

FIRING INSTRUCTIONS

AMC Ultimate Premium and Origami Base Metals (Bronzes & Coppers) arrives to you ready to use right out of the package. AMC's Base Metal clays have a flexibility (also available without flexibility) to them, extended working time and easy firing instructions. AMC clays are made in Australia by Ros Bailey and innovated by Kim Booklass. AMC is proud to boast many firsts in the metal clay industry including, the 1st and only Argentium .960 metal on the market, 1st and only torchable .960 sterling metal clay on the market, the 1st metal clay "glue" on the market, the 1st metal clay rehydration liquid for metal clay that replenishes the binders as well as many other world firsts. Thank you for joining us on our continued journey of many more firsts.

Suitability:

Ultimate Premium Base Metals – Flexible and suitable for cutting machines, craft punches, textures, molds, etc.

Origami Base Metals – As the name implies, the origami clays are best suited for Origami/gentle folding and wrapping. For folding, we recommend 1 card thick. Suitable for craft punches – up to 3 cards thick. Not recommended for molds, textures and cutting machines.

Safety First:

As with any product, some individuals may incur reactions to the product. If skin rash or itchiness occurs, cease using immediately and wash your hands. If symptoms persist, contact a healthcare professional. P2 or N95 masks, gloves & safety glasses are recommended when work with power – mixing, sanding or polishing. Wash hands after use, do not ingest, keep out of reach of children and pets. Take precautions to avoid burns when handling hot tools and equipment.

Getting Started:

AMC Ultimate Premium & Origami clays will arrive in lump form in 50g packs (2 50g packs in

the 100g). Upon opening your packet, be sure to massage your clay to ensure the moisture is evenly distributed after shipping. Any opened, unused clay, wrap tightly in plastic wrap and store in an airtight container to maintain hydration.

Test Strips: Make test strips

approximately 1cm x 2.5cm and 3 cards thick to find the correct kiln temperature for your kiln, as all kilns are different. This applies to all clays. To check for sinter, bend the strip at the end with round nose pliers and if not completely sintered, place back into the kiln and refire stage 2 at a raised temperature of 5 degrees. Repeat until you get a perfect Sinter.

*****NOTE: White bronzes are brittle, should be a minimum of 5 cards thick and most successful with Gold Bronze, Ruby Bronze or Desert Sun as a strong backing.** The white bronzes (Ironbark, Antarctic Sand & Silver Bronze), as well as the Snow White Copper can't be bent. Gently drop your piece on a tile or piece of glass. You will hear that same metal sound that you get from a sintered piece of the other bronzes and copper.

Creating:

Be sure to **LIGHTLY** lubricate your work surface, roller as well as any textures or molds you may be using (lubricate all items or surfaces that your clay will come in contact with, including tools). A little lubrication goes a long way. If you use too much, you have the possibility of compromising your clay. If your clay seems too wet, let it sit out for a bit and then massage clay. If your clay seems dry or cracks while rolling or working with, add a spritz of Clayspray to moisten.

Drying:

Ultimate Premium – NOT for Origami - Once your design has been completed in its "wet" stage, it's time for drying. AMC recommends placing your design in a dehydrator at a maximum temperature of 70c/158f. Although you can use a mug warmer/hot plate, we do not



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recommend this method. If you have no other choice than to use a mug warmer or hot plate, do not place design directly on the surface. Place your design, either on a wire rack or a small ceramic tile placed on top of the warmer and flip your design every so often to avoid warping. Be sure to do the dry test – warm your design and place on a mirror. If condensation appears, it is not dry. Last but not least, it is important to note that your clay designs, even when dried, can still accumulate moisture from the air. We recommend firing your design immediately after your successful dry test.

Origami Base Metals: - To obtain the maximum flexibility from your Origami clay, you cannot completely dry the clay. Allow your design to become “skin dry” by air drying. “Skin dry” means you are drying the outside of the clay while leaving the inside supple. Once skin dry, pick up your clay and gently wake it up by lightly rolling both sides and slowly sliding through your fingers. You will notice more flexibility as you proceed with this process. Complete your folding/design.

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Refining:

The most important piece of advice that AMC can give you regarding refining is to do as much finish work (sanding, smoothing, etc.), before firing. Your dried pieces will still be fairly flexible after drying, making your design less fragile

causing less of a potential breakage. When sanding, be sure to support your piece, either with your hands/fingers or a rubber block, to avoid applying unnecessary pressure on your design. You can also use distilled water or, preferably Claystay to smooth out your designs if need be.

Joining Pieces:

Using Kim's Claystay (the 1st metal clay “glue” on the market), you can easily join pieces together. The pieces you are joining will need to be flush when connecting. If that is not possible, add a bit of fresh clay to get a flush connection. Joining unfired to unfired – add your Claystay, gently push your pieces together. Hold pieces together for a minute or so which gives the Claystay time to adhere. Unfired to fired and fired to fired – rough up your connection spot on your fired piece with a bit of sandpaper or sanding pad. You will then add a small bit of fresh clay and follow the same steps as fired to fired. For additional help you can watch our video on YouTube.

<https://www.youtube.com/watch?v=WpMlwEf6pw&t=384s>

Rehydrating:

Ultimate Premium - NOT Origami - One of the amazing things about metal clay is the ability to reuse all of unfired scraps and “sanding” dust. Break your dried clay in to small pieces or use a coffee grinder. For best results, use Kim's Silver Clayspray (as of 11/22 release, white bottle of Silver clayspray can be used on all clays, blue bottle only on base metals). Using Clayspray replenishes the binders and flexibility to keep your clay in pristine condition. You can use distilled/demineralized water, however, you will eventually deplete your clay of it's binders and your clay will not perform the way it should.

Origami Base Metals – Rehydrating your origami clay will bring it back to a flexible state but not an origami flex. Break your dried clay in to small pieces or use a coffee grinder. Use Kim's Silver Clayspray. Your clay can now be used as the Ultimate Premium, non-origami. It



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will still have a small amount of flexibility just as all of our Ultimate Premium Clays do.

Firing:

AMC Base Metal Clays require a 2-stage firing. Stage 1 is to burn out the binders and liquid to allow proper sintering at stage 2. As all kilns are different, please refer to the test strip section of these instructions.

Kiln Firing:

Reminder: Be sure to do the dry test – warm your design and place on a mirror. If condensation appears, it is not dry. Last but not least, it is important to note that your clay designs, even when dried, can still accumulate moisture from the air. We recommend firing your design immediately after your successful dry test.

Burn off/Stage 1

Option 1 – Place your design on a wire rack and fire at ramp speed 4 (830C/1526F) to reach 400C/752F to 450C/842F. Hold for 30 minutes, up to 3 cards thick. Longer if thicker and/or larger pieces (4 cards – 40 minutes, 5 cards 50 minutes, etc.).

Once your burn off is complete, allow your design to cool to below 200C/392F, or completely cooled before moving on to Sinter/stage 2.

Option 2 – Kim's No Fuss Fire Method:

For those of you that utilize Kim's No Fuss Fire, please follow your personal notes and the suggestions taught in Kim's tutorial. Ramp speed should be Ramp 4 (830C/1526F) or full ramp. Support your design as necessary. As there are many variables, and all kilns can fire differently, please understand that the firing schedule below is just a guideline and doing test strips will help you to determine your time, temperature, etc.

Sintering/Stage 2

Option 1 -

Once your design is cool enough to handle after phase 1, gently (after burn off, your design is extremely fragile). Transfer your design on to a minimum of 1 inch of activated coconut carbon, into a kiln safe vessel (such as a stainless steel firing container). Cover with an additional 1 inch (minimum) of activated coconut carbon. You can fire with or without a lid.

Fire at ramp speed 4 (830C/1526F) or full ramp (995C/1823F) to reach firing temperature based on the chart below. These are only suggested temperatures and will be determined by how your kiln fires.

Option 2 –

Kim's No Fuss Fire Method:

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Bronzes:

Desert Sun	900C/1652F to 940C/1724F
Ruby	810C/1490F to 850C/1562F
Gold Bronze	775C/1427F to 830C/1526F
Ironbark	775C/1427F to 820C/1508F
Antarctic Sand	773C/1423F to 818C/1504F
Silver Bronze	770C/1418F to 815C/1499F

Coppers:

Copper	970C/1778F to 990C/1814F
Silver Copper	970C/1778F to 990C/1814F
Snow White	970C/1778F to 990C/1814F



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Brass:

Pink Brass 970C/1778F to 990C/1814F

****Rule of thumb – once you have your perfect sinter temperature, add approximately 5/10 minutes per 1 additional card thickness (depending on the size and mass).**

Finishing/Polishing:

Tumblers – Magnetic tumbler will clean your design. Rotary tumbler will burnish your design.

You can clean your design, right out of the kiln with a brass brush, soap and water. You can also put your design right in to a magnetic or rotary tumbler. A magnetic tumbler will clean your design and give you more a satin finish whereas the rotary will give you a more burnished higher shine look. To bring your design up to a mirror finish, you can use the same process and then use a rotary tool with radial discs and then polishing wheels.

Hallmarking:

All countries have different rules for Hallmarking your designs. Be sure to look into what your specifications are for your country.

Have More Questions?

Aussie Metal Clay Australia -

<https://www.aussiemetalclay.com/home/>

Aussie Metal Clay USA –

<https://aussiemetalclayusa.com/home/>

Please join our Facebook Groups –

AMC Support -

<https://www.facebook.com/groups/2049625218595476>

AMC USA Support -

<https://www.facebook.com/groups/3279930315365536>

Join our weekly Q/A's on the AMC Business Pages –

<https://www.facebook.com/AussieMetalClays>

<https://www.facebook.com/AussieClaysUSA>

Read our FAQ's on the website –

<https://www.aussiemetalclay.com/frequently-asked-questions/>

YouTube -

<https://www.youtube.com/@AussieMetalClays>

Instagram –

<https://www.instagram.com/aussiemetalclay/>

