BUTANE TORCH FIRING

NO MUSS, NO FUSS, NO KILN

Smaller PMC3 pieces can be fired quite easily using a butane torch. Pieces that have an overall even thickness work best with this method (e.g. a ring, small pendant, earring, etc.) The advantage of the butane torch firing method is you can fire your piece in just a few minutes and you don't have to heat up a kiln to fir just one item.

Finish the bone-dry clay as normal (sand, file and shape it) and be sure it is completely dry. This is always important but especially when using the torch firing method. Any moisture in the piece will quickly turn to steam when you apply the torch. As the steam expands rapidly it can cause the clay to crack or fragment and possibly fly apart.

MATERIALS:

Butane torch, butane, tweezers, heatproof surface, soldering block

PROCEDURE:

1. Finish your piece in the normal way. Be sure it is completely dry and finish the surface with fine sandpaper or a buffer block.
2. Work in a well ventilated area. Place the soldering block on the heatproof surface and the dry PMC piece on the soldering block.
3. Fill the butane torch as directly by the manufacturer. Ignite the torch, following the manufacturer's directions. Adjust the fuel flow so that the inner blue flame is about 1 ½" (4 cm) long. The outer flame should be about ¾" (2 cm) longer. Aim the inner flame slightly above the PMC3 piece.
4. Move the torch in a circular motion, keeping the flame in continuous motion across the entire piece. Use the outer flame at first to warm the piece, then slowly move the flame closer to increase the heat applied. As the temperature increases, the organic binder will begin to flame and then quickly burn off.
5. Continue to heat the piece, using a continuous circular motion until it reaches the "sintering" temperature. (Sintering means to cause to become a coherent mass by heating without melting.) You have reached a sintering temperature when the piece is faintly glowing with a visible orange color. As soon as the orange color appears begin the firing period of 2 to 3 minutes, depending upon the size of the piece. Be sure to use a timer to insure that the full time period has passed. It is difficult judging the passage of time while working with the torch.
6. Be careful not to overheat the piece because you can actually melt it. If the surface turns from orange to a shimmering "wet look" silver color, immediately move the torch farther away from the piece to reduce the heat. The shimmery look indicates the surface is starting to melt.
7. When you have completed the full firing cycle simply turn off the torch and let the piece cool down to room temperature. This will take a while so be patient or you could risk a serious burn. Once cooled finish the piece in the normal way.