



Glass Mosaic Frit Jewelry Casting Kit Technique Sheet #52



The AMACO® Glass Mosaic Frit Jewelry Casting Kit provides a great introduction to glass casting without the complexity of making a mold. Create button-size decorative glass pieces in an endless variety of designs using these reusable molds. Images and patterns are produced by using an assortment of glass colors and shapes by arranging them as desired in the mold cavities before firing. The mold is reusable when used as recommended. No glass cutting tools are needed. The kit contains plenty of Noodles and Stringers, and enough glass frit for approximately 36 finished pieces - depending on desired thickness and amount of color chunks used. All glass is COE 90.

Items included in kit 40077W:

(1) AMACO® Glass Casting Frit Mold; (1) Tube, AMACO® Noodles & Stringers; AMACO® Glass Medium Frit (3 oz.)—1 each of the following colors: Plum, Lemon Chiffon, White, Clear; AMACO® Kiln Shelf Wash, 1-lb jar (dry); Technique Sheet.

Additional Supplies—Optional:

AMACO® Excel Glass kiln: GSF-045 or GSF-670; white glue; spoon or small scoop; abrasive stone or diamond pad for polishing fired glass edges.

Instructions:

Casting glass in the mold

Glass designs may be created in the molds in the same manner as creating a collage. The smooth, finished side of the piece will be the top surface of the design as it is placed in the mold. This means that the noodles, stringers or other frits should be used to create a design over the initial layer of frit.

A. Before using the mold, it should be brushed with a coat of AMACO® Kiln Shelf Wash and allowed to dry completely (see Kiln Shelf Wash mixing instructions on jar). For best results, bisque-fire the mold after applying the wash and allow it to cool.

B. Glass frit colors may be placed in each cavity with the help of a spoon and filled to desired thickness. If cavity is filled to the top and leveled, then the fired glass thickness will be approx 1/4" thick. **Note:** Less glass creates thinner tiles. Overfilling the cavities by heaping the frit may flood the mold and will create sharp edges after firing. See photo 1.

C. The colored frits, noodles and stringers may be arranged on top of the frit or floated in the middle and covered with more frit. Keep in mind when "floating" the design that transparent (not opaque) glass frit should be placed on top. See photos 2 and 3.



4. Once the designs are in place, diluted white glue is applied to “tack” them into place and avoid shifting on the way to the kiln. See photo 4.



Firing

Molds must be level in the kiln so the molten glass will not run out of the mold cavities. Programmable glass kilns are recommended so that the temperature increase and decrease may be accurately controlled. Programmable ceramic kilns may also be used utilizing the same firing curve. Be careful

not to stack shelves close together. Leave at least 12 inches between shelves to allow for heat distribution. A non-programmable kiln may also be used with the aid of a pyrometer to control heat, but this is difficult and is not recommended.

Follow the firing cycle indicated here which should take approximately 6 hours until the end of the annealing segment (Segment 4).

Segment	1	2	3	4
Rate of Temp Increase (Deg. F/Hr.)	400	600	9999	150
Ramp Temp Increase (Deg. F)	1200	1480	950	750
Hold Time (Hours)	.50 (30 min.)	.25 (15 min.)	.50 (30 min.)	0

Finishing

Once the firing is complete and the pieces have cooled down to room temperature, they may be removed from the mold by flipping the mold and lightly tapping it. The glass tiles may have some sharp edges and burrs so care must be taken when handling. Any sharp edges may be ground using an Abrasive Stone under running water, then washed and dried.

Note: Mold may be reused without reapplying the Kiln Shelf Wash as long as it is intact on the interior surfaces.

Before Firing



After Firing



Project ideas, lesson plans, products, and glass information are all available at amaco.com. For product information, email salesupport@amaco.com. For technical information, email technicalsupport@amaco.com.



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