## Green Man

This mythical character comes to life with the use of powdered and fine frit to enhance the details of the superbly crafted mold.

Begin by treating the mold with a Boron Nitride spray. Be sure to angle the mold while applying the spray to coat the various angles and textures of the mold. Materials Required:

DT25 Greenman Texture Mold, Boron Nitride Spray, COE96 fine transparent frit: Dark Amber, Medium Amber, Lime Green. Orange, COE 96 powdered Dark Green Opal. COE 96 sheet glass: 12 x 12" Citron, 12" x 12" Clear. 1" kiln posts.

Minimum kiln chamber size 18" round or 14" square.











Sprinkle powdered Green Opal frit on the leaves and face. Use your fingers to gently wipe the powder into the crevices. Be careful not to remove the Boron Nitride by rubbing too much or too hard.

Sprinkle fine Dark Amber into the crevices around the face.



Sprinkle fine Medium Amber around the outside of the face blending into the Dark Amber.



Sprinkle fine Lime Green into the crevices of the leaves and blend out into the area outside of the leaves. Add fine Orange frit to random areas around the leaves



Place a 12" x 12" of Citron and a 12" x 12" of Clear (stacked) on the mold. Place the mold on 1" kiln posts in the kiln. Fire the project using the firing schedule provided and observing the notes provided in the following page.

## Firing Notes

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It is very important to get to know your kiln in order to fuse successfully. Many kilns will fire to a different temperature than the read-out indicates. Firing schedules should be written assuming that the kiln to be used will fire to the temperature it is directed to fire to by the operator. It is up to the kiln user to know whether a firing schedule should be adjusted to fit the idiosyncrasy of a given kiln.

At Creative Paradise, Inc. we have recently acquired a couple of new glass kilns. Upon first use it became clear that these new kilns fired much hotter than our original glass kilns. We had to figure out approximately how much hotter to know how to adjust firing schedules for the two new kilns. Instead of investing in more equipment to give us a superbly accurate read out of temperatures, we created a process of firing test tiles to figure it out with a relative degree of accuracy.

We cut two 1" square pieces of COE 96 Double Thick Clear and stacked them together and cut a 1" x 1.5" Black stacked with 1/2" x 1" opaque Yellow and placed these test tiles along with projects in each kiln firing and made notes.

Through this process we found out how to adjust firing schedules with each kiln. The Greenman firing schedule is one written to end in a full fuse with slow ramps and bubble squeezes added below the working temp.

The slow ramp is necessary with the project because large sheets of glass are being fused.

Whenever fusing large pieces of glass it is wise to ramp slowly below 1000 degrees to avoid thermal shock in the glass. Glass being held on raised texture (as in the Greenman project) is even more susceptible to thermal shock.

The long holds below the working temp of 1465 are there to allow the glass to soften and ease into the many low areas of the texture mold and for the two 12" x 12" of sheet glass to come together without trapping air between the two layers. This process needs to happen at temperatures below 1250 degrees to be most successful.

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Seg- ment	Rate	Temp	Hold
1	200	1215	45
2	50	1250	30
3	250	1330	10
4	300	1465	10
5	9999	960	90
6	100	500	5

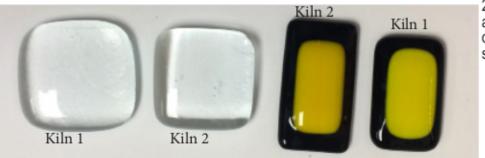
If a kiln is firing hotter than the read out indicates, the critical bubble squeeze will be missed and the glass will be over fired creating sharp serrated edges on the fused glass. Depending upon how far off a kiln is firing, the glass separator can even fail.

An example of test tiles with notes gathered with time and firings.



Test tiles fired in the kiln with the Greenman project pictured on page 1.

The Greenman pictured on the previous page of this tutorial was fired in a kiln that we know to fire hot. Through the test tile process we have estimated it to fire about



20 degrees hotter than expected. We adjusted the firing by taking 20 degrees off of the holding temp in each segment.

The test tiles labeled "Kiln 1" were fired in the kiln with the Greenman project using an adjusted firing schedule (top temperature of 1445). The test tiles labeled "kiln 2" were fired using that same adjusted firing schedule in a kiln known to fire with relative accuracy. It should be clear that one of the kilns fired hotter than the other regardless of the firing schedule that was entered into the controller.