

OUR MAY DEMONSTRATION

STICKY STUFF AKA GLUES & FINISHES WITH BRUCE MEISSNER

What is the *best* glue? What is the *best* finish? **Bruce Meissner** shared numerous insights into those questions and pointed out that *best* depended a lot on what you were trying to do and accomplish in your woodworking project.

GLUES

Bruce described and gave examples of the most common types of glues for woodworking. He encouraged the reading of the manufacturer's directions for each type of glue as each glue works best in certain applications and some have health warnings such as skin contact or fume hazards.

White Wood Glue has long been the go-to glue for most indoor projects because of the easy clean up and low cost. It is not water resistant and is not as strong a bond as yellow wood glues.

Yellow Wood Glue, like the Titebond brand, is the industry standard in woodworking. These glues provide a strong initial tack, set fast (30 minutes), allow for water clean up, and develop a stronger bond than the wood itself. Titebond is most often used in one of three types: Original (poor water resistance), Type II (water resistant); and Type III (water proof). Bruce recommended evenly applying glue to both surfaces of a joint and to not over tighten clamps so that you extrude all the glue and create a weak joint.

Polyurethane Glue, like the Gorilla brand, is popular for certain types of applications. Bruce uses it for gluing metal tubes into pen blanks and warns that wearing gloves is important as it is not easy to remove from fingers (use acetone or nail polish remover with acetone). Apply the glue to one surface of a joint and moisten the other surface because the glue needs moisture to cure. The glue foams and expands as it cures so it works well for certain applications (wood to foam board, wood to metal, but may not be the best wood-to-wood application).

Veneer Glue is used in adhering wood veneer to wood surfaces. It dries very hard and can be purchased in various colors to be used where the glue joint is exposed.

Epoxy Glue is a two part system that requires mixing in small batches and can be purchased with set times from 5 to 90 minutes. This type of glue is most often used for bonding dissimilar types of materials such as metal to wood, where waterproof joints are required, or to strengthen weak wood fibers when turning spalted wood

projects. Bruce mentioned that epoxy generally dries clear; however, it can be colored for applications where the joint is exposed. He purchased some coloring material from Harbor Freight. Epoxy glues have many applications, but it can pose a health hazard such as through skin contact or fumes – wear gloves and avoid vapors.

Cyanoacrylate (CA) Glue is widely used for quickly gluing small wood and non-wood materials together or as a fast and hard surfacing finish such as on pens. It is not recommended for gluing large wood-to-wood surface areas. CA glues can be purchased in various setting times from seconds to minutes and in various viscosities (ultra thin to thick) depending on whether you want deep penetration or a surface bond. Separate accelerator liquids can be used to accelerate bonding, but that reportedly weakens the bond. CA glues can pose a health hazard such as through skin contact or fumes – wear gloves and avoid vapors. Use acetone, CA debonder, or nail polish remover to remove from skin; alternately, it will dry and peel off over a few hours.



FINISHES

Bruce shared some thoughts and cautions on finishing and compared some of the most common types of woodworking finishes that he uses. He encouraged using the first coat of whatever finish you choose as a wood sealer before sanding and he did not recommend separate

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sanding sealer products because many of them have stearic acid that can negatively affect your finish. He suggested polishing and buffing naturally oily woods such as cocobolo or olive wood and to not apply any other finish to these woods. Bruce cautioned that when your finishing work is completed, dry out any rags before disposing of them in a trash can to prevent spontaneous combustion. He also suggested that you can replace the oxygen in the can of finish with inert gas products like Bloxygen (www.bloxygen.com) to prevent the finish from drying out or becoming gummy while still in the can.



Linseed Oil and Tung Oil can take several days to fully dry, but they bring out the natural wood figure especially if there is an unusual texture or pattern to the wood that you want to enhance. Many of the oil finishes like linseed and walnut oil are food safe; however, read the manufacturer's directions to determine if a oil product is food-safe or not. These oils can be top coated with polyurethane to add a more protective finish. Bruce suggested that various finishes can be made using linseed oil and one of his favorite finishes is equal portions of linseed oil, beeswax, and turpentine.

Polyurethane comes in both brush-on and wipe-on formulations. Brush-on formulations offer thicker coats and more protection; however, they are harder to apply due to brush marks and sagging or running varnish marks. Wipe-on formulations may require more coats for full protection, but are easier to apply and achieve a quality looking finish. Bruce uses up to four thin and even coats of wipe-on polyurethane applied with a soft cotton rag; alternately, he also sometimes applies brush-on polyurethane with a rag as though it was a wipe-on formulation. He sands with 800 grit sandpaper in between coats. Some polyurethane varnishes can be thinned with mineral spirits – read the directions on the can to determine what the manufacturer recommends.

Shellac can be purchased already mixed (it has a short shelf life) and ready for use or you can purchase shellac flakes or chips to be mixed with denatured alcohol. [[Shellac Shack](#) or [Shellac.net](#)] This is an older product that can be easy to use although it does not provide the same protection as polyurethane varnish products. Several products are available, such as Shell-A-Wax, that are shellac-based and easy to use but do not provide a durable surface. Research your shellac product before using.

Carnauba Wax is a food safe product that can be applied directly to wood or over a polyurethane varnish to give a buffed shine to a final woodworking project. Bruce uses a Beall buffing system (www.bealltool.com) on his lathe to buff his work or he hand buffs with a piece of brown paper bag (Kraft paper).

Submitted by **Chad Dawson**. Photos by **Greg Potter & Heather Muckley**.

Demonstrators Needed

Friday, July 8th & Saturday, July 9th – 10am to 5pm

Austin Park, Skaneateles – During the Methodist Church Antique & Artisan Sale

The organizers requested that we demonstrate as well as sell our *ornaments and other items* during the event. The tent for demonstrating will be located next to our sale tent. We will have a Lathe and Scroll saw there. You will need to bring your tools and wood. Small things like tops, pens, small lidded boxes, and small bowls are some suggestions. Please let Barbara know if you can make it even for 2 or 3 hours. It is likely we will sell more if we show them how things are made and our sales goal is \$1000 for the weekend!