Lumber Grades And Uses

There are over thirty different grades of redwood lumber including general purpose grades and specialized grades for a single use. There is a grade of redwood for almost any application suitable for wood. Redwood is graded by appearance and durability, with criteria defined by the Redwood Inspection Service.

**Excellence of appearance** is a major factor in the grading of redwood. Clearness (freedom from knots) is the determinant for the highest grades. Other grades are categorized by number, size and nature of knots and the presence of other characteristics such as stains, crook or manufacturing defects that may occur.

**For durability** and resistance against insects and decay—redwood is graded by its color. Reddish-brown heartwood from the inner portion of the tree contains extractives that render it resistant to decay. The cream-colored sapwood that develops in the outer growth layer of the tree does not possess the heartwood’s resistance to decay and insects.

As a rule of thumb, all heartwood grades of redwood will have the word “Heart” in the grade name.

**The architectural grades**, Clear All Heart, Clear, Heart Clear, Heart B and B Grade, are normally sold kiln dried (preshrunk and stress free) for the finest exterior and interior architectural uses. No other wood equals these finish grades in beauty and dimensional stability. They are the choice grades for siding, paneling, trim and cabinetry where attractiveness and tight joinery are desired.

**The garden grades**, Deck Heart, Construction Heart, Deck Common, Construction Common, Merchantable Heart and Merchantable, are offered seasoned or unseasoned. They are frequently specified for decks, fences and garden structures where knots or other characteristics have little or no effect.

For uses where the wood will be on or near soil, such as posts, bulkheads or patio grids, it's essential to use one of the durable, heartwood grades—Clear All Heart, Heart B, Deck Heart, Construction Heart or Merchantable Heart.

For construction above ground where there is little danger of insect or decay problems, one of the sapwood containing grades—Clear, B Grade, Deck Common, Construction Common or Merchantable—will serve handsomely.
Heartwood

Clear All Heart
Finest architectural heartwood grade, normally Certified Kiln Dried (also available unseasoned), well manufactured, free of defects one face (reverse face may have slight imperfections). Available surfaced or saw-textured.

Uses Siding, paneling, trim, cabinetry, molding, fascia, soffits, millwork. Also fine decks, hot tubs, garden structures, industrial storage and processing tanks.

Heart B
Quality heartwood grade containing limited knots and other characteristics not permitted in Clear All Heart and Heart Clear. Available kiln dried or unseasoned. This grade can be surfaced or saw-textured.

Uses Siding, paneling, trim, fascia, molding and other architectural uses. Quality decking, garden shelters and other above-ground outdoor applications.

Construction Heart/Deck Heart
A heartwood grade containing knots of varying sizes and other slight imperfections. Available seasoned or unseasoned. This highly useful grade can be ordered surfaced or rough.

Deck Heart has similar appearance and uses as Construction Heart but is also graded for strength. Deck Heart is available in 2x4 and 2x6 only.

Uses Decks, posts, retaining walls, fences, garden structures, stairs or other outdoor uses especially on or near soil.

Merchantable Heart
This economical heartwood grade allows slightly larger knots than construction grades; holes limited to size of knots. Allows checks, some splits and some manufacturing flaws. Available unseasoned, surfaced or rough.

Uses Fences, retaining walls, garden structures—especially on or near soil.
Sapwood

**Clear**
Same general quality as Clear All Heart except contains sapwood in varying amounts. Some imperfections not permitted in Clear All Heart. Normally Certified Kiln Dried (also available unseasoned). Available surfaced or saw-textured.

**Uses** Siding, paneling, trim, cabinetry, molding, fascia, soffits. Also quality decking, garden shelters and other above-ground applications.

**B Grade**
Quality grade containing sapwood, limited knots and other characteristics not permitted in Clear. Certified Kiln Dried; also unseasoned. Available surfaced or saw-textured.

**Uses** Siding, paneling, trim, fascia, molding and other architectural uses; quality decking, garden shelters and other above-ground outdoor applications.

**Construction Common/Deck Common**
Same general characteristics as Construction Heart, but contains combination of heartwood and sapwood. Unseasoned or seasoned, it can be surfaced or rough. Deck Common is also graded for strength and is available in 2x4 and 2x6 only.

**Uses** Decking, fence boards and other above-ground garden uses that do not require heartwood’s insect and decay resistance.

**Merchantable**
Has same characteristics as Merchantable Heart but contains sapwood in varying amounts. This economical grade is available unseasoned and can be ordered surfaced or rough.

**Uses** Fence boards, rails and other above-ground outdoor and garden uses. Also subflooring and temporary construction.
Heart Clear
High quality grade with same characteristics as Clear but is entirely heartwood. Normally Certified Kiln Dried (also available unseasoned). Available surfaced or saw-textured.
Uses Siding, paneling, trim, cabinetry, molding, fascia, soffits, millwork; also fine decks, rails and garden structures.

Heart Clear

Select Heart
A tight-knotted heartwood grade resistant to insects and decay. It is suitable for high quality construction without waste. Usually unseasoned. Durable grade available surfaced or rough.
Uses Decks, posts, garden structures, curbing, retaining walls, industrial uses, farm structures.

Select Heart

Select
Same general characteristics as Select Heart, but contains sapwood in varying amounts, some imperfections on the back side not permitted in Select Heart. Usually unseasoned. Economical grade available surfaced or rough.
Uses Decking, fence boards, garden structures and other above-ground uses where durability is not a factor.

Select

Rustic Siding
Rustic siding with knots and sapwood is available seasoned in thick-butt bevel, channel, tongue and groove, and board and batten patterns. Produced with a saw-textured surface.

Rustic Siding

Finger-Jointed
Clear All Heart and Clear boards up to 20 feet or longer made from kiln dried pieces finger-jointed and end- and edge-glued. Also available in Clear All Heart, vertical grain and saw-textured on special order. Normally sold surfaced, mixed grain. May be special ordered in patterns or plowed fascia.
Uses Exterior siding, quality fascia, exterior trim. Interior paneling, trim and fine molding.

Finger-Jointed

Patterns
Profiles for pattern lumber (bevel, channel, tongue and groove, etc.) have been established by the California Redwood Association. Most are illustrated in CRA literature—Redwood Lumber Patterns No. 17, Redwood Architectural Guide and Redwood Siding Patterns and Applications—and are available from the CRA.

Grains
Vertical Lumber milled so that a cross section of the annual growth rings appears with grain lines parallel on face of board.
Flat Lumber cut tangent to annual growth rings exposing a face highly figured or “marbled”.

Other Literature
Properties and Uses
Landscape Architecture
Deck Construction
Fences—Practical Elegance
Exterior Finishes
Interior Finishes
Homes—Art in Architecture

Other grades will be shipped with a mixture of vertical and flat grains. Clear All Heart and Clear may be specified in vertical grain.

Other Literature

Textures
Surfaced Unless otherwise specified, redwood lumber, boards and patterns are sold with a smooth-planed surface, emphasizing the wood’s beauty of grain and color.
Saw-textured One or more faces can be resawn for a rough texture effect. The saw-textured surface increases redwood’s natural finish-holding ability, resists or obscures smudges and scuffs and is recommended for exterior siding and less formal interior applications.

Textures

Other Literature

Vertical Grain

Flat Grain

Vertical Grain

Flat Grain

Vertical Grain

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Other Literature

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