



Tools Required:

- Concrete mixer or 1/2" drill (600 RPM or less)
- Drill/driver & bits
- Saw with a metal-cutting blade or hack saw blade with handle
- Caulk gun
- Rubber hammer
- Trowel
- Pliers
- 2" paint brush
- Carpenter square
- Tape measure
- 5-gallon bucket

Materials Needed:

- Melamine-coated particle board
- Coarse drywall screws
- Colored pigment (if desired)
- Potable water
- Plastic
- Styrofoam
- Painter tape & packing tape
- PVC pipe
- Silicone caulk (black or dark color)
- Wire mesh, rebar, & wire ties
- Sanding block & palm sander
- Wood shims
- Wooden 2" x 4" for screeding

Concrete Top Sizing Chart				
	24" L x 24" D	48" L x 24" D	36" L x 12" D	36" L x 24" D
	Quantity of 50 lb. (22.7 kg) Bags			
1.5" Thick	1.5	3	1	2.25
2" Thick	2	4	1.5	3
3" Thick	3	6	2.25	4.5

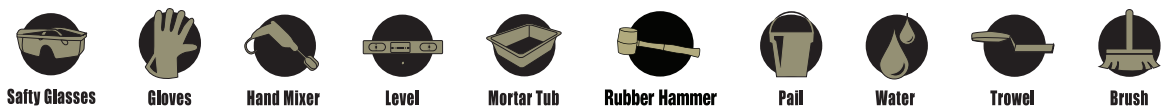
All yields are approximate and do not account for waste or uneven forms, etc.

Yield:

To determine how much material is required for a project, calculate the volume in cubic feet. Multiply the length by the width by the thickness of the finished countertop for volume in cubic inches, then divide the sum by 1728 for cubic feet. As an example, a countertop that will be 36" long x 24" deep x 2" thick will need 1 cubic foot of wet countertop mix – calculation: $(36 \times 24 \times 2) / 1728 = 1$ cubic foot. Each 50 lb. bag will yield approximately $\frac{1}{3}$ of a cubic foot. So, 1 cubic foot would require 3 bags of product.



Helpful Items



Preparation

- Make sure the frame is completely built before mixing the Concrete Countertop Mix.
- Be sure that the mixing bucket used is clean of any debris from prior use.
- Measure out all of the additives to be used prior to mixing. This will create a consistent mix when casting multiple pieces.



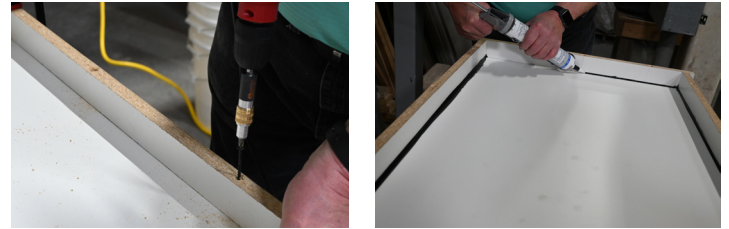
Step 1:

Make a form using ¾" melamine-coated particle board to the dimensions as desired.



Step 2:

Securely fasten sides of forms to base with coarse screws every 6-8 inches. Seal all inside seams using black silicone caulk.



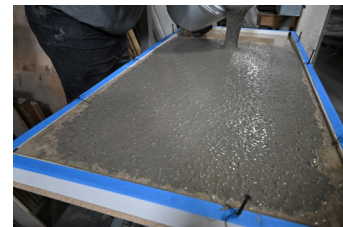
Step 3:

Mix each 50 lb. bag of Premium Concrete Countertop Mix in a 5-gallon bucket or mortar mixer with 5 ½ pints of clean, potable water for 3 minutes. Allow to sit/slake for 2 minutes, then remix for 2 minutes.



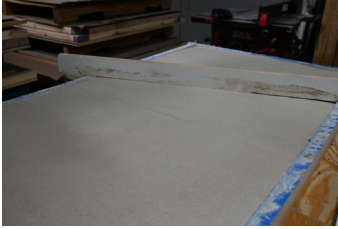
Step 4:

Fill the countertop form with the mixture, ensuring it fills in around any reinforcement. Knead the material with a trowel to ensure it is evenly spread throughout the mold. This also helps eliminate air holes. Gloves should be worn during this process.



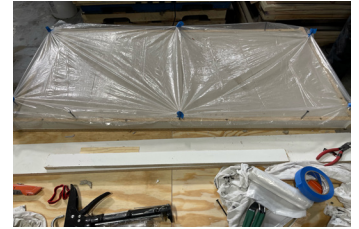
Step 5:

Once the form is filled, vibrate it by tapping the form with a rubber mallet around all the edges or using a palm sander without any paper on it. This is a crucial step to minimize pinholes in the countertop surface. If needed, screed the excess material away. A wood 2 x 4 slightly longer than the width of the form works well. Move the screed in a sawing-type movement against the top of the form.



Step 6:

The mix will begin to set within 1 hour. If you added a wire mesh, now is the time to snip off the wire ties holding the mesh. Cover the countertop mix with plastic and allow it to cure for 18-24 hours in dry conditions.



Step 7:

Once 18-24 hours have passed, remove the plastic from the countertop surface and remove all the screws holding the form together. The countertop is still fragile, so be careful when removing the forms. If necessary, use small wooden shims to help remove the side panels of the form. Finally, gently remove the bottom of the base.



Step 8:

Using caution, lay the top down on a smooth, flat surface. Use a sanding block to smooth all the edges and remove any imperfections and defects if needed. Once dry, the countertop's surface can be wet, polished, cleaned, and sealed, depending on the desired appearance. If pinholes are present, use a non-sanded patch to fill any pinholes and touch up imperfections or defects along the edges before finishing.



Notes for Use with Cast-in-Place Installation:

Although Premium Concrete Countertop Mix is designed for easy use with a reverse-cast method, it can be mixed to pour as a cast-in-place countertop. When making larger countertops or working in limited spaces, the cast-in-place method can be an option, but will require polishing or honing for a smooth finish. Do not pour in place over untreated OSB, plywood, or cement board as these substrates are too absorptive and will pull water out of the mix, which leads to shrinkage cracks. Use melamine-coated particle board as the substrate, or use two coats of TechPro® Moisture Barrier to coat the forms. Reduce the mixing water to 5 pints (2.3 L). The mix will not be as runny, but will still have good flow. Final surface finishing by polishing or honing Premium Concrete Countertop Mix can be started approximately 18-24 hours after pouring the top (begin after removing the forms). Polishing is usually done with diamond wheels, either immediately after removing the forms or within 2-3 days of removing them, depending upon drying conditions.