

Mold Tips: Cone Bowl Molds



The following tips do not guarantee a uniform result. Because of the steep-sided nature of these molds, pieces may slump unevenly. Prior to slumping, prepare any of the Cone Bowl molds as directed in <u>Tips for Using Bullseye</u> <u>Slumping Molds</u> at bullseyeglass.com.

Molds in the Cone Bowl series are especially versatile for handling glass blanks of various diameters. For Cone Bowl (8943) and Large Cone Bowl (8975), one approach is to cut your glass based on the diameter of the top rim of the mold or up 1/16" (1.5 mm) larger all around. This slightly larger size allows the mold's narrow lip to support the glass and hold it in place as it slumps into this steep form. For the Mini Cone Bowl (8974), we've noticed more uniform results while working inside of the top rim, cutting the glass to 4.5" (11.4 cm). Best practices are to level the mold and glass in your kiln.

Uniform Heating

The same characteristics that make these forms unique—depth combined with a narrow lip and flat base—make it unforgiving of uneven heat. Elevating the mold on 2" (5 cm) posts will promote even heating, slumping, and cooling. Best practices are to level the mold and glass in your kiln. Also, if possible, fire the mold in the center of your kiln as these forms may slump unevenly if one side is closer to the elements.

More Frequent Re-Priming

Steep-sided molds like these need more frequent re-priming than forms with gentle curves. (Forms with gentle curves are often fired to lower process temperatures paired with shorter hold times.) As glass slumps into a steep-sided form, it pulls small amounts of primer away from the surface. If the primer wears thin, glass can catch and slump unevenly. Re-prime after every two to three firings. To re-prime, gently remove the old primer with a dry scrub pad and reapply as directed.

Suggested Firing Schedules

For each mold, a different hold time for segment 2 is noted. Plug it into the provided schedule.

- MINI CONE BOWL (8974):45*
- CONE BOWL (8943) 1:30*
- LARGE CONE BOWL (8975) 1:00*

SLUMPING SCHEDULE FOR ALL CONE BOWL MOLDS			
	RATE (DEGREES / HOUR)	TEMPERATURE	HOLD
1	300°F (167°C)	1200°F (649°C)	0:30
2	300°F (167°C)	1225°F (663°C)	*
3	AFAP**	900°F (482°C)	1:00
4	100°F (56°C)	700°F (371°C)	0:00
5	AFAP**	70°F (21°C)	

- * If possible, visually confirm the slump. If you are not able to observe a slump in progress, remember that it is often easier to re-fire and increase the heatwork than to fix something that has slumped too much.
- **As Fast As Possible. Allow the kiln to cool at its natural rate with the door closed.

Note on Segment 1: The purpose of this lower temperature hold is to begin the slumping process and facilitate a uniform slump before moving on to greater heatwork to resolve the form.

Note on Segment 2: We commonly hold at slumping process temperatures for over an hour, especially for molds with steep sides. This lower-for-longer approach reduces the amount of mold texture picked up by the glass and helps maintain a uniform thickness.

© 2021 BULLSEYE GLASS2 - 20211104_AF

bullseyeglass.com #8437