

DIY Concrete Countertop

In this article we'll take you through the step by step process of a DIY concrete countertop project using our Z Counterform and Z Liqui-Crete Systems. From prepping and forming to polishing and finishing, we'll make sure you succeed on your DIY concrete countertop project, so let's get started!

1. Prepping Cabinets

- When preparing your DIY concrete countertop, don't screw the dewar rock down to the cabinet, simply attach it with silicone. The weight of the concrete countertop will be more than enough to hold the dewar rock in place.

2. Cutting Edges

- When cutting the forms to size for your DIY concrete countertop, use our [edge experts](#), which are specially crafted to give you ideal cutting ability. All 7 of our [countertop forms](#) will fit in the [edge expert](#), except for the commercial form. Cut the forms to the desired length using a miter saw. Be sure to have your forms cut to length and drilled with holes for installing #10 5/8 inch screws.

3. Installing Edge Forms

- When installing the forms for your DIY concrete countertop, line up your forms with the edges of your counter and screw them into your dewar rock. It's best to use an electric drill.

4. Creating a Stove Opening

- To avoid seeing the edge of the dewar rock and forms, cut a small gap, about 1/2 inch, from the dewar rock on the side where the stove will be. Also cut a small gap out of the ends of the form you will place directly against the wall. This will stop the forms from bumping into one another. Now you can screw a piece of lumber onto the side where the stove will be. You will remove this piece later, after the concrete has been poured and set. Simply cut a piece of lumber to the length of the edge and screw it in using a drill.

5. Inside Corner, Splice, and Small Returns

- To make an inside corner, simply cut the forms at a 45 degree angle with a miter saw. A clean cut will give you a clean result - two corner pieces that fit together perfectly.
- To splice pieces together, simply cut at a 45 degree angle.

- To form a return for your DIY concrete countertop, cut the form at a 45 degree angle, then attach a small piece to the end with duct tape. If you're putting in a return next to a refrigerator, make sure that the door can open all the way without hitting the return.

6. Installing a sink form

- When preparing the [sink form](#) for your DIY concrete countertop, put some painters tape along the outside. Now when you caulk it, and remove the tape, you won't have any leftover caulking on the front of your sink form. It's also a good idea to put a piece of styrofoam inside the hole and tape it to the sink form, to prevent concrete falling into the hole and damaging your sink.

7. Installing Z-Clips and Z-mesh for Liqui-Crete Mix

- The Z-clips are easy to use and are designed for DIY concrete countertops. Simply break off the longer ends and clip them to the mesh. You can then secure them in place with a #10 x 5/8 inch screw.
- To install the wire mesh, simply roll it out and cut in at the necessary length. Attach the Z-clips along the length of one side of the wire mesh, about 1 foot apart, and screw this first row of clips down.
- Next, continue to connect your Z-clips in rows approximately 1 foot apart, forming a grid pattern.
- Finally, attach a Z-clip in the middle of each square on the grid. Now you can secure the structure down by screwing the Z-clips in place, giving your DIY concrete countertop the support it needs.

8. Overview of DIY Concrete Countertop Finishing Tools

- [Magnesium float](#) - The magnesium float is sand cast. It doesn't have poxy coating, which makes it better for a DIY concrete countertop. Your float should be broken in. Broken in tools don't leave sharp edges, and they do a smoother job. The magnesium float will bring the water in the concrete to the surface.
- [Steel trowel](#) - The steel trowel allows you to flatten out concrete and gives you a polished look.
- [Countertop screed](#), [island screed](#) - The screeds are used to distribute the concrete evenly across the countertop.

9. Pouring the Liqui-Crete

- Using the magnesium float, distribute the mix evenly, then use the countertop screed to level it out. When using the countertop screed, move it across at

different angles (45 degrees from one corner, then from the other corner, then straight across) to ensure even distribution. When screeding, make sure that the screed is touching both sides of the form at all times.

- Using a [margin trowel](#), tap the sides of the form, this will vibrate the concrete and release any trapped air pockets. Use the countertop screed again to even out the concrete. Be sure to vibrate areas first before screeding them.
- If you poured too much, simply remove the excess mix from the concrete countertop.
- Once you have the DIY concrete countertop completely covered and evenly distributed, tap the sides again to remove air bubbles. Add more mix to any low areas and continue to screed.

10. Using the Magnesium Float

- Use the magnesium float to smooth out the DIY concrete countertop, fill in the low spots, and flatten it out. Drag it across the top of the concrete, applying minimal pressure.

11. Steel Trowel Finishing

- To make sure the DIY concrete countertop is ready for steel troweling, first touch it with your finger. It should leave a slight fingerprint. Using half-round strokes, and keeping the edge a little bit above the surface at an angle, apply a decent amount of pressure and drag across the surface. Do not stop at the edges, continue to drag across. Allow to set for ten minutes, and repeat the process several times.

12. Final Finishing of Concrete

- When you drag your steel trowel and hear a scraping noise, you'll know the DIY concrete countertop is ready for final finishing. Give it a good once over with the steel trowel just to be safe. Allow the concrete to dry for 48 hours before moving on to sanding.

13. Removing Concrete from Top of Forms

- Using a [gem pad](#) and 150 grit sandpaper, sand off the excess concrete from the top of the forms.

14. Snapping Off Z Counterform Edges

- With a putty knife, carefully separate the form from the concrete. There will be a few holes usually but it's not a problem, you will fill those in later. Next, using 300 grit paper, sand the corners to make them round.

15. Removing the Sink Form

- Remove the styrofoam and tape. Sand off excess concrete with a gem pad and 150 grit paper. Remove the silicone caulking around the sink.

16. Applying the Slurry Mix

- Using our [Z counter patch](#), make a slurry mix to fill in those little holes along the edge of the countertop. Apply by hand, sponge off, and then sand by hand.

17. Sanding Countertops Using Z grit - Disk

- Attach the [Z grit - disk](#) to your sander. It has velcro so it's easy to attach. Starting with the 80 grit, begin sanding the countertop surface. Move on to the 120 and 220 grit and continue sanding. Wash the surface with a towel and water to remove all excess dust.

18. Staining Countertops Using Z Agua - Tint

- There are a lot of different ways to apply the stain to your DIY concrete countertop. You can use rollers, brushes, or sea sponges. The color of the [tint](#) is up to you. You can use one or multiple tints to give your countertop a unique look and contrast. For a darker tint, use less water with the tint mix, for a lighter one, use more water. An average tint is one part mix to five parts water.
- First mist the countertop with water, which will open up the pores and allow the stain to penetrate deeper into the concrete. Using the desired tint, apply with a paint brush in your own design. Do the same with the other tint. You can also blend your colors together on the surface, letting on run into the other. You can use rollers when you want to cover larger sections. Don't be afraid to leave puddles, these will create darker areas and look more natural when finished. Don't worry about bubbles, they will give it a nice effect as they soak in. The sea sponge is good for blending colors in. The stain should dry after 30 minutes.
- Wash the countertop with a wet towel, which will remove excess stain and give it a more natural look. Allow to dry for 24 hours after staining.

19. Sealing Concrete Using Z Counter - Shine

- Tools needed: Roller with roller pad, short, paint brush for edges, paint cup, measuring cup for epoxy.
- Mix [Aqua - Poxy](#) in a 1:1 ratio (one part A to one part B).
- Wipe the countertop with a rag to remove any dust that may have accumulated.
- Roll out the epoxy. At first it will have a milky look, but this will fade in a few minutes. Roll in one direction, then roll over the top again in a perpendicular

direction. Use a paintbrush to cover the edges. Allow to dry then sand by hand using 320 grit paper. This removes imperfections before a second coat. Wipe off with a damp rag and apply a second coat. Allow to dry and sand again, this time using 400 grit paper. Wipe off with a damp rag once again and you have a finished countertop.

Conclusions

We hope this article has helped you fully understand the DIY concrete countertop process from start to finish. If you have any more questions or are interested in learning more about concrete countertops, visit us at concretecountertopsolutions.com.