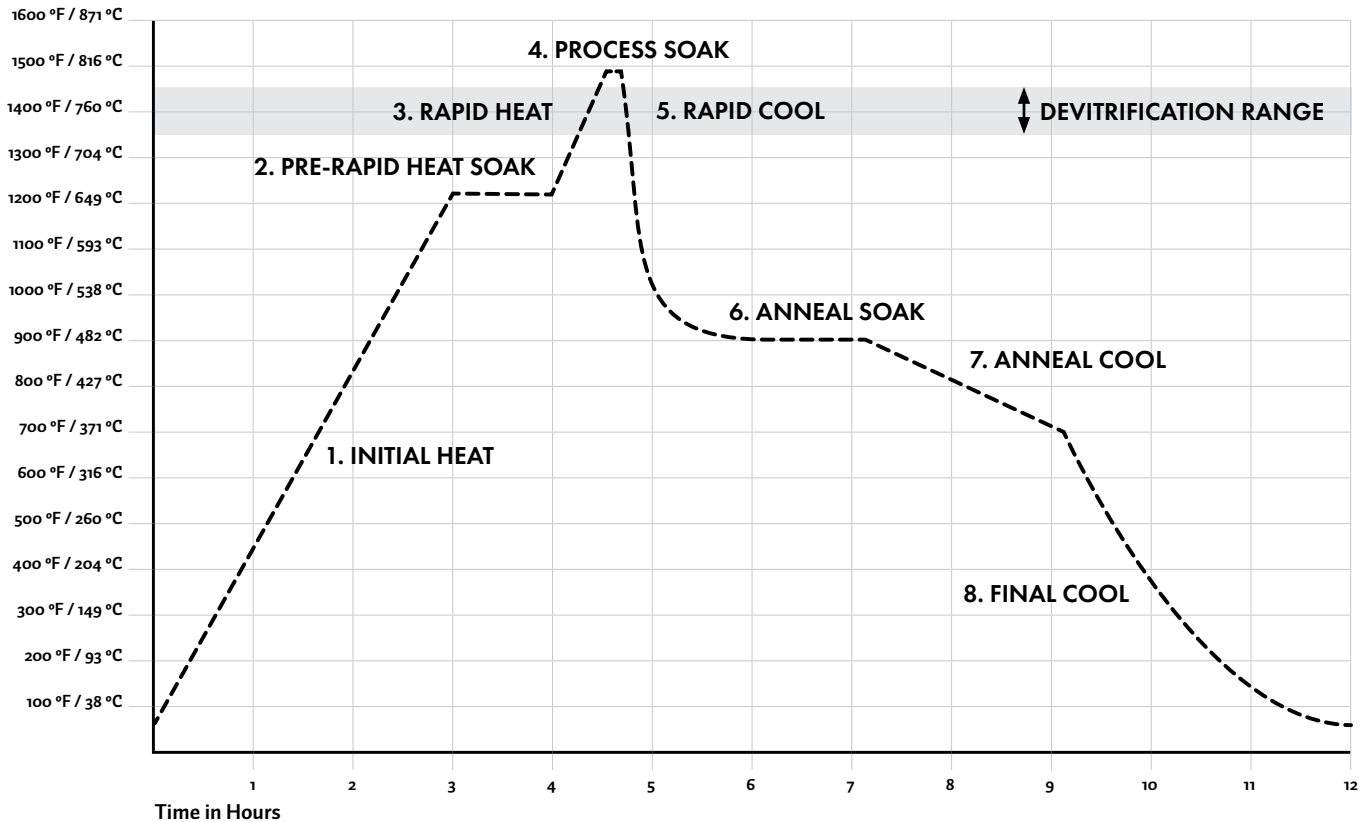


Idealized Firing Graph

Shown on a time/temperature firing graph, the eight firing stages might look like this.



The idealized cycle shown here is based on a project of two 3 mm ($\frac{1}{8}$ ") layers, approximately 305 mm (12") in diameter.

GOALS OF A FIRING SCHEDULE

Understanding the behavior of glass within different temperature ranges allows you to create a firing schedule or series of steps that will properly heat and cool glass in a kiln. Using a firing schedule, you can accomplish the two basic objectives of kilnforming, which are:

- To bring the glass body to a temperature where it can be formed in the manner or process selected.
- To return the glass to room temperature in a stable condition (i.e., free of unwanted internal stress).

A firing schedule (sometimes called a *firing cycle* or *firing profile*) may be subdivided in various ways. At Bullseye, we generally break down the firing schedule into eight stages.

See [TechNote 4: Heat & Glass](#) for additional information about each of the firing stages.

EIGHT STAGES OF A FIRING SCHEDULE

- 1. Initial Heat**
Room temperature → (1000–1250°F) / (538–677°C)
- 2. Pre-rapid Heat Soak**
Hold at (1000–1250°F) / (538–677°C)
- 3. Rapid Heat**
(1000–1250°F) / (538–677°C) → process temperature
- 4. Process Soak**
Hold at process temperature (1000–1700°F) / (538–927°C)
- 5. Rapid Cool**
Process temperature → 900°F / 482°C
- 6. Anneal Soak**
Hold at 900°F / 482°C
- 7. Anneal Cool**
900 → 700°F / 482 → 371°C
- 8. Final Cool**
700°F / 371°C → room temperature