



GLOSSARY OF CONCRETE COUNTERTOP TERMS

Provided by The Concrete Countertop Institute
www.concretecountertopinstitute.com



The concrete industry covers a broad range of people who design, use, apply, and build with concrete. Whether it is a concrete contractor, a manufacturer, an architect, designer, homeowner, builder, or supplier, it benefits everyone to have a general understanding of terms used within the industry. The **Concrete Countertop Institute**, located in Raleigh, NC provides this glossary of the most commonly used concrete countertop terms and definitions. [Continue >](#)





A

acrylic sealer – A simple, single-component polymer that is either water-based or solvent-based. Provides moderate stain protection and is easily scratched.

A-frame – An A-shaped wooden or metal framework used to transport countertop slabs on edge in a truck.

apron front sink – A sink that has a large apron in front and sits on a short cabinet; sometimes called a farmhouse sink.

B

beam – A horizontal structural member often supported near the ends and spans an open space. Concrete countertops are beams, even if there is plywood underneath them, because plywood is too weak and flexible to provide enough structural support to the concrete to prevent cracking.

bug holes – Small voids in concrete caused by entrapped air bubbles. Generally there should be no bug holes on the top surface of concrete countertops, especially for kitchen counters.

C

cantilever – A beam that projects beyond its supports. An area where a countertop overhangs a cabinet or support by more than a few inches.

casting table – A strong, level table designed for casting concrete slabs on top of it

caulk – Used to fill seams between countertop slabs. Usually color-matched. Made of a flexible material such as acrylic, so that they create control joints in the concrete

compressive strength – The ability of concrete to resist compression forces, or pushing together forces, expressed in pounds per square inch (psi)



concrete countertops – A handcrafted alternative to manufactured countertop surfaces. Can be pre-cast in a shop in molds built to the customer's specifications or cast in place, by setting a form on top of the base kitchen cabinets and then filling with concrete. The use of stains, dyes, pigments, decorative aggregates, and epoxy coatings can give concrete countertops the look, texture, and feel of quarried stone such as marble, granite, and limestone.

control (or contraction) joint – Sawed or tooled groove in a concrete slab used to regulate the location of cracking.

cooktop – A self-rimming assembly of stove burners that fits into the countertop

D

drain board – Grooves or depressions in a countertop next to an undermount sink which allows water to run into the sink.

drop-in sink – A sink that has a rim that fits over the countertop, also known as top-mount or self-rimming.

E

edge return – A countertop edge that is thicker than the rest of the slab, to give the appearance of a thicker slab

epoxy sealer – A 2-component system that reacts when mixed to form a hard, durable sealer. Can be UV sensitive and are not heat resistant. Tends to be shiny, thick and look like plastic.

F

fibers – Tiny filaments made of polypropylene, polyolefin, nylon, polyethylene, polyester, or acrylic used to control shrinkage cracking. Fibers do not provide structural reinforcement.





film-forming sealer – A type of sealer that blocks the penetration of water and contaminants by forming a barrier on the concrete surface. May also impart a gloss or sheen, which enhances colored or exposed aggregate concrete.



grinding – A mechanical surface preparation method using rotating abrasive stones or discs to remove thin coatings and mastics or slight flaws and protrusions.

grout (slurry) – A cement paste used to fill bug holes in countertops.



install – To set a countertop onto cabinets and caulk any seams so that the countertop fits well, is level, adjacent slabs are flush, and all fixtures such as sinks and faucets are properly mounted.

integral sink – A sink made out of the same material as the countertop and forms a continuous surface with the countertop.



knockout – A rubber or foam shape placed in a form where there will be a hole in the Countertop

melamine – Particle board coated with a plastic material. Often used in forming concrete countertops because of its smoothness and easy release



metakaolin – Refined kaolin clay that is fired (calcined) under carefully controlled conditions to create an amorphous aluminosilicate pozzolan that consumes calcium hydroxide (lime) byproducts produced during cement hydration, resulting in increased compressive strength due to decreased lime content. Used as a 10% to 20% replacement for cement.





microspheres/cenospheres – Very fine, lightweight hollow ceramic spheres that are chemically identical to fly ash but too large to offer any significant pozzolanic reactivity. Used as a replacement for sand for lightweight concrete or to modify the consistency of the concrete, making it stiffer and less sticky.

mortar mixer – A mechanical mixer designed for blending cement based mortar. Mortar mixers use rotating paddles attached to a horizontal axle to mix mortar or concrete. Often mortar mixers are used for mixing the small batches of concrete required for concrete countertops.

P

penetrating sealer – A sealer with the ability to penetrate into the concrete surface to increase water repellency and resist stains. Often used on decorative concrete to provide invisible protection without changing the surface appearance.

pigment – A finely ground natural or synthetic particle adding color and opacity to a coating or topping.

plastic shrinkage cracks – Irregular cracks that occur in the surface of fresh concrete soon after it is placed and while it is still plastic.

primary reinforcement – Structural reinforcement designed to carry tension forces in reinforced concrete. Often steel rebar or carbon fiber is used as primary reinforcement. Choice of material, amount and correct placement are critical to obtaining the desired structural characteristics.





R

rebar (or reinforcing bars) – Ribbed steel bars installed in cast-in-place or pre-cast concrete as primary reinforcement to provide flexural strength. Rebar come in various diameters and strength grades.

reinforced concrete – A structural composite of concrete with embedded tendons designed to carry tensile loads. In reinforced concrete, the concrete itself carries compressive forces while the primary reinforcing carries tensile forces. The addition of reinforcement transforms a brittle, low tensile strength material into a strong, ductile material.

S

sealer – Solvent- or liquid-based material used to protect and enhance the appearance of decorative concrete. (Also see film-forming sealer and penetrating sealer.)

seam – A joint between 2 adjacent slabs of countertop material. Seams function as control joints in brittle materials such as granite or concrete.

secondary reinforcement – non-structural reinforcement designed to control shrinkage cracking. Often welded wire mesh and/or fibers are used as secondary reinforcement in slabs.

shim – Used during installation to insure that adjacent countertop slabs are flush and level.

shrinkage – The tendency of the cement paste in concrete to shrink as it cures, causing concrete slabs to either curl (due to unrestrained shrinkage) or crack (due to restrained shrinkage)





T

slab on grade – A concrete slab that is fully and evenly supported by an substrate such as the ground. Sidewalks are slabs on grade.

superplasticizer – High-range water reducer (30% and above water reduction)

tensile strength – The ability of concrete to resist tension forces, or pulling apart forces, expressed in pounds per square inch (psi).

template – A physical pattern that represents the space into which a countertop will fit. For precast concrete countertops, templates are created on the finished cabinets, then the templates are used to determine the size of the forms.

U

undermount sink – A sink that is mounted underneath the countertop.

urethane – A type of sealer that provides good stain, heat and scratch resistance but is difficult to apply properly and can debond if the concrete surface is not properly prepared.

V

vessel sink – A sink that sits on top of the countertop.



Photo Courtesy of
[The Concrete Countertop Institute](#)



Sherpa info

HOW YOU CAN USE THIS DOCUMENT

You have unlimited right to print, distribute, and use this guide. E-mail it to a friend, put it on your website, or any other ideas you see fit. You can print it and post it on a job, at your favorite coffee shop, in your office, or get creative and engrave it in concrete. Please share freely, the only things you may not do is alter it or charge for it.

COPYRIGHT INFORMATION

The copyright in this work belongs to the ConcreteNetwork.com. Please direct questions regarding feedback, use, permission and screw-ups to dan@ConcreteNetwork.com.

DOWNLOAD GUIDE

This guide is available on line at <http://www.concretesharpa.com/glossarycountertop>.

EMAIL TO A FRIEND

Click here to pass the guide along to someone cool.

<http://www.ConcreteSherpa.com/email/glossarycountertop>

SUBSCRIBE

Learn about the latest Sherpa Guides and other concrete information available in the Concrete Network's Newsletter. <http://www.ConcreteNetwork.com/newsletter.htm>





Sherpa info

SUMMIT DATE

This document reached the summit (was created) on December 29, 2005 and is based on the best information available to the Sherpa at that time. To check for updates please click here <http://www.ConcreteSherpa.com/glossarycountertop>.

NAVIGATION & USER TIPS

You can move around this guide by using your mouse or keyboard arrows. Left mouse button goes to the next page, right mouse button goes to previous page. Click on the right arrow (→) for the next page and the left arrow (←) to go the previous page.

KEYBOARD SHORT CUTS

	PC	MAC
Zoom in (Larger)	[Ctrl] [+]	[⌘] [+]
Zoom out	[Ctrl] [-]	[⌘] [-]
Full screen/normal screen view	[Ctrl] [L]	[⌘] [L]

ABOUT THE CONCRETE SHERPA

The Concrete Sherpa is a team of people that represent the experience, teaching and learning of our team members and other industry leaders *on a mission to make life better for the concrete contractor*. We are an idea center striving to deliver thought provoking ideas based on “Concrete Advice for Business and Life” to stimulate you to reach new heights. As a user, you should remember to consider all information you receive, here at the Concrete Sherpa or elsewhere, not as a *cast in concrete* recommendation, but rather as an idea for you to consider and ponder.



Sherpa info

THE JOURNEY LEADING TO THE CONCRETE SHERPA PROJECT

The Concrete Sherpa Project (A [Sherpa](#) is a “guide”) was born at The Concrete Network in mid 2004. Here is how it happened:

The biggest surprise, or gift, since starting The Concrete Network in 1999 has been the concrete contractor friends from around the country we’ve made and witnessing the passion they have for what they do. These people include Dave Pettigrew, up in the San Francisco Bay Area, or the Verlennich brothers in Minnesota, or Bob Harris in Georgia, the list goes on and on. It’s quite inspiring.

We were once asked, “How are you so excited every day about concrete?” Well the answer is simple, it is impossible to not be excited about concrete when you have the job we do—interacting with hundreds of concrete contractors from every state in the country.

The thing we’ve learned about concrete contractors is that most are passionate *craftsmen*—they are often less passionate and experienced in the “office stuff”. Human nature channels us to do what we are most comfortable with; learning how to use a new saw-cutting tool is comfortable; learning and implementing a new estimating strategy, or job management tool, is not so comfortable.





Sherpa info

THE JOURNEY CONTINUES...

So Sherpa was born to provide FREE and easy to use information on topics many contractors are not too comfortable with.

- Concrete Sherpa is here to provide help to contractors who are often 'Lone Rangers' and don't have anyone to get solid business advice from.
- Concrete Sherpa is here to provide help for contractors who have to work too hard and too many hours in their business, and one day realize they need to work *on their business, not in their business.*
- Have fun with Concrete Sherpa and go faster towards reaching success than you might have on your own.
- To skeptics who think something free can't be valuable, or there must be a trick- visit Concrete Sherpa and decide for yourself.

We hope you make great use of the Concrete Sherpa and it helps you to become an awesome success for yourself, your family, your church, and your community.

VISIT THE CONCRETE SHERPA

To visit the Concrete Sherpa click here <http://www.ConcreteSherpa.com>.

