



## Conflict-Free Independent Analysis

### PACE/POWERSAVERS Efficiency Improvements

Efficiency Upgrade	Description	% Efficiency Improvement	Cost
Basement Wall Foam and Rim Joist	Install 3" closed cell foam to 2' below grade	6.42%	
Attic Cellulose and Porch Insulation	Install 8" cellulose in attic and 10" in Porch	12.58%	
Thermostat	Replace existing thermostat with programmable set back Energy Star	2.43%	
Natural Gas High efficiency Condensing Furnace	Remove/Replace Existing Furnace	6.72%	
Air Sealing (as part of attic work)	Air seal leaks	10.84%	
Insulated Attic Hatch	2" rigid insulation	2.49%	
Total		41.48%	
Qualify (must achieve a 20% or greater efficiency improvement)		<b><u>Yes</u></b> No	

**Prior to the filing of your Efficiency Maine audit the homeowner must tell Complete Home Evaluation Services the efficiency upgrade choices they are undertaking.**

Improving the air sealing and insulation may create ventilation problems that can result in mold and back drafting of carbon monoxide from combustion appliances. Installing an outside air source may be needed to deal with these issues. Performance testing is necessary to ensure combustion safety.

CO monitor  
(Necessary to have one in each of the following locations)

Kitchen
CAZ (Combustion Air Zone- boiler/furnace room)
Main Living Space
Hall outside Bedrooms
Rooms Adjacent to the Garage

Worst Case CAZ

Base (Pascals)	Worst Case (Pascals)	Difference (Pascals)	Pass/ Fail
0	0	0	Pass

Draft Flue Test

Oil Burners Atmospheric Draft	-10 Pascals to -15 Pascals	Pass Fail
	-12.7	Pass

Acceptable Appliance Spillage Periods

Appliance Type	Spillage Test Period 1 Minute	Pass/Fail
Furnace		Pass

Blower Door Number @CFM50: 2514 cfm50

Heating System Evaluation

System Type	Hydronic Boiler Forced Hot Air Furnace	
Tested Item	Results	Recommended Results
Stack Temperature (F)	445 <sub>o</sub>	NA
Efficiency	56.3%	>83%
Ambient Temperature (F)	68.3 <sub>o</sub>	NA
CO	1294ppm	<25 ppm
O <sub>2</sub>	17.7%	4-7 %
CO <sub>2</sub>	2.4%	11-13.5 %
Model:	Wise Furnace Co.	
Last serviced	10/2011	
Age	1926	
Btuh		
Burner Type	Marathon	
Fuel Type	#2 Oil	
Number of Zones		
Water Heater Type	Bradford White	42,000 btu 50 Gallon Propane
Thermostat Style	Honeywell Electric	

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|---|---|---|--|
| <ul style="list-style-type: none"> <li>• Energy Analysis</li> <li>• Home Inspections</li> </ul> | <ul style="list-style-type: none"> <li>• HERS Ratings</li> <li>• Infrared Analysis</li> </ul> | <ul style="list-style-type: none"> <li>• Mold Inspections</li> <li>• Radon Testing</li> </ul> | <ul style="list-style-type: none"> <li>• Water Quality Testing</li> <li>• Lead Dust Testing</li> </ul> |
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