



Handcrafted countertops, sinks, furniture and architectural elements.

Concrete Countertop Guide

Who would want concrete countertops?

Concrete countertops are the most unique, personal countertop option because they are handcrafted 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, handcrafted 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. Concrete is 3 dimensional, integral sinks, drain board, fiber optic countertops, etc. Your concrete will be unique to you and highly personalized.

High Performance: BCCI uses a proprietary mix design yielding a finished product exceeding 10,000 PSI. This is similar to the strength of granite.

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: BCCI's industry leading 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.

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:

Scratching: 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 take approximately 2-3 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 \$70 to over \$100 per square 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.

Where can I use concrete in my home?

BCCI makes concrete countertops and sinks for kitchens and bathrooms, fireplace mantles, tables, desks, and anywhere else countertops are required. Horizontal countertops must be at least 1.5" thick. We can make thicker countertops if requested.

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 and fireplace surrounds. For vertical applications, concrete is generally 1" thick.

Maximum slab length for standard depth countertops is about 10 feet. Seams are located around sinks and cooktops, or wherever required for structural reasons. BCCI 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 may be minimized by using color-matched acrylic caulk. Integral and vessel sinks are possible. See the section on sinks for more information. Concrete countertops can be used both indoors and outdoors.

What colors are available?

Any color! BCCI can develop thousands of colors. And, you can specify embedded stone, glass, or other objects. You can specify the color, size and density of embedments. Coupled with the many color choices, you have myriad design options.

What is the process for custom colors?

BCCI 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 three 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 is formed and cast rather than cut like granite or solid surface. Therefore, edge choices depend on the availability of appropriate trim moulding. For example, We can do pencil, beveled, concave and reverse cove edging, and 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?

BCCI 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. BCCI can make integral concrete sinks of almost any shape. Bathroom vanities are an excellent application of integral concrete sinks. Concrete vessel sinks are also possible, and concrete's versatility means that the sink can be any color and shape.

What about backsplashes?

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

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 works 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". We offer penetrating sealer as an option. BCCI's sealer is different. We use a high-performance sealer that is exceptionally durable and provides excellent resistance to incidental contact with staining agents such as red wine, lemon juice and olive oil. Complete care instructions are included in your Owner's Guide. Touch-up of any marks that do occur is simple and easy. Our sealer is EPA and FDA compliant with no VOCs.

Will they scratch?

While the sealer is durable, it can scratch if cut with a knife or subjected to 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. If you do scratch a countertop, you can easily repair it yourself using either carnauba wax or a water based polyurethane to reseal the scratch

Can I put hot pots on the countertops?

Our sealer is rated to resist 300 degrees (450 by manufacture), boiling water will not harm it, a pot fresh off the burner could melt or warp the sealer. We recommend installing trivets next to the stove to place hot pots on.

How are concrete countertops made?

All of the slabs are precast in our shop and fully finished and sealed prior to installation. In the structural engineering community, it is well known that precast concrete is superior to cast in place concrete, mainly because tighter quality control can be exercised. Curing, which is a critical step that is commonly misunderstood, can be closely monitored. Moving the process to a shop allows greater flexibility in terms of the look of the concrete. Glass, stone and other objects can now be embedded; these require extensive wet grinding with diamond power tools to reveal the embedded objects and hone and smooth the resulting surface.

What is the lead time?

Although countertops are one of the last items to be installed, concrete countertops should be selected as early as possible. Here is an outline of the process:

1. Color selection

BCCI often performs custom color matching and submits samples for your approval. Allow about 2 weeks for this process. See the section on custom colors for more information. Choosing one of our standard colors eliminates this step.

2. Templating

Templating is done from finished and installed cabinetry, and it takes less than one day.

3. Fabrication

The typical time required to fabricate most concrete countertops, depending on their size and complexity, is 2-3 weeks. Note that the fabrication process may not start immediately after templating depending on how full our production schedule is. A good guideline is to contact BCCI at the beginning of the project, or at the latest one month before cabinetry is scheduled to be installed, both to allow time for custom color samples and to secure a spot on our production schedule. We pride ourselves in customer service, if there is anyway we can physically get it done within your timetable it will be done.

In the case of a residential project such as a countertop replacement, the existing countertops do not have to be removed until the new countertops are ready for installation. In many cases your kitchen will only be out of commission for 2 days.

4. Installation

Because BCCI countertops are precast and prefinished, installation generally takes less than one day.

How are templates made?

Concrete countertops are templated just like granite. Templating is done on top of existing countertops, 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 CAD 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. 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 1/2" thick concrete weighs about 18 lbs; a square foot of 1 1/4" cm granite weighs about 16.5 lbs. Typically, no special considerations are necessary for standard kitchen or bathroom vanity countertops. Front apron kitchen sinks, cantilevered slabs, bartops on kneewalls and similar situations sometimes require brackets or other structural supports for the countertops. We can advise on design, loading and support requirements.

Do you offer a warranty?

Yes. BCCI 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 it than clients ever could once it is installed. In addition, we provides each client with an Owner's Guide and are always available for consultation.

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

Contact your designer or Philip Ferreira, BCCI, at 410 599 7273 or philip@b-moreconcrete.com.