ANSI O5.1-2022

Wood Poles:
Specifications and Dimensions

AN AMERICAN NATIONAL STANDARD FOR WOOD UTILITY PRODUCTS

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ANSI O5.1-2022, Wood Poles: Specifications and Dimensions

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American National Standard for Wood Utility Products

Wood Poles:
Specifications and Dimensions



Secretariat
American Wood Protection Association, Inc.

Approved August 18, 2022
American National Standards Institute, Inc.

Foreword

This American National Standard establishes specifications and dimensions for wood utility poles that are to be given preservative treatment as specified by the purchaser. The poles described are considered as simple cantilever members subject to transverse loads only. Requirements for the preservative treatment of poles are not included although the effects of conditioning are accounted for.

This standard was developed by Accredited Standards Committee O5 – Wood Utility Products (ASC O5) under the procedural administration of its Secretariat, the American Wood Protection Association (AWPA). ASC O5 was organized in December 1924 and has produced revisions of this standard from time to time as required or deemed beneficial. This standard supersedes American National Standard ANSI O5.1-2017.

Suggestions for improvement of this standard will be welcomed. They should be sent to ASC O5 through its Secretariat: American Wood Protection Association, P.O. Box 361784, Birmingham, Alabama 35236 USA <https://awpa.com>.

This standard was processed and approved for submittal to ANSI by ASC O5 through its Secretariat. Committee approval of this standard does not necessarily imply that all committee members voted for its approval. At the time it processed and approved this standard, ASC O5 had the following leadership and members:

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American National Standard for Wood Utility Products –

Wood Poles: Specifications & Dimensions

1 Scope & general requirements

1.1 Scope

This standard provides minimum specifications for the quality and dimensions of wood poles that are to be used as single-pole utility structures. The poles described herein are considered as simple cantilever members subject to transverse loads only. Fiber strength values, provided as a basis for determining pole class sizes, apply only to poles that meet or exceed the minimum quality specifications.

Requirements for the preservative treatment of poles are outside the scope of this standard. However, where such treatment or conditioning may affect strength, limitations are provided in section 5.1.2. [Also see standards such as those published by American Wood Protection Association (AWPA) and ASTM International (ASTM)].

1.2 General requirements

The species, the length, and class of poles; the type of treatment (including seasoning details, if seasoning is desired); aids to penetration such as incising or groundline boring; and complete details for roofing, gaining, boring, and branding not included in this standard shall be given in purchase orders.

Complete detailed instructions shall be given to the supplier whenever the requirements of this standard are modified to meet special conditions.

2 Normative references

The standards listed below contain provisions which, through reference in this text, constitute provisions of this American National Standard. At the time of publication, the editions indicated were valid. All standards are subject to revision; therefore, users of this standard are encouraged to investigate the possibility of applying the most recent editions of the standards.

ANSI C2-2017, *National electrical safety code*. [1]

AWPA Standard M6-18, *Brands used on preservative treated materials*. [2]

ASTM D9-2020, *Standard terminology relating to wood and wood-based products*. [3]

3 Definitions

The following definitions shall apply to the terms used in this standard. Photographs depicting many of these terms may be found in Annex E of this Standard.

3.1 Air dried

Dried by exposure to air in a yard or shed, without artificial heat.

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[1] Available from https://standards.ieee.org/products-programs/nesc/products/

[2] Available from https://awpa.com/standards

[3] Available from https://www.astm.org