

Feature Ring Element

Hints and Tips

For Traditional Segmented turners

- 1) **What:** Feature Ring Elements for urns, cookie jars, vases, etc. measure 2"x2"x3/8" thick. They are designed to be glued to a backer block for final thickness and cut to the appropriate angles on each edge.
 - a. **Alternatively:** wedges may be used between blocks with 90 deg edges to achieve the required circle. i.e. 16 segments would be 22.5 deg, 12 segments, would be 30 deg total included angle per wedge.
- 2) **First Things First:** since the laser cut feature ring elements will determine the diameter of the feature ring, it is important that you **complete its construction as the first step.**
 - a. **The number of pieces**, 12, 16, 24 will determine the overall diameter.
 - b. **How you add the angles** will impact the final diameter
 - i. **Miter** the edge of the element and backer block
 - ii. **Use wedges between each block**
- 3) **The height is set at 2"**
 - a. **For a taller Laser Cut Feature Ring**, add thin layers above and below the feature ring to increase the height.

For Bowl From A Board Easy Cut System Type 2 Users

- 4) Follow the same steps as above to begin
 - a. To make the first ring for the bottom of the vessel:
 - i. Measure the diameter of the completed feature ring and use that dimension to begin your first cut at 45 deg.
 - ii. For the traditional vase shape, progress through 45, 50, 55, 60 for the subsequent rings.
 1. When you glue the base together it should closely match up with the diameter of the feature ring.

2. Glue and turn the bottom of the vessel before you assemble the the feature ring to the base section.

5) To fabricate the top of the vessel

a. If a traditional vase or urn top piece, cut the first ring at 50 deg, and the rest at 60 degrees.

b. Match the starting ring to the diameter of the feature ring.

6) Add whatever top element, lid, spout, finial, etc. to the top of the vessel.

The Laser Cut Feature Ring Elements will create a feature ring that will be the focal point of the vessel. You may wish to keep the top and bottom of the vessel more plain so as not to distract from the feature ring itself. Contrasting species of wood are not recommended for these parts.

Appendix 1

Approximate outer diameters by number of segments:

With 1/4" wedges

Lyr	Sides	Layer Height	Outer Diameter	Wall Thickness	Gap Width	Gap Count	Gap Material	Side Incline	Stagger	Material Thickness	Miter Angle	Blade Tilt	Edge Length
1	8	2"	5-1/2"	3/4"	1/4"	8	Cherry\$	▼	0	2"	22.500°		2"
2	12	2"	8-1/2"	3/4"	1/4"	12	Cherry\$	▼	0	2"	15.000°		2"
3	16	2"	11"	3/4"	1/4"	16	Cherry\$	▼	0	2"	11.250°		2"
4	24	2"	16-3/4"	3/4"	1/4"	24	Cherry\$	▼	0	2"	7.500°		2"
5													

Without Wedges, Segment Blocks are Mitered:

Lyr	Sides	Layer Height	Outer Diameter	Wall Thickness	Gap Width	Gap Count	Gap Material	Side Incline	Stagger	Material Thickness	Miter Angle	Blade Tilt	Edge Length
1	8	2"	4-7/8"	3/4"	0"			▼	0	2"	22.500°		2"
2	12	2"	7-1/2"	3/4"	0"			▼	0	2"	15.000°		2"
3	16	2"	10"	3/4"	0"			▼	0	2"	11.250°		2"
4	24	2"	15"	3/4"	0"			▼	0	2"	7.500°		2"
5													

An 8-segment feature ring without wedges will yield a diameter of approximately 5" before turning: 12 segments – approximately 7-1/2", 16 segments approximately 10", and 24 Segments – approximately 15". You may choose to add a number of filler segments between the Laser Cut Feature Ring Element pieces to build a larger diameter ring if needed.

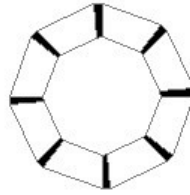
With ¼" wedges: 8=5.5", 12=8.5", 16=11", and 24=16.75" Glue up size before turning.

1



1

8 Segments

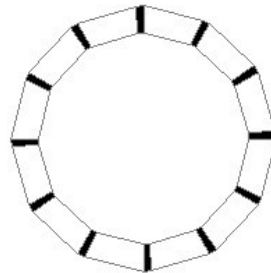


2



2

12 Segments

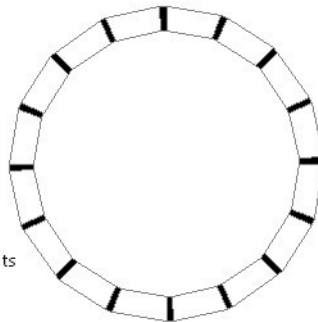


3



3

16 Segments

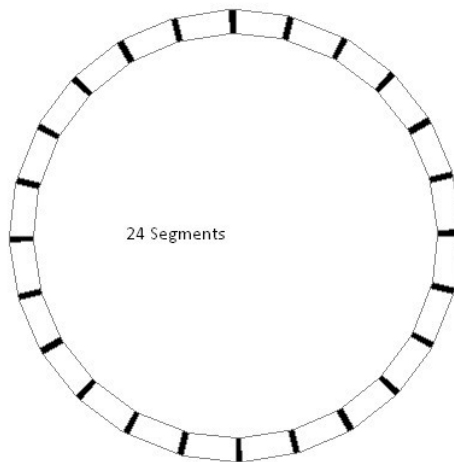


4



4

24 Segments



Using Wedges

Our kits are ~3/8" thick. They are designed to be glued to a backer block for segmented turning of Laser Cut Feature Ring Elements. Christmas Ornament Kits are designed to be attached to a 1.75 x 1.75 x 3" core for the Christmas Ornaments.

Two Methods for mitering the corners to make a circle:

- 1) You may choose to miter the corners of each segment after glue-up. For a 12-segment feature ring, the miter angle would be 15% on each side.
- 2) Method 2 uses wedges between each block. The sides of the glued-up block assembly would remain at 90%. The circle is formed using wedges cut to a 30-degree included angle, in the case of a 12-segment ring.
 - a. We recommend at least 1/4" at the widest part, the front of each segment.
 - b. The wedges can be the same material or contrasting, depending on the desired effect.
 - c. Wedges can be ripped on a table saw set to the desired angle, then cross-cut to the proper height; probably 2."