Glaser Ceramics

Fired-On Images Transfer Paper MS (Multi-Surface)

Instructions for Glazed Clay Bisque, Factory Glazed Ware and Fusible Glass

STEP 1 - Acquiring Images:

- Photographs, drawings, invitations and letters, typed and hand written recipes and other images in your personal collection.
- Digital pictures saved on your computer...directly input, downloaded from friends' web sites, online photo albums or sent as email attachments.
- Search Engines Do an image search by name or category using Google Images or other search engines.
- Stock photo services Image download services that allow you to purchase royalty free professional images inexpensively.
- Clip Art Books, Art Books, Children's Coloring Books

STEP 2 - Preparing Images

There are two basic vehicles for placing your images on the transfer paper:

- Untouched Images: Images can be directly applied to the transfer paper using An HP Multifunction Black and White Laser Printers/ Photocopiers listed on the Authorized Printer Chart.
- Manipulated Images: Images may be scanned, e-mailed, downloaded, copied from CD or input directly from digital cameras and manipulated on a computer using commercially available software applications and then printed using an HP Black and White Laser Printers listed on the Authorized Printer Chart.

STEP 3 - Printing Images

To print your image onto the Fired-On Images Transfer Paper;

- 1. Set printer for plain paper standard US size 8 ½ "x 11"
- 2. Remove the thin tissue paper protective sheet (if present) and discard.
- 3. Run a few sheets of plain paper through the printer to warm up the printer fuser roller.
- 4. Place transfer paper into the manual feed slot of the printer one sheet at a time.
- 5. Print your image onto the **glossy side** of the transfer paper using an approved laser printer or multifunction copier/ printer.

STEP 4 - Applying Image

- 1. Clean the area where you plan on placing your image, Isopropyl alcohol works well.
- 2. Cut out the image(s) as close as possible to the actual design.
- 3. Place in a dish of warm water for about 1 minute, holding gently to avoid tearing.
- 4. When you begin to feel the printed image separating from the backing paper, it is ready to apply to your surface.
- 5. Lift the image out of the water with the backing paper intact.
- 6. Gently slide the image off of the backing paper holding by the transfer film down with one hand and slowly pull the backing paper out from underneath with the other hand.
- 7. Use a clean paper towel to wipe off excess water and remove any air bubbles. A soft brayer may be used by laying a paper towel on top of the transfer and rolling over the towel gently towards the edge of the design.
- 8. Allow it to set for an hour or more.

STEP 5-

Firing Images Onto Glaze it Yourself Clay Bisque

Selecting the Surface:

Images must be applied to pre-glazed and fired surfaces

- · Smooth flat surfaces are easiest to work with.
- White or light colored glazed surfaces give the best image contrast.

Transfer firing temperature depends on the type of glaze and the original glaze

firing temperature. (For Factory Glazed items check page 3 for transfer firing temperatures)

Glaze Firing Temp	Glaze type	Transfer Firing Temp		
Cone 06	Opaque Glazes: Any light colored Mayco's Stroke & Coat , Series 2000, and Foundations Glazes Spectrum 701 White, Gare Matte Glazes	Cone 08-06** **Works at cone 06 but ideal is slightly cooler		
Cone 06	all glaze brands and types except for transparent	Cone 011-09		
Cone 06	Transparent Glaze	Cone 015-012		
Cone 5, 6	All glazes including transparent	Cone 06-04		
Cone 10	All	Cone 04-Cone1		
Cone 10	All	Cone 0		

Hints: If your glaze type is not listed above experiment by firing images a few cones lower than the original glaze temperature:

- If image fades, fire cooler ... if image wipes away fire hotter
- > Outside venting system is recommended while the plastic film material burns off
- **Contemporary Studios: If you are firing transfers to cone 06 make you must use one of the opaque glazes recommended in Cone 08-06 transfer fire section above. Some kilns fire hot...test first and if image is faded at cone 06 fire cooler.
- Cone 06 Transparent Glazes require a significantly lower temp than the original glaze fire temp

Adding Color:

All images fire to a beautiful rich sepia brown, to add color to glazed bisque:

- Under the image during glazing:
 - 1. Trace image onto unglazed bisque surface or on top of dried glaze with +majolica style painting and then color inside the lines as desired.
 - 2. After glaze firing, apply the image by lining it up over the colored area and fire as directed.
- +Majolica style glazing works great with this process. Paint 3 coats of white opaque glaze over bisque and let dry. Trace on image and then paint on top of the white glaze within the lines with colored glazes and fire. (NO transparent coating required) For accuracy: You can print image directly onto Clay Carbon paper to use as a trace template. Also printing your image onto LASER compatible transparency sheet will help to see where to put paint.
 - Over the image after image is fired on:
 - 1. China Paints can be used to "colorize" your images after firing.
 - 2. If you have used one of the cone 06 transfer fire compatible glazes you can paint over the fired image with a thin coat of cone 06 colored glazes and fire again. Mayco's Stroke & Coats work well for this.

Firing Images Onto Factory Glazed Porcelain, Stoneware and **Ceramic

Selecting the Surface:

Images can be fired onto most: White or light colored factory glazed Porcelain, Stoneware, or **Ceramic

There are two options for firing your images:

- **1. Direct Fired:** High fired to cone 06 or 02 depending on the surface. Apply transfer to ware and let dry for at least 3 hours.
 - Porcelain, Stoneware, Floor Tile or Thin Porcelain Ornaments; fire to cone 02
 - Commercial Wall Tile, Thick Porcelain Ornaments, Jewelry Blanks, or **Ceramics; fire to cone 06
- 2. Covercoat Fired: Low fired to cone 018 or 016 with a coating applied over the transfer after it is adhered before firing.

There are 2 options for Covercoats:

- 1. Lead and Cadmium Free: mix Reusche "Series 5" clear glaze or any light color china paint in a 1:1 ratio with mineral or baby oil (lead free cover-coats need a slightly higher fire temp: cone 016.)
- 2. Regular Covercoat: mix Flux or any Light colored regular china paint (not lead free) in a 1:1 ratio with mineral or baby oil/ fire to cone 018

With A Covercoat (cone 018 or Cone 016)

- 1. Apply transfer to ware and let dry for at least 3 hours
- 2. Paint a thin covercoat (see above) over entire unfired transfer with a soft brush
- 3. Fire to cone 018 for flux or regular china paint covercoats or cone 016 for Reusche lead free "Series 5" covercoats.

HINTS:

- For a neat covercoat: Tape around image making sure to leave about ½" space beyond edge of decal and apply covercoat within the taped area.
- Factory glazed **ceramic ware can be unpredictable and may work best with the covercoat method
- > To identify the type of clay used in store-bought ware: Porcelain and Stoneware are usually dry footed (no glaze in area that touches the kiln shelf) and will NOT get hot to touch in microwave. Ceramic gets hot to touch in the microwave.
- Outside venting system is recommended while the plastic film material burns off.

Adding Color:

All images fire to a beautiful rich sepia brown color. Color can be added:

1. Underneath the Image Using a Colored Surface

The transfer paper is transparent so wherever there are light or white areas in your original image will be colored from underneath according to the color of the surface that you are using. Blue backgrounds tend to blacken sepia images.

2. On Top of the Image Using China Paints or Overglazes

Translucent china paints or third fire overglazes can be applied over the already fired transfers and fired again. This method works great for "colorizing" photographs.

Firing Images Onto Fusible Glass

Selecting the Surface:

Images can be fired onto any color or type of smooth surfaced fusible glass.

- The best image clarity and contrast is provided by using white or light opaque (Opal) glass. (If using Iridized or Dichroic glass, test first on a small scrap piece)
- When using translucent or transparent glass, stack an opaque layer under the clear layer and adhere image to the top layer

Firing Instructions

- Images can be fired as many times as you like to any firing schedule but for best results when making un-capped projects, fire your images from 1250°F-1300°F (676°C-704°C)
- Capping is not necessary but if desired; First fire images on to the underneath layer and then add cap and fire again

Hints:

- > Some types of glass (thick or fire polished) may require a higher firing temp. Test on a small piece first. If image rubs off... fire higher. if image fades... fire cooler.
- > Outside venting system is recommended while the plastic film material burns off

Adding Color: All images will fire to a beautiful rich sepia brown color. Color can be added in by;

1. Using Colored Glass under the Image:

The transfer film is transparent so the areas that are light or white in your original image will be colored according to the color of glass that you are using underneath.

2. Painting under the Image:

Colored enamels or frits can be painted on and fired before the image is applied, allowing the color to show through from underneath the image. Simply trace your image onto your glass and then fill areas where you want color to be and then fire. Then apply your transfer over the colored areas and fire again.

3. Painting over the Image:

Transparent enamels can be applied over the already fired transfers and fired again. This method works great for "colorizing" photographs.

Troubleshooting

Black Toner smudged when you wiped the unfired transfer with a paper towel Run a few plain paper sheets through the printer to heat it up before printing on the transfer paper

Image has disappeared completely after firing

Make sure that you are using one of the recommended HP BLACK AND WHITE Laser Printers or Multifunction Printer /Copiers to make your image. Use a fresh toner cartridge if your results fade over time. Only use authentic HP toners, no substitutes. Make sure to use only "Fired-On Images" Brand of Transfer Paper.

Image wipes off after firing

Transfer firing too low, try again at a higher temperature. Remember that images fired onto Glazed Clay Surfaces **WITH** a covercoat applied will fire on at much lower temperature than images fired **WITHOUT** a covercoat.

Image has faded after firing

Transfer firing temperature is too hot. Try again at a lower firing temperature.

Contemporary Ceramics Studios: If you are firing transfers to cone 06 be sure to use one of the opaque glazes mentioned in the cone 08-06 transfer firing section on page 2 and place your ware in coolest part of kiln.

Image has cracks in it

A certain amount of microscopic cracking is normal but if you see large cracks after firing, this may be due to poor contact between the transfer and the glazed/ glass surface. Do not overlap transfer material, make sure there are no bubbles under your transfer and let it dry thoroughly before firing. Test on inexpensive pieces first. Factory glazed ceramic surfaces can be unpredictable and may work best with the lower fired covercoat method. To test whether your store-bought ware is Earthenware Ceramic, Porcelain, or Stoneware... place in microwave for a few minutes on high. Ceramic surfaces will get hot.. Porcelain and Stoneware do not.

Hint:

If image cracking continues to be a problem you can flip the image and use it toner side down. This requires printing the image in reverse and borrowing the adhesive from a blank square of transfer paper and spreading it onto the area before applying the image.

Ware has cracked after firing

Stoneware requires a slow fire for both heating up and cooling down. Porcelain and stoneware must be dry footed...placed directly on kiln shelf

Printers That Work with FIRED-ON IMAGES

You can use ANY HP Black and White HP Laser printers for this process.

If the machine can print in color-- the process won't work.

Commercially Available Printers as of 4/2010

	Туре	Max Dpi (dots per inch)	Mac Compatible	Print Quality			
Model #				Text	Graphics	Photo	\$\$\$
HP LaserJet P1006, P1005 , P1505, P1606	Laser Printer	600X600dpi	Yes	Great	Great	Good	\$
HP LaserJet1018, 1020 (Discontinued)	Laser Printer	600X600dpi	No	Great	Great	Good	\$
HP LaserJet, P2035	Laser Printer	1200x1200dpi	Yes	Great	Great	Great	\$\$
HP LaserJet 1022 (Discontinued)	Laser Printer	1200X1200dpi	Yes	Great	Great	Great	\$\$
HP LaserJet P2015, 2055, 3005, 3015, 4014, 4015, 5200, P4515	Laser Printer	1200X1200dpi	Yes	Great	Great	Great	\$\$\$
HP LaserJet M1522n	Multifunction Laser Printer Scan/Copier	600x600dpi	Yes	Great	Great	Good	\$
HP LaserJet 3052, 3055, (Discontinued)	Multifunction Laser Printer Scan/Copier	1200X1200dpi	Yes	Great	Great	Great	\$\$
HP LaserJet M2727nf, M1319f	Multifunction Laser Printer Scan/Copier	1200x1200dpi	Yes	Great	Great	Great	\$\$
HP LaserJet M3027, M3035, M4345	Multifunction Laser Printer Scan/Copier	1200X1200dpi	Yes	Great	Great	Great	\$\$\$
Older HP Laser Printer Models	Laser Printers	300 to1200dpi	Some	Great	Good	Good	\$

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