

# What's New in Decking?



ADVANTAGE TRIM & LUMBER

**More colors, textures,  
and materials mean  
more opportunities for  
you to close the deal**

by Mark Clement

I remember when there were roughly a billion fewer choices of deck boards and railing systems. The first decks I worked on as a carpenter's helper weren't even made of treated lumber — they were 2x6 SPF. (I'm sure they're mulch by now.) A few years passed and I graduated to ocean-dock building for very high-end customers. On their stratospherically expensive home sites it was "all pressure-treated all the time." And you'll love this: We hand-nailed and carriage-bolted it all together. Our nice-looking — but decidedly green-hued — docks and swim floats reached out into Pleasant Bay.

Fast-forward to the 21st century. Any trundle through a lumberyard, big-box store, or trade show

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sends your head swiveling to look at seemingly endless choices of stuff to build decks and guardrails out of. There's no shortage of wood — the tried and true treated hem-fir and SYP, cedar, and now hardwood — and there's also a veritable ocean of composite and PVC products to service our customers' increasingly wide range of preferences.

“Over the past five years we have seen an explosion of products available on the market, and in one way or another, they have all helped,” says Shawn Miller, owner of Classic Designs in Centennial, Colo. “Wood, composites, vinyl, aluminum, stone ... The list seems to grow almost daily.” And even if “daily” might be a hair hyperbolic, when the parade of new composites started its march onto the scene about two decades ago, who would have guessed that decking options would grow this varied?

Blame (or thank) the massive trend called “outdoor living,” where premium decks seem to be creating opportunities for all kinds of new products and add-ons. The decking market is expected to grow by about 20 percent annually to become a 3.6-billion-lineal-foot industry by 2011, according to Cleveland-based industrial-market research firm The Freedonia Group. That's enough decking to wrap around the Earth almost 27<sup>1</sup>/<sub>2</sub> times.



**Figure 1. Tigerwood decking is Advantage Trim & Lumber Company's less expensive alternative to ipe. Tigerwood has a 25-year (or longer) life span, is Class A flame retardant, and is resistant to scratching, splintering, and cracking, says the company. (877/232-3915, [www.advantagelumber.com](http://www.advantagelumber.com))**

### Would You Use Wood?

As recently as 1992, wood made up about 98 percent of the decking market. While its domination has slipped a bit with the development of synthetic and composite alternatives, there's still a huge demand from consumers and pros for tree-based material.

If you're thinking that “wood” means pressure-treated decking for those homeowner-customers who'd rather save a few bucks, you're not entirely correct. Tropical hardwood is the fastest growing segment in the wood category, according to The Freedonia Group. Deck professionals from California to Texas to New York support the numbers:

“Eighty percent of my decks are ipe, the Brazilian hardwood,” says Al Terry of New York Decks in New York, N.Y.

“We're doing about a 75/25 split with natural wood over composites,” says Stephen Dillinger of Austex Fence & Deck in Austin, Texas. “Cedar is probably the most requested.”

“Eighty to 90 percent of the decks that I build are ipe. Customers like the look,” says Bill Bolton of DeckCreations in Santa Barbara, Calif. “They like that it is as low maintenance as any of the composites. Many times they will call requesting a composite, but once they see and hear about ipe they usually go for it.”

Ipe has earned its status as the beautiful bulldog of the decking world, withstanding serious wear and tear on the Atlantic City Boardwalk and on Treasure Island in Las Vegas. A dense hardwood, it is naturally resistant to rot and decay. In fact, it's so dense many deck builders might characterize it as resistant to nails and screws too, but many customers seem to be willing to pay the upcharge for both the material and the labor. There are hardwoods other than ipe as well. Advantage Trim & Lumber Co. offers Tigerwood, for example, long familiar to woodworkers as gonalco alves (**Figure 1**). Others include garapa (see photo, left) and cumaru.

Because ipe is a tropical hardwood, some question whether it can be considered green. “We are one of the leading ipe importers in North America,” says Dan Ivancic of Advantage Trim & Lumber. “The company's owner makes frequent trips to Brazil to ensure responsible harvesting. That way we can maintain the rainforest and maintain a responsible supply of ipe and other fine hardwoods.” This seems rational: One way to keep forests is to keep needing forests for the board feet

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**Figure 2.** TimberSil is southern yellow pine that has been infused with glass. The maker, Timber Treatment Technologies, claims that its product offers greater span ratings than standard treated southern pine. It's also much harder — about as hard as hickory. The company says the product is extremely “green.” (703/644-0991, [www.timbersilwood.com](http://www.timbersilwood.com))



**Figure 3.** Using specially designed kilns, Bay Tree Technologies modifies wood into a state where it protects itself. Chemical changes the wood undergoes make it inedible to insects, fungus, and mold. The end product, PureWood, is chemical- and metal-free. It's non-corrosive and non-toxic too. (888/575-4180, [www.purewoodproducts.com](http://www.purewoodproducts.com))

they produce. I've heard the same argument presented by such diverse sources as lumber associations and the former leader of Greenpeace.

The Western Red Cedar Lumber Association (WRCLA) reports that interest in western red cedar has increased proportionally to the increased interest in green products. Like other woods, it is a renewable resource. The WRCLA claims it has a neutral carbon footprint, including the fossil fuels used to manufacture and transport the wood.

Another type of wood, *Cunninghamia lanceolata*, commonly known as China fir, has found its way into at least big-box distribution. It's harvested in China and has an appearance and other characteristics that are similar to — but not the same as — western red cedar. The heartwood is classified as highly rot resistant, but as with all woods, the sapwood rots quickly. Anecdotal reports suggest that some of the China fir available in the U.S. consists of sapwood. Be certain about what you buy.

The Southern Pine Council says that southern pine has always been a green building product, and if you are choosing a product based on its track record, you can't beat 100 years of dependable use. The SPC claims that the manufacture of plastic and composite decking requires up to eight times the energy needed to produce the same amount of pressure-treated southern pine lumber. The flip side of the story is the preservatives used with southern pine, but they've come a long way since 2004, when the use of arsenic-based preservatives for residential purposes was discontinued.

While preservatives that protect natural wood from decay and termite abuse might not be the best medicine for a healthy planet, alternatives are coming on line. One that's available now is TimberSil, a decay-resistant fusion of wood and glass that carries a 40-year warranty (**Figure 2**). Further in the future is a preservative made from parts of trees. The Department of Forest Products at Mississippi State University claims it has created a preservative made from coniferous tree resin and an organic biocide that protects against fungi and termites. Stay tuned for that one. Another approach cooks the wood until it's no longer something that insects or fungi can eat (**Figure 3**).

### Composite Decking

“Over the last six years, alternative decking materials have posted double-digit growth and now account

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**Figure 4.** Fiber Composites' fiberon Sanctuary Decking (above left) has no fiber fillers inside its cellular PVC board. The company claims its product eliminates all edge cracking, staining, and water absorption. The boards have an outer layer of PVC and ASA (acrylonitrile styrene acrylate), a material used to protect automobile bumpers and outside mirrors. The company's Tropics decking line (above right) is designed to reproduce the look of tropical hardwoods. (704/463-7120, [www.fiberondecking.com](http://www.fiberondecking.com))



for more than 20 percent of the total decking market," says Craig Sherrett, director of marketing for Fiber Composites (**Figure 4**). "In fact, it is forecasted that more than one in five decks [will be] built with composites in 2008." Anecdotally, I can't have a discussion with anyone about decks — whether they want me to build one for them or they're telling me about their own deck — and not hear them lavishly praise composites.

An industry segment that was only 2 percent of the decking market 16 years ago and 8 percent eight years ago, synthetic materials are gaining ground in America's backyards. If you're wondering what the percentages really mean and prefer to think in terms of cash-money, synthetic decking accounts for about \$1 billion of the \$4 to \$6 billion decking market, according to John Long of Anderson, Ind.-based Trimax Building Products.

Other experts say it'll keep growing — by about 25 percent each year. That's significantly outpacing the 20 percent annual growth for overall decking demand. It's for good reason: Composites are a durable, low-maintenance solution for homeowners. And you can do funky stuff with it too.

The growth of this industry is good news for a lot of deck builders. "The composite industry as a whole has made our job easier, both in installs and sales," says Shawn Miller, owner of Classic Designs in Centennial, Colo. "With the composite industry spending millions of dollars in advertising, they have made the consumer much more aware of outdoor living. So when we are going out to meet with customers they already know about several products and have options in mind."

What products are customers asking for? You won't be surprised. "A lot of people mention Trex sort of like Kleenex," says Stephen J. Dillinger of Austex Fence & Deck in Austin, Texas. The name recognition is probably due to the company's powerful consumer advertising. While a few brand names used by professional deck builders nationwide stand out — like Trex and now TimberTech (**Figure 5**) — there are dozens of other widely used brands.



**Figure 5.** TimberTech's XLM (extreme low maintenance) decking is made from PVC. The boards are 40 percent lighter than the company's wood-plastic-composite planks. The company claims that XLM is the only expanded-polymer decking product with a color-matched railing system. (800/307-7780, [www.timbertech.com](http://www.timbertech.com))

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**Figure 6.** Weyerhaeuser has added Driftwood (inlay) and Spice (background) to its color selections for ChoiceDek composite decking. The boards are made by a process that encapsulates recycled wood fiber in recycled polyethylene. The product line includes a decorative railing system. (800/951-5117, [www.choicedek.com](http://www.choicedek.com))



**Figure 7.** Vekadeck Pro is Veka Innovations' new cellular PVC deck board, which it touts as a "second generation" to the original. Unlike the original's more characteristic PVC-style glossy finish, Vekadeck Pro has a satin finish. It also has a deeper embossed wood-grain pattern the company calls Traction Grip. (888/464-8352, [www.vekadeck.com](http://www.vekadeck.com))

"Customers don't realize there are so many different types of composites," says Robert Heidenreich of The Deck Store/The Deck & Door Company in Apple Valley, Minn. But he adds, "Regardless of what they ask for, they build with the decking we recommend."

Composite products are winning favor on the pro side for installation ease, consistency of product, and warranty; preadoed boards and hidden fastener systems can be a plus, too.

Recent product introductions seem to be going for a more natural look. "The trend toward the tropical hardwood look in composite decking materials is growing," says Sue Snuggs, product manager for Weyerhaeuser. The Weyerhaeuser ChoiceDek product line has two new colors that reflect homeowners' increasing desire for a tropical-wood look (**Figure 6**). Fiber Composites' Tropics line also is meant to look like tropical hardwood.

### PVC Decking

Even with the seemingly incredible success of composites, the big daddies of composite brand names aren't totally focused on the future of composite formulas. Both Trex and TimberTech have new lines of PVC products. Though Trex has gained popularity with Earth Day celebrants for its recycling of 1.5 billion grocery bags a year — of the 100 billion we Americans use — to create deck planks, the PVC products are raising a few eyebrows because they're not exactly following the popular trend toward green. It isn't just that PVC uses virgin resins — many composites use virgin resins too. The point is PVC is not as appealing to green-lovers as recycled or natural materials are.

Depending on who you talk to, the manufacture of PVC may create some nasty chemical by-products. Like many plastics, PVC can be recycled. Correct Building Products' Martin Grohman wishes it were labeled better, though. CorrectDeck makes extensive use of recycled polypropylene, and Grohman says that even a small amount of PVC mixed into its materials has a negative effect on the manufacturing process.

Still, builders and our customers seem to like PVC (**Figure 7**). "I just installed TimberTech XLM product and loved the way it went down and looked," says Larry Hopkins, president of Five Star Home Remodeling in Bridgewater, New Jersey. "It was easy to handle. I did not have to worry about [marring

### A Deck Builder's Wish List

There may be more choices in decking now than ever before, but there's still room for improvement according to deck builders nationwide. "I believe many manufacturers try to get too far ahead of themselves and introduce products to stay current instead of introducing a quality product that is proven and will last," says Larry Hopkins, president of Five Star Home Remodeling in Bridgewater, N.J. Whether that's a fair statement is debatable, but it's a common sentiment among deck builders. More specifically, here are some things deck builders wish manufacturers would take notice of.

"Our job is easier when manufacturers have a great assortment of colors and products available. This means having all the accessories to go with it. The consumer wants the full package: rail, railing caps, posts, decking, fascia, etc.," says Shawn Vernon of Outdoor Escapes in Littleton, Colo.

Color choices, and fade and scratch resistance are three things Robert Heidenreich of The Deck Store/The Deck & Door Company in Apple Valley, Minn., would like

to see improved. He says, "Seems like the best performing products have the worst color choices."

"More one-on-one support of the builders," says Matt Breyer of Breyer Construction & Landscape in Reading, Pa. Breyer likes to work with a knowledgeable company representative who builds a relationship with installers. "That's why I trust the companies I do — I know I can call on them if I need to."

Deck pros across the board are looking for improved handling of decking from the distributor to the lumberyards to the site, to prevent scratches and gouges. Additional installer training programs and more surface and edge profiles are other items that deck builders mention.

"I would like them to improve the way they spend their advertising dollars. The co-op dollars that they offer contractors is not substantial," says Tim Ellis, owner of T.W. Ellis LLC in Baldwin, Md. "We the contractors influence customers more than any ad in any magazine, paper, flyer, or TV commercial." — *M.C.*

the material by] laying my tools down on it." The only word of caution: Use new blades when cutting the material.

TimberTech's XLM (for "extreme low maintenance") is made of a foamed PVC core surrounded by a solid PVC exterior. Across the board, PVC decking products are considered extremely low-maintenance, as they are more resistant to scratching, staining, and fading than composite decking. And because there's no wood fiber in these deck boards, they're also intrinsically mold resistant.

Many wood-plastic composites can support mold growth, says Scott Schmidt at Correct Building Products, because there's exposed wood fiber on the surface of the material. He points out that mold growth only takes the right combination of circumstances — wet and dark environments and naturally occurring mold in the air or rain, for example. Correct Building Products takes a different tack on weather resistance and durability in its CorrectDeck CX: It's a co-extruded wood-polypropylene (99 percent of composites are wood-polyethylene) product that delivers a board with three sides of pure resin — no wood to gather muck.

And if you are bending decking (in a radius for a curved deck or guardrail, or for S-curves in those funky new patterns you see), PVC is pretty bending-friendly. It's made similarly to trim materials such as Azek, and when properly heated it becomes about as flexible as licorice.

So does brand name really matter?

"Our customers are interested in no maintenance and in value. The product that we use to achieve that is secondary," says one deck builder from Glen Mills, Penn.

"As far as I see it, the only products that people really ask for are the products that the deck builders are pushing themselves," says Steve Scholl of Killer Decks in Wayne, Mich.

This means the wide world of choice also gives you as a deck builder some power in selecting what you install — what works best for you, for your crew, and for what's ultimately the reason we all get up and go to work in the morning: the bottom line. ❖

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