## **Recessed Fittings**

Photo #1



Photo #2



Photo #3



Many people have asked how I accomplished the recessed wood fittings on some of my kayaks. Rather than add it to my instructional booklet, I have posted it here for everyone to use. Feel free to let me know how it works for you or how you may have improved upon the technique.

Made entirely from wood, they nicely accent wood strip and epoxy kayaks. You can take this example and create them yourself or adapt the instructions to your liking. These simple fittings are not suitable for carrying handles or for areas on the deck in which a lot of stress will be applied. They simply will not withstand that kind of force. They are, however, very suitable for deck cargo straps. I also chose to use 3/16 shock cord for these fittings, hence measurements are a little on the small side if you choose to use ½".

## Instructions

From a one-inch thick, rough piece of hardwood of your choice, drill part way through with a 1" hole cutting drill bit. (**Photo #1**) Since the drill has a drill pilot center bit, it cannot be used to drill all the way through. After reaching about half way through, stop and switch to a <sup>3</sup>/<sub>4</sub>" regular drill bit to create the center hole. (**Photo #2**) Do not drill all the way through.

Cut out the pieces as close to the larger hole outline with the coping or band saw. Using a disk sander, (**Photo #3**) I shaped each individual fitting to the outside diameter of the larger whole. You now have small cup shaped fittings. Turn the fittings on their sides and drilled a ¼" hole through the center of each fitting for ¼" dowelling to fit through and about 3/8ths of an inch from the top. (**Photo #4**)

With the hole cut, return to the disk sander and set the table at a 15-degree angle. With the cups facing upwards, taper the sides of the cups. This way the fittings will slide into the finished deck of the kayak from the outside using the taper to slide them tightly into place. Round over the bottom and finish sand each one. (Photo #5)

After the cups are tapered, cut the small piece of dowelling to fit into the holes across the opening. Once they are firmly in place, mix up a small amount of epoxy and pour it into each cup and swirl

Photo #4



Photo #5



Photo #6



Photo #7

it around so that all the inside of the cup and the dowelling is covered and sealed. It should also seep into the side holes to firmly affix the dowelling into the cup. While they dry, leave them upside down on a piece of wax paper so that all excess epoxy will run out. You may wish to do this step twice.

The fittings are inserted into the deck after the deck is glassed inside and out.

Establish where the fittings are going to be, and mark the centers and drill a small pilot hole in the deck for each fitting. Always start with small holes and work your way to larger ones. This prevents tear out of glass on the inside of the deck. Forstner drill bits work best for this procedure. Being that each fitting may not be perfectly round, number each one and where it is to fit into the deck and then use a Dremel<sup>TM</sup> or sandpaper on a small dowel to round out each deck hole to accommodate each fitting snugly or go back to sanding the fitting to make it slightly smaller. Once each is ready, mix up some epoxy and thicken it with some dark wood flour. Put it around the hole and gently tap each fitting in so as to be almost level with the deck, leaving some material to round out over the deck and fair in with the rest of the deck. Be sure to have dowels facing as you wish. (Photo #6)

Apply several coats of resin to the underside of each fitting to seal the wood.

After all the resin has set, grind down the outside of the fittings level with the deck and use a cabinet scraper to finish level. Sand and seal the outside of the fittings with several coats of epoxy.

(Photo #7)

