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Hollowood Hints, Tips & Ideas

Hollowood Veneered Tubes

New, innovative, imagination provoking plywood veneered tubes! This is a product we guarantee will get those "creative juices flowing" and allow you to build woodworking projects like no others. This engineered wood product is constructed of thin plies of poplar, $1/51^{\circ}$ to $1/16^{\circ}$ thick, which are bonded together by a high-strength polyester resin adhesive and faced with a veneer so that the grains run with the length of the tube. Wall thickness is approximately $1/8^{\circ}$ making the resulting tube lightweight, but unbelievably strong. Six different species, poplar, walnut, red oak, padauk, zebrawood and purpleheart are available.

Cutting

We found that cutting Hollowood is just as easy as cutting small stock such as molding or trim. Using a fine toothed crosscut blade in a table saw or miter box seems to work best. Because of it's round shape, any jig or fixture that will help support the stock and keep it from rolling during the cut will be safer and result in a cleaner cut. A band saw does a good job but the finish cut may be a little irregular, unless you are using a very fine toothed blade and support the stock with a hold down.

Drilling

NOTE: Before drilling, the Hollowood stock needs to be held securely with a jig or fixture (see illustration right). Brad points or spade bits work best because their center point will lead into the stock allowing the outside edges to make the cut. Applying too much pressure while drilling will increase the chance of chip out on the reverse side of the tube. We also found that a wheel and circle cutter (Woodcraft #15N32), or fly cutter as it is sometimes called, works well at a slow speed in a drill press. Because the circle cutter's drill bit hits the material first, you are able to align the hole more precisely and feed the cutter into the stock with very clean results. Additionally, the outside cutter may be reversed enabling you to cut out the interior of a circle like a "wheel" or "plug".

Gluing

Hollowood is real wood so any yellow woodworking glue, like Titebond II Wood Glue (Woodcraft #08L42), works great. Glue blocks and supporting blocks are useful when bridging seams or joints. Certain circumstances may dictate the need for special adhesives and glues. Epoxies work best and give the best strength when the joint that you created can not support itself. A 5 minute Epoxy like System Three (Woodcraft #124520) will set-up faster and give you the bond that you need.

Finishing

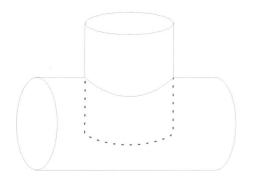
Lightly sand the exterior face of the Hollowood tube with 320 paper to prepare the surface and then wipe with a tack cloth or rag to remove all dust. Apply the finish of your choice according to the manufacturer's directions.

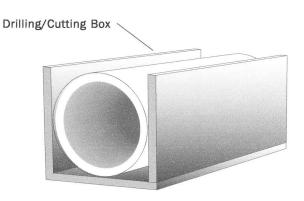
Design Ideas And Hints

The wall thickness of a Hollowood tube is designed to be approximately $^1\!/8"$, with tube diameters increasing in $^1\!/2"$ increments from $1^1\!/2"$ to 4". Remember, Hollowood is a wood product so you should expect dimensional tolerances of \pm $^1\!/64"$ for both the wall thickness as well as outside and inside diameters. Most of the variance can be attributed to the difference in veneer species used for the exterior of the tube. It is very important to measure diameters of all tubing before cutting or drilling to ensure that your cuts are accurate. Do not assume that all Hollowood is uniform in wall thickness or inside/outside diameters.

Intersecting Hollowood is the first thing that most people consider. Because of the structural strength of an intersecting design, your finished project can be very strong, yet lightweight.

If you plan on using many intersections, made of similar diameter Hollowood tubing, it might be to your advantage to build a cutoff/drilling box. This jig is simply a box with an interior dimension that exactly matches the outside dimension of the Hollowood tube. Double sided tape on the interior of the box will decrease the chance of the tube turning while being cut or drilled (see illustration below).







Edging For Tables Or Shelves

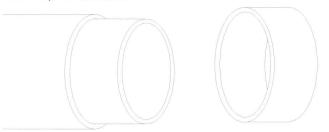
Using Hollowood as an edging for tables or shelves is easy to do and will create an edge radius without requiring the use of a shaper or router. The Hollowood should be cut in half lengthwise and fitted into rabbets on the table edge. Note that the table's edges are rabbeted to a depth that is equal to the wall thickness of the Hollowood tubing, and just wide enough for the tubing to have a surface to attach to.

Hollowood cut in half lengthwise

Table surface with rabbetted edges on top and bottom matching the dimensions of the Hollowood thickness.

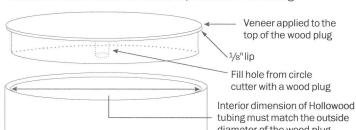
"Telescope" Hollowood

The ability to "telescope" Hollowood is another unique feature which opens endless design possibilities. Hollowood can telescope within itself. A smaller diameter tube will fit inside the next larger diameter tube. In this configuration the inner tube serves as a lip edge to support a top. These "canisters" can hold a variety of objects, like arrows, blueprints, charts or maps, fishing poles, etc. Pre-dimensioned veneer insert liners are also available for creating an inner lip for canisters.

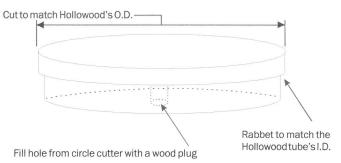


Top And Bottom End Caps

Top and bottom end caps for Hollowood can be purchased from Woodcraft or created several different ways. A circle cutter works well in this situation because you can adjust the cutter for the exact diameter of the tubing. Cut a wood "plug" from any hardwood to match the exact inside diameter of the Hollowood tube that you desire to cap. Glue an oversized piece of veneer to the outside of the wooden plug and let dry completely. Glue the wood "plug"/veneer assembly inside the tubing and allow to dry. After the veneered plug is completely dry, trim the veneer flush with a trim router bit, or cut and sand to fit flush around the perimeter of the tubing.



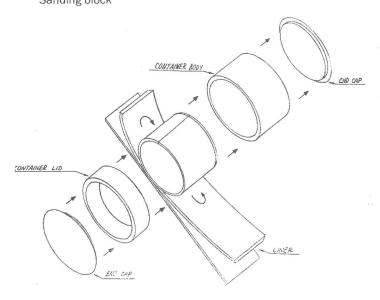
You can also create end caps by using solid wood and rabbeting the edge to fit over the tube. Once again using the circle and wheel cutter, drill a plug that equals the outside dimension of the tube. To hide the drill bit hole of the circle cutter, insert a screw plug of the same species as the end cap. Using a rabbeting router bit with interchangeable bearing, select a bearing that will cut a rabbet as close as possible to inside diameter of the Hollowood tubing. Rabbet the entire perimeter of the end cap. Simply glue into place.



Hollowood Containers Using Hollowood Caps And Veneer Inset Liner

Materials Needed:

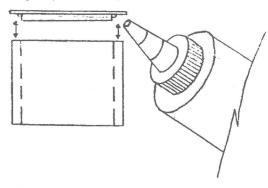
- 2 End Caps
- 1 Container body (to desired length)
- 1 Container lid (to desired length)
- 1 Veneer Inset Liner
- 1 Masking tape
- 1 C-clamp (size depending on container size)
- 2 Clamping blocks Wood glue Sand paper Sanding block





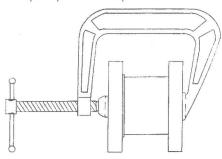
Step 1

Apply glue to the edge of the end cap and gently press into the container body. Repeat this step for the container lid.



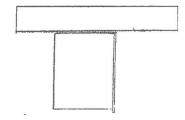
Step 2

Position the container body and lid between two blocks and tighten with a c-clamp. Repeat this step for the container lid.



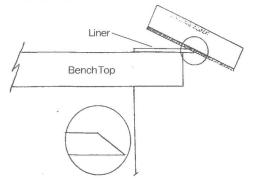
Step 3

After the glue dries, feather the edge of the end cap into the container and lid bodies using a sanding block.



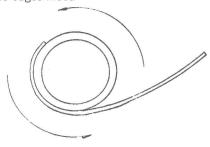
Step 4

Place the veneer insert liner length wise on a bench top edge and sand a 30° - 45° bevel.

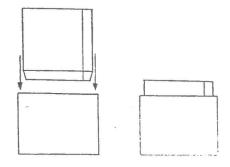


Step 5

With the bevel facing outward, gently curl the veneer insert around the outside of the container body. Once the bend is started, remove the liner from the container body and continue to bend it until the edges meet.

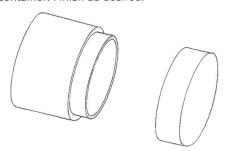


A small spot of glue on the inside of the container body is all that is needed to hold the liner in place. Holding the edges of the liner together, trial fit it in the container body (some light sanding of one edge of the liner may be required for a tight fit). When a proper fit is achieved, apply the glue and gently press the liner into the container body beveled edge first.



Step 6

Place the lid on the completed container body and lightly sand the entire container. Finish as desired.



These are just a few ideas to get you started with one of the most innovative products that we have seen in a long time. If you have questions, comments or additional ideas for Hollowood use, please write to:

Woodcraft

Product Development Dept. 210 Wood County Industrial Park Parkersburg WV 26102