

# CR's Guide to Deck Maintenance and Safety

How to keep your deck in tip-top shape and turn it into a cozy retreat

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Keeping your deck in prime condition will ensure a safe, inviting outdoor living space.  
Photo: Getty Images

Your deck is where you bring your indoor living outdoors—where you grill and dine, relax with family, play with pets. You might use it as a gym, camp-craft studio, or even a remote office on nice days. So you want to make sure it's safe.

Collapses and failures of decks, porches, and balconies accounted for about 2,900 injuries between 2016 and 2019, according to the Consumer Product Safety Commission. "You may think all your deck needs is a power-wash and stain every year or so, but a safety check should be part of routine maintenance," says Ashita Kapoor, associate director of product safety at Consumer Reports.

Here's how to make over your deck for safety, including how to find and fix structural problems and prevent injuries. We have some simple tips for making your deck more cozy, too. For more information on decks, see [CR's ratings of over two dozen decking products](#).

## Replace Fasteners and Rotted Wood

Over time, your deck takes a beating from the weather. So check that everything is secure and sound. Deck and stair railings that are now wobbly could mean trouble; tighten fasteners or replace them if they're rusty. Nail or screw down any nails or screws that you see popping up.

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If those fasteners won't go in, it may mean that the structural element underneath, such as a supporting joist, is damaged and needs replacement, says Mark Guthrie, member of the building code committee for the North American Deck and Railing Association, an industry trade group. The wood could be so soft from decay that it can't hold on to nails or screws.

Replace any decaying wood. How can you tell if wood is rotten?

"If you can poke a screwdriver into the wood more than 1/8 of an inch, it's probably rotted," says Bruce Barker, owner of Dream Home Consultants in Raleigh, N.C., who has written deck inspection guidelines for the American Society of Home Inspectors.

If wood with a [paint](#) or [solid stain finish](#) is decayed, it may look like the finish is lifting or flaking off, says Li Wang, who tests decking for Consumer Reports.

## Prevent Slips

If you're shopping for new decking boards, consider their slip factor. You don't want to fall if you're out on your deck after rain or a water-gun duel. CR's [decking tests](#) show that in wet and dry conditions, wood is the best material for resisting a slip, followed by aluminum decking. Some composite materials and plastic decking don't perform as well.

Another way to reduce slips is to add outdoor area rugs. Look for those made from solution-dyed acrylic, says Tracy Morris, an interior designer in Washington, D.C. Because the dye is mixed into the acrylic solution before it's spun into fiber, the resulting material is colorfast and water- and stain-resistant. "It's a high-quality material," she says.

**Pro cleaning tip:** Pull up the rug periodically to check for moss or algae, which—unlike mold—can grow on synthetics. Scrub affected areas with diluted vinegar. Press a towel over the wet spot where you've scrubbed to soak up moisture, then air-dry over the deck railing.

## Check Under the Deck

You might not think to look under your deck, but it's important to make sure the ledger board, which attaches the deck to your home, is secure. A ledger that's not well attached can break away from your home and cause a deck collapse. The safest ledger connection goes all the way through the wall to attach the ledger to your home's interior floor supports.

Decks built within the past five years are likely to have strong, new fastener designs that significantly reduce that risk. But if your house is older, consider having a contractor or professional deck inspector check out your deck's attachments. (This specialized task isn't part of a standard home inspection, so it may not have been checked before.)

If you need new attachments, it could run you from around \$600 for a small, low deck connected to a house with wood floor supports to \$2,000 for a large, high deck attached to floor supports that aren't wood.

"It's expensive," says Andy Happ, president of Happ Contractors in Doylestown, Pa., "but it's better than a bunch of people pitching off the side of a house when the deck fails."

You may also need a contractor to replace or add flashing to deflect water from the ledger board and joist attachments. Otherwise, the ledger board can weaken from moisture damage and sag or collapse.

## Grill Safety

To prevent fire and smoke damage to siding, decking, and deck furniture, place your grill 2 feet away from railings, siding, and any wires, awnings, or other overhangs.

"You don't want smoke and fumes to get into the house to damage items or sicken anyone inside," says Larry Ciufu, who tests grills for Consumer Reports.

Place the grill on a nonflammable grill mat (most we found online cost \$20 to \$90). Make sure any storage boxes—such as for lighter fluid, cleaners, and other hazardous materials—have childproof latches.

Also, trim any branches hanging above your grill. They can dry out over time and become a fire hazard.

Here's more advice on [safe grilling](#).

## Light Up the Night

To ensure safety and visibility, municipalities usually mandate lighting around deck areas such as steps and landings, says Patrick Harders, a landscape lighting designer and co-owner of Sterling Lighting, an outdoor lighting maker in Danville, Va. But avoid wall-mounted security floodlights. "You don't need that 'prison breakout' look to make things safe," Harders says.

Instead, choose softer lighting for a warm, inviting feel. Place uplights at the bottom of deck posts and staple strings of LEDs under railings, advises Teris Pantazes, owner of Settle Rite Home Services, a home-staging company based in Baltimore. You can illuminate steps the same way. Each activity area—seating, grilling, eating—should get its own lighting as well. Just be sure to check the UL, ETL, or IP rating of all your lighting to confirm that it has been tested and approved for outdoor and wet environments.

Some last pieces of advice: Keep in mind that town or other municipal codes might be more stringent—but often are more lax—than what we discuss here, Dream Home Consultants' Barker says. And if you're uncomfortable assessing your deck yourself, consider having a qualified deck inspector do it; it typically costs \$200 to \$250, Barker says. Decks that are 10 years old or more should be inspected at least every five years. If you live within a mile or two of the ocean, increase that to every year to ensure that the salt water hasn't corroded your deck's fasteners.

## Make Your Deck a Haven

Your deck can benefit from the same design principles used indoors, says interior designer Morris. If there's room, create discrete living areas—say, one place for lounging and another for dining—defined by area rugs and large potted plants.

Neutral colors work best for deck furniture and cushions because they blend into your deck's natural surroundings, Morris says. But be sure to create some contrast with throw pillows and accessories.

"Some of my favorite contrast colors are navy, hunter green, or deep purples," she says. "They work with almost any home."

Daryl Beyers, a container-plant expert at the New York Botanical Garden and author of "[The New Gardener's Handbook](#)" (Timber Press, 2020), prefers tall plant containers on a deck because they bring plants to eye level when you're seated.

"It can make you feel like you're sitting with the plants, not hovering above them," he says. "Even on a small deck, a 3-foot-tall planter can have a small footprint. It's the height that matters."

## Best Decking to Buy

These three products are the top decking materials in their categories. See our [review of decking materials](#) for more information as well as our [decking ratings and buying guide](#).