
Vacuum Pressing Systems, Inc.

UNIBOND GLUING TIPS

1. An easy method for measuring resin to catalyst ratios is to purchase a 1/4 cup, 1 cup and 1 quart measures. The 1/4 and 1 cup measures can be used for mixing small amounts; the 1 cup and 1 quart measures for larger amounts. Both of these give a 4:1 mix by volume.
2. A good applicator is a 9" black foam roller, sold at most paint and hardware stores. This roller will put down a nice uniform glue line and is cheap.
3. One gallon of Unibond 800 will cover approximately 250 square feet. The coverage will vary depending on the substrate and surface materials. One cup should cover approximately 15 square feet and one quart should cover 62 square feet. When calculating coverage, consider that the roller absorbs about 1/8 cup of glue.
4. If your shop temperature is below 65 degrees F and you are using a vacuum press, an electric blanket can be used on top of the bag to assure proper temperature range as well as to speed up the set time if run on high with a quilt over the blanket. It is recommended to place the blanket on top of the vacuum bag first without any work inside to warm up the platen, then slide the panel to be pressed into the bag. To assure proper adhesion, the panel being pressed must be at least 65 degrees F for the entire pressing cycle.
5. A simple test to establish appropriate glue application on veneer is to prepare three samples approximately 12" x 12" and apply an open grained wood such as mahogany, oak, ash, etc. to the substrate material. When applying the glue, put a light coat on the first sample, a medium coat on the second and a heavy coat on the third. When the samples are removed from the press the one with just slight bleed through of glue on the veneer surface is the correct application. Not enough glue will show no bleed through and too much glue will show bleed through over most of veneer surface. It is important to perform this test on an open grained wood to establish good glue coverage because on a closed grained veneer appropriate coverage will not show any bleed through.
6. When glue bleed through on the veneer surface is properly sanded or scraped, it will not affect staining or finishing. To check the veneer after sanding, lightly apply water to the surface to locate any remaining glue spots. Unibond 800 sands easily and will not gum the sandpaper.
(On cherry and maple veneers excessive bleed through may stain the veneer slightly yellow. If necessary, reduce the glue quantity on these closed grain woods until there is very little or no bleed through.)
7. Although set times for Unibond 800 are listed on the bottle an additional technique for determining when the glue is set sufficiently, is to pour a small amount of glue from the batch being used into a baggie and lay flat near the project being pressed. When the glue in the baggie can be removed in one piece and is the consistency of firm rubber, the item being pressed can be unclamped. This applies to flat unstressed work. Items under stress such as bent laminations should be left until the glue becomes brittle. Do not use this technique in a cup because any amount of glue over an 1/8" thick in the bottom of the cup will generate enough heat to set the glue prematurely, giving a false reading.
8. Unibond 800 has a limited shelf life and can be determined by examining the consistency of the liquid glue. The shelf life is up when the glue begins to thicken noticeably in the bottle. The powdered catalyst has no limit to the shelf life.
9. On some darker wood it may be desirable to tint the glue color. Unibond 800 can be tinted by using water or alcohol soluble aniline dyes.