CONSUMER EDUCATION Choosing the Right Countertop



	Pros	Cons	Cost	Examples
Stone	Timeless, natural style Extremely durable Resistant to heat No two stone counters look the same Wide variety of colors and textures	Some can scratch or stain Occasional sealing needed Tough on dishware and glasses	\$50 - \$100 per square foot, installed	Granite
Engineered Stone	Extremely durable Resists heat and scratches Easy to maintain Feels like stone but with many more color choices	Less natural looking than the real thing Tough on dishware and glasses	\$65 - \$125 per square foot, installed	Zodiaq CaesarStone Cambria Silestone (Quartz)
Solid Surface	Resistant to staining Surface is renewable Easy to clean and maintain Many color choices	Not heat or scratch resistant Looks less natural than stone	45 - \$100 per square foot, installed	Corian Staron Swanstone Avonite Gibraltar
Laminates	Wide range of colors and styles Easy to clean and maintain Relatively durable No regular maintenance needed Inexpensive	Susceptible to burns and scratches, and the marks are permanent	\$15 - \$20 per square foot, installed	Wilsonart Formica

Information gathered from Inspired House and Fine Homebuilding.

Stone

Stone is beautiful, durable, heat resistant and popular.

Hewn from the earth, cut with diamond saws, polished like glass, and shipped around the world, stone makes the most cosmopolitan of counters. It exists everywhere in the world, yet nowhere is it the same. Even from the same quarry, no two pieces are identical.

Stone is extremely dense yet also porous; to prevent stains it must be sealed. Its very permanence makes it difficult to work and shape, but technological advances have made it possible to cut and polish stone near quarries around the world, a money-saving development that enables unusable pieces to be discovered before they are shipped abroad.

Granite, the most popular stone for counters, is an extremely hard rock formed by volcanic activity. Its shimmering beauty lies in the crystals of quartz, mica, and feldspar trapped within. So-called consistent granite has the same pattern throughout. Variegated granite has veins that vary from piece to piece, which add character but also make it difficult to match sections. Granite is very porous and should be treated with a penetrating sealer approximately once a year to prevent stains.

Stone, especially granite, is cold to the touch, heavy, hard to work and expensive. It's also so popular, says former stone-restoration contractor Fred Hueston, that it's now going into spec houses selling for \$100,000. "It's the big one now," says Hueston, owner of the National Training Center for Stone and Masonry Trades in Longwood, Florida. Granite comes from all over the world, in a variety of colors and patterns. Prices show big regional differences, starting at \$55 to \$100 per sq. ft. and commonly \$100 per sq. ft installed.

Sold in two thicknesses (3/4 in. and 1-1/4 in.—predominately 1-1/4 in. for countertops), granite is resistant to heat and scratches. Most countertop material is polished, but it also is available in a honed (matte) finish, usually for a little more money. Slab size is usually limited to 10 ft. in length, 5 ft. in width.

Although resistant to acidic foods such as lemon juice, Hueston says, granite will stain. It's especially susceptible to oil. Penetrating sealers, commonly called impregnators, can keep out oil and water. Hueston prefers sealers containing fluoropolymers (the same chemical used to make Scotchgard).





Pricey but high in demand. Natural stone is the current favorite of high-end countertop choices. It offers high heat resistance and durability and a wide variety of colors and texture

Engineered Stone

More durable than the real thing and available in dozens of colors—"The new and the exotic"

Don't think of engineered stone as a rock wannabe. For one thing, it consists mainly of real rock -- particles called stone aggregate, more accurately, which make up more than 90 percent of its mass. And it has some special properties that set it apart from nature's product.

Engineered stone is made by combining the aggregate with resin and pigments, in a vibro-compaction process that binds the medium permanently. Because the mix is uniform, engineered stone has no fissures, veins, or other imperfections that could compromise the strength of natural stone, or make it hard to match seams. It also means that your counter will match the sample exactly -- no need to travel to the stone yard and sort through slabs.

Engineered stone comes in dozens of colors -- some of them mimic the real thing; others are pastel hues straight off a designer's palette.

Know what you're buying: The toughest engineered stones, including Dupont's Zodiaq, Cambria and Silestone are made from quartz. They won't scratch or stain. Others, derived from marble and other stones, are softer, and may need sealing.

Although many countertop materials are familiar, a variety of newer, man-made materials also is available.

Silestone is a composite of 93% quartz, resin binders and pigments. It is sold in the United States through a network of distributors. A similar material is made by DuPont under the Zodiaq brand name. Prices vary by region and by the color of the material, but installed prices are between \$65 and \$125 per sq. ft. It is nonporous and never needs to be sealed, and it's more resistant to food stains than the natural stone it closely resembles. Available in three thicknesses: 7/16 in., 13/16 in. and 1-1/8 in. (1-1/8 in. most common for countertops).





A more resilient version of stone, engineered stone may look less natural, but it is stain, scratch, and heat resistant.



Cambria - Victoria



Zodiaq – Autumn Light



Zodiag – Smokey Topaz

Silestone - Kalahari

Solid Surface

Colorful, renewable and long lasting.

The lowest-maintenance luxury counter, a manufactured solid surface is great for kitchens that get a lot of use -- and for homeowners who don't want a lot of fuss. Solid-surface counters are made by blending acrylic polymers and stone-derived materials, which are then poured into molds to create sheets about half an inch thick. Edges are formed by building up layers of identical or contrasting material and milling the profile with a router. Sheets 30 in. and 36 in. wide run to 12 ft. in length. Solid surfacing is expensive—roughly \$45 to \$100 per sq. ft.—and it's a plastic, so not as appealing to some homeowners.

Deep edges give solid-surface counters the illusion of being even thicker, but there's nothing illusory about their strength. They hold up incredibly well to abrasive cleaners, and even white counters are virtually impossible to stain. The color won't fade, even in direct sunlight, and because the pattern runs through the entire depth, scratches can be sanded out.

As strong as they are, solid-surface counters have a beneficial soft spot: You can plunk a plate down and it won't break -- you can't say that about stone. Integrated solid-surface sinks can be flush mounted (meaning there is no "lip" between the counter and the sink), which makes cleanup easy.

Just as Formica became synonymous with laminates, so has Corian come to mean solid surface. Corian was invented by DuPont in 1966; today, other companies also make solid-surface counters in dozens of colors. Many offer a 10-year warranty that includes all incidental labor (like a plumber), should a counter need to be removed. Few products have had more influence in kitchen design in the past 35 years than DuPont's Corian. What was then the world's first solidsurface countertop material now has many rivals. Staron, Swanstone, Avonite, and Gibraltar all are brand names for essentially the same stuff: polyester or acrylic resin plus a mineral filler called ATH, or aluminum trihydrate. Solid surfacing comes in plain colors, patterns that resemble stone and, more recently, translucent versions that are glasslike in appearance.

Regardless of brand, solid surfacing has a long list of attributes that make it a nearly ideal countertop material. Solid surfacing is the same material all the way through. Minor surface blemishes—a scorch mark, for example—can be sanded out. It's nonporous, so it's easy to keep clean. And it's highly stain resistant. Solid surfacing can be fashioned into a sink and then glued to the countertop for a seamless, leak proof installation without any crevices or edges to catch and hold food and debris. It can be worked with regular woodworking tools, and solid surfacing comes with a long guarantee, usually ten years. It's typically sold only to certified fabricators who have taken a manufacturers training course.

A variety of colors and patterns, custom shapes and edges, and finishes like matte, satin, and high gloss make solidsurface countertops a great choice for most kitchens.



Corian – Mardi Gras



Staron Kitchen

Plastic Laminate

Old standby still rules – Still innovative after all these years.

Laminate countertops cost a fraction of what most other counter options cost. They may not connote luxury, but laminates get the job done -- and let homeowners on a budget put their money into sleeker appliances or better cabinets.

Laminates are made by binding layers of printed-paper and resin under high pressure to create a rigid sheet that can be cut, shaped, and glued onto medium-density fiberboard. Because anything can be printed on the paper, even a photographic image of wood or stone, it's easy for laminate manufacturers to keep abreast of design trends in their color and style choices. Both Formica and Wilsonart offer styles that mimic natural stone, metal, and wood. In its Patterns collection, Formica has seven granite colors alone, from Azul to Uba Tuba.

Higher-end laminates like Formica's ColorCore are melamine based and retain the surface color throughout the sheet. That means nicks and scratches are less likely to be seen -- and it eliminates the brown edge where two sheets meet at an angle, especially where the countertop sheet meets the edge strip.

High-pressure laminate is the family minivan of the countertop world: It's practical and economical, and you'll never brag you own it. Still, laminate is the choice in as many as three-quarters of all new kitchens in the United States. Standard high-pressure laminate, roughly 1/16 in. thick, is a sandwich of craft paper impregnated with phenolic resin and topped by a decorative layer of melamine-protected paper. In sheet form, laminate is glued to a particleboard substrate, either on site or in a fabricator's shop. A thinner version is manufactured into a ready-made countertop with a rounded front edge and an integral backsplash called a post-formed counter.

Laminate is available in dozens of colors and patterns in sheets up to 12 ft. long and 5 ft. wide. Post-formed counters, ready to drop into place, may be found at big home centers. There are fewer colors to choose from, and post-formed counters are for straight runs only; curvaceous kitchen designs won't work.

Most kitchen countertops are made of general-purpose laminate, but laminate is also available in high-wear, extra thick and fire-retardant versions. In addition to its low cost, laminate has many other attributes. Hard and durable, laminate is highly stain resistant and stands up well to everyday use. However, heat and sharp knives damage the surface, and any water getting into seams may degrade the substrate. A variety of new edge treatments has eliminated one of laminate's long-standing aesthetic weaknesses: the dark line formed where the top of the counter meets the front edge. Edging made from wood, solid-surface material or beveled laminate can make that seam all but invisible, but at a higher cost.

Laminate's real breakthrough in recent years has been in the top decorative layer. Digital printing and metallic inks have resulted in higher- fidelity reproduction, allowing manufacturers to create uncannily accurate patterns of materials such as wood, stone and fabric.





Wilsonart – Bronzed Fusion

Stone/Granite and Quartz – Common Edge Profiles

Representative sampling of edge profiles. Profile offering varies by market. These profiles are not an exact representation and are not drawn to scale.



Solid Surface (Corian, Staron, Swanstone, Avonite) – Common Edge Profiles

Representative sampling of edge profiles. Profile offering varies by market. These profiles are not an exact representation and are not drawn to scale.

Level 1



Level 2



Solid Surface – Common Edge Profiles continued

Representative sampling of edge profiles. Profile offering varies by market. These profiles are not an exact representation and are not drawn to scale.

Level 3



Level 4





Triple Beaded (#18) - Upgrade



Butler (#19) - Upgrade



Laminate (Wilsonart, Formica, Pionite) – Common Edge Profiles

Representative sampling of edge profiles. Profile offering varies by market. These profiles are not an exact representation and are not drawn to scale.



Flush Roundover (#24) & Overlay Roundover (#26)