

White Bronze "Mosaic Pendant"

866-PMC-Clay (762-2529)

The combinations of texture and shape are endless with our new Metal Clay Templates, an extruder, and the texture mats of your choosing.



Supplies

The Basics

Teflon Sheet (TFLR)
Clay Roller
Badger Balm (BHM)
Water and Brush
Scalpel (SCP-X) or
Tissue Slicing Blade (SB)

Clay

White Bronze Clay by Hadar Jacobson (HDR - WhiteBronze100)

Other Tools & Components

Clay Extruder (MAKEXTGREEN)
Texture mats of choice (SM3-SZQ1)

Metal Clay Template – Tapered Rectangle (MCT2059)

Graduated Plastic slats (GRDSLT)
Small spray bottle w/ distilled water
Palette knife (PA Mini-X)
Metal Scraper (S-4)
Double Ball Stylus (DBSL-X)
Square Pattern Cutter set (PCSQ)
Round Pattern Cutter set (PCSR)
4 sided sander (4SQBUFF)
Activated Coconut Carbon (CSC)

Optional rotary tools: Radial Bristle Disk Finishing Buffer

Finishing

Wire or Brass Brush (SSBL)
Tumbler/Shot
Shine Brite Polishing Compound (SHNBRT)
Agate Burnisher (BTSTONE)
2" x2" Ultra Polishing Pad (ULTPOLPAD)



Step by Step

Our finished piece, above, is made from Hadar's White Bronze. Our step-by-step illustration shows the same piece being constructed in Hadar's Pearl Grey Steel XT.

1) Pour the Hadar's Clay White Bronze powder into a small bowl and spritz with distilled water a little at time, mixing until it becomes a kneadable consistency. A palette knife works well for this. Be sure to knead the clay until it is well mixed.







2) Make about a one-inch long coil of clay of a size that will fit into your extruder. Using the octagon shaped die (1/8") and the next to the smallest core extruder (1/16"), crank out a long tube. Put this aside and let it dry completely.

3) Roll out clay using the blue slats in the Graduated Slat Set (4 cards.) Determine which size base you want to use for your pendant. For this project I used the second largest opening in the Taped Rectangle template. Using a scalpel, cut around the opening. Carefully, pick the extra clay up from around the shape and allow it to dry in place until it has firmed up enough to handle. Pick it up with a scraper and finish drying in the dehydrator or air dry.









4) When the base is dry, start choosing textures you want to use for the design. Small designs work best. Use the yellow slats (2 cards) to roll the clay for the mosaic pieces. You can also use tiny balls and leave them round or you can indent them in the center using a double ball stylus or cut out small circles or squares with pattern cutters or straws. Whatever size fits your needs. The leaf focal point in the example is from the Suzy Q texture mat.

5) Make a thick paste with a small amount of clay and a little water and use it to attach each piece to the base. Leave a small space between each piece. Let dry completely.



6) On the back I attached a small square of clay to give the bale a slightly larger surface to adhere to. This piece also provides a convenient place to use my name stamp.

7) Using a jeweler's saw or other small blade, cut the desired length of tube to be used for the bail. Attach to the top of the pendant with paste. Make sure this join is reinforced with more paste before it is fired.





Project Guide by Nellann Roberts © 2011 PMC Connection, Inc. Nellann@pmcconnection.com



- 8) Let the piece dry completely and refine the surfaces and edges with the 4 Sided 4 Grit sander dedicated to white bronze clay.
- 9) Pour about ½" of activated coconut carbon into a fiber firing container. Lay the clay on top of the carbon and place in a cold kiln. Fire at full ramp to 1100 degrees for 1 hour. Leave the lid off the fiber container.
- 10) Remove the firing container as soon as possible and let cool to room temperature. Add about $\frac{10}{2}$ " of activated coal carbon to cover the piece.
- 11) Put the container back into the kiln and fire at full ramp to 1295 degrees for 2 hours.***
- ***When firing base metals it is important to <u>Know Your kiln</u>. White bronze has a relatively narrow sintering range and needs to be fired accurately. By making small test pieces and firing them, I have been able to determine that white bronze should be fired at 1295 degrees in my kiln, in a fiber firing container, with the lid removed. Fiber is more efficient at holding the heat and therefore fires hotter, so I have reduced the recommended firing temperature by 30 degrees. You need to determine the temperature which best suits your kiln and firing container. If you are using another type of container, start with the recommended temperature for sintering (1325 degrees) and adjust by 10 degrees either way, until you find the right temp. Each kiln fires a little differently, making this testing phase very important for good results.
- 12) After firing, use a wire brush or a rotary tool fitted with yellow radial bristle disc to remove any oxidation that has formed. You can use fine sand paper on the surfaces as well as an agate burnisher. Tumbling with a little Shine Brite in the water also aids in creating a nice finish. A finishing buff rotary bit will produce a matte finish.