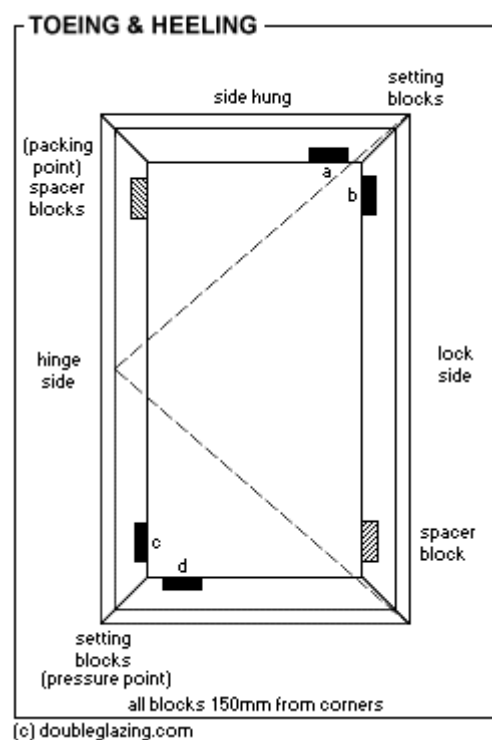


# Installation Guide

N.B. Always check the size of your new framework against your old frame before removing old frame.

- Before commencing installation of your windows you should check you have all necessary materials and tools to complete the job. In particular you will need exterior silicone, interior decorators' filler, frame fixings, screws, glass packers and timber wedges (wedges are required to ensure frame is set 'square' and level, sometimes plastic glass packers are used as wedges). The glass packers are required for creating the 'setting' and 'spacer' blocks (the pressure and packing points). This is particularly important for toeing and heeling, which will be referred to later. You may also require expanding (fixing) foam and interior and exterior PVCu cover trims.
- PVCu frames are delivered unglazed. Before installation of the frames, remove the vertical and top glazing beads by exerting pressure on the bead. It may be necessary to use a wide-bladed stripping knife to help lever the beads out of position, but do take care not to damage the PVCu frame.
- If external cills are being fitted, cut cill to exact length required and glue on end caps. A lot of installers fix the external cill in the opening as the first part of the installation procedure although others will fix the cill to the frame and then fit the cill and frame into opening at the same time. In any case, it is recommended that you fix the cill to the frame by means of 50mm no. 10 screws after first placing clear silicone between on the top of the cill. Please ensure you drill appropriate pilot holes when undertaking this process. Assuming you are fixing the frame and the cill into the opening at the same time, place the new window into opening taking care to set the frame central, level, square and plumb. Small timber wedges or glass packing pieces are useful for setting the frame square. Using a long spirit level, check first of all the level of the cill, adjusting the wedges as necessary. Repeat the process to align the jambs (vertical side frames). Check for squareness by measuring the frame diagonals. They should measure exactly the same. As a final check, open the openings to make sure they do open freely.
- Next, secure the frame to the brickwork using frame fixers. To do this, drill clearance holes through the frame and into the brickwork for the PVCu frame fixings. Hole will be required 150mm-200mm from accessible corners, at the ends of prefixed hinges and at maximum of 600mm centres in between. Countersink the frame for the screw heads, tap in the fixers, and tighten the screws so that the frame is securely held but not too tight that the frame is distorted, or so that excessive pressure pulls the welded frame joints apart. Apply a small amount of silicone to the screw shanks and heads to ensure that they are sealed against the PVCu frame. If available, you can fit plastic cover domes to the heads of the frame fixers.
- You are now ready to start glazing. We recommend you start with a small unit first to build up confidence and get experience. To ensure all opening open with adequate clearance, you need to undertake the process described earlier as toeing and heeling when fitting glass to openers. To start, please ensure all edges of the sealed unit are free and clear of dust and grit. The process of toeing and heeling is done by means of setting blocks and packing/spacer blocks which are essentially both made out of glass packers, but referred to in different terms to distinguish the 'action' of the blocks. When placing the sealed unit in the opener, make sure it is centralized. First, however, fit a setting block on the base of the opener at the position nearest to the hinge.

- Toeing and heeling: With the sealed unit centralized, fit packing/spacer blocks between the glass and frame as per above toeing and heeling drawing. The blocks should be fitted so as to prevent the glass moving up and down from side to side. Note blocks A and B are always located at the top of the frame on the side furthest from the hinges, whilst blocks C and D are at the bottom of the frame on the side closest to the hinges. When you are satisfied the blocks are positioned correctly you can check the operation by carefully opening and closing the opening. (Remember, however, the glass is not fixed- it is an idea to hold in position with one hand whilst checking the operation.) If it does catch, the toeing and heeling blocks will need resetting to correct the frame distortion. Once the opening window works satisfactorily you can complete the glazing process by pushing the glazing beads into position and fitting the 'wedge' gasket internally.



- You are now ready to start making good. Clear all protective tape off frames and generally clean up. Apply silicone externally and decorator's chalk internally along with any cloaking fillet/Dee moulding or miscellaneous PVCu trims required. Once all gaps have been filled and trims fixed, complete process by thoroughly cleaning frames and glass with recommended cleaners. You may also wish to apply a little silicone lubricant (some people suggest WD40) to espagnolette locks and hinges. You can also adjust hinge friction by means of the brass grub screw adjuster fitted.