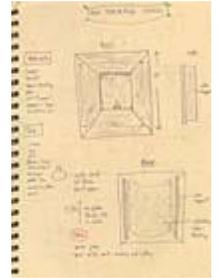




Light Here Light Now

Sitting around the fire is what makes winter worthwhile.

When the firelight flickers, romance is not far off. In fact, more mad spontaneous couplings occur in ski lodges than you might think. It's not the rum-soaked hot chocolate. It's the fact that when firelight flickers, everyone looks at least 50% more attractive than they are. If you don't have a chalet, or even a fireplace, you can still have your own wild interlude in the glow of a wood and copper wall sconce.



Materials:

- Lumber for the frame - barnboard works, but ordinary lumber is great too - preferably three inches or more in width. This one is 7 1/4 inch wide.
- Lumber for the back supports - about three inches wide and you'll need roughly 3' of it if you're making your wall sconce the same size as the example
- Carpenter's glue
- Copper foil, available from sheet metal supply places, scrap metal yards and some art supply shops
- Copper sheet metal - heavier than copper foil but still easy to work with
- Tape - hockey tape or duct tape
- Two soda pop cans
- Brass screws or steel sheet-metal screws - Pan- or dome-headed Robertson or Phillips (avoid the slot head if possible) and 1/2 inch to 3/4 inches long depending on the thickness of the chosen lumber
- Copper nails - found in specialty woodworking shops or boat builder supply stores
- Copper plumbers tape - available in the plumbing section of home centers
- Tea-light candles

Tools

- Miter box and back saw or Swedish precision miter saw or Speed square and a saw
- Pencil
- Glove(s) - Mag likes to use a golfing glove because it is tight and has a good control for detail work; latex disposable gloves are good for gluing.
- Frame clamp, or several squeeze clamps
- Ball peen hammer to texture the copper if desired
- Tin snips - they cut either straight, or to the left, or to the right - buy the best you can afford and having both right and left is helpful. Old dull ones are difficult and dangerous to use!
- Make a roller by taping two soda pop cans end to end
- Utility knife
- Compression punch or hammer and nail to punch holes in the metal
- Drill and drill bits
- Hand screwdriver
- Wood rasp or file

Note: All of these tools can be found in specialty woodworking stores, hardware stores or home centers. [Lee Valley Tools](#) is a

good source in Canada for most of these tools, as well as frame-clamps.

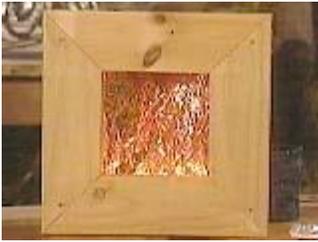


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Cut List:

- Interior dimensions of the wooden frame are 6" across and 4" down (but you can make the opening any size you want)
- Back supports are three inches wide and one inch shorter than the overall height of your frame - 18 inches in the example shown.

Steps:



Mag's first wall sconce



Barn board has a lot of character created from its time out of doors

Choose the wood you want to use. It should be a minimum of three inches wide and can be even wider. Barn board is great because of its natural weathered beauty.

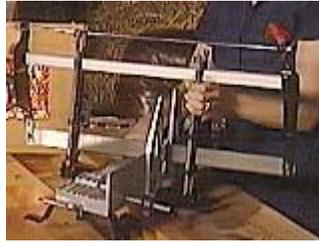
Bear in mind that the wider the board, the more difficult it is to get the 45 degree angles to match each other perfectly, because the joints are a lot longer. If you're a beginner, go for a narrower board the first time you make a sconce. It's less frustrating.



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A wooden miter box and back saw



A Swedish made precision miter saw



Use a speed square and pencil to mark the 45-degree cut line



A speed square is a triangle with 90-degree and 45-degree sides

Use a miter-box with a backsaw, or speed square with a pull-saw to cut the 45-degree angles. The inside dimensions are six inches across and four inches down.



Use a Japanese style pull-saw to make the cuts



Measure and mark at six inches on the inside of the frame



Use the speed square to mark the second cut line that will form a trapezoid



Fit the pieces together before gluing

Fit all of the pieces together to be sure the angles are tight enough for gluing. The more surface area that touches the better, but don't drive yourself crazy.

Use a rasp or file to take off any high points that are keeping the joints apart. You can also add sawdust to the glue to make a filler that will disguise unsightly gaps.



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Apply glue to both sides of all the pieces that touch



Use your finger to spread the glue around and remove any excess



Place the frame clamp over the glued pieces and tighten it down

Put glue on all the joints and use a frame clamp (or several squeeze clamps) to pull all the edges together all at once. Adjust the joints so that they fit snugly but still remain flat as you tighten the clamps. Leave the clamps in place overnight to allow the glue to cure.



Place the copper foil over the opening to get a rough dimension for cutting



Tin snips cut either to the left or to the right



Cut the copper with the snips that work best for you

Measure the copper foil reflector for cutting by holding one side against the frame and making an arch that will accommodate the tea-light. The arch shouldn't be any deeper than three inches (or the width of the vertical back supports that you have chosen).

Be sure to leave enough room on both ends of the foil to make a half-inch flange for attaching the copper to the back of the frame. Cut the copper with tin snips.





Use two soda pop cans taped together as a roller to bend the reflector into an arched shape

If you wish to make a dimpled or crumpled copper reflector, bend it over a log or other irregular surface and use a ball peen hammer to distress the copper. The more bumps and divots the surface has, the more the candlelight dances and flickers.

If you want a smooth reflector, use two soda pop cans taped end to end as a roller and roll the copper around them.



Cut a four-inch square piece of heavier copper



Cut a tab in the square piece



Cut a round shape connected to the tab



Mark the center of the reflector where you want the tabbed shelf to sit

Cut a four-inch square out of the heavier copper. Make two $\frac{3}{4}$ " parallel cuts centered on one edge. Cut a circle ending at the end points of the first two cuts. This will give you a rough circle with a rectangular tab on one edge.



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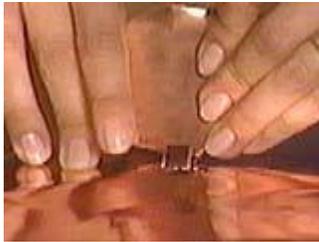
At the mark cut two slits in the reflector the width of the tab



Pass the tab through the upper slit in the reflector



Pull the tab snugly through the other side



Pass it through the other slit and bend it up to secure it in place

Using a utility knife cut two horizontal slits in the back of the copper reflector. The slits are used to attach the little circular tea-light shelf you've just cut from the sheet copper. The shelf should sit either low enough to hide the candle or high enough to reveal it, whichever you prefer.

Feed the tab through the top slit, bend it around and pass it through the bottom slit. Then bend it up again flat against the copper reflector. Tweak the shelf so that it is perpendicular to the reflector. Polish all of your fingerprints off the reflector!

Liberate the frame from the clamps. Bend a flange on each side of the reflector. Line the reflector up over the center of the opening and adjust it vertically so that the tea light will be in the place you want it.





Use a compression punch to make dimples in the metal for drilling



Drill prior to screwing



Use a hand screwdriver to drive the screws

Use a compression punch, or hammer and nail to punch three holes along the edge of each flange. Drill holes for the brass screws. Using a screwdriver, drive the screws in. Don't use a power drill because it is very easy to strip the head of the soft brass screws even with a hand screwdriver.

Attach the other side of the reflector being careful to maintain the appropriate arch. Attach the back supports vertically to the frame using copper nails. Pre-drill first to prevent splitting of the wood.



Inset the back supports at the top and bottom; inset them from the sides as well



Use copper nails to attach the back supports



Pre drill before driving the nails in

The back support should be about one inch shorter than the overall height of the frame, should be centered vertically and set in from the edge about an inch. Use at least two nails since the nails can become a decorative feature on the front of your new wall sconce. Attach copper plumbers tape to the back supports with two brass screws each. Leave one or two loops above the top of the support used for hanging the sconce on the wall.

Get ready for the romantic glow of firelight, and don't forget your weenie.

