



Dome Ring

Once you have learned a few of the basics of rings, you can begin to build on them to make great projects. This week we will include the basic instructions for using the Ring Maker as a starting point for a quick, attractive ring.

Supplies

The Basics

Teflon Sheet (TFLR)
Badger balm (BHM)
Water and brush
Scalpel (SCP-X)

Clay

PMC3
Optional: firing directions are also given for PMCPRO

Other Tools & Components

RingMaker Mold
4 Side 4 Grit Sander/Buffer (4SQBUFF)
Sanding Sticks (SNDSTKS)

ClayMold™ - Dome Creative Components (MOLD53196)

Hatties Patties or a Ring Pellet Mold to make your own pellets (RPM)

Finishing

Wire or Brass Brush
Tumbler/Shot
Shine Brite Polishing Compound (SHNBRT)
Agate Burnisher (BTSTONE)
2" x2" Ultra Polishing Pad (ULTPOLPAD)
Jeweler's Black (JBlack)
Nikolas 2105 Clear Lacquer (CLRLACQ)

Step by Step

- 1) Start each project by making sure your clay is well conditioned and rolled into a smooth, compact ball. If you have used the piece of clay before, this step is especially important.
- 2) **Lightly** coat your hands with Badger Balm.
- 3) Make two different size domes of clay with the dome mold. The mold offers several options for construction. Let the clay in the mold to dry, remove the domes, and refine the surface with the 4 side 4 grit sander.
- 4) Make the ring shank using the ring mold in the size and thickness you desire. (See Ring Mold instructions below)
- 5) When the shank is dry and refined, wet it and the back of the largest dome with a little water. Apply a generous amount of PMC3 Paste and press the two pieces together. Brush off any excess clay and smooth the surface of the joint with a wet brush. Let this construction dry and repeat the process to add the second dome. For our ring, we placed the second dome a little off center.

- 6) Carve the surface around the top dome in any design you like. I used a radiating pattern. Experiment a little with different tools in order to find a mark you like.
- 7) Look over the ring and make any final adjustment before firing. The half-round Sanding Sticks are an excellent tool for sanding the inside of your ring. For a very refined finish, you may also want to use the Fine Sanding Sheets (FSS) which can be cut to various sizes and shapes.
- 8) Place a ring sizing pellet in the center of the ring to maintain the size and shape during firing. When you quench the ring, the investment will dissolve in the water. **Never pour this water into a drain.** Always dispose of where it will not clog anything up.
- 9) For PMC3, fire the ring to 1600 degrees for thirty minutes. (PMC PRO instructions below.) Remove from the kiln and quench in cool water. Brush with a wire brush and tumble for an hour with a little Shine Brite added to the water.
- 10) Paint the ring with Jeweler's Black, rinse with water, and dry. Use an Ultra Polish Pad to remove as much of the patina as you want and shine up the surface as well. In order to maintain the patina, spray the ring with a thin coat of Nikolas 2105 Clear Lacquer.

Instructions for using the Ring Mold:



11) The first step is to determine what size ring you are going to make. There are several types of sizing tools. We used PRSIZE which is both accurate and durable. After you have determined your size, use the conversion chart below to determine which size RingMaker mold to use.

Japanese Size	US Size (after fired)
17	4.5 to 6
21	6 to 7.5
25	7.75 to 9
29	9.15 to 10.50

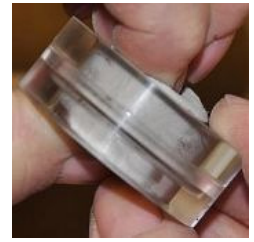
12) Coat the inner surfaces of the mold with a very light film of Badger Balm.



13) Roll a ball of clay that is somewhat larger than the center hole of the RingMaker mold and flatten just a bit.

14) Put the mold parts together and place the clay in the center hole.

15) Holding the mold with both hands, compress the ring parts together tightly and press the clay together with your thumb and forefinger. Make sure the clay gets squeezed into all parts of the mold by turning and continuing to press.



16) Push the small extruder through the center, maintaining the pressure to keep the mold tight. Remove the excess clay.

17) You may leave the clay in the RingMaker for a few hours or overnight before opening it. Before opening, give the mold a slight twist and pull off one side. Remove the ring and allow to completely dry before the final finish and firing. If you are very careful, you can give the mold a slight twist and open it at once. This allows you to see if the ring is properly formed. Allow the ring to dry in half of the mold only until you can easily lift it out without disturbing the shape. Remove the ring and let dry before readying it for firing. If you leave the clay in half of the mold until it is completely dry it will shrink unevenly.



18) Clean the RingMaker of any clay bits and recoat with Badger Balm before re-use.

Flat Band RingMaker

19) The basic process is the same for this ring as the one above with the exception that you have the ability to vary the thickness of the band by using different inserts found in the RingMaker Joint Set.

20) The Basic set includes one insert (joint) which will produce a ring that has a shank width of either 5mm, 8mm or 12mm (3/16", 5/16", or 15/32") and a shank thickness of 2mm (5/64")



21) If you want to make a flat ring shank in any thickness except 2mm, you will need to buy a RingMaker Joint Set in the same size RingMaker you are using. The Joint Set includes three inserts (joints) which will allow you to make ring shanks with a thickness of 1.5mm, 2.5mm and 3.5mm (1/16", 1/10", 9/64").

22) You can remove the joint you are using with the wet clay still in it, set it aside to dry, and create another ring shank immediately of another thickness.



23) These flat bands make a wonderful canvas to work on. You can apply syringe or other clay parts, carve into them, or use resist to create wonderful one-of-a-kind reliefs. (But that's another Project Guide!)



24) Smooth and refine all the surfaces when the clay is bone dry.

Thoughts About Firing With PMC PRO

25) Before firing any ring that has been created to a specific size, insert an investment pellet in order to maintain that size and shape while firing. You can purchase premade pellets (Hatties Patties) or you can make your own pellets with our Ring Pellet Starter Set. **CAUTION:** Never dispose of investment or any water containing investment in your drains.

26) To use the PMCC Fiber Firing Container, line the bottom of the container with an inch of Coconut Shell Carbon.

27) Lay pieces flat on the carbon with as much separation as possible and cover with another ½" on carbon. Our fiber containers are very efficient and **we recommend firing with no lid for PMC PRO.**

28) Place container in the middle of your kiln.

29) For PMC PRO, fire to a temperature of 1400 F degrees for one hour. Follow manufacturer's instructions for firing all other clays. Note that because the Fiber Firing Container holds heat so efficiently, you may need to set your firing temperature as low as 30 degrees F below the standard firing temperature.

30) Firing temperature is critical with PMC PRO. Do not fire PMC PRO above 1425 degrees F. A well-calibrated kiln is a must and we strongly encourage you to fire a few small test pieces to understand how PMC PRO responds to your kiln and container before you fire a finished piece. On items which have some degree of thickness, we have found that decreasing the ramp speed from "full" to 700 degrees per hour significantly increases firing success with PMC PRO.

31) When your pieces are finished firing, remove the firing container from your kiln as soon as possible and set on a heat-proof surface. Quench the pieces in cold water and brush with the wire brush. Tumble for approximately an hour.