MetalClay Australasia Pty Ltd

Our recommended methods of Butane Gas Torch and Gas Stove Top firing follow. PMC3 and PMC Flex are recommended fine silver clays that can be fired using a Gas Torch and/or a Gas Stove Top

HAND HELD BUTANE TORCH FIRING PROCESS – Torch firing is **not** recommended for large items, rings or any pieces that require maximum strength. Fire pieces that measure approximately 32mm diameter - 1.2mm thickness (6 card thick) that weight up to 20gm. This method works best for small, simple pieces like earrings, charms and small pendants that can be fired and heated uniformly. You can include and fire pure silver findings and small metal clay safe gemstones (4mm or smaller) in projects with this method.

Items that cannot be fired with this method include projects made using Cork Clay, paper, glass, ceramic, porcelain or large quantities of organic material

1) Allow your finished fine silver metal clay work to air dry overnight. Alternatively dry with a hairdryer, coffee warmer or metal clay dedicated food dehydrator. It is important that all metal clay is completely dry before all methods of firing. If pieces are not dry they can blister or crack.

2) Place the work on a soldering block or fire brick. We recommend placing the soldering block or fire brick on a fireproof surface or even a thick block of wood. We do not recommend working on a kitchen counter top which could be permanently scarred if a hot piece accidently rolls off your firing block.

Set a clock timer to one side where it is easily accessible. If possible dim the lights or draw the blinds. It is easier to see the piece begin to glow if the area has been darkened.

3) Light the butane torch and create a flame. Hold the torch so the flame is almost vertical with the tip of the cone and approximately 2-3cm away from the work. Slowly and steadily rotate the flame around the whole piece. Within a minute the piece will begin to smoke and be enveloped in a soft flame as the binder burns away. Do not be alarmed, this is normal and the flame will go out by itself. Within another minute the piece will begin to glow a peach or salmon pink colour. Continue rotating the flame and heating the piece uniformly until the colour becomes bright and luminous. At this point, set the timer.

4) We recommend holding this colour as uniformly as possible over the whole piece for at least 5 minutes (10 minutes will produce a stronger, denser result) Glance away periodically to relieve your eyes. Watch the surface carefully - if the clay starts to turn shiny and bubble – the flame is too close and is melting the silver. Withdraw the torch flame away slightly so that you maintain the salmon glow but have a cooler burn. Maintaining the salmon glow for the required time is the key to successful torch firing. When the time is up, turn off the torch and allow the piece to cool until the red colour subsides. If there are no gemstones embedded in the piece, it can be quenched in water.

GAS STOVE TOP FIRING PROCESS – Gas Stove Top firing is not recommended for large items, rings or any pieces that require maximum strength. Fire pieces that measure approximately 32mm diameter - 1.2mm thickness (6 card thick) that weight up to 20gm. This method works best for small, simple pieces like earrings, charms and small pendants that can be fired and heated uniformly. You can include and fire pure silver findings and small metal clay safe gemstones (4mm or smaller) in projects with this method.

Items that cannot be fired with this method include projects made using Cork Clay, paper, glass, ceramic, porcelain or large quantities of organic material.

When firing fine silver metal clay using a gas stove top or portable barbeque you will need a stainless steel net that is stable and rests comfortably over your gas or BBQ ring. Set a clock timer to one side where it is easily accessible.

1) Dim the lights or draw the blinds and turn the gas ring on. This will help you to identify the hottest area on the stainless steel net (area where it glows brightest) and also easier to see the silver clay piece begin to glow in a darkened area.

2) Switch the gas flame off.

3) Using tweezers, carefully place your dried and finished fine silver clay design onto the stainless steel net directly on the area where the flame was glowing brightest.

4) Turn the gas flame back on.

5) In the same way that the organic binder burns away when using the hand torch method above, the binder will begin to smoke and set alight before the piece starts to glow.

6) Set the timer on when the whole piece begins to glows a salmon pink colour. We recommend holding this colour for at least 5 minutes (10 minutes will produce a stronger denser result) Glance away periodically to relieve your eyes. Watch the surface carefully - if the clay starts to turn shiny and bubble - you are melting the silver. If this happens, lower the flame slightly so that you maintain the salmon glow but have a cooler burn. Maintaining the salmon glow for the required time is the key to successful stove top firing

7) After firing, switch off the gas and leave the piece to cool on the mesh. After it has cooled the piece should easily detach from the stainless steel mesh. If there are no gemstones embedded in the piece, it can be quenched in water.