Fusing Fun with Paper!
Incorporating Design Elements Made with Fiber Paper & Ceramic Shelf Paper

Written by Jackie L. Doehling
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Cover photo dish was made with an image purchased through the Silhouette Design Store, by designer StudioIlustrado, design ID#69282.
After a few recent Facebook posts where I showed some examples using the processes in this tutorial, I thought it might be good to put it all together in one spot for easy reference. I have seen several other folks that do similar pieces which inspired me to try this. In no way am I claiming to be the one to invent these processes - but I am certainly willing to share how I have done them. I am including some firing schedules I use as well - but always remember A.K.A.D.... ALL KILNS ARE DIFFERENT! 😊

Enjoy!

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UPDATE - March 2015

While the schedule I had in my original document worked perfectly for the piece in the cover photo and a few others, I have experimented with some other top temps and also tried a suggestion of incorporating glass bits in the corners of the piece between layers to avoid bubbles when going to a full fuse. Please know this can be a trial and error process when incorporating the ThinFire between layers. For those projects using fiber paper to create a kiln-carved look, the same schedule has worked consistently for me.

Additionally, based on suggestions from other fusing artists I have changed my annealing temp for 96COE to 950 degrees F. I also updated these schedules to indicate having the last segment shut off the kiln at 600 (but wait for the temp to get below 100 before opening - it is never worth the risk to rush the cool down process or open the kiln too early.

Just wanted to share this update in case you reviewed the original document.
SUPPLIES

- Sheet glass cut to size- these can be scraps or leftovers from larger projects, depending on the desired finished project size
- Ceramic paper (such as Bullseye ThinFire Shelf Paper) or other kiln-safe paper material such as Dicro Slide or Glassline paper
- Fiber paper - thickness depends on look you want to achieve; I use 1/8” in the examples shown
- Something to cut your designs with - scissors, Exacto knife, craft punches, punch dies (Sizzix, etc.), or an electronic cutting tool (example Cricut®, Silhouette Portrait/ Cameo®, etc.)
- Prepared kiln shelf (you can use shelf paper or kiln wash, whichever you prefer
- Kiln with programmable controller

EXPLORE YOUR POSSIBILITIES - USE YOUR IMAGINATION!

Hopefully you never throw away your “scrap” pieces of shelf paper or fiber paper, or the leftovers generated when you cut a larger piece (is there really such thing as scrap?) I keep mine in a box I recycled from a mold purchase. For designs like the cover photo where I have fused paper between layers of glass, I use Bullseye ThinFire shelf paper. It works well with just about any craft punch, as well as die punches like the Sizzix, and my personal favorite, my Silhouette Cameo®. Additionally you may want to experiment with coloring your pieces with kiln-safe paints, mica powder, etc.

For a relief firing, or a kiln-carved look, you can cut shapes from 1/8” fiber paper (or thinner fiber paper or even multiple pieces of shelf paper stacked together!) I have not found a craft punch that will work 1/8” fiber paper, however it does work great with a Sizzix die. I have not tried cutting fiber paper using my Silhouette although I have seen posts by others that have done so. Since I have not personally tried it yet, I don’t have any images or suggestions to share using anything other than a Sizzix or hand tools (scissors, Exacto knife, etc.) for the thicker fiber paper.
You can also free-form cut your designs. You are only limited by your imagination and whatever tools & supplies you have on hand - but be creative! Look around your house - something you might have never considered a crafty tool can become one!

**ALWAYS** remember to practice safety when working with fiber paper - it can irritate your skin and the powder/dust released when cutting (and sometimes just handling it) is not safe to inhale. A dust mask is a good idea. Shelf paper can be dusty but not usually until after it has been fired. For the designs like the one on the cover where it is fired between glass layers, you shouldn’t have any post-firing dust (unless your glass breaks.) However the fiber cutouts will breakdown when fired so always handle with care.

**CUT THE DESIGN**

Here are a couple of examples of fiber paper cutouts I have experimented with. These were cut with a Sizzix and are actually double stacked, so my relief design is approximately ¼” deep. For the mitten “string” I just cut a curved single layer of 1/8” fiber paper.

Here are some small snowflakes I cut from ThinFire paper as well as a larger snowflake cut from Dicro Slide paper using a simple craft punch:

And for much more intricate detail, these were cut using a Silhouette Cameo® electronic cutting tool:
TIPS FOR THOSE USING ELECTRONIC CUTTERS

- If you are going to apply any fusible paints to your paper, you may want to do so before cutting (and ensure the paper is completely dry before cutting.) The Silhouette Cameo® I own has a print and cut capability - you can print your design on paper before cutting it. This would allow you to paint your design as well once you have the outline printed.

- Make sure your cutting mat is sufficiently sticky enough to keep your paper in place while it cuts. I had a mat that was starting to lose some of its adhesive quality and had a design get eaten up as it shifted around while cutting! If your mat has lost its adhesion, I have had success using a repositionable adhesive, like 3M Spray Mount to give it a fresh layer of tack. I will also note that if the mat is too sticky you may have issues peeling the paper off without it tearing. It is good to experiment with a small sample cut before cutting anything too detailed. If you have used a cutter for some time you probably know where the happy medium is for your mat tack.

- NEVER use any paper that you wouldn’t normally put into your kiln. You don’t want to chance a fire!

ASSEMBLE & FIRE YOUR CREATION

You might want to decide on your design size based on the size glass you have available; or you may decide to cut your designs first and then cut your glass to work with it. Here are a few additional tips I will share:

- When firing with ThinFire paper between glass layers, use two full thicknesses of glass. When I capped a color base with thin clear, I ended up with a much more crinkled
paper. I think this has to do with the fact that glass wants to be a certain thickness when fused. When I used a regular thickness clear cap, there was less pulling in on edges and the paper looked much better after firing.

- Have some space between your glass edge and your paper edge; I had the best success when my paper was about 1/2" in from all edges.

- If firing over fiber cutouts, you may want to tack fuse your glass layers together to avoid any shifting (I have shared an example where this happened on page 8.)

- Use a firing schedule that is more of a contour or texture fuse rather than a full fuse for the designs with paper between glass layers.

**FIRING SCHEDULES**

This is the fusing schedule I have had the best success with when firing ThinFire paper between two full layers of glass, and smaller sized pieces (6” or smaller.) It is one I use when doing contour or texture fuses normally as the temp is not quite as high as a full fuse. (All glass in my projects shown is 96 COE.)

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*Always wait until kiln is below 100 degrees F before opening!

This next schedule is a full fuse that will create the relief design from the fiber cutouts. For this process, I placed my fiber cutouts on the treated kiln shelf (use either kiln wash or shelf paper) and then placed the glass over the cutouts. You may want to tack fuse your layers together before firing over the cutouts (you will see an example of why I say this on page 8.) Alternatively you could dam the piece with fiber, etc. or even fire the entire thing within a mold to keep it from shifting.

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If you wish to slump your creation, use the slumping schedule that works best for you. I have a variety of molds and depending on the height, shape, etc. my slumping schedules vary more than my fusing schedules do. Just make sure you do your fusing before slumping and don’t try to do it all in one step.

FINISHED EXAMPLES
Here are a few pictures after firing. I am sharing the first set of ornaments I did as this is where I had thin clear on top and paper closer to edge - notice the crinkled look of the paper:
Here is a better piece where the paper did not crinkle. In this one I moved the design in further from the edge and also used regular thickness clear on top:

Here are a couple of pieces where I used fiber paper under the base glass to create a kiln-carved effect.
SOMETIMES PROBLEMS HAPPEN.....

Here is an example where my glass shifted when firing. I believe it was a combination of the size of the glass relative to the size of the cutout, the fact that two layers of fiber cutouts were under the smaller pieces, and that I didn’t pre-fuse the pieces together. I share this to show what can happen sometimes - I did make sure my kiln was level, so I know that wasn’t it. I have decided to do a tack fuse of the two layers of glass before laying over the cutouts in the future. Additionally you could dam the pieces with some fiber or other pieces, or fire in a dam type mold.

This one was a heartbreaker when I pulled it from the kiln - the glass formed a bubble and the paper appears to be burned. I used the same firing schedule I had in the red plate example on the cover, however the difference being it was done in a different kiln. Just like I keep reminding everyone when asked for my schedule - A.K.A.D! All kilns are different! The kiln I fired this one in has both side and top elements. I suspect it is firing hotter than my other one with top only, not just based on this epic fail but on some other projects that have failed in this kiln as well. My guess is I should not have gone as high in the fusing step. Some additional research is needed but I know what schedule works best for my other kiln, so back to that one I will go!

THANK YOU!

I hope you have found this tutorial helpful. I don’t mind sharing my failures as well as my successes as I always feel I am still learning and hope others can also learn from my mistakes as I usually try to do! Questions or comments? Please drop by my Facebook artist’s page and like my page to connect with me!

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