

UNITED STATES DEPARTMENT OF AGRICULTURE  
NATURAL RESOURCES CONSERVATION SERVICE

**MATERIAL SPECIFICATION**

**MS-216: “STRUCTURAL TIMBER AND LUMBER”**

216.1 SCOPE

This specification governs the quality of structural timber, lumber and plywood.

216.2 QUALITY

Wood materials shall be sound and free from decay. No boxed heart pieces of Douglas Fir or redwood shall be used in stringer, floor beams, caps, posts, sills, or other principal structural members. Boxed heart pieces are defined as timber so sawed that at any section in the length of a sawed piece, the pith lies entirely inside the four faces.

216.3 GRADING

Structural timber and lumber shall be graded in accordance with the grading rules of the West Coast Lumber Inspection Bureau or the Western Wood Products Association. The material supplied according to the commercial grading rules shall be of equal or greater stress value than specified in ASTM D-245, Established Structural Grades and Related Allowable Properties for Visually Graded Lumber.

216.4 HEARTWOOD REQUIREMENTS

All timber and lumber specified for use without preservation treatment shall contain not less than 75 percent heartwood on any diameter or on any side or edge, measured at the point where the greatest amount of sapwood occurs. This requirement shall not apply to timber and lumber for which pressure treatment with wood preservative is specified.

216.5 SIZES

The sizes specified are nominal sizes. Unless otherwise specified, the material shall be furnished in American Standard dressed sizes.

216.6 MARKING

Each piece of timber and lumber shall be legibly stamped or branded with an official grade mark. Plywood shall be legibly stamped with an official mark designating the grade, type, and surface finish as described in the cited Product Standard.