

TECHNICAL DATA (Fabric Base Industrial Laminates - Grade F1)

LAMTUF GRADE	:	LPF - 10
COLOUR	:	Sheets are supplied in natural colour, but can be also supplied as per requirement i.e. Dark Brown or Black Colour
THICKNESS RANGE	:	0.4 MM - 150.0 MM.
DESCRIPTION	:	LPF - 10 Grade material is manufactured from fine weave scoured Cotton fabric. This has got good electrical and mechanical Properties and can be machined to a fine finish. This is suitable for small components such as instrument gears as well as intricate Machined items.
SIZE	:	Standard sizes are 2440 x 1220 / 1220 x 1220 mm / 1220 mm x 610 / 610 mm x 610 mm .
TOLERANCES	:	Sheets are supplied as per tolerance specified in IS:2036. Material can be supplied with still closer tolerance as per customers requirement.

PROPRIETIES	UNIT	Condition	Nominal thickness to Which test applies	Values as per IS-2036 – 1995	Average Test Results
<u>MECHANICAL PROPERTIES</u>					
Tensile Strength	MPa (min)	A	≥ 1.6	70.0	72.0
Flexural Strength/ Cross Breaking strength	MPa (min)	A	≥ 1.6	135.0	140.0
Shear strength	MPa (min)	A	≥ 1.6	65.0	70.0
Impact Strength (Edgewise) (Charpy Method)	KJ/m ²	A	≥ 5.0	6	6.5
Specific Gravity	---	A	All	--	1.35
<u>ELECTRICAL PROPERTIES</u>					
Insulation resistance after immersion in water for 24hrs At 23 \pm 2°C	MΩ (min)	E24/50 +D24/23	All	1	50
Electric strength Flat wise 1.6mm thick	MV/m (min)	90°C in Oil	≤ 3.0	1.21	1.8
Edgewise	KV (min)		> 3.0	2.0	10
<u>WATER ABSORPTION</u>					
Immersion in water for 24 hrs at 23 \pm 2°C		A		0.8 mm thk-201	180
Specimen size 50 +/- 1mm Sq.	mgs (max)	E24/50 +D24/23	All	6.0 mm thk-277	235
				16.0 mm thk-354	305
				25.0 mm thk-420	380

SPECIFICATIONS MET: EN-60893-3-4/ 1995 – PF CC 203
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