

Building a Salad Bowl with a Chevron Feature Ring

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Let's build a salad bowl with a chevron feature ring. The bowl we will make will look something like this:



I use Woodturner Pro to design my segmented bowls. This is an easy-to-use program, and this article won't cover the use of the program. I want to focus on the process of making the bowl, and particularly making the feature ring. The output of the Woodturner Pro is a cutting summary. I modify the cutting summary to provide information I find useful:

| Row | Type | # Segs | Board Thick | OD | ID | SEL | Board Width | Economy Board Length | Board Length |
|-----|----------------|--------|-------------|------|------|------|-------------|----------------------|--------------|
| 13 | Flat Walnut | 24 | 0.38 | 8.5 | 7.06 | 1.12 | 0.75 | 27.59 | 33.9 |
| 12 | Flat Padouk | 24 | 0.13 | 8.5 | 7.06 | 1.12 | 0.75 | 27.59 | 33.9 |
| 11 | Flat Walnut | 24 | 0.13 | 8.5 | 7.06 | 1.12 | 0.75 | 27.59 | 33.9 |
| 10 | Flat Padouk | 24 | 0.13 | 8.5 | 7.06 | 1.12 | 0.75 | 27.59 | 33.9 |
| 9 | Feature Ring | 12 | 1.81 | 8.5 | 7.06 | 2.28 | 0.84 | 26.36 | 32.9 |
| 8 | Flat Padouk | 24 | 0.13 | 8.5 | 7.06 | 1.12 | 0.75 | 27.59 | 33.9 |
| 7 | Flat Walnut | 24 | 0.13 | 8.5 | 7.06 | 1.12 | 0.75 | 27.59 | 33.9 |
| 6 | Flat Padouk | 24 | 0.13 | 8.5 | 7.06 | 1.12 | 0.75 | 27.59 | 33.9 |
| 5 | Flat Hickory | 24 | 0.5 | 8.38 | 6.81 | 1.1 | 0.81 | 27.01 | 33.4 |
| 4 | Flat Hickory | 24 | 0.5 | 8.03 | 6.03 | 1.06 | 1.03 | 25.27 | 32.4 |
| 3 | Flat Hickory | 24 | 0.5 | 7.56 | 5.22 | 1 | 1.19 | 23.28 | 31.0 |
| 2 | Flat Hickory | 24 | 0.5 | 6.66 | 3.19 | 0.88 | 1.75 | 18.74 | 28.1 |
| 1 | Disk Walnut | 1 | 0.38 | 5.03 | | | | | |
| | Height | | 5.35 | | | | | | |
| | Max Width | | 8.5 | | | | | | |
| | HT/Width Ratio | | 0.63 | | | | | | |
| | # Segments | | 277 | | | | | | |
| | # Rows | | 13 | | | | | | |

Instead of cutting segments for the entire bowl, I usually build the feature ring. This is the most complicated element of the bowl, and I want to know the exact dimensions of the completed feature ring. If it turned out to be a little bigger or smaller than planned, it is easy to adjust the dimensions of the other rings to match.

The first step in making a chevron feature ring is to decide on the number and type of woods to use. For your first chevron ring, I recommend 3 wood elements that have good contrast. For example, walnut, padouk and hickory or maple would be a good choice.

Now for the steps:

1. Made an assembly of three species of wood, about 48" long, glued with Tight Bond II, and clamped with a ton of clamps A gluing tray and wax paper can make this process easier and less messy. I suggest building the assembly using these widths:
 - 3/4" Hickory
 - 3/8" Padouk
 - 3/4" Walnut
2. When the assembly has dried, run it through a planer or drum sander to even out the faces. Then cut the assembly at 30 degrees into strips that are a little wider than half the segment edge length (SEL) of your bowl design. The feature ring we are building has an SEL of 2.3". Let's aim for an assembled chevron to be 2.5" wide. So cut the assembly into 1.25" widths at a 30-degree angle. Make as many of these slices as you safely can. We need 24, I think I got 26 out of a 44" long assembly.



3. Layout the strips you just cut in pairs. Flip one strip in each pair to make a chevron. Glue two strips together and clamp. Alignment is critical. Make a few more chevrons than you'll need for your feature ring. Then you can choose the best-looking ones for use in your feature ring.



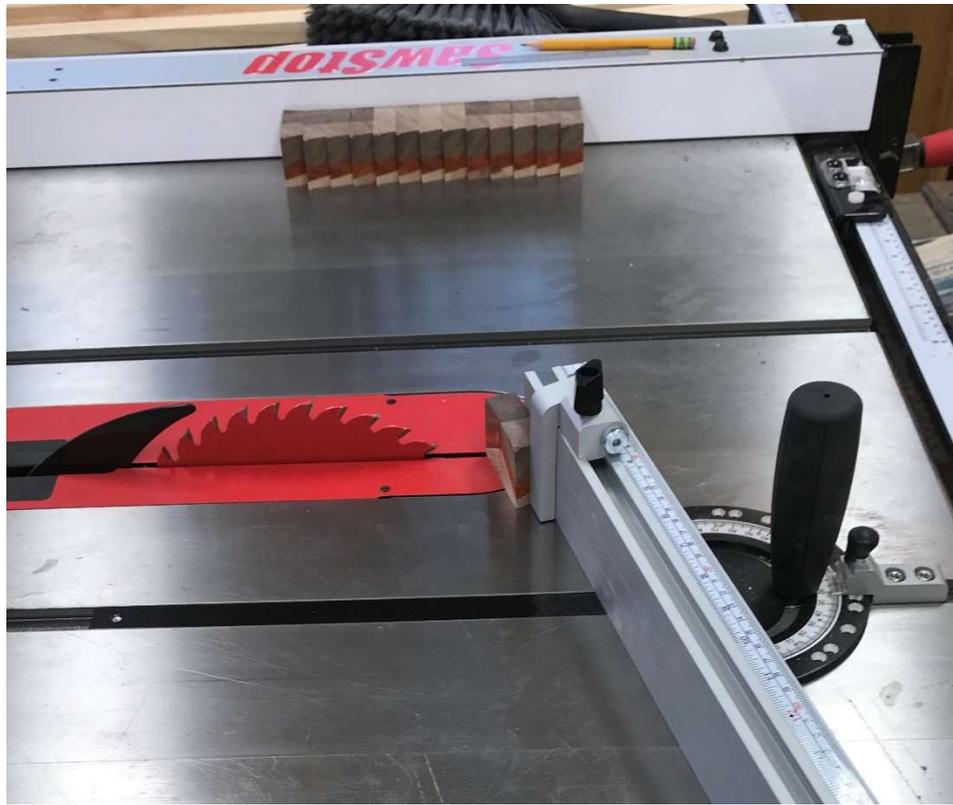
4. Each chevron needs to be trimmed to remove the 'pointed' parts of the chevron assembly. Malcolm Tibbetts suggested a method that produces uniform segments. Get a piece of plywood or MDF that is as wide as your chevron assemblies and long enough to hold all of them side by side. Put two strips of double-sided tape running the length of the MDF, placing the tape wide enough to stick to the main part of the chevron and also the portion of the tips that will be removed. (This

prevents the cut-offs from flying around the shop.) Then stick the chevron assemblies side by side on the MDF. To align them well, hold the MDF against your saw table fence, and stick the chevrons with the 2-leg side tightly against the fence. If you do this well, you should see that your chevrons line up.

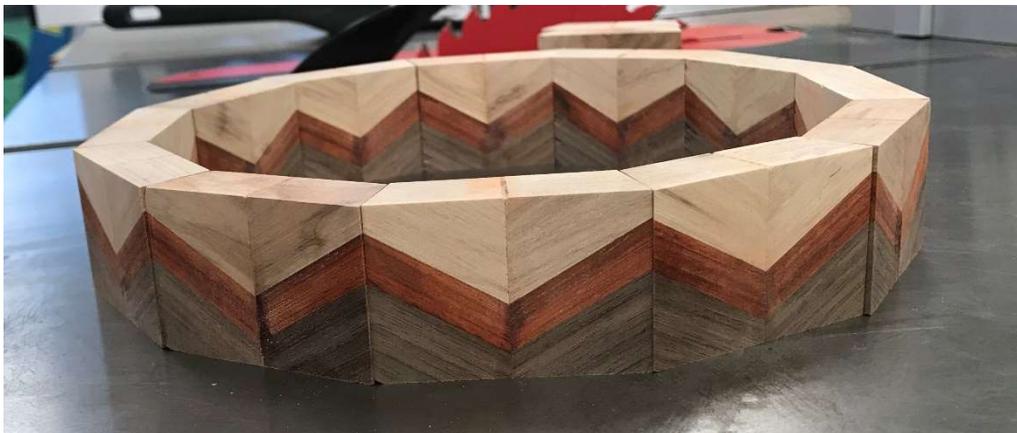
5. Now cut off the side of the chevrons that has two legs. In my case, the two-leg side was walnut. I left about 3/8" of walnut which matched the width of the padauk center.
6. Then flip the MDF around and trim of the single point side of the chevrons. In my case this was the hickory side. Again, I left about 3/8" of hickory. That left me with 14 square-edged chevrons, each about 1-1/8" high and 2.5" wide.



7. While still attached to the base MDF, run the assembly through the drum sander. Then, remove the chevrons from the MDF.
8. The chevrons need to be cut into trapezoid segments. For a 12-segment feature ring, cut 15-degree angles on two sides of each chevron pair. This is not possible or safe on the wedgie sled. So, I use a Incra 1000 SE production miter gauge.



9. I needed the finished segment to have a SEL of 2.3". I used the centerline of the chevron as a reference. I made the 15-degree cut on the right edge of all 14 segments, 1.15" from the center line. I flipped them over and adjusted the production stop to make the second 15 degree cut 1.15" from the centerline. This is a critical step for proper alignment of the chevrons.
10. Dry fit segments and hopefully you will have a nice alignment of the chevrons all around the ring.



Now you can glue up the feature ring. If it turns out to be close to the planned dimension, you can use the cutting summary above to make the other rings in the salad bowl.