

Kitchen Flooring Choices

From old standbys like hardwood to new contenders like laminates, the choices are daunting. We evaluate the pros, cons and costs.

BY NENA DONOVAN LEVINE

In the world of building materials, genetic engineering is a constant. The products may look traditional, but underneath their skins lie bonded, laminated, foamed, recycled and reconsidered cores. Nowhere is this ferment of product development more robust than in the flooring business. Floors have been to the lab and come back smarter, stronger and so much easier to care for. Even linoleum, the flooring a previous generation mopped and waxed on a regular basis, is back in an easy-care formulation. New products such as snap-together laminates have the old-time look of fumed oak, or not. You also can find Italian laminates the color of mint gelato, with a sprinkling of burlap for a nonskid surface. So what's best for a kitchen? Consider appearance, practicality, comfort, "green-ness," antiallergen properties, resale value, maintenance, individuality, ease of installation, ease of removal, longevity, historical suitability and price. □

Nena Donovan Levine is a kitchen designer in West Hartford, Connecticut. Photos by Joseph Kugielsky, except where noted.

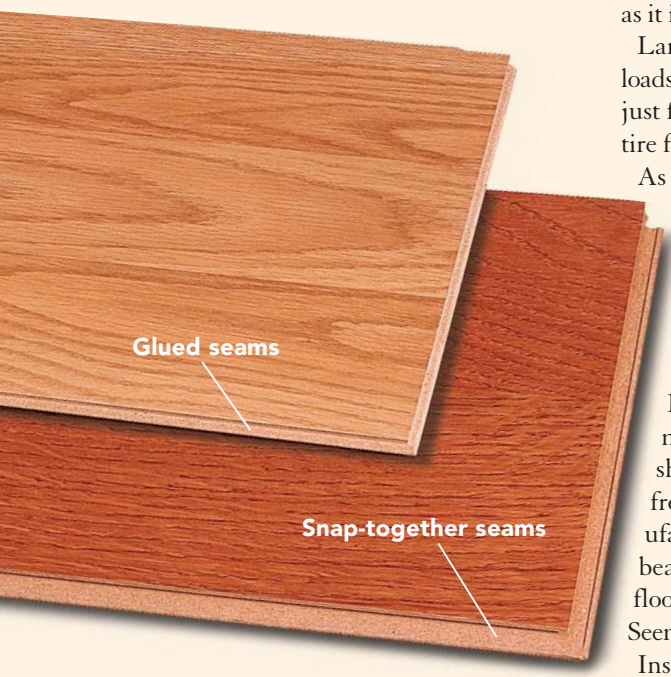
Online extra: Visit www.finehomebuilding.com for an expanded list of flooring sources.

Photo this page: Courtesy of BHK of America

LAMINATES: THE LOOK OF THE FAMILIAR, AND MORE

In Europe, our source for many a savvy design tip and trend, homeowners often take their kitchen cabinetry with them when they move. More and more often, they are taking their kitchen floors as well. Snap-together laminate, a removable, portable flooring, has interlocking edges (photo below) that join the pieces together into a single unit.

Like engineered woods, laminates are multiply sandwiches (p. 43). The visible layer is a photographic image topped with a tough, clear layer of melamine that takes the wear. Products range from 7/32 in. to ½ in. thick. Laminate should be installed over a flat subfloor, which can be either a layer of plywood or even an existing vinyl or tile floor, as long as it is in sound condition.



Some glue, some don't. *The tongue-and-groove edges of most laminate floors require a bead of glue to join them. Newer styles, however, feature interlocking tongues and grooves that snap together.*

Laminate flooring is a rising star. It has loads of positive features and few minuses. In just five years, it has captured 4% of the entire flooring industry.

As interest and demand grow, so too do the number and quality of products. Most laminate floors mimic wood or tile. But other patterns and textures are emerging. ABET Laminati, which produces the ParqColor series of wood-pattern laminates (45 choices), also makes Fiber Floor, a textured product with a matte finish. Available in 12 muted shades, the slightly rough surface results from the burlap-bag fibers used in its manufacture. The sacks previously held coffee beans, so there are some bean bits in the flooring, which add flecks of darker color. Seems perfect for the kitchen floor.

Installations in the North American market used to require that planks be glued together. Now 20% of the laminate-flooring products in this market are glueless: They snap together with clever locking mechanisms tight enough to keep out liquids. These products, more than those requiring glue, target the do-it-yourself market.

Even systems requiring glue use it only to adhere one tongue-and-groove plank to another, never to the subfloor. A laminate kitchen floor is meant to float atop the subfloor, not be glued or nailed to it. Some manufacturers produce several quality levels. Get the best you can for your kitchen.



Beyond wood grain. *Fiber laminate takes laminate flooring into the realm of color and texture that doesn't mimic anything. Made by ABET Laminati, the flooring gets its random surface pattern from recycled coffee-bean bags.*

SOURCES: LAMINATES

ABET INC.
(800) 228-2238; www.abetlaminati.com

BHK OF AMERICA
(800) 663-4176; www.bhkmoderna.com

BRUCE LAMINATE FLOORS
(800) 722-4647; www.brucelaminatefloors.com

DURAMAR FLOOR
(877) 387-2627; www.duramar.com

FORMICA
(800) 367-6422; www.formica.com

NORTH AMERICAN LAMINATE FLOORING ASSOCIATION
(202) 785-9500; www.nalfa.com

PERGO
(800) 337-3746; www.pergo.com

▲ PROS

Easy, quick installation, portable, no damage to substrate, low to moderate cost, comfortable underfoot, no fading or yellowing, scratch resistant, simple maintenance, damaged planks can be replaced, DIY installation

CONS ▼

Limited style choices, no refinishing, can dent, fiberboard core problematic for some allergies

COST

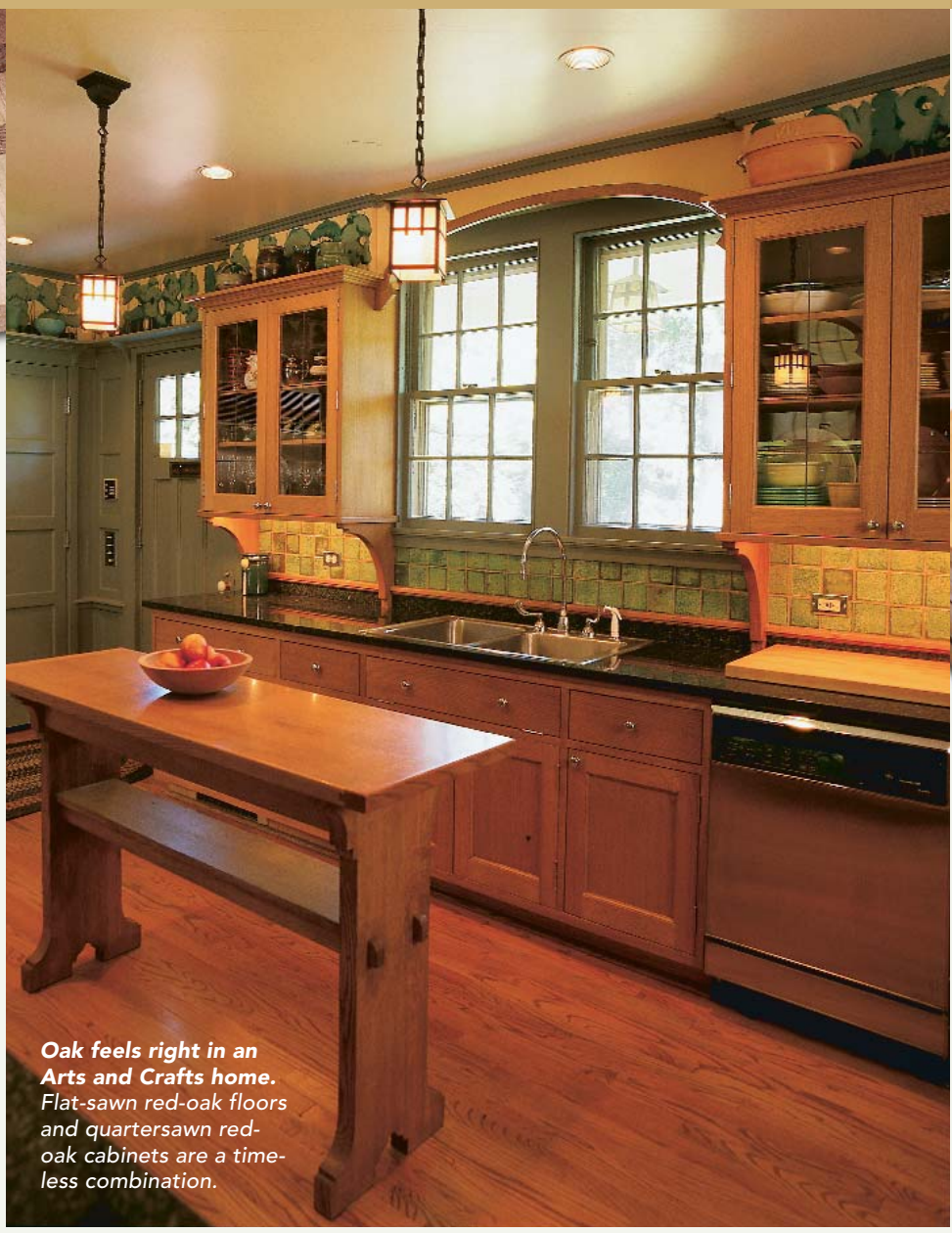
Typically $3-$6 per sq. ft., material only; professional installation, including underlayment, is about $3 per sq. ft.



Planks and strips. *Common wood patterns in laminate floors are the look of planks and strips. A layer of high-pressure laminate on the back of a flooring plank acts as a vapor barrier to reduce moisture absorption.*

WOOD: WARM AND WONDERFUL, SOLID, PREFINISHED AND ENGINEERED





Oak feels right in an Arts and Crafts home. *Flat-sawn red-oak floors and quartersawn red-oak cabinets are a timeless combination.*

WOOD PRODUCTS

Yes, products. You still can get good old wood, which is known in the trade as solid wood. But the category has grown to include flooring products referred to as engineered wood and prefinished flooring. I'll talk about each type here. No matter which one you choose, it's hard to go wrong with a wood floor in a kitchen. The cost is moderate, and a wood floor is a resale plus.

SOLID

Solid means the same piece of wood, and nothing but that wood, for the entire thickness of the floorboard. A typical wood floorboard is ¾ in. thick and 2½ in. wide, with a tongue-and-groove profile to make it interlock. Red and white oak still rule, together comprising more than 90% of all of the solid hardwood flooring installed nowadays. But plenty of other species are well suited to kitchen flooring, such as ash, maple, beech and cherry. The Hardwood Council ("Sources," facing page) has a terrific Web site that illustrates all the readily available North American species of hardwood.

Then again, if you live in an older home with wood floors, they might not be hardwood at all. Many older homes have wide-plank pine floors, which you may want to choose if you're creating a vintage look. Here in Connecticut, white-pine plank flooring up to 12 in. wide costs $3 per sq. ft.

Beyond regular sweeping and vacuuming, the floor's finish dictates maintenance specifics. A practical choice for this hard-traveled floor is multiple coats of a water-based urethane finish. A solid-wood floor can last the life of the structure.



Prefinished solid wood. *Carlisle Restoration Lumber offers familiar hard and softwoods with a tung-oil finish. From the top, antique oak, heart pine, maple, white oak and antique chestnut.*

PREFINISHED

Prefinished means that a multistep surface-finishing program was completed prior to the flooring's trip to the retailer. The finish on Harris-Tarkett's engineered flooring, for example, is an acrylic urethane formulation containing aluminum-oxide granules, which have been added to toughen the finish. Mohawk Corporation adds ceramic material to strengthen its finish. The technology is—no kidding—rocket science.

Even if the drawbacks ("Pros/Cons," facing page) discourage you, take advantage of manufacturers' Web sites, as well as that of the National Wood Flooring Association. Their Web site includes a list of answers to frequently asked questions about wood floors and a state-by-state listing of flooring installers.

Kitchen photo above: Charles Miller

ENGINEERED

Engineered wood flooring is a laminated product with three to five layers. The top layer is clear, top-quality wood (photo right). It represents a growing percentage of the flooring market, and it often is sold prefinished. Every major manufacturer has several product offerings, combining different features, price points and warranties. Engineered wood is more dimensionally stable than solid wood. So if your kitchen is in a potentially damp location, such as a room below grade, consider using engineered instead of solid-wood flooring.

Some engineered-flooring products are impregnated with acrylic. When dyes are added, the results are rousing. PermaGrain Products makes its Timeless 3 series in juicy colors (photo left). It should be ordered with PenThane (urethane) finish, or it will water-spot. The product cannot be refinished.



Acrylic-impregnated flooring. *PermaGrain Products makes engineered flooring in nine species and more than 20 colors. From the top, maize, pistachio, tomato, plum, tangerine and indigo.*



A sandwich works fine in a kitchen. *Engineered flooring is composed of a sandwich of thin layers of wood laminated together. This is Harris-Tarkett's artisan cherry, in a ½-in. by 5-in. tongue-and-groove profile.*

PROS

Warmth, beauty, relatively comfortable underfoot, enormous range of species and price, good resale value, new finishes require less maintenance, can be refinished many times (solid), dimensional stability (engineered), speed of installation, immediate use of room (prefinished)

CONS

Finish maintenance required, subject to dents, expands/contracts with humidity (solid), limited choice of stain colors/sheens (prefinished), no overall finish coat applied to "seal" seams (prefinished), limited number of refinishings (engineered)

COST

Materials only
Solid wood: $4-$10 per sq. ft.
Engineered flooring: $8-$12 per sq. ft.
Acrylic-impregnated flooring: $8-$12 per sq. ft.



Your room is ready now. *Prefinished engineered lumber goes down in a hurry and doesn't require the messy steps of sanding and applying multiple layers of finish.*



Wide, narrow, light, dark. *Engineered flooring comes in a huge variety of species and several thicknesses. It's more stable than solid wood, making it a good choice in locations subject to high humidity.*

SOURCES: WOOD

BHK OF AMERICA
(800) 663-4176
www.bhkmoderna.com

BRUCE HARDWOOD
(800) 722-4647
www.brucehardwoodfloors.com

CARLISLE RESTORATION LUMBER
(800) 595-9663
www.wideplankflooring.com

THE HARDWOOD COUNCIL
(412) 281-4980
www.hardwoodcouncil.com

HARRIS-TARKETT INC.
(800) 842-7816
www.harristarkett.com

MOHAWK FLOORING INC.
(800) 241-4494
www.mohawk-flooring.com

NATIONAL WOOD FLOORING ASSOCIATION
(800) 422-4556
www.woodfloors.org

PERMAGRAIN PRODUCTS INC.
(610) 353-8801
www.permagrain.com

Photo bottom left this page: Courtesy of BHK of America

EXOTICA: HARD, SOFT AND SHINY, UNCOMMON MATERIALS UNDERFOOT

BAMBOO



Bamboo flooring is a hybrid product similar to engineered hardwoods. But it's not wood: It's a grass. Bamboo stalks are milled into strips, then reassembled as floorboards. The boards are typically ⅜ in. or ⅝ in. thick, and have either square edges (on unfinished boards) or microbeveled ones (on prefinished boards).



Photo: Courtesy of Smith & Fong Co.

Depending on how the strips are aligned, the flooring resembles either quartersawn or flat-sawn hardwood. The unmistakable figure of the bamboo nodes adds a visual interest to the "flat-sawn" boards.

Prefinished bamboo is available in two colors, natural and carbonized, and in two sheens, high gloss and matte. The carbonized color shows a lustrous warmth, akin to natural cherry, that would enhance any kitchen.

COCONUT PALM



This newcomer is milled from the dark wood of the coconut palm. Developed by Smith & Fong, Durapalm is a ¾-in. thick, 72-in. long, 3-ply tongue-and-groove floorboard that is 25% harder than red oak. It is free of formaldehyde and VOC emissions.

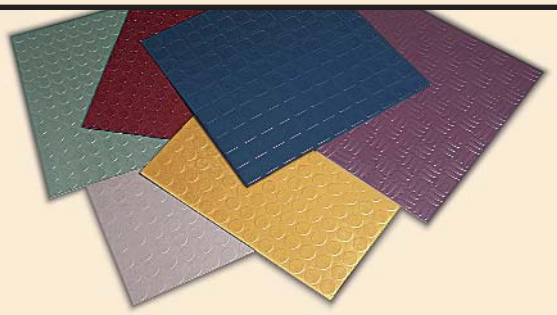
Durapalm is available both unfinished and prefinished. The latter type uses the ceramic system of embedded particles to prolong finish life, which is warrantied for five years. The edges are microbeveled; the color choices are a medium mahogany and a dark brown. The installation methods are the same as used for other hardwoods, and so are care and maintenance.



Photo: Courtesy of Smith & Fong Co.

Why use it? It has the same benefits as sustainably harvested wood, along with an alluring color, warmth and figure.

RUBBER



This material is gorgeous, but will it work for you? It has some great qualities, and some not-so-great ones ("Pros/Cons, below). It is manufactured now in a host of heavenly and earthly colors, patterns and textures. But a lack of demand means that manufacturers' distribution networks aren't geared to sell most rubber flooring at retail.



Photo: Andy Engel

Flexco is an exception. Its Repel rubber flooring is formulated to resist grease, and it's sold in retail stores. Repel is available in 12-in. and 18-in. squares, which can be heat-welded together following installation. Install using their solvent-free adhesive.

PROS: BAMBOO AND PALM

Environmentally friendly, warmth, beauty, available prefinished, hard, durable

CONS

Limited colors in prefinished, finish maintenance required, limited product choice

COST

Bamboo: $5-$8 per sq. ft.
Palm: $8.75 per sq. ft.

SOURCES: BAMBOO AND PALM*

Bamboo Flooring International Corp.
(800) 827-9261; www.bamboo-flooring.com

D&M Bamboo Flooring Co.
(630) 582-1600; www.dmbamboo.com

***Smith & Fong Co.**
(866) 835-9859; www.plyboo.com

PROS

Resilience, durability, insulates, quiet, comfortable underfoot, traction, low price

CONS

Can be harder to find sources, fewer choices, dull finish, grease/oil can stain

COST

$3-$4 per sq. ft., material only

SOURCES: RUBBER

BurkeMercer Flooring Products
(800) 447-8442; www.burkemercer.com

Flexco
(800) 633-3151; www.flexcofloors.com

STAINLESS STEEL



No surprise that this high-style floor is made in Italy. I understand it's the flooring choice in at least one showroom there: Ferrari. If it can hold up to cars, it likely will hold up to foot traffic in even the busiest kitchens.

Manufactured in 18-in. sq. and 24-in. sq. panels, each piece of stainless flooring has a raised pattern, all the better to slow skids. A



Photo: Courtesy of Sistema Men

custom underlayment of interlocking rubber squares cushions and guides panel installation. The combined thickness is less than 7 mm.

The steel panels do not attach to the subfloor; they are screwed to the rubber underlayment with Phillips-head screws (made of stainless steel) in predrilled holes.

PROS
Durable, portable, stylish

CONS
Expensive, cold, glare

COST
$35 per sq. ft., includes underlayment; installation, shipping additional

SOURCES: STAINLESS STEEL

Rochelle Vagenas (U.S. sales rep)
(401) 225-4040



CORK: A NATURAL CHOICE FOR FLOORS



It grows on trees. *Cork is the thick outer layer of bark that protects cork oak trees in forests near the Mediterranean. Fortunately, it grows back and can be harvested periodically. Photos above courtesy of AmCork.*

Another ambassador from green land, cork (like linoleum and bamboo) originates from a natural source not endangered by its harvesting. Cork tiles are made of the bark of the cork oak tree, bark that can be peeled off every decade (the trees live to be 150 years old). Frank Lloyd Wright liked cork, and he installed it in houses where it endures today.

Contemporary cork floors now are sealed with UV-cured acrylic or water-based urethane sealers. Neither water nor oil penetrates the sealer. What's more, you literally are walking on air: Cork tiles contain 200 million air cells per cu. in.

Traditionally, cork floors have been made from 12-in. sq. tiles, up to 5/16 in. thick, in the familiar honey color. Those tiles are still available, but manufacturers have broadened their offerings. ContempoCork has tiles in more than a dozen stain colors. KorQinc makes a striped plank in a choice of two color duos, as well as tiles and moldings. AmCork offers cork flooring in more than 30 patterns and colors. And now two companies, BHK and KorQinc, produce cork flooring in a glueless tongue-and-groove plank.

Because of cork's thirsty, expansionist tendencies, moisture is the crucial concern. In areas with wide variations in humidity, experts recommend installing cork floors at the driest time of year. After installation, cork floors should be finished with the manufacturer's recommended sealer to ensure that the edges of the tiles or planks are sealed thoroughly. To keep them clean, damp-mop water-based urethane finishes with a water-and-vinegar solution.

PROS
Resilient, less breakage of dropped items, comfortable underfoot, warm, "green" material, durable, moderate cost, sound and thermal insulator, hypoallergenic, simple care

CONS
Limited color/style selection, can fade, can dent, finish maintenance required, characteristic odor

COST
$5-$9 per sq. ft., material only

SOURCES: CORK

AMCORK
(888) 955-2675; www.amcork.com

BHK OF AMERICA (SEE P. 41)

CONTEMPOCORK LLC
(201) 986-7915

CORKDIRECT
(800) 344-2675; www.corkdirect.com

DODGE-REGUPOL INC.
(866) 534-6084; www.regupol.com

KORQINC AT EX INC.
(212) 758-2593; www.korqinc.com



SHEETS AND SQUARES: VINYL AND LINOLEUM



Vinyl ranges from tame to wild. *A perpetual top performer in the kitchen, vinyl is durable and inexpensive, and it's available in a multitude of colors and patterns.*

VINYL

Vinyl flooring, which bounded into homes in the 1960s, works great in the kitchen and remains a popular choice today. Inlaid patterns are consistent throughout the thickness of the material. They last longer than those patterns printed on the top surface only (rotogravure), which can wear off. So inlaid costs more.

Products differ mostly in the composition of the top, or wear, layer. The tougher and more resistant, the longer the life expectancy of the product; also, the better the warranty. Many wear layers now are impregnated with aluminum oxide and nylon. At least a dozen companies with high brand recognition provide top products.

Rob Peck at Epstein Bros. Flooring in West Hartford, Conn., praises Congoleum's Ultima line, which comes in 12-ft. widths (the old vinyl standard was 6 ft.). Material width may be a material factor in your kitchen. Ask where the seams will fall.

Armstrong's new residential-flooring introductions "have added texture to color and pattern as the third element of design," says Deb Esbenshade, Armstrong's general manager of product styling and design. The company's recent sheet-vinyl products resemble stone, tile, concrete and even crocodile (photo left).

Maintenance: There is some, but not much. As with wood floors, the culprits are outdoor grit and pebbles that are likely to scratch the finish or to become embedded. Sweep, damp mop, and follow manufacturers' recommendations about cleaning products.

PROS

Resilient, comfortable, enormous variety, tough, wears well, low cost, works in most site conditions, good warranties, simple maintenance, non-absorptive

CONS

Can fade or yellow, pattern can wear off, seams can lift or intrude visually

COST

Ranges from $1.25 to $5.50 per sq. ft., material only



Abstract designs in hundreds of colors. *Made from natural ingredients, linoleum comes in subtle patterns that don't try to mimic anything. Marmoleum's products also include fancy prefab border strips.*

LINOLEUM

What it is: a product manufactured from natural, renewable resources, including linseed oil, wood flour, ground limestone, pigments and resins, and backed by jute fiber. Its components, in combination, have both antistatic and bactericidal qualities.

What it is not: vinyl (PVC).

Vinyl pushed linoleum aside in the 1960s because then it required waxing to keep it looking good, while vinyl didn't. Today's linoleum doesn't need waxing because it comes presealed and also can be resealed.



In the United States, Forbo Industries (Marmoleum) and Armstrong (Marmorette) market linoleum for residential use. Marmoleum's sheet product is 6 ft. 7 in. wide, and its tiles are 13 in. sq. The product is available in more than 150 colors/patterns and 13 borders. Or you can create your own design, to be precision-cut using water-jet technology and inlaid by the installer. Armstrong's Marmorette is produced in 6-ft. wide sheets and is available in 16 colors.

Remember the phrase "... wears like iron"? It describes not only some drab garment that probably itched, but also lively linoleum. Maintenance? Be as ecofriendly as the product itself, using a pH-neutral cleaner. Follow manufacturers' guidelines.

PROS

Environmentally friendly, antiallergen, antistatic, resilient, comfortable, durable, tiles are a good DIY choice, large color selection, simple care

CONS

Pricier up front, seams can intrude visually, harder to find installer

COST

Forbo Marmoleum, $5.50-$8.50 per sq. ft., installed; Armstrong Marmorette, $3.75 per sq. ft., material only

SOURCES: VINYL

AMTICO INT'L INC.
(800) 291-9885
www.amtico.com

ARMSTRONG WORLD INDUSTRIES
(888) 276-7876
www.armstrong.com

CONGOLEUM
(800) 934-3567
www.congoleum.com

DOMCO
(800) 465-4030
www.domco.com

MANNINGTON
(800) 356-6787
www.mannington.com

SOURCES: LINOLEUM

ARMSTRONG WORLD INDUSTRIES
(888) 276-7876; www.armstrong.com

FORBO LINOLEUM INC.
(800) 842-7839; www.themarmoleumstore.com

TILE: CERAMIC AND STONE





The look of stone without the cost. *The latest offerings from manufacturers include stone look-alike tiles that come in a broad variety of colors and sizes. The vitreous choices are harder and less absorbent than the stone they resemble. Photo by David Duncan Livingston.*

CERAMIC

Mosaic-tile floors that have been excavated in Piazza Armerina, Sicily, are 1,800 years old. How's that for durability?

The Porcelain Enamel Institute groups tiles in categories (I to IV+), indicating increasing durability. Durability is a function of a tile's hardness, and of the sheen and color of any glaze. (Light-color glazes are more durable than dark, for example.) Kitchens usually need a group III or higher tile. Choose a tile with good slip resistance. Unglazed tiles are less slippery than glazed tiles. Any tile with a slightly textured surface provides greater traction than a smooth tile. The texture shows dirt less; too much texture, however, inhibits cleaning.

Tiles that mimic stone in their texture and have mottled coloration are popular now. Many of these tiles are porcelain products, fired at temperatures so high that they are vitreous. This process renders them harder than the slate, granite, marble or limestone they resemble. They are extremely dense and absorb little water, meaning you can continue your kitchen flooring outside the house. And these tiles are made in sizes larger than previous standards, up to 18 in. sq. The larger the tile, the more expansive your kitchen space reads.

Recycling has entered the world of tile. EcoCycle is a porcelain tile made of unfired, reclaimed raw materials, byproducts of Crossville Ceramics' manufacture of standard-color porcelain tile. Before EcoCycle, these byproducts were discarded.

Care/maintenance: Follow the manufacturers' specs regarding sealer (type and frequency of application) on the tile you select. Use the recommended grout and seal it. Clean with diluted household cleanser and hot water; rinse thoroughly.

SOURCES: TILE

CERAMIC TILES OF ITALY
www.italytile.com

CROSSVILLE PORCELAIN STONE/USA
(800) 221-9093
www.crossville-ceramics.com

DALENE/CARPET ONE FLOORS
(800) 227-7381
www.carpetone.com

THE MOSAIC TILE CO.
(804) 794-2700
www.mosaictileco.com

TILE OF SPAIN CENTER
(305) 446-4387; www.tilespain.com

SOURCES: STONE

GREEN MOUNTAIN SOAPSTONE CORP.
(802) 468-5636
www.greenmountain soapstone.com

MARBLE GRANITE DEPOT
(888) 379-1111
www.marblegranitedepot.com

MOST VENDORS OF CERAMIC TILE CARRY STONE TILES

PROS	CONS
Durability and hardness, enormous variety, simple care, environmentally friendly, no staining or fading, good over radiant heat, moderate cost	Less comfortable underfoot, hardness means breakage of dropped items, cold, noisy, grout can stain or crack

COST

Ceramic tile: $1.50-$8 per sq. ft.
Stone tile: Typically $5-$16 per sq. ft.

STONE

If you value an original more than a copy, consider stone: granite, limestone, slate, soapstone. Stone retains heat (remember those early bed warmers?), making a stone floor a fine installation over radiant heat or in passive-solar situations. We know it's durable, and it is low maintenance.

Soapstone sends a worn, venerable message; black absolute granite sends a polished, sophisticated one. Rustic stone tiles with slightly irregular dimensions will look their best with wider grout lines. Crisply machined stone tiles, such as the soapstone floors from Green Mountain Soapstone, have edges accurate enough to require no grout. Just butt them together.

Seal any stone except soapstone. A stone supplier can recommend the best sealer. Maintain your floor with a pH-neutral cleaner but nothing that leaves a soap film, which traps dirt.



