

About the Stencils

The stencils I will make for your boats are cut with high performance vinyl; after initial testing, no other vinyl product (including vinyl made specifically for stencils!) stuck to the boat well enough to prevent leaks under a popped edge. High performance vinyl, while more expensive, does the job and does it right, period.

The stencils are cut and weeded, leaving the letters open for painting. There will be an approximate one-half inch margin around the letters which you will extend with masking tape once the stencil is on the boat. The names are cut as one continuous run; translation: no matter the length of your boat names, they are a single piece, properly spaced and ready to work with; no need to measure spacing or line up parts. The vinyl stencil is then covered with a transfer sheet, a clear plastic material that helps keep the vinyl under control when you have removed the backing paper.

When you receive your stencils, you may need to cut along the top edge to remove the perforated paper edge. You want the plastic transfer material and the vinyl stencil to share the same cut edge.

Stencil Application Process

- a) Measure the best available surface area. You want to avoid handles, D-rings, etc.; while it wouldn't be easy, you can span a seam.
- b) Note your letter height or line length requirements. Most letters are cut to just under 6 inches cap height but you may want something shorter. Be sure to measure the **maximum line length** and include that information. Usually it won't matter, but long names may push that limit. I can set a size to be exactly X by Y, but that is usually not a critical need because most names are shorter than the maximum space.

Applying the Stencil

a) New boat or old, clean the surface with toluene or ethyl alcohol (not to be confused with standard isopropyl rubbing alcohol). You can find ethyl alcohol at most drug stores. Let the area dry. **DO NOT APPLY STENCILS TO A DAMP SURFACE.**

b) Assuming the inflated boat is sitting flat on your floor or work table, put some masking tape tabs on the stencil and stick it onto the boat where it's going to be painted; stand back and see if it looks right? Is it level to the lines of the boat? A helper makes this easier, but do your, uh,...level best. Measuring for precision is probably nowhere near as useful as simply eyeballing the straightness.

Got it level? Great. Now, if you have trimmed the top edge so that there is no paper edge remaining, put a tape hinge along the top edge of the stencil, half on the stencil, half on the boat. Tear the tape so that it is not extending beyond the stencil's left or right edges; a little shorter is OK, just not longer than the stencil. Rub it down well. You need to be able to lift the stencil away from the boat without the whole thing coming free.

Take a sharp pair of scissors (the top plastic can be hard to cut) and carefully cut in between every several letters, creating sections that are 12 to 18 inches wide; you don't want to work with long pieces which can be harder to manage, and you will tape these cuts before you paint. Once you have created sections, lift them up one at a time until you can get your fingernail up along the top edge to release the slick paper backing. Peel that paper up and away, exposing the sticky underside of the vinyl. Grab both corners of the now-exposed vinyl section and lower it into place against the boat, keeping it tight as you lay it back against the curving surface.

Take a squeegee (best option) or a credit card and press the stencil onto the boat, making sure the edges are down tight. **(NOTE: If you need to apply the stencil over a seam, leave that section for last, then follow the instructions in the next paragraph!)** Air bubbles are not such a problem but after two or three sections, you will have found a method and likely get no air bubbles.

Dealing with Seams: Remove the paper backing and lay the stencil down GENTLY over the section with the seam. Squeegee from left and right edges toward the seam. You don't want to distort the matching edges, and you do need to stretch the stencil a bit to accommodate the seam. GENTLY remove the plastic top sheet, careful to keep the stencil stuck to the boat. Use a hair dryer to warm the stencil over the seam, using your squeegee to press the now-stretchy stencil to conform to the seam. Use a rag to buff the stencil edges down tight.

When all the sections are applied, pick at the edge of the plastic transfer sheet until you get it released from a lower corner, then carefully peel it back against the boat, not toward you! Pull this away slowly so that you will see any edges that weren't stuck down well enough and might start to pull up. Find one? Simply rub it down again.

Now take some masking tape and tape over any cuts you made to create sections, then add several runs of tape to extend the edges of the stencil by several inches so that you can paint with wild abandon.

Applying the Paint

a) Thin the paint with toluene to proper consistency (like cream). This is thick stuff; use a mixer bit on your electric drill to blend it. Keep the paint covered and out of the sun or the toluene base will quickly evaporate and thicken the paint again.

b) Using a 3-inch short-nap roller, start by applying a super thin coat with so little paint on the roller that it almost appears transparent when applied. Applying too much will increase drying time and decrease absorption of the paint into the Hypalon, especially important to the bonding process on the first coat. Set the timer for one hour and walk away. Between coats keep your roller covered (try for air tight) with plastic wrap or a zip lock and stored in your flammables cabinet. (I have kept them, tightly wrapped, in a bucket of water!)

c) Additional coats (a total of four recommended) can be added each hour.

Removing the Stencil

After about 8 hours, wave a heat gun over the stencil cut outlines to soften the paint and allow for sharp edges when removing. Pull sideways **away** from the cut edge as if you were making the letter wider; don't pull up and toward you! Tweezers are the best way to grab the edges of the centers of letters that are now painted over.

Drying time

Allow a minimum of 3 days at 80 degrees drying time prior to folding. It is ideal to keep inflated as long as possible and left baking in the sun up for to a week before using the boat.

Folding after Painting

Rolling deflated boats is not recommended!

a) When deflating the boats, work the wrinkles out of the painted areas so that when you make folds the area is flat.

b) It is strongly advised that you heavily powder it with a combination of baby powder and corn starch. (One liter per boat) as an additional precaution you can put plastic between the folds and the other surface areas.

c) Take special care when folding the boat; don't make any folds on the logo area or it will cause creases.

Removing Painted Names

a) Remove the air from the tubes and work the wrinkles out of the painted area.

b) Put boat in a highly ventilated area.

c) You will be using toluene to clean off the paint but you don't want the toluene to run onto the urethane bottom chafers. You will need to prop the edge up and brace it so the toluene pools around the paint.

d) With a wide putty knife (2 inches) that you have rounded the edges on, use it to scrape the paint off the soaked area. You should be able to remove about 80 percent with the first swipe. Then with a clean towel that has been soaking, wipe off the remaining paint.