Condensing Gas Boiler & Weatherization Installation Proposal

Client:

Brent Vanni & Jenna Martellucci

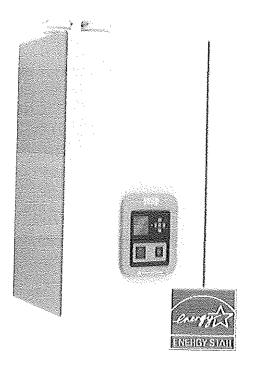
Address:

19 Atlantic Street

Portland, ME 04101

Date:

December 20, 2013



Model

Prestige TriMax Solo 110 w/ Heat Flo 40-gallon Tank

Performance

- 95% AFUE
- ENERGYSTAR Certification
- Stainless Steel Heat Exchanger and Burner
- Outdoor Reset Sensor
- Digital TriMax Control Panel
 - o 60-second Set-Up
 - Two Reset Curves/Set Points
 - o Control of 2 Space Heating Call Inputs and 4 Circulators

Cost (Including weatherization)

\$19,832 Fully Installed
Projected 40% Efficiency Improvement

The reVision Difference

reVision heat is not your average heating contractor. What makes us different is our passion for saving energy. We're motivated for a number of reasons to reduce the amount of energy Mainers use heating their homes, and also to reduce the demand for dirty imported oil. We want to keep you warm, yes, but in the most energy efficient and environmentally responsible manner possible. Technology requires smart technicians and people who understand the drivers of efficiency, and can set up the systems with low energy use in mind.

Efficiency is in the margins, but boilers last a long time. If we can squeeze 5% to 10% more out of a boiler for the next 25 years, that effort will pay for itself over and again over time. Not every heating contractor does what we do, and it can make our competitors' prices appear less expensive than ours. We wouldn't feel good doing anything other than the very best job possible to save you energy over the life of your system; we hope you appreciate the reVision difference!

On your job, here are a few of the things that we do better than most:

- We set up our systems to use as little electricity as possible. A typical boiler, driven by 5 pumps will require 450 watts to operate. Our systems, because of the boiler and the pumps we choose, typically use less than 40 watts.
- We calibrate the system to minimize energy use. We take the extra step and put a flue gas analyzer on every system we install, to ensure the factory settings are accurate and the system is working at the highest efficiency. Where there are parameters to set, we set them aggressively to save energy.
- We've learned through monitoring of energy systems that most of the energy wasted from a water tank is wasted from the pipes that connect to the tank. To reduce that energy loss, we insulate the pipes around the tank to keep the heat in.
- We have a strong commitment to Reduce, Reuse, and Recycle. If anything comes out of your home that has some value in it, we'll get it to someone who can use it.
- We safely dispose of waste oil sludge on the bottom of your tank. Once we have a full drum, we call Clean Harbors to dispose of the waste material.

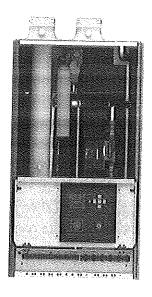
Energy costs will continue to escalate in the coming years and decades ahead. We believe in setting things up to use as little energy as possible in the long run. The reVision difference - your home is worth the investment.



Overview

Based on an evaluation of the proposed buildings heating requirements, reVision heat proposes to install a Triangle Tube Prestige TriMax Solo 110 modulating/condensing gas boiler with a boiler piping station.

The natural gas boiler will be installed and controlled to provide optimum response and efficiency. Triangle Tube's Prestige is one of the most sophisticated, well-constructed boilers currently manufactured. The burner and proprietary heat exchanger are built of the highest-quality stainless steel available. Triangle Tube boilers, are rated at 96% AFUE efficiency, are capable of better than 96% combustion efficiency in low-temperature applications, and can modulate down to 25% of the rated input. An outdoor reset control supplied with the boiler matches its supply water temperature to the seasonally-variable heat loss of the building. All of this means that Triangle Tube boilers are



among the very lowest in fossil fuel consumption among all other boilers on the market. In addition, the built-in TriMax Control supports up to four circulators, allows for two custom heating zones and one domestic hot water zone.

Component Specification

- One Prestige TriMax Solo 110 Condensing boiler
- Outdoor Reset Control Sensor
- Optima SZC5 Zone Controller
- Grundfos Alpha Variable-Frequency Circulator
- Grundfos SuperBrute Three-Speed Circulator
- Heat Flo 40-gallon Indirect Tank Ħ

System Operation

Whenever the room temperature falls below a set level, a call for heat is created and the Prestige boiler will come on and the variable frequency pump will pump heat into the distribution system. The boiler will provide the correct temperature based on feedback from the outdoor temperature sensor and the room thermostats and the boiler controller will essentially take over control of the boiler to provide the perfect temperature for maintaining the room temperature and minimizing fuel usage. Whenever there is a call for domestic hot water, the system will prioritize the call and ignore the reset curve for optimal domestic hot water recovery. The Optima SZC5 control will be programmed to post-purge waste heat from the heat exchanger into the heating zone or domestic hot water tank.