

Pre-Paint>Fuselage>Fit windows

The windows are formed from strong but brittle acrylic and care must be taken to avoid marking or cracking the windows while they are being fitted. The windows are fixed in place with flock and *without* screws, however screws *are* used around the windows to hold the windows in place while the flock cures and are then removed.

Any minor shaping of the windows that may be required must be done with an 80 grit sanding disc or a hand-held sanding block: you must *never* use a jigsaw on acrylic.

The description and photos that follow show the window being fitted to a pilot's door, and the exact same technique should be used for any window.

Materials required:

Epoxy resin and flock, wax

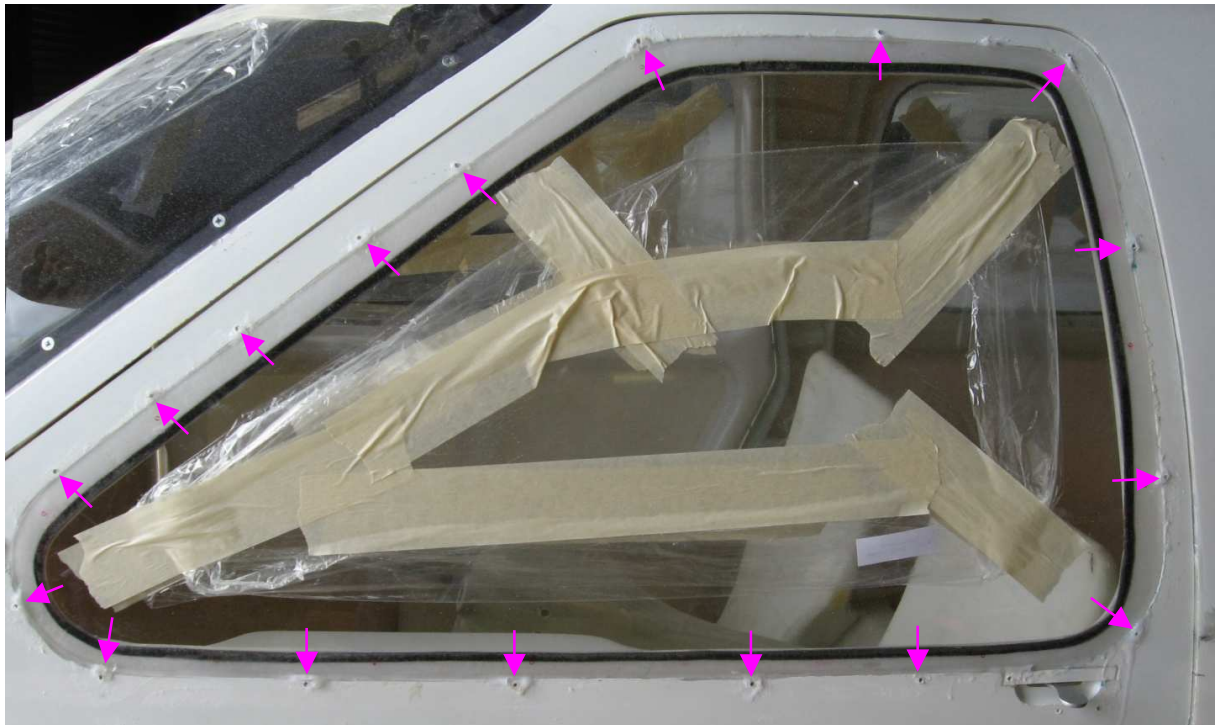
¼ x ¼" adhesive-backed foam strip

8G self-tapping screws in heavy duty (coax) cable clamps:



Pre fit the window

Start by carefully sanding away all of the gel coat from the joggle, then fit a length of the ¼" foam strip around the very inside of the joggle (the dark grey line in the photo below) – this will keep the flock from making a messy line around the inside of the window and give a nice clean edge when the window has been flocked into place.



Close and latch the door and then test fit the window, holding or taping it in place and making any minor adjustments that may be required so that the window fits snugly inside the joggle.

Remove the window and, working very carefully, drill 1/8" screw holes in the door frame just *outside* of the joggle as shown arrowed above. Note in the photo of a completed window above that the protective plastic sheet has been folded and taped back from the edges of the window so that the bulk of the window area is still protected from scratching.

Prepare the window

Remove the window carefully and clean and blow away any dust and debris from the joggle.

Place the window face down on the bubble wrap packing material, taking care not to allow anything to scratch the surface, and carefully sand around the entire **inside** edge with emery tape – sand only to a point just short of the inside of the joggle, level with the centre of the ¼” foam strip.

By holding the emery tape as shown you can use your finger to control the width of the sanded area.

When the sanding is complete blow away the dust and then use a clean soft cloth and wipe right around the window.

Do **not** use any cleaning agents on the window.



Fit the window

Close and latch the door, wax the self-tapping screws and cable clamps and then wash and dry your hands to prevent wax from getting onto the window or the joggle.

Mix a batch of resin and coat the joggle, then add flock to the resin and fill the entire joggle out to the level of the foam strip. Carefully place the window into the bed of flock - start at one corner and position the window until the alignment is correct and it fits inside the joggle - and then gently press it into position.

Once the window is positioned correctly, take the self-tapping screws and cable clamps and start fitting them around the door frame as shown at right, working from the corners first and then the middle screws and so on.

The clamps will pull the window into the joggle level with the door frame and the wax will allow easy removal once the flock has cured, while the screw holes will be filled during the *Paint Preparation* tasks. Take care not to over tighten the screws, tighten them just enough so that the edge of the window is level with the adjacent door frame.



Check all around to see that the flock has keyed to the window: the sanded surface of the window edge will appear to go clear with no bubbles when the flock is in full contact with it. It may be necessary to gently squeeze the window to remove any bubbles, although if you have filled the joggle with flock there should be full contact anyway.

When you are satisfied that the window is positioned correctly wipe away the excess flock with a clean mixing stick, taking care not to smear any resin or flock over the window: always wipe out and away from the window. Refer to the photo of a completed window on the previous page for an example of how it should look. Leave overnight to cure. Next day remove the screws and cable clamps.

The same process should be used for all the remaining windows. You may do more than one window at a time if you are confident of your ability to do so but we would suggest that one window at a time is a great way to start.

This completes the *Pre-Paint>Fuselage>Fit windows* task.