

# UTILEX ENGINEERING PVT. LTD.

## Technical Data (Fabric Base Industrial Laminates - Grade F3)

GRADE	LPF - 3 (F3)
COLOUR	Sheets are supplied in natural color, but can be also supplied as per requirement i.e. Dark Brown or Black Color.
<BTHICKNESS< b>THICKNESS	0.8 MM - 150.0 MM.
DESCRIPTION	LPF - 3 Grade material is manufactured from coarse weaved, Grey Cotton Fabric. The material of this grade is strong and tough with good machining properties. It is suitable for heavy duty gears and other applications requiring high impact strength.
SIZE	Standard sizes are 2440mm x 1220mm or 1220mm x 1220mm or 1220mm x 610mm or 610mm x 610mm.
TOLERANCES	Sheets are supplied as per tolerance specified in IS:2036. Material can be supplied with still closer tolerance as per customers requirement.

<b>Properties</b>	<b>Units</b>	<b>AVERAGE TEST RESULTS</b>	<b>VALUE AS PER IS:2036 -1995</b>
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***Mechanical***

Tensile Strength	Kgf/cm <sup>2</sup>	700	--
Flexural Strength/Cross			
Breaking Strength	Kgf/cm <sup>2</sup>	1300	1000 Min.
Shear Strength	Kgf/cm <sup>2</sup>	735	650 Min
Impact Strength (Edgewise) (Charpy method)	KJ/m <sup>2</sup>	10.0	8.8 Min
Specific Gravity		1.35	--

***Electrical***

Electrical strength in oil at 90° C			
* Flat wise 1.6 mm Thickness	Kv/mm	1.2	0.72 Min
* Edgewise 3.2mm thickness	Kv	2	1.0 Min
Insulation Resistance after immersion in water for 24hrs. at 20° C	Meg Ohms	10.0	0.5 Min.

**Water Absorption: (Specimen size -50 ± 1 mm square)**

* Thickness	mm	1.6	6.0	20.0	25.0
* Maximum values	mg	220	277	384	420
* Average Test Results	mg	116	188	195	250

**SPECIFICATIONS MET: BS:2572::1955::GRADE F3 /EN-60893-3-4-PF CC201  
DIN:7735-GRADE HGW: 2082**