# **Basic Firing Schedules**

# Developed for Bullseye Glass 2023

These schedules have been used in our Warm Glass studio for thousands of Bullseye Glass projects over the past 15 years. We have used them in all different sizes of kilns with great success. We review these schedules each year and are confident that you'll achieve excellent results with them.

# **Basic Full Fuse** For up to 50cm squares with an even thickness of 6mm

Runtime: 12 hr	Rate	Temp	Hold
Segment 1	222°C/hr (400°F)	→ 677°C (1250°F)	30 min
Segment 2	333°C/hr (600°F)	→ 804°C (1480°F)	10 min
Segment 3	999°C/hr (999°F)	→ 482°C (900°F)	1 hr
Segment 4	83°C/hr (150°F)	→ 371°C (700°F)	End

# **Basic Slump\***

For non-complex moulds. \*See our website for individual mould schedules

Runtime: 12 hr	Rate	Temp	Hold
Segment 1	167°C/hr (300°F)	→ 640°C (1184°F)	10 min (variable)
Segment 2	999°C/hr (999°F)	→ 482°C (900°F)	1 hr
Segment 3	56°C/hr (100°F)	→ 371°C (700°F)	End

# Basic Tack/Contour

Use a Process Temp of 780°C for a Contour Fuse

Runtime: 12 hr	Rate	Temp	Hold
Segment 1	222°C/hr (400°F)	→ 677°C (1250°F)	30 min
Segment 2	333°C/hr (600°F)	→ 760°C (1400°F)	10 min
Segment 3	999°C/hr (999°F)	→ 482°C (900°F)	2 hr
Segment 4	83°C/hr (150°F)	→ 371°C (700°F)	End

#### **Super Bubble Squeeze**

Use this firing to avoid unwanted bubbles

Runtime: 12 hr	Rate	Temp	Hold
Segment 1	222°C/hr (400°F)	→ 600°C (1112°F)	30 min
Segment 2	111°C/hr (200°F)	→ 677°C (1250°F)	1 hr
Segment 3	333°C/hr (600°F)	→ 804°C (1480°F)	10 min
Segment 4	999°C/hr (999°F)	→ 482°C (900°F)	1 hr
Segment 5	83°C/hr (150°F)	→ 371°C (700°F)	End

#### **Ideal Process Temperature for Full Fuse**

Kiln	Ideal Process Temperature
Skutt Firebox 8	→804°C (1480°F)
Skutt Hotstart Pro	→ <b>795°</b> C (1463°F)
Skutt Firebox 14	→ <b>790°</b> C (1454°F)
Paragon SC2	→804°C (1480°F)
Kilncare Hobbyfuser	→ <b>795°C</b> (1463°F)
Kilncare Cubfuser	→804°C (1463°F)
Kilncare Profuser	→800°C (1472°F)
Kilncare Profuser D	→800°C (1472°F)
Nabertherm GF240	→ 810°C (1490°F)

Based on our own test results. If your kiln is not shown, we recommend using our Kiln Test Kit to calibrate your kiln.

# What is a segment?

A segment is made of three parts:

#### 1. RATE/RAMP:

Temperature rise/fall in degrees per hr

# 2. **TEMP:**

The heat you want to reach

# 3. **HOLD:**

How long you want to stay there

A programme is made of several segments in a row. Segments can be identified in the following order:

- Heat to Bubble Squeeze
- Heat to Process Temperature
- Cool to Annealing Hold
- Cool to Room Temperature

### **Recommended Adjustments**

A slower heat to bubble squeeze is required for thick projects or when using inclusions that may need burning out or slower heating, such as metals, paints or decals.

Adjusting the process temperature or hold time will achieve different surface and edge finishes, especially in the Tack/Contour fuse.

Adjust annealing time according to the project's thickness and complexity. If you get cracks or bubbles, fire slower, lower, longer. Avoid cracks in tack fused projects by using a minimum 5mm base layer.

# **Working on Thicker Projects?**

For pieces that are thicker than 6mm or uneven in thickness, a longer annealing phase is required. See our <u>Annealing Charts PDF</u> for more information and firing schedules.

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