



FRIT AND METAL CLAY

By Judi Weers

Frit comes in many forms, but simply put, it's ground up glass, gems, minerals, etc. It's available in varying sizes from large chunks to fine powder. In this step-by-step instruction sheet, I am referring to glass frit. If you would like to add color to your piece, but aren't ready to get into cutting sheets of glass for fusing, using frit is an easy way to accomplish the task without all the extra tools.

A kiln is required, but other tools needed will be things you, most likely, already have. Very small pieces with glass frit might work with a torch, but I don't recommend it.

The following pendant is created to be reversible, giving the wearer two options.

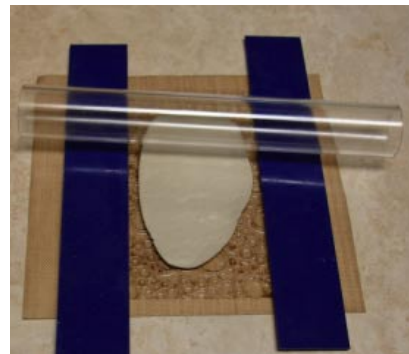
1. After deciding the shape, roll metal clay to desired thickness (3 or 4 cards recommended) over a lightly oiled texture sheet.

2. Cut to desired shape using cutters or freehand.

3. Create openings to complement the design of the texture sheet.

4. Dry thoroughly, then add strips of clay approx. 3/8" wide to create a frame around the base. This can be done by cutting strips or using an extruder to achieve even slices.

5. Attach strips around all edges with paste. Once dry, smooth edges and check for gaps around the seams. Inside edges do not need to be smooth. They will be covered with the glass frit. **When using glass frit, wear a mask over your nose and mouth to prevent breathing airborne particles.**



6. Choose your colors and size of glass frit. In this case, fine frit is used with a sprinkling of clear medium-grit frit to add sparkle.

7. Place pendant on a properly covered kiln shelf, so it doesn't have to be moved when full of glass. Don't lift the pendant after you've started adding frit because it will fall through the holes.

8. Carefully add each color of frit, filling to top of the frame.

9. When all colors have been added, tap the frit down with a finger to compact loose glass. Add enough frit to create a slight dome over the frame without overflowing. Use a needle tool and tweezers to carefully remove excess glass. Gently brush stray glass from around the edges on the shelf. Any glass touching the silver will fuse to the silver. Carefully take entire shelf and place it in the kiln.

10. Fire according to the schedule on the following page. When schedule is complete, you can turn the kiln off, but DON'T open the door until temperature drops under 200° F. Remove the piece when it is cool enough to handle and check to make sure the frit is fused to silver. If it needs to be fired again, you can adjust the time and/or temperature as necessary.

A silver object with fused glass can be tumbled, and in fact this is a good test to see if the glass was fused sufficiently. It's always a good idea to keep a small notebook near the kiln when working with glass. Write down the program used, and adjust as needed. Next time you do a similar firing, you will know the correct schedule.



Items required

- Kiln
- Kiln shelf coated with kiln wash or covered with thin kiln shelf paper to prevent glass from sticking to the shelf.
- Scissors to cut paper
- Face mask
- Assortment of glass frit
- Small scoop
- Needle tool/tweezers to nudge stray pieces into place
- Small brush

Firing Schedule

It's important to understand that temperatures differ from kiln to kiln. The following firing schedule is the one that works in my kiln. You may need to do some adjusting for your kiln. **NO PEEKING** until program is finished and kiln is cooled to at least 200° F.

Ramp 1 – 1450° F per hour
Temp 1 – 1360° F
Hold 1 – 6 minutes

Ramp 2 – FULL
Temp 2 – 950-960° F
Hold 2 – 30–45 minutes