



Standard Test Methods of Conducting Strength Tests of Panels for Building Construction¹

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This standard has been approved for use by agencies of the U.S. Department of Defense.

INTRODUCTION

Sound engineering design of structures using existing or new materials requires accurate technical data on the strength and rigidity of the basic elements employed in various construction systems. It is the purpose of these test methods to provide a systematic basis for obtaining engineering data on various construction elements and structural details of value to designers, builders, building officials, and others interested in this field. The results should closely approximate the performance in actual service.

1. Scope

1.1 These test methods cover the following procedures for determining the structural properties of segments of wall, floor, and roof constructions:

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Concentrated Load

APPENDIX

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Technical Interpretation

Appendix X1

1.2 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.

1.2.1 *Exception*—SI units are used in Fig. 6.

2. Referenced Documents

2.1 ASTM Standards:²

- D2395 Test Methods for Density and Specific Gravity (Relative Density) of Wood and Wood-Based Materials
- D4442 Test Methods for Direct Moisture Content Measurement of Wood and Wood-Base Materials
- D7438 Practice for Field Calibration and Application of Hand-Held Moisture Meters
- E4 Practices for Force Verification of Testing Machines
- E73 Practice for Static Load Testing of Truss Assemblies
- E564 Practice for Static Load Test for Shear Resistance of Framed Walls for Buildings
- E575 Practice for Reporting Data from Structural Tests of Building Constructions, Elements, Connections, and Assemblies
- E661 Test Method for Performance of Wood and Wood-Based Floor and Roof Sheathing Under Concentrated Static and Impact Loads

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.