

# BUILD IT WITH REDWOOD

Deck Over Concrete



## REDWOOD

Naturally beautiful  
Easy to use  
Practical and economical  
Durable and stable  
Resistant to decay and insects

# Deck Over Concrete

*Concealing an aged concrete patio with a naturally beautiful redwood deck will add immeasurable value and ambience to your outdoor entertainment area.*

*Knotty redwood garden grades, such as Construction Common or Deck Common, are economical choices for all outdoor projects. For decking and framing that will be built on or near the ground, as in this deck project, use the naturally decay-resistant all-heartwood grades, Construction Heart or Deck Heart.*

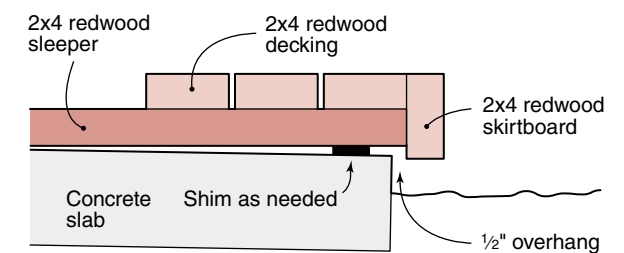
## BUILD A REDWOOD DECK

Building a redwood deck over an existing concrete slab is an easy way to get the complete enjoyment of a deck at a fraction of the usual labor and cost. Concrete slabs that have been around for years are often cracked, uneven or just plain unsightly. Stable, weather-resistant redwood can cover all these defects beautifully.

There are two basic steps in Deck Over Concrete construction: attach Construction Heart or Deck Heart redwood 2x4 sleepers to the concrete slab; and nail 2x4 or 2x6 Construction Heart or Deck Heart decking to the sleepers.

Measure and trim as you build for the best results. Use only non-corrosive nails, screws or other fasteners to avoid rust stains. Pre-drill nail holes at board ends to avoid splitting.

**1. Sleepers** First lay the sleepers down in the spots where they will be attached. Allow for a 1/2-inch overhang at the outside edge of the concrete slab for water drainage. They should be spaced 24 inches on center. The sleepers may be random lengths because the concrete slab will support the full length of the sleeper. This can be a savings because short lengths are often less expensive. If the concrete slab is cracked or uneven, this is the time to level the sleepers with shims or small pieces of Construction Heart or Deck Heart redwood. If the concrete slab is adjacent to the wall of a house, sleepers should run perpendicular to the wall for best drainage and with space for clean out and water to drain.



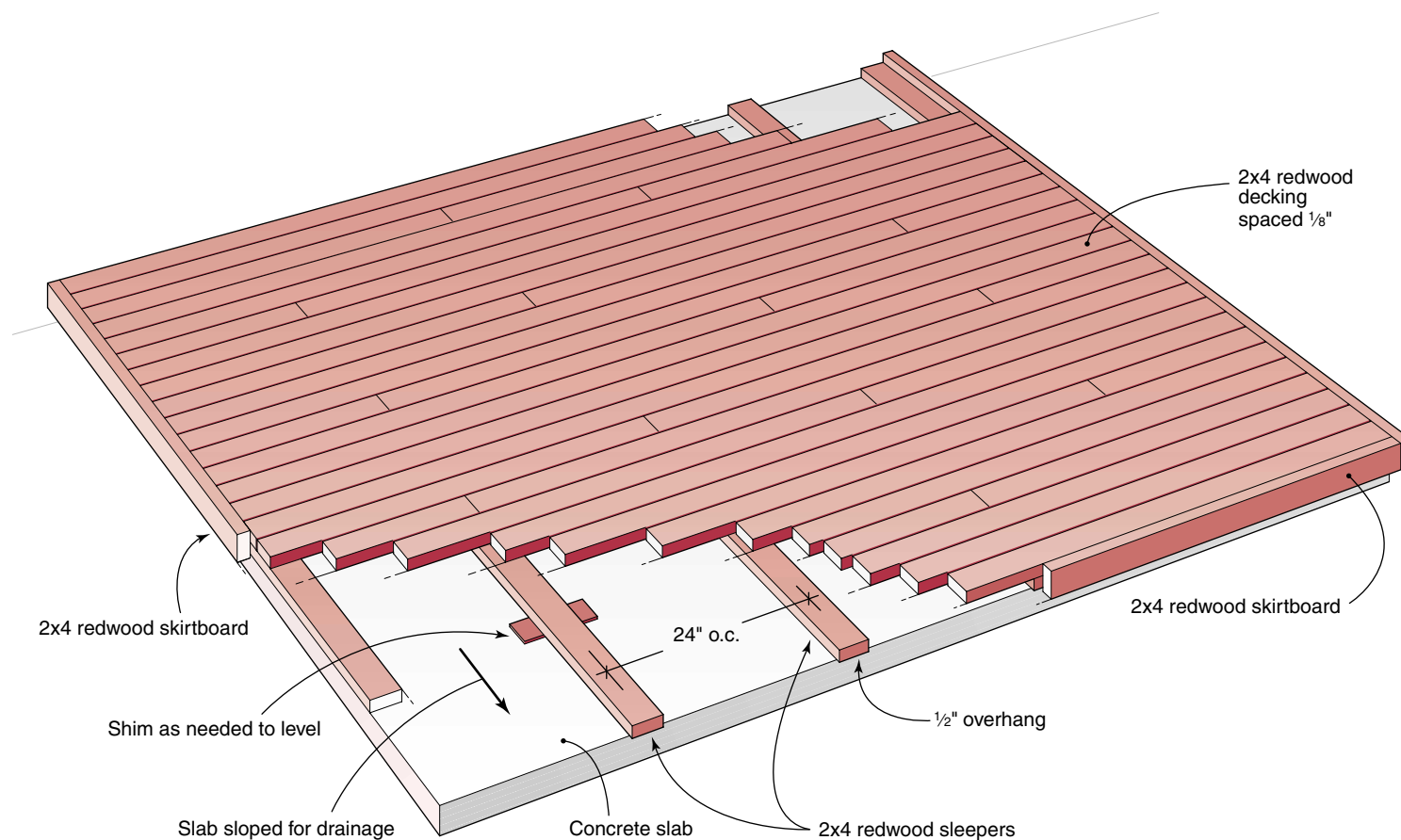
The best way to attach sleepers to the concrete slab is with a power hammer which uses explosive charges to shoot special nails into concrete. Power hammers are available at building supply and tool rental centers. They are easy to use and are designed with safety features to help prevent accidents. Follow the manufacturer's directions for safe operation.

**2. Lay out decking** The decking should be laid in place before nailing. Random lengths of Construction Heart or Deck Heart can be used for decking as long as butt joints meet over the sleepers. It is good practice not to have two butt joints adjacent to each other on the same sleeper. Install deck boards bark side up.

**3. Install decking** Use top quality hot-dipped galvanized, stainless steel or aluminum nails and fasteners for exterior redwood projects. Other types of fasteners will corrode when exposed to moisture and will cause unsightly stains.

For 2-inch decking, use 10-penny (10d) nails or 3-inch deck screws. Decking nails should penetrate 1 1/2 inches into the sleepers. If you use a power drill, be careful not to overdrill the screw heads. Nail and screw heads should be flush with the board surface. Pre-drill nail holes at board ends to avoid splitting. To allow for water drainage, deck boards should be spaced about 1/8-inch apart.

**4. Skirtboards** Complete the deck with 2x4 or 2x6 skirtboards, depending on the ground clearance you have. See the finishes section on the back panel of this brochure for guidelines to various finishing methods and their results.



## TOOLS AND MATERIALS

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**Tools you will need** Tape measure, carpenter's or framing square, power hammer, level, power radial saw or hand saw, hammer, power drill and drill bits.

### Materials For One Square (100 Square Feet)

	Quantity	Size
Sleepers	60 linear feet	2x4
Deck boards	326 linear feet	2x4
or Deck boards	210 linear feet	2x6
Deck screws	1 pound	3 inches
Deck nails	1½ pounds	10d

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Contact the California Redwood Association for more great publications containing redwood technical and building information. Call us toll free at 1-888-Cal-Redwood for a complete literature list or to ask for any of the titles listed here:

<b>Other Construction Tipsheets</b>	<b>Also Available</b>
Freestanding Deck	Deck Construction
Calistoga Spa Surround	Deck Grades, Nails and Finishes
Windsor Shade Shelter	Fences for All Reasons
Monterey Potting Center	Landscape Architecture
Mendocino Bench	
Lake Tahoe Gazebo	
Petaluma Planters	
Sonoma Picnic Table	

### **Redwood**

For beauty and performance, redwood is naturally superior to other woods. That's why it's the first choice for decks, fences and most outdoor projects. Redwood retains its beauty outdoors, shrinks and swells less than other woods and is less likely to warp, split, check or cup. With relatively little or no pitch, redwood is easy to drill, saw and shape. Redwood heartwood has natural durability and resistance to insects and will last longer outdoors than most woods.

### **Grades**

The knotty garden grades of redwood are ideal for outdoor projects. These grades are beautiful, durable and economical.

**Construction Heart/Deck Heart** is all heartwood and contains knots; used for load-bearing applications near the ground. Deck Heart is graded for strength and is available in 2x4 and 2x6.

**Construction Common/Deck Common** contains sapwood and knots; used for decking and above-ground uses. Deck Common is graded for strength and is available in 2x4 and 2x6.

**Merchantable Heart** is all heartwood and contains larger knots than Construction grades; used near the soil.

**Merchantable** contains sapwood and larger knots; used for fence boards, rails and above-ground uses.

### **Finishes**

Redwood accepts finishes better than most woods. Some heighten redwood's natural beauty, bringing out the color and the grain. Others help the wood harmonize or contrast with surrounding structures. Read the labels on all finish products before using.

**No-finish option** Redwood performs better than most woods if left unfinished. This no-maintenance option will result in redwood weather-bleaching to a soft driftwood gray.

**Clear water repellent finish** with mildewcide is recommended to stabilize the color at tan.

**Bleaching and weathering stains** produce a permanent driftwood gray effect, a good, low-maintenance option.

**Semitransparent stains** in "redwood" shades tint the wood without hiding the grain.

**Solid-color stains or paints** should be applied over compatible oil-based primers.

### **Fasteners**

Use only non-corrosive hardware such as aluminum, stainless steel or top quality hot-dipped galvanized screws or nails. Ordinary nails and screws will cause stains.



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