

# Murrini & Filigree Application

By Dave Strobel

Dave Strobel's passion for glass began in 1991 when he took a couple of community college off-hand soft glass courses. Two semesters later, he moved to Oregon where he trained and worked as a glassblower for several borosilicate artistic and scientific companies. In 1994 he struck out on his own to pursue his many artistic ideas using his skills in borosilicate glass. In 1998, he turned his attention to murrini and millifiori, and hasn't looked back. Today, Dave creates beautiful marbles and paperweights using the murrini and filigree from his business Strobelglas, a borosilicate murrini and filigree manufacturer offering nearly 100 images and several styles of striped filigree canes. With over a thousand murrinis made, Dave is one of the most experienced murrini artists of today. Strobelglas takes up the majority of his time nowadays, but he still takes at least a weekend or two a month to make his unique style of paperweights and marbles (or other art.)

"For me, working hot glass is a freedom I seldom find in any other aspect of my life. When the flame is on, and the glass is hot, it becomes a truly surreal time. As my experience grows, so does my enjoyment of working glass. As each year passes, I enjoy glassblowing more and more."

"I find that boro is about as user-friendly as glassblowing gets, the higher silica content allows it to stay together far after what would have cracked a piece of soft glass. I try to take advantage of this user friendliness by constantly experimenting with new techniques and process based upon ideas and imagination. I think, "What would I like to make?" and, with boro, I can usually (with experimentation) reach that goal."



The foundation of murrini started with glass mosaics made by the Egyptians dating back to around 2000BC. Though the first true samples of glass murrini date back to 100B.C., the Italians took it to a completely new level around 1500AD when they developed a technique called Millifiori (translated means "thousand flowers".) In simple terms, this is done by making a single flower cane, melting and stretching it around 100 feet long, then cutting it into a thousand lengths, each about 4". These pieces are bundled together and melted and stretched again, making a cane with a thousand flowers in it. Today, millifiori is an accepted term for any repetitious, cascading pattern (as it applies to internal canework.) With the advent of millifiori, murrini soon followed. Simply, a murrini is any asymmetrical image or picture that doesn't fall into the millifiori category, such as a portrait, or a landscape. It can be produced in a furnace or on the torch (lampworked), though I produce mine exclusively on the torch.

There are two basic mediums of artglass, loosely called "soft" and "hard" glasses. Soft glass has been around in various forms for over 3500 years, while hard glass was created in the mid 1900's for scientific apparatus. The difference? Soft glass has a lower silica content (60-70%) thus giving more room in the recipe for color variances and fluxes- making a glass with a huge color spectrum that melts and moves with minimal heat. The drawback is that the lower silica means it is much, much more likely to have cracking issues. Hard glass, or borosilicate, has a much higher silica content (about 89%), which leaves minimal space in the recipe for variances. As a result, borosilicate has a tenth of the colors available, and requires a flame twice as hot as softglass to melt it.

Over the last ten years, boro has been working it's way into mainstream glass art. This is seen in marbles, paperweights and jewelry, mostly. Just in the last two years, several new artistic boro supply companies have opened, and international softglass suppliers are just starting to carry boro glass supplies.

I started Strobelglas simply because there was no existing company that could consistently supply top quality borosilicate murrini and filigree. Today, Strobelglas products are distributed at nearly every major boro supplier, with wholesale orders available direct from Strobelglas.com. Our mission statement is to provide borosilicate glassworkers with the highest quality murrini and filigree, at the lowest price possible.

Bead: This will show how to use murrini nippers, the cold murrini chip pickup, and a latticino hook.



1  
Align the blades of the nipper at a 90 degree angle to the murrini cane, about 4mm from the end. Close the blades quickly and firmly with the slightest twist in the wrist. A slice will pop off of the end. Be sure to practice safety, and always use safety glasses in your shop.



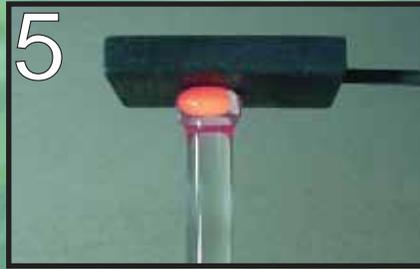
2  
Place slice of murrini on a clean carbon surface near the torch. Heat a rod of clear that has at least the same diameter of the murrini slice. Once the clear is white hot, quickly apply the rod directly over the top surface of the slice, picking it up.



3  
Place a small dot of clear on the back side of the slice then melt and push it down with a carbon paddle. This will protect the colors in the murrini from the flame, while the slice is fully melted in.



4  
Using some ribbon cane, a circle is spun onto the back side to give a background to the murrini bead.



5  
The cane is melted in, then pushed flat with the carbon paddle.



6  
Apply a punty on the backside of the bead, then pull off the clear.



7  
Pull off any excess clear left on by the rod, then melt it round.



8  
Apply another punty on the side of the bead, at the bottom (top and bottom are determined by the murrini image.) Then separate the back punty with a slight tap.



9  
On the direct opposite side (the top) attach a stick of filigree for a hook. Heat up about an inch of the filigree, and in one smooth movement, draw a circle as you roll the filigree cane in you fingers.



10  
Melt in the base of the hook. Careful not to get too much of the hook hot, as it will melt closed. Once it is melted in, round out the open area with a small carbon rod.



11  
Using preheated tweezers, grasp the hook and tap off the remaining punty. Firepolish the scar left by the punty, and you're finished! With a little practice, this is a great hook.



Marble: This will show how to use the stick-and-snap technique of murrini application.



1 After applying a base color, use a marble mold to shape. By shaping the marble before applying the murrini, the images won't be distorted by the manipulation.



2 I do a circle wrap (similar to a lip wrap) on the this end with ribbon cane as an accent, then melt it in.



3 Give the murrini cane a slight pre-heat, but there should be no color to the cane when it is applied to the marble.



4 Heat up a small area on the marble until white hot, then stick the murrini cane into the surface of the marble about 2 or 3mm. This one is in the middle of the ribbon cane.



5 While the surface is still hot, and you are able to move the cane around, do so in a back and forth motion once or twice, but stop before the cane becomes too stiff. Pause for 3 or 4 seconds, then snap the cane off to one side with a sharp motion.



6 The same thing is done on the sides of the marble, with alternating images of flowers.



7 After all of your chosen murrini is applied, you will need to dab a small amount of clear over the front surface of each of the slices, to protect it from the flame. Melt in again.



8 Apply a punty, and separate the clear rod, making sure that no clear is left behind. Accent with more filigree (on this side I chose surface striped cane) then melt in. Apply another murrini, cover with the dab of clear and melt.



Tap the marble off of the punty, polish the scar, and you're finished!

## NEW FOR 2004!

STROBELGLAS PROUDLY INTRODUCES OUR BORO FILIGREE LINE-RIBBON CANE, SURFACE STRIPE, AND COMING SOON, LATTICINO!!!

Strobelglas is now in full production of filigree. We currently offer both ribbon and surface stripe cane in diameters from 4mm to 10mm, PRESPUN or STRAIGHT LINE. Nearly any color combination is available, including custom color combos. Volume orders welcome, visit

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