

## Window Replacement, 8m Catalac.

When we purchased Sea Spirits her windows were certainly showing their age. Time and UV light had reduced the once clear material to a crazed and almost opaque finish. Being able to look at the great outdoors from within the accommodation had become a thing of the past. Clearly (no pun intended) we had to replace the sad and sorry window material so a cunning plan was needed. It all started in the middle of the summer in 2003.....

"I have scrounged some pallets from work, and the guys there say what you do is lay the pallets down on the ground and then lay the decking on top. They have all done it so it must be easy" announced the crew on returning home from work one Friday afternoon. The ensuing discussion about the merits of time and money spent on something that we would not be home to enjoy, that I was not prepared to contemplate during the 'Season', and that required rather more thought than said crew had applied was quite long and protracted. The clincher, for me, came the following morning when I enquired locally about the price of the decking materials. "How much?" echoed the crew, now convinced at last that this project was a non-starter. So we now had half a dozen pallets stacked round the back, ("oops, forgot they were being delivered this morning") and no obvious use for them. Or maybe there was.....

During the early planning stage of the Great Window Replacement Scheme it had become obvious that if you remove all the screws from the outer window frame of a Catalac 8m there is nothing much holding the inner frame in place. And since the inner frame is actually in four pieces the chances of these dropping to the floor is greatly increased. And since the headlining is held in place by said inner frame, I could foresee a very saggy headlining being an easy thing to achieve and not so easy to rectify. So the inner frame must be held in place before the outer frame is removed. But how?

We spent the Sunday after Pallet Delivery Day on the boat, and like all great ideas this one arrived with the speed and clarity one has become used to over the years. "Pallets!" I exclaimed. "Please don't go on, I have said I know I should have consulted with the Great One before ordering them" replied the penitent crew.

"No, I mean we can dismantle the pallets and use the wood to brace the inner window frames. It is so clear I don't know why we haven't thought of it before!" I responded.

"Clearer than the windows then," giggled the crew, and then "What do you mean, we?!"

I deduced that if I made all necessary preparations for the replacement of the windows well before lift-out time I would be in a good position to complete the job before the onset of winter, or as the crew calls it, Christmas shopping time. Ok so what do I need to do/order? (Notice one has dropped the 'we')

The outer frames, once they are removed from the boat, need to be taken apart. This can be easy or not, depending on the state of the corner fixings. These are aluminium mitre blocks, drilled and tapped, and fitted internally to the mitred corners of the outer frames with aluminium machine screws. Or as in the case of three of our screws, they had become white powder! It's ok, we can overcome this. And there is non-setting sealant used at each corner also. And some of the black plastic strip hiding the screw points in the internal frames was missing. Also some of the internal glazing bead, the round section rubber stuff between the windows and internal frames, was missing. So, shopping list:

Frame screws. Take one out, measure and identify it and order from Screwfix. Easy. £10.00 for twice the quantity I need. Next?

Sealant. Clear silicone and grey non-setting mastic. To seal the outer frames to the coachroof and for use in the rebuilding of the outer frames. Again, Screwfix at a cost of £8.00 for 3 tubes of silicone and 1 of non-setting frame sealant. (Grey would be least visible after reassembly).

Black plastic strip. We found some identical to the original at a caravan shop, Charles and Son in Parkstone, Poole at 60p/metre.

Glazing bead. Bought from Cherry's chandlery in Moordown, Bournemouth. Cost, 30p/metre. They advertise in PBO/YM. Next!

The Windows. I had been given the name of a signmaking company in Ringwood who apparently were not averse to cutting plastics and acrylics to order, and it was even suggested that for the correct number of 'pieces of eight' they would 'sort out your boat windows'. As they were located little more than

spitting distance from 'chez nous' it was logical to give them a try, so armed with one of the galley hopper type windows as a sample I sought their advice and, more importantly, their estimate of price. The premises were busy (a good sign – sorry, another pun) and the inmates very friendly and the 'boss' who we shall call Kev, as that is his name, seemed amenable to the task being requested. He advised that an acrylic would be the hardest wearing and that UV resistant materials were now available which would suit the job well. The thickness would remain the same. However he would 'probably have to order it in specially and it might take 24 hours'. As the price quoted was less than I had expected I agreed that I would deliver the windows to him minus the frames and he would use these as patterns for the new ones.

I took a week's leave in early November so that I could complete the window replacement in one hit. All nine windows in one go. Saying it fast made it sound easy. We had been lifted out at Ridge Wharf as usual and the forecast for the week was unbelievably good. The plan was to make a cruciform from the pallet wood, one for each window, and hold it in place with a strut made from pallet wood braced against something structural for rigidity. The horizontal piece would be 70-80mm wider than the window; the vertical piece would be 40-50mm longer than the window's height. This extra length would help with making sure that there was a good overlap of the wood when braced against the frames. I carried out a trial fit on one window and found it best to have the horizontal against the window first and the vertical across the horizontal to hold it in place, each being placed centrally on the window. The ability of the horizontal wood to flex when I applied enough pressure to the vertical wood to hold it against the frame ensured that the inner frame and subsequently the headlining would be held securely, but the wood was thin enough (about 20mm) not to come into contact with the window material. So all that was required to complete the bracing was to measure and cut a piece of wood to wedge between the cruciform and a suitable part of the boats anatomy, to hold it all in place. In the galley area I used the moulding forming the saloon seating/galley lockers for this. In the forecabin I found that the best place to jam the brace to hold the crosspiece on the forward windows was the junction of the main bulkhead and bed base, as it gave approximately the 90 degrees required between the cruciform and brace. For the starboard side window I used the edge of the bunk base. Moving to the heads I used the inner moulding at the point between the vertical and horizontal faces under the water heater/beside the handbasin for the forward facing window, and the adjacent wall which separates the forecabin/heads for the window in the port side. Finally for the windows over the quarterberth/navigation area I again used the moulding forming the saloon seating/lockers. After all the wood was in place the interior of the boat resembled a bad day at an MFI owners meet, when the assembly instructions had been lost. I went round and double-checked that nothing had moved all was still secure, and then I had lunch. Well, I had been working hard, after all!

And so, Dear Reader, we start to remove the windows. Aren't cordless tools just marvellous? What did we do pre-cordless. With all the screws removed from the window furthest from the prevailing weather (well we might get some) I gingerly eased the frame out of the coachroof and checked that nothing had moved down below. All wood in place, all headlining likewise. Excellent. The confidence was growing. As soon as the window was placed into the cockpit for safety I cleaned the surrounding area of the coachroof ready for the re-fitting ceremony and then using gaffer/duct tape I stuck polythene sheet over the gaping hole where once was window. This is easier than I thought, says I. But am I heading for a fall, is it all going too well? Read on....

Inspired by the ease with which Catalac's can be parted from their windows, or is it windows from their Catalac's, I rapidly progressed to the point where a Catalac without windows was arrived at. The days goal. Result. After checking that all polythene was secure and all wood likewise I headed home with all the windows. As the day had progressed far better than I imagined I had time to dismantle the window frames and take the old windows round to Kev for his assessment. On arrival at Multi-Signs of Ringwood, as the name over the door proclaims, Kev assisted in the movement of the windows from car to workshop and announced that it would be 'no problem' and they would be ready tomorrow afternoon if he ordered the material now. As today was Monday, I had visions of completing the job on Thursday. Vis.Timetable: Tuesday, collect windows. Wednesday/Thursday, re-fit windows. Fantastic. Kev, sharp eyed as always, noticed that two of the windows were defaced with some kind of stick-on stuff. I explained about such niceties as 'the heads' and 'privacy' and he, God bless him, suggested that certain

female crew members might prefer these windows to be made using material with a 'special non-see-through' finish which he could do at no extra cost as he had an offcut lying around somewhere. I had to agree that that did seem an excellent idea. The right price too.

Leaving the old windows in Kev's trusty hands I returned home and set about cleaning up the old frames. As I said earlier three of the corner fixing screws were just powder, but to overcome this I worked out I could drill the old screws out and re-tap the holes and fit new screws although I had to use Stainless screws as I had none in aluminium. The cleaning of the frames and the trial re-assembly took until 15:00 on Tuesday. As I cleaned each frame in turn, I taped the pieces up to make sure I kept the right parts together. After I was happy that all the frames were clean and would go back together I called to see how the window cutting was progressing and was amazed to be told that they were ready for collection. I went to collect them immediately and was delighted with the finish. All the edges had been chamfered to remove any sharpness and the heads windows have such opacity that we do not need curtains. And the bill? An unbelievable £110.00 for all the windows. This was far less than the original estimate but Kev insisted that was all I owed him. I thanked him, paid him, loaded the car and sped on my way lest he change his mind!

Re-assembly was a reverse of the dismantling procedure, using the non-setting mastic at all the corners. By leaving the protective film on all the windows it prevented any mastic sticking to the acrylic surface. In fact I did not remove the film until the windows were re-fitted into the coachroof. So by late evening on Tuesday I had rebuilt the frames and windows ready to re-fit them on Wednesday. And still no rain!

I felt I had to start early Wednesday in the vain hope I could complete the job in one day. After removing the tape and polythene sheet from each window opening in turn and cleaning the surrounding area with white spirit, then drying it, I bedded the window in on a bead of clear silicone. When re-fitting the screws I left them just slightly loose, and tightened them fully when the silicone had gone off, to make a better joint. Once all the windows were in which took about two hours to complete I removed all the 'Home Assembly' joinery from the inside, the film from the acrylic and fitted the internal glazing bead. I then ran a bead of clear silicone round the joint between acrylic and the frame on the outside. I also opened up the drain holes in the corners of each frame on the outside as these were blocked. It was then just a matter of fitting the cover strip over the screw points on the inside of the frames and the job was complete. Except that as it had not rained yet, I could not be sure how leak-proof they were (no confidence some people!). And the windows had not been cleaned. Both these were soon remedied. It rained big time on the Friday. Skip took his crew for a drive down on the Saturday to show her the new windows. We could see in from outside for the first time. And Friday's rain had stayed outside the boat. What a fantastic job! We agreed on that. And we could see out, amazing. We agreed it was the biggest improvement we had made to Sea Spirits since our purchase of her. It was pointed out that the windows had yet to be cleaned. We agreed that was the case.

So, what were the snags? Three or four of the screws holding the frames in sheared off when I tried to undo them. When the job was complete I took all the screws out of the section of outer frame which secured the inner frame section with a sheared screw in it, removed the corresponding section of inner frame and undid the screw using pipegrips. There was plenty of screw to grip and they undid quite easily, then reassembly was the reverse. As I only removed one section of inner frame at a time the headlining stayed where it should.

I completed the job on my own. Another pair of hands may have been useful, but certainly was not essential. If anyone else is contemplating this job, I would say go for it! I did not lose any sleep over it. So which would I rather have, decking in the garden or new windows for the boat? No contest. The cost involved was small; the improvement to the appearance of our boat was tremendous. If of a nervous disposition then just do one side at a time, or one window. If your windows, like ours, are letting your boat down, have a go.

Go on, you know you want to.

Nigel and Sheila Jones  
Catalac 8m Sea Spirits.