



Shop Flooring Solutions

Quick, effective coverings
for a cold concrete slab

BY ANATOLE BURKIN

Concrete is a perfect shop floor for machines. But it's not so kind to the body or to the occasional dropped hand tool. Concrete is especially nasty in the winter if your shop is in a detached building. And no matter how high the indoor-air temperature gets, the floor is always cold, even in warmer months.

Determined to get off the slab and to do it with a minimum of fuss, I surveyed what floor coverings were available. My primary goal was to find products that would be easy to install and would keep my feet from freezing in winter. Of secondary importance was to find products that acted as a moisture barrier, could protect a dropped tool, and were easy to keep moderately clean.

I found five types of flooring products that seemed to meet all of those criteria. One is a wood composite; the others are PVC based.

Wood composite vs. PVC

The wood-composite product, called DRICore, is a subflooring material made of random waferboard bonded to a high-density polyethylene base. This

WOOD-COMPOSITE TILES

Although they're designed to be a subflooring material, on shop floors these large tiles can be used as is. Easy to install with tongue-and-groove joinery, the tiles help insulate you from a cold floor.

DRICORE

AVAILABLE AT THE HOME DEPOT
866-976-6374
WWW.DRICORE.COM

The 7/8-in.-thick DRICore panels are about 2 ft. square and fit together with tongue-and-groove joints. The fit between adjoining tiles was good, but not as neat and tight as with PVC tiles (see pp. 52-53). This is the only flooring product that has a leveling system; special spacers can be purchased to correct for minor pitch changes in your floor. No fasteners are needed. Although sold primarily as a subflooring system for basements, the panels may be used as is. The clear acrylic finish is not meant as a wear surface but as a sealant; however, the manufacturer says it can be topcoated with a non-water-based paint or a polyurethane floor finish.



The insulation factor. After the concrete floor and the acclimatized DRICore tile are checked with an infrared thermometer, the readings show a 4.5°F difference. The polyethylene underside elevates the tile, providing a moisture barrier and adding to the insulation factor.



INSTALLING WOOD-COMPOSITE TILES



Block, mallet, shims, and a jigsaw for installation. Protect the tongue-and-groove edge with a block when knocking the tiles into place with a mallet (left). Leveling spacers are easy to position and compensate for any unevenness in the concrete floor (above). With the tiles on a stable support, cut them to size with a jigsaw.



tongue-and-groove product was created as a base for carpet, vinyl tile, or engineered hardwood flooring, but it may be used as is. The color of DRIcore is a natural-wood tone, and the surface can be painted. A mallet and a jigsaw are all the tools required for installation.

Most of the PVC products are available in the form of interlocking tiles (Century, Lock-tile, and Resilia) and come in a variety of colors. All of the tiles can be installed with a rubber mallet and trimmed with a utility knife.

PVC flooring also comes in the form of large sheets (Better Life Technology) that unroll like a carpet and can be trimmed with a utility knife. Adjoining sheets may be laid side by side or attached to the floor at the seam with carpet tape. PVC rolls are available in numerous colors.

Costs for both composite and PVC flooring products range from about \$1.25 per square foot to more than \$4 per square foot.

Performance underfoot

I assembled samples of each flooring type, and they fit together easily. The PVC products were best assembled at room temperature, between 60°F and 70°F, which made them pliable and easy to connect.

All of these flooring products provided some insulation from the concrete slab, which can reduce the rate of body-heat loss.

Covering concrete with flooring also resulted in a warmer floor temperature, although only slightly. Using an infrared thermometer, I found that the floor temperature increased by 2°F with the PVC products. With the wood composite, though, the floor temperature increased by 4.5°F, a noticeable amount. All of these products also act as vapor barriers, which, depending on how the concrete slab is constructed, may reduce the humidity in your shop.

To see how well these floor-

PVC TILES

Available in a variety of colors and sizes, PVC tiles have interlocking tabs, some of which create almost invisible seams. Quick to install and ready for immediate use, these tiles lend a bright and modern look to a concrete floor.

BOTTOM

LOCK-TILE

EVERTILE FLOORING CO.
888-562-5845
WWW.LOCKTILE-USA.COM

Lock-tile pieces are ¼ in. thick and 19⅝ in. square. They come in nine colors (custom colors may be ordered but only in large quantities). Like other PVC-tile products, these can be installed with a rubber mallet and a utility knife. The interlocking tabs create a snug but exposed joint.

Approximate cost: \$3.20 per sq. ft.

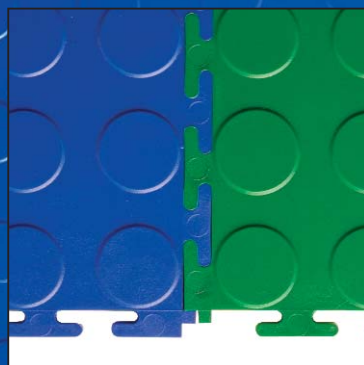
CENTURY

FLOORING ADVENTURES
877-779-2454
WWW.FLOORINGADVENTURES.COM

Century PVC tiles are ¼ in. thick and 18 in. square and come in seven colors. The hidden interlocking dovetail-shaped tabs seemed to be the best-designed joint of all the samples; the connection is secure and nearly invisible, leaving only a hairline gap between adjoining tiles.

Approximate cost: \$4.39 per sq. ft.

Locking tabs vary in style. Lock-tile tabs leave a visible seam (above), while Century tiles have tabs that join in a tight, clean, and hidden seam (below).



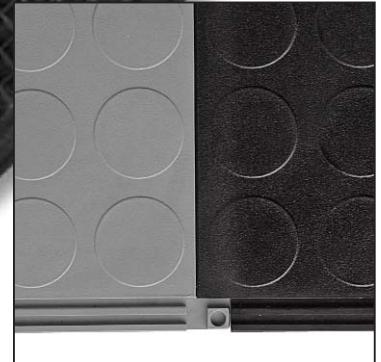
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BOTTOM

RESILIA

FLOORSURFACES INC.
805-963-4250
WWW.FLOORSURFACES.COM

Resilia interlocking tiles come in a choice of 20 colors, and for a surcharge, custom colors may be ordered. These ¼-in.-thick tiles are 12 in. square and have a hidden interlocking joint, which leaves only a hairline seam between tiles.
Approximate cost: \$3.45 per sq. ft.



A clean look. When locked together, the Resilia tiles have a tight seam.

LAYING PVC FLOORING



The tight interlocking tabs are joined easily with a mallet. Knock the interlocking edges into place with a rubber mallet for a snug, flush seam.



Trim the tiles with a utility knife and a straightedge. PVC tiles are thin enough to be cut to size with a standard utility knife.



A clean finish. Some manufacturers offer edge strips, which are snapped on or glued into place.

PVC ROLLS

This material covers a concrete floor in no time, lending a clean and uniform covering. Although durable, it is thinner and more flexible than the PVC tiles.

BLT (BETTER LIFE TECHNOLOGY)

877-810-6444
WWW.BLTLIC.COM

BLT's PVC floor covering comes in a roll. The material is about $\frac{1}{8}$ in. thick and is available in various widths and lengths and in six colors. BLT's covering is the easiest product to install: Simply unroll it. Adjoining sheets can be butted together, but for a better joint, tape mating edges to the concrete with indoor/outdoor double-faced tape. Approximate cost: \$1.10 per sq. ft.

ROLLING OUT PVC FLOORING



Cover a large surface area in no time. The large, heavy rolls are easy to install once in position. Wait for warm weather, as the PVC material is more pliable and easier to unroll above 60°F.



Trim with a utility knife. Before trimming the excess material, allow it to relax at the base of the wall.



Hold down edges with tape. When taping the edges, use indoor/outdoor double-faced tape.

ing products could protect a tool from mishap, I dropped a sharp 1-in. chisel from waist height onto each sample. In all cases, the flooring prevented the edge of the chisel from chipping. All of the flooring samples suffered only minor damage, except for the Better Life Technology PVC sheet, which was partially punctured. Such a fine slit, however, is unlikely to degrade the product.

I dabbed each type of flooring product with typical shop chemicals such as naphtha, alcohol, and oil stain, and did not see any damage (the PVC products are rated against damage from a host of chemicals). Except for the DRICore tiles, which absorbed some stain, all of the flooring samples cleaned up easily.

What to choose for your shop

It seems you couldn't go wrong with any of these flooring products, based on the ease of installation and the insulation improvement. Budget, however, may be a factor in your decision (prices are noted in the comments about the individual products), as may be aesthetic considerations. For instance, the PVC flooring comes in numerous colors. You could even make a checkerboard pattern if you go with the PVC tiles. PVC also is a durable substance, and it might wear better than wood composite.

There's another point worth mentioning: During the course of my review, a number of people asked me which of the flooring products was more comfortable to stand on. I can't say any of them is a substitute for antifatigue mats, which have a lot more give. But I did appreciate the insulating qualities that the DRICore tiles provided during cold weather. □

Anatole Burkin is the editor of Fine Woodworking.