

Redo your non-skid

Make that deck safe again

by Brian Cleverly

WHEN IT WAS TIME TO APPLY NON-skid to the deck of my Fuji 32, I was looking at a blank canvas. Deck repairs, coupled with an ineffective existing non-skid, prompted me to totally remove the remaining non-skid.

What I did is not meant for revitalizing existing non-skid patterns. For that, there are a number of ways to go, all of which last a few years but eventually need re-doing. I have seen many schemes, some of which I consider outright dangerous. One example of this is using sand sprinkled in paint or, even

My plan for my bare deck was to apply a permanent non-skid, using gelcoat. This approach is often required when a deck has had a lot of repairs and/or core replacement. I have used this method for a number of years on clients' boats with good results.

The previous non-skid on my 1976 Fuji 32 was of the sand-in-paint variety. Since I have an inherent dislike for this approach, I removed all the non-skid as a part of the deck repair process. The repairs I made were epoxy-based. This presents a possible problem since polyester gelcoat will not reliably adhere to



sanded, before applying the gelcoat. This is the method I use.

Over the years I have used a variety of textured roller covers and, while all have given a satisfactory result, I've never been able to achieve what I really wanted. What I've searched for is a pattern that will be effective in extreme conditions, will be easy on bare feet, and will not tear off bare skin when falling on it. That requires a random lumpy, but rounded, pattern and I feel I have now found it.

You will need:

- **Various sanding/grinding disks/papers.** You remove the entire existing pattern but not necessarily all the existing gelcoat; the important point is that the entire area be well-sanded. Do not use a grit finer than 80.
- **Masking tape.** No need for expensive tape here because the gelcoat will not bleed under the tape. If you roll some of the SB-112 onto the tape, it will strengthen the edge for easier removal.

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worse, using crushed walnut shells. Certainly those work, but beware if you fall on them with bare skin.

One of the better revitalizing schemes is to use polymer beads in a two-part linear polyurethane (LPU) paint. The LPU is very tough. The beads clump up during application to create a random pattern on top of the existing pattern, which enhances the effectiveness. However, in time even this treatment will wear through under heavy traffic. There are also pre-molded panels that you affix to the deck with glue of one sort or another. Those appear to work fairly well, but there have been reports that they start to lift off in time.

epoxy. That is where the System Three company comes to the rescue. They manufacture a special epoxy (SB-112) that acts as a tie-coat between normal epoxy and polyester. SB-112 was originally developed for the surfboard industry, where they envelop the foam blanks with SB-112 and add polyester graphics over it.

Allow to cure

System Three states that gelcoat can be applied while the SB-112 is green, but that is not feasible when you need unrestricted access to the “following areas,” areas that have been prepped. Fortunately, they recommend that the SB-112 be allowed to cure, then

- **A foam roller cover.** This is used for applying the SB-112. I find a full-sized cover is too difficult to handle in tight spaces so I usually cut a 7-inch cover in half and use a 3-inch roller frame.
- **Textured roller cover.** Following a lot of testing with different brands/types I settled on a texture cover manufactured by Symphony. This can be found in the faux finishing section of your local home center. Not all of them carry it; I had to scout around to find it at my local Lowe's store. I cut these in half. Purchase a couple of these covers. You can keep a cover clean by dipping it in acetone from time to time, but with the price of acetone it's more cost-effective to throw away a cover once the gelcoat on it starts to set up.
- **SB-112.** A 3-pint kit is more than ample for a 36-foot boat.
- **Gelcoat.** It is difficult to estimate the amount required. I used 2 gallons on my deck project. If you plan to apply white, it can be purchased at most chandlers, but if you want a color, your sources are limited. I purchase from Fiberlay, which has a wide range of stock colors available. The important point here is that you do not want gelcoat that has wax mixed in it, which, unfortunately, is the way it is normally packaged. Gelcoat will not surface cure if left exposed to air while curing. The usual way to overcome this is to mix wax with the gelcoat. The wax rises to the surface after application and blocks air contact. This wax is very difficult to remove and the last thing you want on non-skid is a waxed surface. So when you purchase the gelcoat, make certain it is wax-free.
- **MEKP.** The catalyst for gelcoat, MEKP is usually used in a 1.5- to 2-percent ratio, depending on ambient temperature.
- **PVA (polyvinyl alcohol).** This is sold as a mold-release agent and is a liquid that dissolves only in water. It is ideal for surface-sealing gelcoat, as it can be sprayed or brushed on and, once the gelcoat has cured, it is easily washed off with water and light scrubbing. I used a quart on this project.

- **Colloidal silica (cabosil).** This will thicken the gelcoat and add strength.
- **Talc.** Talc will eliminate the natural gloss of the gelcoat and provide some additional strength. If you like a full-gloss, non-skid finish, you can overlook this additive, but you will probably need to increase the amount of silica to compensate.

Practical application

Now to the nitty-gritty. Mask off the non-skid areas, prep sand, wipe clean with acetone, and apply SB-112. Once the SB-112 has cured (minimum overnight), sand it, wipe clean with acetone, and apply the gelcoat following the process described below. If you use any brand gelcoat other than Fiberlay, experiment a bit with the following recipe by doing test patches on plywood. You need to create a mixture that, when applied, will produce peaks which will round off before curing.

The recipe I use is 10:3:1 (by volume) gelcoat:silica:talc. I find a 500-milliliter batch is all I can handle before it starts to go off in the can. Using that amount, I start with 500 milliliters of gelcoat, adding 150 milliliters of silica, and then 50 milliliters of talc.

Mix in the additives in small amounts since, while the talc mixes in easily, the silica tends to form clumps which must be broken down while mixing.

To facilitate working, I pre-mix four or five uncatalyzed batches, then add the MEKP immediately before I use that batch. It is also wise to put aside about 8 ounces of uncatalyzed mix for later touch-up.


To apply the gelcoat I find it works better to pour an amount on the area to be covered and then spread it out, rather than filling the roller from a tray.

Spread it around, covering the area to an even depth, using medium pressure on the roller, then go back over it using absolutely no pressure on the roller to remove any ridges you may have formed.

Important points:

- **Do not go back over an area** once it has started to set up. If you do, you will create a very fine spiky pattern.

- **Do not skimp on the amount** you apply. Too little will produce a very spiky and unsatisfactory pattern. Allow the roller to dictate the amount while using medium pressure.
- **Do not use a roller cover once the gelcoat in it starts to set.** Throw it away and start with a fresh cover.
- **Do allow the gelcoat to partially set up** before applying the PVA. Most household hand sprayers will give a reasonable spray pattern but, as PVA is thicker than water, it may not produce a fine spray. If you can't find a good sprayer, be prepared to brush on the PVA. Do this once the gelcoat has set up sufficiently so that the brush will not disturb it, and apply a light coating.
- **Do remove the masking tape immediately** after you have covered a specific area. While it can be removed later, it is so much easier to do it now.

Allow the project to cure for at least 24 hours, remove the PVA and inspect for any areas where the gelcoat has not fully covered the deck. Once these areas have fully dried you can use the previously saved gelcoat mix, now catalyzed, and cover these areas by dabbing mix into/onto them with a stiff brush. Cover these areas with PVA and allow them to cure as above. 

Brian Cleverly ran a yacht refurbishing company in Sacramento, California, for many years. When not working on clients' boats, he bought insurance write-offs and eBay castoffs for resale. Now in his early 70s, Brian is rebuilding a Fuji 32 for his own use in solo extended offshore cruising.

Resources

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