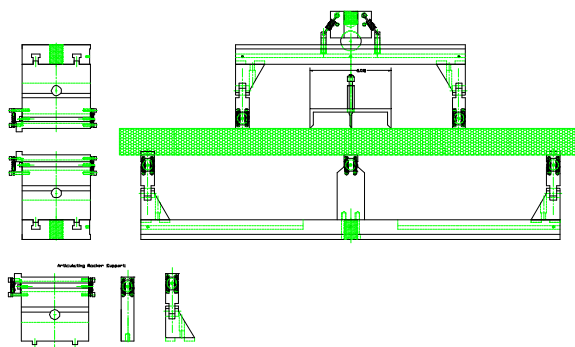


PLYWOOD LARGE PANEL FLEXURAL TEST FIXTURE



Specimen	Width	5" (150mm)
	Thickness	3/8" - to 1.0"
	Length	28" (457mm)
Fixture	Construction	High strength steel with black oxide finish
	Temperature	-120 to 250°F (-85 to 122°C)
	Mounting	1" -14 threaded couplings
	Capacity	5,000 lbs (20 kN)
	Weight	100 lbs approximately
	Dimensions	Assembled 5" x 14" x 31"
	Standard	Manufactured in accordance with ASTM D2718.

Model No. ASTM.D2718.20 - Five Point Bend Planar Shear Test Fixture

The fixture accommodates specimens up to 5" wide and up to 1" thick by 28" long. Includes 5" wide x 17" long top plate with self-aligning adjustable loading head. Supplied with (2) 5" wide articulating loading rocker anvils, (2) 5" wide articulating rocker supports, and (1) 5" wide fixed center support. (1) set of (5) 3/4" diameter rollers and removable aluminum loading pads are provided. Supplied with 1" -14 threaded couplings for mounting purposes. Constructed from high strength steel with a protective black oxide finish in accordance with ASTM D2718.

Capacity: 10,000 lbs (44.5 kN) when sitting on base of test frame

Specimen Lower Support Span: (2) end supports are adjustable to center fixed support

Loading Points: 3/4" diameter rollers and removable aluminum pads

Loading Head Span: Fully Adjustable from 1-14"

Specimen Widths: up to 5"

MODEL NO. ASTM.D2718.20

ASTM, WOOD, MISC

ACCESSORIES

Base Plate Stiffner - Used to Reach a Higher Capacity

Upper and lower fixture attachment is supplied with 1" -14 female coupling. (Common adapter sizes include:)

Model No. M03S36 - 1.25" Male Clevis (Type D) to 1" -14 Threaded Stud

Model No. S42S36 - 1.25" -12 to 1" -14 Threaded Step Stud

Model No. S48S36 - 1.5" -12 to 1" -14 Threaded Step Stud

Model No. S60S36 - 2" -12 to 1" -14 Threaded Step Stud

Model No. LN36 - 1" -14 Threaded Locking Nut with Knurled OD

SPARE PARTS

Call for replacement or spare parts

REFERENCE DOCUMENT AND TEST METHOD SCOPE:

SCOPE: <http://www.astm.org/Standards/D2718.htm>

ASTMD2718-00(2011)

Standard Test Methods for Structural Panels in Planar Shear (Rolling Shear)

1.1 These test methods determine the shear properties of structural panels associated with shear distortion of the planes parallel to the edge planes of the panels. Both shear strength and modulus of rigidity may be determined. Primarily, the tests measure the planar shear (rolling shear) strength developed in the plane of the panel. 1.2 Structural panels in use include plywood, waferboard, oriented strand board, and composites of veneer and of wood-based layers. 1.3 Two test methods are included 1.3.1 Test Method A-Planar shear loaded by plates. 1.3.2 Test Method B-Planar shear induced by five-point bending. 1.3.3 The choice of method will be dictated by the purpose of the test and equipment available. 1.3.4 Test Method A, Planar Shear Loaded by Plates-This test method uses a rectangular panel section adhered between steel plates with protruding knife edges to create load at the panel faces. This test method has been used to develop shear properties of plywood and oriented strand board for the purpose of confirming design values. This test method does not produce pure shear, but the specimen length is prescribed so that the secondary stresses have a minimum effect. The method determines shear strength and modulus of rigidity. 1.3.5 Test Method B, Planar Shear Induced by Five-Point Bending-Planar shear stress is induced on the panel while loaded in bending using two continuous spans. This test method determines planar shear strength consistent with panel applications under transverse loading. This test method is able to determine shear strength at any moisture condition. 1.4 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. 5.1 The specimen having the form of a rectangular flat plate is bonded between steel plates beveled at opposite ends of the specimen to provide knife edges for loading the plate at the face bonded to the specimen. The knife edges project beyond the ends of the specimen. This test method is conducted by loading the knife edges in compression at a uniform rate while a suitable gage measures slip between the plates due to specimen deformation. Shear strength is computed from maximum load, and effective shear modulus for the specimen is determined from a plot of load versus slip. 10.1 Specimens are tested in a two-span continuous beam support configuration with line loads applied at midspan of each span as shown in Fig. 4. Induced shear stresses are consistent with those developed in conventional panel applications under transverse loading. Specimens may be tested in any moisture condition. Note 1-Research that led to the development of the test method is available., Research on the test method's usefulness for determining elastic constants is also available. Extracted, with permission, from ASTM D2718 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.

Material Testing Technology

420 Harvester Court - Wheeling, IL. 60090 - Ph: (847) 215-7448 Fax: (847) 215-7449 E-mail: sales@mtusa.net