# FLATWISE PLANE SHEAR FATIGUE FIXTURE (SS) WITH THREE SETS OF BONDING PLATES (AL) (COMPRESSION MODE)

![Image of fixture](image.jpg)

**Specimen:**
- **Width:** Any width up to 3.0”
- **Thickness:** 0.25” to 0.75” (optional plates for thicker samples)
- **Length:** Up to 9.0”

**Fixture:**
- **Construction:** Stainless steel with aluminum bonding plates
- **Temperature:** -20 to 120°F (-29 to 49°C)
- **Mounting:** 1”-14 threaded coupling
- **Capacity:** 20,000 lbs (88 kN)
- **Weight:** 20 lbs approximately
- **Dimensions:** Assembled 3” x 2” x 14”
- **Bonding:** Supplied with 3 sets of aluminum plates
- **Standard:** Manufactured in accordance with ASTM C394

Model No. ASTM.C0394.11 - Sandwich Flatwise Plane Shear Fixture (Compression Mode) - Specimen configuration up to 9" long and 3" wide. Constructed from stainless steel except for the three sets of loading plates, which are constructed from aluminum with a protective black anodized coating. The fixture includes an upper and lower loading anvil with a cylindrical seat to accept loading plates with a recessed cylindrical loading end. The upper and lower grips will also be supplied with a cylindrical side-to-side alignment attachment. Supplied with (2) 1”-14 threaded couplings. Fixture is constructed in accordance with ASTM C394. Capacity 20,000 lbs  Temp Range -20 to 120°F (-29 to 49°C)
MODEL NO.  ASTM.C0394.11
ASTM, EDGEWISE, COMPRESSION, SHEAR,

ACCESSORIES
ACC.C0394.1101 - Set of (2) aluminum bonding plates 9” long by 3” wide
ACC.C0394.1102 - Set of (2) Additional high strength steel bonding plates 9” x 3” wide
ACC.C0394.1103 - Set of (2) Additional stainless steel bonding plates 9” long by 3” wide
ACC.C0394.1104 - Set of (2) Customer specified material
ACC.C0394.1105 - Extensometer Bracket

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
No spare parts

REFERENCE DOCUMENT AND TEST METHOD SCOPE:
SCOPE: http://www.astm.org/Standards/C394.htm
ASTM C394/C394M-13
Standard Test Method for Shear Fatigue of Sandwich Core Materials
1.1 This test method determines the effect of repeated shear forces on core material used in sandwich panels. Permissible core material forms include those with continuous bonding surfaces (such as balsa wood and foams) as well as those with discontinuous bonding surfaces (such as honeycomb).
1.2 This test method is limited to test specimens subjected to constant amplitude uniaxial loading, where the machine is controlled so that the test specimen is subjected to repetitive constant amplitude force (stress) cycles. Either shear stress or applied force may be used as a constant amplitude fatigue variable.
1.3 The values stated in either SI units or inch-pound units are to be regarded separately as standard. The values stated in each system may not be exact equivalents; therefore, each system shall be used independently of the other. Combining values from the two systems may result in non-conformance with the standard. Within the text, the inch-pound units are shown in brackets.
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.
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