

Drop Grid Pendant Project

This elegant project will teach you simple PMC skills in forming and assembly of both wet and dry components, as well as patination and finishing techniques. The finished pendant weighs 8.4 grams.



Supplies

18g PMC Plus or 16g PMC 3
PMC+ or PMC 3 paste

Toolbox

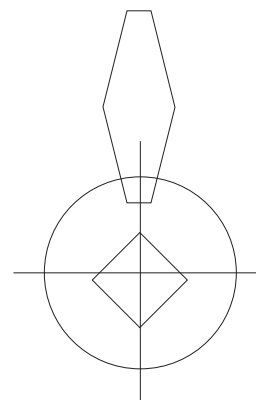
Claymate, Badger Balm or Olive Oil
CoolSlip*
Cool Roller or pvc pipe roller
#4, #5, #7, #5T spacers
Tissue blade
Pallet knife
Paste brush (#3 red sable)
Water brush (#5 red sable)
Dusting brush (#5 red sable or extra soft dry brush)
Bench block
Clay Shaper #6 Taper Point*
Doming block or other form*
3 piece Divit Tools (extra small ball burnishers)
Diamond needle files, rat tail and flat
Abrasive file, extra fine
Brass buff or brush
Burnishing tools or rotary tumbler
Polishing papers or rotary finishing tool
Needle tool
Flat nose pliers or prong pusher
Set of sanding sticks, grits 400 through 4000
Large Dot Grid Texture Tile (or other texture)
Cruciferous 3 Texture Tip set (or other center design)
Piece of copper wire, about 8" long

2 Scrap plastic sheets 2"x2" *
Cocktail straw
Polymer clay
Small plastic or glass containers for patina
1" circle template (or circle cutter)
4x6 Acrylic worksurfaces x 2
Liver of sulphur
Polishing cloth



Bail Template

Print this page, then cut out template using an exacto knife.



Placement Guide

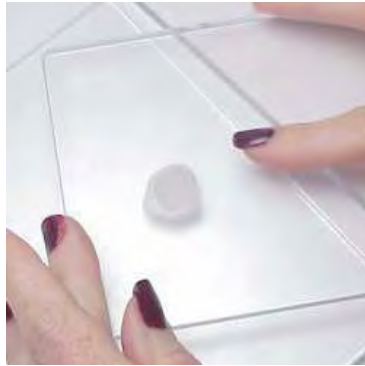
Center lines are shown on the circle. Notice the placement of the design element and bail.

- * Badger Balm or olive oil can be used as a release
- * A large diameter wire can also be used in place of a Clay Shaper
- * Look for something that is non-porous and rounded to achieve a dome shape. Be sure to add a release to the form before applying the clay.
- * Save ziplock bags you receive with orders. Cut these bags into small squares and use in your work. You'll find dozens of uses and you're recycling!

Make the Domed Disc

1. Spritz CoolSlip on a rag or pad and lightly rub over your rolling tool and 1 side of each of your worksurfaces. Install #7 spacers on your Cool Roller. Spritz your Texture Tile with CoolSlip. We'll be using the Texture Tile as a cutting mat, so turn the tile over and rub some ClayMate into an area about 2" square. Put on a thin even coat; enough to make it look wet but not white. Have #5T spacers nearby for a quick size-switch during the project. Coat the 1-1/4" dome on the Doming Block (second smallest dome) with ClayMate or Badger Balm.

2. Apply ClayMate to your hands and fingers.



3. Knead the clay through the plastic wrapper to soften and condition it. Then open the plastic package to reveal the clay, but do not touch the clay. Dip your pallet knife into your water dish, tap it lightly to get rid of any drops and cut the lump of clay in half.

4. Press the lump roughly into a ball. Place the ball on your worksurface and press it into a disc about 1/8" thick using a second worksurface as the press.

5. Roll the disc to a #7 thickness. Quickly change the spacers on your roller to 5T.



6. Peel the clay from the worksurface and place on the Texture Tile. Roll across the tile with the #5T roller. The 5T roller is designed so that the tile sits directly on the worksurface and the spacers roll directly on the worksurface. By starting with a #7 slab and then rolling it over a Texture Tile to a #5 thickness, the result is a #5 slab with #7 peaks in pattern height.

7. Turn the Texture Tile over and flex it so the clay peels off the tile onto your fingers. Turn the Texture Tile over and apply the clay to the back side of the tile. Lay the tile on the worksurface in front of you. The back of the Texture Tile must be coated with ClayMate or Badger Balm to avoid sticking.

8. Position the 1" opening on the circle template over the textured clay. Use the grid marks on the template to line it up. Use your Ultra Clay Pick to cut the circle. Go lightly and hug the edges of the template. The clay is incredibly soft, so the tip of the clay pick should only lightly brush the surface of the tile as you cut.

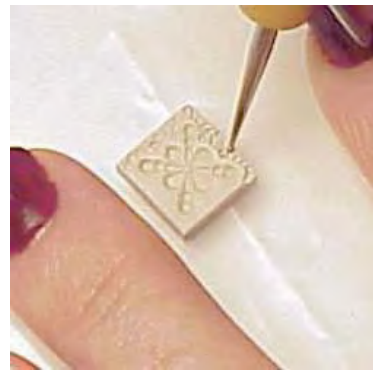
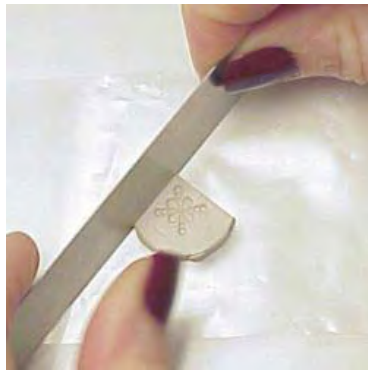


9. Peel away the excess clay and put it away quickly. Turn the disc out onto your fingertips, supporting it completely.
10. Lay the disc onto the second smallest dome (1-1/4"), centering it visually.
11. Smooth the disc down over the dome very gently to be sure all the edges are contacting the form..

Make the Design Element



1. Place a recycled plastic square on the worksurface. Cut a fresh piece of clay off of the original lump, about 1/4" x 1/4" in size. Roughly form the clay into a ball, place the ball on the plastic sheet. Place a second plastic sheet over the ball and press into a disc with a worksurface to about 1/8" thick. Peel off the top sheet of plastic and set aside.
2. Spray CoolSlip on your rag or pad and dab the Texture Tip into the wet cloth to lubricate. Press into the slab, holding the worksurface so you can view the depth of the tip. Peel the bottom sheet off and lay it on the worksurface, then place the disc back on top of it. This will help us move the element more easily later.



11. Using the design as a guide, cut a square with the flexible tissue blade. Make the margin around the square equal on all sides. Remember that you can always cut away more, but you can't put it back on. Work quickly.

12. Use the smallest ball on the divit tool set to texture the square. Start by making an outline around the design which will make an attractive edge appear all around the design. Do not overlap your impressions. Put them close together, but equally distributed for a clean look.



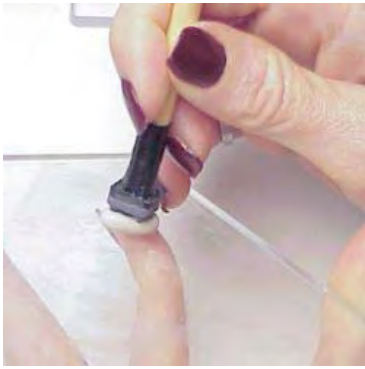
13. The texturing distorts the edges of the element a bit, so use your tissue blade to smooth the edges and square them back up.

14. Pick up the square with the pallet knife and move the element to the disc ahead on the doming block and slide it into place and lightly smooth it to conform to the disc. It does not need to be in perfect position. The element will be removed once it has dried. Leave this assembly to dry.

Make the Drop

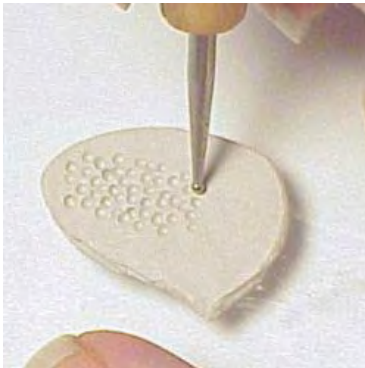


1. Cut a piece of fresh clay about 1/4" x 1/4" in size. Form into a ball and roll into a drop (pear) shape in the palm of your hand. Place the drop on your worksurface and press to 1/8" thick.



3. Impress the Cruciferous Texture Tip into the drop, centering it by turning the worksurface up so you can see the edges.
4. Use a small divit tool to texture the clay around the design. Be methodical and make the impressions regular and the same distance apart for a uniform texture. Taking a bit of time here and not being in a hurry will make all the difference in this piece. Set the drop aside to dry.

Make the Link

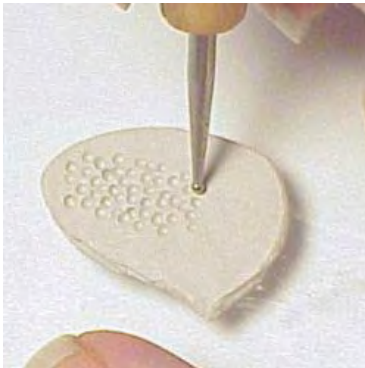


1. Cut a fresh piece of clay about 1/4" x 1/4" Roll out a slab of clay in #4 thickness. Place the slab on a worksurface and texture it with the small divit tool.
2. Use your tissue blade to cut a strip approximately 1/8" wide and 7/8" long. Square up the ends. Flip the strip on it's side.

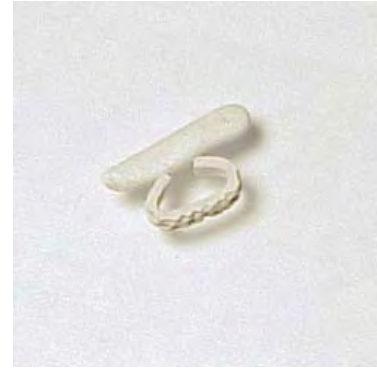
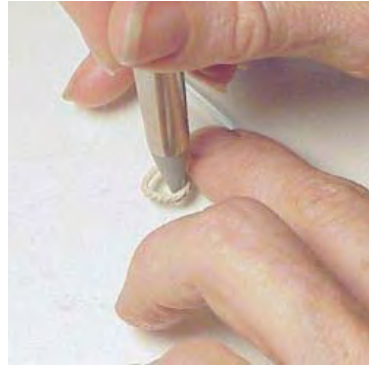
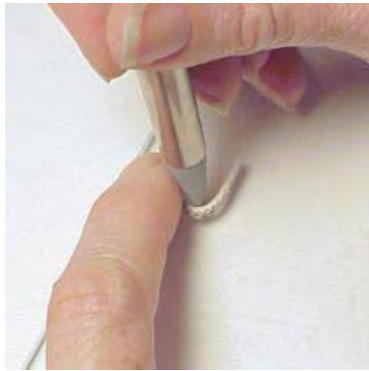


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3. Use your finger and a #5 tapered point Clay Shaper to form the strip into the shape of the link. Press the tip of the Clay Shaper down on the worksurface and hold it there as a mandrel while you "bend" the clay piece around it as you would wire to achieve the bends. Be very ginger with it. The clay is very soft and can easily deform.

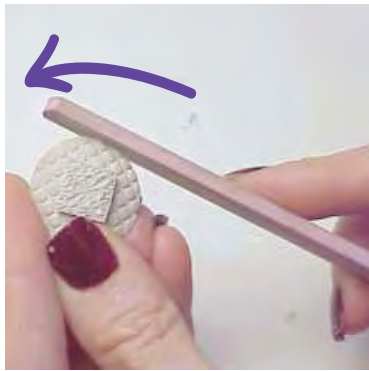
The bends need to be round and not pinched to hang properly and allow room for connection to the disc and the drop it will link.

5. It's important to make the link in an open position as shown in the far right photo. To hold the shape in position for drying, press a small snake of polymer clay on the worksurface next to the link. Then use the side of your finger to nudge the clay up to the polymer clay. The link will be closed after we assemble the pendant.

Attach the design element



1. Stir the paste with the palette knife. Wet your the #1 Sable paintbrush and pick up some paste from the knife.
2. Pick up the dried design element from the doming block and apply paste to back of the element, leaving a margin all around the edges so the paste does not squeeze out the sides when applied. Immediately turn the element over and place it on the disc, centered left and right but about 1/8" lower than center top and bottom. This is to allow room for the bail which will extend onto the disk by about 1/8".
3. The element can be slid around a little at this point to position it. When you have it in place, press on the design element for 2 or 3 seconds to set it.
4. Go around the edge of the design element with a wet water brush to set the paste. Leave to dry completely.



Refine the disc

Use a file to clean up the edges of the bone dry disc. Notice how the file is held. This is the proper way to file a thick, round edge. The strokes should be forward, and the file should follow the contour of the disc, as shown by the arrow. Keep the file perpendicular to the disc at all times and hold the disc in place as if your hand is a vice.

Go very lightly as the bone dry clay files like chalk and you can easily overdo it. Stop and rotate the disc as you progress around the edge. After filing, brush off the filings with a dry red sable brush.

Add the Bail

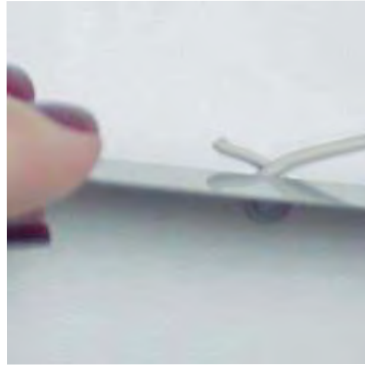


1. Rub the back side of a Texture Tile with ClayMate. Roll out a piece of clay to a #4 thickness and about 1-1/2" long x 1/2" wide. Place the slab on the tile. Texture the slab with the divit tool.
2. Place the bail template over the textured clay and cut out the bail shape. Peel away the excess clay and put it away.

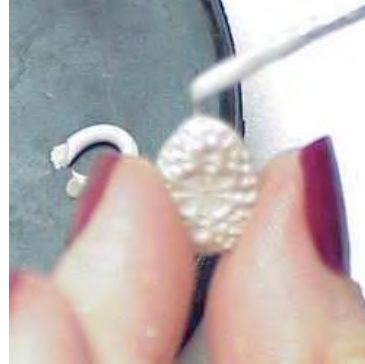


3. Place the wet bail on your hockey puck so the end extends about 1/8" over the edge. Put a dab of paste on the end of the bail closest to you and then place the dried disc on bail about 1/8" from end. Press the disc lightly to get a good contact.
4. Place a dab of paste on the top end of the bail. Place the straw piece at the widest part of the bail. Use the edge of a finger to lift and fold the bail over to the front. You may wish to hold the straw with your free hand to keep it from moving. Gingerly tap the clay to get a good contact.

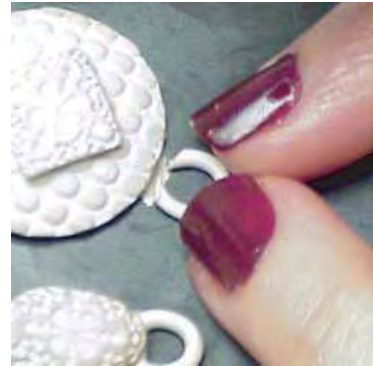
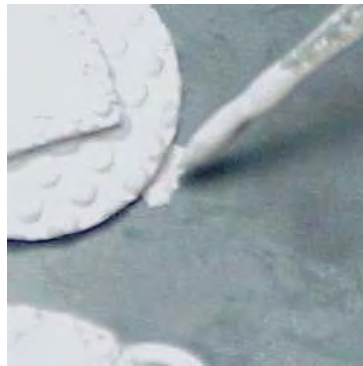
Add the Jump Rings



1. Roll a snake of clay about 2" long and 1mm in diameter. Make a loop from the snake and cut it at the overlap, as shown. Remove the scraps and put them away.



2. Add a dab of paste to the cut ends of the loop, and some at each place on the drop where the jump ring will make contact. Set the drop down and slide it to the loop gently, careful not to deform it.



3. Make another jump ring the same size as the last one. Put a dab of paste on the disc where the jump ring will be attached, and on the jump ring ends. Use your palette knife to move the jump ring closer to the disc and then slide the jumpring in place very carefully. Leave this for a few minutes to set up.

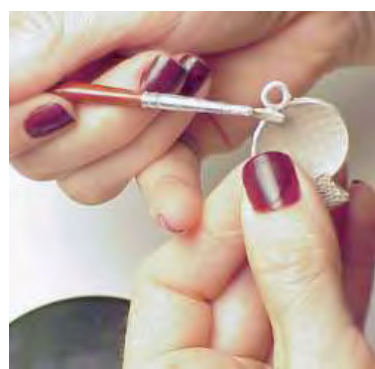


3. Slide the straw out from the bail and save for another project.



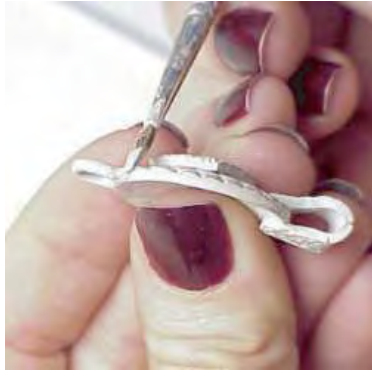
3. Paint all the joints with a water brush. Pick up the drop and paint the back and front with the water brush. The water will seep into the clay and set it.

Reinforce the Structures



1. Stir the paste with the palette knife. Wet the #3 Sable paint brush and apply paste to all joints, front and back and inside the bail. You will need at least 2 coats and possibly 3 for a strong joint, depending on the thickness of the coats.

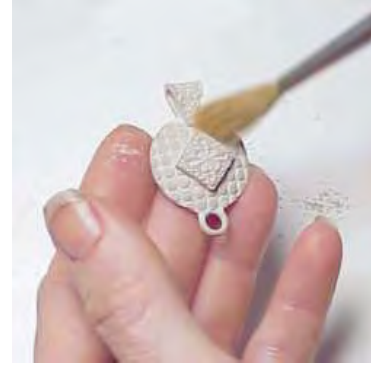
Notice how the little finger is contacting the opposite hand in the far left and far right photos. This is a way of steadying your hands for accurate application of the paste. Use this method any time you are holding something in mid-air to work on it.



2. After applying paste to the joints, arrange the pieces to air dry without contact to the freshly pasted areas.

3. Coats of paste to the joints should be added until there are no holes or crevices at the joint.

Refine the Bone Dry Piece



1. Once the paste is completely dry, you can refine the pasted areas to smooth them out. The small diamond file set is excellent for this. You will be rubbing the dry clay more than filing because the clay is like chalk. Clean it up to the level that satisfies you. If you find areas that have holes or divits in them where they should be smooth, then repaste these areas.

Use the rat tail file (the round one) to clean up areas with curves and for flat surfaces, such as the sides of the bail, use the flat file.

Be sure and brush away the filings after you are finished. Save all filings to make paste.

Fire



1. We are using a Bead Firing Dish filled with vermiculite for support of the domed object during firing. The dome should be placed face down and snuggled into the vermiculite to cradle the dome and keep it from slumping during firing. The photo on the left is before firing, the photo on the right is after firing.

Burnish and Pre-Polish



1. Use a brass buff to give the parts an initial burnish. The buff has very fine bristles which will not hurt your skin, even as you brush over it. Burnish down the white crystals everywhere that you can. Turn the piece to get at the nooks, crannies and crevices. Any white left standing will resist patina, so the better your job now, the better your final product.



2. Small parts can be held in your hand and brushed directly with a soft brass buff. The pieces will look like pewter when properly brushed. In each photo, the hand is contacting the hockey puck for support. Be sure to rest brace your hand while you brush the parts. Do each part as completely as possible before moving on.

3. Place the parts into a rotary tumbler and tumble with stainless steel shot for 1 hour. If you do not have a tumbler, the parts should be hand polished and this stage. Use ball burnishers to burnish any remaining silver crystals down.

Patina

1. The pendant parts will be dipped in a liver of sulphur solution to oxidize the recesses and give it an aged look. You'll need 2 containers: 1 for hot water and liver of sulphur and one for water and baking soda. Put 1 teaspoon of baking soda into a container and add about a cup of water. Stir to dissolve the baking soda. This is a neutralizing solution, and the proportions can be estimated.

2. Heat about a cup of water to coffee temperature and pour into a container. Add a chunk of Liver of Sulphur the size of a large pea. Stir with a copper tong or plastic spoon to dissolve. The color should be very rich yellow.



3. String the pendant on a copper wire so it can be completely immersed in the solution. Dip the pendant into the Liver of Sulphur solution. Since the water is hot, the oxidation will happen very quickly. The bronze color is after one quick dip and the blue/black is after a second quick dip. Leave the pieces in the solution until the pieces turn black.



4. After patinating each part, dip it or drop it into the neutralizing water. Then rinse and leave the parts to dry.



Final Polish

By Hand

To finish by hand, start with a 400 grit (green) 3M polishing paper to remove the oxidation from the high spots. Move to a Then repeat the process through all grits of polishing papers (green/grey/blue/pink/teal/pale green).



Final Polish

By Rotary Tool

Use bristle discs for the back side and all crevices. Use silicone cylinder mounted polishers for the front.



Assembly

Place the disc and drop on the connector. Check to be sure the parts are correctly oriented. Brace your hand on a firm surface. Place the link over your finger and push with a flat nose pliers to close. Use firm pressure but be careful not to press too hard.