



Manufacturer's Fitting Instructions

FOR GUIDANCE ONLY

The tips and suggestions set out below are designed to help make your fitting go as trouble-free as possible and to protect your new windows and interior from the accelerated corrosion conditions found in maritime environments.

WARNING! If the coating to the windows is at any point during the installation damaged the window may suffer from corrosion in the future.

Important: Channelglaze Limited accepts no liability for the failure of windows supplied by it for installation by a third party. The incorrect fitting of or damage to the windows during the installation process undertaken by a third party will not be the responsibility of Channelglaze Limited.

Fundamentals...

- The portion of the window that fits into the structure must be smaller than the aperture (1.5mm clearance between the window frame and the aperture all round is typical).
- The surface to which the windows are fitted must be perfectly flat. Any distortion of the shell will cause the outer frames to distort and cause leaks.
- Prior to fitting make sure that butyl tape and silicone is stored in a moderate temperature, when it is too warm it becomes too sticky to work with and when it is too cold it becomes too firm to work with.
- All surfaces to which the window is to be fitted, including the flange of the window itself must be free from dust, grease, oil and rust.
- All raw edges of a cut aperture must be suitably protected to the same condition as the surrounding surfaces.
- Some coating damage may occur during installation and this WILL require protection.

Step 1: Prepare the window opening (For replacement windows)...

To remove the old window, first remove the concealing gasket (if applicable) then remove the screws on the outer side of the windows. It will be necessary to release any sealant from under the window flange on the outside of the boat. This can often be accomplished by working around the outside flange of the boat with a very thin putty knife. Select a corner of the window, work the flange loose and push/pull the corner of the window out of the aperture. You will have to carefully remove any residual sealant that is stuck to the outside wall. Care must be taken not to damage the paintwork or surface of the shell (and the frame of the window if it is to be re-used). The window should stay in place but be wary of it possibly falling out and be sure to have another person



present to hold it in place whilst one person attempts to slowly push the window out from the inside.

Step 2: Dry fit the new window into the aperture...

It is a good idea to initially test the window in the aperture to verify the fit. This process works best with two people working together. Make sure that the exterior window flange overlaps the aperture sufficiently to make a good seal.

When satisfied with the window position spot mark the drill holes through the existing countersunk holes of the window (being extremely careful not to damage the coating) onto the structure of the boat and remove the window. Drill through the structure with a 1/8th drill bit and tap ready for No.6 stainless steel screws and in preparation for the permanent installation. If a tapping tool is not available it is advisable to drive in and out of each hole with zinc plated screws initially. It is not ideal for the screws to run straight through the structure into trim work therefore we recommend smaller sizes such as 3/4" screws (depending on the thickness of the structure and lining out).

Step 3: Primary seal...

With the window lying face down on a soft surface (preventing damage to the coating) apply the butyl tape to the back edge of the flange, central to the fixing holes. Start from one of the top corners of the window and apply to the entire perimeter of the window being sure not to stretch or overlap the sealant. Ensure that both ends of the butyl tape meet each other (applying a small amount of pressure to mould one end to the other where applicable) and pull back the release paper. Carefully place the window in position and screw the windows in place with the stainless steel, countersunk screws. Do not over screw when fitting as this can damage the finish of the windows. If damage does occur to the coating around the countersunk holes of the window then this MUST be protected by applying a small amount of high quality sealant prior to driving through with the screws (this is recommended good practice to ensure maximum resistance to filiform corrosion in such maritime environments). When all screws are in position work around the entire window, progressively tightening the screws into their respective countersunk holes (on a low RPM if using an electric screw driver) being careful not to over tighten. Please turn over for Step 4.

Step 4: Secondary seal...

For the secondary seal we advise a cap bead of low modulus, high performance silicone sealant (domestic silicones are unsuitable) to be used around the entire window between the structure of the boat and window frame. Using a conventional skeleton gun set the silicone cartridge ready to use and cut the nozzle diameter to match the size of the gap to be capped (at a 45° angle usually helps). Make a chamfer tool out of thin plastic (an old bank card type material is useful) by cutting a 45° angle between two straight edges of the plastic. Apply a small but constant bead of silicone from the left corner of the window, across the top and progressively around the edges of the window, now cover your chamfer tool with water or washing up liquid and with a flat edge against the shell of the boat draw it along the bead of silicone. Each time you get a build up of silicone on your chamfer



tool wipe it off with kitchen towel or similar, wet the chamfer tool again and continue until finished. Remove any excess silicone with washing up liquid and kitchen roll. Applying this cap bead of silicone prevents water traps from gathering behind the frame and also adds to aesthetics.

Please note: Concealed fixing windows are pre-drilled and countersunk for No. 6 screws. To ensure that this type of frame is protected from the elements and corrosion please ensure that flat, countersunk screws are used within the pre-drilled holes and lay flat within these holes to enable the concealed fixing gasket to sit flush in its housing. Compress the gasket into the channel, apply to the entire concealing channel of the window and leave a small overhang at the mitred edges. This can be left to settle for 24 hours before trimming back, which should take into account some of the setting that usually takes place. Before trimming any overhang back try to push the gasket down and around the channel away from the mitres with lots of pressure around the entire window (this will make for a much longer lasting product and if done properly should use a lot of the overhang available). Apply a small amount of low modulus silicone sealant to the mitre ends of the gasket to stop any possibility of water ingress into the channel. Do not stretch the gasket at any stage when inserting.

Maintenance: The durability of anodised or powder coated aluminium frames has been proven over many years (PLEASE NOTE: Ultimately anodising dyes will fade regardless of the light fastness rating of the dye used). Although aluminium is relatively maintenance free it is necessary to regularly clean the windows. It is advisable to wash the windows with lukewarm water. The addition of a little soap solution will assist the cleaning process, and then wash with clean water.