



FRANKLIN

**PLASTICS & NON-METALLICS
FOR INDUSTRY SINCE 1921**

FRANKLIN FIBRE – LAMITEX CORPORATION
P.O.Box 1768, Wilmington, DE 19899

Phone: (302) 652-3621
Fax: (302) 571-9754
e-mail: info@franklinfibre.com

Lamitex® XXX Tube Technical Data

Lamitex® XXX paper/ phenolic convolute wrapped tubes are suitable for electrical and mechanical applications in high humidity conditions. XXX is a tropical grade laminate with the lowest moisture absorption rate of all paper phenolic formulations that also retains good electrical properties in high frequency applications.

<u>Mechanical Properties</u>	<u>Test Method:</u>			<u>Conditioning</u>	
	<u>EN 61212-2</u>	<u>Standard</u>	<u>Test Specimen</u>	<u>IEC 212</u>	<u>Values</u>
Flexural Strength	4.1	ISO 178	id>3.937 inch	1	15,950 psi
Compressive Strength, Axial	4.2	ISO 604		1	18,850 psi
Cohesion between layers	4.3	EN 61212-2	id>3.937 inch	1	21,000 psi
 <u>Electrical Properties</u>					
Electric Strength in oil @ 194°F:					
Perpendicular to Laminations	5.1	IEC 243-1	.118" wall thk	2	170 Vpm
Parallel to Laminations	5.1	IEC 243-1	>.118" wall thk	2	25 kV/inch
Insulation resistance after immersion in water	5.2	IEC 167	id>.315" and or od>.394"	4	200 M ohm
Permittivity 50 Hz & 1 MHz	5.3	IEC 250		3	5.0
Dissipation Factor 50 Hz and 1 MHz	5.3	IEC 250		3	0.03
 <u>Physical and Thermal Properties</u>					
Thermal endurance index @ 20,000 hrs	6.0	IEC 216		-	248°F T.I.
Density	7.2	IEC 1183-A	All	1	1.25 g/cm ³
Water Absorption	7.1	IEC 62-1		4	4.6 x 10 ⁵ oz/in ²

Conditioning: 1: 24h @ 73°F & 50%RH
2: 24h @ 73°F & 50%RH + 1hr in oil at 194°F
3: 96h @ 221°F + 1hr @ 73°F & 20%RH
4: 24h @ 122°F + 24hr in water at 73°F
5: 96h @ 221°F + 1hr in oil at 194°F

The standard length(s) for inside diameters .118" - .331" is 59", .335" - .394" is 53.1", IDs >.394 to 3.937 is 53.2", 59" or 65" and >3.937 - 49.2" is 48", 53.1, or 65".

All values are average test results from typical production material and extensive testing.
No Warranty is implied or guaranteed and testing is recommended for each application.

Epoxies • Phenolics • Melamine • Silicone • Sheets • Molded Shapes • Tubes • Cut to Size • Fabricated Parts • Vulcanized Fibre

FRANKLIN FIBRE – LAMITEX CORPORATION

August 20, 2009 Rev. b