

The PMC Studio Fact sheet

Firing Precious Metal Clay (PMC)

Firing is one of the most important aspects of working with Precious Metal Clay (PMC). As PMC is made up almost entirely of pure silver particles items can be polished even though they have not been fired. The only way you will find out is when the piece breaks whilst it is being worn. PMC will always look white once fired as this is its natural state. By polishing ie, smoothing the surface the PMC will gain its silver colour. The more you polish the brighter the silver will look.

Once fired, PMC can be hallmarked as Fine Silver (.999) at any of the UK Assay Offices. You will find more information about this in the video clip 'Hallmarking your PMC'.

Please note that all Firing Instructions provided on Bead TV refer to the use of PMC3, the most advanced form of Precious Metal Clay, unless stated otherwise. Details on firing PMC+, PMC Standard and PMC 22K Gold are provided at the end of this fact sheet.

Torch Firing

Pieces the size and thickness of a 50 pence piece can be torch fired. Gently heat the piece, wait for the binder to burn off and the piece to glow a pale orange. Once the piece glows orange, continue for a minimum of two minutes and keep the whole piece heated evenly. If your piece starts to look silver on the surface you are in danger of melting your silver. Pull the torch up.

Once fired, quench in a cup of water to strengthen the metal. Please note applies to items that are made of PMC only. PMC items containing gemstones, glass or ceramics need to be left to cool.

Items that can be torch fired are those:

No larger or thicker than a 50 pence piece
Contain fireproof gemstones

Kiln Firing

A kiln suitable for PMC needs to have a temperature control as the kiln needs to maintain the correct temperature for a minimum of 10 minutes.

The Evenheat Pro-Set Kiln is recommended for firing any type of PMC as well as ArtClay. This kiln can also be used for glass fusing, glass slumping and enamelling. You do not need to programme this kiln as the programmes are set in the factory.

Items that need to be fired in a kiln are items:

- larger or thicker than a 50 pence piece
- 3D objects e.g. box shapes
- contain natural gemstones
- contain glass
- contain ceramics
- contain natural materials e.g. pods, leaves and paper

Kiln Firing Service

If you are new to PMC and not sure how to fire your items The PMC Studio offers a kiln firing service. For further information please go to www.thepmcstudio.com.

Precious Metal Clay Firing Schedule

Kiln Firing	Temperature	Time	Approx Shrinkage
PMC3 Fast Programme	700 C	10 minutes	10 %
PMC3 Slow Programme	600 C	45 minutes	10 %
PMC+ and 22K Gold Fast Programme	900 C	10 minutes	15 %
PMC+ and 22K Gold	850 C	20 minutes	15 %
PMC+ and 22K Gold	800 C	30 minutes	15 %
PMC Standard Programme	900 C	2 hours	30 %

Re-firing

The melting point of silver is 962 C (or 1571 F). Therefore as long as you do not exceed this temperature you can fire any type of PMC as many times as you wish.

Re-firing repairs

Should you need to repair an item this is best done using PMC3 clay or syringe irrespective of whether you have used PMC3, PMC+ or PMC Standard. Use the relevant PMC3 programme for the item.

Example: PMC+ pendant repair, use PMC3 to repair and fire on the PMC3 fast Programme.

Example: PMC3 repair containing natural gemstone, use the PMC3 Slow Programme.