Maintenance

Although your conservatory has been manufactured to the highest standards using high specification components, it is advisable to wipe down and re-lubricate the moving metal parts every 6 months. The use of an acid-free light machine oil is recommended rather than penetrating oils such as WD40.

Oil door locks and latches

The skeleton of your conservatory is manufactured from high-grade PVC-u and will therefore never rot, need painting or discolour*. Cleaning PVC-u is recommended to remove dirt and dust that can accumulate, especially in areas prone to higher levels of pollution or at coastal areas prone to salty atmospheres. Warm soapy water and a sponge will remove most layered dirt but a proprietary PVC-u cleaner can be used for more stubborn marks and stains.

Oil door locking pins and shoot bolts

Do not use any abrasive cleaners or sharp objects to remove marks on your conservatory.

Oil friction stays (hinges) and window locking pins Oil door locks and latches

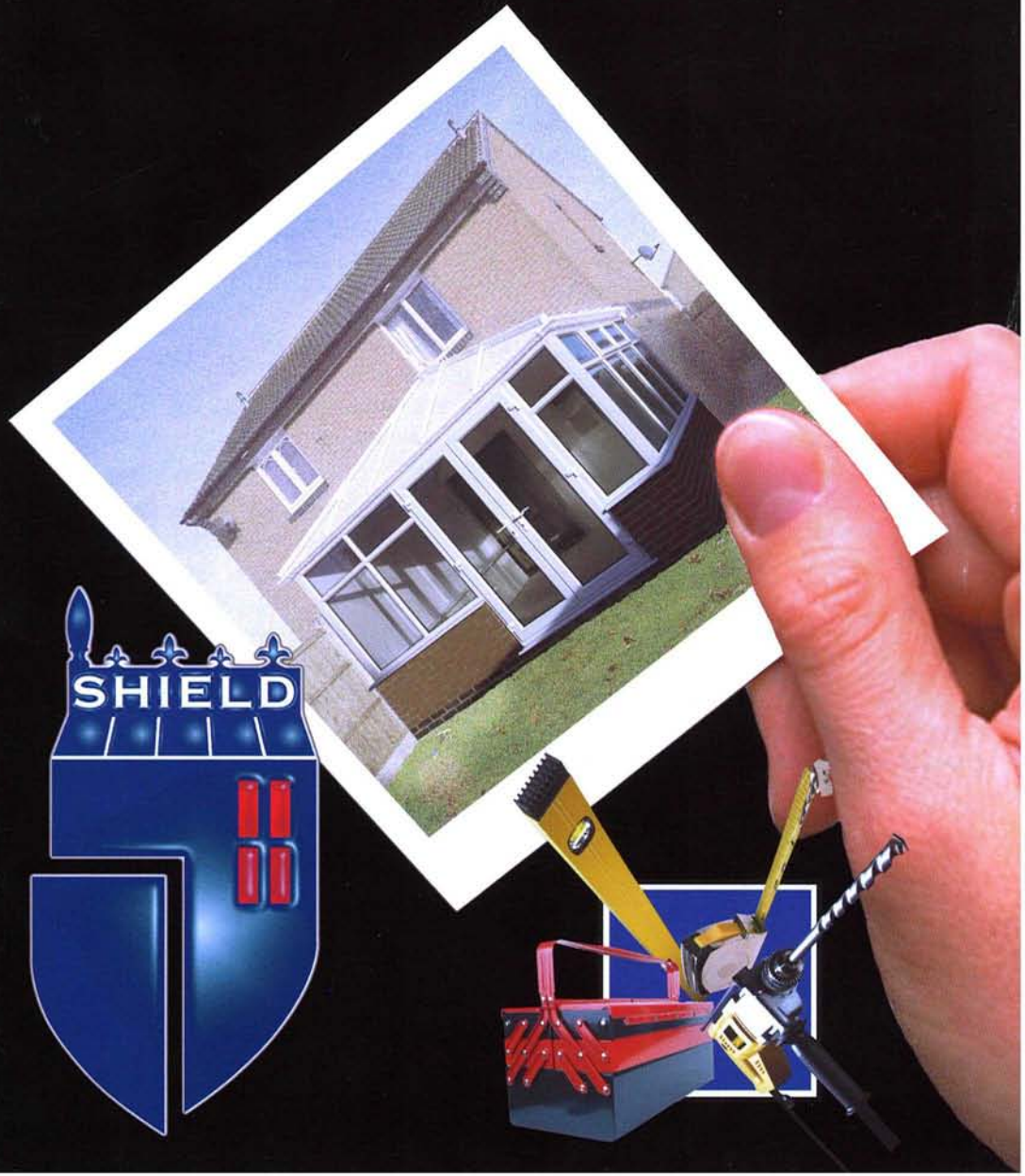
* excludes brown and caramel guttering components

SHIELD is a Synseal Product

May 04

Conservatory Installation Guide
Base and Frames

(to be read in conjunction with the Conservatory Roof Assembly Guide)



Sealants and Flashings

Follow the instructions carefully and use sealants where indicated, we recommend that you use low-modulus, neutral curing grade of silicone. Is is also recommended that where your conservatory roof abuts the house, you use a minimum of Code 3 lead chased into the brickwork.

Tools

Small tower or working platform
10 tread platform steps
2-section extension ladder
Work bench

8 x 150mm masonry drill bits
4 x 119mm HSS drill bits
8 x 165mm HSS drill bits

12" ratchet clamps - 2 No.
Mallet with white rubber head
Long nosed pliers
13mm socket and ratchet

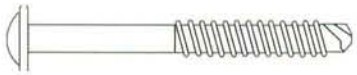
Electric hammer drill (preferably SDS)
4" Angle grinder with masonry discs
Battery operated screwdriver
Extension lead
Hot air gun (for box gutters only)

4' spirit level
10m measuring tape
Roofing square

Silicone sealant gun
Hacksaw
Stanley knife
13 & 17mm open ended spanners
45 & 60mm diameter hole cutters

Fixings

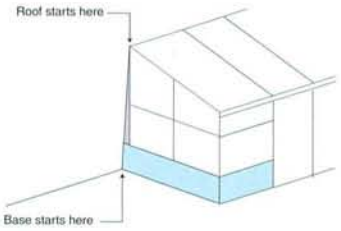
8 x 100mm frame to masonry fixings
4.8 x 65mm self tapping screws
M6 x 70mm Coach screws (fixing back to timber)



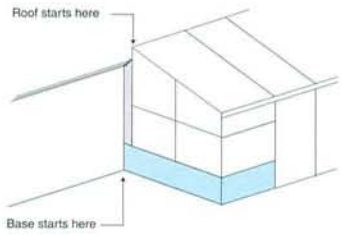
All the above tools, fixings, flashings etc can be purchased from any good hardware/DIY store.

Setting Out the Conservatory

The setting out point (datum) of the base off the house wall must be carefully considered if the house wall is not vertical or has protrusions such as render, brick corbels, pipes etc. The drawing below shows how you need to make allowance for these discrepancies and obstructions.



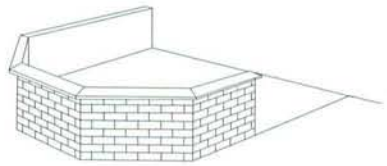
EXAMPLE: *BASE PROJECTION GREATER THAN THAT OF THE CONSERVATORY DUE TO 'OUT OF PLUMB' HOUSE WALL*



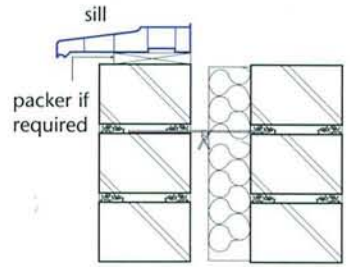
EXAMPLE: *BASE PROJECTION GREATER THAN THAT OF THE CONSERVATORY DUE TO 'BRICK PROJECTION' ON HOUSE WALL*

ALLOW FOR OBSTRUCTIONS AND DISCREPANCIES

STEP 1 Laying out the Sill

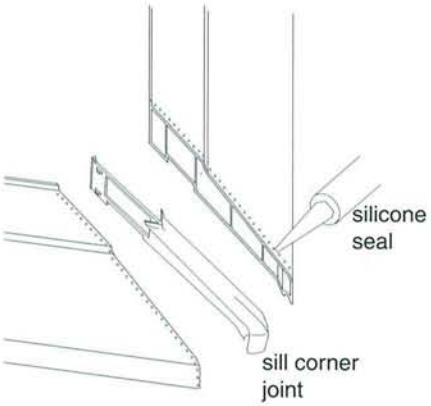


The welded conservatory sill will act as a template for the conservatory frames and roof and must therefore be laid out onto the base accurately. The ends of the sill will be supplied over-size to take up any discrepancies on the base, you will need to cut these to size. Please note that the internal edge of the sill should be level with the internal edge of the outside brick. It is vitally important that the perimeter setting out sizes for the sill match the sizes on the roof plan exactly, cross checking the diagonal measurements will help determine the positions of the sill corners.



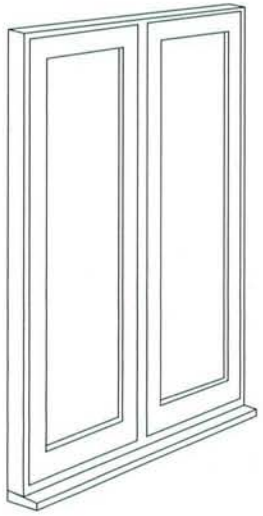
STEP 2 Jointing Sills

In the instance that the conservatory sill arrives in individual segments, then the corners will require sealing and joining. Each sill should arrive cut to size with the specific sill corner joint, this joint must receive a complete silicone seal along its length.



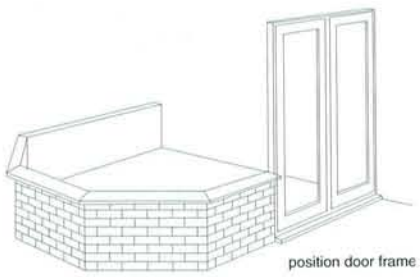
STEP 3 Fixing the Sill to the Door Frame

At door opening positions in dwarf walls, cut the extra piece of sill for the doors to the brick opening size less 10mm, position the door frame in the brick opening (it may not necessarily be central) and mark its position on the sill. The lengths of the dwarf wall sills coming into the sides of the door frame can now be established and the sills cut to size. Remove the door frame and sill, run a continuous silicone sealant line along the back edge of the sill then screw the door sill to the underside of the door frame.



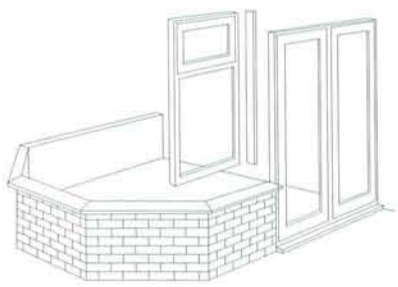
STEP 4 Positioning the door frame and Sill

On dwarf wall models, position the previously prepared door frame and sill into the opening, fit packers if required between the underside of the sill and the base ensuring the door sill remains level. Pack between the door frame and the reveals on the dwarf wall ensuring the door frame is plumb on all sides, fix back the door frame into the brickwork reveals using 8 x 100mm frame to masonry fixings.



STEP 5 Wall Panels

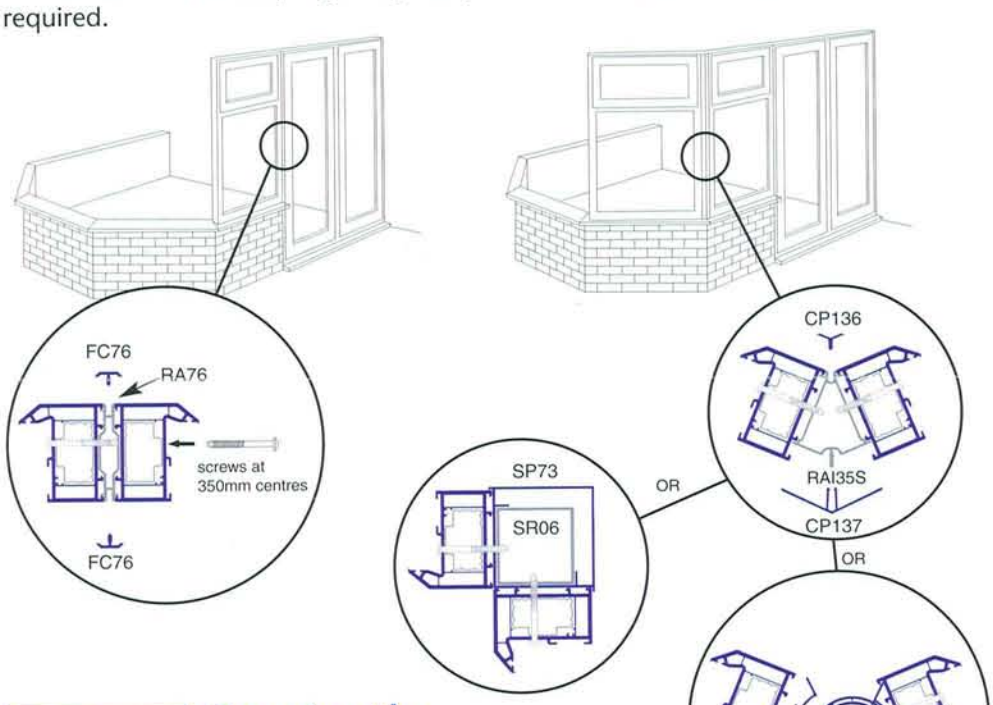
The contract paperwork with your conservatory should depict the style and position of each window frame. Select the correct frame for each position and check that the widths amount to the correct perimeter size of the conservatory sill, you will need to take into account the thickness of the window coupling profiles. Please be aware that PVC window frames have manufacturing tolerances of +/- 4mm.



Starting at the door frame, offer the coupling profile (RA76) and the adjacent window to the side of the door frame, ensure the coupling and frame heads are level and then temporarily clamp the three items together. Use 4.8 x 65mm self tapping screws into 4mm drilled pilot holes at 350mm centres, 150mm in from each end to give the final connection.

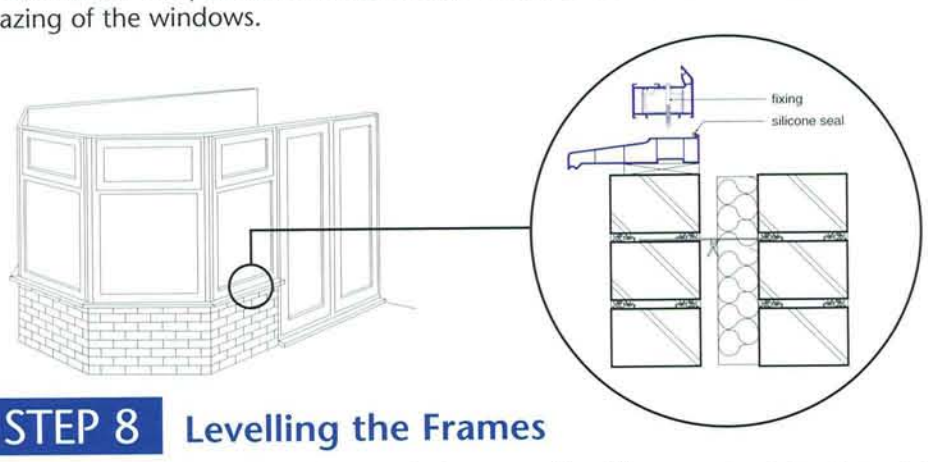
STEP 6 Connecting the Frames together

Continue connecting the frames together using the in-line and corner couplings until the perimeter is complete, the corner posts should relate to the corners on the welded sill. These couplings may be provided oversize in length, cut down as required.



STEP 7 Securing the frames to the sill

Run a continuous silicone sealant line along the back edge of the sill (see drawing) and position the back edge of the window frame up to the upstand on the sill, secure the frame of the window down to the sill using 4.8 x 65mm self tapping screws into 4mm drilled pilot holes at 350mm centres, 150mm in from each end. Seal over all exposed screw heads. The position of these screws is vital so as not to interfere with the re-glazing of the windows.



STEP 8 Levelling the Frames

With the frames fixed together and down to the sill, a constant level must be achieved around the perimeter of the conservatory, packing pieces between the top of the wall and the underside of the sill may be needed to achieve this constant level.

A long spirit level placed on top of the windows will determine the highest point around the frame perimeter, this will be your starting level. Work away from this starting level and pack-up the frames as required. Note: the frames and sill should float on the conservatory wall, therefore it is advised that once the conservatory is complete, point-up any gaps between the underside of the sill and the wall with mortar to give the sill a constant bed.

The last frame against the house wall requires fixing back into the brickwork, you may have to fit packers in any gaps there to stop the window frames from distorting. Ensure the window frame against the house wall is plumb on all sides and fix back using 8 x 100mm frame to masonry fixings at 350mm centres, 150mm in from each end. Seal over all exposed screw heads.

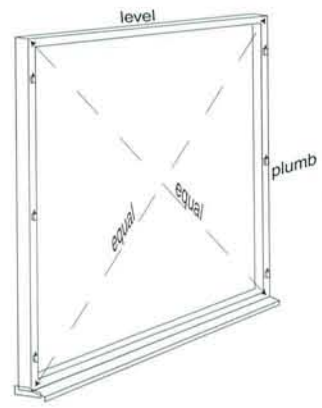
STEP 9 Ready for the Roof?

The frames should now be ready to accept the roof, refer to the roof installation guide for further instruction. Please remember that prior to assembling the roof, the frames must be:

1. dimensionally correct around the perimeter
2. dimensionally correct in width and depth
3. level
4. vertical, leaning neither into or out of the conservatory

STEP 10 Fitting the French Doors to the Frame

The doors should only be fitted into the frame once the conservatory roof has been erected and glazed. The door frame jambs should be plumb on both faces whilst the door frame head and sill should be level. The diagonal measurements across the door frame, from corner to corner, should also be checked, these measurements should be within 5mm of each other.



Your conservatory will be supplied with either a single personnel door or a pair of french doors, hanging and adjusting the doors are similar for both although the instructions below concentrate on fitting a set of double doors. Double doors can be either opening out or opening in, one door must be opened first and is called the MASTER door, the door opening second is called the SLAVE door.

The doors and frame should have the 3 sets of hinges factory fitted, each door can be lifted into position by sliding the female part of the hinges on the door over the male part of the hinges on the frame. This must be done with the door in its open position.

STEP 11 Adjusting the doors

Each door hinge has the ability to be adjusted in 3 directions, see the photo left, this adjustment allows fine tuning of the locking mechanisms and that the doors remain parallel to each other whilst giving correct compression on the door to frame gaskets. Once the door has been adjusted the plastic caps at A and C must be refitted.

Door hinge adjustment
5mm Allen key

A	door height adjustment
B	door left to right adjustment
C	door in and out adjustment (eccentric)

The hinge adjustment A will effect the height position of the door mainly on the door hinge side, should the height position need adjusting more on the lock side then this can be achieved by adjusting the packers between the glass and the door. The glazing beads will need to be removed to allow this. Fitting different glazing packer thicknesses at this corner will move the corner of the door up or down to suit.

Shoot Bolt Keeps

The shoot bolt keeps fitted to the frame can be adjusted by releasing the screws. On the slave door, adjust the top and bottom keeps so that the door is pulled into the frame as tight as possible. Adjust the keeps on the master door until a smooth latching operation is achieved. Re-tighten all screws once adjustment is complete.

STEP 12 Glazing Windows

The sealed units in your conservatory are made from toughened glass, this makes them very tough face-on but vulnerable on their edges. Whilst handling the sealed units, please ensure you protect the edges from knocks. To install a glass unit into the frame, firstly ensure that the frame is fitted with the appropriate gasket then follow these instructions:

1. Position the unit onto bridging packers. These keep the unit away from any water sitting inside the frame.

2. Centralise the unit within the frame and pack the edges with appropriate thickness of glass packers. Keep the bead area of the frame clear.

3. With the glass packed into the frame at the sides and head, fit the glazing beads. The top and bottom beads must be fitted before the side beads.