

## Kilnformed Flashed Glass

*with instructions and photos compliments of Gail & Dan Jenkins at Second Story Glass & Wood*

Although flashed glass is traditionally made by glassblowing, you can make your own by fusing layers of glass together in a kiln. Not only can you make it for a fraction of what you'd pay to buy flashed glass, you can make it in any colours you want.

Here's some examples of kiln-fused glass that was used for sandblasting:



The **LION** was made with 2mm **Black** fused onto 3mm **Marigold** fused onto 4mm **Clear**. The lion pattern was sandblasted through the Black to reveal the lion pattern in Marigold.

2mm thin Black was used for the cap to minimize the time spend blasting through the black. An extra layer of clear was fused on as a base to increase structural strength because our previous experiments demonstrated that without this base, the sandblasting will crack the second layer glass.



The **DRAGON** was made with 2mm **Black** fused onto 3mm **Red** fused onto 4mm **Clear**.



The **NATIVE MOON** was made with 2mm **Black** fused onto 3mm **Yellow** fused onto 4mm **Clear**.

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### **Some helpful tips:**

#### **Fuse in a mold**

When you fuse a combined 9mm thick layers of glass, the glass will spread out from the original size as it moves to become 6mm (1/4") thick. If you want it to retain the original shape and size, you must use some form of mold to prevent the glass from spreading. To fuse the desired 3 layers, the following kiln firing schedule is suggested for COE 96 glass:

1. 200 dph to 1000°F hold 20 min
2. 75 dph to 1150°F hold 20 min
3. 850 dph to 1460°F hold 20 min
4. FAP to 960°F hold 90 min
5. 200 dph to 100°F OFF.

Add 25°F to all top temperatures for COE 90.

#### **Use thin glass cap**

It can take several hours to sandblast through even 2mm glass. It takes much longer to blast through thicker glass. To produce a thinner than 2mm cap, you can fuse a layer of power onto the mid colour and the base – or you can grind off part of the the 2mm cap once it's fused on.

#### **Backlight while sandblasting**

It takes some time to sandblast through 2mm of glass. The Dragon took almost 4 hours. You'll want to be careful to not blast through too much of the second layer and try to get a relatively even surface on the coloured second layer. It helps if, as soon as you see some of the colour appearing through the top layer, you put a light behind your project to help see where you have removed enough of the top layer and make it

easier to blast away a relatively uniform amount of glass.

#### **Firepolish after**

Sandblasted glass has a rough frosted finish. You can leave it frosted, or you can do as was did and fire polish it to produce a smooth gloss on the second layer and smooth off the sandblasted glass edges. Use this firing schedule for Systems 96 (add 25 degrees to all temperatures for Bullseye):

1. 200 dph to 1000°F hold 20 minutes
2. 900 dph to 1350°F hold 10 minutes
3. AFAP to 960°F hold 90 min
4. 200 dph to 100°F OFF

This will put a smooth even sheen on the mid layer coloured glass and produce softened edges on the sandblasted edges of the top layer. If you want sharper and more defined edges, reduce the hold in segment 3 to 8 minutes. If you want them more rounded, increase to 12 minutes.