

AWI Standards

Materials

AWI 300-2018



AWI ARCHITECTURAL
WOODWORK
INSTITUTE

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Wood products installed outside of climate controlled, interior environments are not governed by this standard.

Illustrations are intended to assist in understanding the standard and may not include all requirements for a specific product or unit, nor do they show the only method of fabrication. Such partial drawings shall not be used to justify improper or incomplete design and/or construction.

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Foreword

(This foreword is not a part of AWI 300-2018 - Materials)

The AWI 300 - Materials Standard is intended to provide requirements pertaining to lumber, panel cores, and panel surfaces as well as other related materials specified, such as solid surface, engineered stone, and/or solid phenolic.

This standard is intended for use by individuals and organizations from all aspects of the architectural woodwork industry, including architects, design professionals, manufacturer/suppliers, contractors, installers, and end users. Individuals within the architectural woodwork industry will use this standard to maintain a high degree of control over the aesthetic quality and the structural integrity of their work, ensuring that potential differentiations in the workmanship and implementation of architectural woodwork projects are made uniform.

The requirements contained within this standard are derived from AWI's Architectural Woodwork Standards that the organization has been publishing in various formats since its inception in 1953. Each requirement has been thoroughly vetted by a committee of leading volunteer professionals in the architectural woodwork industry to ensure that the content is up-to-date and relevant to the current industry requirements.

Effective March 15, 2019, this standard succeeds, replaces, and supplants Section 3 and Section 4 of the Architectural Woodwork Standards, Ed. 2 (2014) as the most current version of the AWI Standard for Lumber, Sheet Products, and/or Materials.

Suggestions for the improvement of this standard will be welcome. Suggestions should be sent to:

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This standard was developed by AWI Professional Staff and the AWI Technical Committee and was approved for publication by the AWI Technical Committee. Committee approval of the standard does not necessarily imply that all committee members voted for its approval.

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1.0 Purpose

- a) These requirements are intended to provide a well-defined degree of control over a project's quality of materials and workmanship in Architectural Woodwork and related interior finishes (henceforth referred to as "Product").
- b) The majority of architectural woodwork and casework is fabricated from lumber or wood-based core materials. The selection of the proper wood species and sheet products contributes to the appearance and performance of the completed project. Intended use, cost, hardness, and relative stability are among many important considerations. Once the material is chosen, its effectiveness may vary by the manner in which it is manufactured and installed.

2.0 Scope

- a) Requirements pertaining to lumber, panel cores, and panel surfaces as well as other related materials specified, such as solid surface, engineered stone, and solid phenolic, are contained within this standard.

3.0 Requirements

3.1 General

- a) Aesthetic grade rules (premium, custom & economy) are used within AWI standards only in reference to the acceptable quality of workmanship, material, or installation in a completed Product and apply only to exposed and semi-exposed surfaces which remain visible after installation.
- b) Visible surfaces of lumber shall be sound, free of decay, shake, pith, wane, and warp. Lumber shall be plain-sawn unless specified otherwise.
- c) Where conflicts exist within AWI Standards, the least restrictive requirement shall prevail.
- d) The following requirements shall be met unless a project's contract documents indicate otherwise.
- e) Species not covered by this standard shall be as agreed to between owner/design professional and manufacturer/supplier as to length requirements and size/exposed area of permitted natural characteristics.

3.1.1 Measurements

- a) This standard is written with the metric system of measurement followed by the U.S. Customary System of measurement in brackets.
- b) The system of measurement used in the project's original contract documents and architectural drawings will dictate which system of measurement within this standard is used for verification of compliance.
- c) The U.S. Customary measurement is typically a "soft" conversion of the metric measurement. In order to make the metric number more conceptually coherent and consistent, most conversions for less than 152.4 mm [6"] in dimension are "soft" converted to the nearest 0.1 mm. For measurements above 152.4 mm [6"], the "soft" value is converted to the nearest 1 mm.
- d) Where conflicts exist within this standard, the least restrictive requirement shall prevail.

3.1.2 Lumber and Veneer Specified as Natural

- a) Natural, as a type of wood species selection, permits unlimited heartwood and/or sapwood within a face. Special requirements shall be so specified.

3.2 Lumber

3.2.1 Lumber Grading

- a) Lumber Association rules shall not be used, since even their highest grades permit defects unacceptable in Product and are not based upon the use of the whole board but, rather on a percentage of the board. Lumber rules in this standard apply only to wood surfaces visible after manufacture and installation.
- b) Lumber grade rules in this standard apply to boards exceeding 6.4 mm [.250"] in thickness.

3.2.2 Moisture Content of Lumber

- a) Shall be in compliance with AWI 200 Care & Storage Standard.

For a complete AWS document,
including compliance requirements,
product information and more,
contact us.

Contact Us