Material Specification 584—Structural Timber and Lumber

1. **Scope**
The specification covers the quality of structural timber, lumber, and plywood.

2. **Grading**
Structural timber and lumber shall be graded in accordance with the grading rules and standards, applicable to the specified species adopted by a lumber grading or inspection bureau or agency recognized as being competent and that conform to the basic principles of ASTM Standard D 245. The material supplied according to the commercial grading rules shall be of equal or greater stress value than the specified stress-grade.

3. **Quality of material**
All material shall be sound wood free from decay and disease damage. Boxed heart pieces of Douglas fir or redwood shall not be used in stringers, 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.

4. **Heartwood requirements**
All timber and lumber specified for use without preservative treatment shall contain a minimum of 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.

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

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