B220 WavEdge Mold Bundle

With a Square Cast Foot or a Slump-Drop Foot

Use this Mold Bundle to Create a 9" (23 cm) Square Footed Platter



C110 Foot Mold & S220 WavEdge Mold



Bars & Squiggles created on the Mold

WavEdge Mold Process Overview

Use the WavEdge Mold to create a square cast footed platter in a three-step process.

- 1. The first step is to cast a square glass foot using the C110 foot casting mold and 5.6 oz (160 g) of scrap-glass shards.
- 2. Then design and fuse a 9.25" (23.5 cm) square flat design. This could be a single glass layer with fused design elements on it or it could be a two layer, full-fused design, or simply cut a 9.25" (23.5 cm) square from a compelling piece of fusible art glass and let the design in the glass and the square cast foot on the bottom be the star.
- 3. The final step is to slump the design into the WavEdge Mold to shape the platter and attach the cast glass foot to the underside in a single firing.

Note: You can create a beautiful platter using this mold without adding the cast glass foot. Simply create your 9.25" (23.5 cm) square design, place it on the S220 mold and follow the slump firing schedule that will find in this booklet. The center of the design will slump into the foot cavity in the mold to form a slump-drop foot.

Register Your WavEdge Mold and Get a FREE eProject

Go to the <u>www.artglasslove.com</u> website then click on the Support menu and choose Register Your Mold. Fill in the short information form and we'll send you an email with a link to download an eProject for the WavEdge Mold. An eProject includes a PDF eBook with detailed step-by-step instructions, a full-size pattern drawing (that you can print on your desktop printer) and a link to the online Webcast video where you can watch the project fabrication from beginning to end. Registration is easy and the reward is worth it - so go get it!



MUST READ SECTION! - Separation of Glass and Mold

The first step, as always, is to prepare the mold with the appropriate release separator. The WavEdge Mold is manufactured using a proprietary mix of dense ceramic clay that creates an exceptionally smooth surface. This clay is so dense that powder-type separators (a.k.a. kiln-wash or mold primer) will often bead up and refuse to stick to the mold. That is why we only recommend using ZYP[®] Lubricoat Boron Nitride separator for all our molds. Boron Nitride is very smooth and silky leaving the bottom surface of your platter with the smoothest possible surface. This ZYP[®] Lubricoat comes in a convenient spray can and works fabulously for both casting and shaping molds. New ceramic molds require 3 light coats of ZYP[®] with a 10 minute drying time between coats. For subsequent firings simply remove the loose powder from the surface with a



Spray ZYP[™] Mold Release on the C110 mold



Coat the C220 mold with ZYP[™] Boron Nitride

Kiln Temperature Variations

soft bench brush, then apply one light restoration spray-coat.

IMPORTANT NOTE: The reason we only recommend ZYP^{**} Lubricoat is because it has a high concentration of boron nitride as compared to other brands of boron nitrite spray. ZYP^{**} Lubricoat has proven to protect ceramic molds during both slumping and hi-temperature casting. If you try to save a few dollars by using any other brand, you run the very real risk of damaging or ruining your mold.

We recommend against using a kilnwash or primer separator for any glass shaping or casting mold. To read some mold misadventure stories and a few possible recovery strategies, please see the FAQ section on our website... <u>www.</u> <u>artglasslove.com</u>

Experienced fusers know that pyrometers and digital controllers are calibrated differently for every kiln. The temperatures shown in the schedules in this booklet (and also in our book Joy of Fusing) were carefully researched to be the average temperature for fire-brick kilns manufactured for glass fusing. The reality is the temperature in your kiln is likely to be 5°F to 20°F higher or lower than our schedules. If you are firing in a Rigid-fiber kiln your temperatures are likely to be 35°F to 50°F higher to achieve the same result as a Fire-brick kiln. That is why it is extremely important for you to know your kiln and the best way to do that is to create a Fusing Level Sample Set. The process and schedules to create one of these 6 tile sample sets is in our book Joy of Fusing. Or you can purchase the eProject for the Fusing Level Sample Set on our website: www. artglasslove.com

Putting Your Foot Down

If you would like your platter to have that distinctive blown-glass look, you will want to create a square cast foot in the C110 casting mold and add that to the bottom of your platter. However, the WavEdge Mold will enable you to shape a beautiful platter without adding a square cast foot. Instead your design will slump into the foot cavity in the mold to form a drop-slump foot. Just skip this next step and move to the slumping step.

For this project we will create a foot in the C110 casting mold. Prepare the C110 mold using ZYP[™] Lubricoat Boron Nitride spray (please read the Separation section). Then use mosaic nippers to break the glass into shards from 1/4" to 3/4" (6mm to 20mm). An all clear glass foot is classic but a mixture of clear with a complimentary color from your



Measuring 160 grams using a digital scale design can be very impressive. Or use all clear shards then add some frit to create a color layer. You can use any frit size from powder to course depending on the look you are going for. Remember the COE of the frit must match the COE of the glass shards and the COE of your platter.

Place the prepared C110 mold on a digital kitchen scale and zero the tare



The C110 mold with foot after a cast firing

| Foot Casting Schedule | | | | | |
|-----------------------|---|---------------|----------------|---------|--|
| Segment | # | Degree/Hour | Target Temp | Minutes | |
| Primary Heat | 1 | 300°F - 165°C | 1200°F - 650°C | 30 | |
| Intention Heat | 2 | 600°F - 325°C | 1485°F - 805°C | 45 | |
| Rapid Drop | 3 | Full/AFAP | 950°F - 510°C | 60 | |
| Anneal Cool | 4 | 75°F - 40°C | 800°F - 430°C | 10 | |
| Power Off | 5 | Kiln Off | Room Temp | ~ | |

weight, then carefully place 160 grams of glass shards into the mold. Now put the C110 mold filled with glass in your kiln and set the kiln controller to fire the Casting Schedule, shown here. Be sure to read the Kiln Temperature Variations section on previous page.

Download an eProject with a Video from the artglasslove.com website

This 9.25" (23.5 cm) square flat design was created using narrow reeded glass to ensure the stringers stayed straight. Download an eProject and Video by registering your WavEdge mold at: <u>www.artglasslove.com</u> then choose the the WavEdge project the eProject download catalog.

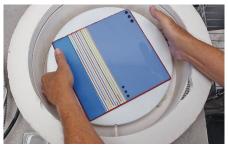




Create a 9.25" (23.5 cm) square flat design3 Bar Blues design ready for flat fusingFor more Fusing Fun and Information visit:www.artglasslove.com

Shape the WavEdge Platter and Attach the Square cast foot

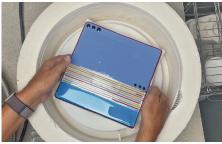
If this is the first time to use your new WavEdge mold please read the Separation of Glass and Mold section in this booklet. New ceramic molds require 3 light coats of ZYP[™] Lubricoat with a 10 minute drying time between coats. If you have previously fired your mold, you should lightly brush the inside of the mold to remove the loose boron nitride



The 3 Bar Blues design ready for slumping



Place the pre-cast square foot into the reservoir



Center the pre-fused design on the upper flange



The slumped platter still in the kiln after firingCompleted 3 Bar Blues Platter with cast foot4Download eBooks & eProjects for Fusing at: www.artglasslove.com

powder (be sure to wear a dust mask when cleaning or applying mold release). Then coat the entire inside surface of the mold with one light restoration spray-coat of ZYP[™] Lubricoat.

Now place the pre-cast glass foot into the mold by lining up the key marks then place and center the pre-fused flat design on the upper flange of the WavEdge Mold.

Finally, set your kiln controller to follow the forming schedule shown here. It is important to follow the recommended Primary ramp speed of 250°F (135°C) per hour to harmonize and maintain a balanced temperature between the fused glass and the ceramic mold. Ramping too quickly brings very high risk of thermal shock. It is also important to anneal soak for 3 hours (180 minutes) then ramp down slowly to room temperature. To enable the platter and the cast foot to cool at the same rate.

| WavEdge Mold Forming Schedule | | | | | | |
|-------------------------------|---|---------------|----------------|---------|--|--|
| Segment | # | Degree/Hour | Target Temp | Minutes | | |
| Primary Heat | 1 | 150°F - 80°C | 500°F - 260°C | 20 | | |
| Intention Heat | 2 | 300°F - 165°C | 1260°F - 682°C | 10 | | |
| Rapid Drop | 3 | Full/AFAP | 950°F - 510°C | 60 | | |
| Anneal Cool | 4 | 50°F - 26°C | 750°F - 400°C | 10 | | |
| Power Off | 5 | Kiln Off | Room Temp | ~ | | |

