

Oregon
Interpretive Ruling No. 93-64
LUMBER DESIGN VALUES

Requested by: LEE MARCH
OREGON BUILDING OFFICIALS ASSOCIATION
AUGUST 12, 1993

ACTION REQUESTED

1. Confirm that the design values for joists and rafters as contained in the 1993 edition of the Oregon One and Two Family Dwelling Specialty Code (Dwelling Code) shall be used by all Oregon jurisdictions in the review of plans for one and two family dwellings.
2. Clarify that the appropriate species of Douglas Fir for determining design values for visually graded dimensional lumber predominately used in Oregon is "Douglas Fir-Larch."

APPLICABLE CODES SECTIONS

Table No. 6/7 A, One and Two Family Dwelling Specialty Code (Dwelling Code) and Table No. 25-A-I of the Structural Specialty Code (table No. 23-A-I, common code format).

HISTORY

Extensive testing of the performance of visually graded dimensional lumber conducted by all of the authorized grading agencies in the United States and Canada during the past decade confirm that lumber derived from currently harvested second-growth species of western woods has generally less design strength than lumber historically derived from old-growth western woods. As a result, new design values have been approved in the CABO and ICBO code change process and incorporated into the current edition of the Oregon Dwelling Code. These new values will be included in the Structural Specialty Code when the 1994 edition of the Uniform Building Code is implemented in Oregon. Table No. 6/7 A and Table No. 25-A-I each contain three different categories for the Douglas Fir species; "Douglas Fir-Larch" generally grown in the Pacific Northwest and Northern California, "Douglas Fir-South" generally grown in Arizona, Colorado, Nevada, New Mexico and Utah, and "Douglas Fir-North" generally grown in Western Canada. Building officials are concerned as to how to address the use of Douglas Fir species that could potentially be imported into the Oregon market.

BOARD FINDING

This interpretation is authorized by ORS 455.060, Rulings on Acceptability of Materials, Designs or Methods of Construction and Attorney General's Opinion OP-5208 issued October 1, 1981, which advised the statute permits authoritative interpretations of existing code requirements.

DISCUSSION AND CONCLUSION

1. The design values for joists and rafters contained in the 1993 edition of the Oregon One and Two Family Dwelling Specialty Code are consistent with values adopted by model code organizations reflecting lumber in the marketplace generally produced from second-growth forests. These values have been established as the result of a rigorous national testing program. Moreover, adoption of the 1994 edition of the Uniform Building Code in Oregon will bring the provisions of the Oregon Structural Specialty Code in line with the Dwelling Code.
2. Because of its predominance in the Pacific Northwest, "Douglas Fir-Larch" is the appropriate specie of Douglas Fir to be utilized in connection with Table No. 6/7 A and Table No. 25-A-I, unless specified otherwise. The applicant is responsible for identification of the species of wood used in the design of the structure on plans or specifications submitted with the application for permit.

(signed April 25, 1993)

Jack Talbott, Chairman
Building Code Structures Board

The recommendations and findings of the Building Codes Structures Board are accepted and adopted.

(signed April 29, 1993)

Gary J. Wicks, Administrator

Building Codes Division

Date

RESCINDED