## Bowl \& Tray Template Routing Instructions

Safety Note: Read and follow all safety instructions for all your tools. If you are unsure of how to perform any operation safely, STOP and learn before you proceed. Practice safety in all shop operations. Routing, drilling, sawing and many shop operations involve the potential for serious injury if proper safety procedures are not observed. Wear proper safety equipment at all times. Secure material with clamps of proper design and strength to hold the project securely.

Bowl and tray bits are specially designed to plunge cut with a radius edge for a smooth cut with rounded corners. If a sharp inside edge is desired, a straight bit may be used. Bit requires either a shaft-mounted bearing or use of a guide bushing to follow the template. Deeper depths can be achieved with a bearing versus a guide bushing. For some templates with finer detailed areas, it may be necessary to use a small core box or straight bit to route details of the template. Keep in mind that some designs are intentionally eased in order to eliminate sharp, hard-to-clean crevices.

We recommend a variable speed router with a minimum of $11 / 2$ hp and $1 / 2^{\prime \prime}$ shank capacity. If a collet extender is used for a deeper reach, it should not be used on routers with worn bearings or collets. Ensure the collet extender is not "bottomed out" in the router collet, but raised about $1 / 16$ " and securely tightened. Do not over extend the router bit or collet extender. Check for vibration at low speed before use at operating speed and cutting depth. Excessive vibration could lead to serious injury. We recommend routing on a router table to eliminate the need for an oversized base plate. This method allows use of a bar clamp across the material blank for secure holding. If using a handheld router, an oversized base plate is required and must be wide enough to extend beyond the template sides and stiff enough to eliminate bending under the weight of the router. The majority of material removal is accomplished with a forstner bit in a drill press. A band saw, jig saw or scroll saw is used to cut the outside edge. You will also need a pencil, glue, compass, measuring device, drywall screws, drill, sander, sandpaper and finishing supplies. When selecting the variety of wood, ensure it is clear and straight with few knots or difficult grain areas and not of a toxic variety. Boards can be glued or laminated to create the size and effect desired.


Centering and reference marks are included on some templates.


Set bit height. Invert over router table and carefully use multiple passes and clear chips frequently until all tooling marks from drilling operation are removed.


Use a forstner bit in a drill press at low speed only (<600 RMP).


If using a collet extender, be sure to follow all of the safety instructions as noted above.


Stay within $1 / 4$ " of edge and overlap holes. Material should be clamped securely.


Make a final pass with a light cut and inspect to be sure that all tooling marks are removed and all details are exposed.


Reference lines are provided as a guide to allow approximately $1 / 2^{\prime \prime}$ thick walls, but you may make the outline any shape or thickness.


Carefully making these cuts as smooth and uniform as possible will reduce sanding later.


Sanding refines the finished shape.


Select a bit no larger than half the width of the wall thickness. Sand inside and outside to remove any tool marks.


Trays and bowls should be coated with a food safe finish such as shellac, mineral oil, butcher block, salad bowl or other similar finish.

Get creative and try different wood species in various layers and glue-ups to create unique works of art that you'll be proud to use and display.



