

Prometheus White Bronze Clay Firing Test

Prometheus White Bronze Clay is a beautiful silver metal clay with a very slight hint of yellow once fired and polished. The clay is a light grey color while wet and dry, and dark grey/black after firing. Prometheus White Bronze has a shorter firing temperature range than Prometheus Copper and Bronze. This shorter range makes it much more important to test your first pieces before firing your final product.

This test procedure will provide you with the correct temperature and time for your specific kiln set-up. Please follow the test procedure below carefully.

1. Make 10 identical pieces. 4 cards thick with no texture and no larger than a quarter in size. Dry and refine.

PREFIRE

2. Burn off all of the pieces at the same time as follows:

Place the pieces on a steel mesh

Pre-heat the kiln to 932°F 500°C

Place the steel mesh in the kiln when it reaches approximately 900°F. 482°C

Fire for 10 minutes at 932°F 500°C

Kiln program is Ramp Full, Target 932°F, Hold 10 minutes

Now you are prepared to carbon fire your test pieces. You will be firing each piece starting at 1420°F, increasing each one 20 degrees, until you melt a piece. Then, you will reduce the next firing by 10 degrees to see if you still have any melting.

Let the carbon cool to room temperature before you remove the piece.

Brush half of the piece with a steel brush.

DO NOT - Get wet, quench, bend or try to break

FIRING

3. Place your first piece in the center of your firing container filled with carbon. Place your container in the center of your kiln. This is a critical step. Your piece must be in the center of the container and in the center of your kiln. You may put the piece into a cool or warm kiln.

Fire at 1420°F for 3 hours. 771°C

Kiln program is Ramp Full, Target 1420°F, Hold 3 hours

↑ diesel at depot

When the program is finished and the carbon is cool, remove the piece and brush half of it with a steel brush. If the piece is powdery, it is not sintered. You may see that all of it is powdery or just small areas. Place this piece on a sheet of paper and write down your firing temperature.

4. Second piece, same steps as above except fire 20 degrees higher at 1440°F. 782°C

Brush and place the piece on the sheet of paper with the firing temperature.

5. Continue this procedure, increasing the temperature by 20 degrees each time until the piece has silver balls on it. This piece will be your highest temperature and last piece on the sheet of paper. You do not need to brush this piece.

6. Fire another piece 10 degrees less than the above piece to determine if it will still melt. Place it on the paper in the second to last position.

Your ideal temperature is the highest temperature that did not melt and does not have any powdery spots. In the example below, piece number 4 is my ideal temperature at 1500°F. 815°C



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