



ASTM D-790

Test Methods for Flexural Properties of Unreinforced and Reinforced Plastic and Electrical Insulating Materials

These test methods cover the determination of flexural properties of unreinforced and reinforced plastics, including high-modulus composites and electrical insulating materials in the form of rectangular bars molded directly or cut from sheets, plates or molded shapes. These test methods are generally applicable to both rigid and semi-rigid materials. However, flexural strength cannot be determined for those materials that do not break or that do not fail in the outer surface of the test specimen within a 5.0% strain limit. These test methods utilize a three-point loading system applied to a simply supported beam.

Procedure A (designed for materials that break at comparatively small deflections): used for measurement of flexural properties, particularly flexural modulus, unless the material specification states otherwise.

Procedure B (designed for materials that undergo large deflections during testing): used for measurement of flexural strength only.

Tangent modulus data obtained by Procedure A tends to exhibit lower standard deviations that comparable data obtained by Procedure B.

(D790, D-790, D 790)

ASTM Standard D790, 2007, "Test Method for Purity by DSC," ASTM International, West Conshohocken, PA, 2007, DOI: 10.1520/D790-03, www.astm.org.

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