

## **Electrical Insulation - Glass Epoxy**

#### **Glass Epoxy Fiber Sheet - 3240**

Main Component: Non-Alkali Fiberglass Cloth, Epoxy Phenolic Resin & Flame Retardant.

**Thickness:** 0.5 - 25 mm

**Sheet Dimension:** 80"x40", 40"x40"

Color: Yellow

**Density:** 1.8-2.0 g/cm3

**Characteristics & Applications :** Higher Mechanical and Electrical Properties, Better Heat & Humidity Resistance,

Good Machining ability.

It could be used for: Products are widely used in Mechanical, Electronic & Electrical Equipment, Insulation Parts and Components, Chemical Machine Parts, Generator,

Transformer, Inverter, Motor etc.,

### **Glass Epoxy Fiber Sheet - FR4**

Main Component : Non-Alkali Fiberglass Cloth, Epoxy Resin

& Flame Retardant . Thickness: 0.5 - 25 mm

**Sheet Dimension**: 80"x40",49"x41",49"x43",48"x36"

Color: Yellow, Green, Natural Color

**Density:** 1.8-2.0 g/cm3

**Characteristics & Applications :** It has higher Mechanical and Electrical Properties, Better Heat Resistance, Humidity Resistance, Good Machining ability and the Flame Retardant is improved to UL F-V0 Grade.

It could be used for: Insulation Structural parts in Motors and Electrical Equipment including various types of Switches, Higher Mechanical, Electronics & Electrical Equipment, Insulation Parts and Components,

### **Glass Epoxy Fiber Sheet - G10**

Main Component : Non-Alkali Fiberglass Cloth, Epoxy Resin

& Flame Retardant. **Thickness:** 0.5 - 25 mm

**Sheet Dimension**: 80"x40", 49"x41",49"x43",48"x36"

**Color :** Natural Color **Density :** 1.8-2.0 g/cm3

Characteristics & Applications: Low water absorption rate, Hard to be deformed, High mechanical strength, Good Electric performance weather under the moist or dry environment, Flame retardant grade could reach 94-V0, High temperature resistant, High Dielectric Performance and Mechanical

Processing Performance.

It could be used for: Insulation Structural Parts, Electrical & Electronic Field, Mechanical Electrical & Electronic structural parts of Transformer, High Voltage Switch and Motors, General Machine Parts and Gears.

#### **Book-Post**

To,			

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#### From



## Trishala Insulation Private Limited

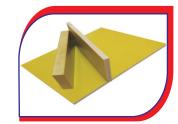
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# Trishala Insulation Private Limited



**Glass Epoxy** 



Polyester



**Fabric** 



Acrylic



Bakelite

**Dog Bone** 

Components

Since 1973 We have Experience in Manufacturing of Components Paper Laminate Board-Bakelite, Fabric, Glass Epoxy, Acrylic, Glass Polyester, Copper Clad Laminate & Trading of all kinds of Industrial Laminates.



### **Copper Clad Laminate**

**FR-4 CCL** is made of Flame Resistant Epoxy Glass Fabric Copper-Clad adhered Glass Fabric by Flame Resistant Epoxy Resin, with modify-epoxy glass cloth board and suitable for making PCB board.

**Thickness:** 0.05 - 3.20 mm,

**Copper Thickness :** 18μm, 25μm, 35μm, 70μm, 105μm.

Sheet Dimension: 49"x43", 49"x41", 48"x36"

**Characteristics & Applications :** Natural Color, available in Single Sided & Double Sided Copper clad, Non-UV Blocking &

Excellent mechanical process ability.

**It could be used for :** Computer, Communication Equipment, Measuring Instrument, Digital Electronics Equipments etc.

Aluminum CCL have Excellent Flame Retardant, High Mechanical Strength, and Dimensional Stability etc. Especially it has very good heat sink, Electromagnetic Shielding and Solder Float used for the modifier and sparker on fire for Motorcycle and Mobile, Power LED, Sound Box, Power Supply Module and Acoustics Shielding System etc.

Thickness: 0.5mm - 3.0mm.

**Copper Thickness :** 18μm, 35μm, 70μm, 105μm, 140μm.

Sheet Dimension: 48"x41", 48"x40", 48"x20"

Characteristics & Applications: RoHS compliance,
Halogen free, Excellent heat dissipation, Good heat stress
performance, Excellent reliability, Customized CCL available.

It could be used for: LED lighting, Backlight module, Power

Automotive Regulator & Power Module, Intelligent 3D printing,

Electric Car (Charger Station/PDU) etc.,

Electronics Inverter, Transistor & Regulator,

Version 1.



## **Electrical Insulation- Polyester**

**Main Component :** Non-Alkali Fiberglass mat combining with the unsaturated, Polyester Resin & Flame Retardant .

**Thickness:** 1.00 - 25 mm

**Sheet Dimension**: 96"x48", 48"x48",

Color: Yellow / White / Red Density: 1.7-1.9 g/cm3

**Characteristics & Applications :** Higher Mechanical and Electrical Properties, Better Heat Resistance, Humidity

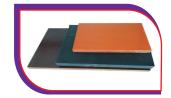
Resistance, Good Machining ability

It could be used for: Backing Board, Arc Extinguishing
Chamber, Tube & Plate, Flash Barrier, Wiring Board Insulation
between phases and contact support of various Switch Cabinet,
Structural support, Bus bar pallet, Bus duct Insulation of Switch,
Transformer, Motor armature parts, Cover plate, Stator for slot
wedge, Fixed gasket, Single plate, Thin Gasket; Electric melting
furnace Insulation, Locomotive and widely used in low voltage
Electrical & Electronics Appliances & Equipment.



## **Electrical Insulation- Dog Bone & Corner Angle**

Insulation Dog Bone and Corner Angles for Transformer is made of Non-Alkali Glass Fiber yarn impregnated with unsaturated Polyester Resin by the traction force and finally Pultruded and Solidified in hot mold. It is mainly used as spacer in Coil winding assembly in Dry Type Transformers as Insulation Components of Electrical Equipment. The product can be rectangular, I-shaped, Angular, T-shaped, Groove-Shaped, Tubular and Cylindrical, etc.



### Paper Laminate Boards-Bakelite

**Main Component :** These are laminated sheets made from layers of paper using thermo setting synthetic resin as the bonding medium.

**Thickness:** 0.50 - 25 mm

Sheet Dimension: 96"x48", 48"x48" Grade: FPG, FP1, FP2, FP3, FP4

**Density**: 1.4-1.5 g/cm3 **Characteristics & Applications**:

**FPG**: Low Mechanical and Electrical Properties.

**FP1**: Excellent mechanical and adequate electrical properties, and Suitable for low tension non-humid properties.

**FP2**: Combination of good electrical & mechanical properties, and Specially suitable for power electrical industry for use in oil

**FP3**: Excellent electrical and adequate mechanical properties, Low water absorption, and Suitable for high tension electrical application even under tropical conditions.

**FP4**: Excellent electrical properties, maintained under humid conditions (very low water absorption), suitable for high frequency applications.

#### It could be used for:

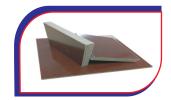
FPG: Backing Board, Cover & Support Board in Control Panels.

**FP1**: Battery Eliminator (Transformer and Choke bobbins), Tube light ends and chokes, Control Panels, Condensers mountings etc.,

**FP2 :** Transformer covers, Distribution Boards, Fuse holder base etc.

**FP3 :** Transformer and Choke Bobbins for Power Electronics, Relay spacers, HV transformer tap changers, Grid Covers, etc.,

**FP4**: Meter fuses, Wafers for band change Switch, Cross-Bar Switches, Insulation in X-Ray Equipment, etc.,



### **Industrial Laminates - Fabric**

**Main Component:** These are laminated sheets made from layers of wooven cotton fabric using themo setting synthetic resin as the bonding medium. These are graded according to coarseness of cloth and electrical properties.

**Thickness:** 0.50 - 25 mm

**Sheet Dimension**: 96"x48", 48"x48"

Grade: FFG, FF1, FF2, FF3, Density: 1.4-1.5 g/cm3

**Characteristics & Applications:** 

**FFG**: Low Mechanical and Electrical Properties.

**FF1**: Very fine weave fabric reinforced laminate with fine machining properties & moisture resistance.

**FF2**: General purpose grade with good Machinability and

mechanical strength. Very good strength and weight ratio. **FF3**: High impact resistance, Good Mechanical strength and

adequate Machinability.

#### It could be used for:

FFG: Barrier in MCCB

**FF1**: Shuttles, Gears, Pulleys, Automobile Couplings, etc.,

FF2: Armature Wedges, Generator, Slot-wedge Insulation, etc.,

**FF3**: Heavy duty gears, Pulleys, Piling dolly, Workbench tops,

Rolling mill bearings, etc.,



### **COMPONENTS**

Our company has set a machining center, owning several drills and several machining Equipments for Sawing, milling, paneling, grinding, drilling, tapping, punching, and cutting. We are fully capable of precisely machining parts according to the drawings or samples of customers Machining parts of excellent quality, The series of products are mainly used in Mechanical, Electronic & Electrical Equipment, Insulation Parts and Components, Chemical Machine Parts, Generator, Transformer, Invertor, Motor, Insulation Structural parts in Motors and Electrical Equipment, including various types of Switches, Higher Mechanical, Electronics & Electrical Equipment, Insulation Parts and Components, Insulation structure parts of Transformer, High Voltage Switch and Motors, General Machines Parts and Gears. We also guarantee you the timely delivery.



### Industrial Laminates -Acrylic

Main Component: Cast and Molding Acrylic Sheet.

**Thickness**: 0.50 - 25 mm

**Sheet Dimension :** 96"x48", 72"x48", 48"x48", 48"x36"

**Grade :** Clear and Opaque. **Density :** 1.2 - 1.3 g/cm<sup>3</sup>

**Characteristics & Applications :** The material is similar to Polycarbonate, it is suitable for use as an impact Resistant alternative to Glass. Acrylic can be optically clear or cloudy, as in the case of impact modified acrylics.

Advantages: Excellent optical clarity, Excellent Weather ability and Resistance to Sunlight, Rigid, with good impact strength, Excellent dimensional stability and low mould shrinkage,

Stretch forming increases bi-axial toughness.

**Disadvantages and Limitations :** Poor Solvent Resistance, subject to stress cracking combustible continuous service temperature limited and Flexible grades unavailable.

It could be used for: Transparent items such as Lenses, Automotive trim, Household items, Light fixtures, Decorator items Signage and point of purchase Display.

We also accept customized requirements of all the products available with us.