

# Kiln Test Kit

All kilns are different and it's often very difficult to assess whether your kiln is firing correctly.

This kit has been designed by Warm Glass UK to help people set their kilns to a firing cycle ideal for Bullseye Glass.

This kit simply helps you achieve a similar Full Fuse to the one we use in our studio. Slump and Tack temperatures only need to be adjusted if you are not achieving the finish you expect.

## Instructions:

Put one 014 (grey) and one 015 (blue) cone into the cone holder (Figure 1.). Put the cone holder in the kiln, centrally on the shelf and fire the kiln.

Use the following settings to set your kiln, this is a basic full fuse for up to 50cm square Bullseye Glass with an even thickness of 6mm.

FULL FUSE	RATE	TEMP	HOLD
Segment 1	222°C (400°F)	677°C (1250°F)	30 min
Segment 2	333°C (600°F)	804°C (1480°F)	10 min
Segment 3	999°C (999°F)	482°C (900°F)	60 min
Segment 4	83°C (150°F)	371°C (700° )	End

## Results:

**Figure 2:** The perfect full fuse: you kiln is calibrated correctly.

**Figure 3:** Underfiring: Don't worry, there's nothing wrong with your kiln, it just means you will have to raise the top temperature to achieve the result in Figure 2.

**Figure 4:** Overfiring: Don't worry, there's nothing wrong with your kiln, it just means you will have to reduce the top temperature to achieve the result in Figure 2.

**Why is my kiln over or under firing?** The reason for underfiring or overfiring can be anything from thermocouple position to chamber size. The result of this test will change over time, so it's best to repeat the test once every six months. Small kilns generally overfire slightly, old or damaged elements will make results change rapidly.

Tests of our kilns in the studio have provided the following results:

Paragon SC2 – Perfect full fuse: – 804°C with a 10 minute hold  
Skutt Firebox 8 – Perfect full fuse: – 804°C with a 10 minute hold  
Skutt Hotstart Pro – Perfect full fuse: – 795°C with a 10 minute hold  
Skutt Firebox 14 - Perfect full fuse: – 790°C with a 5 minute hold  
Kilncare Hobbyfuser – Perfect full fuse: – 795°C with a 10 minute hold  
Kilncare Profuser – Perfect full fuse: – 800°C with a 10 minute hold  
Nabertherm GF 240 – Perfect full fuse: – 810°C with a 10 minute hold

Please note that this kit monitors heat over time for a Basic Full Fuse and not whether your glass is annealed properly. For more information on annealing, visit the Knowledge Base section of our website, [www.warm-glass.co.uk](http://www.warm-glass.co.uk)

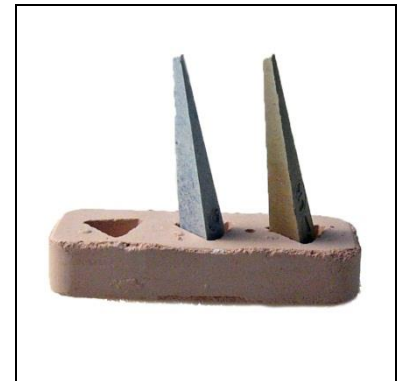


Figure 1: Set Up



Figure 2: Perfect full fuse

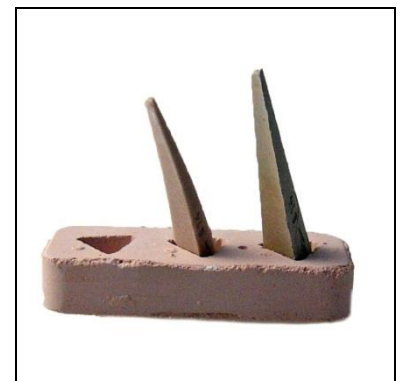


Figure 3: Underfiring



Figure 4: Overfiring