



decks

Inviting outdoor spaces beckon us out of the home and into the fresh air. And why not encourage as much outdoor living as our fickle Northwest weather will permit? However, decks tend to require a lot of work and maintenance. Especially if you're building close to the ground, consider whether a more durable patio of recycled masonry, broken concrete or pavers will work as well. See *Patios, walkways & paths choices* on page 7 for materials ideas. Decks over 18 inches in height require permits and railings designed to meet code. See the Seattle Department of Planning and Development's Client Assistance Memo # 312: *Decks, Fences and arbors in Single Family Homes* at www.seattle.gov/dpd (click on *Publications*, then *Client Assistance Memos*) for help.



decking choices

MATERIAL	DESCRIPTION/TIPS	BENEFITS	DRAWBACKS
Wood 	<p>A global commodity, wood is used for everything from decks to raised beds and retaining walls. Landscape-application wood is normally naturally rot-resistant, or treated with preservatives to delay rot. For years, <i>chromated copper arsenate</i> (CCA) was the standard for treating wood in contact with the ground. However, health concerns over these highly toxic compounds have prompted the U.S. EPA to phase it out of residential landscape use. Wood treatments of lower toxicity, such as <i>copper azole</i> (CA-B), are now available, even through major retailers.</p> <p>Tips: Look for naturally rot-resistant species-domestics such as cedar, juniper, and cypress, or highly durable tropical woods like Ipe. Specify wood products stamped and certified by the Forest Stewardship Council (FSC) as responsibly harvested. To discourage moss growth, avoid using wood in heavily shaded areas.</p>	<p>natural material even surface good for wheelchair and mobility-impaired accessibility FSC products promote responsible forestry recyclable or compostable, if untreated</p>	<p>rots over time can attract pests like carpenter ants prone to moss and algae growth can be slippery some species require periodic painting or refinishing</p>
Recycled Plastic Lumber and Composite Lumber 	<p>Recycled plastic, usually polyethylene, is re-melted and formed into standard dimensions for decking, railings, and other applications. <i>Composite</i> recycled products mix recycled plastic with sawdust or other wood products. Added pigments create integral color, eliminating the need for paint. The properties of plastic are such that plastic lumber has limited structural capacity, requiring closer joist spacing on decks, for example. Fiber-reinforced recycled plastic lumber is available.</p> <p>Tips: Inquire about the recycled content of the product, and look for 100% recycled content.</p>	<p>durable recycled content very low maintenance lower long term cost</p>	<p>products that require closer joist spacing result in additional material higher initial cost</p>

Deck Joists and Beams

A deck's structural support depends on joists and beams, which are most commonly made of pressure-treated wood. As with treated decking, CA-B is the least toxic current alternative. Also consider *structural recycled plastic*, which uses glass fiber to enhance the structural capacities of recycled plastic timbers. Although substantially more expensive up-front than low-toxic pressure-treated lumber, structural recycled plastic ensures a long-lasting, virtually maintenance-free deck.

Foundations

Most decks rely on pier blocks or poured concrete for foundations. One product that helps reduce cement use in foundation work is the *pin foundation*. Most foundations rely on a substantial *footing*, or subsurface mass of concrete, to distribute the force of the load they support. Pin foundations replace the footing with a series of large steel pipes, which stabilize and carry the load (read more about how they work at www.pinfoundations.com). This eliminates not only the need for a traditional footing, but all the digging and concrete such a footing requires.