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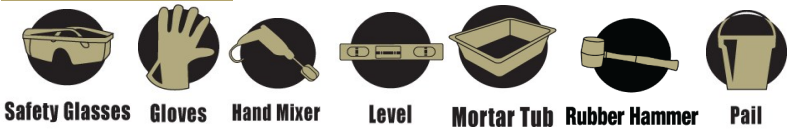
PREMIUM CONCRETE COUNTERTOP MIX INSTALLATION INSTRUCTIONS

Helpful Items:



	CONCRETE TOP SIZING CHART		
	24” L x 24” D	48” L x 24” D	36” L x 12” D
	QUANTITY OF 50 POUND (22.7 kg) BAGS		
1.5” Thick	**1.5**	**3**	**1**
2” Thick	**2**	**4**	**1.5**
3” Thick	**3**	**6**	**2.25**

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

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.

Tools Required:

- Concrete mixer or ½” drill (600 RPM or less)
- Drill/ driver and bits
- Saw with a metal-cutting blade or hack saw blade w/ handle
- Caulk gun
- Rubber hammer
- Trowel
- Pliers
- 2” paint brush
- Carpenter square
- Tape measure
- 5 gal. bucket

Materials Needed:

- Melamine-coated particle board
- Coarse drywall screws
- Colored Pigment (if desired)
- Potable water
- Plastic
- Styrofoam
- Painters tape & packing tape
- PVC pipe
- Silicone caulk
- Wire mesh, rebar, wire ties
- Sanding block & palm sander
- Wood shims
- Wooden 2”x4” for screeding

Yield:

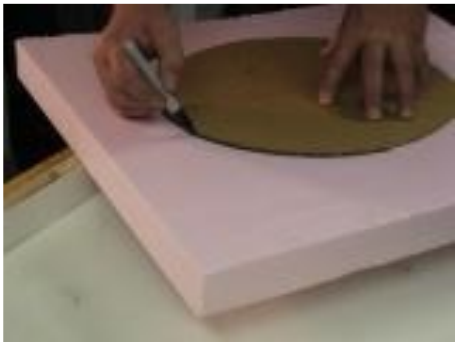
To determine how much material is required for a project, calculate the volume in cu. ft. Multiply the length by the width by the thickness of the finished countertop for volume in cu. in., then divide the sum by 1728 for cubic feet. As an example, a countertop that will be 36" long x 24" deep x 2" thick will need 1 cu. ft. of wet countertop mix (36 x 24 x 2/1728=1). Each 50 lb. bag will yield approximately 1/3 of a cu. ft. So, 1 cu. ft. would require 3 bags of product (1/.33=3).



1. Build a form for making your countertop using ¾" Melamine coated particleboard. Cut strips for the sides 1 ½" – 3" wide to match the desired countertop thickness.

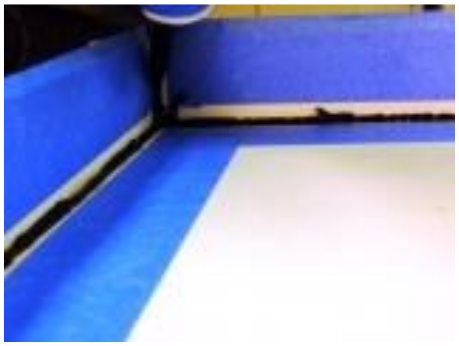


2. Drill guide holes on the side boards from the top down and assemble the side panels to the bottom panel using 2" coarse drywall screws. Fasten the sides of the form to the base using coarse screws allowing for the depth of the countertop and fastening securely to the base. Fasteners should be located ever 6-8 inches are the perimeter.
Note: If the countertop will be positioned against walls that may not be square, we recommend creating a template out of cardboard first and positioning the sides to match the template.

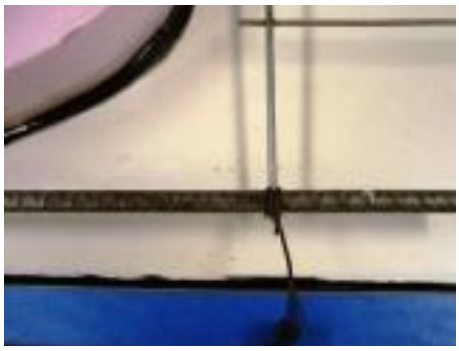


3. Sink Cut Out (if required – otherwise, skip to step #4): Make a sink cut out by using extruded foam equal to the depth of the form. Use a jigsaw with a metal cutting blade or a hack saw blade with handle to form the cut out. The cut out should be sanded to remove any rough spots and taped carefully with clear packing tape. Smooth out any air bubbles, etc. as they will transfer to the sink opening. Faucet templates can be made using PVC pipe wrapped in thin sill plate foam and wrapped with clear packing tape using the same procedures used for the sink.





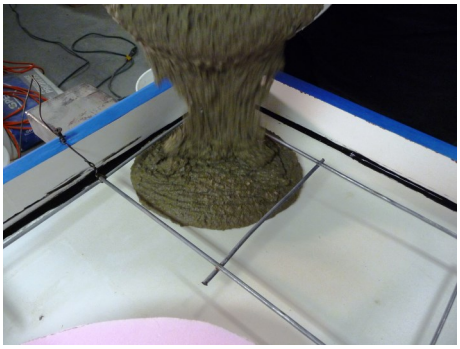
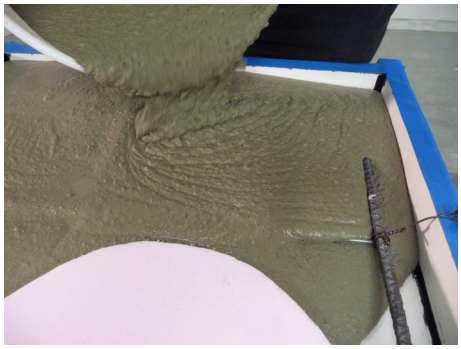
4. Attach the sink cut out and faucet pieces to the form base using black silicone caulking. Also run a bead of silicone caulking around the inside seams of the countertop form. Smooth with a moisten finger tip once to get a uniform appearance. Note: Using painters tape to protect the caulking area will speed the process. Allow surface of silicone caulk to dry for up to 1 hour prior to pouring mix into the form. Clean any silicone residue off the form with a razor blade to reduce imperfections in the top of the finished product.


5. Reinforcement: In many concrete countertop applications, it will be desirable to use wire mesh or rebar for added strength and durability. It is especially recommended in applications that will endure heavy-duty use or force. Cut a piece of welded wire mesh 2" smaller than the interior of the form and 2" away from any sink or faucet cut outs. On countertops larger than 42" or over 2" thick #3 rebar should also be used. Using wire ties attach the rebar to the welded lath. Suspend the reinforcements near the middle of the height of the forms using wire ties attached to the side forms using screws. Place painter's tape over the screw heads to create ease in dissembling the form.



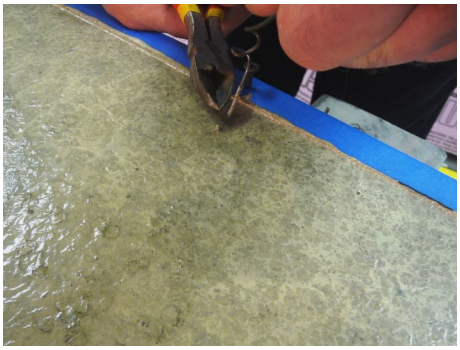
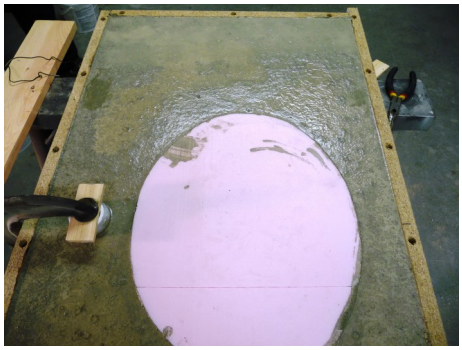
6. Mix each 50 lb. bag of countertop mix in a five gallon bucket or mortar mixer with 5½ pt. of clean, potable water for 3 minutes. Let product sit for 2 minutes undisturbed. Then, remix the product for 2 minutes until a flowable consistency is obtained. If color is desired, add pigment to water in the mixer.. If liquid color is used, displace the amount of mix water with the amount of liquid in the pigment. (A general recommendation for adding 1 pt. liquid pigment is to less the amount of liquid pigment to the overall mixing water. So if the liquid pigment is ½ solids and a ½ pt. water, subtract ½ pt. water from the 5-6 pt. of recommended mixing water. Do not overwater. Mix water and pigment well before adding the countertop mix to the colored mix water."

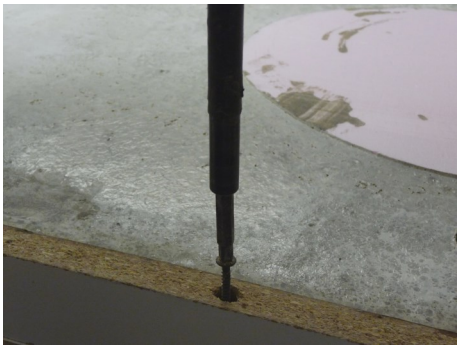
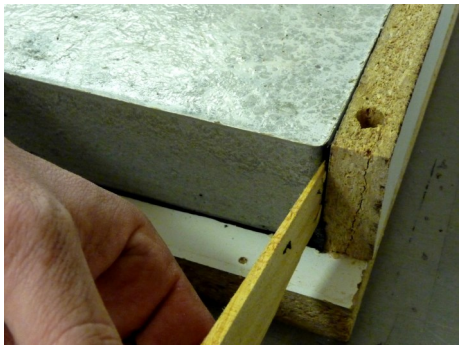

7. Fill the countertop form with the mixture making sure it fills in around any reinforcement and around all cutouts. Knead the material with your hands to assure the material is evenly spread throughout the mold and to eliminate air holes. Gloves should be worn for this process.



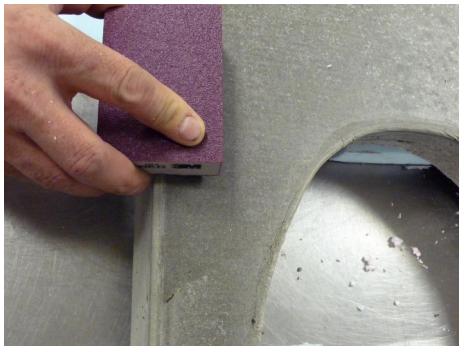
8. Vibrate the form by tapping with a rubber mallet around all the edges or by using a palm sander without any paper on it. This is an important step to minimize pinholes in the countertop surface. Screed of any excess material with a 2”x4”.


9. After the material in the form has begun to take a set, normally 1 hour, snip off the wire ties holding the wire mesh just below the surface of the countertop mix. If needed, screed the back off, using a 2” x 4” moving it in a sawing type movement against the top of the side forms. Cover the countertop mix with plastic and allow it to cure 18-24 hours.


10. Remove the plastic from the countertop surface and remove all the screws holding the form together. The countertop will still be very fragile so use care in removing forms. If necessary, use small wooded shims to help remove the sides of the form. Put down some small pieces of foam next to the base of the form. Then hold the base of the form and the countertop, lift the countertop onto the foam in a vertical position. Gently remove the bottom of the base.


11. Gently remove any cut outs. Using caution lay the top down on foam scraps with the surface of the countertop up. Using a sanding block smooth all the edges and remove any imperfections/defects. The surface of the countertop can be wet polished or cleaned and sealed, as is, depending on the desired appearance. Follow all instructions for the sealing products used. If pinholes are present use a non-sanded patch to fill any pinholes or touch up any imperfections or defects along the edges prior to finishing.

Alternative, Cast-in Place Installation Option: 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 the best 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 ProSpec Waterproofing & Crack Isolation Membrane to coat the forms. Reduce the mixing water to 5 pints (2.3 L). The mix will not be as runny, but still have good flow. Final surface finishing by polishing or honing our 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