

Design for Griffiths Hatches

Aluminum-framed, acrylic-topped hatches are today's standard, and for good reason; they're strong, relatively leak proof, and essentially maintenance free. They also suit the modern styling of many of today's boats. Yet for a traditionally-styled boat, whatever material she's built of, wooden hatches are often more in the style of the equipage.

The problem with most designs for wood hatches is that they leak at the slightest provocation. Those natty canvas hatch covers which used to be seen on a nicely equipped yacht were not there just to protect the varnish!

There is, however, a design for wooden hatches that is handsome, not too difficult to construct, and most important, about as leakproof as a wooden hatch can be. Developed a half century or so ago by Maurice Griffiths — the British designer, writer, and long time editor of **Yachting Monthly** — this design is commonly known as the "Griffiths hatch". Even if you don't want to replace all the existing hatches on your boat, a Griffiths hatch would be especially appropriate as a main cabin skylight, or in a small size, as a vent hatch over the head compartment.

The drawing shows that the Griffiths hatch has a double coaming. In addition to the normal hatch coaming around the perimeter of the deck opening, there's an outer coaming set out 5/8" from the inner coaming. This outer coaming has scuppers, and because the seam of the hinged lid is about halfway down the depth of the outer coaming, any water which enters the lid seam drains out through the scuppers. The beauty of this design is that you get a watertight hatch without having to mess with rubber gaskets, which always leak eventually, or with hatch dogs which tend to distort the frames of wooden hatches. In fact, the fit between the base of the outer coaming and the lid doesn't even have to be particularly good, because in this design, that

seam can leak all it wants to without water coming below in anything less than total submersion.

For this article, the original design has been updated to suit cored fiberglass deck construction. To gain a solid base for the hatch, you'll have to dig out about 1 1/2" of the core material all around the hatch cutout, unless the deck is cored with plywood at that point. After digging out the balsa or foam core material, epoxy in 1 1/2" wide strips of oak or mahogany the same thickness as the core material you removed. These solid filler strips will give you a strong base for attaching the inner and outer hatch coamings.

If the deck is solid fiberglass, you'll need to epoxy wooden framing pieces to the inside of the deck opening to which the inner coaming can be screwed. These can be about 3/4" by 1" in cross section. If the deck is wood, you should install framing under the deck equivalent in section to the deck beams.

The dimensions shown are those originally worked out by Griffiths. In practice, the height of the hatch can

be cut down to 2 1/2' or less as long as the outer coaming seam is kept down to about half the total height of the hatch.

Construction is simple. The best corner joint to use for the coamings is the simple half lap. After cutting and fitting the coaming pieces both to one another and to the crown of the deck, square up, then assemble the upper and lower hatch coaming frames by gluing and screwing the corner joints. Use epoxy for gluing, and a single screw driven down through each of the half lap joints.

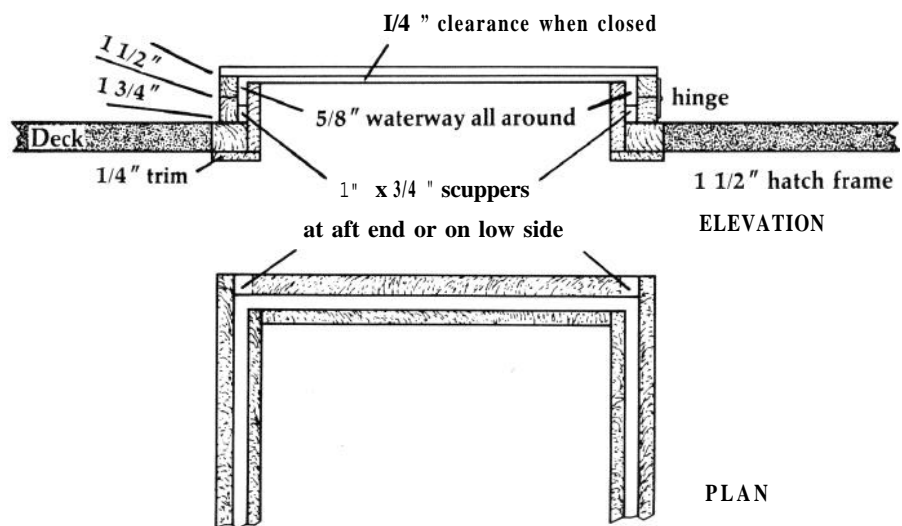
The inner coaming should be assembled in place on the boat. The coaming should be bedded and screwed into the deck framing pieces. The inner coaming half laps should be glued as you fasten the coaming to the deck framing.

To let light below, use 3/8" acrylic for the top. For more traditional appearance, use a solid 3/4" wooden top, perhaps with a glass or acrylic deadlight set in the middle of the top. A wooden top should be screwed and glued to the outer coaming. A plastic top should be bedded and screwed down, using acrylic latex or silicone acrylic caulk.

After the outer lower coaming is glued up it should be closely fitted to the deck camber, then bedded and bolted through the deck.

This is a project which can mostly be done at home, then taken down to the boat for installation. It therefore makes a good off-season project, and will pay you back handsomely during the summer.

-JP



Outer coamings 3/4" mahogany or teak

Inner coamings 1/2" mahogany or teak