



Stack Temp

THERMOMETERS

INCLUDES

- A | Dual Declaration Dial
(Fahrenheit and Celsius)
- B | Aluminum Mounting Bracket
(Predrilled mounting holes for easy side mount or back mount)
- C | Rugged, Stainless Steel Probe
- D | 1/2" NPT Probe Fitting
- E | Stainless Steel Lead
(4" dial = 10' lead and 6" dial = 17' lead)



BENEFITS

- ✓ **Fuel Efficiency**
(Know exactly when to add more fuel to the firebox)
- ✓ **Training Tool**
(Helps teach new maple producers how to run an evaporator)
- ✓ **Assessment of Wood Quality**
- ✓ **More Consistent Boiling / Draw-offs**

INSTALLATION TIPS

Recommended Tools

- Step Drill
- Crescent Wrench
- High Temperature Anti-Seize
- Screws/applicable hardware

Mounting the Temperature Probe

We recommend mounting the probe as high as possible on the Stack Pipe. If your evaporator has a concentric exhaust system, mount **BELOW** the concentric system, in the base stack. Otherwise you would be measuring steam temperature instead of exhaust temperature.

Mounting the Dial

We recommend mounting the dial to your arch so that the cord from the Stack Temperature Thermometer does not obstruct any walkways and the temperature can be read easily from both the draw-off and the firebox. The mounting bracket includes both side mount & back mount options.



Stack Temp Instructional Videos:
SmokyLakeMaple.com/stack-temp-guide

4" Stack Temp Thermometer = SL-STKTMP4
6" Stack Temp Thermometer = SL-STKTMP6

< **See the video for a demonstration**

FREQUENTLY ASKED QUESTIONS

WHAT IS THE BEST STACK TEMPERATURE AT WHICH TO ADD FUEL?

Temperature will vary from evaporator to evaporator. (See “What Factors Affect Stack Temperature?”)

Observe how stack temperature changes based on the amount of firewood in the firebox. Also observe how your boiling rate is affected at various stack temperatures.

Remember, your evaporator will operate optimally within a certain RANGE. You are trying to determine what the BOTTOM of that range is going to be. You will never be adding wood while your stack temperature is at the TOP of its range.

- **Should I Add Wood MORE Frequently?**

Add fuel frequently enough to maintain an efficient boil. If there isn't enough fuel in the firebox, the boil will start to die down.

- **Should I Add Wood LESS Frequently?**

A general rule of thumb is to reload the firebox when the firebox is about halfway empty. Avoid opening the firebox door more frequently than necessary because this can kill a boil and invite cold air into the evaporator, cooling the pans and adversely affecting boiling rate.

WHY NOT JUST USE A MINUTE TIMER TO KNOW WHEN TO ADD FIREWOOD?

All wood is different. Some species will burn faster/slower than others. Also, wood which is not fully seasoned will take longer to burn.

A Stack Temperature Thermometer can help identify issues with firewood quality as well. If your stack temperatures are not reaching the expected levels, the culprit is usually firewood quality.

WHAT FACTORS AFFECT STACK TEMPERATURE?

- **PLACEMENT**

The higher you install the Stack Temperature Probe in the Smoke Stack, the lower the temperature.

- **EVAPORATOR LENGTH**

Longer evaporators will have lower stack temperatures than shorter evaporators.

- **PAN STYLE**

Flue Pans will have lower stack temperatures than Flat Pans.

- **WOOD QUALITY**

High quality firewood will generate higher BTUs (more heat). Thus, good firewood will result in higher stack temperatures than low quality firewood.

- **ARCH INSULATION**

An arch that is poorly insulated will allow heat to escape before it reaches the Smoke Stack. Thus, a well-insulated arch will have a higher stack temperature, but will also be much more efficient.

- **DRAFT STYLE**

A Forced Draft Kit blows air under the grates in your firebox to aid in combustion. Thus, evaporators with Forced Draft will have higher stack temperatures than evaporators using natural draft.

MAY I CUT THE THERMOMETER'S LEAD TO MAKE IT SHORTER?

The lead on your Stack Temperature Thermometer is an inert gas line.

Do NOT cut it. Extra cord should be neatly coiled up and tied out of the way.

