

ALL ABOUT

Composite decking

Long on life span and short on fuss, these man-made boards never splinter, rot, or need staining. The TOH team explains everything you need to know about selecting, installing, and caring for this thoroughly modern material **By Sal Vaglica**

That singular American creation, the backyard deck, conjures up images of idyllic afternoons napping in a hammock or festive get-togethers around the grill and a tub of ice-cold beer. But maintaining that elevated expanse of lumber is a downright chore, what with all the scrubbing, bleaching, and staining that wood requires—not to mention the occasional replacement of a splintered, warped, or rotten board. So when the less demanding plastic-composite decking appeared on the scene in the 1990s, homeowners happily adopted it, despite the higher price and limited color selection (gray). A decade later, as companies began to offer new products that looked like fresh-cut cedar and Brazilian walnut but never turned gray, sales of composites took off. Last year's tally came to \$1 billion.

That kind of popularity represents a big boost for the environment, too, because most composites are made from waste: sawdust, used plastic milk jugs, and shopping bags. Every 20 feet of decking contains about 30 pounds of material that would have ended up in a landfill. Trex, the first and largest of the composite manufacturers, recycles 6 million pounds of plastic each year.

The fact that composites don't feel or look like real wood is beside the point. Once in place, they just do their job and don't need much more than an annual washdown, leaving you plenty of time to work on your nap.

What's in a board?

Equal parts of wood fiber and plastic are mixed with pigments, ultraviolet inhibitors, and borate preservatives, then usually heated and extruded. The texture, if any, is embossed onto the warm surface before it cools.



recycled plastic
Shredded polyethylene from milk jugs and shopping bags

waste wood
Ground-up wood from mills and furniture factories



VITALS

What's it cost?

Run-of-the-mill boards start at \$4 per square foot, while the premium products that closely resemble tropical wood run up to \$7.20 per square foot.

What's the warranty?

Most manufacturers offer either a 25-year or limited-lifetime warranty on structural integrity; some warranties are transferable from one homeowner to another. Fading, scratches, and stains usually aren't covered.

How much care?

Less than wood. A simple scrubbing with soapy water and a soft bristle brush is usually all that's needed.



Not just decking.

Everything you need to finish a deck—fascia boards, railings, balusters, treads, and posts—is made in matching colors using the same composite material.

Does it burn?

Yes, but at a much higher temperature than wood. Most composites meet California's strict Wildland-Urban Interface Building Code.

The grooved boards of this cozy backyard deck have been set at a slight pitch and oriented so that rainwater drains away from the house.

Is this the right decking for you?

Before you make a commitment, weigh the pros and cons of composites



Reduced maintenance. Forget about having to bleach and stain wood every other year. With the money you save by not using these coatings and cleaning materials, you can recoup the higher cost of composites in about five years.

Long life: Composites don't rot or attract termites, they can't warp or check, and you can go barefoot without fear of splinters.

Minimal fading: All composites turn a slightly lighter shade after the first two or three months in the sun, then the fading stops. (Left to its own devices, wood inexorably turns gray.)

Longer boards. Up to 20 feet, which means fewer end joints.

High recycled content: Every 10 square feet contains nearly 3,000 recycled plastic shopping bags and 1,100 one-gallon milk jugs.



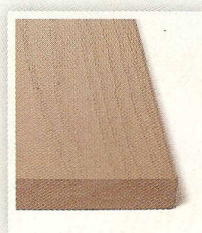
High initial cost: Low-end composites are priced about 30 percent higher than pressure-treated pine. High-end composites run about the same as ipe (ee-PAY), a hardwood decking harvested from tropical rain forests.

Easily scuffed: Moving furniture, frisky dogs, and gritty shoes will abrade new composites. Light scratches can't be sanded out but do blend in over time.

Prone to staining: The wood fibers are easily stained by food and grease. And the hardwood in many mixes can create uneven brownish tannin stains early on when wet, but they typically disappear over time.

Hot underfoot: Like dark hardwoods, dark composites heat up as they bake in the sun. Lighter-colored and deeper-grooved boards are more barefoot-friendly.

Doesn't really look like wood: Some boards do a better job at mimicking wood than others, but a close look or touch gives them away.

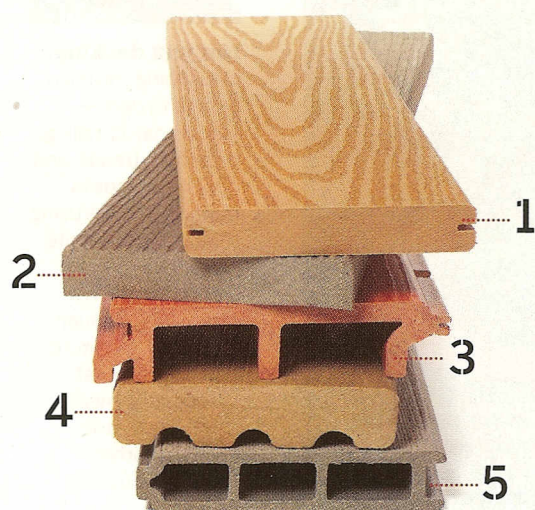


THE ALL-PLASTIC ALTERNATIVE

They look like composites, but these boards are actually 99 percent virgin PVC plastic, very different stuff from the polyethylene-wood mix found in most composites.

PVC is harder than polyethylene, so it doesn't scratch as easily. And because it doesn't contain wood fiber, it won't absorb water or food stains. (Suntan lotion and insect repellent will stain it, however.)

But all-plastic decking has a very limited color palette—three or four colors at most—and it's pricey, about the same as a top-of-the-line composite. Plus, PVC is not particularly friendly to the environment: There's no recycled content, and when it burns it releases toxic hydrogen chloride gas.



The importance of profiles

Composites are made in a range of profiles to make boards lighter, easier to install, or both. The profile you pick determines how your deck will be fastened down, which affects its look (do you want to see screw heads or not?); the installation speed; and how much you'll pay for the fasteners (see p. 96).

1_ SLOTTED. Grooves along both sides accept the hidden fasteners specified by the manufacturer. 2.5 pounds per foot. Starting at \$4.60 per square foot; latitudesdeck.com

2_ SOLID. Can be face-fastened or edge-fastened and has two usable sides. 2.5 pounds per foot. Starting at \$4.60 per square foot; evergrain.com

3_ OPEN FLANGE. Saves weight without loss of stiffness. Uses only hidden fasteners. 2.2 pounds per foot. Floorizon, \$5.90 per square foot; timbertech.com

4_ SCALLOPED. As heavy as a solid board but with only one usable side. Fastens like a solid board. 2.5 pounds per foot. Starting at \$4.70 per square foot; choicedek.com

5_ HOLLOW. Stiffer and almost 25 percent lighter than a solid board. End caps stop bugs from nesting inside. Fastens like a solid board. 1.9 pounds per foot. \$6.90 per square foot; geodeck.com

Pick your board

There are profiles, textures, and colors to enhance any home. Here's what you can choose from

textured grain

Professional by Fiberon

Price: \$4.90 per sq. ft.

Highlight: Both faces have a rough, cut-in "grain" that helps hide scuffs and scratches. Slotted profile. fiberondecking.com

two-faced

Veranda

Price: \$4.50 per sq. ft.

Highlight: One side has a wood-grain look (shown), the other is brushed. Slotted profile. homedepot.com

plastic-wrapped

Horizon by Fiberon

Price: \$5.80 per sq. ft.

Highlight: A covering of proprietary resin gives it excellent stain, scratch, and fade resistance. Reversible matching faces. Slotted profile. fiberondecking.com

embossed grain

Classic EverGrain by TAMKO

Price: \$4.60 per sq. ft.

Highlight: The graining is deeper because it is pressed rather than cut into the board. Solid profile. evergrain.com

weathered wood

Exotics by Monarch

Price: \$6 per sq. ft.

Highlight: Extra pigments produce a veining designed to resemble aged cypress. Reversible. Slotted or solid profile. monarchdeck.com

paper board

Cedar by GeoDeck

Price: \$6.90 per sq. ft.

Highlight: Made with plastic and recycled paper, which the company says resists fading better than wood fiber. Hollow profile. geodeck.com

watertight

MoistureShield by A.E.R.T.

Price: \$4.40 per sq. ft.

Highlight: Absorbs almost no water, even if submerged. Scalloped underside. moistureshield.com

Why the price difference?

All composites have roughly the same basic ingredients and performance characteristics. The primary differences come down to aesthetics: If you want more color choices and a more woodlike appearance, you'll pay more.

→ These boards have rough, deep graining and are 5 inches wide, 1/2 inch narrower than higher-priced boards.

Colors are limited to gray, red, and brown. To make this board lighter, ridges are pressed into the underside, so only one side is usable. Trex Contours, \$4 per sq. ft.; trex.com

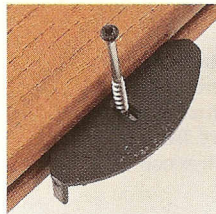
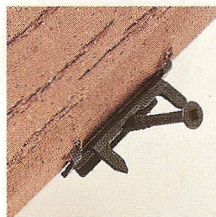
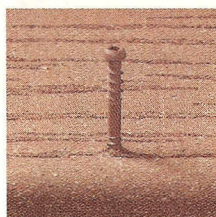
<basic>

<mid-range>

→ The surface grain pattern is more subtle than a basic board, and it has two usable sides. Width is 5 1/2 inches. Choose from four colors. Trex Accents, \$5 per sq. ft.; trex.com

<premium>

→ Streaks of a different-colored pigment added to the mix replicate the look of tropical hardwoods. These 5 1/2-inch-wide boards have little or no surface texture, although they are slip-resistant. Also available with slots. Trex Brasilia, \$5.90 per sq. ft.; trex.com



<Aha!>



TOH technical editor Mark Powers turns composite boards on their edges to make the curved borders for a brick walkway. (Learn how to do the same project at thisoldhouse.com/bonus.)