

Right Angle Jig

by Marcia Selsor



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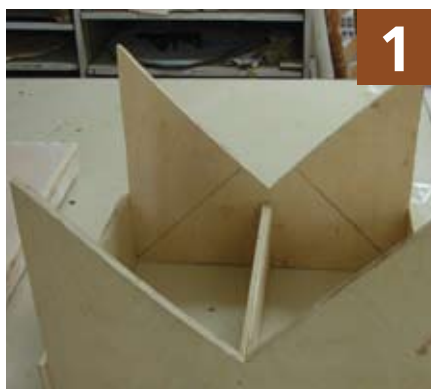
Terra cotta corbels constructed using the right angle jig.

Many years ago while hand-building a large form, I needed a support for the slabs while joining the edges, so I built a right angle jig to support the form in progress. Over the years, this has become an invaluable tool when building architectural forms. I use a simple structure that supports boards with slabs at a right angle while attaching them. This system is used for various architectural segments such

as corbels, square tops of capitals or square vessels.

Making the Jig

Begin with two pieces of ½-inch plywood cut to 12×15 inches. Cut a right angle shape out of each piece. To connect these notched ends, cut two 15-inch-long braces and one 14-inch-long brace from 4-inch-wide plywood boards. Attach the braces to each side and the middle (figure 1). Two sheets of plywood complete the jig (figure 2).



Create the form from ½-inch plywood.



Two plywood boards complete the jig.



Tarpaper pattern on slab.



Butted slabs with 45° angles placed in jig.



Two joined slabs stand after coming out of the jig.



All four sides and the bottom are joined in the jig.



Place bats on the top and bottom to help flip the piece over.



Refine edges with a Surform tool.

Using the Jig

Cut out all the clay pieces during the same session and store overnight on sheetrock or gypsum board under plastic. Tip: Design tarpaper patterns then cut and press them onto the slab (figure 3). Use tarpaper patterns much like sewing patterns but plan for the thickness of the clay. Store and reuse tarpaper patterns.

Use a 45° bevel cutter to cut the edges of the shapes that will later be joined at right angles. You can also use a cut-off wire held tightly and pulled along the edge, or a fettling knife held at a 45° angle.

On the second day, or after the slabs have stiffened, score and slip the edge of one and place in the plywood cradle. Score and slip a sec-

ond slab and slide it down to meet the edge of the first slab (figure 4). Fill the seam with a coil and smooth with a rib.

To remove, tilt the whole works and slide the boards and slabs onto the table (figure 5). Gently pull the boards away from the clay, which should stand free.

After joining the remaining two sides, attach the bottom, then attach the other assembled sides to complete the basic form (figure 6).

Remove from the jig and finish the exterior seams the same as the interior seams. To work on the top and bottom, sandwich the form with bats and flip it over (figure 7). Finish the surface with ribs or a Surform tool (figure 8).