

Instructions from AAE Glass for Firing Their Decals



OK, Let's talk decals...Enamel fusible decals are a great way to embellish your fused glass backgrounds. If your decals do not look rich black in color or semi-gloss to high glossy...then "operator error!" Sorry my friends, there is no other way to say it. The decals are LOW FIRE and are actual glass enamels. They are screen printed (which is an art form in itself) and NOT digitally printed. AAE Glass' decals are very, very strong. You can even stretch them, cut them with exactos and guess what? When they slide off the paper, they do not curl up and thus are ruined. They just simply float off the paper and hang out in the water and wait for you to apply them. They are so strong and spectacular that we have even soaked them in apple juice and fired them. Why did I do this? Why not?

I just wanted to see if the color would still maintain after firing! It did! Although, let the record show, I do not recommend apple juice, just plain ol' warm, distilled water will do. Did you know it takes 6-8 weeks just to screen print ONE design? We do not digitally print and the quality stands for itself. When firing, all kilns are different of course. I have 9 different decal schedules for 9 different kilns. I am going to provide you with my firing schedule for my 20" clam shell Olympic kiln. The decals top firing range is from 1035-1100. I suggest the following schedule below to start. Always start at the lower end of the scale and re-fire them if you do not like the look. You can re-fire your decals 20 times if you wanted to. IF your decals scratch off with your finger nail, looks matte or grey in color, blistered or has burnt off - the problem lies in your schedule. What do you do if you just need some help? As I tell all my students, you email us. You do not quit! You try again. When you email us, we need your current firing schedule, what the decals looked like coming out of the kiln and what you wanted them to look like. The more info, the better. A picture is even better and we can solve the problem and we can get you a new firing schedule.

But For Now-Try This One:

250F to 250F hold/soak 10 min.

350F to 500F hold/soak 20 min.

500F to 1095 hold/soak 12 min.

Full Speed to 900 (anneal for specific thickness of glass)

TURN KILN OFF!

SOME OTHER IMPORTANT INSTRUCTIONS:

Application Instructions:

1. Clean the glass surface where the decal will go.
2. Remove any wax paper barrier, if any, from the decal surface.
3. If desired, cut decal to desired shape using xacto knife or scissors.
4. Soak the decal in a shallow pan of warm water until they easily slide off the paper. It is easier to apply decal directly from the paper to the glass piece. Leaving them in water too long will result in them floating off the base paper and it will be difficult to apply.
5. Use a paper towel to blot excess water and gently smooth out any wrinkles or air bubbles. If air bubbles are not gently rubbed out, a tiny hole will pop through the decal when fired.
6. Change water frequently after soaking several decals to remove impurities.
7. ALL MOISTURE MUST BE REMOVED PRIOR TO FIRING. OVERNIGHT DRYING IS HIGHLY RECOMMENDED!

Other Important Information:

Decals go on your FINISHED, fire polished piece. DO NOT cap the decals with a top glass layer. Decal firing is the last step to your piece. Preheating is particularly important in decal work. Materials from the medium on the decal must be burned off gently. Good ventilation allow for a clean final product. Leave the kiln lid open 1/2 inch with a 1/2" kiln post, plus any peepholes. No more than that. Preheat slowly to 1000 degrees to prevent pinholes or blisters, shut the lid and then proceed with normal ramping. Heat-soak the decals at top temperature for approximately 8-12 minutes. Start at the low end of the schedules and check your results. If you can still see the over coat on the decal, you did not fire hot or long enough. Guess what? You may refire the piece with no harm. Just tweek your schedule higher and a little longer OR you did not use distilled water. If you still some of the overcoat, try to wipe the overcoat away with a glass cleaner. If that does not work, refire your piece to the same decal schedule. THE FIRING SCHEDULES PROVIDED ARE FOR A REFERENCE POINT ONLY! GET TO KNOW YOUR KILN AND TAKE NOTES! Remember, it is always better to under fire than over fire your decals!

TIPS/TRICKS:

1. If you are using the large decals (Birds & Branches Sheet) you can push the temp to 1200-1250. The lower the better, but you can slump at these temperatures. Tricky, but worth it to figure it out.
2. You can overlap decals designs (perhaps a tree on top of a moon). This is advanced decal work and must be done on separate firings.
3. Color decals can be pushed in temp as well. You can fire these up to 1200.

What About The Metallic Decals?

NEW HIGH FIRE METALLIC DECALS are just that, high fire decals. Fire between 1300-1425 Fahrenheit. Can be used while fire polishing OR slumping at the same time! Two color decals are black with metallic high fire gold lining! Ventilation is key to a perfect gold or silver finish!

Suggested Schedule Below:

250 DPH to 350F Hold 10 min.

350 DPH to 750F Hold 20 min.

Full DPH to 1300-1425 Hold 12-15 min.

Full to 900 (Hold for specific annealing time)

Turn Kiln OFF