# Warm and Classy Veneer Hanging Lamp

You will not make just one ......



A lamp with a twist, indeed twists of veneer, going around and around with a bulb hidden in the center. It is relatively easy to make and if you're into Christmas gifts, it makes a great one.

I started out making one of these as an experiment and it ended up at our "camp" in Maine. Then one of my three daughters saw it, and said: "Dad, could you make me one?" One of my failings as a father is an inability to say no to my daughters, so it became a Christmas gift. Now, you guessed it? Both my other daughters want one!

This is a delightful light which has broad appeal and is a favorite of mine. I love the warm glow of the light passing through the thin strips of wood. The thin veneers in light colored woods (in this case curly maple) are just right for passing light through. This design is handsome, yet relatively easy to build and can be put together without an elaborate set of shop tools.

I originally got this idea from an article in *Fine Woodworking* by Christian Becksvoort. I modified the design and shape to fit the parameters of the veneer I could obtain. I wanted to have a single glued overlap in each piece of veneer (see discussion on calculating lengths of each piece of veneer) and have a nice pleasing circular shape. I wanted a globe whose height and diameter were approximately 12"

The inside structure is interesting as you can see below. The way it is made can now be seen: it is several bands of thin veneer wrapped around 4 identical wooden frames. You can purchase veneer in a variety of wood types and thicknesses. I obtained the veneer from Rockler:

- Sheet count will vary to make up 12 square feet.
- Sold in packs of 12 square feet.
- 2/83" Thick (.6096 MM)
- Sheet sizes range from 4-1/2" to 6-1/2" (W) x 48" (L).

Sources of Supply	
Veneer/Wood Banding	Rockler.com; Woodcraft.com; Woodworkersource.com; Wood- veneers.com
Lamp Parts	Amazon.com; Mylampparts.cm
PVC Spacer	Homedepot.com; Lowes.com; Truevalue.com

#### **Internal Structure**

The frames are cut from ½ inch Baltic birch plywood (or equivalent) using a cardboard pattern cutout. The pattern sketch is drawn to scale and dimensioned, since it is a complicated shape.

## How to build it



**1** First, cut out the template frame pattern out of cardboard, using the dimensioned drawing. Using a template makes cutting all four frames much easier, because you are cutting our 4 frames. Using the cardboard template, trace out all 4 frames.

Then, cut 4 identical frame pieces with your saber saw. Then cut out the top and bottom disks. Both disks have an outer diameter of 4  $1/2^{"}$  Note that the top disk has a 2" diameter hole to prevent the electric light bulb assembly to pulling up thru when hanging (but permitting the cord plug to pull through), and, the bottom disk has a 2  $3/4^{"}$  hole to allow the assembly to pull up, and drop down to facilitate changing bulbs.

Cardboard Template

Dimensioned Drawing



**2** Cut the holes with a hole saw, or your largest spade wood drill bit, or Forstner bit. Forstner bits are very accurate for cutting wood, but that is not necessary here. You may not have a large enough bit, in which case you can use your largest, and then finish it off by tracing the circular pattern and then cutting with a saber saw.



**3** Sand the edges of all pieces and check for fit up. Assemble the 6 pieces as shown, with the cutout groves connected as shown. The four frame connect in the slots cut into the upper disk at 90 degree angles to each other. The lower disk fits in slots cut into each frame. Notice how the various pieces assemble. A tad tricky, but this woks for the light bulb, socket, plug and cord.

Glue and clamp in place and let cure.



# Nine Veneer Rings for the Shade, and a little Math!

**4** We have 9 bands of veneer to cut and each will have a slightly different length (I avoided trying to duplicate supposed identical diameter bands, because a slight fit up misalignment with the disks can change the diameter).

So, measure the distance across the two frames at the middle – this is the diameter of my first band. The method of determining cut length is to use this diameter and then apply the formula C (circumference) = D (diameter) \*  $\prod$  (Pi) You



can use your cell phone calculator for Pi or just use 3.14159 So lets say you measured 11 3/4".

Then your cut length would be equal to 36.91" = 36 29/32" (11 3/4" x 3.14159)

I made my bands 2 1/2" wide, so I cut the veneer this wide. I added 3/8" to the length (for gluing the ends together), and cut my first band to this added length. Mark the calculated length and add 3/8" to it and also mark that with pencil on the veneer





Cutting the veneer can be tricky, since it tends to split. I used a sheet rock knife with a very sharp edge and a sheet of plywood underneath as shown below:

Good glue up of each band can be accomplished by using small blocks and clamps. Once this first band was dry, I slipped it on the framework and glued it in place.

Each successive band is measured, cut, clamped, glued in place in the same manner. A little tape can be used to hold each band in place on the framework.



### **Electrical Cord and Lighting**

**5** I purchased an electrical cord like this one. Now you can see why the different diameters are required for the lower and upper disks. The plug must pull through, but not allow the light assemble to pull through when hanging. You will find that the light bulb hangs too close to the wood, so you can do a couple things. I purchase a spacer (a PVC coupler pipe fitting) that kept the light a sufficient distance from the wood. This fitting was placed loosely above the light socket and underneath the upper disk (check out the lamp assembly above). Note that the electrical cord comes with hanging hooks and connectors to make the process of hanging this light easy.



