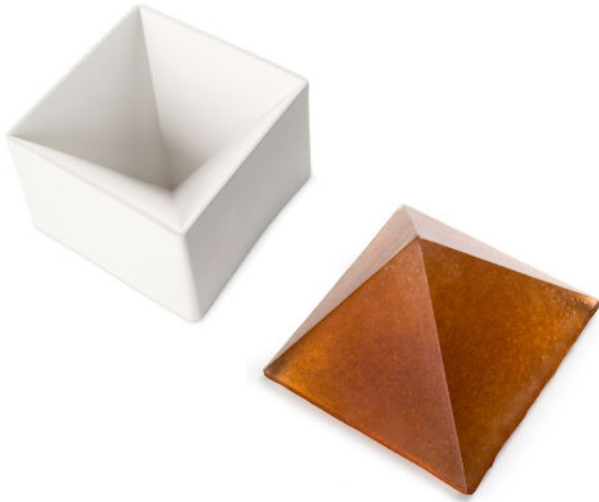


Mold Tips: Pyramid Mold (8948)

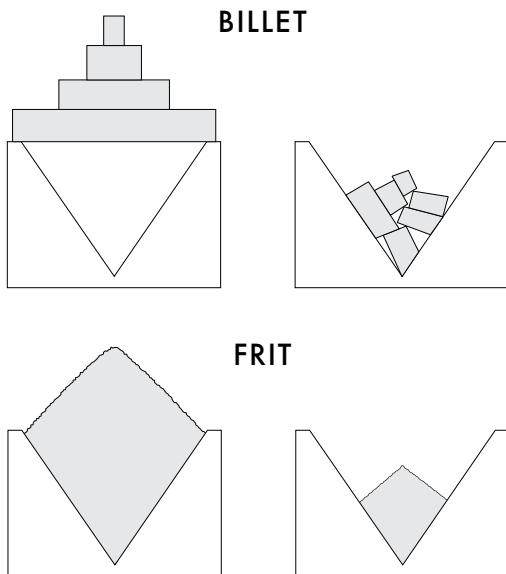


Glass Selection

It takes 2090 g (4.6 lbs) of glass to maximize the mold form, resulting in a pyramid that is 9.5 cm (3.75") tall. Any form of glass may be used to fill the mold. Our illustrations show options for loading billet or frit. For smoother edges around the finished base, heap material in the center as shown.

Alternatively, use less material to create a smaller form. The mold has room to make various sizes. As a reference, we used 150 grams to create a pyramid that was 4.6 cm (1.8") tall. Modify the schedule provided and follow a 25 mm (1") anneal, starting with the hold in segment 3. See the [Annealing Thick Slabs](#) chart for [Celsius](#) and [Fahrenheit](#).

The form of glass used (billet or frit) will have a direct impact on the clarity of the casting. Color is also a major consideration when choosing glass for thick works. To learn about selecting glass for casting, see [TipSheet 8: Basic Lost Wax Kilncasting](#) and [Bubble Population](#) at bullseyeglass.com.



Surfaces

Expect matte to semi-matte surfaces where the glass contacted the mold during firing. On these surfaces, you may also see outlines of the glass pieces that were used to load the mold. The mold-contact surfaces of a pyramid made from frit, for example, may display faint dappling that mirrors the random pattern of the frit. Conversely, surfaces that did not touch the mold will be glossy.

Mold Preparation

Select a product for releasing the fired glass from the mold, either ZYP primer (recommended) or Bullseye Shelf Primer.

- **ZYP Boron Nitride Aerosol Lubricant (008714)** releases easily and smoothly, leaving a glossier surface than left by shelf primer. However, once ZYP Lubricant has been applied to a mold, shelf primer can never be applied to it again. See [ZYP Tips](#).
- **Bullseye Shelf Primer (008220)**, while more cost effective than ZYP Lubricant, does not release as easily and is more labor intensive. See [Using Bullseye Shelf Primer](#) for directions. Once dry, gently smooth the surface and tap out any excess primer.

RE-PREPARATION

Regardless of separator, the Pyramid Casting Mold (008948) must be re-prepared before each kilncast firing. To buff away fired ZYP, use a nylon bristle brush. To buff away fired Bullseye Shelf Primer, use a dry scrub pad such as Scotch-Brite. A small, stiff-bristled paintbrush can be helpful for clearing out the point of the pyramid. Then re-apply separator as directed.

Suggested Firing Schedule

Suggested firing schedule following a 50 mm (2") anneal profile appropriate for thickness of glass and hollowed mold structure:

	RATE (DEGREES / HOUR)	TEMPERATURE	HOLD
1	200°F (111°C)	1225°F (663°C)	2:00 for billet 1:00 for frit
2	600°F (333°C)	1525°F (829°C)	2:00*
3	AFAP**	900°F (482°C)	8:00
4	6°F (3.8°C)	800°F (427°C)	0:00
5	12°F (6.8°C)	700°F (371°C)	0:00
6	41°F (22°C)	70°F (21°C)	0:00

* Visually inspect after :20. Skip segment once cast is complete. If bubbles have collected at the top surface, a continued hold will allow them to break open. Visually inspect bubble activity.

** As Fast As Possible. Allow kiln to cool at its natural rate with the door closed.

The topic of the firing cycle as it relates to the glass and kiln conditions is covered in depth in [TechNotes 4: Heat and Glass](#) at bullseyeglass.com.