

# Redwood

TECHNICAL DATA SHEET

## Special Purpose Structural Grades for Decks

*Two grades to use when design values are required for a decking project. . .*

**Deck Heart and Deck Common** are two grades of redwood especially suited for exterior walking surfaces such as decks where specific design values or span ratings are required in combination with an attractive appearance. These grades are manufactured in 2-inch thicknesses, in 4- through 6-inch widths. Like other grades, Deck Heart and Deck Common are available green or dry.

**Similar to Construction Heart and Construction Common** in their appearance, these grades have comparable characteristics and limiting provisions in the grade definitions. The primary difference is the inclusion of a 1-in-6 slope of grain requirement and knot measurement based upon equivalent displacement rather than average diameter. These two additional characteristics allow the calculation of design values in accordance with ASTM Standard D-245, "Establishing Structural Grades and Related Allowable Properties for Visually Graded Lumber."

**The recommended span** (on-center spacing between joists) for 2x4 through 2x6 Deck Heart and Deck Common is 24 inches. If the decking is to be installed diagonally, joists should be spaced 16 inches on center. These spans are based upon a live load of 40 pounds per square foot. Extra weight, such as a large permanent planter, hot tub or spa, will need extra support. In these instances, assistance from a contractor, architect or engineer may be necessary.

*These two special purpose grades must be grademarked or otherwise identified. . .*



As with other special purpose grades such as Foundation, all Deck Heart and Deck Common lumber must be grademarked or otherwise identified by hammer branding and an RIS Certificate of Inspection. The principal difference between the two grades is simply that Deck Common may contain sapwood without restriction.

**The development of these two grades** is the culmination of several years of market surveys, mill studies and American Lumber Standard

***Deck Heart and Deck  
Common were developed  
in answer to requests for  
redwood decking lumber  
with design values. . .***

Committee, Incorporated proposals. The impetus came from repeated requests from contractors, designers and building officials for redwood decking grades with design values.

In October 1989, the ALSC, Inc. Board of Review approved the Redwood Inspection Service proposal for two special purpose redwood decking grades.

These grades appear in the 1997 Supplement to the National Design Specification for Wood Construction as published by the American Forest & Paper Association. This document has been adopted by the major national building code agencies (ICBO, BOCA, SBCCI); thus, these grades have building code recognition throughout the country.



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