

SHEAR TEST FIXTURE FOR WOOD

2820-060

The 2820-060 wood shear fixture is designed for testing shear strength properties of wood or adhesive bonds in wood by compression loading. The fixture consists of a high-strength steel body with a sliding, self-aligning anvil which is used to apply compressive loading to the specimen in shear. The shear line can be set at 0.0 mm, 2.0 mm or 3.0 mm by using shims. The shims are clearly engraved with the applicable standard and are easy and quick to change. The fixture is attached to the test system using simple clevis pin interfaces which allow quick and easy fitting and removal.

PRINCIPLE OF OPERATION

The fixture consists of two main components. A sliding shear blade with a self-aligning anvil contacts the specimen which is supported in the body of the fixture. The shear blade moves downwards under compression and applies a shear force to the specimen. The self-aligning anvil ensures uniform lateral distribution of the applied load. A screw-action specimen clamp with self-aligning thrust pad holds the specimen securely during test. Shims supplied with the fixture allow the clearance along the shear line to be adjusted according to the standard being followed. Clearances of 0 mm, 2.0 mm and 3.0 mm are possible.

FEATURES

- 50 kN (5,000 kgf, 11,250 lbf) force capacity
- Self-aligning loading anvil ensures uniform lateral distribution of applied load
- Screw-action specimen clamp with self-aligning thrust pad to hold specimen firmly in position
- Specimen seat with clearance adjustment shims to fix the offset between the edge of the supporting surface and the plane of the loading surface
- Suitable for tests on wood and adhesive bonds
- Compliant with ASTM, BS, ISO, JAS and JIS standards

APPLICATION RANGE

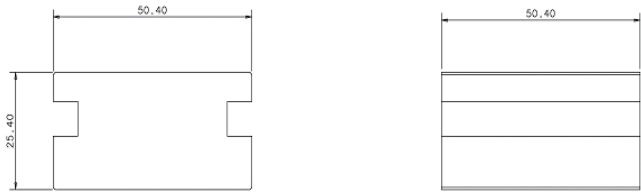
- Static shear tests on a wide range of wood and timber specimens and adhesive bonds at ambient temperatures
- Type of Loading: Static shear (in compression). Not suitable for high cycle dynamic fatigue tests
- Specimen shapes: Rectangular



2820-060 Shear Fixture

SPECIFICATIONS

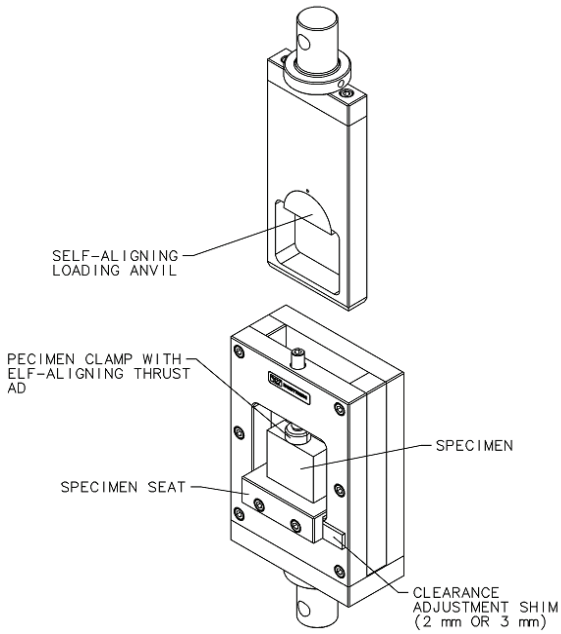
Catalog Number	2820-060
Compliance to Standards	ASTM D 143-94, ASTM D 905-98, ISO 6238 2001, JIS K 6802-1973, JIS Z 2117-1977, BS 373: 1957 and JAS 601-1974
Upper Fitting	0.5 in clevis (Type Dm)
Lower Fitting	0.5 in clevis (Type Dm)
Weight-Upper	2.64 kg (5.8 lb)
Weight-Lower	8.3 kg (18.3 lb)



2820-060 dimensions (mm)



Shims for adjusting clearance of shear line



2820-060 shear test fixture

