

# Plywood Hatch Stops

Photo #1



Photo #2 (topside view)



Photo #3



To prevent the hatches (**Photo #1**) from falling into the boat, you can build hatch stops from 1/8 plywood. (mahogany door skins)

The thickness of the plywood will be determined by the thickness of the gasket you plan to use for the water seal. Remember that the gasket material will compress, so if you want your hatches to sit very flush, if you use a 1/4 thick gasket material (recommended), then two layers of 1/8 ply will be required.

Take your hatch patterns and cut out four half rings from the plywood for each hatch. (**Photo #2**) These rings should be at least 1.5 inches wide with a little extra to extend into the hatch opening (this will be trimmed flush later). If your deck has a lot of curve to it, you should consider one solid ring for both layers of plywood. This will prevent the edges from sticking up too high on the centerline.

This first layer will lower the actual hatch lip to accommodate the gasket seal material thickness.

Rough up the surface on the underside of the deck with sandpaper for a good bond. Mix up some resin and thicken it with silica powder to the consistency of peanut butter. This will be used as the glue to affix the pieces to the underside of the deck. Apply a small amount of thickened resin to the half rings and press them to the underside of the deck extending out into the hole about 1/8 of an inch.

Clamp in place until epoxy fully hardens. (**Photo #3**)

Once the epoxy has hardened remove the clamps (**Photos #4**) and cut and grind down the small area that was extended into the opening flush with the hatch cut out edge.

Photo #4

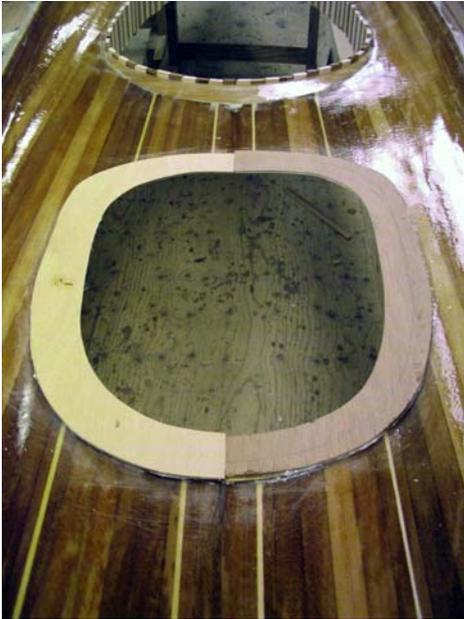


Now cut out full rings per hatch with extra material that will extend into the opening by at least one and a half inches and extend under the deck by a little less than the other rings so there is a small step from layer one to layer two.

**(Photo #5) (Diagram #1)**

Glue this third layer on in the same manner as the first.

Photo #5



Once all is hardened, you can use epoxy thickened with a fairing compound such as micro-balloons to fill in the underside of the deck and create a smooth transition between the layers of ply and the deck surface. **(Photo #6)**

Photo #6



Photo #7



Once this has hardened, sand the surfaces smooth and prepare to apply one layer of fiberglass over the plywood.

Cut several pieces of fiberglass and dry fit over the plywood and onto the deck surface by at least two inches. **(Photo #7)**

Apply epoxy to the glass and let harden.

Photo #8



After it has fully hardened, scrape and sand down the rough edges and apply more epoxy to smooth it out. Let harden.

**(Photo #8)**

Scribe and cut the hatch lip to  $\frac{3}{4}$  to 1 inch wide with a jigsaw. Since we chose to apply epoxy blackened with graphite to the top of the lip, the choice of wood colour was not important. **(Photo #9 & 10)**

Photo #9



If you wish to have a clear wood lip, then the mahogany veneered plywood will look nice.

We do not believe that any fiberglass is necessary on the top of the hatch lip. It should be strong enough for every day use.

Photo #10



Apply your gasket seal to the hatch lip, to the hatch lid or both.