

## ADHESIVES & BONDING

The best joining is accomplished with adhesives, in conjunction with screws, nails, or other fasteners. A few of the more common types include:

### Polyvinyl (carpenter's wood glue)

This is a white, creamy glue, usually available in convenient plastic bottles. Mainly used for furniture, craft, or woodworking projects, polyvinyl dries clear, won't stain and sets in about an hour, with full strength being attained in around 24 hours. Polyvinyl is vulnerable to moisture, so should not be used in damp environments.

### Resorcinol and formaldehyde

These are mixed just prior to using, can be used two to four hours after mixing. Both the resin (powdered resorcinol) and the powdered formaldehyde that you mix with water are brown and will stain light wood. Follow the manufacturer's instructions carefully as quantities of the components are critical for a good bond.

### Contact cements

These are used to bond veneers or to bond plastic laminates to wood for table tops and counters. Coat both surfaces thinly and allow to dry completely before bonding. Coated surfaces bond instantly when brought together so care should be taken to align the surfaces perfectly before pressing together. The fumes given off from most contacts are dangerous so use in a well-ventilated area away from naked flame.

### Two Part Epoxy

Epoxy is a unique adhesive in that it produces a strength greater than the material it bonds. It resists almost anything from water to solvents. Epoxy can be used to fill cavities that would otherwise be difficult to bond. Use it in warm temperatures but read the manufacturer's instructions carefully, since drying times vary and mixing the resin and hardener must be exact.

### Tips on Bonding

- With the exception of epoxy, too much adhesive will weaken the hold of the materials you are bonding.
- Rough up smooth surfaces slightly before applying adhesives so they will grip more securely.
- Apply a thin coat of glue, clamp securely, and allow to dry the recommended amount of time.
- Wipe away excess glue immediately after clamping.