

# NESSGLAZE LTD

## General advice on installation

Prior to fabrication, the customer should have confirmed sizes and handings. However it is good practice to check that before removing the existing product, that the replacement product will fit into the aperture, inclusive of any tolerances allowed for by the Surveyor.

In general replacement products should be positioned in the same position as the original frame. You should consider:-

- The new frame should bridge the DPM and the required expansion gap should be maintained
- The new frame should be set back as far as possible within the aperture to shield it from the elements.
- The new frame should be bed in a thick continuous layer of silicone
- PVC-U windows and door-sets shall be installed plumb, level and square within the aperture, without twist or distortion of any frame member.
- Particular attention is required to the frame positioning of door-sets. The clapping jamb should be set in alignment with the door leaf (twist).
- Each frame member should be fixed to the structure or to an adjacent frame to resist all likely imposed loads, which will cause the frame member to deflect.
- The fixing methods should allow for thermal movement and will be influenced by:
- The presence or absence of a wall cavity and the nature of any cavity
- The relative position of the frame and cavity and the design of the reveal
- The position of the plaster line and the need to preserve the interior decorations

## Fixing methods and fixing distances

There are two principal methods of fixing Nessglaze Ltd products used either separately, or in combination. These two methods are:-

- Through-frame fixings. The fixing should penetrate the substrate a minimum of 50 mm. The fixing head should be pocketed into the frame, with the hole closed with silicone and a cap. This is the recommended method for Doors, French Doors and Tilt & Turn windows.
- Lug fixings. If fixing lugs are used they shall be made from a non-corrosive material and used in combination with 'one way' or tamperproof screws. Any screws used must penetrate a minimum of 50mm into the substrate. Nessglaze Ltd supply fixings brackets with all windows.

Note: Construction foam should be used as a fixing assist or void filler only. Misuse of construction foam will distort PVC-U profiles.

In general, all four sides of the frame should be secured, wherever possible, using the following, recommended fixing distances and methods (see diagram's overleaf):-

- Corner fixings should be a minimum of 150 mm and a maximum of 250 mm in from the corner
- No transom or mullion fixings should be closer than 150 mm, or further than 250 mm from the centre of the transom or mullion. All intermediate fixings should be at centres no greater than 600mm

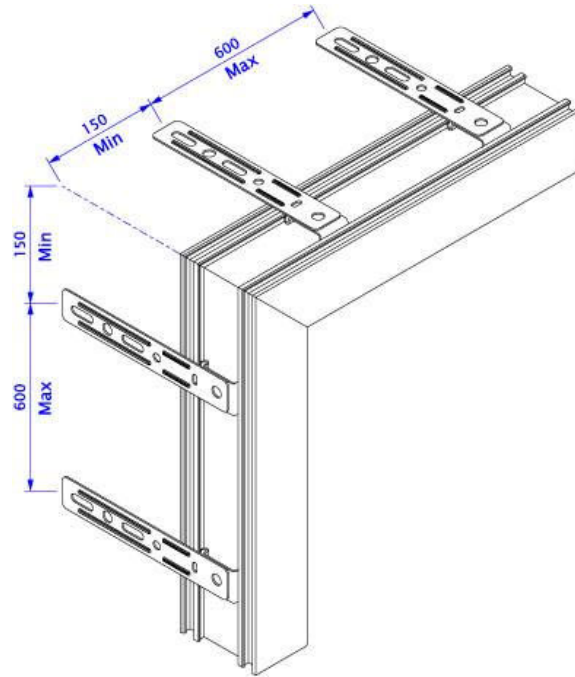
When preparing the new frame, the following points should be followed:-

- If you are to screw through the main outer frame into the structure, then the glass in the appropriate fixed light must be removed. If the window is too heavy for convenient handling, the glass units may have to be removed.
- Choosing one of the longest beads first, push a sharp chisel or rigid putty knife into the bead/ frame joint at approximately the centre point. Apply force to lift the bead up and out. Starting at the end of the next bead, the remainder can now easily be removed. Make a note of the positions of each bead to ensure correct positioning later.
- Carefully remove the glass unit, taking care not to disturb the packers. Store any glass you have removed safely away from where you are working.
- Check for squareness of trickle vent in frame aperture.
- Fixing at sills should be in accordance with the general guidelines. No fixings are required for sills up to 1000 mm wide provided that an adequate silicone or mortar bed has been achieved and the sill has been secured to the outerframe base by either screw fixings or clip-on feature.

## Perimeter Sealing

- The purpose of the perimeter sealant is to prevent water and air leakage in the face of differential thermal expansion between the aperture and the frame's guarantee life. The use of low modulus silicone in accordance with BS 5889 type A is recommended for this application.
- The optimum joint width required for effective sealing is a function of the movement that is expected in service. Therefore NO joint width should be less than 5 mm.
- Gaps up to 6 mm in width can be sealed solely with a ribbon of silicone sealant. In all cases the sealant should fill the gap to a depth

## Fixing Bracket - Location Guide



## Final Inspection - Sample Checklist

Visual Appearance	Is the frame installed plumb and square?	
	Are the beads fitted correctly and evenly?	
	Are exposed faces - including beads - free from damage?	
	Is the frame clean with all protective tape removed?	
	Has any damage to the aperture been correctly made good?	
	Have all trims internally / externally been fitted correctly?	
	Has all site debris been removed?	
Glazing	Is all glazing as specified on the contract?	
	Are all sealed units free from scratches and damage?	
	Are obscure and coated glasses fitted correctly?	
	Are sealed unit spacer bars covered evenly by frame and beads?	
	Is the glazing held properly by the beads / gaskets etc?	
	Has safety glass been used where necessary?	
Operation	Do all sashes open / close and lock as intended?	
	Are seals on the frames fitted correctly and without gaps?	
	Are cams free from binding against the strikers?	
	Is all operating gear lubricated as necessary?	
	Is all hardware attached with correct number of fixings?	
Sightlines	Are all sight lines visually correct?	
	Are opening lights aligned correctly?	
	Are all decorative features e.g leading, correctly aligned?	
Sealing	Are all joints smooth and correctly formed?	
	Is the sealant continuous around the perimeter of the frame?	
	Is the frame face free from excess sealant?	
Drainage	Are all drainage channels correctly positioned and free from obstruction?	
Miscellaneous	Are sub-cill end caps fitted if required?	