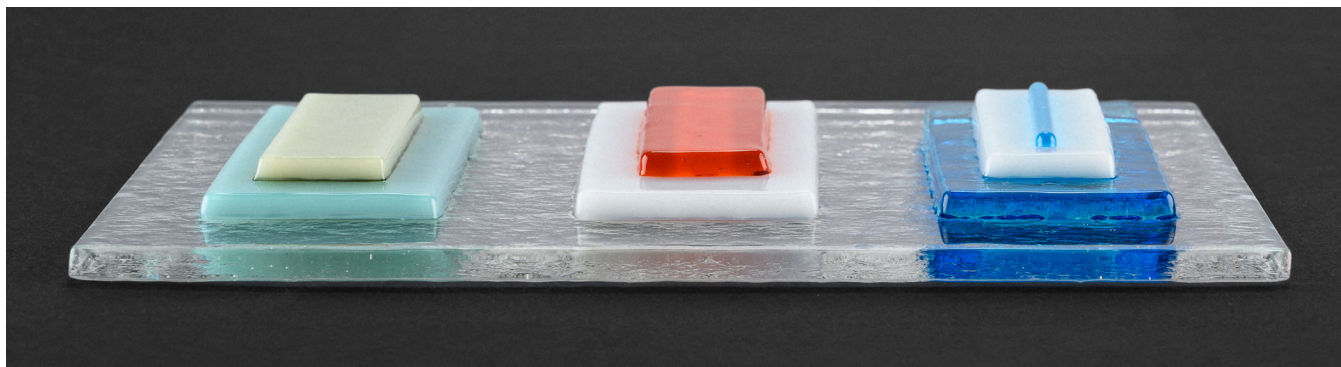


Tips for Tack Fusing: Annealing



When writing a firing schedule for tack fusing, there's a lot to consider. This document focuses on an important consideration for success: annealing. Tack fused projects are often uneven in thickness and require longer firing schedules to ensure uniform temperature during annealing and cooling. Pair the guidelines below with *Annealing Thick Slabs* for a recipe for success!

About Tack Fusing

Tack Fusing is a kilnformed glass technique that involves fusing pieces of glass together while maintaining some or all of their unfired form and texture. This relatively lower temperature process:

- Ranges in process temperature, approximately 1275–1450 °F / 690–788 °C
- Covers a range of effects
 - *Lower Temperatures*: sintering, fuse-to-stick.
 - *Higher Temperatures*: smoother, softened surfaces, sometimes referred to as "contour fuse".
- Often involves firing works of varied thicknesses, and heating and cooling them uniformly is crucial to their success.
- Generally results in works that require special attention for additional firings, like slumping.

Annealing Tack Fused Projects with Variation in Thickness

1. Determine the thickness of the thickest area of your project. Add up sheet glass layers rather than measure. For example, a 6 mm base with three layers of 3 mm is 15 mm.
 - Measure pre-fired pieces prior to assembly.
 - Estimate applications of frit.
 - Overestimate rather than underestimate.
2. Refer to *Annealing Thick Slabs* and follow the chart for **at least 2× the thickest area**. Example: for a 15 mm thick project, follow the chart for 30 mm or thicker. Program the recommended *Anneal Soak/Hold* at 900 °F / 482 °C and follow the chart from there.
3. Avoid aggressive venting. Allow the work to cool with the kiln door and vents closed.

Additionally:

- Planning to refire? When reheating projects with variations in thickness, we recommend a slow ramp in the first segment, below 1000 °F / 538 °C, to minimize the risk of thermal shock. Properly annealed works are less prone to thermal shock in subsequent firings than ones that were poorly annealed.
- Check pre-programmed schedules as they may not be a good fit for your project.
- We recommend firing on an elevated kiln shelf that allows for air and heat circulation. We advise against stacking shelves.
- Some kilns anneal better than others. For example, top-fired fiber kilns may require even more conservative firing schedules (annealing for 3× the thickest area) to achieve successful results.

For support in determining other parts of a tack fuse firing schedule as well as a guideline for reheating, see ***Writing Firing Schedules for Fusing & Slumping***.

Resources

[Annealing Thick Slabs](#), article

[Tips for Tack Fusing](#), video

[Writing Firing Schedules for Fusing & Slumping](#), article