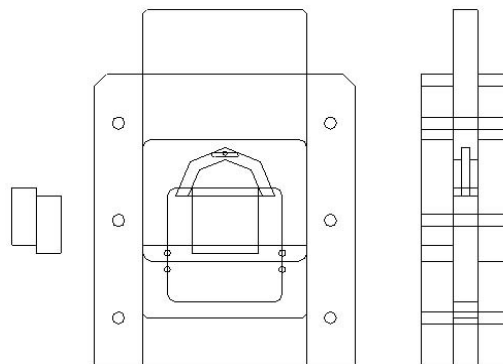


## WOOD ADHESIVE SHEAR TEST FIXTURE



Specimen	Width	2.00"
	Thickness	1.50"
	Length	2.00"
Fixture	Construction	High strength steel with protective black oxide
	Temperature	-120 to 250°F (-85 to 122°C)
	Mounting	Platen to platen (platens not included)
	Capacity	15,000 lbs
	Weight	60 lbs approximately
	Dimensions	Assembled 12" x 5" x 10"
	Standard	Manufactured in accordance with ASTM D2559

Model No. ASTM.D2559.10 - Adhesive Bond Strength Shear Test Fixture. 15,000 pound capacity compression loading fixture that applies a shear load to a bonded wooden sample. The loading anvil has a self-alignment seat that allows uniform lateral distribution of load. The fixture has a 1/2"-20 threaded coupling adaption supplied in loading plate, while the base sits on a platen. The fixture is constructed in accordance with ASTM D143, D905, D2559, D3931 and D5751.

# **MODEL NO. ASTM.D2559.10**

## **ASTM, SHEAR, ADHESIVES**

### **ACCESSORIES**

#### **Upper fixture attachment is supplied with 1/2" -20 female coupling (Common adapter sizes include:)**

Model No. M01S21 - 1/2" Male Clevis (Type B) to 1/2" -20 Threaded Stud  
Model No. M02S21 - 5/8" Male Clevis (Type C) to 1/2" -20 Threaded Stud  
Model No. M03S21 - 1.25" Male Clevis (Type D) to 1/2" -20 Threaded Stud  
Model No. M12S21 - 12mm Male Clevis (Type O) to 1/2" -20 Threaded Stud  
Model No. S36S21 - 1" -14 to 1/2" -20 Threaded Step Stud  
Model No. LN21 - 1/2" -20 Threaded Locking Nut with Knurled OD

#### **Lower fixture attachment is supported on a platen or flat surface of the test machine. (Common adapter sizes include:)**

Model No. PLAT.RF061.10 - 6" Diameter Round Fixed Compression Platen  
Model No. PLAT.RA061.10 - 6" Diameter Round Articulating Compression Platen  
Model No. PLAT.SF061.10 - 6" Square Fixed Compression Platen  
Model No. PLAT.SA061.10 - 6" Square Articulating Compression Platen  
Model No. M03S36 - 1.25" Male Clevis (Type D) to 1" -14 Threaded Stud

### **SPARE PARTS**

### **REFERENCE DOCUMENT AND TEST METHOD SCOPE:**

SCOPE: <http://www.astm.org/Standards/D2559.htm>

ASTM D2559-12a Standard Specification for Adhesives for Bonded Structural Wood Products for Use Under Exterior Exposure Conditions

1.1 This specification covers adhesives suitable for the bonding of wood, including treated wood, into structural wood products for general construction or other uses where a high-strength, durable adhesive bond is required. 1.2 This specification includes test methods that may be referenced by specific product standards for the evaluation and approval of structural wood adhesives. Methods are included to evaluate adhesives intended for use in exterior exposure. Note 1—Consult the Commentary in Appendix X1 regarding the intent and limitations of each test method contained in this specification.

1.3 Description of Bondline Performance—It is recognized that structural wood adhesives are used in various applications and levels of severity in terms of moisture content, loading, cyclic and seasonal weather conditions, heat exposure and other use conditions. It is the intent of this standard to determine the suitability of an adhesive for use under various levels of severity and conditions with specific and appropriate test methods and requirements.

Note 2—This specification does not contain specific tests outlined for different chemical types of adhesives. 1.4 Strength and durability requirements of the adhesive in Service Class A are based on the performance of the adhesive in laminated wood as measured by: 1.4.1 Resistance to shear by compression loading after conditioning to the target moisture content indicated in 14.2.3 and meeting requirements in 14.4. 1.4.2 Resistance to delamination during exposure to three cycles of vacuum pressure wetting followed by drying at elevated temperature as indicated in 15.3 and meeting requirements in 15.4.

1.4.3 Resistance to creep under static load by subjecting test specimens to a specified shear stress and exposing one set of test specimens to an environment of elevated temperature and ambient humidity and another set to an environment of high humidity and meeting requirements set forth in 16.3.

1.4.4 For applications involving chemical treatment, the adhesive shall be evaluated using representative samples of treated wood. Note 3—When using chemically treated wood, compatibility between the treatment, adhesive, and wood is to be considered and agreed upon between the chemical manufacturer and the user. Note 4—Additional durability testing may also be required as specified by individual product standards. Consult the Commentary in Appendix X1 for additional information and guidance as to the type of durability testing that may be appropriate to supplement this specification when characterizing the adhesive for suitability with specific wood products. 1.5 The evaluation of adhesives for use in ground contact and marine exposures are beyond the scope of this specification. 1.6 The evaluation of binder adhesives is beyond the scope of this specification. 1.7 The values stated in SI units are to be regarded as the standard. The values in parentheses are for information only. 1.8 The text of this specification references notes, footnotes and a commentary which provide explanatory material. These notes, footnotes and commentary (excluding those in tables and figures) shall not be considered as requirements of the specification. 1.9 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. Extracted, with permission, from ASTM D2559 Standard Test Methods of Static Tests of Lumber in Structural Sizes, copyright ASTM International, 100 Barr Harbor Drive, West Conshohocken, PA 19482. A copy of the complete standard may be purchased from ASTM International, [www.astm.org](http://www.astm.org).

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