

Product Information

HIFLEX EPOXY GLASS COMPOSITE

Description

Hiflex is an epoxy glass composite designed for high fatigue resistance leaf springs. It is especially suitable as “tuned” leaf springs in vibrating machinery.

Property	Spring	Test Method ASTM
Glass Fibres @ 0° angle @ 90° angle	85% 15%	
Flexural Strength @ 0° stress angle @ 90° Stress angle	932 MPa 376 MPa	D-790 16/1 Span : Depth Ratio
Flexural Modulus @ 0° stress angle @ 90° Stress angle	28 GPa 16 GPa	
Tensile Strength @ 0° stress angle @ 90° Stress angle	800 MPa 141 MPa	D-638 Type II necked (4mm) Type I straight sides
Tensile Modulus @ 0° stress angle @ 90° Stress angle	33 GPa 14 GPa	
Compression Strength Edgewise @ 0° stress angle @ 90° Stress angle	724 MPa 315 MPa	D-3410
Compression Modulus @ 0° stress angle @ 90° Stress angle	34 GPa 14 GPa	

THICKNESS		ORIENTATION		
mm	inches	Ply	Spring	Crossply
0.76	0.03	3		√
1.27	0.05	5		√
1.78	0.07	7		√
2.29	0.09	9		√
2.54	0.10	10		√
2.79	0.11	11		√
3.30	0.13	13	√	
3.81	0.15	15	√	
4.06	0.16	16	√	
4.83	0.19	19	√	
6.35	0.25	25	√	
7.87	0.31	31	√	
9.40	0.37	37	√	
11.00	0.43	43	√	
13.00	0.51	51	√	
16.00	0.63	63	√	

Note that other thickness can be made available with production lead-times .

Also check for minimum order quantities for non stock thickness.