

# Board Glassing

## Chapter 6

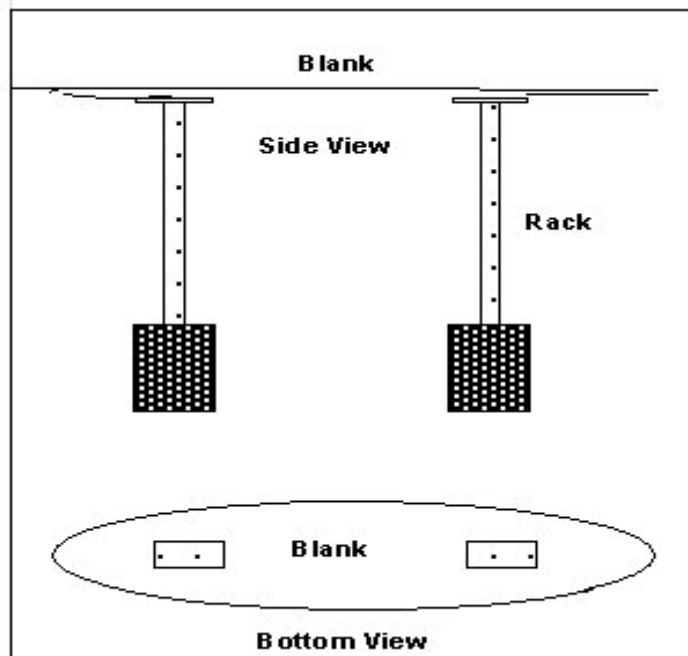
*The Complete Surfing Guide for Coaches - Bruce "Snake" Gabrielson*

### Glassing Guidelines

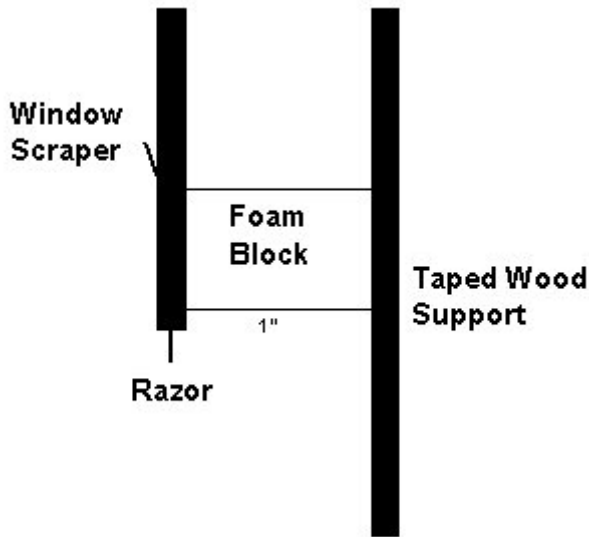
Like shaping, there is probably any number of ways to successfully glass a blank. Yet there are also plenty of ways to ruin a blank with an improper glass job. This section describes a very conservative approach to glassing that should eliminate many of the problems a novice glasser will face.

Before glassing, a certain amount of material will be required. Make sure to obtain enough cloth to cover the board twice plus about two feet extra of 3-foot wide, 6 ounce bleached fiberglass cloth. Bleached cloth disappears with resin, and will prevent the necessity to pinline on both the top and bottom of the board because of two shades of cloth, or the cloth discoloration around a glassed on fin.

A glassing rack design is shown in Figure 6.1. For glassing, only a small 4" x 6" pad, covered with foam rubber and taped over, touches each end of the board as shown in Figure 6.2. The board is held just above waist high. This allows plenty of room for the glasser to get under the board when squeegeeing rails. The 2" by 4" stand can be mounted on plywood, or mounted by placing the board inside a 5 gal. bucket and filling with sand.



Here is a list of the necessary items that you will need: A roll of 1" wide and a roll of 1/2" wide high temperature masking tape, a single edge razor blade, a rail cutting tool (shown in Figure 6.3), scissors, a soft squeegee 6" to 8" long and 4" wide, three 2 quart buckets, wood tong depressors for stirring, hardening agent, about 4 to 5 quarts of non-finish (non-hardening) resin, a 4" wide natural hair brush, and a soft bristle wooden handle brush will also be needed. If fins are to be glassed on, about 1 foot of fiberglass rope per fin is sufficient. Not all of the rope will be used. More or less resin is necessary depending on experience. Don't get caught short.



Resin comes in two types, one of which contains wax and hardener and cures to a hard finish. Since finish resin can not be resined over without sanding, non-hardening resin (laminating) is available, which will cure to a hard surface but can be resined over with no ill effects. Finish resin will only be used after the fiberglass coating is attached and fins have been mounted.

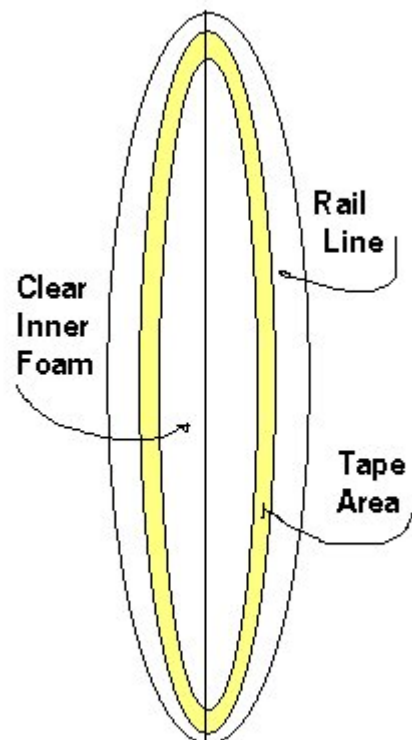
Don't get the hardening agent mentioned here confused with catalyst. Catalyst is used to make the resin cure. Sometimes catalyst is referred to as a hardening agent, but this is not really the same as the hardening agent

mentioned here. This hardening agent contains wax products that make the resin cure to a shiny sandable finish.

### Preparing the Blank

Before touching the blank, wash your hands or put rubber gloves on. Blow off and remove any excess foam dust from the blank with the hand brush and place it deck up on the glassing stand. With the 1" tape roll in your right hand (right handed), and using your other hand as a guide along the rail, walk a tapeline down each side of the board about 6 inches wide. Use the tape roll on edge to ensure the tape is completely attached to the blank.

Next, using the cutting tool held at arms length in your right hand, carefully walk each rail with the cutting tool held exactly at a right angle to the blank rail and with the razor edge cutting the tape slightly. The attached tape will be cut along both rails and then the outer tape will be removed leaving the board as shown in Figure 6.4.



## Decal Attachment, Air Brushing, and Pigment Colors

Decals and airbrushing are placed or painted on a clean blank prior to glassing. If a decal is to be placed on the board, it should be mounted under the cloth just prior to adding resin to the cloth. Squeegee the decal on the blank at the desired position using a small amount of straight non-hardening resin with no catalyst added. The resin must be the same as that used for glassing on the cloth, as the blank will stain to the color of the resin applied.

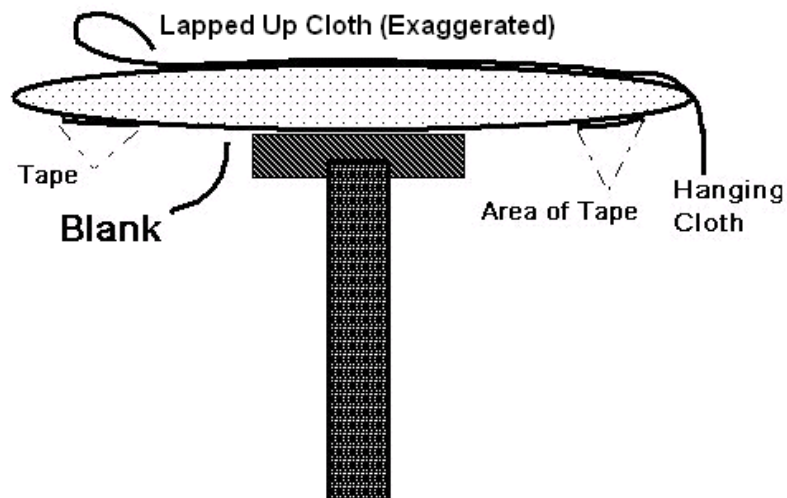
Airbrush designs should be placed on a newly shaped blank before glassing, but with enough time for the design to dry. Use a previously tested water based acrylic if possible. Also, make sure the loose foam has been blown from the blank before applying colors.

Pigment colors are mixed with the resin prior to glassing. For a bottom color, mix the pigment in the resin used with the cloth. For a top color, the rails are first tapped to allow the excess resin to be worked off while preventing any discoloration of the lower glassed on cloth. Mix slightly over a pint of non-hardening resin with the pigment, pour, and squeegee on to and across the foam.

Make sure no excess resin is left on the blank. When dry, proceed with glassing the top layer of cloth. Note that glassing the top and bottom can be reversed with the colors and pinline going on the bottom rather than the top first.

## The Outer Cloth Coating

There should only be one layer of outer cloth necessary on the top and bottom of the board. If a super light blank or a longboard is being glassed, a layer of 4 ounce cloth on the deck may be necessary. If so, the cloth must be cut to fit after the bottom is glassed and then resined on by carefully squeegeeing the resin into the top cloth and laid flat when placed over this bottom cloth.



Turn the blank over (bottom up) and place a fiberglass cloth over the surface extending about 3 inches from the length of the board at each end. Carefully cut the cloth along both sides until the free cloth hangs about 3" to 4" below the bottom of the board all the way around. Also cut a small notch in the cloth at the nose and tail section so the cloth can be overlapped at these points. The cloth should only reach to the middle of the tape area on the deck of the board when lapped.

When ready, tip the cloth edges up to the top of the board as shown in Figure 6.5, then mix the non-hardening resin in a slow curing batch (20 min.) and pour just less than half along the lapped cloth and one side of the blank. Quickly work the resin into the edge cloth until saturated, then flip it back over the edge and repeat the process on the other side. Pour the remaining resin down

the middle stringer and begin squeegeeing the loose resin from the middle to one outer edge of the blank. Don't push down too hard on the squeegee; just use light pressure.

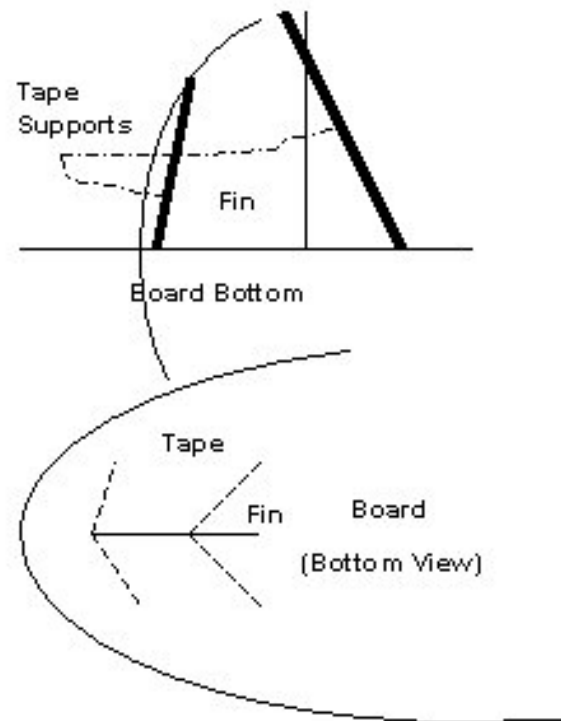
Once the loose resin is worked over the edge, start at the middle of the board on the edge, and begin working each rail to the nose or tail while squeegeeing and removing loose resin. The cloth edge will attach over the deck tape. Work the cloth around one side of the nose and tail sections first, and then overlap when the other rail is squeegeed. Make sure no resin buildups appear on the cloth.

When the resin has begin to set but is still not fully hard, turn the board over and carefully (very shallow) cut completely along the tapeline with a razor. Make sure all cloth strands are cut before removing the tape as these can pull the cloth loose from the blank. Pull the tape and excess cloth off the blank and then turn it back over to complete curing.

### Top Lamination and Fin Attachment

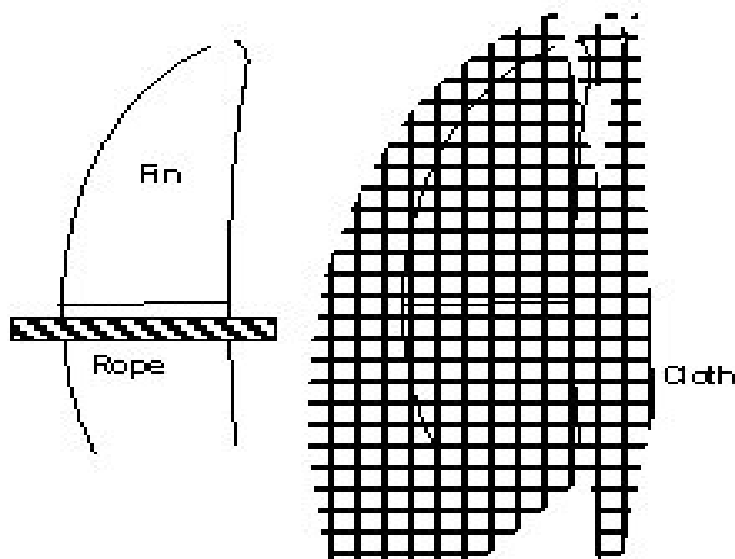
The deck lamination is performed similar to the bottom lamination, except that blank tapping is not necessary. Bleached cloth will not show once resined down. The cloth hanging from the blank edge can be trimmed off about 3 to 4 inches. After saturating the rail cloth, flip it down and squeegee the top excess resin to each rail. Beginning from the middle, work the cloth along the rail under the blank, again letting the excess resin drip to the floor. Let the blank stand until the resin has completely hardened.

Turn the blank over and using 1/2 inch masking tape position each fin in the desired position as shown in Figure 6.6. Use a small amount of non-hardening resin as glue to hold each fin at its base. While the resin is curing, cut a piece of rope for the base of each side of the fin, about one inch or more beyond the front and back of the fin. Also cut two pieces of cloth for each fin, about 1/2 inch larger than the surface size of the fin, with about a 3 inch base lap onto the board (see Figure 6.7).



*Fin Positioned With Tape and Resin*

When the tape supports are removed and the fins are tacked down, they are ready to be resined. Put a strip of 1/2" masking tape on the outer edge of the tail section, flared out at the bottom, to allow excess resin to fall off the board. Only do one fin at a time with one resin mix. Mix about 1 pint of resin very cold, and place the rope into the resin. With your fingers, work the resin into the rope until completely saturated. Place this rope along one side of the fin base and repeat the process for the other rope.



Next, place the cloth into the remaining resin and work until saturated. Place this cloth over the rope and along each side of the fin. Using your thumbs, slowly work the rope into a smooth uniform slope along the fin base on each side. A squeegee, or your fingers and thumbs can also be used to mount the cloth on the fin and board, working excess resin to the tape and off the board. When

completed, the fin should appear similar to that shown in the pictures of Figure 6.13. The process is repeated for all fins.

Watch your resin closely for signs that it is curing too fast, such as an unusual smell, the appearance of brown spots, or the forming of lumps. Once the resin has just started to set, use a razor blade to trim, as much as possible, all excess cloth and the thick rope extending beyond the front and back of the fin. This will give you some leeway against too hot of a cure and also it can reduce the final amount of sanding necessary on the finished board.

### **The Fill Coat**

When the fins have been mounted (if using hard mounted fins), the board is ready for the fill coat using sanding or finish resin. Attach a strip of 1/2" tape along the entire edge of the rail flaring out at the bottom. Mix a quart of fast "hot" curing resin and using the paint brush, paint the top of the board. A hardening agent or wax should be added to ensure a sandable surface. Use the brush hairs with slight pressure to work the resin until you have a uniform coating and excess has been dripped off the taped edge. Pull this tape off just after the resin begins to set.

When the first coating is hardened, flip the board over and repeat the process. Put the tape on the lower resined edge, just barely below the previous tape line. After painting the fins, make sure the excess resin hasn't accumulated at the fin base. To do this, use a thin coat on the fins and work the resin in a downward manner to the tape line.

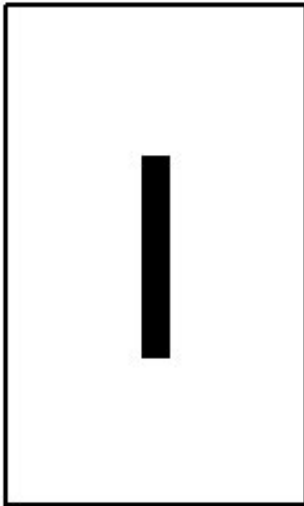
### **Fin Box Templates**

Fin boxes are not difficult to install provided you use the correct equipment and the proper procedure is followed. When glassing, utilize the same procedures from above that have been suggested. However, if a box is to be used, make sure you have left sufficient blank thickness in the tail section of the board for the box to fit.

To begin with, you need to make a box template. If using different size boxes, it's best to make a separate template for each size rather than one adjustable box. The following method of template making is probably not the most efficient, but it will help prevent you from making a mistake that could force you to start over.

Cut out a piece of 1/2 inch plywood 2 feet by 2 1/2 feet using a table saw to ensure that straight right angle cuts and parallel cuts are made. Place the box you are planning to install directly in

the center of this plywood piece (make sure it is centered at each end) and draw its outline on the plywood with a pencil. Next, using your router with a small bit (1/4 - 1/2 inch), and a jig saw, cut out the marked area to about 1/8 inch beyond the pencil mark. The small bit works best in the corners.



The corners should be as close to square as possible. The cut might be difficult, as there will be some precise hand work involved. Using the 1/2 inch plywood will help prevent serious over-cutting of the corners, and using a small tooth blade in the saw will help reduce rough edges along the straight cut. Go slow for best results. The figure (6.8) shows about what your plywood will look like.

After the hole is cut, put a 1/2 inch cutting bit in the router. Place your pencil on the outer edge of the metal flange holding your router, and with the router off, move the router around the hole. This will draw a second line on the plywood at the edge of the flange. This line will be the edge of the top board pieces that will prevent the router from cutting larger than the intended hole. The router cutting bit should fit just at the edge of the cut plywood.

Using approximately 1/2 inch by 1/2 inch boards, cut first two pieces extending the longest distance of the plywood flange mark, then cut a piece for the top and the bottom. These pieces should then be both nailed (use short nails) and resined to the plywood as shown in Figure 6.9.

After you finish attaching the top pieces, cut the outside edge of the plywood to about 2 inches from the attached pieces. I use a bench saw and make straight cuts from the bottom. Be very careful you line things up right so you cut even distances on both sides and don't over cut.

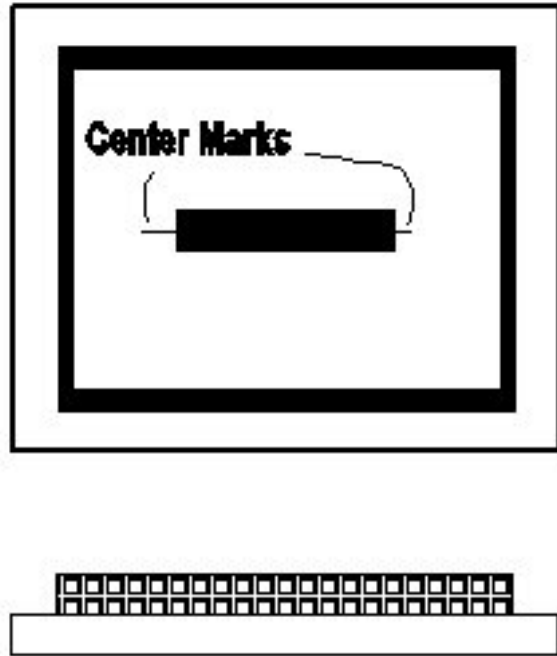
When completed, glue a thin piece of rubber (I used wetsuit rubber) on the bottom of the template and you're almost finished. The final activity is to mark the top and bottom of the inbox hole exactly at the middle. This mark will be used to line up with the board stringer when cutting the board's inbox hole.

## Cutting the Finbox Hole

Place the fin box on the edge of the template cut with the 1/2 inch diameter bit in the router (the router will be upside down with flange directly against the plywood), and adjust the bit to a distance about 1/8 inch beyond the finbox. Measure the board's tail section to ensure the blank is at least 1/2 inch thicker than the installed box will extend. I sometimes sand a finbox down to fit if a tail section is too thin, but I don't advise this for non-professionals.

The distance for the bit extension is critical. Once adjusted, make sure the router flange is tightly secured to the router or you could have the bit go too deep and cut through your board.

With the board on its top on your sanding rack, lay the finbox on the tail section and make two small lines (top and bottom of the finbox) with a pencil. Make one last eyeball estimate back from the tail section to ensure the box cut will not go through. Next, lay the template over the tail section, lining up the middle marks with the stringer, and over the marks you made on the board. As a final precaution, tape the top and bottom of the template to the board to ensure it doesn't move. You're now ready to cut.



Place the router bit in the center of the template over the stringer, and cut straight down until the flange meets the template. From that point, move around the template until the hole is cleanly and evenly cut out. Remove the template and put one end of the finbox into the hole to make sure it will fit and not be too snug.

If the bottom of the board had a vee shape or was not flat, you must be careful to ensure that the template was exactly level so the bottom of the cut was horizontal. Taping the template securely and level first will prevent an uneven cut.

## Installing the Box

Lay the box on two layers of 6 oz. glass and cut such that each piece extends about 3/4 to 1 inch above the box. Put a piece of 1/2 to 3/4 inch wide masking tape over the finbox slot to ensure no resin leaks in. I seal the tape with a straight edge to make sure it is solidly secure. Tape the board hole cut out about 1/2 inch, overlap the tail with an edge, and turn up the upper tape



edges as shown in Figure 6.10 to make sure excess resin drains off.

Mix a colder (not hot) batch of finish resin and saturate the two cloth pieces. Laying the saturated cloth over the hole, push the finbox down into the hole evenly. I sometimes will paint a very thin layer of resin on the foam first, but be very careful the layer is thin or you will not be able to get the resin out and the finbox will not go all the way in.

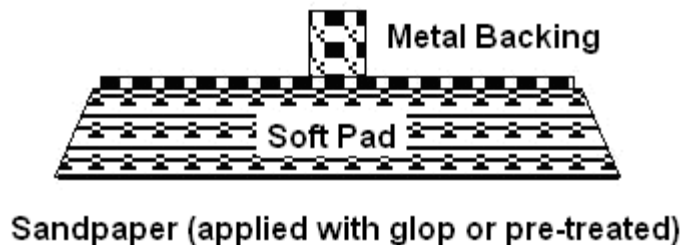
You need to work the box down until it is about even with the board's bottom, and not slanted. This ensures the fin will be straight up and down when installed. With the cloth sticking up around the box as best you can, squeegee off any excess resin over the back of the board.

You must then wait with a straight edge razor blade until the resin just starts to set. Carefully cut the excess cloth down as close as you can to the top of the box. Remove the tape over the finbox slot and the board is ready for final sanding. Remember that the tape over the slot will need to be redone when you gloss. I use narrow tape for this so you don't have a funny looking un-glossed area around the finbox after glossing.

## Sanding

After the board has been hot coated and a fin box or fin has been installed, you are ready to sand. There are several methods of sanding depending on the sander's experience and equipment. This author prefers a fast disk sander with a 7 inch soft pad for quick results. However, considerable experience (and concentration) is necessary with this equipment as is very easy to sand through the fiberglass outer layer and ruin your glass job. Inexperienced sanders should start with a heavy, slower type grinder such as those used in auto body work, or even a drill with a 5 inch soft pad. These take longer but the risks involved are considerably lessened.

Sanding pads are soft or hard foam depending on application. Soft, 1/2" to 1" thick pads are used on rails and in dips or other non-uniform glassed locations. Hard foam pads are used when sanding the flat surfaces on decks or bottoms, and also when sanding fins. A typical solid backed foam pad is shown in Figure 6.12. Note that the base of a mounted fin is non-uniform and requires a soft pad. Inexperienced sanders should use the harder pad exclusively and sand the dips by hand. Eighty and 120 grit sanding discs are the most commonly used.



Professional sanding racks are very similar to shaping racks, and in non-commercial applications are often the same. The lining covering the sanding rack should be sandpaper rather than foam so the board will not slip when pressure is applied. In commercial applications, the two supports are closer together than shaping racks, and are placed in a special room used exclusively for sanding. The racks are also sometimes equipped with suction cups to hold the board very secure, and the room has a large blower for ventilation. It is essential that the sander wear a protective dust mask, eyeglasses, and should also wear heavy clothing while sanding.

In the non-commercial, backyard environment, do the sanding outside in a shaded area on a cool day with only a slight breeze. Indirect natural lighting and outside ventilation probably is acceptable provided that only an occasional personal board is to be sanded.

To sand a board, lay it flat on the racks, deck up, and using an 80 grit pad, move the sander back and fourth several times until most of the shiny spots have vanished. Use a slow, steady stroke, applying slight pressure, and holding the pad always level with the board. Do not stop your movement at any time as this may cause a glass burn or sand-through. An inexperienced sander might want to continuously start and stop the sander in bursts until you become comfortable with the sanders steady spinning motion.

Start down the middle of the board and work to the edge closest to you. Care should be taken to avoid catching your electric cord with the spinning disc. Also, be careful the board does not slip off its rack from too much downward pressure. This can be avoided by standing close to the board while sanding and also by moving the board back and forth a few times after placing it on the racks. This will allow the racks sandpaper to get a good grip.

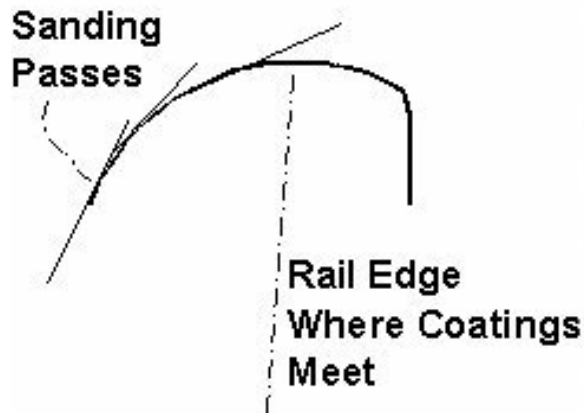
After the deck has been initially sanded, turn the board over and repeat the process on the bottom. If sanding a board with a fin box, do the box area first. Make smooth passes over the box while applying slight pressure. If the box is seated correctly, it will smooth over very easily with no burning or other problems.

When fin boxes are glassed, they sometimes float up in their hole, causing the outer box edge to be raised above the board's bottom. If the box was not seated properly, a very tricky problem may develop when sanding. Use a sureform to take the box down as close to the board as possible. Next, apply three or four firm passes over the box and on one side of the tail section only. More passes at one time may cause burning. Try to keep pressure on only the box and not the board.

Next, go to the other side of the board and repeat the operation for that half of the tail. If a light spot appears on the foam, the board has been sanded too far, and a new piece of patch cloth may be needed for repair. If yellowing occurs, the board has been burnt, and again repairs may be necessary. Slow careful work will avoid these problems.

If the board has a glassed on fin (or fins), sand the fin base as smooth as possible, but leave the fin itself until later. Inexperienced sanders should use a soft 5" pad with a drill for the fin base area. Make sure the buildup from extra rope along each side of the fin has been removed from the front and back of the fin. Sand these areas down to near the board's bottom level but don't sand too fast or you will cause a burn.

Set the board on its rail with its deck facing you. Just touching the disc to the board, work the sander back and fourth along the rail with quick passes until the top edge of where the bottom and top glass coatings is reached (see Figure 6.13). Go around to the other side of the board (remember you always sand the board side closest to your body) and work the bottom edge of the rail to this same position. Don't worry about having the rail look smooth, as this will come later. Flip the board over and repeat this same procedure on the other rail.



## Fins

Fins are fairly easy to sand once you get the hang of it. The following procedure is for a non-presanded fin blank, and should be modified if the fin is already shaped and only needs outer sanding. Place the board on edge with the tail section moved back from the stand. Using steady strokes and a hard foam pad, start at the base of the fin and run to its tip. Continue working from the thinnest edge to the back and then one pass along its back (rake) to take off the roughness and form the fin to its midpoint if not pre-shaped. Repeat the process on the other side of the fin.

If the fin is pre-shaped, there will be an outer covering of cloth over the entire fin. In this case, not many passes will be necessary since you are only trying to smooth the surface area of the fin.

## Final Sanding

Take the 80 grit sandpaper off the sander pad and fold it in half. Bend the paper slightly and began hand sanding all remaining shiny spots around the fin base first, then around all other flat areas on the board. When these are done, fold your cupped hand with the sandpaper over a rail and with even strokes from one end to the other smooth each rail. Carefully examine the nose and tail areas before going to the next step to ensure there are no remaining shiny spots.

Next, put a 120 grit disc on the sander and repeat the sanding process on the top, bottom, and fin area until they are very smooth. When completed, remove the disc fold in half, and finish hand sanding the rails. The final procedure is to dust off the board with a dry, clean cloth, or blow it clean using an air hose.

Once the board is cleaned, it must be placed in an area free from dust accumulation and where it will be dry until glossed. Do not let the board sit more than a couple of days and never handle a sanded board without first cleaning your hands. If the board sits more than a few days, it should be scraped slightly with a single edge razor blade before glossing.

## Pre-Glossing Procedures

Glassing and glossing racks are virtually identical. The glossing room must have good lighting, and must be absolutely free of dust, bugs, and any air motion. It is also best to glass before dark, as both moisture in the air, and bugs you can barely see will cause big problems with your final product.

After cleaning your hands (or getting a fresh pair of rubber gloves on), placing the board on the racks, and brushing off any loose dust on the sanded board, take a strip of 1" masking tape about the lame length as the board width and make several passes along both sides of the board. Repeat this process several times with new tape until the tape picks up virtually no fine dust. After this final cleaning, the board is ready for pinlining and glossing.

## **Pinlining**

Two methods are available for pinlining. The early day method used resin and pigments, while a more modern, less messy method is to use acrylic paints or pens. Acrylic pens are recommended for inexperienced people since it's easy to remove the line with a razor blade and there isn't a long wait for the resin to cure.

To position the pinline correctly, you must pre-tape where the line will be positioned. The tape must be smoothly and evenly placed on the board surface with no wobble. Taping is always performed with the tape roll in your left hand, if right handed (or right if left handed), and your right thumb and index finger used to position the tape and rail. If the pinliner is inexperienced, several tapings and high temperature tape rolls may be necessary to get the feel of what you are doing. Inexperienced pinliners should use 1 inch tape. This author prefers 3/4 inch masking tape for pinlining, while more experienced pinliners often use 1/2 inch tape.

Starting at the nose of your board, stick one edge of the tape slightly under the trim line of the blank, and pull out about two feet of tape continuously. Holding the tape roll in your left hand while keeping a slight amount of pulling pressure, slowly move the tape line along the trim line from nose to tail. Your right hand is cupped slightly around the rail while your thumb is applying pressure on the tape for adhesion.

Try to hold the roll of tape as close to the rail as possible since this helps keep the tape line uniform. Quite a bit of pressure and pull (the tape is kept taught) will be necessary to make the tape uniformly follow the trim line. When the tail is reached, break the tape and repeat the operation on the opposite rail using the same procedure, except starting at the tail first. If the tape breaks during this process, pull it off and start over.

After eyeing the tape, first from the nose and then from the tail, to see if all lines are even, the top side of the pinline tape is applied. Hold the tape roll in your right hand and use your left hand index and middle fingers to stick the tape to the board. The upper tape should be brought as close to the bottom tape as desired to achieve the intended final pinline width.

Good pinliners will keep their lines about 1/8" thick. The line thickness must be eyeballed to stay approximately the same width all the way around the board. Thick spots or uneven bends in the tape require re-taping.

Tails and noses can be taped in various ways. Look at a few boards to see how widths and corners are handled. Usually, tail edges have two short strips of tape placed in a vee shape across the bottom first, and then the rail tape is applied across and over, forming the corner. The area where the tape overlaps is cut away by hand, as well as the pinline width, using a razor blade.

After taping is completed, secure the tape roll and rub it fairly hard all along the tape line. This will press the tape securely to the board and prevent the acrylic or pigmented resin from running underneath. If resin is used, a second layer of tape under the bottom tape will be necessary to prevent any drip from touching the board.

## **Applying the Pinline Ink**

Apply the ink using whatever tool you prefer. I like using an artist's knife and applying the ink like putty, but many people prefer to use a narrow brush or apply directly from a tube. A brush is used if the pinline is resined on. If resin is used, mix about 200 cc of resin with 6 drops of catalyst and two drops of DNA hardener for a fast hardening batch.

The tape must be pulled immediately after applying the ink or resin. Work quickly when using resin since the tape must be pulled before the resin starts to harden. Resined pinlines that look wobbly after removing the tape should be immediately wiped off with a clean acetone saturated cloth, or with razor scraping if they have started to harden.

Resined pinlines must be completely hardened and set before they can be glossed over as glossing too soon will cause them to bleed. Press your fingernail on the pinline and see if it is hard enough to not show any marks. Inked on pinlines may be glossed immediately after application.

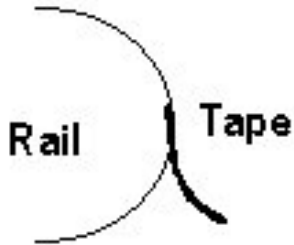
## **Glossing**

Glossing is very difficult and many precautions must be taken if your finish is to look shiny and smooth. Gloss in a room with no dust, and during the daytime when the humidity is low and no bugs are flying around. However, the clean environment is only part of the solution; a very clean brush is the real key to smooth finishes. After a brush has been used once, excess unremoved resin hardens at the base of the bristles, regardless of how well the brush is cleaned. These small pieces will eventually work their way loose and get into the gloss on subsequent boards. Brush hairs also start to come loose after a few cleanings in acetone, and these must be removed when they get into the gloss. Needless to say, glossing brushes only last so long and must be replaced when they start to deteriorate.

The best glossing brush is a 4" or 5" wide natural hair brush with an unfinished wood handle. Acetone will melt the finish on a handle and will also destroy some synthetic hair bristles. To clean the brush, first squeeze all the loose resin out of the bristles with your hand. Work acetone well up into the brush base, and then rinse in progressively cleaner acetone until no resin is detectable. After cleaning, shake the brush vigorously until dry. The brush should be hung upside down in a clean area.

Glossing or finish resin is available off the shelf from many surfboard shops and distributors, and does not need to be blended with styrene or hardener. Only people with experience in glossing should use these agents as they can ruin your finish if used improperly. About 30 cc of styrene is mixed with 2 drops of DNA and just over 2 pints of resin for a professional finish. If using finish resin, add about 40 cc of catalyst to just over 2 pints of resin and mix using a wood stirrer. A good procedure to follow before glossing is to first clean your brush well and then strain about 2 pints of resin into a clean non-waxed paper container. Ordinary paint strainers work well.

Before you pour or mix the resin, tape around the board at the maximum extension of the rail line, deck up first, using 1" high temperature masking tape with the bottom flared out as shown in Figure 6.14. Make sure the bottom edge of the tape has not accidentally been pushed to the board, as this will allow resin to flow onto the bottom surface rather than off the board.



### **Lower Edge Flared Out**

You are now ready to mix and apply the gloss coat. Hold the brush the same as you hold the squeegee, gripping the base rather than the handle. Mix the resin and catalyst together and pour 1/2 the contents down the middle of the board from nose to tail. Pressing lightly down on the brush, work the resin out to the edge of the board closest to you using slightly slanted middle to outside strokes.

Next, go around the board and again pour your remaining resin down the middle from nose to tail. Again, work the resin out to the edge of the board closest to you. The board should now be completely covered with a fairly uniform coat of resin.

Covering from nose to tail, make diagonal strokes with the brush across the entire width of the board in the opposite direction from your first strokes, slowly working any thick resin buildups towards the outer edge. Repeat the procedure one last time with strokes again in the opposite direction from the previous brushing. This process will cause the resin to have a very even thickness throughout.

For the final brushing, hold the brush so that the bristle ends slightly touch the board surface. Make long, horizontal strokes starting at the middle of the board and work them out to each rail. The final stroke along each rail should have slight pressure applied to remove any thick resin buildups that have accumulated along the tape. If the resin was applied smoothly, no heavy spots should be visible on the deck or rails.

I like to pull the tape just after the resin starts to set. This helps keep edges smoother for the final rail sanding and buffing. This is also a good time to carefully check the finish over to ensure no specs of dust, loose hairs, or other problems have shown up in the finish. If the resin was set off too hot or there was dust or finger marks on the board, the resin will separate, and the board must be re-sanded and glossed again.

After the board has set for several hours or until the next day, the process is repeated on the bottom of the board. Tape the edge just on top of the previous tape line and also over the fin box (the box only) if there is one. If a hard fin is mounted, make sure you brush all resin buildup from the fin that can accumulate at its base. This may require only placing a very light coat of resin on the fin and then strongly brushing off any resin drops as soon as they appear.

### **Buffing**

After the gloss coat has set, use a razor blade to lightly take off the resin buildup along the rail tape line. Next, using wet fine grit emery cloth, sand down this rail edge and any other blemish in the outer coating. Finally, using blue shell or a similar car wax, buff the rails and overall surface of the board to a shiny finish. Be very careful to keep moving the buffing pad in a circular direction and not to leave it in any one spot too long or it will burn the board's finish.

Some people use the same equipment, a grinder, for both sanding and buffing. Buffers operate at higher speeds (rpms), resulting in a glossier finish than can be obtained from a sander. This speed is what can cause the surface to burn quickly if the buffer is not controlled. Practice on an old board before you try buffing a new one.