Float Glass Mosaic Tray

Fusing with float glass can be great fun. It uses free glass, it’s easy to do, and it’s a terrific way to learn how glass responds to being fired in a kiln. There are 3 key factors to consider when working with float:

- **Compatibility** – all glass is compatible if it’s from the same sheet but you can’t assume any glass from any different sheet is compatible when you mix glass from different sheets.

- **Lower COE = higher temperature** – float glass varies from COE 82 to 86 and requires a higher temperature than art glass to fuse. To produce the same results as COE 96 glass, add 50° F to all top temperatures.

- **Devitrification** – float glass is a lot more likely to devitrify than glass made for fusing. To avoid devitrification use a devit spray or coating – or, you may find as many artisans have, that the foggy look of devitrification adds an interesting and attractive look to the project.

You can use clear float, gray tint or bronze tint. For the project in the photos shown here, we used bronze. You can use any thickness you want. This project uses ¼” (6mm) thick glass. To break it up, you can smash it with a hammer into random size pieces or cut it into relatively similar sized bits with a glass cutter. I usually alternate between each method for different looks. The project here was done with pieces cut by hand into roughly same size but random shape. I prefer the look of random shapes but there’s no reason you couldn’t make project using pieces all the same size to create a geometric design.

### Assembly

One of the best things about making float glass mosaic bowls or trays is you don’t have to fuse and slump separately (unless you really want to) but can fuse and slump in the same firing. Start building the tray by placing a piece in the middle of the mold. Keep adding pieces laid against it until they reach the edge of the mold.
Once you have completely filled the mold to the edge, lay on a second layer the same way you did the first.

Starting the second layer

Firing

How hot to fire depends entirely on how you want the finished project to look. A tack fuse will leave a clean defined edge but will also leave sharp edges and sharp points that you’ll want to file or grind off. Close to a full fuse will soften out the design and remove much of the clean definition. My choice is to compromise with a temperature that will leave strong definition but soften off the glass edges enough to not require any coldworking.

Firing Schedule Used

<table>
<thead>
<tr>
<th>SEGMENT</th>
<th>RAMP</th>
<th>TEMP</th>
<th>HOLD (min)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>500F (260C)</td>
<td>1000F (515C)</td>
<td>20</td>
</tr>
<tr>
<td>2</td>
<td>900F (500C)</td>
<td>1420F (775C)</td>
<td>20</td>
</tr>
<tr>
<td>3</td>
<td>FULL</td>
<td>960F (515C)</td>
<td>60</td>
</tr>
<tr>
<td>4</td>
<td>400F (200C)</td>
<td>300F (150C)</td>
<td>0</td>
</tr>
</tbody>
</table>

CAUTION:
When you only fire slumping molds to slump temperatures, you can keep reusing them without applying more kiln wash. If you fire to a higher temperature to slump and fuse simultaneously, you shouldn’t trust using the mold again without applying another layer of kiln wash. Just one coat is all that’s needed.

The finished project