



FRANKLIN

Composites for Today's Challenges

Franklin Fibre - Lamitex Corp

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Lamitex® CE Laminated Sheet

Lamitex® CE Sheets are intended for use in electrical applications requiring good moisture resistance and good mechanical strength. It has lower mechanical strength than material with glass substrates, but has superior impact resistance when compared to paper based laminates. CE has good dielectric properties and medium dielectric loss.

<u>Physical Properties</u>	<u>Test Condition</u>	<u>ASTM</u>	<u>Thickness</u>	<u>Values</u>
Specific Gravity		D792		1.37
Rockwell Hardness (M Scale)		D785	0.25	100
Moisture Absorption		D229	.062 "	2.00%
Flexural Strength	Condition A: Lengthwise	D790	.062 "	17,500 psi / 120.7 Mpa
	Crosswise		.062 "	15,500 psi / 103.4 Mpa
Flexural Modulus	Condition A: Lengthwise	D229	.062 "	1,600 kpsi / 11.0 GPa
	Crosswise		.062 "	1,500 kpsi / 10.3 GPa
Tensile Strength	Condition A: Lengthwise	D638	.125 "	11,000 psi / 75.8 Mpa
	Crosswise		.125 "	9,000 psi / 62.1 Mpa
Compressive Strength	Condition A: Flatwise	D695	.500"	34,000 psi / 234.41 Mpa
Izod Impact Strength	E48/50: Lengthwise	D256	.500 "	1.7 ft-lb/in. / .91 J/cm
	Crosswise		.500 "	1.5 ft-lb/in. / .80 J/cm
Bond Strength	Condition A	D732	.500 "	1,700 lbs / 771.1 kg
Shear Strength (Perpendicular to Laminations)	Condition A	D732	.062 "	14,000 psi / 96.5 Mpa

Thermal & Electrical Properties

Temperature Index - Electrical / Mechanical		UL Bulletin 786b	.125"	115° C / 125° C
Coefficient of Thermal Expansion	X Axis	IPC-TM 650-2.4.24	.125"	20.0"/°C / x 10 ⁻⁶
	Y Axis		.125"	22.0"/°C / x 10 ⁻⁶
U.L.® 94 Flammability Rating			.062 "	94HB
Dielectric Breakdown Voltage (step x step)	Condition A	D149	.062 "	40 kV
	D 48/50	D149	.062 "	3 kV
Dielectric Strength (short time)	Condition A	D149	.062 "	550 Vpm / 216.5 kV/cm
	D 48/50	D149	.062 "	300 Vpm / 118.1 kV/cm
Permittivity 60Hz	Condition A	D150	.125 "	8.15
	D 24/23	D150	.125 "	11.44
Dissipation Factor	D 24/23		.125 "	0.248
Arc Resistance	Condition A	D495	.125 "	15 seconds

Standards: NEMA LI-1 Grade CE
 Mil-I-24768 / 14 Type fBG
 EN 60893 PF CC 203
 Din 7735 PF CC 203

Availability: CE is also manufactured as round tubes (convolute wound),
 molded channel, angle, square and rectangular tubes and fabricated custom parts.

All information and suggestions pertaining to the properties and uses of the materials described herein are based upon tests and data believed to be accurate; however, the final determination regarding the suitability of any material for such use is the sole responsibility of the user. No warranty is expressed or implied, including, without limitation, warrant of merchantability or fitness for a particular purpose. Under no circumstances shall Franklin Fibre - Lamitex Corp be liable for incidental or consequential loss or damage.

Composite Tubes • Bearings • Molded Shapes • Rotary Vanes • Fabricated Parts • Vulcanized Fibre • High Temp Insulation

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