

How To Prepare A Mold For Glass Fusing (Or How To Get A Little Extra Mileage From Your Pantyhose!)

Any new mold warrants a close inspection to rule out any flaws or defects (like cracks or lumps) that may translate into problems with your finished glass piece. So first, give the mold a thorough wipe down with a damp cloth to remove any dust or debris that may be present and then have a good look at it. Assuming it passes inspection, you should then proceed to properly prepare the mold for use.

In order to prevent your glass projects from sticking to your mold(s), you must apply kiln wash (also known as kiln primer) to prevent the glass from becoming permanently affixed to the mold. Kiln wash/primer is typically sold in powder form, and water is added to create a "wash". The powder may be tinted and therefore will create a mixture that may be colorized (i.e., pink). If your kiln wash/primer is not tinted, do not worry.

As teachers and artists, it has been our experience that the manufacturer's suggested ratio of water to powder (usually 5:1) creates a "wash" that is really too thin. We have always been guided by the "look" of the kiln wash, and so we recommend that our students mix water into the powder until they have created a wash that looks like the consistency of whole milk or the well known coffee creamer, "Half and Half".

Once you have mixed up a batch of kiln wash/primer, you will want to apply it to your mold as carefully and evenly as possible. When heated in the kiln, your glass project will "pick up" every brush stroke, so the idea is to create a near-flawless finish on your mold as you apply the kiln wash/primer. Many people use the haik brush (pronounced "hake") to apply the wash, as this special brush consists of super-fine, super-soft hairs that hardly leave a mark. We can also recommend using a sponge brush (sized to fit the mold you are coating).

The Lasses suggest four even coats of kiln wash to ensure a smooth working surface. We teach our students to paint from north to south, then east to west before repeating the process to make four coats. Do not be surprised to discover that your mold soaks up the kiln wash/primer as quickly as the brush moves across the surface -- this is normal. Do NOT worry if some brush hairs are deposited on the mold and do NOT try to pick

them off until after the kiln wash/primer is COMPLETELY dry or you will leave "picking" marks on your mold.

Kiln wash/primer must be thoroughly cured (dried) before you can use it in the kiln. To do this, you have a couple of options. You can simply leave the mold in a warm, dry environment and let it "air dry" for several hours or you can speed things along a bit if you are able to place the mold outside on a warm sunny day to "bake" in the sun for an hour or more. Your other option is to cure the kiln wash/primer in the kiln. To do this, place the mold in the kiln and prop the lid open at least an inch. Leaving the lid propped open in this position, you will program the kiln to heat "as fast as possible" to 500F and to then "hold" that temperature for ten minutes before shutting off.

You may close the lid (if you wish) once the kiln has shut off, sealing in the hot air that will complete the curing of the kiln wash/primer. You cannot use the mold until it is completely COLD to the touch, and so this method will take several hours.

You will notice that if your kiln wash/primer was tinted and you used the kiln to cure it, it will have become a pale creamy color once it is completely dry. However, if you are air drying or sun drying the primer, it will only become a lighter shade when it is dry; retaining the tint that the manufacturer has used (i.e., pink) until it has actually been "kiln fired".

When working with small molds that have concave or convex surface areas (such as paperweights or barrette molds), the Lasses have found it can be a challenge to apply a consistently even coating of kiln wash/primer so here's where the pantyhose come in (as if you weren't just dying to know)! With an old pair of worn pantyhose, you can have a near perfect finish on any mold! Once the kiln wash/primer is completely dry, you can smooth out flaws in the finish and remove any stray brush hairs by balling the pantyhose up into your hand and GENTLY buffing/wiping the surface of the mold until you are satisfied that you have removed the unwanted irregularities.

The pantyhose act like a super-fine sanding pad and will allow you to remove small imperfections but should not be considered a cure-all for a sloppy application of kiln wash! Also, DO be careful to ensure that you have not been overzealous in your buffing; accidentally exposing the "raw"

surface of the mold, as glass will permanently adhere to any surface that has not been properly and adequately primed with kiln wash!

The Two Lasses recommend that you always make a habit of inspecting your molds before each firing, checking to ensure that there is a smooth, even coating of kiln wash/primer on the mold so that your finished project reflects your attention to the importance of proper mold preparation.