



# ANSI O5-1-2017

## Wood Poles: Specifications and Dimensions

AMERICAN NATIONAL STANDARD FOR WOOD UTILITY PRODUCTS



Accredited Standards Committee O5 was first organized in 1924 by the Bell Telephone System and the U.S. Independent Telephone Association's American Standards Association (ASA) Telephone Group. The Exchange Carrier Standards Association (ECSA), which later became the Alliance for Telecommunications Industry Solutions (ATIS), accepted sponsorship and Secretariat responsibility for ASC O5 in 1985. The American Wood Protection Association (AWPA) then assumed the role of Secretariat, effective January 1, 2011. ASC O5 is jointly accredited with its Secretariat by the American National Standards Institute. This committee develops standards for wood poles, crossarms, braces, and glue laminated timber for utility structures. For more information, visit the ASC O5 website at [www.asco5.org](http://www.asco5.org).



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## ANSI O5.1-2017, Wood Poles: Specifications and Dimensions

is an American National Standard developed by **ASC O5 – Wood Utility Products**.

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American National Standard for Wood Utility Products

**Wood Poles:  
Specifications and Dimensions**

Secretariat  
American Wood Protection Association, Inc.

Approved February 23, 2017  
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 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 O5.1-2015.

Suggestions for improvement of this standard will be welcomed. They should be sent to ASC O5 through its Secretary: American Wood Protection Association, P.O. Box 361784, Birmingham, AL 35236 <[www.awpa.com](http://www.awpa.com)>.

This standard was processed and approved for submittal to ANSI by ASC O5. 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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**Table of Contents**

1	Scope & general requirements .....	1
1.1	Scope .....	1
1.2	General requirements .....	1
2	Normative references .....	1
3	Definitions .....	
4	Pole classes .....	
5	Material requirements .....	4
5.1	General .....	4
5.1.1	Species & designated fiber strength values .....	4
5.1.2	Conditioning, seasoning, & treatment limitations .....	4
5.1.2.1	Air seasoning .....	4
5.1.2.2	Boulton drying temperature .....	4
5.1.2.3	Steam conditioning .....	4
5.1.2.4	Kiln drying .....	4
5.1.2.5	Steaming (Douglas-fir & Western larch) .....	5
5.1.2.6	Sterilization .....	5
5.1.3	Solvent recovery .....	5
5.1.4	Rate of growth .....	5
5.1.5	Through boring .....	5
5.2	Prohibited defects .....	6
5.3	Permitted defects .....	6
5.3.1	Firm red heart .....	6
5.3.2	Hollow pith centers .....	6
5.3.3	Sap stain .....	6
5.3.4	Scars .....	6
5.4	Limited defects .....	6
5.4.1	Bark inclusions .....	6
5.4.2	Compression wood .....	6
5.4.3	Dead streaks .....	6
5.4.4	Defective butts .....	6
5.4.5	Insect damage .....	6
5.4.6	Knot .....	6
5.4.7	Scars (cat face) .....	7
5.4.8	Shakes .....	7
5.4.9	Shape .....	7
5.4.10	Spiral grain .....	7
5.4.11	Splits & checks .....	8
5.4.11.1	In the top .....	8
5.4.11.2	In the butt .....	8
5.4.12	Shelling .....	8
5.4.13	Cone holes .....	8
6	Dimensions .....	8
6.1	Length .....	8
6.2	Circumference .....	8
6.2.1	General .....	8
6.2.2	Circumference .....	8
6.3	Classification .....	8
7	Manufacturing requirements .....	9
7.1	Bark removal .....	9
7.2	Sawing .....	9

ANSI O5.1-2017

7.3 Trimming.....9

7.4 Shaving.....9

7.5 Marking & code letters.....9

8 Storage & handling ..... 11

8.1 Storage ..... 11

8.2 Handling..... 11

8.3 Mechanical damage..... 11

Annex A: Design practice ..... 3

A.1 Poles not included in the size study ..... 1

A.2 Southern pine, Douglas-fir, & Western red cedar ..... 1

A.3 Multi-pole structures ..... 33

Annex B: Groundline stresses ..... 35

Annex C: Reliability based design ..... 36

C.1 Scope..... 36

C.2 Pole classes & geometry ..... 36

C.3 Adjustments to special conditions ..... 37

C.4 Generation of material resistance data..... 37

Annex D: Requirements for consideration of foreign species into ANSI O5.1 ..... 42

D.1 Scope..... 42

D.2 Requirements ..... 42

Annex E: Bibliography ..... 44

Annex F: Acronyms & abbreviations ..... 45

**Table of Figures**

Figure 1 - Measurement of sweep and short crook in poles ..... 29

Figure 2 - Through-boring diagram showing minimum height above and depth below intended groundline ..... 30

**Table of Tables**

Table 1 - Designated Fiber Strength and Modulus of Elasticity Specifically for Wood Utility Poles ..... 12

Table 2 - Limits of Knot Sizes ..... 13

Table 3 - Dimensions of Northern white cedar poles (Fiber Strength 4000 psi) ..... 14

Table 3M - Metric dimensions of Northern white cedar poles (Fiber Strength 27.6 MPa) ..... 15

Table 4 - (Intentionally left blank) ..... 16

Table 4M - (Intentionally left blank) ..... 16

Table 5 - Dimensions of Western red cedar and Ponderosa pine poles (Fiber Strength 6000 psi)..... 17

Table 5M - Metric dimensions of Western red cedar and Ponderosa pine poles (Fiber Strength 41.4 MPa)..... 18

Table 6 - Dimensions of Jack pine, Lodgepole pine, Red pine, Western fir, and Radiata pine (Fiber Strength 6600 psi)..... 19

Table 6M - Metric dimensions of Jack pine, Lodgepole, Red pine, Western fir, and Radiata pine (Fiber Strength 45.5 MPa)..... 20

Table 7 - Dimensions of Alaska yellow cedar poles (Fiber Strength 7400 psi)..... 21

**ANSI O5.1-2017**

Table 7M - Metric dimensions of Alaska yellow cedar poles (Fiber Strength 51.0 MPa)..... 22

Table 8 - Dimensions of Douglas-fir (both types) and Southern pine poles (Fiber Strength 8000 psi)..... 23

Table 8M - Metric dimensions of Douglas-fir (both types) and Southern pine poles (Fiber Strength 55.2 MPa).... 24

Table 9 - Dimensions of Western larch poles (Fiber Strength 8400 psi)..... 25

Table 9M - Metric dimensions of Western larch poles (Fiber Strength 57.9 MPa) ..... 26

Table 10 - Dimensions of Scots pine (Scandinavian) poles (Fiber Strength 7800 psi)..... 27

Table 10M - Metric dimensions of Scots pine (Scandinavian) poles (Fiber Strength 53.8 MPa)..... 28

  

Table A.1 - Douglas-fir Above-Ground Height Effect Factors for Use as Alternatives to Equation A.2 ..... 34

Table A.2 - Southern pine Above-Ground Height Effect Factors for Use as Alternatives to Equation A.2 ..... 34

Table A.3 - Western red cedar Above-Ground Height Effect Factors for Use as Alternatives to Equation A.2 ..... 34

  

Table C.1 - Groundline strength and stiffness values for new, green poles less than 50 feet (15.2m) long..... 39

Table C.2 - Groundline strength and stiffness values for new, green poles, 50 feet (15.2m) and longer, used in unguyed, single-pole structures only ..... 40

Table C.3 - Groundline strength and stiffness values for new, green poles, 50 feet (15.2m) and longer, used in structures other than unguyed single-pole structures ..... 40

Table C.4 - Correction factors for pole strength and stiffness ( $k_i$  factors for Equations 2 and 3)..... 41

Table C.5 - Height-effect correction factors for MOR ..... 41

# 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 5.1.9. [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, groundline boring, or etching; 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.

ASC C2-2007, *National electrical safety code*.<sup>1</sup>

AWPA Standard M6-07, *Brands used on forest products*.<sup>2</sup>

ASTM D9-05, *Standard terminology relating to wood*.<sup>3</sup>

Wood Preservation Statistics. *Forest Service, U.S. Department of Agriculture, 1973*.<sup>4</sup>

## 3 Definitions

The following definitions shall apply to the terms used in this standard. Photographs depicting many of these terms may be found in Technical Report O5-TR-01, the Photographic Manual of Wood Pole Characteristics, which is based on this Standard.

<sup>1</sup> Available from [www.ieee.org](http://www.ieee.org)

<sup>2</sup> Available from [www.awpa.com](http://www.awpa.com)

<sup>3</sup> Available from [www.astm.org](http://www.astm.org)

<sup>4</sup> Available from the U.S. Government Printing Office, Washington, DC 20402.