

Refurbishing, Restoring & Repowering

DIY Fibreglass Ice or Fish Box

with Tony Ravenscroft

In the process of making the icebox for this article, I was constantly reminding myself that there are faster ways to make an icebox. So if you are reading this after first skimming the photo series, and thinking "It looks like a lot of stuffing around just to make an icebox!" I will be the first to agree.

As some readers will see this as being in conflict with the purpose of this DIY series, let me explain: the average home built icebox is simply a few slabs of insulating foam (the type that does not react with resin) pinned together and covered with fibreglass straight over the top. The finish is not very good, but it will keep your beer just as cold as if it were a gold plated professional job.

"So why is this particular icebox' construction so complicated?" you keep wondering. For two very good reasons.

First: While I have already conceded that the straight 'glass-over foam box will do just as good a job, I prefer that the things I make look a little better than that. Accordingly, I am prepared to put in the extra effort. If you don't see the need, then just pick out the information you need from the following pages and do a straight 'glass-over-foam job, and as I said - your beer will be just as cold!

Second: The other reason is a little more solid. This is the final in our "Learn to Fibreglass" series. In the previous sections we covered a wide range of skills, materials and how to use them. To tie all that together it was

obvious that we had to make something, and preferably something many readers actually want to make and use. So it was decided an icebox was the go.

However, bear in mind the same techniques are just what you need if you were making a hardtop or a swim platform.

If you were making a hardtop, for example, then it should not take too much imagination to look at the following pages and modify what is on them, to make it and have it look as good as a professional job.

That by the way, is THE point. You can make just about anything you want with fibreglass. The only limits are those imposed by your imagination and how much effort you are prepared to put into the job.

Since it was a while since I have done a job like this I rediscovered just about every mistake you could make and (thankfully) how to fix them as well. I will mark the trail as clearly as I can.

Before we go too far the best advice I can give is to start small. Either make a small box of say 20cm square (I mean just a box, not an icebox like we have here) or perhaps just start with the icebox lid. Build your skills by making mistakes where it doesn't matter, then launch into the icebox proper.

Fibreglassing is really easy, and so is riding a bike - but how many times did you crash before you made it to the end of the driveway?

Finally, re-read the original "Learn to Fibreglass" article (F&B #95) before



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you do too much more.

How To Use This Guide To Build An Icebox

It is not my intention to tell you blow for blow how to build the icebox shown in the photos. Very simply, it may not be the size that you want. What I have attempted to do is to tell you how to design and build a professional looking, double moulded item to your own specification.

Then read this month's piece in total before doing anything towards actual building. Draw some rough sketches and take them to your fibreglass suppliers; the guys behind the counter will be able to then tell you what and how much you need to buy.

This month should provide all you need to have four mouldings off the moulds ready to assemble - and then we'll assemble them.

Basic Job Description.

The icebox is made of four fibreglass mouldings. An outer shell, an inner liner, a lid and a flat base for the lid. All have a gelcoat finish.

The inner liner was made with two layers of 450gsm chopped strand mat.

The lid and outer shell were made with two layers of 450gsm chopped strand mat and a final layer of heavy woven rovings. The outer shell has a reverse flange for added strength in the final assembly.

The lid base was made with two layers of 450gsm chopped strand mat and a third layer added during the final assembly process.

Re-introducing Tony Ravenscroft's popular series all about building your own fibreglass ice box at home. First published back in 1995 - it's been in constant demand ever since, despite long ago selling out of the 2 issues that first carried the reports. Fibreglassing is not a difficult process once you've got the hang of it - and armed with that knowledge, there is then no reason why you can't do fully professional repairs; make your own moulds, design and build a hardtop, ice-chest, or fishbox - or build your own fibreglass boat. In this series, Tony has done a marvellous job of taking a very technical subject and putting it into language we ordinary folk can understand. He's been assisted by some of the industry's top fibreglass specialists who tipped all the high tech words back in - forcing Tony to re-write the piece several times. But as technical guru Brian Edwards said to F&B "Sure, keep it simple by all means, but let's get it right." What we have here, then, is one of the best reports we've ever read on this subject, and although it is still - of necessity - a bit heavy in parts, if you take the time to read it through a couple of times, it will provide the basic understanding and know-how that you need to go to the next square. Our thanks to all the people who so willingly contributed their time and expertise to this series - we've all learned a great deal in the process.



Left: "Just like a bought one" only better, because it is designed and built to suit your exact needs.

The insulation used was green foam from the fibreglass suppliers. White coolite foam dissolves in seconds upon contact with resin and cannot be used in this particular icebox project.

Step 1

Making the basic mould.

To make this type of mould, you can use just about anything that resin doesn't stick to. So basically anything that is the shape you want, or can become the shape you want will do. It also helps if you can get it cheap.

I had originally planned to use coated 6mm masonite stiffened with a light timber frame. Then by coincidence where I currently work remodelled a storeroom and all the coated 12mm chipboard from a row of shelves came my way for free. So the plan was changed to chipboard.

The point is this: please do not read this and think you must use coated chipboard - use whatever you can lay your hands on at the time and adapt the material and your design/plan to suit. If you do go out and buy some board for the job, then go with the chipboard as you can screw it together much easier and faster, and you will have a better chance of re-using it. However, try and scrounge something instead (much more fun) be it coated masonite or chipboard, as the new stuff is between