



ASTM D7249 Testing Fixture

This is a specialized version of the standard Long Beam Flexure Fixture and includes linear bearings alignment rods. It does not have an adjustable structure, as it has been designed for specific load and support spans. In test environments such as the control of production quality, sometimes this is desired to ensure that the appropriate bays are constantly used and cannot be altered. The device is typically set to four load points, with a loading head at three points. There are, however, various support configurations and optional load, for example cylindrical supports and large flat supports. The optional stops are applied to the plates, to allow easy specimen centering.



ASTM D7249 Testing Fixture - Drawing

The maximum specimen width can also be specified, being typically between 2" and 6".

To minimize fixture weight, this fixture is fabricated primarily of aluminum, with flats and hardened steel cylinders and for durability.

Test Standard	D7249, D7250, D546 and ASTM C393
Maximum Load	25 kN
Temperature Range	da -80 °C a 149 °C
Specimen Thickness	1-10 mm
Specimen Width	40 mm
Specimen Length	700 mm
Mass	9.00 kg



ASTM D7249 Testing Fixture - Assembly



ASTM D7249 Testing Fixture - Application

Additional Information:

- ASTM Standard C 393-11 (2011), "Flexural Properties of Flat Sandwich Constructions," American Society for Testing and Materials, West Conshohocken, Pennsylvania (first issued in 1957);
- ASTM Standard D 790-10 (2010), "Flexural Properties of Unreinforced and Reinforced Plastics and Electrical Insulating Materials," American Society for Testing and Materials, West Conshohocken, Pennsylvania (first issued in 1970);
- ASTM Standard D 6272-10 (2010), "Flexural Properties of Unreinforced and Reinforced Plastics and Electrical Insulating Materials by Four-Point Bending," American Society for Testing and Materials, West Conshohocken, Pennsylvania (first issued in 1998).
- ASTM Standard D 7264-07 (2007), "Flexural Properties of Polymer Matrix Composite Materials," American Society for Testing and Materials, West Conshohocken, Pennsylvania (first issued in 2006).

Referenced Documents

- *ASTM C 273* Test Method for Shear Properties of Sandwich Core Materials;

- *ASTM C 480* Test Method for Flexure Creep of Sandwich Constructions;
- *ASTM E 4* Practices for Force Verification of Testing Machines.