
Deck Construction Services

**Extend your living space and
start playing on a full deck.**



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Deck Basics:

Decks are any type of horizontal platform that form a flooring surface, and although they are found on ships, the term most commonly refers to those in homes. Decks are usually built extending from a back or side door of a home to give the inhabitants an area to enjoy the outdoors and activities such as outdoor eating, grilling, and entertaining. Decks may be small or large, and while most are commonly made of wood, other materials are used as well.

Wood requires regular maintenance and may be susceptible to damage from rain, wind, sun, and other elements, which has led to the development of wood substitutes designed for use when building or replacing decks. Options include composite wood, vinyl, coated steel, aluminum, and a variety of plastics.

An existing deck can also be covered with new flooring material to change the look and help eliminate many of the chores involved with caring for a wooden deck. An increasing demand for low-maintenance but visually appealing options has also resulted in look-alike substitutes for cast-iron railings, wooden railings, and other decorative accents.

Tips on Building and Installing a Deck:

Most decks fail at the connection to the house or where the guard posts attach to the deck. If you're having a deck built, it is essential that approved guidelines are followed to ensure strong connections and a safe deck.

First check local building codes, regulations and zoning restrictions.

It may be that sunshades need approval, power lines cannot pass over, or footings, spans and deck railings over slopes must conform to specific standards. Property lines and easements will reduce your options, too. So will any deed restrictions and the location of a septic tank.

Next, decide where you want to locate your new deck.

Access to the kitchen, living room or family room makes a big difference, indoors and out. Entry from more than one room or a pass-through at a kitchen window also makes a patio or deck more enjoyable. Decks on the north and east side of your house will get less sun and more cooling breezes. Take time to study wind and rain directions in your yard, as well as sun and shadow patterns. See how they vary with the seasons before settling on a site. Terrain will dictate whether you should build a grade-level deck, which stands on its own just a few inches above the ground, or a higher raised deck. For design excitement, consider building one of each, interconnected by a set of stairs.

How big a deck do you want?

Outdoor rooms should measure about the same size as the largest indoor rooms. Measure your patio furniture and add enough room for pulling out chairs and walking around. A minimum of 5 feet by 6 feet allows two people to sit and relax beside a table, but it's cramped if anyone else comes along. If money is a problem, start small and add on as your family and budget grows.

Decking materials.

Make a seamless transition between indoors and outdoors by incorporating a decking material that seems to be an extension of the room inside.

Layout.

Look at different sizes and layout packages. Many homebuyers like larger decks; others prefer a more intimate setting.

One option is to build different modular decking "areas" based on their uses—a grilling area, hot tub area or perhaps a sitting area. You may want to give each area its own level; a few steps up or down gives the illusion of expansiveness and privacy.

Built-in decorating. Built-in furniture adds both style and function to outdoor living spaces. A bench along a stretch of deck with an unobstructed view is particularly pleasant.

A popular way to "decorate" a deck is to vary the board direction; an angle change or unique pattern provides subtle visual interest. Adding cedar planter boxes incorporates nature into the deck's decor.

Many homeowners today see outdoor living space as a must-have amenity. A well-planned deck or patio can add a lot of enjoyment to their home. The wrong deck or patio can become unused dead space. In the end, a dream of relaxation can become a negative experience and can produce new stress for the homeowner.

Sometimes, local building codes or the terrain of the site dictate whether you build a deck or patio. In addition to code and topography consideration, you must decide how you are going to use the space. Be honest with yourself about budget, use of space, and doing maintenance.

Certain factors can help determine if a deck is more suitable than a patio:

- **Capacity** - How much weight will the deck need to hold? A deck can be beefed up to hold a huge spa, but might sacrifice the aesthetic.
- **Climate** - Will the deck become too hot to walk on? Will snow and rain runoff create a problem on a solid patio surface?
- **Site** - Rough, sloping terrain almost always dictates a deck. Are you willing to pay for the extra excavation to provide a patio surface?
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Deck Materials:

Beyond building codes, terrain and engineering issues, there are issues with each individual material of which clients should be made aware:

Composite and vinyl decking. Increasingly popular, these materials require less maintenance than wood and are more resistant to insects, warping and splintering. Composite decking is made from recycled hard wood fibers and recycled polyethylene fibers from items like grocery bags, milk jugs, and PVC vinyl. The wood fibers protect the decking from UV damage and add stability. The plastic fibers help prevent rot and splitting, which are common in lumber-based decks. What's more, composite decking never has to be stained or painted, so homeowners don't need to invest additional time and expense to maintain its appearance.

Composite decking is often sold as an entire system, including the deck boards, attachment clips, trim, and handrail material. The decking material is typically attached to a standard preservative-

treated wood sub-frame. Although many don't shrink or swell like wood, some varieties can swell in hot, sunny climates. While the initial cost of composite decking is greater than that of traditional lumber, especially if coordinating railing and balustrade systems, the investment pays for itself in long life and low maintenance.

Wood decking. Low cost, availability and rot resistance makes pressure-treated pine and fir popular decking choices. However, even with the periodic maintenance that is absolutely necessary, warping, twisting, shrinking and swelling will still occur. Maintenance includes routine cleaning, staining and painting. Other species such as red cedar, redwood, and tropical hardwoods are more durable and have no chemical treatments, but maintenance is still required and those options can be pricey.

Concrete. No longer just a drab gray slab, concrete is available in a wide variety of colors and patterns. Designs are nearly limitless. A periodic re-sealing may be required, but otherwise an occasional pressure wash is the only maintenance required.

How The Deck Is Constructed:

The following are the steps your contractor takes to build your deck:

Digging and pouring footings.

A good deck has its feet planted squarely on the ground, bolted to concrete footings that extend down to below the frost line in your region. Always remember to check for pipes and power lines before digging any holes. Holes are dug to 6 inches below the frost line, or whatever depth your local building code calls for. Gravel or crushed rock is poured into each hole, set an 8-inch-diameter fiberboard or cardboard pier form on top of the loose fill, and then leveled. The forms are cut so the footings will extend a couple of inches above ground level. Concrete is shoveled into the form, jabbing it periodically with a long stick to eliminate air bubbles. After the form is filled, the concrete is leveled by dragging a board across the top of the form. While the concrete is still wet, a post is stuck in to anchor the concrete.

The concrete is cured for at least two days before construction begins. The aboveground portion of the form is cut away, and posts, beams and joists are sized. Codes and common sense govern the size of deck framing members. Decks that are 6 feet or less above ground are supported with 4x4 posts: 6x6s for higher decks.

Decking patterns.

For the surface of your deck, use 2x4 or 2x6 lumber. Most people install decking at right angles to the joists, but there is no reason why you can't nail or screw down boards diagonally or - by doubling up the joists - in a herringbone pattern. Whichever way you choose to go, just be sure that spaces are left, about the thickness of a nail between boards.

Building stairs.

Stairs are built and installed before attaching decking boards. The staircase is assembled by nailing treads to all but the top step. The final tread is nailed after the decking is installed. The top of the assembled staircase is bolted to an edge joist. Concrete is poured as a footing for the base of the stairway or bolted to a precast pad.

If you think you can build the deck yourself, see if you can answer these questions:

1. What is the retention value of the lumber you use in your deck projects?
2. What is your pound per square foot calculations? Regular deck and spa deck?
3. What's live load and dead load?
4. What do your foundations consist of? How are they constructed?
5. How do you make the house connection?
6. How much of a gap do you leave between deck boards?
7. Post and beam construction or *corncob* method? What's the difference? What's better?
8. What is the code for spindle spacing?
9. What is the code for when I need railings on my deck and stairs? One side of stairs or both?
10. What is the code for stair riser height and tread depth?
11. Should I use gravel and/or plastic under my deck?
12. How close to the doorsill can I build my deck?
13. When is it a good idea to change deck flooring pattern direction?
14. Should I run the deck boards on an angle or keep them horizontal? Why?

Having second thoughts about not using a deck contractor?

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