



802-524-4114

Serving all of Franklin County and Beyond!

Our way of **LOWER OPERATING COSTS** in **Your** heating system
To **SAVE YOU** substantial **MONEY!**

BENEFITS TO THE SYSTEM WE WANT TO DESIGN FOR YOU WILL INCLUDE COMFORT AND LOWER OPERATING COSTS

Factors that greatly affect your cost to heat your home include:

Proper Boiler Sizing – too large a boiler makes the system **inefficient**, too small a boiler **shortens the life** of your new boiler and it may **not properly heat your home**.

Selection of the Boiler, type of fuel, and the design of the boiler affect how **efficient** a boiler can be. Boiler efficiencies are different than system efficiencies – today most oil boilers will have 83% boiler efficiency and gas over 90% boiler efficiency. Meaning nobody has the leg up on providing you with a more efficient boiler! NO ONE. The system efficiency includes as it suggests, all components of piping and control strategies used in the system – this is where you will save money over the long haul in the way of savings to pay back initial costs and then by putting money and comfort in your pocket day after week after year.

System Efficiency is accomplished by proper piping both near the boiler and throughout the house; with improper piping many common hidden things may happen, including:

- 1) **Shortened life of the Boiler**
 - a. By improper air elimination, corroding the boiler and system parts
 - b. Thermal shock, cold water hitting hot metal, creating metal fatigue and possible cracking.
- 2) **Deterioration and eventual replacement of the chimney**
 - a. Due to boiler condensation (impurities in the oil such as sulphur mixing with the condensation rot out the chimney)

- 3) **Noise** from both air and expanding pipe noises
- 4) **An uncomfortable home**, probably keeping you from freezing but not keeping you, your family and friends comfortable.

Some of the ways we accomplish system efficiency include:

1. **Outdoor reset** which matches the outside temperature with the water temperature in the boiler. The lower the outside temperature the higher the boiler water will be; conversely the warmer it is outside the lower the water temperature in the boiler will be **making the boiler run less** and giving you these benefits:
 - a. The system only delivers the amount of heat to the house that it needs at that time, **eliminating overheating** in the spring and fall, greatly lowering your operating costs.
 - b. The heating elements are not blasting you with heat then shutting down, **elimination of the up and down temperatures felt by regular systems**, making you more comfortable.
 - c. **Reduce expansion noise**; pipes expand when they are heated, the higher the temperature the more they expand and can cause noise. Using lower water temperatures reduces noise of pipes expanding.

Savings as compared to other systems

- Industry experts say 30-40%* savings on your annual heating bill are possible with system outdoor reset controls and piping.

*All figures are approximate but do show significant savings making this system significantly less expensive than an ordinary system. Every system is different and needs to be looked at individually by a trained professional.

With the right Oil Burner you save:

- **Electric savings** up to \$100.00 per year
 - 46V AC produced by motor (not 120V)
 - 8000V DC ignition transformer (not 12,000V)
 - Transformer shuts off after ignition
 - 2.2 AMP motor (5.5 AMP on others)

With Boiler Outdoor Reset Controls, we can save you money:

For every 3 degrees F the boiler temperature is reduced, it adds 1% of system efficiency.
Example: changing 180 degree F to 104 degree F boiler water **reduces your annual heating bill by 25%! \$\$\$\$**

Set Back Temperature Controls – again **lowering temperatures** even more at night to **save you money**.

Indirect Hot Water Heating made better:

- 1) When the indirect tank is almost heated the burner shuts down and continues to **pump the residual heat from the boiler to the indirect hot water tank saving money**.
- 2) A digital clock to set times when the indirect can heat
- 3) Both of the above items are most useful in the summer – **reducing boiler stand by loss and savings money**

Whether you are installing a system for heating your home today or to resell your home tomorrow (with today's high fuel prices buyers do check on your home energy costs) **when you purchase a heating system there is more to look at than the bottom line of what it will cost to install.**

We will design your system based on the individual needs of your home to maximize your comfort and savings.

Ward Manley

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