

Heat Treating Oklahoma Cherts

In addition to the Oklahoma chert's listed below, I'm adding information on cooking Burlington chert from Missouri and Ft. Hood from Texas. Although I've found the temperatures listed work for me, they may vary depending upon your method of heat treating. I always dry my rock in the kiln by running it at approximately 200-250 degrees for 6-8 hours before beginning the temperature climb. I let the temperature rise about 20-50 degrees per hour until I reach the desired temperature and then hold it at the various temperatures and times listed below before turning the kiln off and letting the rock cool. When the temperature goes below 200 you can safely remove the rock from the kiln. Make sure you wear gloves and stack the rock on something that won't melt until it cools to room temperature. Never strike a piece of rock until it's completely cool. You may create micro fractures in the rock if you do.

- Cook most Burlington (MO chert) at 550 for high grades and 650 for lower grades, for 6-24 hours
- Cook Florence A (Kay County OK) at 550-650 for 8 hours depending on the grade.
- Cook Gray Boone (OK chert) at 650 for 8 hours.
- Cook Peoria (OK chert) at 580-650 for 8 hours depending on the grade.
- Cook Frisco (Ada chert) at 525 for 8 hours to slick it up and recook over 600 following reduction to increase color.
- Cook Ft. Hood at 450-535 for 8 hours.

A slow rise in temperature followed by a slow decrease in temperature is always the best. Remember, start at a lower temperature when you are unsure of the correct temperature, you can always cook it again. Also, rock heated less than it's maximum before it becomes too volatile to work is stronger and sometimes works with less problems.