

**IMPORTANT**

**Installation Instructions for A&L Products**

**June 2011**



When installing A&L products, it is important that the sill is always packed level and to ensure products are;

## 1. Plumb.

Using a spirit level, ensure the sill and jambs are both level.

## 2. Square.

The sill and jambs are at right angles to each other

## 3. Without wind

It is very important there is no wind in the frame as it can affect the performance of a product. Wind is when one jamb is not parallel to the other in the plane of the wall. To check for wind in an awning or casement window, ensure that the sash comes into contact with the frame seal equally on all sides. If the gap is not equal, use additional packing between the frame and the window where the largest gaps are. The sash must compress the frame seal around the entire perimeter of the opening.

## 4. Supported

When some products are installed (sliding doors as an example), they are cantilevered out into the cavity. Without the brick sill for support, construction traffic may roll the sill forward off the slab rebate. In these cases, temporary support may be required.

A&L Windows Pty Ltd may be unable to warrant any products not installed within the allowable tolerances set out below. The performance of the product may also be affected by poor installation. By following the guide above, you are ensuring trouble free operation and performance of your A&L Products for many years to come.

All products are designed and manufactured by A&L Windows Pty Ltd to conform with AS2047.

### Manufacturing Tolerances

**Standard window products:** Height =  $\pm 3\text{mm}$  (variation from brochured size)  
Width =  $\pm 3\text{mm}$  (variation from brochured size)

*\*Standard window products include sliding and awning windows, sliding doors, French doors, casement windows, aluminium doorframes, Georgian & Armadale windows, picture windows, fixed mullion windows.*

**Special Window products:** Height =  $\pm 6\text{mm}$  (variation from detailed size)  
Width =  $\pm 6\text{mm}$  (variation from detailed size)

*\*Special window products include any frame adapted to another (radius/ raked/ elliptical head windows)*

### Installation Tolerances

Upon installing a product, the diagonal dimensions should be measured as per figure 1. If the measurements vary by more than the maximum set out below, the products performance may be affected and is no longer covered by A&L's warranty. Measurements to be taken from aluminium to aluminium, not timber reveals.

- Sliding windows, sliding doors, picture windows, fixed mullion windows

A maximum of 4mm difference in the diagonal dimensions as measured in Fig.1

- Casement windows, French doors, awning windows, Georgian & Armadale windows

A maximum of 4mm difference in the diagonal dimensions as measured in Fig.1

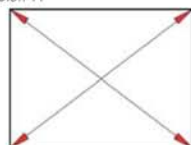
- Aluminium doorframes

It is highly recommended that the aluminium doorframe is installed perfectly squared as any variation may lead to the door binding or scraping on the sill. Remember, the frame is aluminium and cannot be planed down on site.

- Raked, radius & elliptical head products

Because of the way these products are constructed, it would be extremely difficult to install them out of square. If the rake/ radius/ ellipse are adapted to another product, follow the limits above.

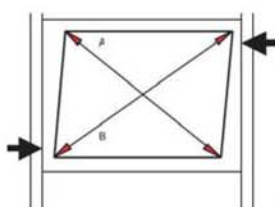
Dimension 'A'



Dimension 'B'

Fig.1

Dimension 'A' and 'B' can only have a maximum difference as set out above. Using a tape, measure from one corner to the diagonally opposite corner. Note the measurement. Repeat for the remaining corners. If the two measurements are more than the allowable amount set out above, the windows installation needs to be rectified. This can usually be achieved by packing out the top or bottom corner of the longer dimension. Refer example below.

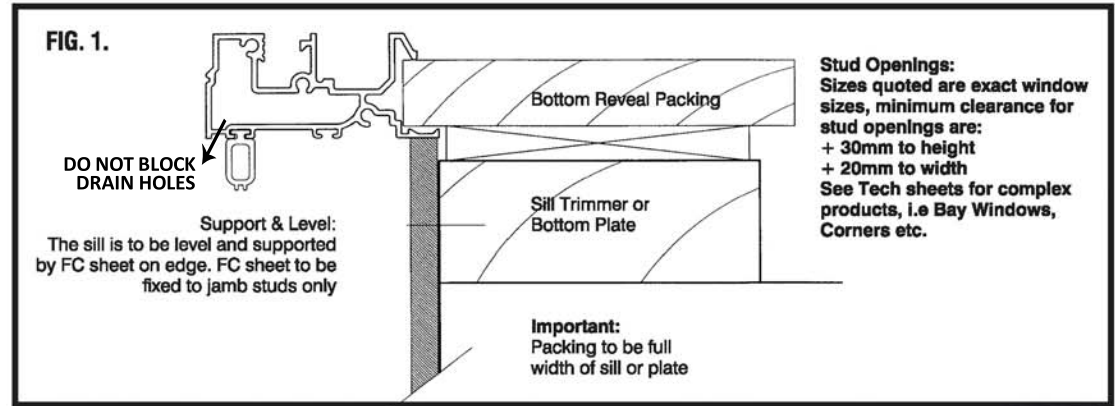
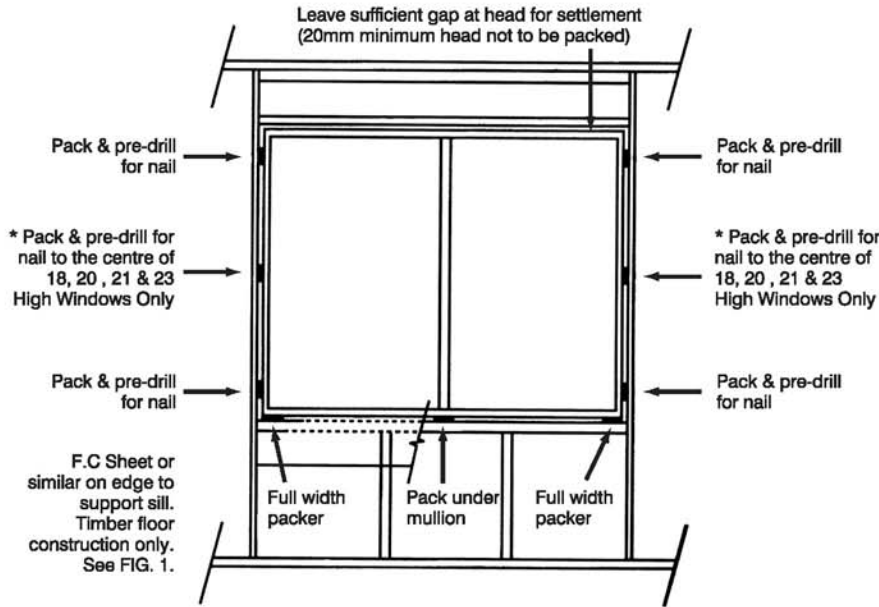


Example

Example.  
Dimension 'A' = 1800 and Dimension 'B' = 1820

To square the window, pack between the jamb stud and window frame as indicated (you may only need to pack at one point). Measure the 'A' and 'B' dimension again to ensure it is square and conforms to the maximum tolerances as set out above.

# RECOMMENDED BUILDING-IN DETAILS



SHOULD YOU REQUIRE FURTHER INFORMATION RING A&LWINDOWS  
**1800 441 414**



## WINDOWS & DOORS... ATTENTION ALL TRADES!

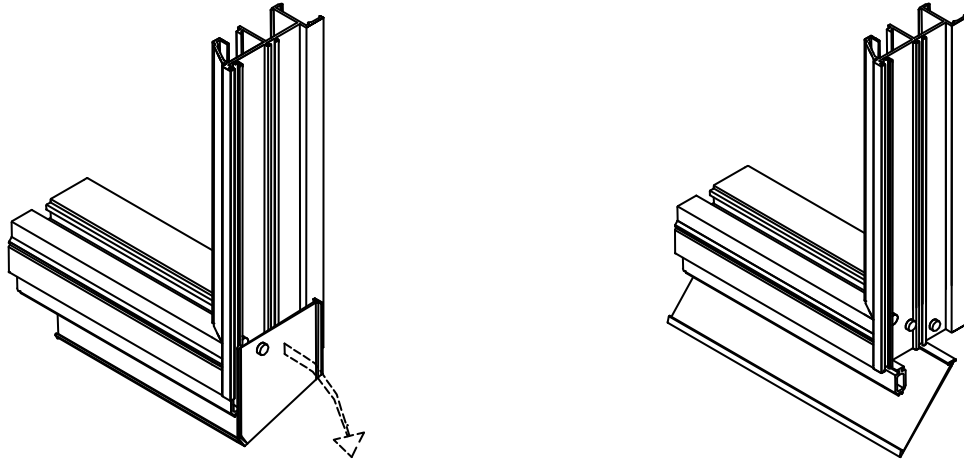
**Do not remove the plastic wrapping on windows and doors until home is complete.**

The windows and doors in this home have been supplied in good condition and your builder expects them to be in the same condition upon completion. If you see any damage, especially to the paint or glass on any window or door, please contact your building supervisor immediately.

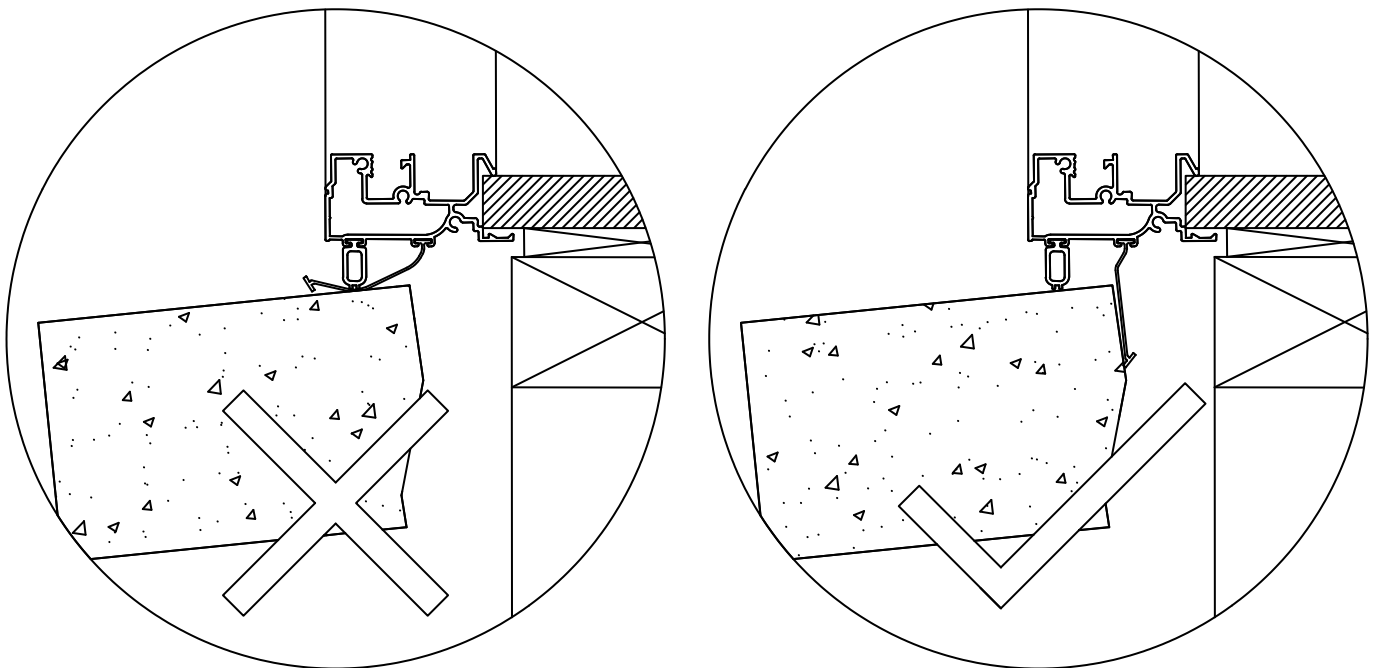
<p><b>Carpenter</b> Do pre-drill before nailing - this will prevent splitting.</p>	<p><b>Bricklayer</b> Don't allow mortar and render to get onto windows and doors - keep tracks clear. Do wash off immediately if contact is made, do not use cloths or brushes.</p>
<p><b>Plasterer</b> Don't drag plaster over window transoms or door sills as this damages the powdercoat paintwork.</p>	<p><b>All Trades</b> Don't pull electric cords or building materials through windows or doors.</p>
<p><b>Painter</b> Don't paint over winder or remove winder.</p>	<p><b>Cleaner</b> Do wash surfaces gently using clean cloths and clean water.</p>

**NOTE: Your Builder will hold the last trade responsible for any damage.**

# IMPORTANT



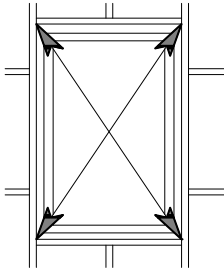
Allow Vinyl Flap To Hang Down Loosely.



Cross-Section of Sliding Window in Brick Veneer Wall.

**NOTE:** This MUST Be Done Before Brickwork Goes Up.

# Awning Sash Installation



## Step 1 BEFORE INSTALLING SASH

Measure the diagonals of the awning window with a measuring tape. It is important for the correct operation of this product, that the tolerance does not exceed 4mm.



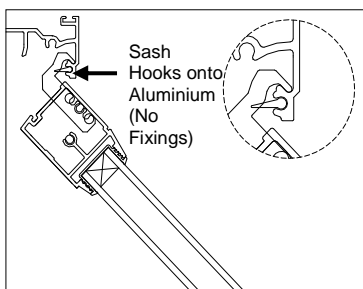
## Step 2 ORIENTATE SASH

The Sash must be installed from the outside face of the window. Make sure that the sash hooks (highlighted in picture) are located at the top of the sash and pointing outside.



## Step 3 POSITION SASH IN OPENING

Angle the sash at 45° and lift the sash into position.



## Step 4 HOOK IN SASH

Hook the sash into the Head/Transom (indicated in diagram). Make sure that the sash is properly hooked in, before gently lowering the sash and closing the opening.

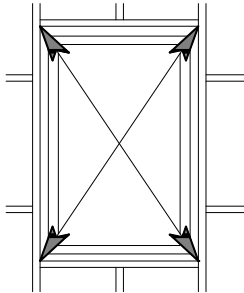


## Step 5 FIX WINDER TO SASH

Hook the winder over the two screws on the sash (indicated in inset). Secure the winder to the sash with Phillips Head screwdriver. It may be easier to fix the screws if the winder is first removed from the window frame (to improve access to screws).

**PLEASE NOTE:** The Sash must be fitted prior to nailing window in place on any **Second Story**.

## Boutique Sash Installation



### Step 1 BEFORE INSTALLING SASH

Measure the diagonals of the boutique window with a measuring tape. It is important for the correct operation of this product, that the tolerance does not exceed 4mm.



### Step 2 UN-SNAP BEAD

Un-snap the aluminium bead under the Head/Transom of the window frame (indicated by arrow). Gently insert a Flat screwdriver above the bead and lever it away from the Head/Transom.



### Step 3 REMOVE BEAD

Once the bead is un-snapped, remove the bead from the window



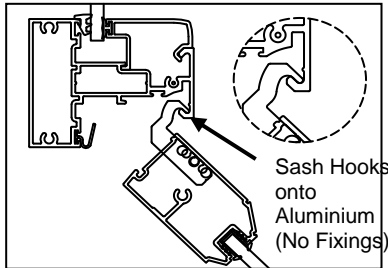
### Step 4 ORIENTATE SASH

The Sash must be installed from the outside face of the window. Make sure that the sash hooks (highlighted in picture) are located at the top of the sash and pointing outside.



### Step 5 POSITION SASH IN OPENING

Angle the sash at 45° and lift the sash into position.



**Step 6**  
**HOOK IN SASH**

Hook the sash into the Head/Transom (indicated in diagram). Make sure that the sash is properly hooked in, before gently lowering the sash and closing the opening.



**Step 7**  
**ATTACH WINDER TO SASH**

Hook the winder over the two screws on the sash.



**Step 8**  
**FIX WINDER TO SASH**

Secure the winder to the sash with Phillips Head screwdriver. It may be easier to fix the screws if the winder is first removed from the window frame (to improve access to screws).



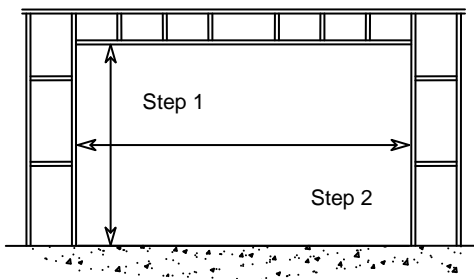
**Step 9**  
**SNAP IN BEAD**

Wind the sash closed and ensure that it seals correctly. Position the bead back into the Head/Transom of the window frame and snap into position.

**PLEASE NOTE:** The Sash must be fitted prior to nailing window in place on any **Second Story**.

## Entertainer & Bi-Parting Sliding Door Installation

**PLEASE NOTE:** Installation of A&L Entertainer and Bi-Parting Sliding Doors as per these instructions is vital for smooth operation for the life of the product. Incorrect installation can severely affect product performance.



### Step 1

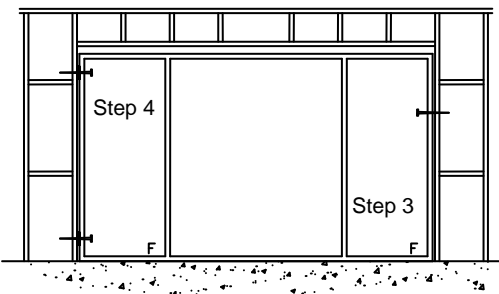
Measure the frame opening to ensure that there is sufficient room for the product and additional packing. Stud opening:

Height = O/A reveal size + 30mm

Width = O/A reveal size + 20mm

### Step 2

It is important that the door sill has a level platform to sit on. Ensure the sill is packed flat and level. This will prevent twist and movement when the door is being operated.



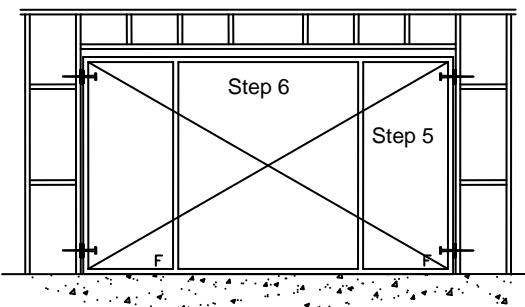
### Step 3

Present the door frame to the opening and stand up into place. Temporarily tack the top corner of one jamb reveal into place to hold frame.

**Note:** The jambs are to be packed and fixed 150mm from the top and bottom and in the middle of both jamb reveals. The fixing hole must be pre-drilled through the reveal and packer to prevent cracking or splitting of the reveal material.

### Step 4

Ensure the opposite jamb is plumb and level. Temporarily fix the top and bottom of the reveal into the frame.

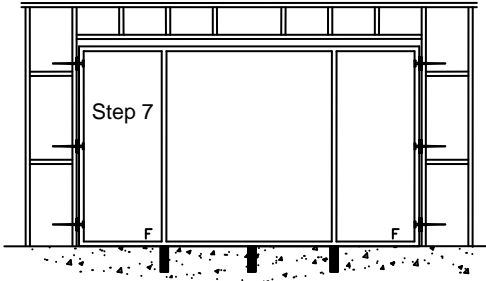


### Step 5

Repeat the process for the jamb temporarily tacked in, ensuring it is plumb and level.

### Step 6

Before fixing in the centre of both jambs and nailing it home, check the diagonal dimensions of the aluminium frame. A tolerance of 3mm is acceptable. If they are more than 4mm, re-check the jambs for plumb and adjust packing as required.

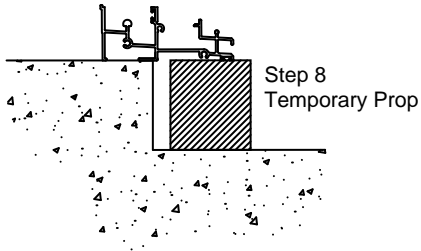


**Step 7**

Nail home top and bottom and fix in the centre of both jambs.

**Step 8**

The sliding doors are only supported on the back edge of the sill (until the sill bricks go in). We suggest to prop the sill in 3 points as there is a chance that when walked on during construction, that the sill can roll forward. The props are to be removed when the sill bricks are laid.

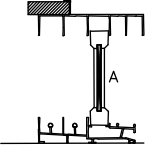
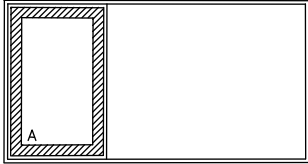
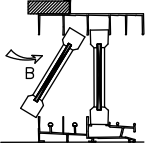
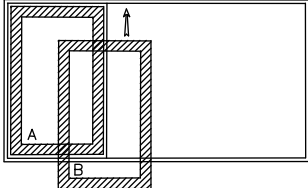
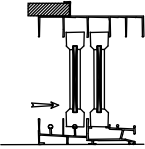
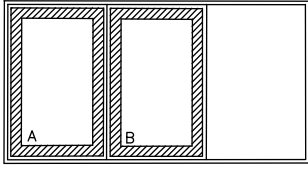
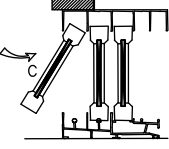
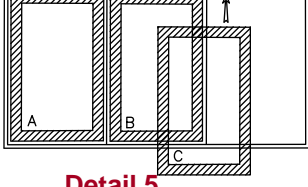
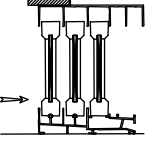
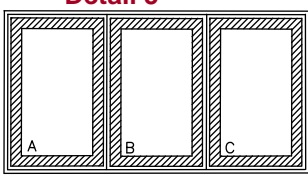


**Step 9**

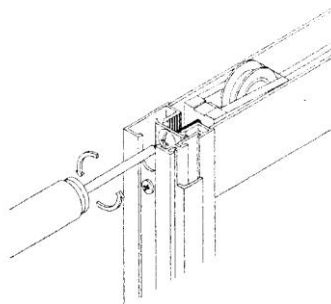
Install sliding panels as per the other instruction found on this product.

By following this installation guide, you will ensure proper operation of fly doors and barrier doors when fitted. A&L may be unable to provide a warranty on this product if it is deemed that it has not been installed as per these instructions. Please contact A&L Windows if you require further assistance.

## Entertainer Door Panel Installation

	<p><b>Detail 1</b></p> 	<p><b>Step 1</b> Fix the door frame into the studwork making sure it is square and plumb  <b>Step 2</b> Panel 'A' is factory fitted and should already be secured into position</p>
	<p><b>Detail 2</b></p> 	<p><b>Step 3</b> Remove bubble wrap from panel 'B'  <b>Step 4</b> The panel needs to be inserted as per detail 2.  <b>Step 5</b> Holding panel 'B' on an approximate 60° angle, insert the top into the second track and lift it up as high as possible</p>
	<p><b>Detail 3</b></p> 	<p><b>Step 6</b> Push the bottom of the panel across and lower into the track as per detail 3.  <b>Step 7</b> If you have trouble getting the panel in, remove and adjust the rollers as set out below  <b>Step 8</b> Once you have the panel in, adjust the rollers back up so it doesn't scrape on the sill</p>
	<p><b>Detail 4</b></p> 	<p><b>Step 9</b> Repeat the process for panel 'C' as per detail 4.</p>
	<p><b>Detail 5</b></p> 	<p><b>Step 10</b> Adjust both panels and ensure they close plumb against each other and the jamb. The keeper for the lock as it is self adjusting.</p>

**Panel 'A'** – Fixed panel already installed in frame  
**Panel 'B'** – Panel with only rollers on the sill  
**Panel 'C'** – Panel with the handle on it  
 (Large handle faces into the building)



BOTTOM OF DOOR, UPENDED

### Roller Adjustment

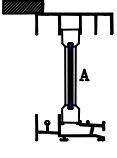

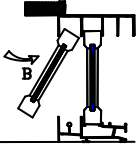
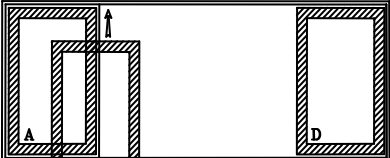
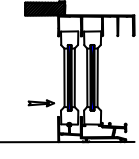
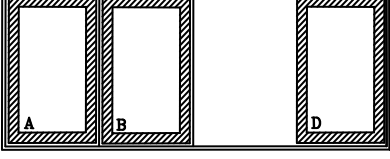
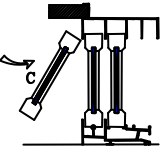
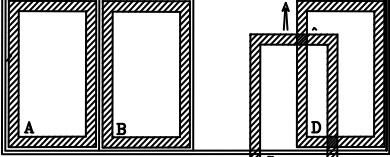
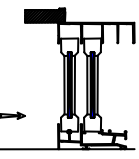
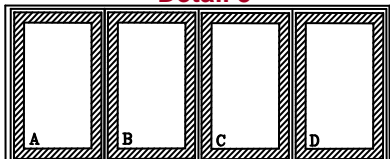
You may have to adjust the height of the roller so it clears the bottom sill before you install the panel. Follow the steps below to do so:

- To raise the roller, adjust the screw anti-clockwise
- To lower the roller, adjust the screw clockwise

Once you have the panel installed:

- To raise the door, adjust the screw clockwise
- To lower the door, adjust the screw anti-clockwise

## Sliding Door & Bi-Parting Door Panel Installation

	<p style="text-align: center;"><b>Detail 1</b></p> 	<p><b>Step 1</b> Fix the door frame into the studwork making sure it is square and plumb</p> <p><b>Step 2</b> Panel 'A' and 'D' are factory fitted and should already be secured into position.</p>
	<p style="text-align: center;"><b>Detail 2</b></p> 	<p><b>Step 3</b> Remove bubble wrap from panel 'B' (with handle).</p> <p><b>Step 4</b> The panel needs to be inserted as per detail 2.</p> <p><b>Step 5</b> Holding panel 'B' on an approximate 60° angle, insert the top into the second track and lift it up as high as possible.</p>
	<p style="text-align: center;"><b>Detail 3</b></p> 	<p><b>Step 6</b> Push the bottom of the panel across and lower into the track as per detail 3.</p> <p><b>Step 7</b> If you have trouble getting the panel in, remove and adjust the rollers as set out below.</p> <p><b>Step 8</b> Once you have the panel in, adjust the rollers back up so it doesn't scrape on the sill.</p>
	<p style="text-align: center;"><b>Detail 4</b></p> 	<p><b>Step 9</b> Repeat the process for panel 'C' as per detail 4. Panel 'C' has no handle attached.</p>
	<p style="text-align: center;"><b>Detail 5</b></p> 	<p><b>Step 10</b> Adjust both panels and ensure they close plumb against each other and the jamb. The keeper for the lock is self adjusting.</p> <p><b>Panel 'A'</b> – Fixed panel already installed in frame</p> <p><b>Panel 'B'</b> – Panel with the handle on it (Large handle faces into the building)</p> <p><b>Panel 'C'</b> – Panel with keeper fitted</p> <p><b>Panel 'D'</b> – Fixed panel already installed in frame.</p>

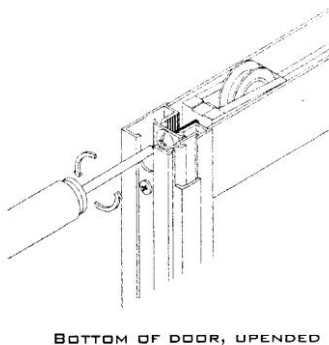
### Roller Adjustment

You may have to adjust the height of the roller so it clears the bottom sill before you install the panel. Follow the steps below to do so:

- To raise the roller, adjust the screw anti-clockwise
- To lower the roller, adjust the screw clockwise

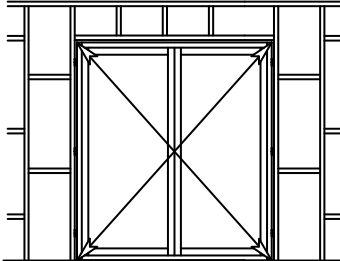
Once you have the panel installed:

- To raise the door, adjust the screw clockwise
- To lower the door, adjust the screw anti-clockwise



# French Door Installation

## Step 1 BEFORE INSTALLING PANELS



Measure the diagonals of the opening for the French door with a measuring tape. It is important for the correct operation of this product that the difference does not exceed 4mm.

## Step 2 ORIENTATE PANEL

Identify the hinge knuckle on the panel. Make sure that the hole in the knuckle (indicated in inset), is pointing down. The hinge knuckle has a matching half fixed to the door frame. Ensure that the plastic 'C' Clip is threaded onto the pin prior to panel fitment.



## Step 3 POSITION PANEL



Sit the panel perpendicular to the door frame. This will ensure that the panel does not strike the head of the door frame when the panel is lifted up. The hinge knuckles should be facing each other (as indicated in the picture).

## Step 4 LIFT PANEL INTO POSITION



Lift the panel up and into position. Try to keep the panel as vertical as possible.

## Step 5 LINE UP HINGES



Locate the panel so that the panel hinge knuckles are positioned directly above the frame hinge knuckle pins. Make sure that all the hinges are lined up correctly.

## Step 6 LOWER PANEL ONTO HINGES



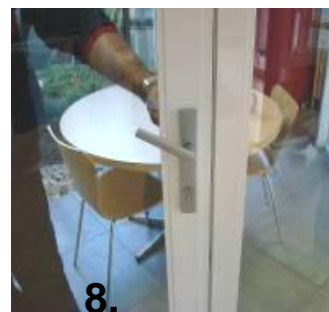
Lower the panel, making sure that the hole in the hinge knuckles have threaded onto pins.

## Step 7 SECURING INACTIVE PANELS

Close the inactive panel (panel without door handle). Operate the flush bolts at the top and the bottom of the panel (indicated in picture) to sure the panel into position.



## Step 8 SECURING ACTIVE PANELS



Close the active panel (panel with door handle). Lift handle upwards (indicated in picture) to draw the active panel hard up against the seals.

**PLEASE NOTE:** The Panel must be fitted prior to nailing door in place on any **Second Story**.

# Care of Glass

## CLEANING AND PREVENTION OF GLASS SCRATCHING

Complaints to glass suppliers relating to scratched glass are common and claims are made suggesting that toughened glass scratches more easily than annealed glass. Frequently the cause is found to be inappropriate cleaning of the glass. It is also common for glass to be damaged because the builder has not taken adequate steps to protect the glass during construction.

This Bulletin gives some general advice on correct glass cleaning procedures. Specific advice on the cleaning of glass should always be sought from a reputable glazier or professional window cleaner before any glass cleaning is undertaken. Professional glass cleaners have significant experience and access to equipment, materials and methods which the general public may not.

## GUIDELINES FOR GLASS CLEANING

It is recommended that glass be protected from contamination caused by building materials and methods during construction as this will greatly simplify the glass cleaning task at the end of the project. If the glass is not protected during construction then the glass and frames should be cleaned frequently during construction. Construction dust, leachate from concrete and rusting from steel can contribute to the formation of mild chemicals, which may stain or otherwise damage the glass.

Glass should be cleaned using only cleaning materials which are free of grit and debris (to avoid scratching and marking of the glass surface). Only detergents and cleaning solutions which are recommended for cleaning glass should be used. Mild detergents are preferable.

Extra care is necessary where high performance, special products and reflective glasses are installed. The coated surface can be susceptible to stains and scratches and therefore requires vigilance during the full construction process and specific cleaning procedures. Refer to the manufacturer's web site or product literature. Temporary screens should be installed if welding, sandblasting, floor sanding, cuffing or other potentially damaging construction practices takes place near the glass. Glass installations which are adjacent to concrete (eg concrete slab floors) require extra care and cleaning due to the abrasive nature of concrete dust.

All tradesmen should be advised to be aware of damaging glass and windows and to leave in place any materials protecting the window or glass.

## TOUGHENED GLASS

The cleaning of toughened glass requires special care. The glass surface opposite the standards compliance stamp may, as a consequence of the manufacturing process, have 'pickup' on the surface. 'Pickup' is a deposit of very small particles of glass which are fused to the glass surface.

A cleaning method which does not dislodge these particles should be employed otherwise scratching of the glass surface may result. Blades or scrapers have been known to dislodge 'pickup' from the glass surface. A soft cloth, which will not dislodge 'pickup', should be used.

## WHAT NOT TO DO

*Do not* use cleaners which contain Hydrofluoric or Phosphoric acid as they are corrosive to the glass surface.

*Do not* clean the glass when the glass is hot or in direct sunlight.

*Do not* allow cleaning solutions to contact the edges of Laminated glass, Insulating Glass Units or Mirrors.

*Do not* store or place other material in contact with the glass. (This can damage the glass or create a heat trap leading to thermal breakage).

Abrasive cleaners, powder based cleaners, scouring pads or other harsh materials should not be used to clean windows or other glass products. Some tapes or adhesives can stain or damage glass surfaces. Avoid using such materials unless they are known to be easily removed.

## IF DAMAGE OCCURS!

If glass is damaged or broken on-site ensure that experienced glaziers are engaged to rectify the situation.

Glass can be a safety hazard if not handled properly.

## ADVICE FOR PAINTERS!

Paint spots have been traditionally removed using a sharp razor blade. The use of a blade can in some cases cause damage to the glass. As an alternative, investigate solvents or graffiti removal materials, ensuring that they will not damage the glass. If a blade or scraper is used then the risk of damage can be reduced by using a scraper which has a clean edge and is held at an angle of 30 degrees to the glass.

However, surface coated, modified or tinted glass requires special care. Seek cleaning advice from your local glass merchant.

## CARE OF MIRRORS

Mirrors require special care in cleaning. To clean mirrors, simply wipe over the surface with a few drops of methylated spirits on a damp cloth. Polish surface dry with a lint free cloth.

Some proprietary glass cleaners, if used to excess, can cause damage to the silvering as can excessive amounts of water. Make certain when cleaning the face of the mirror that there is no contact with the silver backing, particularly at the edge of the glass and be careful to keep any moisture away from the paint backing of the mirror.

Do everything possible to ensure that the cleaning cloths used are free of any abrasives.

**All material stated above kindly provided by the Australian Window Association.**

# Glass Scratches, Scars and Rubs



The following information should be used as a guide in determining whether or not a scratch in the glass surface is to be considered a defect or not. The following extract from the below mentioned Australian Standard clearly defines that if the scratch or mark is not visible from a distance of 3m, it is not considered to be a defect.

## **AS/ NZS 4667: 2000**

Quality requirements for cut-to-size and processed glass header.

### **9.2.5 SCRATCHES, SCARS AND RUBS**

Inspect the glass held in a perpendicular position using daylight without direct sunlight, or with a background light suitable for observing any imperfections. Imperfections will not be visible from a distance of 3m.

*With the following definitions from the same standard:*

#### **3.2.13 RUB**

Abrasion on the glass surfaces producing a frosted appearance. A rub differs from a scratch in that it has an appreciable width.

#### **3.2.16 SCAR**

Scratch on the surface of the glass.

#### **3.2.17 SCRATCH**

Any marking or tearing of the surface produced during manufacturing or handling, appearing as though it were done by a sharp or rough instrument.

### **DETERMINING THE CAUSE**

Determining the cause of a scratch can be extremely difficult and each instance would need to be evaluated on a case by case basis.

Call 1800 441 414  
[www.alwindows.com.au](http://www.alwindows.com.au)