

## Wood and Copper Pendulum Clock

Joe Rotella

| Materials |
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| $1 / 2^{\prime \prime}$ Thick Clear Pine or Birch |
| $1 / 8^{\prime \prime}$ Thick Birch |
| Copper Sheet, 16 oz., 24 gauge |
| Pendulum clock insert, $3 / 4^{\prime \prime}$ stem |
| $1 / 2^{\prime \prime}$ Scor-Tape double-sided adhesive |
| tape |
| Supplies to decorate the wood parts |
| of the clock, such as paint, stain, or |
| medium and collage papers. |

Tools<br>Safety Glasses<br>Pencil<br>Compass<br>Work gloves<br>Ruler<br>Proxxon Table Saw FET<br>Proxxon MICRO Bandsaw MBS/E<br>Proxxon Disc Sander TG 125/E<br>Proxxon Bench Drill Press TBM 115<br>$3 / 8^{\prime \prime}$ spade bit with a reduced shank ( $1 / 4^{\prime \prime}$ )



Proxxon bench top tools give you the power of workshop in the space of a tabletop. This clock combines wood and copper to create a functional art piece.

## Instructions

## *Always wear safety goggles when working with tools and follow the manufacturer's instructions.

1. Using the Table saw, cut the $1 / 2^{\prime \prime}$ thick Clear Pine or Birch down to 6 " $\times 12^{\prime \prime}$.
2. Using a pencil, draw a triangle at the top of the 6 " $\times 12$ " piece. The base of the triangle should be 4 " from the end and go from the sides up to the center of the edge of the piece. This gives the piece a "roof" shape. Use the bandsaw to cut out the sides of the triangle.
3. Using a pencil, draw a $5^{\prime \prime}$ diameter circle on the $1 / 8^{\prime \prime}$ birch and mark the center. Use the bandsaw to cut relief cuts from the edge of the piece to the edge of the circle and then cut out the circle. Don't worry about cutting it perfectly, as you can smooth out the edges with the disc sander.
4. Use the pencil to draw a triangle that's $8^{\prime \prime}$ wide and $8^{\prime \prime}$ tall on the copper sheet. Use the bandsaw to cut the out the triangle. Be sure you're using a blade that's suitable for non-ferrous metal. Wear gloves as the edges could be sharp.
5. Use the bandsaw to cut a 2 " square from the $1 / 8^{\prime \prime}$ birch to use as a spacer. Mark the center with the pencil.
6. Smooth out the edges of the copper and round off the circle using the disc sander.
7. Drill a $3 / 8^{\prime \prime}$ hole for the clock mechanism through the circle, spacer and $1 / 2^{\prime \prime}$ base. Be care to drill the holes so the pieces line up appropriately for the clock mechanism.
8. Decorate the wood pieces as you like. When dry, assemble the components using Scor-Tape. First affix the copper piece to the base (since the circle extends above the copper), then affix the spacer and the circle,. Insert the clock mechanism.

