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.

Designation: D7469 – 21

Standard Test Methods for End Joints in Structural Wood Products[1]

This standard is issued under the fixed designation D7469; 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.

INTRODUCTION

Adhesive bonded end joints are used in structural glued wood products. The bond performance of these end joints is only one of several parameters that influence the in-service performance of these products. Evaluating the performance of these end joints require specific tests.

The testing regimen, which may consist of one or more of the test methods specified in this standard, is dependent on the type of product, the stage in the manufacturing of the product or sub-components when the testing is to be performed, and the objective of the evaluation. Appendix X1 – Appendix X7 provide an overview of considerations for developing a testing regimen.

1. Scope

1.1 This standard provides test methods for evaluating the structural capacity and integrity of end joints in structural wood products.

1.2 Off-line test methods include: *(1)* Axial Tension, *(2)* Bending, and *(3)* Cyclic Delamination.

1.3 In-line test methods include: *(1)* Tension Proofload and *(2)* Bending Proofload.

1.4 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.

1.5 *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.*

1.6 *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

D198 Test Methods of Static Tests of Lumber in Structural Sizes

D1101 Test Methods for Integrity of Adhesive Joints in Structural Laminated Wood Products for Exterior Use

D1151 Practice for Effect of Moisture and Temperature on Adhesive Bonds

D1183 Practices for Resistance of Adhesives to Cyclic Laboratory Aging Conditions

D2559 Specification for Adhesives for Bonded Structural Wood Products for Use Under Exterior Exposure Conditions

D2915 Practice for Sampling and Data-Analysis for Structural Wood and Wood-Based Products

D3434 Test Method for Multiple-Cycle Accelerated Aging Test (Automatic Boil Test) for Exterior Wet Use Wood Adhesives

D4442 Test Methods for Direct Moisture Content Measurement of Wood and Wood-Based Materials

D5456 Specification for Evaluation of Structural Composite Lumber Products

D4688 Test Method for Evaluating Structural Adhesives for Finger Jointing Lumber

[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.

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