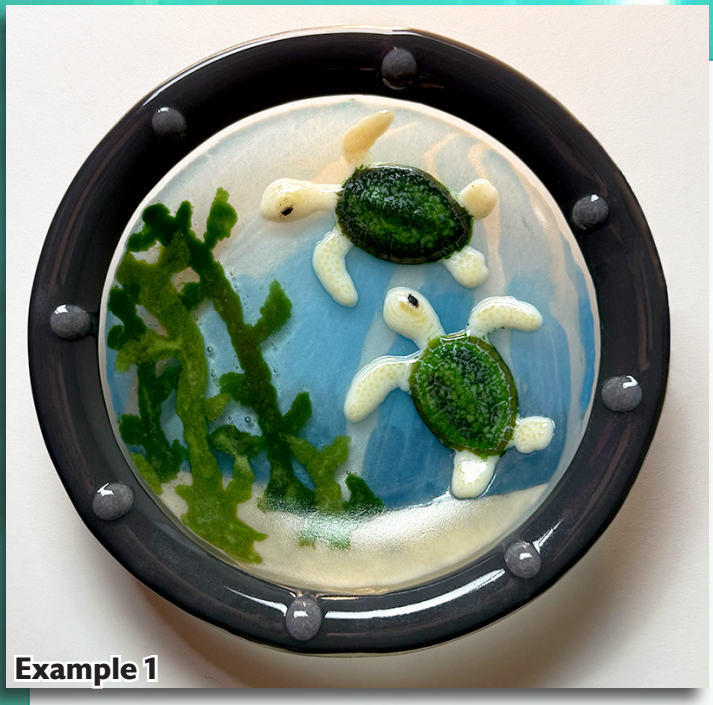
Porthole Dish

Creative Paradise Inc.


Example 1

Materials:

- LF258 Two Small Turtles
- GM66 Shallow Bowl
- LF45 Mini Disks (Optional, See **Note**)
- COE96 Glass (See Below)
- Suitable Glass Separator/ZYP
- Glass Cutting Tools
- Frit Slurry Supplies *
- Kiln Shelf Paper
- Kiln Posts
- Ceramic Tile or Small Removable Kiln Shelf
- Frit Placement Tools

*Refer to this Basic Slurry Tutorial.

NOTE: The LF45 and F3 Pewter frit are used to make the "rivets" seen on the porthole. Any pre-fused compatible "pebble" around 0.5" in diameter will also work.

Suggested Glass:

- F1 Powder Frits:
  - Sapphire Trans.
  - Sea Green Trans.
  - Pale Blue Trans.
  - Sky Blue Trans.
  - Navy Blue Trans.
  - Champagne Opal
  - Pale Amber Trans.
  - Dark Green Opal
  - Fern Green Opal
  - Black
- F3 Medium Frits:
  - Pewter Opal (Optional, see **Note**)
  - Dark Green Opal
  - Fern Green Opal
  - Almond Opal
- Sheet Glass:
  - Standard Thickness Clear
  - Payne's Gray Opal

Before You Begin:

Prepare the molds thoroughly with suitable glass separator before adding glass. We recommend spray-on ZYP. **Always wear a mask when applying spray-on separator or using dry powder frits.**

Making the Background:

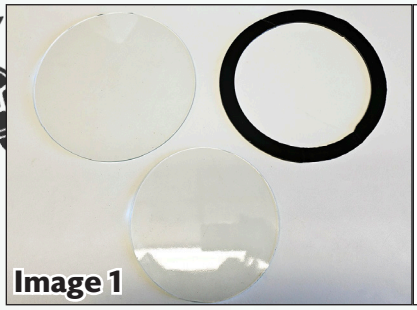


Image 1

Cut one 10" diameter and one 8" diameter circle of Standard Thickness Clear sheet glass.

Refer to this "Bordered Fluted Bowl" Tutorial to cut a 10" diameter ring of Payne's Gray Opal sheet glass 1" thick. Any breaks can be healed in subsequent firings or covered by rivets.

Clean all the cut glass well.

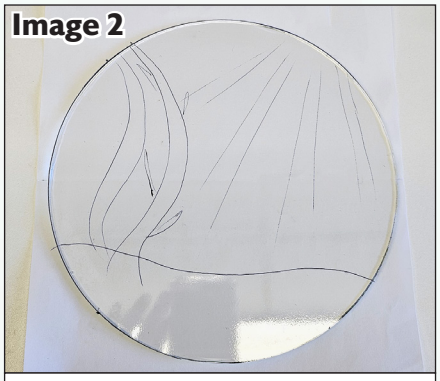


Image 2

It can be helpful to have a loose pattern placed under the glass as a guide. Place a pattern or a plain towel down on your workspace then center the 8" circle of Clear on top.

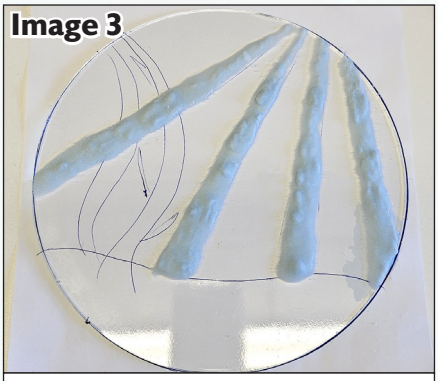


Image 3

Begin by creating a slurry by mixing F1 Sapphire and F1 Sea Green frits in a 3:1 ratio with just enough water to cover the top.*

Use a small spoon to carefully place this mixture into rays.

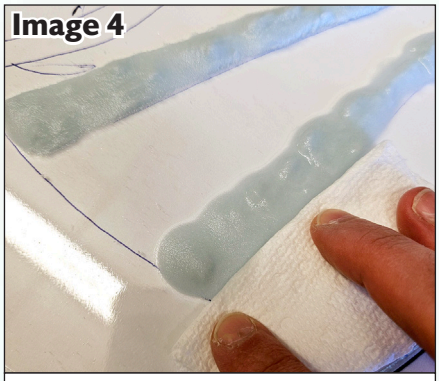


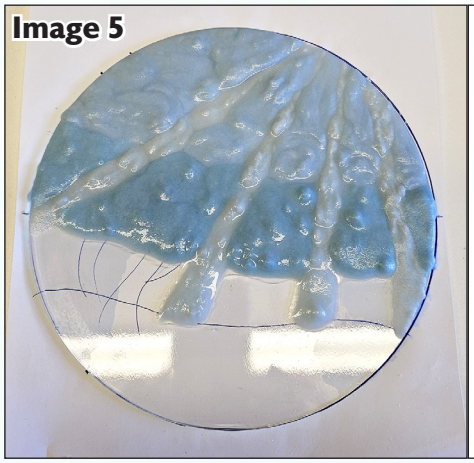
Image 4

To keep the lines clean, fold a piece of paper towel and press the folded edge gently along the sides of each ray. This will absorb excess water as well as straighten the edges.

* For more on slurries, refer to our Basic Slurry Tutorial here.

Background Image from NOAA

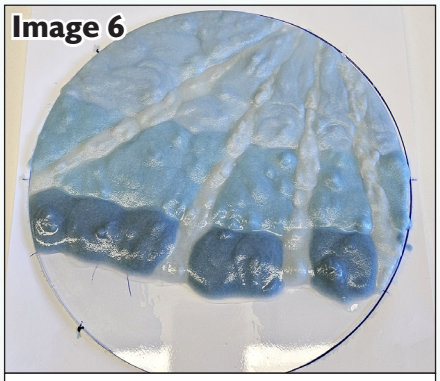
Background con't:



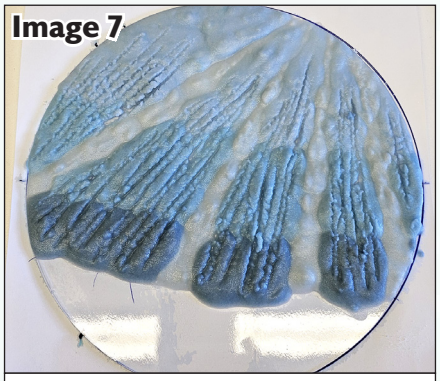
Create a slurry with F1 Sapphire, F1 Pale Blue, F1 Sky Blue, and F1 Sea Green in a 1:2:½:½ ratio in a clean cup. Scoop this slurry into the top third of the water portion of the design, between the rays.

For the next layer, make a slurry with F1 Pale Blue, F1 Sky Blue, F1 Navy, and F1 Sea Green in a 1:2:¼:½ ratio. Create this new mixture in the same cup used for the previous mixture for added consistency between layers.

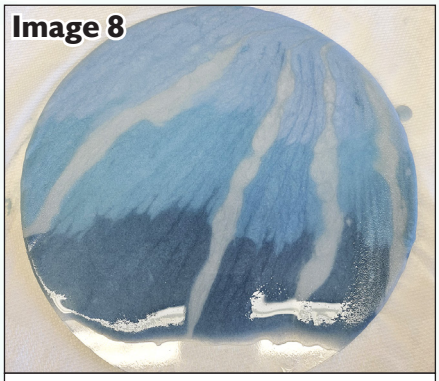
Add this mixture to the middle third of the water portion of the scene.



Make a slurry with F1 Sky Blue, F1 Navy, and F1 Sea Green in a 1:1:1 ratio, again in the same cup as the previous mixture. Add it to the bottom third of the water portion.



Take a Needle Tool or similar instrument and drag it between the layers in both directions, taking care to leave the rays untouched.



Gently shake the glass from side to side to evenly disperse the slurries. The rays may jostle a bit, but they can be gently corrected with a few nudges from a pointed tool.

Slurry Mixture Ratios:

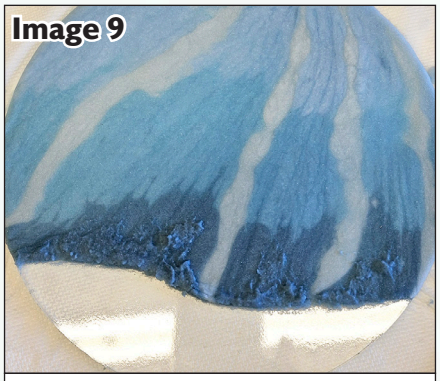
Top Water Layer:
- 1 part Sapphire
- 2 parts Pale Blue
- 0.5 part Sky Blue
- 0.5 part Sea Green

Middle Water Layer:
- 1 part Pale Blue
- 2 parts Sky Blue
- 0.25 part Navy
- 0.5 part Sea Green

Bottom Water Layer:
- 1 part Sky Blue
- 1 part Navy
- 1 part Sea Green

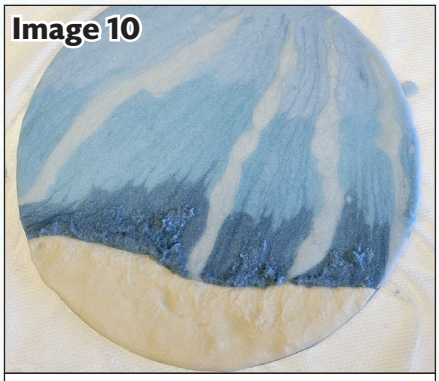
Sand:
- 2 parts Champagne Opal
- 1 part Pale Amber

Kelp (**Page 3**):
- 2 parts Dark Green Opal
- OR-
- 2 parts Fern Green Opal
- 1 part Pale Amber
- 0.5 part Sea Green



Use a paper towel or similar to press back the slurries at the bottom edge where they will meet the sand.

Use your fingers to smooth out any ridge that may form.

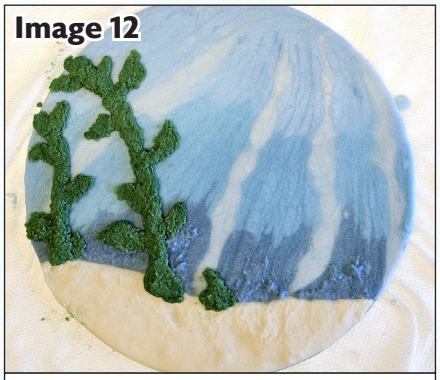


Create a slurry using F1 Champagne Opal and F1 Pale Amber in a 2:1 ratio in a **clean** mixing cup and add it to the sand area. Keep the line where the water and sand meet clean.

Background Image from NOAA

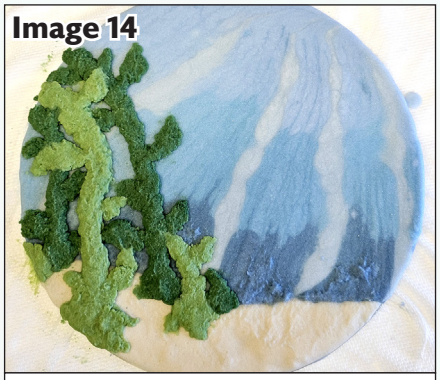
Background con't:

Make a slurry in a **clean** cup with F1 Dark Green, F1 Pale Amber, and F1 Sea Green in a 2:1:½ ratio. Keep this slurry drier than usual.



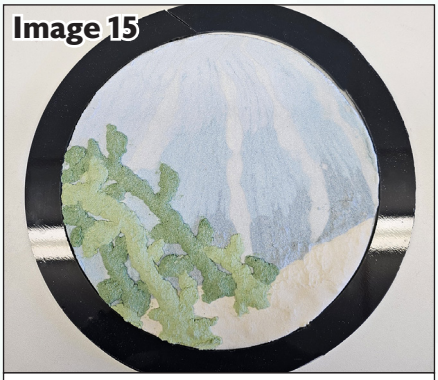
Using a small scoop or spoon, dollop the slurry into kelp shapes. A wet fingertip will help smooth them out and make manipulation easier.

When placing this slurry it should behave more like very wet sand than liquid, which will help it keep its kelp shape.



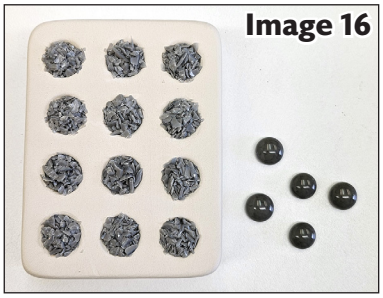
Create a slurry with F1 Fern Green Opal, F1 Pale Amber, and F1 Sea Green in a 2:1:½ ratio in a **clean** cup and use it to create additional strands of kelp.

Once finished, clean any slurry off the edges and bottom of the glass, and set it aside to dry.



Once the slurries are completely dry, assemble the dish base together starting with the 10" circle of Clear. Center the 10" ring of Payne's Gray on top of the Clear so their outer edges align, then carefully place the slurried 8" circle within the ring.

Rivets:



If not using pre-fused glass pebbles, fill each cavity of a primed LF45 with F3 Pewter frit (about 1g per cavity if using fill weights).

Fire using the suggested schedule in **Table 1** or your own preferred Full Fuse.

Transfer the project onto a suitably sized sheet of Kiln Shelf Paper on a ceramic tile, and elevate on 1" Kiln Posts on a level shelf in the kiln.

Fire using the suggested schedule in **Table 1** or your own preferred Full Fuse. If making the rivets for the final dish, they can be fired in the same kiln at the same time.

*Before firing, it's important to know your kiln. For tips on how to do that, please click here to see our Important Firing Notes!

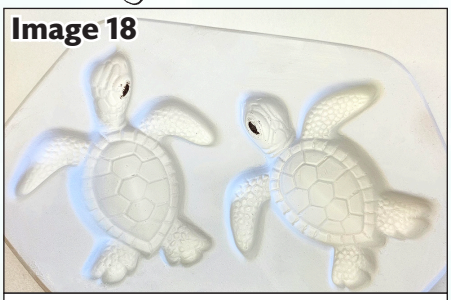
Table 1: Full Fuse*

Seg.	Rate	Temp (°F)	Hold
1	300	1150	45
2	150	1300	20
3	400	1460	10
4	9999	950**	60

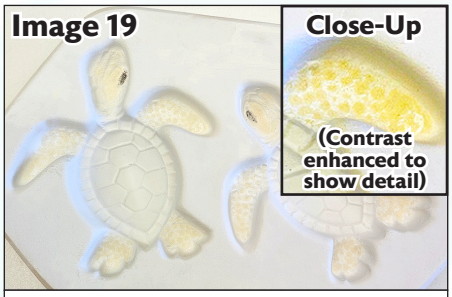
**If using COE90, adjust this to 900°F

Background Image from NOAA

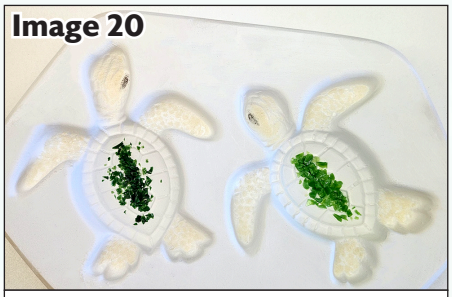
Making the Turtles:



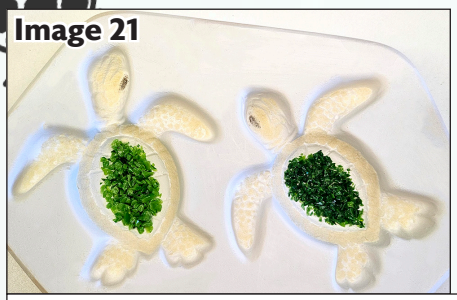
Begin by adding F1 Black to the eyes. Clean up any frit that falls outside the eye area.



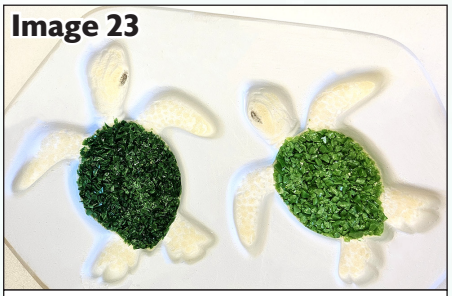
Sift or sprinkle F1 Pale Amber into the head and fins, then use a clean finger to gently press it down into the lower areas (**Close-Up**, top right). Take care not to remove any separator.



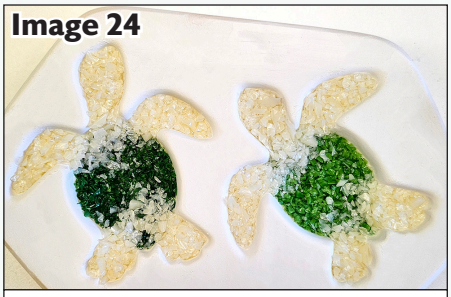
Add a bit of F3 Dark Green Opal (left) or F3 Fern Green Opal (right) in a stripe down the middle of each shell.



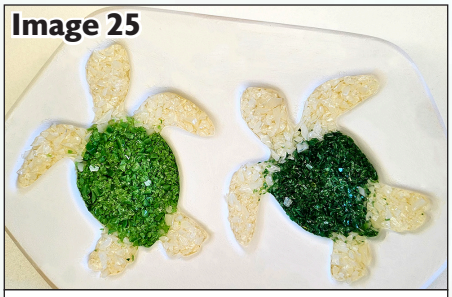
Sprinkle a bit of the opposite green (F3 Fern in left, F3 Dark in right) above and around the green already in the shell. Add a bit of F1 Pale Amber in the outer ring of scutes of each shell and pat it down as before (**Image 22** Close-Up).



Add a layer of the opposite green (F3 Dark in left, F3 Fern in right), over the entirety of each shell.



Place F3 Almond Opal in the heads and fins, spreading it into the shells. Make sure there is plenty where each limb joins the shell, especially in the necks.



Place more of the opposite green (F3 Fern in left, F3 Dark in right) until each turtle is filled just below the edge of the mold (**Image 26**). If using fill weights, each turtle is around 35g.

Transfer to a level shelf in the kiln and fire using the suggested schedule in **Table 2** or your own preferred Tack Fire.

Table 2: Tack Fire*

Seg.	Rate	Temp (°F)	Hold
1	275	1150	60
2	50	1300	30
3	350	1365	05**
4	9999	950***	90**

***If using COE90, adjust this to 900°F

*Before firing, it's important to know your kiln to see if you need to adjust our suggested schedules for your use. For tips on doing that, please click here for our Important Firing Notes!

NOTE: When repeating this firing to fuse the turtles and rivets to the background on **Page 5, adjust these holds to 08 min. for Segment 3 and 120 min. for Segment 4 to compensate for the increased amount of glass.

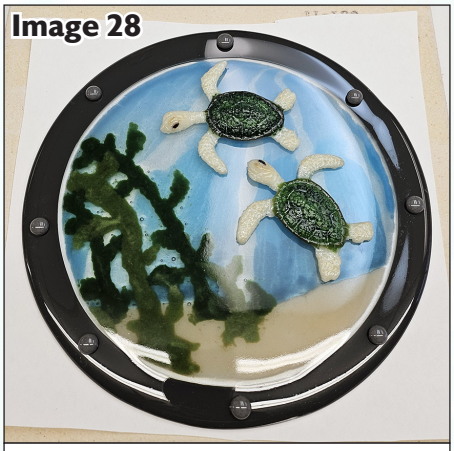
Background Image from NOAA

Assembly:

Image 27

Once fused and cooled, carefully remove the turtles from the mold and rinse off any residual separator. Warm water and a stiff-bristled (but not wire) brush work well.

Image 28



Place the fused background on a suitably sized sheet of Kiln Shelf Paper on a ceramic tile. Arrange the turtles and rivets atop as desired. If there are any seams in the outer rim, placing a rivet on top can help disguise them.

Image 29

Transfer the ceramic tile onto Kiln Posts on a level shelf in the kiln and fire using the suggested schedule in **Table 2** on **Page 4**. As seen in the double asterisk **NOTE**, the hold times of Segments 3 & 4 should be increased for this firing. If using your own Tack Fire schedule, adjust accordingly.

Image 30

Once everything is cool, center the project on the GM66 mold that has already been treated well with suitable separator. Transfer to a level shelf in the kiln and fire using the suggested schedule in **Table 3** or your own preferred gentle Slump schedule.

Table 3: Slump*

Seg	Rate	Temp (°F)	Hold
1	275	1225	10
2	9999	950**	120

**If using COE90, adjust this to 900°F

*Before firing, it's important to know your kiln to see if you need to adjust our suggested schedules for your use. For tips, click here for Important Firing Notes!

Example 2

This piece makes a fun trinket dish or wonderful display! The dish in **Example 2** is displayed on the LF253 Large Easel, which was slumped on the GM277 Angle Drape.

Example 3

For more information, tutorials, and molds, visit our website: www.creativeparadiseglass.com

Creative Paradise Inc.

Special thanks to Wayne Schultz of Goddard, KS for his assistance with this project!

Background Image from NOAA