

Kiln Corner

Tips for Firing Glass

by Arnold Howard

Photography Courtesy of Paragon Industries, LP.

Though Arnold Howard works for Paragon Industries, L.P., the information here applies to all brands of glass kilns. Feel free to send questions for this column no matter what brand of kiln you own.

When I'm slumping glass into a mold such as a wine bottle slumper, do I need a kiln shelf under the mold, or can I set the mold directly on posts?

I recommend a shelf under the mold to protect the kiln bottom from melted glass. However, if there is no danger from melted glass, you could eliminate the shelf. Separate the mold from the shelf with short posts. This reduces the chance of causing thermal shock to the mold.

Can the shelf inside a glass kiln be placed directly onto the firebrick bottom?

Because the kiln shelf is a heavy thermal mass, it takes longer to heat up than the air around it and the glass on top of it. Placing the shelf directly onto the kiln bottom makes the shelf even more difficult to heat. That is why I recommend placing 1/2" posts under the shelf. The posts allow heat to circulate under the shelf.

Can you fire two or more stacked shelves in a glass kiln that heats from the top?

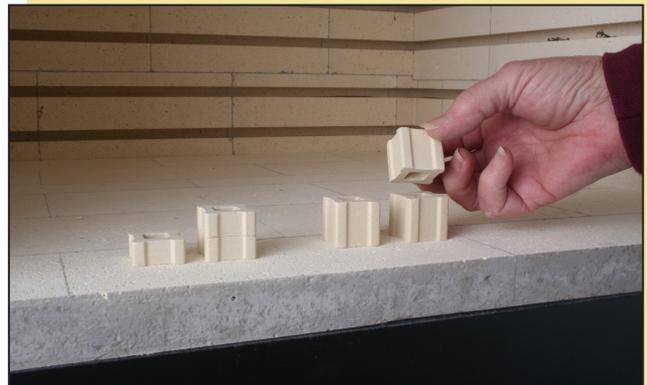
Glass kilns that fire only from the top are not designed to fire multiple, stacked shelves of glass. If you fired two shelves slowly, the bottom shelf would reach a low fuse and the top shelf a higher fuse. You can work around this limitation, however, by designing full-fuse and tack-fuse pieces for the same kiln load. It helps if your glass kiln has a sidewall element in addition to the top elements. Before firing multiple shelves of glass, experiment with small glass scraps.

How closely should one follow published or recommended glass firing schedules?

Never hesitate to change a firing schedule. A schedule is only a guideline. Since every kiln fires a little differently, results may vary from one kiln to another even when using the same firing schedule.

Should silver clay be fired on a separate shelf from glass?

Yes. The silver contamination in the shelf can affect the color of glass in future firings.



You can stack short posts to gain extra height.



If glass sags unevenly into a mold, place a small level across the shelf inside the kiln. Turn the level in several directions. To level the kiln, place sheet metal shims under the kiln stand. Make sure the kiln can't rock after you level it.



Place short posts between the shelf and the kiln bottom. The posts allow the shelf to heat more evenly.



Arnold Howard writes instruction manuals and advertisements for Paragon Industries, L.P in Mesquite, Texas. His hobbies are glass fusing and karate. He also enjoys studying history and watching classic movies. You can reach Arnold at ahoward@paragonweb.com with questions for future columns. Sign up for his kiln newsletter at www.paragonweb.com.

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