



Designation: D3200 – 74 (Reapproved 2022)

Standard Specification and Test Method for Establishing Recommended Design Stresses for Round Timber Construction Poles¹

This standard is issued under the fixed designation D3200; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (ϵ) indicates an editorial change since the last revision or reapproval.

1. Scope

1.1 This specification covers the physical characteristics of round timber construction poles to be used either treated or untreated.

1.2 This test method covers basic principles for establishing recommended design stress values for round timber construction poles that are applicable to the quality described.

1.3 The values stated in inch-pound units are to be regarded as standard. The values given in parentheses are mathematical conversions to SI units that are provided for information only and are not considered standard.

1.4 *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety, health, and environmental practices and determine the applicability of regulatory limitations prior to use.*

1.5 *This international standard was developed in accordance with internationally recognized principles on standardization established in the Decision on Principles for the Development of International Standards, Guides and Recommendations issued by the World Trade Organization Technical Barriers to Trade (TBT) Committee.*

¹ This specification and test method is under the jurisdiction of ASTM Committee D07 on Wood and is the direct responsibility of Subcommittee D07.04 on Pole and Pile Products.

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2. Referenced Documents

2.1 *ASTM Standards*:²

D25 Specification for Round Timber Piles

D2899 Practice for Establishing Allowable Stresses for Round Timber Piles

3. Terminology Definition

3.1 *construction poles*—poles which are used as principle load-carrying components of a building.

4. Physical Requirements

4.1 The round timber construction poles shall be as specified in Specification D25, with the following exception:

4.1.1 In place of 7.1 of Specification D25, the following shall apply:

The tip circumference shall be specified. The corresponding butt circumference shall not be less than that specified in Table 1 of this standard.

5. Design Stresses

5.1 Methods for establishing design stresses for round timber construction poles shall follow those presented in Practice D2899.

6. Keywords

6.1 design; poles; stresses; timber

² For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at service@astm.org. For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.

TABLE 1 Specified Tip Circumference With Corresponding Minimum Butt Circumference

Tip circumference, required min, in. (mm)	16 (406)	19 (483)	22 (559)	25 (635)	28 (711)	31 (787)	35 (889)	38 (965)
Length, ft (mm)	Minimum Circumference 3 ft (914 mm) from Butt, in. (mm)							
10 (3048)	18.5 (469.9)	21.5 (546.1)	24.5 (622.3)	27.5 (698.5)	30.5 (774.7)	33.5 (850.9)	37.5 (952.5)	40.5 (1028.7)
15 (4572)	19.8 (502.9)	22.8 (579.1)	25.8 (655.3)	28.8 (731.5)	31.8 (807.7)	34.8 (883.9)	38.8 (985.5)	41.8 (1061.7)
20 (6096)	22.0 (533.4)	24.0 (609.6)	27.0 (685.8)	30.0 (762.0)	33.0 (838.2)	36.0 (914.4)	40.0 (1016.0)	43.0 (1092.2)
25 (7620)	22.2 (563.9)	25.2 (640.1)	28.2 (716.3)	31.2 (792.5)	34.2 (868.7)	37.2 (944.9)	41.2 (1046.5)	44.2 (1122.7)
30 (9144)	23.5 (596.9)	26.5 (673.1)	29.5 (749.3)	32.5 (825.5)	35.5 (901.7)	38.5 (977.9)	42.5 (1079.5)	45.5 (1155.7)
35 (10668)	24.8 (629.9)	27.8 (706.1)	30.8 (782.3)	33.8 (858.5)	36.8 (934.7)	39.8 (1010.9)	43.8 (1112.5)	46.8 (1188.7)
40 (12192)	26.0 (660.4)	29.0 (736.6)	32.0 (812.8)	35.0 (889.0)	38.0 (965.2)	41.0 (1041.4)	45.0 (1143.0)	48.0 (1219.2)

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