

Building a live edge river table is a very creative and unique DIY project that merges woodworking and epoxy. This table was made out of a kiln dried slab of pine along with three different epoxy systems available at Rockler. Penetrating Epoxy to seal the wood, Table Top Pro for a base layer of color (optional), Deep Pour epoxy for the river channel and finished with Table Top Pro as the final clear coat. See the steps below for more detailed descriptions.

First, you need to make a mold out of melamine or MDF board. The mold needs to be formed to fit the live edge slab of wood. Once the mold is cut, you will need to apply sheathing tape to the inside of the form which will enable the epoxy to release. Insert screws on all edges to the base and apply silicone to all inside edges to ensure the mold will not leak.

## Step 1: Apply Penetrating Epoxy Sealer

Using MAS Penetrating Epoxy sealer, mix correctly at a 2:1 (two parts resin:one part hardener) into a cup and stir for 2-3 minutes. Pour mixed epoxy onto the wood and coat all sides of the wood slab using a paint brush or by rubbing it into the wood by hand with rubber gloves on. This step will create a barrier that eliminates any bubbles or foaming when epoxy comes in to contact with the wood. Once all sides are coated with epoxy, prop them up on plastic cups so the epoxied slab does not bond to your workspace. Any type of plastic or silicone surface will work for this. Let epoxy cure overnight.



## Step 2: Sand Wood Slab

Once Penetrating Epoxy has cured, using your random orbital sander, sand down all edges with 80-180 grit paper and hand sand the live edge. Main focus of this should be making sure the top, side and bottom are flat and the live edge is lightly scuffed. Make sure all sanding debris is removed from wood slab prior to placing in to your mold.



## Step 3: Place Wood Slab into mold

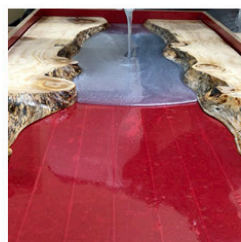
For this river table, we wanted to add color but not too much that it hides the beauty of the live edge slab and the unique character it has. Using Table Top Pro, we added two colors of pigment powder to get our desired color scheme which was a blue/grey color. This first layer of epoxy with pigment will also secure the slabs in place once it starts to cure so we did not need to clamp, screw or silicone the slab to the mold.



## Step 4: Mix and Pour Table Top Pro with Pigment

Measure Table Top Pro using the correct 1:1 mix ratio and add approximately 1 tsp of color per cup, mix epoxy resin for 5 minutes. DO NOT pour over 1/4" of epoxy on this step. Keep in mind, if you are mixing with a drill attachment the faster the mixer spins the more air bubbles you will whip into the mix. Use a controlled speed when mixing. Once epoxy is mixed, let it sit in the cup for 5-10 minutes to allow air bubbles to rise to the surface.

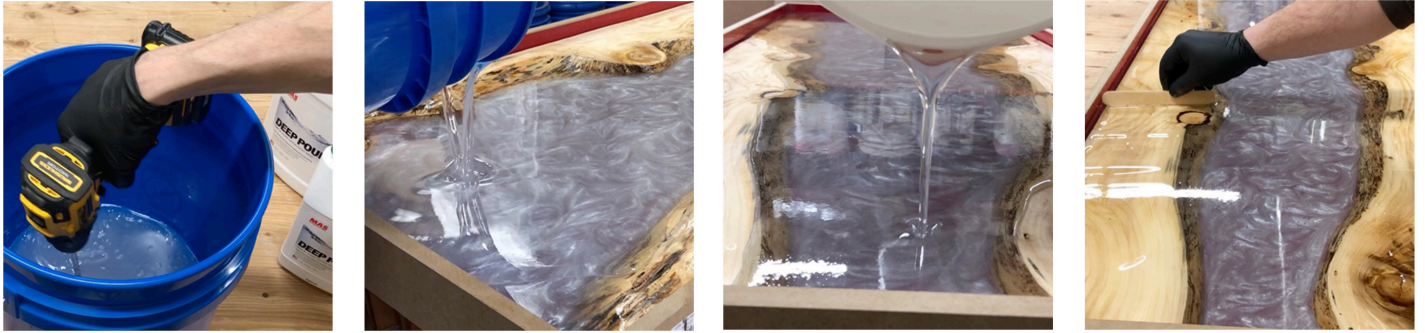
Pour epoxy into the channel of the mold and wait 10-15 minutes. Using a propane torch, apply heat 6 inches above the surface in a slow waving motion to release air bubbles. After you torch you can start to create your own pattern using a mixing stick to swirl the epoxy. This is the fun part and you can create a interesting pattern for you base layer. Repeat this process for the first 30 minutes until the epoxy starts to gel. Once the epoxy has a syrup like consistency, swirl and apply heat one final time and cover your piece to keep off any dust from settling.



## Step 5: Mix Deep Pour Epoxy and Apply

Once the base layer of Table Top Epoxy has set for approximately 12 hrs, you are ready to apply Deep Pour Epoxy over the first layer. Using our handy Resin Calculator, measure the dimensions of the river channel that needs to be poured and the calculator will tell you the exact amount of epoxy you will need for this layer. We mixed a full 1.3 gallon kit of Deep Pour epoxy and poured into the river channel at .5" thick. Deep Pour epoxy is mass and temperature sensitive.

The mold was 42" long and 20" wide. However, the live edge width between the slabs varied from 6" to 20". Pouring at .5" in 70F working conditions will let the epoxy cure properly and not overheat which could cause shrinking, yellowing and cracking. After 12 hrs we applied the last .5" of Deep Pour on top of this layer. Since the epoxy was poured in two .5" layers within 12 hrs of each other, the layers bond together providing a 1" thick casting with out any layer lines.



## Step 6: Disassemble Mold

Once epoxy has fully cured after 24 hrs you can start to take apart the mold. Using your power drill, remove screws from all sides of the form. Next, using a mallet or hammer tap the inside edge of the mold to release the edges. Once all sides are removed you will need to remove the base from the table. Using a chisel or wedge, place the edge in between the epoxy and mold and tap the handle to separate the table from the bottom. Continue to do this on all sides until the table releases from the mold.



## Step 7: Sand River Table

Now that we have the river table demolded, the next step is to sand all sides of the table. Using a random orbital sander with 80 grit sand paper, sand down the surface and edges of the table. Once you have sanded the surface completely, wipe the surface down with denatured alcohol and a clean rag. Using an air compressor helps blow off any small dust particles to ensure a clean surface. For this table we went a step further and used a hand planer for the sides to remove any tape or silicone marks. This made the sanding process much easier but if you don't have access to a hand planer, sanding will work fine it will just take a little more time. We also routed the top edges to give a beveled look to the table.





## Step 8: Clean Surface for Final Top Coat

With a clean rag, wipe surface down with Denatured Alcohol. Be sure to wipe all sides down for a clean surface. Blowing off the surface one final time with an air compressor can ensure the surface is completely dust free.

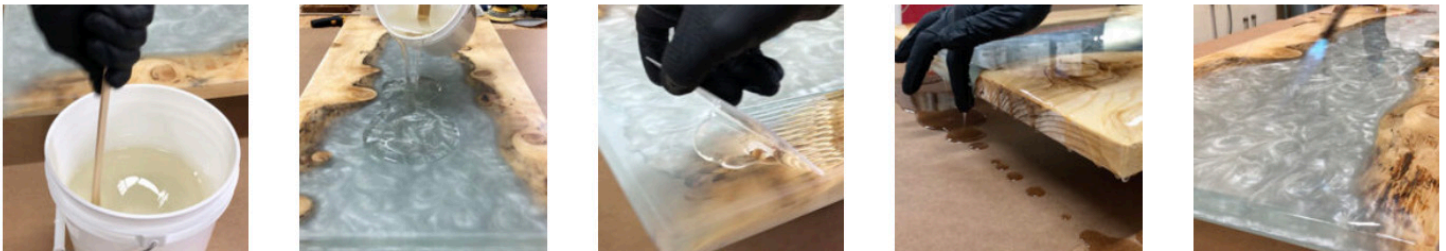


## Step 9: Apply Final Coat of Table Top Pro

Using our handy Resin Calculator, enter the dimensions of the surface with an 1/8" coating and the calculator will tell you exactly how much epoxy you will need to mix up. Once you have the amount you need, mix Table Top Epoxy at the correct 1:1 mix ratio.

One tip that helps the mixing step is warming up the Part A Resin bottle for about 5 minutes. You can put the sealed bottle under hot water and this will help the clarity and reduce the amount of air bubbles while mixing. **DO NOT** warm up both Part A and Part B.

Once you have your epoxy measured out, you can begin mixing with a power drill or mixing stick for 5 minutes. Once the epoxy is fully mixed you can let the epoxy sit for 5 minutes. You'll notice the air bubbles will rise to the surface during this time. After the epoxy has sat you can pour on to the surface and spread the epoxy to all the edges with a notched trowel or plastic spreader. When the epoxy is going over the edge, you can use your finger with a rubber glove on and rub the epoxy along the edges. Let the epoxy self level for 10 minutes when it is spread on the top of the surface. Once it is all even you can begin to apply heat using a propane torch or heat gun to release the air bubbles. Apply heat every 10 minutes for the first 30 minutes after the epoxy has leveled. Continue to rub the edges with your finger to eliminate drip marks.



## Step 10: Let Epoxy Cure

Once you have eliminated the surface bubbles you can cover the table with a piece of cardboard or some sort of protective surface that will protect the piece from any dust settling on the epoxy while it cures. After 12 hrs the epoxy will be cured at 70F. The surface will be fully cured and ready for use after 7 days. **DO NOT** rest objects on it or use it until the 7 days has passed. This could result in rings from cups or scratches on the surface. Apply a base to the table and there you go. You made your own river table!



### Mold Materials:

Melamine or MDF for Mold

1/2" Screws

Clear Silicone (DAP)

Standard 185 ml Caulk Gun

Sheathing Tape

Scissors or Razorblade

Power Drill

Level

Circular Saw

Clamps

Safety Glasses

### River Table Materials:

Dry and Flattened Wood Slab

1.5 Qt kit of Penetrating Epoxy Sealer

4 Gallon kit of Deep Pour Epoxy

1 Gallon Kit of Table Top Pro Epoxy

Mica Powder or Mixol Ink (Optional)

Mixing Cups, Sticks or Paddle Mixer

Rubber Gloves

Propane Blow Torch

Random Orbital Sander

80-180 grit Sandpaper

Denatured Alcohol

Notched Trowel

