

# Project Tutorial

Featuring compatibility with nearly all CNC Machines

It is our pleasure to provide our customers with fun and useful projects to enjoy!

Vetric Project Tutorial  
www.vetric.com

Compatible with:  
**VCarvePro 7.5**  
(or greater)

and  
**Aspire 4.5**  
(or greater)

Sample Carved with:  
**ShopBot Buddy**  
PRSalph BT48

**ShopBot®**  
www.shopbottools.com



## Poppins Umbrella Stand

Designed for Vetric™ by Michael Tyler

This project features sixteen curved uprights and three rings with T-bone filleted slots for ease of assembly. The entire job requires just one bit to create the Poppins Umbrella Stand!

The sample was left its natural wood color with only clear coats applied for the final finish. However, this project is a very good candidate for applying a metallic paint and patina treatment or using standard latex paints and a crackle finish for a “shabby chic” look.

The finished dimensions of the Poppins Umbrella Stand are about 13.5" Dia. x 18" Tall.



Main items you will need:

**1) The Project Files (included):**

- Base\_and\_Middle\_Rings.crv
- Top\_Ring.crv
- Uprights.crv

**2) Boards with these dimensions:**

**Base/Middle Rings:** 0.75" x 11" x 21"

**Top Ring:** 0.75" x 11" x 11"

**\*Uprights:** 0.75" x 11" x 23"

\*(you need FOUR boards this size)

**3) Self-stick Cork sheeting to cut out a 7.5" diameter circle for the base insert**

**4) Wood glue, strap clamps, sandpaper, wood stain and/or paint and clear finish**

**5) Optional: A Dremel-type rotary tool with assorted sanding wheels and bits to sand small details and tight areas, and a spindle sander for efficient sanding of inside curves and ring interiors.**



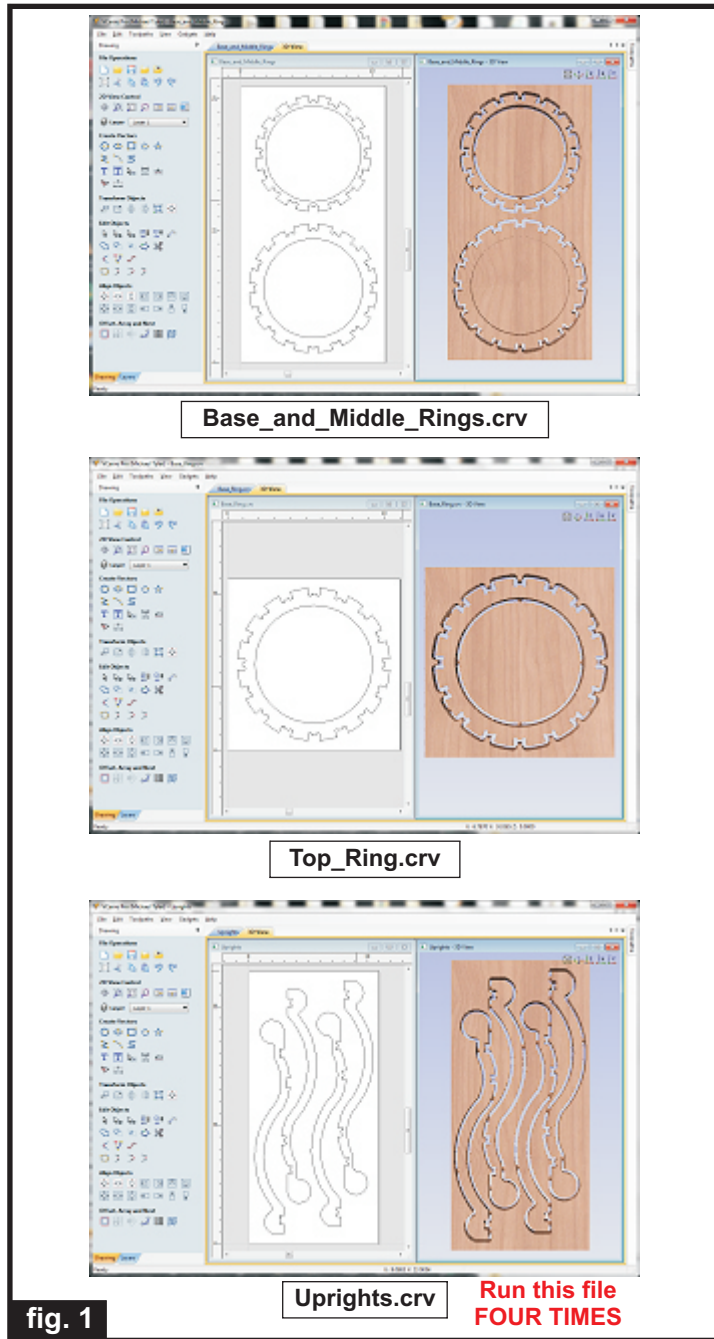
**CNC Bits used for the Sample:**

0.25" Down-Cut EM



## STEP 1 - Open and Review the Project Files

Start your VCarve Pro or Aspire software and open the project files. (fig. 1)



If you like, you can easily adjust any of the file layouts for your particular machine capability. For example, you may want to use larger boards and combine all the rings laid out in one file, or use larger boards to place more uprights per board. If you make your own custom layout, remember - **you must recalculate all toolpaths if any changes are made!**

Carefully review all the toolpaths and make any necessary changes to suit your particular bits and machine. The toolpaths are currently set with feeds, speeds and pass depths that were used in creating the original sample. Please don't use them directly until you review them for your own setup.

You can edit the tools and change the settings to your own preferences and requirements. **It is VERY IMPORTANT to recalculate all toolpaths after making any edits/changes.** Once you have recalculated for your own machine and bits, reset the preview, then preview all toolpaths again to visually verify the project outcome on-screen. The project is designed with tabs to hold parts in place during the final part cut outs. You may delete the tabs if you use some other reliable hold-down method.

## STEP 2 - Run the Project

When you are satisfied with your settings, save the toolpaths to the appropriate Post Processor for your machine, place your material on your machine bed and proceed to run the project files. (fig. 2a, 2b, 2c)



fig. 2a



fig. 2b



fig. 2c

(cont.)

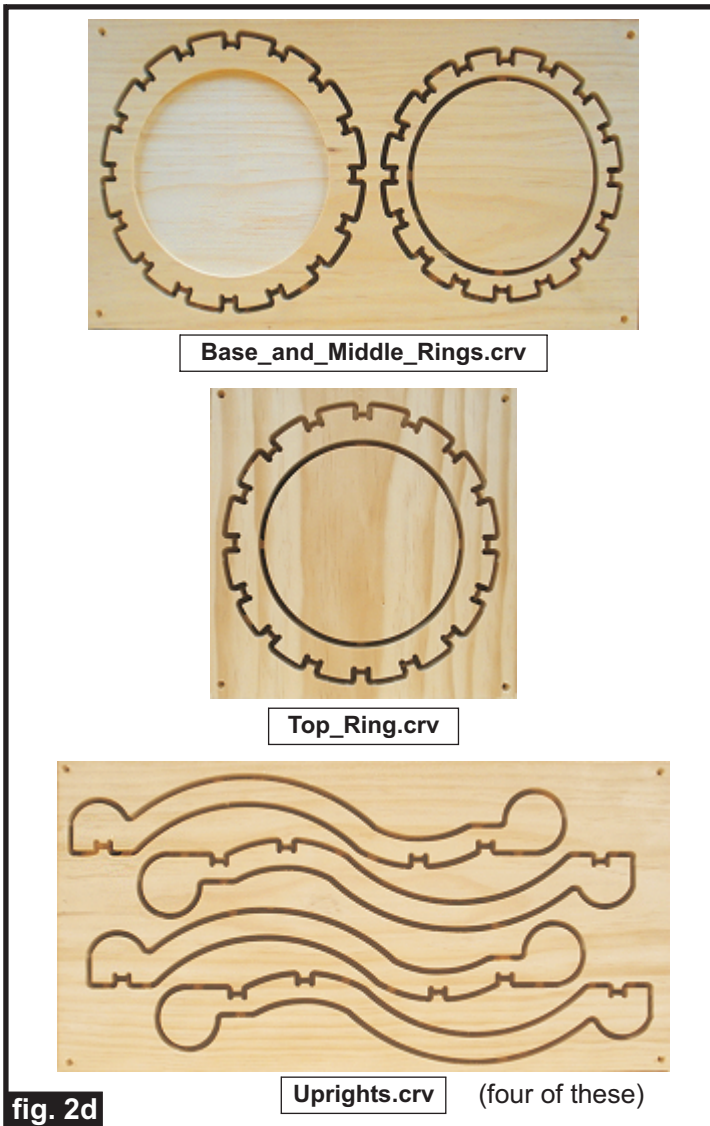


# Poppins Umbrella Stand

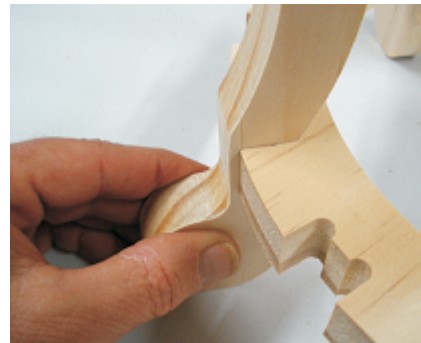
(cont.)

## STEP 2 - Run the Project (cont.)

Your boards will look something like this: (fig. 2d)



Dry fit the parts. Adjust if necessary, then soften (sand) all expose sharp edges slightly. (fig. 3b, 3c)



**NOTE:** All the slots already have a built-in clearance of 0.02", so no adjustment should be necessary.

fig. 3b

All parts dry-fitted



fig. 3c

## STEP 4 - Glue Parts Together

Disassemble the dry-fit and proceed to glue all parts together. I glued 4 of the uprights (equally spaced) to the rings first, then rotated the assembly to glue the remaining uprights around the rings. Clamp with strap clamps until dry. (fig. 4a, 4b)

Glue 4 uprights first



fig. 4a

## STEP 3 - Release and Sand Parts

Separate all the parts from the boards with a utility knife or small saw and sand off the tab remnants and any undesirable toolmarks. (fig. 3a)



fig. 3a



Continue gluing each upright in place

Clamp until dry



fig. 4b

(cont.)



# Poppins Umbrella Stand

(cont.)

## STEP 5 - Finish Application

Apply the finish of your choice. Here's what I used on the sample Poppins Umbrella Stand made from Select Pine: (fig. 5a, 5b, 5c)

- One light coat of thinned 50/50 Zinsser Bulls Eye SealCoat and denatured alcohol, sanding when dry
- Several coats Zinsser Bulls Eye spray Shellac
- Several coats Krylon Clear spray acrylic for final topcoat

Applying thinned SealCoat



fig. 5a



Applying Spray Shellac

fig. 5b

Applying Clear Acrylic Spray



fig. 5c

## STEP 6 - Install Cork Sheeting Insert

Cut a circle from your cork sheeting. Make it a tad shy of 7.5" diameter. Peel off the backing and press into the bottom ring recess to complete the project. (fig. 6a, 6b)



fig. 6a



fig. 6b

## IN CONCLUSION

I hope you enjoyed making the Poppins Umbrella Stand!



Happy Carving!

*Michael*



**Circle Guide for  
Cork Sheeting  
Cutout**

# Materials Source Page

- 3M Radial Bristle Discs from [www.mcmaster.com](http://www.mcmaster.com)  
(stack 3 discs at a time on your rotary tool mandrel)
  - 80-grit: part # 4494A19
  - 220-grit: part # 4494A18



## Miscellaneous Items Purchased at Home Depot™ or Lowes™

- Zinsser Bullseye SealCoat (100% wax-free brush-on shellac)
- Denatured Alcohol
- Zinsser Bullseye Spray Shellac (100% wax-free spray shellac)
- Self-stick Cork Sheeting (located in the shelving section)
- Sandpaper
- Disposable Brushes and Paint Rags



Krylon Clear Gloss Acrylic from WalMart™

# Additional Resources

## RESOURCES...

There are numerous resources for Vectric software owners to make their experience with their products more enjoyable. The Vectric website includes video tutorials and more, to provide a good overview of the software products and how to use them. Please visit the Support page for a complete listing of available resources for you.

**Vectric Support:** <http://support.vectric.com/>

## Vectric User Forum

Every owner should join the Vectric User Forum (<http://www.vectric.com/forum/>) where fellow users share their experience and knowledge on a daily basis. It is a FREE service that you will surely appreciate. A handy Search Feature helps you find answers to any questions you may have. There are Gallery sections as well, where you can post and view photos of projects created with Vectric software.

**IMPORTANT:** Before outputting any toolpaths you should carefully check all part sizes and the material setup to make sure they are appropriate for your actual setup. You should also check and re-calculate all toolpaths with safe and appropriate settings for your material, CNC machine and tooling.

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