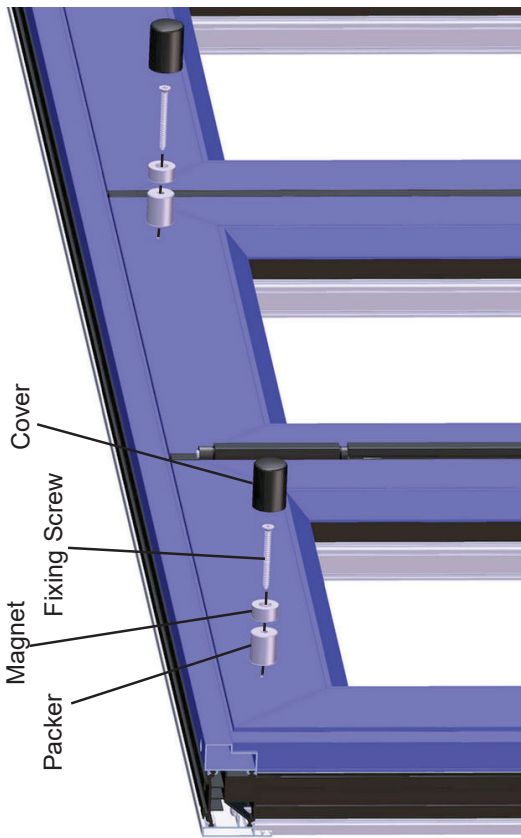


No. 8 x 1" csk self tapper (front holes only)

DFC1699 self piercing screws (rear holes only)

Fitting of Magnetic Catches (DFP1194)

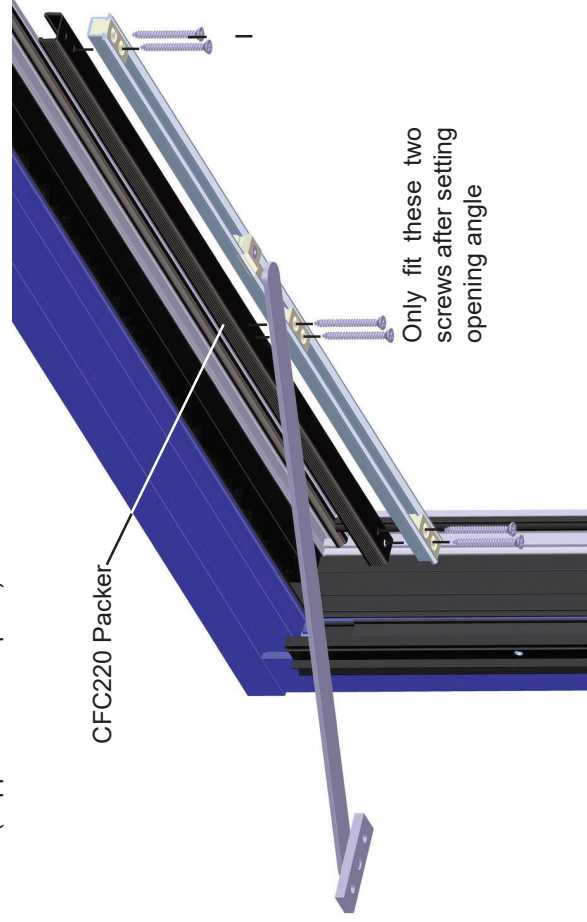
Fit Magnetic catches to top rail locking side of all locking leaves, and opposite end of top rail on next leaf. Assemble magnets as shown below. Apply a spot of threadlock to the fixing screw and fix using screws supplied. Apply a small amount of sealant to the inside edge of the cover. Slide covers over magnets. Clean off any excess sealant immediately.



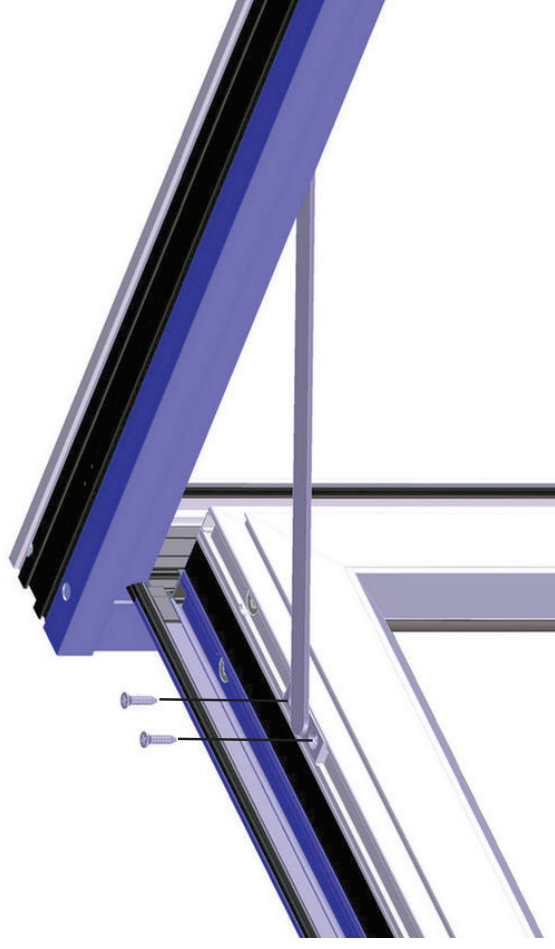
INSTALLATION - SWING LEAF RESTRICTOR

Fitting Swing Leaf Restrictor (DFP1098)

On units where there is a free swinging leaf hanging off the jamb (e.g. 431, and 651), an optional restrictor can be fitted to restrict leaf at any desired angle. Fit frame portion to head as shown below using CFC220 packer and 4 off No. 8 x 1 1/2" csk self tapping screws (supplied in acc. pack) into two end blocks only. The third stop block is fixed after adjusting the opening of the leaf to the required angle. Drill two 2.0 dia holes through stop block and fix in place using 2 off No. 8 x 1 1/2" csk self tapping screws (supplied in acc. pack).



On the leaf, fit restrictor as shown below using 2 off No. 10 x 3/4" csk self tapping screws (supplied in acc. pack). The two tubular spacers supplied in pack are not used on this product and can be discarded.



INSTALLATION - GLAZING - STANDARD LEAF

Glazing

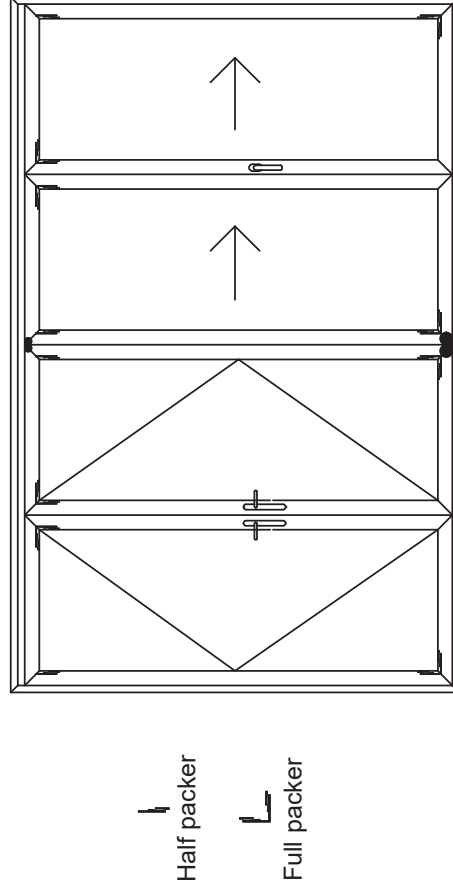
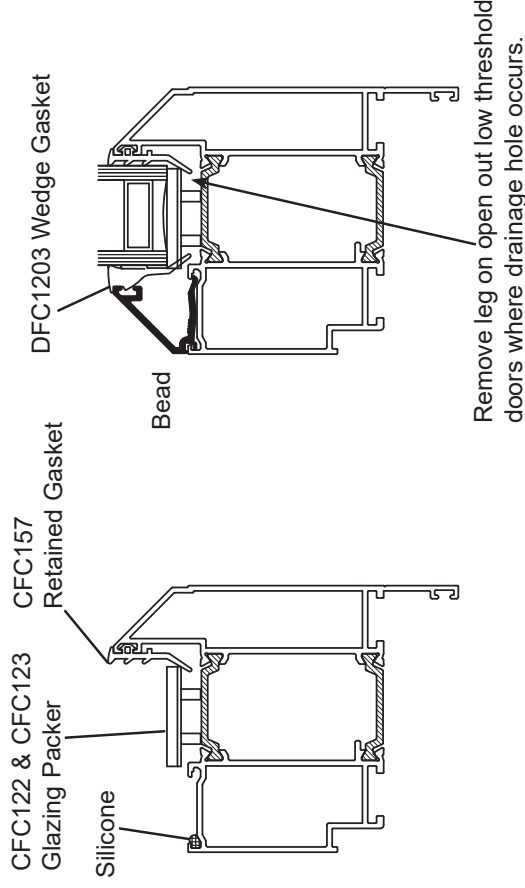
Fit retained gasket CFC157 to the glazing rebate on all four sides of every leaf. Take care not to stretch the gasket during fitting. Mitre cut the corners and seal each joint using Henkel Terostat sealant. **IMPORTANT** - On open out low threshold doors, remove the leg of the retained gasket for approx 25mm around the drainage hole in the bottom rail.

Position the CFC122 adjustable glazing packer bases and CFC123 wedges into the leaf using packer positions shown alongside. Note that packers can be broken in half where half packers are shown. A small amount of silicone sealant may be used to retain these in position, however care must be taken to ensure that the sealant does not obstruct any of the drainage paths. Apply a bead of silicone sealant to the inner bead nib (as shown) across the bottom rail and 100mm up each stile.

Once 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 and the frame distorted.

Once the glass is positioned correctly within the frame and all leaves checked to ensure that they are square, the beads are clipped into position. It is very important that the joints between beads are carefully sealed with small joint sealant to form an airtight junction. A plastic wedge should be pressed between the glass and the glazing bead on all sides to force the glass forward. This will ease the glazing process as the outer gasket will be slightly compressed.

The wedge gasket DFC1203 is now fitted in place starting at one corner in the head, and then completely around the frame in one piece, joining back onto itself. Notch out the back of this gasket to enable the gasket to bend around the corners and mitre the last end to form a neat join. Care should be taken to ensure the seal is not stretched during fitting and a small amount of 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 tear off strip can be removed or alternative wedge gasket DFC1509 can be used.



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INSTALLATION - GLAZING - SLIM LEAF

Glazing

Glazing of slim leaves is exactly the same as that shown for the standard leaf on the previous page. Bead / gasket combinations for various glazing thickness's are shown below.

Glazing / Bead / Gasket Combinations	Bead / Gasket Combinations				
	DF049 Bead	DF056 Bead	DF046 Bead	DF216 Bead	DF287 Bead
Glazing Unit Thickness	24mm	DFC1203 CFC157			
	26mm	DFC1509 CFC157			
	28mm		DFC1203 CFC157		
	30mm		DFC1509 CFC157		
	32mm		DFC1203 CFC157		
	34mm		DFC1509 CFC157	DFC1203 CFC157	
	36mm			DFC1509 CFC157	
	38mm				DFC1203 CFC157
40mm					DFC1509 CFC157

FINISHING OFF

Adjusting Jamb

Both jambs are adjustable giving ± 2 mm each. If required to give more or less clearance at the lock stile, the jambs can be adjusted by either slackening jamb perimeter fixing screws and carefully levering jambs inwards, or by gently tapping jambs outwards and tightening jamb perimeter fixing screws. On even paned doors, final fixing screws must be fixed into the angle brackets at the cill (See page 5-3). Seal jamb to head and cill corner joints after adjustment, taking special care at cill to ensure a watertight joint is achieved.

Perimeter Sealing

The recommended sealant for the exterior is Low Modulus 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.

MAINTENANCE

HAND THIS PAGE TO THE END USER AFTER INSTALLATION

Routine Cleaning

No aluminium finish is "Maintenance Free" and hence should be cleaned at regular intervals. All products 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 places where industrial air pollution is a known hazard - the products should be cleaned every 3 (three) months or more frequently if requested by the powder coat manufacturer for that specific location. See "Maintenance Information" Technical Data Sheet (C3365) for further details.

Maintenance

Roller bearings and hinges are sealed for life and need no further lubrication. To prevent damage to the rollers or track, periodic checks should be carried out to ensure that tracks and guides are free from dirt, grit or debris

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. See "Maintenance Information" Technical Data Sheet (C3365) for details.

Trouble Shooting

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 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.

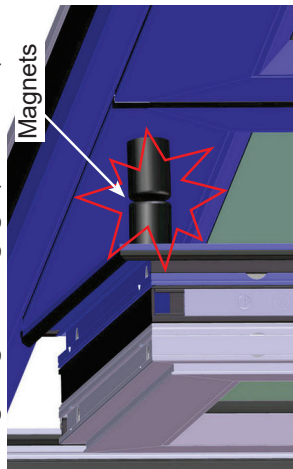
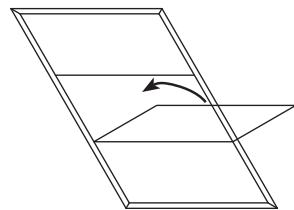
Where an item is still covered by the warranty given by the fabricator or installer of the product, requests for remedial work under such guarantees must, in the first instance, be referred to that person or company.

OPERATION

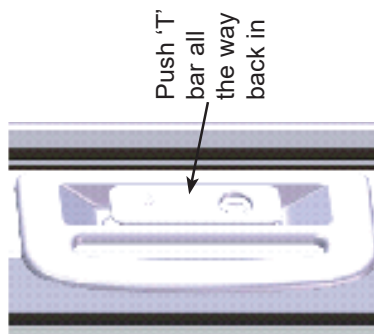
HAND THIS PAGE TO THE END USER AFTER INSTALLATION

Correct operation of the door is essential to maintain performance and prevent damage.

To unlock swing door, turn key then depress handle. **Always ensure swing door is folded all the way back and the leaf retaining magnets engage** (See below).

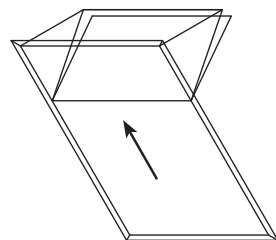
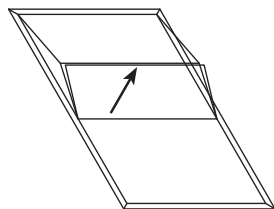


To unlock sliding panes, turn key to unlock, remove key, then operate shootbolts. (See below)



IMPORTANT - always make sure 'T' bar is pushed all the way back in before proceeding further.

Push (or pull on open in units) at the centre of the shootbolt meeting stiles to start the sliding action. (See alongside).



Continue sliding action by pushing at the centre of the roller meeting stiles. (See alongside).

Closing is a reversal of the above procedure - **do not pull on the door lever handle to slide the panes shut.**

Re-engage all shootbolts before disengaging leaf retaining magnets by gently pulling on lever handle. To re-lock, close swing door, push handle upwards to engage hook bolts, then turn key.

If any obstruction or stiff operation is felt during use stop immediately and refer to maintenance instructions on previous page.