

# Kiln Corner

## Electrical Installation of a Kiln

by Arnold Howard

Photography Courtesy of Paragon Industries, L.P.

*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.*

### **Having to unplug the kiln to turn it off is a very unfriendly option. Is there a switch I can install that would prevent having to unplug the kiln?**

Disconnecting the power when the kiln is not in use is a safety precaution that we recommend for all kilns. The easiest way to disconnect the power to a studio-size kiln is to install an electrical shutoff box near the kiln.

### **Is it okay to plug a kiln into a clothes dryer outlet?**

Before installing your kiln, please look up the recommended wire gauge for the kiln's circuit. That information is listed in the kiln manufacturer's specifications.

If you are planning to connect the kiln to an existing circuit, be sure the circuit has been wired with the correct wire gauge for the circuit breaker. The wire gauge, or thickness, determines how much electricity can safely pass through the circuit. The thicker the wire, the lower the wire gauge number. For instance, a #12 wire is thicker than a #14 wire. Have an electrician determine the wire gauge of the circuit for you if you are in doubt.

If possible, install the kiln within 25 feet (7.6 meters) of the breaker or fuse panel. For every additional 50 feet (15 meters) from the panel, increase the circuit wire size by one gauge.

**We have started to deliver equipment to oil installations in the North Sea off the Norwegian coast, where they use 230v and 400v, 60 Hz. Can the Paragon Calderas that we have in stock be used on 230v, 60Hz? The Calderas we have are marked 50 Hz. I assume I will have to change the controller.**

It makes no difference to the Sentry controllers whether the power supplied is 50 or 60 Hertz. The controller will operate on either Hertz.

**I bought a kiln in Australia a few years ago and now I am moving to Canada. I have to decide whether to take it with me or try to sell it here. Perhaps you could tell me if it would work on Canada's electrical system. The kiln was made for the Australian system.**

If the kiln is to stay wired as 240 volts, then the only change needed would be a new plug. Fortunately, your kiln already has a lid safety switch installed as well.

**I'm installing a 240 volt, 30 amp line for my Ovation kiln. However, there are only 214 volts available in the panel. Will this be a problem? I will cast and slump glass in the kiln at 1000F° to 1400F°. The electrician said he can install a transformer booster to add the additional volts. Do I need to add the booster, or will the existing 214 volts give me the power I need?**

Since you are firing to such low temperatures, it would probably be okay to fire your kiln on only 214 volts. Try to fire the kiln as is. If the kiln cannot reach the temperatures you need, your electrician could install the booster, or you could change the 240 elements to 208 volts.



*The easiest way to disconnect a studio kiln is with an electrical shutoff box. It should be installed near the kiln.*

*Check your voltage before buying a kiln. If you are going to use an existing circuit, be sure it is rated for the amperage of the kiln you are ordering.*



*If the wall receptacle feels unusually warm or smells like burning plastic, disconnect the circuit breaker and have the outlet serviced. Loose connections can cause the outlet to overheat, which is a fire hazard.*

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*Arnold Howard writes instruction manuals and advertisements for Paragon Industries, L.P. His hobbies are glass fusing and karate. He also enjoys studying history and watching classic movies. You can reach Arnold at [ahoward@paragonweb.com](mailto:ahoward@paragonweb.com) with questions for future columns. Sign up for his kiln newsletter at [www.paragonweb.com](http://www.paragonweb.com).*

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