

Composites Test Fixtures | Flatwise Shear, ASTM C 273

ASTM C 273 describes a method of determining the shear strength of a sandwich core panel. The test the specimen is bonded to thick loading plate blocks and is subject to shear loading applied via the blocks.

Principle of Operation

Two types of fixture are available: one working in a tension mode and one working in a compression mode. Both fixtures are supplied with carbon steel loading blocks. Either fixture can test a variety of different sandwich core materials including honeycomb core structures and continuous core structures, such as foam or balsa wood.

Features

- Conforms to ASTM C 273
- Suitable for non-ambient temperatures



Specifications

Catalog Number	-	S4682A	S4681A
Test Standard	-	ASTM C 273	ASTM C 273
Test Type	-	Tension	Compression
Maximum Load	kN	100	100
	kgf	10,000	10,000
	lbf	20,000	20,000
Temperature Range	°C	-75 to +250	-75 to +250
	°F	-103 to +482	-103 to +482

Specimen Size

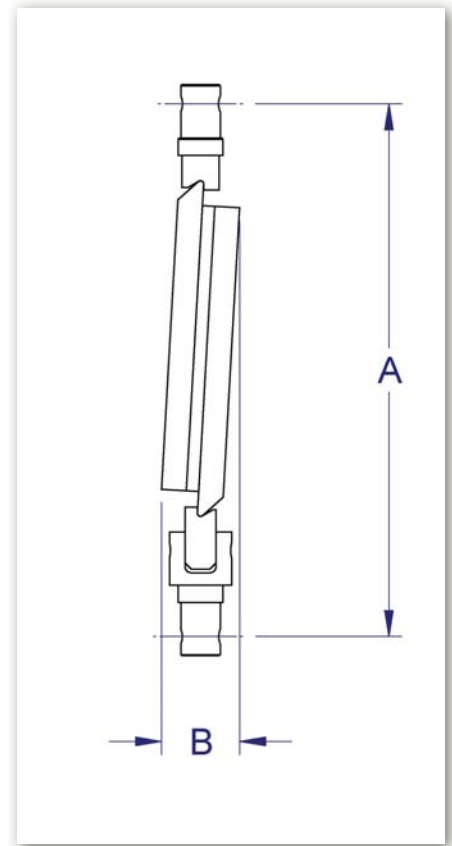
Maximum Length (A)	mm	230	230
	in	9.0	9.0
Maximum Width (B)	mm	80	80
	in	3.2	3.2

Mechanical Connections

Upper Interface	-	½ in clevis pin (type Dm)	½ in clevis pin (type Dm)
Lower Interface	-	½ in clevis pin (type Dm)	½ in clevis pin (type Dm)
Grip Body Material	-	Stainless Steel	Stainless Steel
Body Face Material	-	Carbon Steel	Carbon Steel
Weight (Approximately)	kg	26	26
	lb	60	60

Dimensions

Maximum Length (A)	mm	430	430
	in	17	17
Maximum Length (B)	mm	63	63
	in	2.5	2.5



Spare Bonding Faces

Catalog Number	Consult Factory
Description	Extra set of bonding faces for S4682A (5 off)
Mode	Consult Factory
Description	Extra set of bonding faces S4681A (5 off)

www.instron.com



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