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Composites Test Fixtures | Two Rail Shear, ASTM D 4255

ASTM D 4255 describes both 2 Rail and 3 rail methods of determining the in-plane shear strength of a composite laminate panel. In the 2 Rail test (Method A) a laminate panel specimen is clamped between loading plates and yokes and then subject to shear loading. Measurement of shear strain requires the use of strain gauges on the specimen.

Principle of Operation

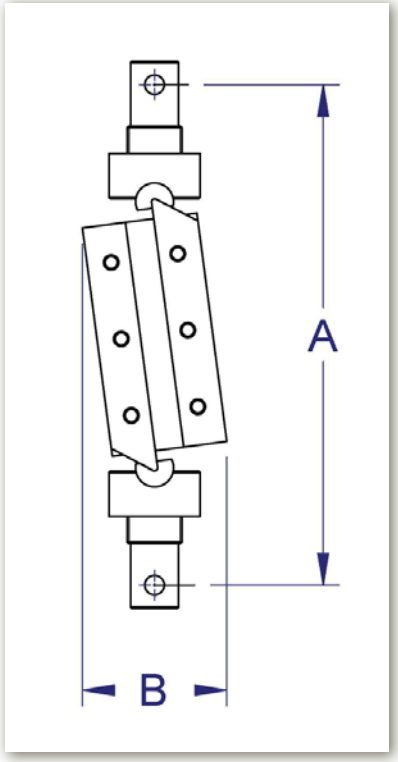
Two types of fixture are available: one working in a compression mode and one working in a tension mode. A specimen template is included to ensure the accurate location of the holes in the specimen.

Features

- Conforms to ASTM D 4255
- Suitable for non-ambient temperatures

Specifications

Catalog Number	-	S4695A	S4695B
Test Standard	-	ASTM D 4255A	ASTM D 4255A
Test Type	-	Compression	Tension
Maximum Load	kN kfg lbf	100 10,000 22,000	100 10,000 22,000
Temperature Range	°C °F	-75 to +250 -103 to +482	-75 to +250 -103 to +482
Specimen Size			
Width	mm in	76 3.0	76 3.0
Length	mm in	152 6.0	152 6.0
Mechanical Connection			
Upper Interface	-	1.25 in connection with ½ in clevis pin (type Dm)	1.25 in connection with ½ in clevis pin (type Dm)
Lower Interface	-	1.25 in connection with ½ in clevis pin (type Dm)	1.25 in connection with ½ in clevis pin (type Dm)
Dimensions			
Effective Length (A)	mm in	304.8 12	508 20
Effective Width (B)	mm in	102 4	102 4
Material	-	Stainless Steel	Stainless Steel



INSTRON

Worldwide Headquarters
825 University Ave, Norwood, MA 02062-2643, USA
Tel: +1 800 564 8378 or +1 781 575 5000

European Headquarters
Coronation Road, High Wycombe, Bucks HP12 3SY, UK
Tel: +44 1494 464646

Instron Industrial Products
900 Liberty Street, Grove City, PA 16127, USA
Tel: +1 724 458 9610

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