

Thank you!

Thank you! I am thrilled you have decided to try out our new specialty underglaze transfers! I hope you find great success and enjoy using them on your pottery. Here is some info to help you apply them to your greenware pots. I recommend printing this document out so you can refer to it as you are experimenting with your new transfers. Note - If you wish to apply to our transfers to bisqueware please see that section on that towards the end of this document. At the end you will also find a bisque firing schedule, glazing instructions, and some helpful hints! Enjoy!

Materials Needed – Transfer sheet, clay body to apply design to, bowl of water, yellow Y3 mud tools rib, sharp scissors. For advanced techniques a ¾" angled paint brush, small diameter knitting needle or smooth chopstick, clean towel to hold mugs in place, a tiny paint brush for touch-ups, and a spray bottle are helpful.

For Beginners – I would recommend using a flat piece of clay such as a rolled slab and then move up to a plate and then a wide bowl and then try a cylinder and finally a curved mug (*they are the trickiest*).

For Flat Surfaces – When no darting of the paper is required and the transfer can lay flat with no wrinkles across the piece, the clay can be pretty damp. I usually throw a plate and then leave it until I can push on it without warping the rim and then apply the transfer. Then I flip the plate, trim it, and apply transfers to the back. For a slab the transfer can be applied right after rolling and compressing it. The reason the clay can be wetter for flat surfaces is that there is no creases or folds in the paper which require a dryer clay body as to not smear the color.

For Slabs – Lay your transfer sheet on the flat surface and starting in the center use a damp sponge (make sure to wring all excess water out) and slowly press the transfer down on to the clay. Think about it like you're applying a window sticker that you don't want bubbles in. Once the transfer is completely stuck you should notice the color change to a darker shade. At this point you can gently rub with the wrung-out sponge. You can pull up a corner to see if it has transferred yet as you go and depending on how wet the clay is will determine how much rubbing you will need to do. Sometimes rubbing with your finger or longer with the sponge is necessary. The wetter the clay is starting out the less rubbing you will have to do, the downside is that wetter clay

makes it trickier to apply the transfer without smearing it.

If your clay is dryer or leather hard you can apply the transfer and then use the yellow rib to press it down again similar to how you would apply a window sticker. Using this method can be tricky on wet clay as you can nick it more easily.

Once your design is transferred you can peel the paper off. As you pull go slowly and if you see spots that didn't transfer lay the paper back down and use a damp sponge or your finger to rub the area on to the pot. After all the paper is removed you can clean up the smudged areas and fill in the missing spots. (see section on clean up)

For Curved Plates and Bowls – First I make sure the piece is dry enough to handle me pushing on the surface without warping it. I usually try to apply transfers to the inside first before pulling it off the bat it was thrown on. This allows me to have a way to hold it in my lap without warping the form. Depending on the curve of the piece will determine whether or not I will lay an entire sheet on the piece and dart the edges or if there is a large curve I will cut the transfer into sections and apply it in pieces so there are limited seams.

For full sheets I apply the entire sheet at once, the same as with slab pieces, and cut slits at the top rim to make it easier to wrap over the edge. If there are small areas of creases, I just fold the transfer over on itself similar to wrapping a present, I try to make the folds, darts, and cuts in areas of blank space or areas where it will be less noticeable.

When I have a significant curve to the piece I will cut the transfer into smaller more manageable sections and apply them the same way one at a time. I cut around large images and try to cut as close to the design as possible so the images look seamless when next to the others. First, I cut out enough patches to apply them all over the inside and up and over the rim and apply them as close together as I can without overlapping.

Next you can get a bit creative... I fill in the open areas with the same pattern if it works but if the images get distorted or cut off I will usually pick another design to go behind the original design. It is important to apply the first design first and rub them down so they are fully attached before adding the background images. Also leave the paper of the first design on the piece and add the secondary designs on top. Cut only what is needed to fill in the blank areas and overlap the existing patches by a smidge, you don't want the excess ink and paper making more of a mess.

Use the sponge and rib to apply the secondary design next. After both sets of images are attached check to make sure they have transferred, sometimes when working on a piece for a long time you will have to go back and re-dampen it with the sponge before pulling the paper off to make sure it transfers. Next pull the paper off slowly reattaching it as needed to compress more. After you do the inside flip the bowl, trim, and place it back on the bat to do the underneath section the same way. Keeping the bowl on the bat helps to not warp the rim when transferring

the back section. Clean up and fill in as needed. (see clean up section)

For Mugs – Start with a cylinder without a handle if possible then move up to a handle and finally a curved mug with handle. Measure the height you want the transfer to come to on the mug and add an extra inch then cut the transfer into a strip the height you desire. As for the length I wrap the strip around the mug loosely and overlap it about 1” before cutting the end off for the length. I try to cut my transfers long ways so I have the full 19” to go around the mug if needed.

After you have your strip, lay the mug in the towel roll (see helpful hints) so the handle is resting upwards against the roll part so it will not move. Then line up the transfer against the handle making sure it is centered in the area you want it. Start attaching the transfer by pressing it with a damp sponge all along the handle edge. Once the transfer is fully stuck you can begin going around the mug. Go slowly in sections, first sticking the center and then pushing the sponge down to the bottom and top edges. Make sure you have fully stuck the image before moving to the next section of the mug. Try to keep the strip centered as you go, otherwise it will wander one way or the other and your strip will not be lined up anymore. As you go rotate the mug, if yours has a handle I find it's helpful to transfer it to my lap at a certain point and let the handle fall in between my knees.

When you get all the way back to the handle on the other side you can cut slits where the handle is to go around it and this is where the paintbrush comes in handy. Dampen the bristles and get under the handle to make sure the transfer is fully attached under the handle as well. Once the transfer is fully attached and there are no gaps or air between the transfer and the pot you can start compressing the transfer to the pot using the yellow rib. I find starting in the center and working up is helpful with my hand inside the mug so I don't warp the rim and then turn the mug around and work from the center down to do the bottom half. In order to get in the creases around the foot and handle use your knitting needle to rub the design in.

Putting transfers on mugs is reserved for people with endless patience or those of us who really want a badass mug so be patient ☺ These are not easy to apply to rounded surfaces so be patient and keep trying. Also, it's helpful if you plan to add glaze to some sections of the piece to hide the imperfections. You can even plan ahead to put all the smudges, darts, and folds under the glaze. Another option is to patchwork the designs or come up with your own unique way to apply them that works with your vision!

Clean Up – After the transfer has been applied and the paper removed you can clean up around the designs with the rounded end of a knitting needle. I find the smaller sizes work well, the end should be about the size of a slightly used sharpened pencil. So not pointy or sharp but small and smooth. I use this to get in between the small designs and remove any smeared color or change the shape of designs that got cut off.

Fill Ins – Using a scrap piece of unused transfer paper that the same color as the design you are

fixing add small amounts of water directly to the colored areas to turn the underglaze into a something that can be painted on to your pot. It is important to use scraps from the transfers and not use regular underglazes because the colors will not match. I would even say they might not match from one transfer supplier to the next. Also make sure you add just enough water to be able to paint it to your pot, too much water and you will lighten the color of the underglaze and you will be able to see the fill in spots on your finished piece. After the fill in areas are dry you will be able to see the difference but it should be slight, if the areas are a completely different shade you may be able to tell the difference in the finished piece.

Bisquing – I bisque to ^04 and use the firing schedule created by Steve Davis that was posted on Ceramic Arts Network.org and have great success (I have attached it at the end of this document). This schedule works great if you have applied our transfers to greenware and are trying to prep them for glazing as well as bisquing your pots to apply our decals to bisqueware.

Applying Transfers to Bisqueware – Truth be told, I am not an expert at this and do not do it often. I find it harder to control the crispness of the design and find it harder to apply the design without having it bleed to other areas. There are a great many potters that have great success with this application process and I encourage you to try it and see what works best for you and your pots. When applying to bisqueware the application is similar except you are going to sponge only and there is no real need to burnish the design on as the water and sponge will do most of the work for you. After your image is applied be sure to let the pot fully dry (maybe overnight even) to make sure all the moisture from the application process is out of the clay. The residual water in the clay can cause the glaze not to stick properly and will make it peel off during the glaze firing.

Glazing – Elan Transfers can be used in a wide range of firing temperatures. I regularly fire to cone 6 and have great success using premixed Amaco ^6 clear (zinc free), I find it is sticky enough to adhere to the surface of the bisque with the transfer applied. You can also use a wide range of other glazes, I recommend testing them first to make sure you like the results. Some glazes will cause the transfer pattern to run which can be desirable when part of the design for your pot. Our transfers can also be successfully fired to other temperatures and atmospheres as well. I have had great success using them in raku, wood, and gas reduction kilns. Treat them as you would any other underglaze and have fun experimenting with them.

Helpful Hints

Greenware Application Hints –

- Tap the side of your hand on a towel after squeezing your sponge out so excess water does not inadvertently drip on the transfer as you pass your hand over it.
- Sometimes if the clay gets drier as you are doing applying you may need to spritz it with the spray bottle or dampen it with the sponge. Start your spray bottle stream off the pot and move it over the piece as you spray so as not to build up too much water in one spot. Make sure the paper is fully stuck before you spray otherwise you will prematurely moisten the images and they will smear.
- When you are applying transfers to a piece that is a bit dryer or leather hard you will notice as you rib the paper onto the pot the negative space areas will turn a greyish color and the colored areas will turn darker still. This is how you know the paper is attached. If there are any bubbles or the paper is not completely compressed on the piece the ink cannot transfer. Sometimes there is a lot of burnishing the images with the rib and you may need to add more water to get the image to transfer on dryer pieces.
- When wrapping the cut strip around the mug to determine the length only let the back side of the strip touch the mug so you don't get the design wet.
- Always keep your work area clean and free of extra transfer pieces. They will get ruined if you accidentally drip water on them.
- Save scraps for patchwork projects and fill in color.
- Fold a towel long ways and roll it half way to form a bed for your mug and a rolled pillow to hold the handle and prevent the mug from moving when applying the transfer.

Glazing Hints –

- If you apply the transfers to greenware, do not wipe them after the bisque. Instead be careful when handling them as not to smudge the design. Underglaze transfers become fully attached to the pot after glazing or reaching temperatures ^6 and above.
- When possible brush your glazes on this will prevent the glaze from peeling off the pot during firing. • Since we are not wiping bisque pieces there can be a layer of dust on the piece and simply dipping them might not allow the glaze to fully stick to the bisque pieces. I find a fan brush particularly helpful to apply the glaze.
- On designs that have large areas of color you can use your brush to apply the glaze, then dip your finger in glaze and lightly rub the areas with large areas of color, and then smooth over the rubbed areas with your glaze brush. This will prevent peeling and pin holing on these areas that can sometimes happen when the glaze does not stick well.
- Use a thin coat of zinc free clear glaze to prevent designs from running if that is not what you are trying to achieve.
- I glaze to ^6 with a 5-minute hold at temperature and a slow cool 150 degrees per hour until it reached 1800 degrees and then shut it off and let it cool naturally. I pull the peeps around 350 degrees and usually crack the lid at any point under 300 degrees. This glaze schedule combined with the bisque schedule mentioned earlier will prevent crazing on your glazed pieces.

Bisque Program for an Automatic Kiln Controller

| Controller Display | Input | Press | Comments |
|--------------------|------------------|---------------|--|
| "STOP or IDLE" | | STOP | This resets the kiln so you can program the kiln. |
| "STOP" | | RAMP/ HOLD | This puts you into a custom program mode. These can be saved and reused. |
| "PROG" | 1 | Enter | Select a numerical program such as User Program 1. |
| "SEGS" | 6 | Enter | You'll enter 6 segment entries for ramp, temperature, and hold. |
| "RA1" | 60 | Enter | This is ramp 1, increasing 60°/hour up to 180°F, then held there for 12 hours. |
| "F1" | 180 | Enter | Water forms steam at 212°F so 180°F is a safe temperature to remove water. |
| "HLD1" | 12.00 (hours) | Enter | The amount of hold time at this temperature varies depending on water content and thickness of the ware. |
| "RA2" | 200 | Enter | This is ramp 2, increasing 200°/hour up to 600°F. |
| "F2" | 600 | Enter | Organic carbon burns out from 300–600°F. |
| "HLD2" | 0 | Enter | No hold time is necessary for ramp 2. |
| "RA3" | 240 | Enter | This is ramp 3, increasing 240°/hour up to 1300°F. |
| "F3" | 1300 | Enter | 1292°F is start of inorganic carbon burnout, which is why the ramp ends at 1300°F. |
| "HLD3" | 0 | Enter | No hold time is necessary for ramp 3. |
| "RA4" | 60 | Enter | This is ramp 4, (60°/hour up to 1650°F). The slow ramp ensures removal of inorganic carbon at this critical stage. |
| "F4" | 1650 | Enter | Inorganic carbon burns out from 1292–1652°F, so the ramp ends at 1650°F. |
| "HLD4" | 0 | Enter | No hold time is necessary for ramp 4. |
| "RA5" | 360 | Enter | This is ramp 5, increasing 360°/hour up to 1850°F. |
| "F5" | 1850 | Enter | The kiln can gain temperature quickly through this phase up to 1850°F. |
| "HLD5" | 0 | Enter | No hold time is necessary for ramp 5. |
| "RA6" | 108 | Enter | This is ramp 6, increasing 108°/hour up to 1922°F (cone 04). |
| "F6" | 1922 | Enter | Approaching the final temperature more slowly ensures all wares reach the desired bisque firing maturation. |
| "HLD6" | 0 | Enter | No hold time is necessary for ramp 6. |
| "ALRM" | 9999 | Enter | 9999°F is a default temperature. You can set the kiln alarm to any temperature. |
| "IDLE" | | START | Now the program is set, and you can start the kiln. This firing schedule takes 26 hours to complete. |