



Designation: D6782 – 19

Standard Test Methods for Standardization and Calibration of In-Line Dry Lumber Moisture Meters¹

This standard is issued under the fixed designation D6782; 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 These test methods apply to instruments designed to detect, or measure, moisture in wood which has been dried below the fiber saturation point. The purpose of these tests is to provide a unified standard against which such systems can demonstrate their suitability for their intended use (see [Appendix X1](#)).

1.1.1 Sensitivity to thin layers of surface moisture such as caused by dew or brief rain exposure is not addressed by these methods. Certain applications, such as screening material for surface adhesion, require additional assessment methodology and criteria (see [Appendix X5](#)).

1.2 The standard is configured to support tests by moisture meter manufacturers as well as end-users of such systems, therefore the text follows two tracks (see [Appendix X2](#)).

1.3 Test methods specified for manufacturers are generally designed for laboratory settings and are intended to provide a standard against which a manufacturer certifies calibration and general system conformance.

1.4 Test methods for end-users are generally designed for field settings and are intended as a standardized set of procedures for determining the suitability of a specific machine for a particular use.

1.5 Applications such as lumber marking or sorting systems utilizing the output of the in-line meter are not part of this standard.

1.6 Applications requiring sensitivity to and identification of localized wet areas are limited to general recommendations. The presence of wet-spots is the subject of [Appendix X8](#).

1.7 The values stated in SI units are to be regarded as the standard. The values given in parentheses are for information only.

1.8 *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.

1.9 *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.*

2. Referenced Documents

2.1 *ASTM Standards:*²

[D9 Terminology Relating to Wood and Wood-Based Products](#)

[D1990 Practice for Establishing Allowable Properties for Visually-Graded Dimension Lumber from In-Grade Tests of Full-Size Specimens](#)

[D2395 Test Methods for Density and Specific Gravity \(Relative Density\) of Wood and Wood-Based Materials](#)

[D2915 Practice for Sampling and Data-Analysis for Structural Wood and Wood-Based Products](#)

[D4442 Test Methods for Direct Moisture Content Measurement of Wood and Wood-Based Materials](#)

[D4444 Test Method for Laboratory Standardization and Calibration of Hand-Held Moisture Meters](#)

[D4933 Guide for Moisture Conditioning of Wood and Wood-Based Materials](#)

[D5536 Practice for Sampling Forest Trees for Determination of Clear Wood Properties](#)

3. Terminology

3.1 For definitions of terms used in this test method, refer to Terminology [D9](#).

3.2 *Definitions of Terms Specific to This Standard:*

3.2.1 *accept/reject meters, n*—meters that permit identification or sorting, or both, of pieces into moisture content classes.

3.2.1.1 *Discussion*—An accept/reject meter has a specific or

¹ These test methods are under the jurisdiction of ASTM Committee [D07](#) on Wood and are the direct responsibility of Subcommittee [D07.01](#) on Fundamental Test Methods and Properties.

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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.