



Standard Specification for Adhesives Used for Laminate Joints in Nonstructural Lumber Products¹

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1. Scope

1.1 This specification covers performance levels for adhesives to be used in laminate joints in nonstructural lumber products. Such products include, but are not limited to, interior and exterior mouldings, window and door components or parts, and bonded lumber panels. This specification is to be used to evaluate adhesives as well as the adhesive bonds in nonstructural-glued-lumber products.

NOTE 1—This specification supersedes the laminate-joint portion of Specification D3110.

NOTE 2—See 3.2.1 and 3.2.2 for descriptions of a dry-use-nonstructural adhesive and a wet-use-nonstructural adhesive.

1.2 This specification applies to laminate-joint specimens made under both laboratory and field conditions. See Section 4 for limitations in using this specification to evaluate industrially manufactured laminate joint products.

1.3 The following safety caveat applies only to the apparatus and test methods portions, Sections 6, 7, 8, and 9 of this specification: *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 and health practices and determine the applicability of regulatory limitations prior to use.*

1.4 The values stated in inch-pound units are to be regarded as standard.

1.5 In this specification, *laminate joint* refers to both face and edge joints.

1.6 The following index is provided as a guide to the test methods in this specification:

	Section
Apparatus	6
Conditioning	7
Material and Preparation of Assemblies and Specimens	8
Exposure Conditions and Treatments	9
Testing, Calculation, and Reporting	10

¹ This specification is under the jurisdiction of ASTM Committee D14 on Adhesives and is the direct responsibility of Subcommittee D14.30 on Wood Adhesives.

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NOTE 3—The conditioning needed for various stages in the preparation of the specimens and for the exposure tests are given in Sections 7, 8, and 9.

2. Referenced Documents

2.1 ASTM Standards:²

D905 Test Method for Strength Properties of Adhesive Bonds in Shear by Compression Loading

D907 Terminology of Adhesives

D2016 Methods of Test for Moisture Content of Wood (Withdrawn 1987)³

D2555 Practice for Establishing Clear Wood Strength Values
D3110 Specification for Adhesives Used in Laminate Joints for Nonstructural Glued Lumber Products (Withdrawn 1996)³

D5266 Practice for Estimating the Percentage of Wood Failure in Adhesive Bonded Joints

E4 Practices for Force Verification of Testing Machines

E6 Terminology Relating to Methods of Mechanical Testing

E41 Terminology Relating To Conditioning

E177 Practice for Use of the Terms Precision and Bias in ASTM Test Methods

E691 Practice for Conducting an Interlaboratory Study to Determine the Precision of a Test Method

3. Terminology

3.1 *Definitions:* Many terms in this specification are defined in Terminologies D907, E6, and E41.

3.1.1 *bond, n*—the union of materials by adhesives.

3.1.2 *laminate joint, n—in wood bonding*, a joint made by bonding layers of adherends face-to-face or edge-to-edge to form thicker or wider stock.

3.1.3 *edge joint, n—in wood bonding*, a type of laminate joint made by bonding adherends edge-to-edge with grain directions parallel to form wider stock.

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.

³ The last approved version of this historical standard is referenced on www.astm.org.