



Patio vs. Deck

Decks are dangerous; plan for a patio

BY MATT MILLHAM

Both patios and decks serve the same general purpose: providing a surface on which to comfortably enjoy an outdoor space adjacent to a home. Both can be great places to hang out and grill. Both essentially extend the living space when the weather's right. Both require maintenance (sort of). Both can add value to a house.

But when you consider all the things we use these spaces for and the life of a home, one is inherently safer than the other (not just for people, but for the structure it sits next to): patios.

Most decks last 20 years on average, according to the National Association of Home Builders (other estimates are even lower). They're typically

attached to the house and can do major damage when they fail. The average patio, meanwhile, lasts the lifetime of the home, according to NAHB. Built to code, a patio should never hurt a house.

This is not to say that I'm anti-deck; there's one on my house, and I use it plenty. A well-built deck can be a beautiful, useful thing. What I don't like is avoidable risk, and to me that's more or less the definition of a deck.

The fact that prescriptive building codes gave exterior decks their own section starting in 2015 seems a tacit acknowledgment of this risk. Why it took so long for decks to get more attention is anybody's guess, but I suspect the code council didn't

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want to highlight the myriad ways decks are known to fail and hurt people and buildings. Incidentally, that's exactly what recent code updates have done. Fire, frost heave, termites, rot, detachment, overturning, and water infiltration are just some of the things the code addresses.

One thing the code can't fully account for is the human factor, and that's a biggie. I did a quick search for deck fires in the U.S. over the last year, and Google's predictive search strongly suggests that Americans don't deserve nice things. Lots of people had apparently searched for "deck fire pit," so, needless to say, there was no shortage of stories on deck fires. A lot of these fires spread to the house, and, where a cause was listed, they usually pointed

negligence, I don't have a lot of faith that people are properly maintaining their decks, and that's dangerous.

Data seems to back me up. The U.S. Consumer Product Safety Commission collects deck stats, and a study of their data from 2003 to 2007 found 224,740 injuries related to decks and porches, including 33,270 resulting from structural failure or collapse. These numbers don't include injuries from wet or icy surfaces, splinters, falling on a deck, or alcohol- or drug-related injuries that happened on a deck or porch; these are injuries that resulted because of the structure.

The human factor aside, a deck's propensity for failure largely comes down to two things: water and gravity. Most decks are built with wood, and there's really only one kind of wood that won't rot when left outside in the rain: living trees.

Though decks are typically built with lumber that's been pressure-treated, which can help them stand up to water, that only delays the inevitable. I say "can help" because there's a lot of uncertainty about the quality of pressure-treated products. Rules allow up to 15% of the "treated" lumber rolling out of treatment facilities to fall below its marked grade. For some perspective, regular smokers have lower odds of getting lung cancer than a board does of coming out of a facility undertreated.

Treated or not, wood rots. When it rots, it loses its ability to resist gravity, and gravity's favorite thing, besides dropping apples on physicists, is demolishing decks.

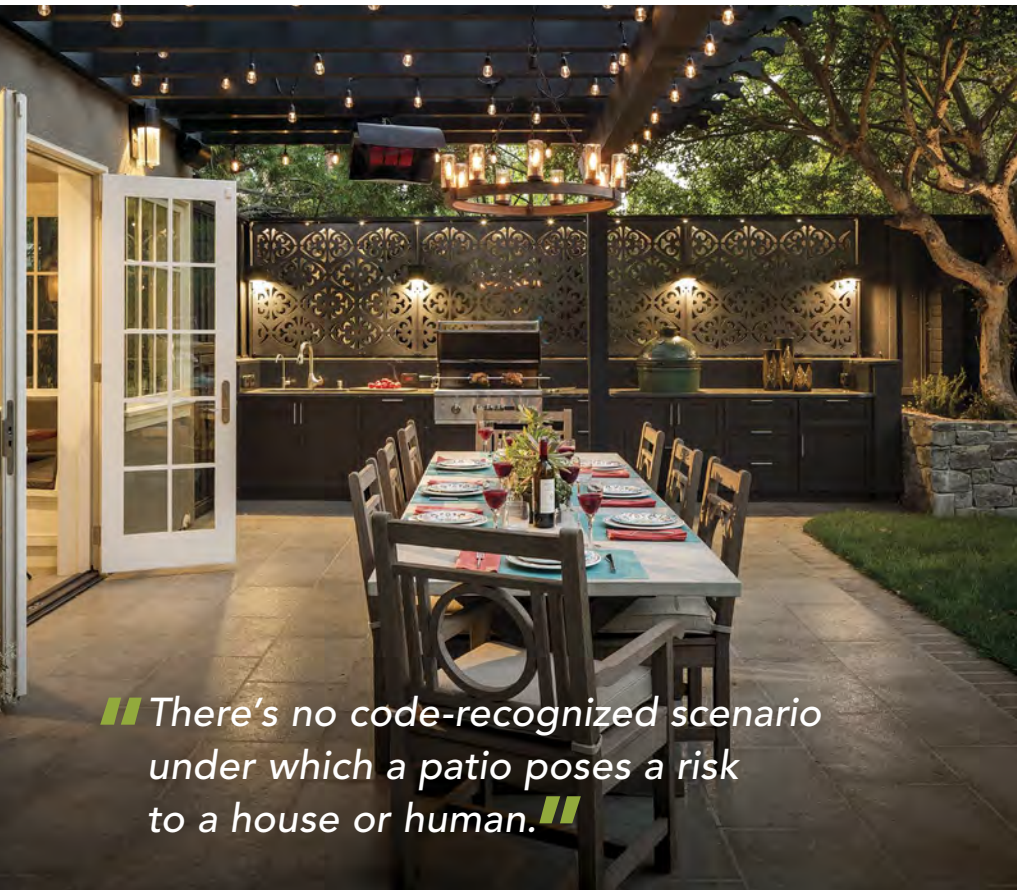
Patios, meanwhile, are already on the ground. The building code requires measures to prevent concrete patio slabs from damaging houses during floods, but under non-Biblical conditions, there's no code-recognized scenario under which a patio poses a risk to house or human. Patio covers, which aren't essential, get extra scrutiny in the code—as should any structure built to defy gravity and the elements.

With the exception of the aforementioned floods, patios are nearly immune to water on a human timescale. Depending on exposure to freeze-thaw cycles, even the least capable paving

materials should outlive your grandkids, whether they're maintained or not. Fire, termites, detachment, overturning—these are non-issues for patios. So put a fire pit or a pizza oven or a pig-roasting station in there and enjoy not burning down your house.

If built with the same attention to detail as a well-made deck, a patio shouldn't need much maintenance. Even if you skimp on the upkeep, it's not going to ruin your house or fall on your dog. The worst-case scenario for a neglected patio is that it gets overgrown and turns into a forest that some dummy logs to build a daggum deck. □

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to grills, fire pits (!), and other forms of negligence. The code addresses flame-spread index, but it can only account for so much stupid.

Even when people aren't actively damaging decks, there's such a thing as passive harm. There's probably nothing on the outside of a home that requires more regular maintenance than a deck, and it's usually not done until someone notices a problem. Even then, the average homeowner may just address cosmetic issues; they probably don't even know what they're looking at structurally. For safety, decks should be inspected by a professional once a year—just like cars (in many states) and human beings. Who does this? Judging by the aforementioned