Fiberesin Solid Phenolic

Fabrication and Assembly

Fabrication
Fiberesin Solid Phenolic can be sawed, routed, drilled and tapped with conventional wood-working or metalworking equipment. Carbide-tipped saw blades and router bits are recommended for cutting. They should be kept sharp to produce chip-free edges. For volume cutting or fabrication diamond-tipped tooling is recommended. High tool speed and low feed rates are advisable. The use of a hold-down bar is recommended to prevent vibration. Although unlikely, stress cracks can be avoided by ensuring that cutouts and holes are oversized. To reduce the likelihood of stress cracking with nails and screws, an oversized hole should be predrilled with a minimum distance to the edge of 1-1/2 times the hole diameter. Self-tapping screws can be used in predrilled holes. Panels can be joined using metal brackets or clips.

Adhesives
Fiberesin Solid Phenolic may be bonded with most adhesives. Recommended adhesives are permanent types, such as urea and polyvinyl acetate (PVA), and contact types. When necessary, surfaces can be prepared with light sanding of 100 grit sandpaper. Contact adhesive should only be used on sanded surfaces.

Sanding and Finishing
If desired Fiberesin Solid Phenolic can be finished by sanding with coarse sandpaper (80 grit) followed by a fine sandpaper (180-220 grit). This will remove any machining striations and provide a smooth appearance to the edges. A final edge treatment with a furniture or laminate polish, oil, or wax will further enhance the edge aesthetics.

Conditioning and Storage
The materials should be acclimated/conditioned a minimum of 48 hours before fabrication.

The recommended conditioning/acclimation temperature for the materials is approximately 75°F (24°C), with 45-55% relative humidity.