Fitting Instructions for Easyfit uPVC Conservatories

"Get the best out of your Conservatory by following these simple Fitting instructions."

TOOLS REQUIRED

You will require the following tools to fit uPVC Windows and Doors successfully:

- A coarse toothed saw such as a Bow Saw for cutting out the old frame.
- A fine toothed saw for cutting any trims, accessories or cills etc.
- A claw hammer.
- Spirit level.
- A large screwdriver or power driver for screwing the frame fixings.
- An electric drill and masonry bit for drilling through the frame and brickwork.
- A paint scraper or similar thin bladed tool for removing the glazing beads.
- A rubber mallet for re-fitting the glazing beads.
- A skeleton gun for applying the silicone sealant.
- Step ladder and extension ladder if required.

You may also find the following tools useful:

- A plastic glazing paddle for manoeuvring the double glazed units in situ to insert packers. Don't use a chisel or similar steel object for this job as you will almost certainly damage the glass.
- A Stanley knife.
- Various drill bits.
- A jemmy bar.
- "G" clamps or luggage ratchet straps for temporarily holding frames together during assembly, (or you could ask a mate to hold them).

PREPARATION

Before you begin to fit your new uPVC Windows or Doors there a few precautions that you may well wish to consider.

The following minimum safety equipment should be worn when removing old frames.

- Goggles or similar eye protection especially when breaking out glass. Work gloves.
- Use dust sheets inside and outside.
- Keep children and animals as far away as possible.
- **GOLDEN RULE. Never ever** remove the old frame before you have double checked that the new one is the correct size and you have everything you need at hand.
- Facilities for disposal of the old frame and glass.
- Dispose of your rubbish thoughtfully, bearing in mind the danger of large pieces of broken glass.

It is assumed that all necessary building work to the base has been completed and all base dimensions have been checked. Conservatory roofs come in many varied designs but no matter which design you are fitting, the following instructions generally apply. These instructions are intended as a guide to fitting the average Victorian, Georgian or Lean-to type Conservatory and as such do not cover the many variations that other designs may present.

Generally the fitting will be obvious and self-explanatory and anyone with average D.I.Y skills should have no difficulty in achieving a very satisfactory result.

If problems do occur during the erection of the wall sections, it is important to try to rectify these before progressing to the roof, particularly if the problems are dimensional. If it doesn't fit down below, there is little chance of the roof fitting correctly and the problems will be transferred to the roof, which may have undesirable consequences.

If you are fitting the Conservatory as a D.I.Y. project, take your time to get it right. It doesn't take long to erect the wall structure and if you complete this part with the wall plate fixed in position in a working day, all correct and to dimensions, you are doing O.K. The roof can be completed on the second day and the glazing and general finishing off done last.

Good luck and enjoy the project.

SETTING THE CILL

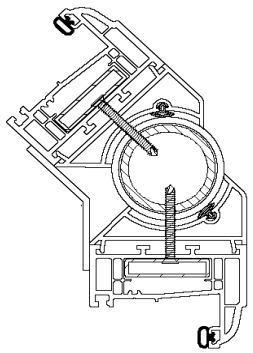
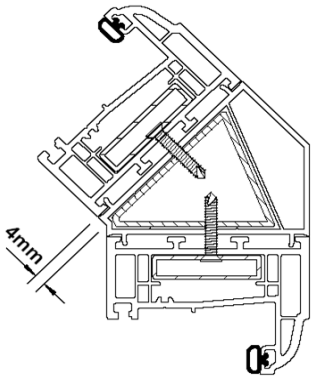
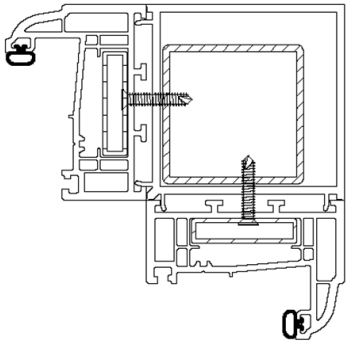
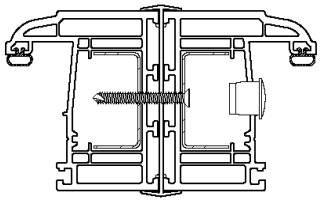
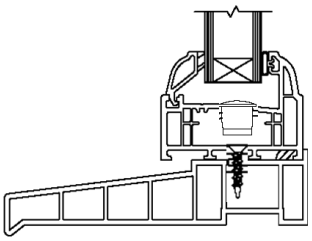
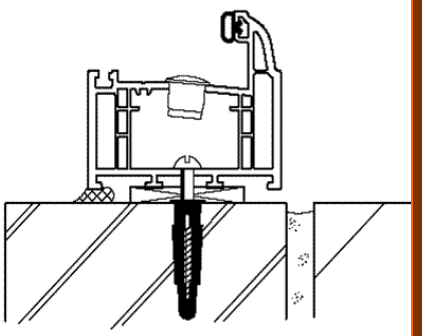
Series of pilot holes through the centre line of the frame jamb and, using plated screws, ensure they pass through the frame and into the aluminium reinforcing in the bay pole. Fixings should be no greater than 600mm apart and not closer than 150mm from any frame weld. Once the frames are secured to the bay poles you can now fix the bottom frame members to the cill once again ensuring that the screws pass through the frames and into the cill. Use a good smear of silicone sealant around any screws in the bottom sections.

Progress from the centre to the back before finally fixing the frames to the house wall. Torx screws are best, just drill straight through the frame and into the brick work with a masonry drill and then screw a Torx screw directly into the structure, no raw plugs needed...Magic! Alternatively, hammer plugs are good, just tap them through the hole until they are home, then screw them up with a power driver just enough to grip firmly, don't over tighten. Before doing this you must check that the width is correct, the wall frames are parallel and the frames at the house wall are plumb.

Any doors should now be fitted ensuring they are connected to the adjoining frames with the H coupling provided, and the frames screwed together in the same manner as the bay poles. Once the wall structure is fitting correctly, anchor the structure to the brickwork, again using hammer plugs with a smear of silicone sealant.

Now you can progress to the roof ring beam.

TYPICAL FRAME FIXING ARRANGEMENTS

		
Frame to Bay Pole Fixing	**Frame to Bay Post Fixing**	**Frame to Corner Post Fixing**
		
Frame to Frame Fixing	**Frame to Cill Fixing**	**Frame to Brickwork Fixing**

FITTING VICTORIAN OR GEORGIAN ROOF

Before fitting the roof bars it will be necessary to cut any chases into the brickwork, for the flashing. Unless of course you are using adhesive flashing such as flash band.

The aluminium ring beam sits directly on top of the wall structure and is fixed from underneath and through the heads of the wall frames directly into the ring beam section. Ensure that you get a good fit at the corners and that the ring beam is sat level and square to the frames. Before fixing, ensure all the rafter screws that will be required are in the screw channel on the ring beam.

The roof is made up of uPVC covered aluminium rafters fixed at the bottom to the ring beam and at the top, to the ridge.

Bolt the hip rafters and two wall rafters loosely in place on the ridge. With assistance manoeuvre into position and loosely bolt to the ring beam. Check that the ridge is level before fixing the wall rafters to the house wall and then tightening all bolts. Now bolt the intermediate rafters into position.

You can now glaze the roof by fitting the panels in place and snapping on the uPVC after capping. Generally this is done with a rubber mallet. Leave one panel out, usually the next but one to the house wall, to allow the fitting of the ridge cover, finial and cresting. Once the last panel is installed you can fit the gutters and down spouts, the internal ridge cover and the ring beam covers.

Apart from general finishing off, that's the main work done.

FITTING A LEAN-TO ROOF

Before fitting the roof bars it will be necessary to cut any chases into the brickwork, for the flashing. Unless you are using adhesive flashing such as flash band.

The aluminium ring beam sits directly on top of the front wall structure and is fixed from underneath and through the heads of the wall frames directly into the ring beam section. Ensure that you get a good fit and that the ring beam is sat level and square to the frames. Before fixing, ensure all the rafter screws that will be required are in the screw channel on the ring beam.

The roof is made up of uPVC covered aluminium rafters fixed at the bottom to the ring beam and at the top, to the wall plate.
Fix the wall plate onto the house wall ensuring that it is level and each end is sat on the raked end frames (if you are using this option). Now bolt the intermediate rafters into position.

You can now glaze the roof by fitting the panels in place and snapping on the uPVC after capping. Generally this is done with a rubber mallet. As you progress with the glazing, fit or apply the flashing in convenient lengths, don't leave the flashing until you have finished glazing or you will find it difficult to do afterwards. Once the last panel is installed you can fit the gutters and downspouts and the ring beam covers.

GLAZING

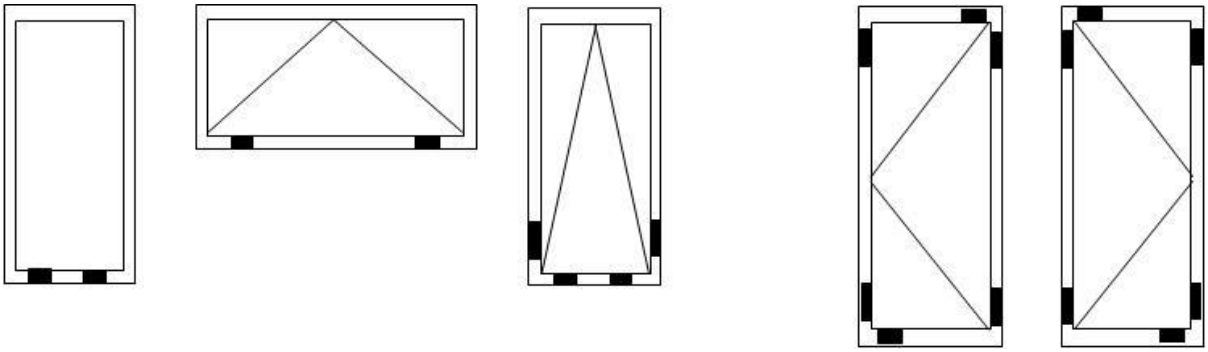
Starting with one of the longest beads first, remove the glazing beads by pushing a sharp chisel or a rigid paint scraper between the bead and the frame joint at approximately the centre point. A sharp tap on the butt of the tool should allow the bead to be freed. It is most important to refit the beads in the same positions as they were removed, they may vary in length slightly, due to the manufacturing process.

1. Place into position the glass packers approx. 100mm in from each corner. (Intermediate packers should be used if the double glazed unit is wider than 1200mm).
2. Place the double glazed unit into the frame ensuring correct positioning on the glass packers.
3. Starting on one of the shortest lengths, fit 3 of the beads moving around the frame using a rubber mallet, finally fitting the last bead by bending into position.

N.B. It is always best to leave one of the longer beads until last as a long bead will locate and bend more easily.

TOE & HEELING

It is essential that glass packers are used to support the double glazed units to prevent them from standing in any water that may collect in the frame rebate. This can cause failure of the seal of the double glazing and will invalidate your guarantee if packers are not used. Packers must not cover the drainage holes in the frame. Both leaves of the double glazed unit must be supported by the packer, do not allow the packer to support one leaf only as it may bed into the sealant and cause failure of the unit.



Fixed glass and top hung | Side opening vents and doors

The objective of toe & heeling is to transfer the weight of the glass onto the hinge side of the frame. Correct use of this technique will give trouble free operation once the vents have been set correctly. The vent should be flexed upwards if necessary to allow the insertion of the top packers.

N.B. Adjustment of hardware should not be attempted until the frames and glass has been correctly packed and installed.

ADJUSTMENTS

Window hinges.

Generally the window hinges require no adjustment. However should you wish to adjust the tension on the friction stay, this can be achieved by screwing the brass screw, set in the black plastic pad, in or out to increase or decrease the tension. The adjustment screw can be accessed by opening the vent.

Window locking mushroom cams.

The cams on the window locking mechanism can be adjusted with an Allen key that is located in the centre of the mushroom cams. The cams are eccentric and can be turned to increase or decrease the closing pressure of the mechanism. They should also be used to adjust the cams if you experience any wracking of the window vent. This is usually caused by the pressure being too tight and the cams grinding onto the keeps.

Door Hinges.

Door hinges can be adjusted in three planes: Vertically | Horizontally | In/out.
Vertical adjustment can be achieved by a 4mm AF Allen key via the hole on the side of the die cast cover. Horizontal adjustment is by a 5mm AF Allen key in the base of the hinge pin which can be accessed by removal of the plastic base cover. In/out adjustment, although rarely necessary, is similarly adjusted by turning the eccentric top screw found under the top plastic cover.

Door locking mushroom cams.

The cams on the door locking mechanism can be adjusted with an Allen key that is located in the centre of the mushroom cams. The cams are eccentric and can be turned to increase or decrease the closing pressure of the mechanism. They should also be used to adjust the cams if you experience any wracking of the door vent.

On no account should mechanisms or hinges be adjusted to compensate for incorrect installation or toe & heeling? of the glass. Adjustments should only be carried out after you are certain that the installation has been carried out correctly.

Should you request a service call and any of these instructions have not been applied, a charge will be made.

Provided that you have observed the instructions in this leaflet, your windows and doors will provide you with years of trouble free service with only the occasional oiling of moving parts being necessary.

COMPLETION

All that remains is the cleaning of the frames and then sealing them. The frames should be cleaned with clean soapy water; a non-abrasive cleaning cream may be used for stubborn marks.
After the frames and working area has been cleaned the frames should be sealed inside and out with a silicone sealant, alternatively a painter's caulk may be used inside only.

Using a thin opening of the nozzle, apply a thin continuous seal by squeezing the skeleton gun trigger with an even pressure. At the end of the stroke, press the release mechanism to stop the pressure. Keep the nozzle clean. Do the same outside but you may need to widen the nozzle by cutting it back, make a clean sloping cut with a sharp knife for easier application. You can also use masking tape for neatness, removing before the sealant sets. The sealant can be smoothed out by using a finger dipped in soapy water.