



A Guide to Concrete Countertops

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Who would want concrete countertops?

SURFACE DESIGN LLC (SURFACE DESIGN) CONCRETE COUNTERTOPS ARE THE MOST UNIQUE, PERSONAL COUNTERTOP OPTION BECAUSE THEY ARE MADE FROM SCRATCH FOR EACH CLIENT.

To determine whether concrete is right for you, think about whether you believe that:

- you want something unique and personalized
- you want something that looks natural and has character
- you appreciate high-quality, hand-crafted items
- you think granite is too shiny, too formal, too common
- you think synthetic solid surface materials look and feel like plastic
- you need a color or visual texture that's not available with other countertop materials.

If so, concrete countertops may be right for you.

What are the advantages and disadvantages of concrete compared to other countertop materials?

Advantages:

- Custom: Concrete's biggest advantage is that it is completely custom. Your countertop will be unique to you and highly personalized.
- Versatile: Concrete is extremely versatile. It can enhance any style, from French Country to Contemporary. From Arts and Crafts to Industrial. From Traditional to Modern. The possibilities are endless.
- Practical: Surface Designs' sealer provides a surface that is extremely stain-resistant and low-maintenance. Common food items will not stain it. The sealer does not degrade, and therefore does not need to be reapplied every year like many other sealers. The sealer also exhibits great heat resistance. Although not recommended, you can put hot pots (Up to 350 F, normal heat usage) on the countertop without trivets.
- Imperfections: We believe that this is an advantage. Concrete countertops are hand made and hand finished. Since concrete is a heterogeneous mixture of many different ingredients, subtle variations in color, shade, texture and overall appearance should be expected. All concrete is susceptible to harmless hairline cracks. They will sometimes appear months or years after installation, and are generally a result of seasonal movement of the cabinets and the house itself. These should be considered part of the aesthetic charm of concrete, and not a defect. Concrete exhibits natural beauty rather than plastic perfection.

Disadvantages:

- Cutting boards: While the sealer is very durable, it is possible to scratch it. For example, in kitchens, you should use cutting boards on concrete countertops.
- Lead time: Concrete countertops are a long lead time item. They may take approximately 3 to 6 weeks to fabricate. See the section on lead time for more details.

How much do they cost?

Even though it is a completely custom material, concrete is competitive in price with standard countertop materials. The price is competitive with high end granite, ranging from \$65 to over \$100 per square foot. Edge designs range from \$15 to \$20 per linear foot. We are happy to work with you and your designer to give you an estimate on your project, and we can help you with options to fit your budget.

What about backsplashes?

Backsplashes are cast and finished separately and deck mounted after the countertops are installed. Backsplashes are 1" thick and can be from 3" high to full height. Outlet openings are cast in, not cut on site.

Where can I use concrete in my home?

- Surface Design makes concrete countertops for kitchens, bathrooms, fireplace mantles, tables, desks, end tables, coffee tables, all interior and exterior applications, and anywhere else countertops are required. Horizontal countertops must be at least 1.5" thick. Surface Design can make thicker countertops as well as fabricate front edge returns up to 6" deep.
- Concrete countertops can be straight, curved, notched, multi-level, etc. Unlike granite, which would drastically increase in cost for curved shapes, creating curved concrete shapes simply involves some extra complexity and labor in forming.
- Concrete can also be used in vertical applications such as backsplashes, shower surrounds, fireplace surrounds and various other types of wall coverings and surrounds. For vertical applications, concrete is generally 1" thick.
- Maximum slab length for standard depth countertops is about 8 feet. Seams are located around sinks and cooktops, or wherever required for structural reasons. Surface Design will work with you to design seam placement that is both structurally sound and aesthetically pleasing. Seams are typically 1/16" wide, similar to tile grout lines. However, it is important to realize that concrete countertops are hand made and hand processed; they are not machine cut, so tolerances for seams are more generous than with granite. Seam appearance is minimized by using color-matched acrylic caulk.
- Many sink options are possible. See the section on sinks for more information.
- Concrete countertops can be used both indoors and outdoors.
- Concrete floors are a different application. Surface Design also specializes in various types of concrete floors.

What colors are available?

Any color! Surface Design has developed hundreds of colors including every color on the spectrum. Any color can be produced in a solid, speckled or variegated pattern. And, you can specify embedded stone, glass, or other objects. You can specify the color, size and density of embedments. Custom acid staining processes can be used as well. Coupled with the many color choices, you have myriad design options.

What is the process for custom colors?

Surface Design specializes in custom color development. We can customize existing colors or match the color of an item such as a paint chip or fabric. The process takes about 3 weeks. We produce two or more 6" x 6" samples and submit them for your approval.

How much color variation can occur?

Concrete is a natural, handmade material. Many factors such as humidity, sand lot and cement lot can affect the final appearance of the concrete. All of our color formulas record the type of sand, type of cement, and exact measurements of pigments to 1/10th of a gram, and we use specially developed software to calculate mix design. However, colors can still vary because of the aforementioned factors.

Another factor that contributes to perceived variation is simply the size of samples. A 3" x 3" sample, or even a 6" x 6" sample, will look different than a whole countertop simply because the small sample does not capture all of the natural, random variations that will occur over a large surface. The color in a 3" x 3" sample may appear completely uniform, but a whole countertop in that exact same color will not appear as uniform. The same situation occurs with other natural materials such as granite. If you are looking for perfect uniformity, solid surface might be a better countertop option for you.

What edges are available?

For concrete, edging may be cast or milled. Therefore, edge choices depend on the availability of appropriate trim moulding or availability of diamond router bits. For example, Surface Design can do beveled, cove, eased and full bullnose--other custom edges may be available. Edging may be placed on top or bottom of the countertop.

What kind of sinks can be used with concrete countertops?

Surface Design concrete countertops can accommodate all types of sinks including drop-in, undermount and apron front. The minimum lip of concrete around all sides of sinks is 3". Concrete can also accommodate drop-in cooktops. The minimum lip of concrete in the front of a cooktop is 3"; we recommend 3" for the back also, but 2" will suffice.

Surface Design can make integral concrete sinks of almost any shape. Bathroom vanities are an excellent application of integral concrete sinks. We do not recommend integral concrete kitchen sinks for engineering reasons. Kitchen sinks are deep and have angles that would put large stresses on the concrete and have high potential for cracking. Also, the size of kitchen sinks generally dictates a very thick concrete bottom that would be a problem with standard plumbing and cabinetry.

Concrete vessel sinks are also possible, and concrete's versatility means that the sink can be any color and shape.

Will concrete countertops stain?

Bare concrete is very porous and will readily stain. Virtually all concrete countertops are sealed to prevent staining; however the degree to which these sealers work varies significantly. Commonly used sealers include wax and penetrating acrylic sealer. Both of these are inexpensive and easy to apply. However, neither offer significant stain or heat resistance, and both require frequent reapplication to prevent the formation of a "patina". Surface Design's sealer is different. We use a sealer that is exceptionally stain-resistant and durable.

Can I put hot pots on the countertops?

Surface Design's sealer is very heat resistant. Although it is not recommended, hot items up to 350 degrees Fahrenheit may be placed on the counters with no damage or discoloration.

Will they scratch?

While the sealer is very durable, it can scratch if cut with a knife or subjected to very heavy, sharp objects dragged across the surface. Cutting on the concrete may compromise the integrity of the sealer and allow stains to permeate the concrete matrix. Cutting on the concrete will also ruin knives, requiring a professional sharpening to reshape the damaged edge. Remember, concrete is made with stone, the same thing used to sharpen knives (and will therefore dull them just as easily).

How are templates made?

Concrete countertops are templated just like granite. Templating is done after any existing countertops are removed, or after new cabinets are fully installed. Your contractor needs to arrange for existing countertop removal. Almost all concrete countertops require physical templates from the finished and installed cabinetry.

In some cases, such as small or freestanding pieces, we can fabricate from CADD drawings instead of physical templates. We will advise on templating requirements for your project, and we provide your contractor with a templating checklist to help him prepare. All fixtures that penetrate the concrete, such as sinks and faucets, must be available at templating time.

How are the countertops installed?

Concrete countertops are handled and installed just like granite. Seams are caulked with a color-matched acrylic caulk. Your contractor needs to arrange for plumbing and electrical hookup no earlier than 24 hours after the countertop installation.

Are there any special structural considerations?

A square foot of 1.5" thick concrete weighs about 17 lbs; a square foot of 3 cm granite weighs about 16.5 lbs. Typically, no special considerations are necessary for standard kitchen or bathroom vanity countertops. Cantilevered slabs, bartops on kneewalls and similar situations sometimes require brackets or other structural supports for the countertops. Surface Design can advise on support requirements.

Do you offer a warranty?

Yes. Surface Design warrants the structural integrity of the concrete for one year after installation. The countertops will of course last a lot longer than a year, but if any problems were to occur, they would occur in the first year. We subject the concrete to much larger stresses while handling and transporting it than clients ever could once it is installed. In addition, Surface Design provides each client with an Owner's Guide and full phone and email support (emails checked daily) from Sam Costa, President and Landon Costa, Production Manager.

Whom can I contact with questions or to discuss a project?

Contact your designer, Sam Costa or Landon Costa at 724.752.9911 or info@surfacedesignllc.com (email is checked daily). See our web site at www.surfacedesignllc.com for additional information and photos. Also, consultations with a Surface Design representative are available by appointment as needed.