

Heating System and Hot Water Heater Improvement Survey Report

Agency Name: _____

Client Name: _____ Job # _____

Owner Authorization

I authorize representatives of _____ to enter my home to complete necessary health and safety testing and evaluation of my heating system and hot water heater as prescribed on this form. I understand that the testing and evaluation does not necessarily mean that additional work will be performed on the heating system and/or hot water heater. I also understand that neither my family nor myself will be charged any cost related to any work performed on the heating system and hot water heater.

Signature _____ Date _____

- Heating Type: (Select) Gas: Oil: Electric: Propane:
Hot Water Boiler: Steam Boiler: Furnace: Baseboard: Heat Pump: Tankless Coil:
- Heating System Working: (Yes) (No)
- Major Problems: (Yes) (No)
Gas Leak: (Yes) (No) Oil Leak:(Yes) (No) Boiler leak: (Yes) (No)
Heating Pipes or Radiators Cracked? (Yes) (No)
Damaged Flue/Chimney Duct/Cold Return? (Yes) (No)
Hot Air Furnace Heat Exchanger Cracked? (Yes) (No)
Rusted Heat Exchanger Due To Humidifier Leak? (Yes) (No)
Soot in Living Area? (Yes) (No)
Low-Water Cut-Off Present? (Yes) (No) Operable (Yes) (No)
Automatic Water Feeder Present? (Yes) (No) Operable(Yes) (No)
Emergency Switch Present? (Yes) (No) Is Operable(Yes) (No)
Electric Service Adequate? (Yes) (No) Operable (Yes) (No)
Change in CO2 and O2 When Blower Comes On? (Yes) (No)
If so, record % of CO2/O2 – with blower on _____ and off _____
- Setting on High Limit: 5 Pounds or Less on Steam (Yes) (No)
210 or Less on Hot Water (Yes) (No) 250 or Less on Hot Air (Yes) (No)

5. Heating System Data:

Manufacturer _____ Model _____

Output _____ GPH _____

Oil Burner Mounting: (Flange) (Pedestal)

Conversion: Coal to Oil (Yes) (No) Oil to Gas (Yes) (No)

Summer/Winter Hook-Up (Yes) (No) Stainless Steel Chamber (Yes) (No)

Condition of Gas Burners (Good) (Poor) Condition of Blower Motor(Good) (Poor)

Oil Filter (Yes) (No) Air Filte (Yes) (No) Thermostat Operable (Yes) (No)

6. Heating System Efficiency Test Results:

| | | |
|------------------|------------------|------------------|
| <u>Gas</u> | <u>Oil</u> | <u>Propane</u> |
| Room Temp. _____ | Room Temp. _____ | Room Temp. _____ |

| | | |
|-------------------|-------------------|-------------------|
| Stack Temp. _____ | Stack Temp. _____ | Stack Temp. _____ |
|-------------------|-------------------|-------------------|

| | | |
|------------------------|-------------------------|-------------------------|
| O ₂ % _____ | CO ₂ % _____ | CO ₂ % _____ |
|------------------------|-------------------------|-------------------------|

| | | |
|------------------|------------------|------------------|
| Efficiency _____ | Efficiency _____ | Efficiency _____ |
|------------------|------------------|------------------|

| | | |
|----------------|----------------|----------------|
| CO (ppm) _____ | CO (ppm) _____ | CO (ppm) _____ |
|----------------|----------------|----------------|

| | | |
|-------------|-------------|-------------|
| Draft _____ | Draft _____ | Draft _____ |
|-------------|-------------|-------------|

Smoke Discount:

If Smoke is 0 1 2 3 4 5 6 7 8 9

Then Subtract 0 0 0 0 1 2 3 4 5 7

Adjusted Efficiency Rating _____

Temperature Rise & Static Pressure Testing: _____

7. Recommendation:

Repair? (Yes) (No) Retrofit Tune-Up? (Yes) (No) Replace Unit? (Yes) (No)

State Reason. Be Specific. _____

8. Hot Water Heater Data:

Manufacturer _____ Model _____
 Output _____ Gallons _____
 (Gas) (Oil) (Electric) (Propane)

9. Hot Water Heater Efficiency Test Results:

| <u>Gas</u> | <u>Oil</u> | <u>Propane</u> |
|------------------------|-------------------------|-------------------------|
| Room Temp. _____ | Room Temp. _____ | Room Temp. _____ |
| Stack Temp. _____ | Stack Temp. _____ | Stack Temp. _____ |
| O ₂ % _____ | CO ₂ % _____ | CO ₂ % _____ |
| Efficiency _____ | Efficiency _____ | Efficiency _____ |
| CO (ppm) _____ | CO (ppm) _____ | CO (ppm) _____ |
| Draft _____ | Draft _____ | Draft _____ |

Smoke Discount:

If Smoke is 0 1 2 3 4 5 6 7 8 9

Then Subtract 0 0 0 0 1 2 3 4 5 7

Adjusted Efficiency Rating _____

10. Recommendation

Repair? (Yes) (No) Retrofit Tune-Up? (Yes) (No) Replace Unit? (Yes) (No)

State Reason. Be Specific. _____

11. Additional Comments

12. CAZ Pressure Testing:

Zone Locations (Basement) (Attic) (Other) _____

Baseline Pressure
WRT Outside Pa _____

Worst Case Pressure
WRT Outside Pa _____

Pressure Difference Pa _____

Meets Standards? (Yes) (No)

CAZ Depressurization Limits

Power-vented or sealed-combustion furnace or boiler;
pellet stove with draft fan and sealed vent * **-10 pa (-.04 IWC)**

Atmospherically vented gas systems **-5 pa (-.02 IWC)**

Oil power burner and fan-assisted (induced-draft) gas * **-5 pa (-.02 IWC)**

Closed controlled combustion
Decorative wood-burning appliances **-5 pa (-.02 IWC)**

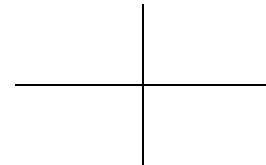
Atmospherically vented water heater **-2 pa (-.008 IWC)**

* Individual combustion appliances may be capable of operating safely at CAZ depressurization more negative than - 10 pascals. However CAZ depressurization is a potential problem for numerous reasons and can usually be reduced. The causes are most often return-air leakage or large exhaust fans.

13. When only HIP work is considered: Testing for fuel burning Stove/Oven and Ambient Air Test numbers are required.

Oven Carbon Monoxide Reading _____ ppm

Ambient Air Reading _____ ppm



14. Surveyor's Name: _____

If surveyor is a contractor, list company:

Name: _____

Address: _____

Surveyor's Signature _____ Date _____

Agency Heater Specialist Signature _____ Date _____