

[Print Form](#)[Reset Form](#)**WARM Program Audit Form**

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Revised Date: 12/1/15

Customer Info:Name: Address: City: State: Zip Code: Account Number: E-mail: Phone Number: Work Number: Other Number: Auditor Name: Audit Date: Job Complete Date: Baseload kWh: Coordinate with State Weatherization: Yes NoState Weatherization \$: Coordinate with Gas Utility Program? Yes NoGas Utility \$: Referred to State or other programs? Yes NoOther Program \$: Landlord Name: Landlord Phone: Directions:

Customer qualifies under PCAP?

 Yes No

Customer enrolled within 12 months

Eligibility Verification: Yes NoVerified By: Household Income \$: PER YEARDate Verified:

Primary Source Of Income:

 1. Employment 2. Public Assist. 3. Pension/Retirement 4. Unemployment 5. Disability
 99. Other Head of household employment status: 1. Full-Time Employment (35 or more hours per week) 2. Part-Time Employment (34 or fewer hours per week) 3. Unemployed Worker 4. Retired 5. Homemaker 6. Student 99. Other Refer to Procedures Manual for "Preparing for an Audit" Document
(REMINDER: Plug in refrigerator monitoring devices)**Demographic/Dwelling Information required by the PUC & entered in WARM3 by contractors:**1. Name of household member present at audit: 2. Relationship to customer: 0. Self 1. Spouse 2. Sibling 3. Parent 4. Relative 5. Non-Relative 6. Other 3. Customer's Date of Birth: 4. Ethnic Origin 1. Caucasian/White 2. African American 3. Hispanic 4. Asian/Pacific Is 5. Native American 99. Multi-Racial5. Number of Occupants: Number of Handicapped Occupants:

Check all that apply:

- Installed electric heat job
 AC job (at least 2,000 kWh summer seasonal use to qualify for roof coat/window film, new AC units or shell measures with full audit required)
 De facto/supplemental heat jobs (electric heat in lieu of or in addition to primary heat source; winter seasonal use of at least 2,000 kWh with full audit required)
 Water Heat Job
 Baseload Job
 Used Default

Seasonal spending allowance: Summer Seasonal Use: Winter Seasonal kWh:

When seasonal allowance cannot be used (customer does not have 6 bills based on actual meter readings within a year), use default spending guidelines effective 01/12/2015.

Please note: Costs associated with any health and safety issues may not exceed 50% of the seasonal spending allowance.

6. Age of Occupants: Under Age 19: Ages 19 to 62: Over 62:

7. Occupancy Type: 1. Own 2. Rent 99. Other

8. Structure Type: 1. 1-1/2 Story or 2 Story 2. Ranch 3. Bi-level 4. Mobile Home 5. Row House (Inside)

6. Row House (Outside) 7. Duplex 8. Multi Family 99. Other

10. Manufactured, Modular Housing

9. Construction Type: 1. Block, concrete or log home with slab foundation and open joist attic 2. Wood frame home with full basement and knee wall attic
 3. Wood frame home with full basement and open joist attic 4. Wood frame home with combination crawl space/basement, open joist attic
 5. Wood frame home with crawl space and open joist attic 6. Wood frame home with post foundation and open joist attic
 7. Mobile home with post foundation 8. Wood frame home with slab foundation and open joist attic 99. Other

9A. Year Constructed:

10. Size of Electrically Heated Area: sq. ft.

11. Type of Air Conditioning: 1. Central System 2. Heat Pump 3. Window Units 4. Wall Units 5. None
 99. Other

12. Number of Window or Wall AC Units:

13. Number of Rooms Routinely Air Conditioned:

14. Size of Area Cooled: sq. ft.

15. Primary Heating Source: 1. Electric 2. Utility Gas 3. Fuel Oil 4. Wood 5. Coal 6. Solar 7. City Steam
 8. Bottled Gas/ Propane 9. Kerosene 99. Other (please describe)

16. Type of Heating System: 1 Electric Baseboard 2. Electric Heat Pump 3. Electric Boiler 4. Electric Furnace
 5. Electric Radiant 6. Electric Wall Blowers 7. Gas Furnace 8. Gas Boiler 9. Oil Furnace
 10. Oil Boiler 99. Other (Please describe)

17. What is the Main Source of Supplemental Heat? 00. None 1. Fuel Oil/Kerosene 2. Utility Gas
 3. Bottled Gas/Propane 4. Electricity 5. Coal 6. City Steam 7. Wood 8. Solar
 9. Pellet Stove 10. Electric Space Heater
 99. Other (please describe)

18. What is the Contribution of the Main Supplemental Heat Source to the Total Household Heating?

1. Totally heated by suppl source 2. Most htg (at least half) from suppl source 3. Less than half of htg from suppl source
 4. Supplemental heat seldom used 5. Suppl heat is present but never used 6. Supplemental heat is not present
 99. Other: Location:

18A. Why are they using the electric space heater? No Heat Heating System does not Work

Using as Additional Heat Other

19. How many unblocked fireplaces are present in the customer's dwelling? (Enter actual number; enter "0" if none.)

20. Water Heater Fuel Type: 1. Electric 2. Fuel Oil 3. Utility Gas 4. Bottled Gas/Propane 99. Other

21. Dryer Type: Electric Gas

Comments:

Customer Interview (Introduce the Partnership Concept)

Describe areas in your home that are difficult to heat or cool and in which season.

[Large empty box for writing]

Describe any appliance problems in your home (including water heater) that we need to be aware of. Are there electrical, plumbing, roofing, or moisture problems? If so, describe.

[Large empty box for writing]

Do you ever use unvented combustion appliances to heat your home in the winter? Yes No N/A
If so, see the Weatherization Release procedure.

What do you believe are the highest energy users in your home?

[Large empty box for writing]

Does anyone living in your home have any respiratory, allergy, or other health issues that we should be aware of? Yes No

If yes, please explain:

[Large empty box for writing]

Are you aware of any building materials, such as caulk, foam, insulation, etc, that could cause anyone living in your home to have a health issue?

[Large empty box for writing]

Act 129
moved
from
pg 4

LED Night Lights - Smart Power Strips - Furnace Whistles - CO Alarms

LED Night Lights: (No install limit, no warranty)
Location:

Installed Furnace Filter Whistle? Yes No
Smart Power Strip: Up to 4/household SPS
Location:

 6-9 Outlet 10+ Outlet

 6-9 Outlet 10+ Outlet

 6-9 Outlet 10+ Outlet

CO Alarms
of Existing Alarms less than 5 years old:
Total NEW Alarms installed #:
Location of new:

WARM Program Lighting

Act 129 Bulbs are non-warranted CFLs. Install these bulbs in lights that are used an average of one (1) hour or more per day. Your goal is to install as many CFLs as possible in each customer's home.

Note: All measures are required to be installed by the contractor.

Act 129

CFL Replacement Wattage

Standard Bulbs

Location

Number of Standard Bulbs Installed:

Act 129

Bulb
Type* CFL Replacement Wattage

Specialty Bulbs

Location

*Bulb type: Note the following - SB for General Specialty, R/F for Recessed and/or Flood

Number of Specialty Bulbs Installed:

Number of Recessed and/or Flood Bulbs installed:

Number of Torchiers Installed:

LED Replacement Wattage

LED Bulbs

Total	6 - 8 Standard	9 - 13 Standard	2.3 Globe	3.5 Med-Base Torpedo	3.7 - 4.8 Candelabra	8 Flood	13 - 14 Flood	17 Flood	Location
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Number of LED Bulbs Installed:

↑ Replaced the Act 129 section

which is now on Pg 3

Refrigerators

Number of refrigerators used:

Test all units five years or older. If any unit was not tested, please use a web-based database to determine annual usage.

Existing Refrigerator and Freezer Testing Data

kWh Guidelines for Replacement: Test units for as long as possible but factor the test results back to a one hour reading. In order to meet the daily minimum guidelines for replacement the kWh must reach the kWh/Hour Minimum listed below by the end of one hour of monitoring. If at any time during the first hour of monitoring the meter reaches the kWh/Hour Minimum, the tester will indicate that the refrigerator is likely to qualify for replacement.

To get KWH/Hour test results:

Divide total kWh recorded by the monitor, by the number of minutes that the monitor has been on. Your answer will be the number of kWhs consumed per minute. Multiply this by 60 minutes to get the kWh usage for one hour. This is shown by the formula below. (Refer to chart on page 4-54 of the Policy and Procedures Manual)

$$\frac{\text{Total kWhs recorded by monitor}}{\text{Number of minutes monitored}} = \text{kWhs per minute} \times 60 \text{ minutes} = \text{kWh per one hour}$$

Refrigerator Size	kWh/Hour Minimum	Replacement
15 cu ft or less	.08 kWh	15 cu ft
16 - 19 cu ft	.10 kWh	17 or 18 cu ft
20 - 21 cu ft	.11 kWh	21 cu ft
22 cu ft or larger	.12 kWh	20 - 25 cu ft

Ambient Air Temperature Immediately Surrounding the Refrigerator during Testing

5 degrees (or more) hotter than average	0.88 factor
Average annual temperature for room*	1.00 Factor
5 degrees (or more) cooler than average	1.13 factor

*If not known by customer, use 70 degrees F

Primary refrigerator:	Location: <input type="text"/>	Calculated Estimated Operating Cost/Month. (Optional Info): \$ <input type="text"/>
Make: <input type="text"/>	Model: <input type="text"/>	Year: <input type="text"/> Size: <input type="text"/> Type: <input type="checkbox"/> Top Mount <input type="checkbox"/> Bottom Mount <input type="checkbox"/> SxS
Start Time: <input type="text"/>	End Time: <input type="text"/>	Total Time Monitored: <input type="text"/> Ice Maker? <input type="checkbox"/> Yes <input type="checkbox"/> No
kWh Monitor Reading: <input type="text"/> kWh conversion at one hour: <input type="text"/>		<i>Add ↗</i>
Is this unit eligible for replacement? <input type="radio"/> Yes <input type="radio"/> No		Temperature inside fresh food: <input type="text"/> Room Temperature: <input type="text"/> Temperature inside freezer: <input type="text"/>
<input type="checkbox"/> Database Used? Replacement Size: <input type="text"/> <input type="checkbox"/> Did not test because: <input type="radio"/> Could not move <input type="radio"/> < 5 years old		<input type="radio"/> Customer Refused new unit

Secondary Refrigerator:	Location: <input type="text"/>	Calculated Estimated Operating Cost/Month. (Optional Info): \$ <input type="text"/>
Make: <input type="text"/>	Model: <input type="text"/>	Year: <input type="text"/> Size: <input type="text"/> Type: <input type="checkbox"/> Top Mount <input type="checkbox"/> Bottom Mount <input type="checkbox"/> SxS
Start Time: <input type="text"/>	End Time: <input type="text"/>	Total Time Monitored: <input type="text"/> Ice Maker? <input type="checkbox"/> Yes <input type="checkbox"/> No
kWh Monitor Reading: <input type="text"/> kWh conversion at one hour: <input type="text"/>		
Is this unit eligible for replacement? <input type="radio"/> Yes <input type="radio"/> No		Temperature inside fresh food: <input type="text"/> Room Temperature: <input type="text"/> Temperature inside freezer: <input type="text"/>
<input type="checkbox"/> Database Used? Replacement Size: <input type="text"/> <input type="checkbox"/> Did not test because: <input type="radio"/> Could not move <input type="radio"/> < 5 years old		<input type="radio"/> Customer Refused new unit

Additional Refrigerator:	Location: <input type="text"/>	Calculated Estimated Operating Cost/Month. (Optional Info): \$ <input type="text"/>
Make: <input type="text"/>	Model: <input type="text"/>	Year: <input type="text"/> Size: <input type="text"/> Type: <input type="checkbox"/> Top Mount <input type="checkbox"/> Bottom Mount <input type="checkbox"/> SxS
Start Time: <input type="text"/>	End Time: <input type="text"/>	Total Time Monitored: <input type="text"/> Ice Maker? <input type="checkbox"/> Yes <input type="checkbox"/> No
kWh Monitor Reading: <input type="text"/> kWh conversion at one hour: <input type="text"/>		
Is this unit eligible for replacement? <input type="radio"/> Yes <input type="radio"/> No		Temperature inside fresh food: <input type="text"/> Room Temperature: <input type="text"/> Temperature inside freezer: <input type="text"/>
<input type="checkbox"/> Database Used? Replacement Size: <input type="text"/> <input type="checkbox"/> Did not test because: <input type="radio"/> Could not move <input type="radio"/> < 5 years old		<input type="radio"/> Customer Refused new unit
If space is needed for additional refrigerators, please use comment section on next page.		

Freezers

Existing Freezer Type	Existing Freezer Size	If existing one hour of use is:	Then
Chest	Less than 8 cf	Greater than .064 kWh	Replace existing unit
Chest	8.1 to 12.9 cf	Greater than .084 kWh	Replace existing unit
Chest	13 to 15.5 cf	Greater than .103 kWh	Replace existing unit
Chest	15.6 cf or larger	Greater than .154 kWh	Replace existing unit
Upright	Less than 10 cf	Greater than .074 kWh	Replace existing unit
Upright	10.1 to 12.9 cf	Greater than .103 kWh	Replace existing unit
Upright	13 to 15.5 cf	Greater than .123 kWh	Replace existing unit
Upright	15.6 or larger	Greater than .154 kWh	Replace existing unit

Number of freezers used:

Primary Freezer: Location Calculated Estimated Operating Cost/Month (Optional Info): \$

Make: Model: Year: Size: Upright Chest

Start Time: End Time: Total Time Monitored: Frost Free? Yes No

kWh Monitor Reading: kWh conversion at one hour: ↑ Add ↑

Is this unit eligible for replacement? Yes No Room Temperature: Temperature inside freezer:

Database Used? Replacement Size: Did not test because: Could not move < 5 years old Customer Refused new unit

Secondary Freezer: Location Calculated Estimated Operating Cost/Month. (Optional Info): \$

Make: Model: Year: Size: Upright Chest

Start Time: End Time: Total Time Monitored: Frost Free? Yes No

kWh Monitor Reading: kWh conversion at one hour:

Is this unit eligible for replacement? Yes No Room Temperature: Temperature inside freezer:

Database Use? Replacement Size: Did not test because: Could not move < 5 years old Customer Refused new unit

Additional Freezer: Location Calculated Estimated Operating Cost/Month. (Optional Info): \$

Make: Model: Year: Size: Upright Chest

Start Time: End Time: Total Time Monitored: Frost Free? Yes No

kWh Monitor Reading: kWh conversion at one hour:

Is this unit eligible for replacement? Yes No Room Temperature: Temperature inside freezer:

Database Use? Replacement Size: Did not test because: Could not move < 5 years old Customer Refused new unit

Comments:

Utilize this space to indicate readings for additional refrigerators/freezers monitored in the home.

Washer and Dryer Assessment

Number of washer loads per week:

Water Heater Type: Electric Gas

What temperature settings do you currently use? Hot Wash/Cold Rinse Warm Wash/Cold Rinse Cold Wash/Cold Rinse Other

Washer comments (if water heater is electric)

Number of electric dryer loads per week:

How long does it take to dry a load?

Dryer Type: Electric Gas - H&S Only

Is dryer vented properly? Yes No

Dryer venting details: Venting location

Venting done for H&S? Yes No

Make a new hole Vent the dryer out using an existing hole Approx # of feet # of elbows:

Add new vent cap/hood

Semi-Rigid Aluminum Flex used. Why?

Would a clothesline be cost effective? Yes No Is one being installed? Yes No

Other drying issues:

Fossil Fuel Heating Systems

New filter(s) installed in the heating system? Yes No Number installed: Filter Dimensions:

Filter(s) to be cleaned in the heating system? Yes No Number cleaned:

Is filter slot covered? Yes No N/A if no, install cover.

Other

Well Pump used? Yes No Water leaks? Yes No Dehumidifier used? Yes No Pool pump used? Yes No

Septic system grinders? Yes No Are you willing to replace waterbed(s)? Yes No N/A

Replacement Size: Super Single (46" x 82") Queen (58" x 82") King (70" x 82")

Other issues or comments such as moisture, ventilation, electric space heater, or unvented combustion issues:

Comments:

Water heat fuel type question was removed.

Document water heating issues here, such as family runs out of hot water, tank rusted:

Is the water heater leaking? Yes No

Is the water heater rusted/corroded? Yes No

Are the element(s) bad? Yes No

Is the unit rated R8 or less? Yes No

Will water heater be replaced? Yes No

Energy Factor:

Existing Water Heater size: Replacement size:

Are you going to:	Yes	No
Replace or add expansion tank	<input type="checkbox"/>	<input type="checkbox"/>
Replace Element(s)	<input type="checkbox"/>	<input type="checkbox"/>
Replace Thermostats	<input type="checkbox"/>	<input type="checkbox"/>
Flush Tank?	<input type="checkbox"/>	<input type="checkbox"/>
Add/replace pressure relief valve	<input type="checkbox"/>	<input type="checkbox"/>
Add/replace pressure relief pipe	<input type="checkbox"/>	<input type="checkbox"/>

Did you change the temperature? Yes No If yes, set both elements to the same temperature.

Test location: Existing Temp: Adjusted Temp: (No lower than 125 degrees F)

Are you wrapping water pipes? Yes No If so, # of linear ft for hot water: 1/2" 3/4" Location:
If so, # of linear ft for cold water: 1/2" 3/4" Location:

Comments:

Are there any other hot water leaks? Yes No If yes, where?

Are you going to repair leaks? Yes No If yes, where?

Faucet Aerators & Shower heads

Are you installing faucet aerators? Yes No If so, which?
Bath Aerator # installed? Location:

Kitchen Aerator # installed? Location:

Are you installing a shower head? Yes No If so, which?
with swivel head # installed? Location:
with shutoff # installed? Location:
with out shutoff # installed? Location:
handheld # installed? Location:

Would a GFX System work? Shower is used at least 15 minutes per day; basement drain stack servicing the most used shower is exposed; at least 34" of vertical height available on the drain stack; drain pipe is at least 3" in diameter: Yes No

If yes, how far is the drain pipe from the cold water supply? How far is the drain pipe from the water heater? Installing GFX? Yes No

Does the customer have a water heater timer? Yes No

If yes, are you recommending removal? Yes No

All TOD questions removed

Comments:

Heat Pump Water Heater (HPWH) - Once "No" is an answer to any question or if the customer's home is for sale, stop asking questions in this section and proceed to the Cooling Assessment.

Is the customer a candidate (currently has an electric resistance water heater) for a Heat Pump Water Heater (HPWH)? Yes No

Homeowner? Yes No Are there two or more occupants, but less than six? Yes No

Does the home have a basement area , where the HPWH would be located, that is at least 45 degrees year round with no dirt floor? Yes No

Can you install the HPWH in an unconfined space that is at least 10' by 10' by 7' and is there room to remove and replace the filter? Yes No

Is there adequate space to bring the HPWH into the home, down the stairs, along railings, etc.? Yes No

Can you install the HPWH near an existing drain or line/pump that is no higher than 3" above the floor or can you run the condensate line from the HPWH to the existing drain? Yes No

Are the home's plumbing and electrical systems in good shape? Yes No

Is the customer willing and able to adjust the HPWH panel or maintain consistent usage habits? Yes No

Does the customer understand there is noise and cold air output associated with a HPWH? Yes No

Does the customer agree to the installation of the system and to regularly clean the HPWH filter? Yes No

Is a HPWH recommended, and will it be installed? Yes No Size: 40-50 Gallon

Comments:

The WARM Program auditor has explained to me how a heat pump water heater operates and how it can help reduce my electric usage. The auditor has also provided me with instructions on how to maintain the water heater to ensure its efficient operation. I agree to the installation of the heat pump water heater and I or another member of my household agrees to perform required water heater maintenance that includes regularly changing the filter and periodically checking to make sure the unit is draining properly.

Signature

Date

Cooling Assessment

Summer Seasonal Use:

kWh

Cooling Load Reduction Measures: Summer Seasonal use of 2,000 kWh or more qualifies for roof coat/window film, ACs and/or shell measures if related to cooling.**Window Film:** Are there any windows on the west, south and east that are not shaded in the summer during the hours of 9 AM and 4 PM? Yes NoApproximate total sq. footage of window film needed: # and location of west facing windows to receive film: # and location of south facing windows to receive film: # and location of east facing windows to receive film: **Reflective Roof Coating:** Is there any roof area that faces south and receives sun all day in the summer and is metal or roll roof material? Yes NoInstall roof coat? Yes No Approx sq. footage of roof, times 2 for 2 coats: Are there other steps to reduce A/C use i.e., AC timers, Fans, Screens? Yes No Will install: Comments: **Room AC units:** Is the EER on the existing room AC 6 or lower as labeled, calculated or metered? If so, it can be replaced with an Energy Star rated unit, but the Summer Seasonal Use (kWh) must be 2,000 or more to replace 1 unit and 2,500 to replace 2 units and 3,000 to replace 3 units.

Unit Watts	EER = BTU/hr Watts	Replace AC?	Current Size BTU/hr	Current Location	New Size BTU/hr	Installed Location	Replace Filter?	Clean Filter?
		<input type="checkbox"/> Yes					<input type="checkbox"/> Yes	<input type="checkbox"/> Yes
		<input type="checkbox"/> Yes					<input type="checkbox"/> Yes	<input type="checkbox"/> Yes
		<input type="checkbox"/> Yes					<input type="checkbox"/> Yes	<input type="checkbox"/> Yes
		<input type="checkbox"/> Yes					<input type="checkbox"/> Yes	<input type="checkbox"/> Yes
		<input type="checkbox"/> Yes					<input type="checkbox"/> Yes	<input type="checkbox"/> Yes

What are the customer's window AC thermostat use habits? Total number of AC units to be replaced? Manufactured year for newest room AC unit present (only if insulation is installed): **Central AC:** Replacement determined by kWh use and the SEER (age and efficiency) of the existing unit. Replace SEER 8 or less with SEER 13 or higher. Replacement requires FirstEnergy approval. **Please note:** Customer must have at least 3,000 kWh of summer use in order to qualify for replacement.What are customer's AC thermostat use habits? Is the thermostat accurate? Yes No If not, why? Do you recommend replacement of thermostat? Yes NoIs filter slot covered? Yes No N/A If no, install cover. Location of A-coil? Inside OutsideCan you visually inspect the A-coil? Yes No If yes, is cleaning recommended? Yes No If yes, cleaning performed by: Auditor 3rd Party ContractorIf visually unable to inspect A-coil, does usage warrant 3rd party clean and tune? Yes No If yes, was 3rd party contractor contacted? Yes No Clean/Tune? Yes NoIf clean and tune recommended, why? New filter(s) installed in the system? Yes No Number Installed: Filter Dimensions: Filter(s) to be cleaned in the system? Yes No Number Cleaned: Coils to be cleaned? Yes No C/A unit to be replaced? Yes No Size of Unit: **Duct work Sealing and/or Duct Installation:** Are there obvious duct leaks in any duct work that is outside the thermal boundary? Yes No Location: Insulation to be installed? Yes No Sealing to be completed? Yes No Manufactured year for central AC unit present (only if insulation is installed): Comments:

Heat Pump: Replacement determined by kWh use and the HSPF (age and efficiency) of the existing unit. Replace HSPF 9 or less with HSPF 13 or higher. Replacement requires FirstEnergy approval. **Please note:** Customer must have at least 4,500 kWh of seasonal use in order to qualify for replacement.

Customers' heat pump is used for? Heat A/C N/A Other []

What are customer's Heat Pump thermostat use habits? []

Is the thermostat accurate? Yes No If not, why? []

Is filter slot covered? Yes No If no, install cover. Can you visually inspect the A-coil? Yes No

If yes, is cleaning recommended? Yes No If yes, cleaning performed by: Auditor 3rd Party Contractor

If visually unable to inspect A-coil, does usage warrant 3rd party clean and tune? Yes No If yes, was 3rd party contacted? Yes No Clean/Tune? Yes No

If clean and tune recommended, why? []

New filter(s) installed in the system? Yes No Number Installed: [] Filter(s) to be cleaned in the system? Yes No Number Cleaned: []

Coils to be cleaned? Yes No Heat Pump to be replaced? Yes No Size of Unit: []

Duct work Sealing and/or Duct Installation: Are there obvious duct leaks in any duct work that is outside the thermal boundary? Yes No Location: []

Insulation to be installed? Yes No Sealing to be completed? Yes No **Heat pump energy education pamphlet provided to customer?** Yes No

Comments: []

Electric Heat: Type of Heating System: 1. Electric Baseboard 2. Electric Boiler 3. Electric Furnace 4. Electric Radiant

5. Electric Wall Blowers 99. Other (Please describe) []

What are customer's Electric Heat thermostat use habits? []

Is the thermostat(s) accurate? Yes No If not, why? []

Do you recommend replacement of thermostats? Yes No Explain Details: []

Is filter slot covered? Yes No If no, install cover. Provide Locations of Thermostats: []

Clean/Tune? Yes No

If clean and tune recommended, why? []

New filter(s) installed in the system? Yes No Number Installed: []

Filter(s) to be cleaned in the system? Yes No Number Cleaned: []

Electric heater to be replaced? Yes No Size of Unit: []

Any electric heating system repairs? Yes No Explain Details: []

Does family use electric space heaters INSTEAD of or in addition to their primary heat source? Yes No Location: []

If PCAP customer answers yes, good opportunity to explain his/her program responsibilities

Duct work Sealing and/or Duct Installation: Are there obvious duct leaks in any duct work that is outside the thermal boundary? Yes No

Location: [] Insulation to be installed? Yes No Sealing to be completed? Yes No

Comments: []

Fossil Fuel Heating Assessment

Primary Heating Source:

Add additional duct run? Yes No

1. Utility Gas 2. Fuel Oil 3. Wood 4. Coal 5. Solar
 6. City Steam 7. Bottled Gas/ Propane 8. Kerosene 99. Other (please describe)

Would minor retrofitting reduce the need for supplemental electric space heating? Yes No

List measures installed

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Structure Assessment

A blower door test must be conducted if: the home has installed electric heat, AC is present with summer seasonal use of at least 2000 kWh, or electric space heaters are present with winter seasonal use of at least 2000 kWh. Use the **Blower Door Testing Information Sheet** to document the **Building Airflow Standard** (BAS), and the testing results.

If blower door test is not being completed, why?

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If the blower door test indicates air sealing is to be performed, indicate location of air leaks.

Location of air leaks: Location of air leaks: Location of air leaks: Location of air leaks: Live Knob & Tube? Yes No Location: Abatement: Yes NoEvidence of Mold? Yes No Evidence of moisture, water? Yes No Location:

Document any structural problems such as roof leaks, poor drainage, etc, here.

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Mechanical VentilationKitchen: Existing: Yes No Measured Fan Flow CFM Add: Yes No Vents out Recirculates

Comments:

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1st Floor Bathrooms: Existing: Yes No Measured Fan Flow CFM Add: Yes NoLight in existing: Yes No Replacement requires light: Yes No Is the fan on its own switch? Yes No Is fan on shared switch? Yes No

Comments:

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2nd Floor Bathrooms: Existing: Yes No Measured Fan Flow CFM Add: Yes NoLight in existing: Yes No Replacement requires light: Yes No Is the fan on its own switch? Yes No Is fan on shared switch? Yes No

Comments:

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If adding a fan: Ceiling: Yes No Size: Location:
 Wall: Yes No Size: Location:

Attic	2nd Fl
Basement	1st Fl

<input type="radio"/> A	Access	<input type="radio"/> V	Ventilation
<input type="radio"/> H	Recessed heat producing device	<input type="radio"/> O1	Other _____
<input type="radio"/> D	Dropped soffit/ceiling/bulkhead	<input type="radio"/> O2	Other _____
<input type="radio"/> I	Existing insulation	<input type="radio"/> O3	Other _____
<input type="radio"/> S	Stored Items	<input type="radio"/> O4	Other _____
<input type="radio"/> F	Floor	<input type="radio"/> O5	Other _____

Basement/Crawl Spaces/Mobile Home Belly**Basement Air Sealing:**

Perimeter (doors, windows, rim joist, walls) Ceiling Ducts Other

Decide if the basement and/or crawl space is inside/outside the thermal and pressure boundaries. Then decide if air sealing/insulation should be at the basement and/or crawl space perimeter or at ceiling.

Insulation:

Area	Location	Sq Ft	Existing Effective R Value	Add R	New Insulation Type	Comments (such as joists running lengthwise or widthwise - 16" or 24" joist bay size)
Floor/Crawl Space						
Perimeter						
Other						
Belly						

Install ground cover: Yes No If so, sq ft installed:

Are there any kneewalls? Yes No Are they air sealed or blocked at the joist bays? Yes No If not, please block them!

Insulation: Heating Cooling

Area	Location	Sq Ft	Existing Effective R Value	Add R	New Insulation Type	Comments
Unfloored Attic 1						
Unfloored Attic 2						
Unfloored Attic 3						
Floored Attic 1						
Floored Attic 2						
Cathedral						
Finished Attic						
Kneewall Floored						
Kneewall Unfloored						
Slopes						
Vertical Kneewall						
Vertical Kneewall						

Attic Ventilation

Ventilation Type	Proposed Additional Ventilation	Location	Comments
Roof Vent			
Gable Vent			
Soffit Vent			
Ridge Vent			

Comments

Attic Access:

Horizontal attic access - insulate to at least equivalent R value of surrounding surfaces Already done Will do Location: Weather Stripping Existing Add

Vertical openings - insulate to equivalent R value of surrounding surfaces Already done Will do Location: Weather Stripping Existing Add

Pull down stairs - insulate to at least equivalent R value of surrounding surfaces Already done Will do Location: Weather Stripping Existing Add

Be sure to dam the access if it will remain operable. Recommended? Yes No

Heat Producing Fixtures

Are there recessed heat producing fixtures? Yes No

How many recessed fixtures are there? # of lights # of fans # other

If you are going to insulate the attic floor or air seal the fixtures, please continue.

How many are IC rated? How many are non-IC rated? How many have an unknown rating?

How many will be dammed to protect them from insulation? How many will be air sealed either with sealed dams or with air tight inserts?

Will customer allow recessed light(s) to be changed out? Yes No

How many will be replaced with either air tight, IC rated recessed fixtures, or surface mounted fixtures?

How many are under the floored attic and protected with metal dam blocking or fiberglass batt blocking?

When complete, the recessed fixtures must not leak air into the attic and dams must be able to be seen from the attic unless they are under the attic floor.

Be sure to dam any chimney flues. Recommended? Yes No # of chimneys:

Cantilever Overhangs

Are there cantilever overhangs? Yes No Is the underside blocked with an impermeable air barrier? Yes No

Are floor joists bays blocked? Yes No If no, please block these joist bays and insulate.

Area	Location	Sq Ft	Existing Effective R Value	Add R	New Insulation Type	Comments
Cantilever						
Cantilever						
Bay Window						

Side walls

Siding Type: Wood Asphalt Stucco Aluminum Vinyl Brick Other

Interior Wall Material:

Can side walls be insulated? Yes No If not, why?

If yes, list the facing direction of the side walls you want to insulate North sq ft South sq ft East sq ft West sq ft

Document side wall issues such as weak walls, open cavities, electrical issues, etc:

Other Zones such as attached garage

Insulation:

Area	Sq Ft	Existing Effective R Value	Add R	New Insulation Type	Comments
Garage Ceiling					

Is garage isolated from thermal envelope? Yes No If no, air seal Health and Safety? Yes No

Other Zones outside Thermal and Pressure Boundaries, ie porches, bay windows

Air Leakage Testing

Step 1: Multiply # of occupants x 15 CFM = CFM needed for people (P) Number of Occupants: X 15 CFM = Total CFM for the people (P)

Step 2: Multiply the building volume x .35 ACH. Then divide by 60 minutes to get CFM Natural for the Building (B)

Floor (1st, 2nd, etc)	Width x	Length x	= Area (sq ft)	x Ceiling Height	= Volume	x .35 ACH	Divide by 60 mins	= CFM N B
						0		0
			0		0	0		0
			0		0	0		0
			0		0	0		0
					0	0	Answer B:	0

Number of Stories above Grade: Enter P or B (larger # of the 2) 4: Multiply by height corrected N Factor:

Number of Stories above grade	N Factor
1	19
1.5	16.8
2	15.4
2.5	14.4
3	13.7

N Factor
(online completion)

Use drop-down above for online form completion. Use table to left for paper completion. For paper complete Steps 3 and 4 above:

5. Answer

Above number is your target BAS. Multiply above number by .70.

6. Air sealing below this number means you MUST install mechanical ventilation.

Target BAS: CFM 50

Check all that apply:

Pre-treatment test result: CFM 50, Basement Door: Open Closed

Blower door location pre-treatment:

Attic Door: Open Closed

Blower door location post treatment:

Other Door:

Open Closed

Other Notes:

Post treatment test result: CFM 50, Basement Door: Open Closed

Attic Door: Open Closed

Other Door:

Open Closed

If unvented combustion appliances exist, don't air seal the home below 3000 CFM 50; however, always air seal the attic from the living space regardless of BAS or existing CFM 50. Follow ASHRAE 62.89 and the Air Sealing Procedure in the WARM Manual.

Thermal Boundary: In or Out?			Pressures							
Zones	In	Out	What was blower door set at?		House/Zone		Zone/Outside			
			Pre-Treat	Final	Pre-Treat	Final	Pre-Treat	Final	Pre-Treat	Final
Attic	<input type="checkbox"/>	<input type="checkbox"/>								
Basement	<input type="checkbox"/>	<input type="checkbox"/>								
Vented Crawl	<input type="checkbox"/>	<input type="checkbox"/>								
Attic A	<input type="checkbox"/>	<input type="checkbox"/>								
Attic B	<input type="checkbox"/>	<input type="checkbox"/>								
Kneewall A	<input type="checkbox"/>	<input type="checkbox"/>								
Kneewall B	<input type="checkbox"/>	<input type="checkbox"/>								
Garage	<input type="checkbox"/>	<input type="checkbox"/>								
Garage Attic	<input type="checkbox"/>	<input type="checkbox"/>								
Cantilever Overhang	<input type="checkbox"/>	<input type="checkbox"/>								
Other	<input type="checkbox"/>	<input type="checkbox"/>								
Other	<input type="checkbox"/>	<input type="checkbox"/>								

Pressure Pan Test Results (test at -25 Pascals) Duct leaks or disconnects observed? Yes No Existing Duct Materials: Metal Ductboard Flex

System Type: Heat Pump Central Air Only Electric Furnace Other

Register	#1	#2	#3	#4	#5	#6	#7	#8
Room								
Reading	Pre	Post	Pre	Post	Pre	Post	Pre	Post
Supply								
Return								

Note: Number registers by floor going away from Air Handler Unit (AHU). Register #1 will always be the one closest to AHU.

Copy this page for as many tests that are needed. Typically, there should be two of this form, one for pre-work testing and one for post-work testing.

Pre-Test Post-Test

Auditor Crew

Tech Name

Test Date:

Combustion Safety Testing

Are there Combustion Appliances? Yes No

Combustion Equipment Safety Tests must be performed if any air sealing will be done or is done. If post-treatment blower door test is lower than the pre-treatment test, the chart below MUST be completed. Refer to the Procedure Manual for complete testing procedure.

Are there any unvented combustion heating appliances? Yes No

Burners:

Write in CO ppm for each burner:

Over

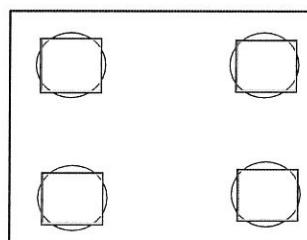
If CO at oven vent is 100 ppm or more,
install CO alarm and
recommend service.

No air sealing is allowed until CO level drops below 100 ppm

|Open:

CO Ambient:

CO at oven vent:



Notes:

AMB = Ambient, CAZ = Combustion Appliance Zone, Det = Detected, W/C = Worst Case Conditions, NAT = Natural, Temp = Temperature, Eff = Efficiency
Pa = Pascal, IWC = Inches of Water Column: 50 Pa = 2 IWC, 25 Pa = 1 IWC, 1 Pa = 0.00401 IWC

BPI Minimum Acceptable Draft Test Reading at Outdoor Air Temperature Ranges

Degrees F	<19	20s	30s	40s	50s	60s	70s	80s	>90
Pascals (Pa)	-2.5*	-2.25*	-2*	-1.75*	-1.5*	-1.25*	-1*	-.75*	-0.5*

* Actual equation is $(T_{out}/40) - 2.75$

Outdoor Temperature:

CAZ Worse Case Depressurization: Natural: WC: Diff:

Pass? Yes No

- Emergency situation. Gas company called to fix gas leak or other.
 - Work cannot continue due to one or more failed tests over Action Level

Select Appliances on At Worst Case Test:

- Dryer
 - Bath Fan
 - Kitchen Fan
 - Attic Fan
 - Whole House Fan
 - HVAC Air Handler

Notes:

For more information about the study, please contact Dr. John Smith at (555) 123-4567 or email him at john.smith@researchinstitute.org.

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Pre-Test Post-Test
 Auditor Crew

Tech Name

Test Date:

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Are there any unvented combustion heating appliances? Yes No

Burners:

Write in CO ppm for each burner:

Oven

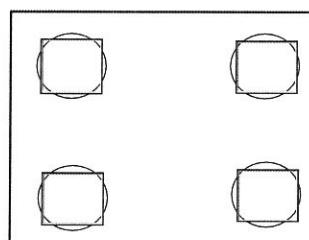
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|Open:

CO Ambient:

CO at oven vent:



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Outdoor Temperature:

CAZ Worse Case Depressurization: Natural: WC: Diff:

Pass? Yes No

Emergency situation. Gas company called to fix gas leak or other

Work cannot continue due to one or more failed tests over Action Level.

Select Appliances on At Worst Case Test:

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- Bath Fan
- Kitchen Fan
- Attic Fan
- Whole House Fan
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Pre-Test Post-Test

Auditor Crew

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Test Date: _____

Combustion Safety Testing

Are there Combustion Appliances? Yes No

Combustion Equipment Safety Tests must be performed if any air sealing will be done or is done. If post-treatment blower door test is lower than the pre-treatment test, the chart below MUST be completed. Refer to the Procedure Manual for complete testing procedure.

Are there any unvented combustion heating appliances? Yes No

	CO Initial Reading		CO After 5-10 Min		Gas Leak Det Y/N	Flame Rollout Y/N	Spillage Y/N		Spillage after 1 min Y/N		Draft Pressure PA		Draft Pass Y/N		CO Flue Y/N		CO Pass Y/N			Optional		
Appliance	AMB	CAZ	AMB	CAZ			W/C	NAT	W/C	NAT	W/C	NAT	W/C	NAT	W/C	NAT	W/C	NAT	Stack Temp	O2	Eff.	
Water Heater																						
Furnace/Boiler																						
Gas Range																						
Other																						

Burners:

Write in CO ppm for each burner:

Oven

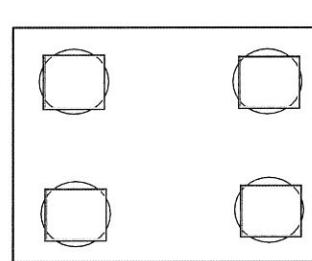
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No air sealing is allowed until CO level drops below 100 ppm.

Oven:

CO Ambient: _____

CO at oven vent: _____



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Outdoor Temperature: _____

CAZ Worse Case Depressurization: Natural: _____ WC: _____ Diff: _____

Pass? Yes No

Emergency situation. Gas company called to fix gas leak or other.

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Select Appliances on At Worst Case Test:

- Dryer Whole House Fan
- Bath Fan HVAC Air Handler
- Kitchen Fan _____
- Attic Fan

Notes: _____

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Pre-Test Post-Test

Auditor Crew

Tech Name: _____

Test Date: _____

Combustion Safety Testing

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Combustion Equipment Safety Tests must be performed if any air sealing will be done or is done. If post-treatment blower door test is lower than the pre-treatment test, the chart below MUST be completed. Refer to the Procedure Manual for complete testing procedure.

Are there any unvented combustion heating appliances? Yes No

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Appliance	AMB	CAZ	AMB	CAZ			W/C	NAT	W/C	NAT	W/C	NAT	W/C	NAT	W/C	NAT	W/C	NAT	Stack Temp	O2	Eff.
Water Heater																					
Furnace/Boiler																					
Gas Range																					
Other																					

Burners:

Write in CO ppm for each burner:

Oven:

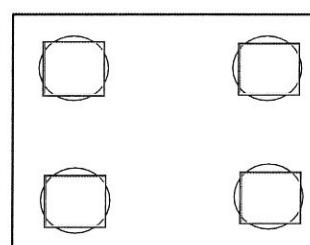
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Oven:

CO Ambient:

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Outdoor Temperature:

CAZ Worse Case Depressurization: Natural: WC: Diff:

Pass? Yes No

Emergency situation. Gas company called to fix gas leak or other.

Work cannot continue due to one or more failed tests over Action Level.

Select Appliances on At Worst Case Test:

- Dryer Whole House Fan
 Bath Fan HVAC Air Handler
 Kitchen Fan
 Attic Fan

Notes:

House Air Sealing

		UI/Lin. Ft/#	Location(s)	Materials	Labor Hrs
Doors:					
<input type="checkbox"/> Replace	<input type="checkbox"/> Repair				
<input type="checkbox"/> Weatherstrip					
<input type="checkbox"/> Sweep(s)					
<input type="checkbox"/> Threshold(s)					
<input type="checkbox"/> Sealing					
Windows:					
<input type="checkbox"/> Replace	<input type="checkbox"/> Repair				
<input type="checkbox"/> Replace broken glass					
<input type="checkbox"/> Reglaze					
<input type="checkbox"/> Weatherstrip					
<input type="checkbox"/> Sash lock(s)					
<input type="checkbox"/> Sealing					
Other:					
<input type="checkbox"/> Dryer/Other Vents					
<input type="checkbox"/> Fireplace					
<input type="checkbox"/> Plumbing					
<input type="checkbox"/> Electrical					
<input type="checkbox"/> Walls					
<input type="checkbox"/> Stairs					
<input type="checkbox"/> Other					

Attics Indicate areas where air sealing is needed and/or performed:

Air Sealing Measures:	Materials	Labor hrs Optional
<input type="checkbox"/> Top Plates		
<input type="checkbox"/> Plumbing Penetrations		
<input type="checkbox"/> Electrical Penetrations		
<input type="checkbox"/> Dropped Ceilings		
<input type="checkbox"/> Bulkhead soffits		
<input type="checkbox"/> Recessed fixtures		
<input type="checkbox"/> Access		
<input type="checkbox"/> Ducts		
<input type="checkbox"/> AC or htg system air handler		
<input type="checkbox"/> Open Chaseways		
<input type="checkbox"/> Other		

Notes:

To assist all the inspectors and evaluators, please list:

**Other Notes to
Inspectors or
Evaluators:**

For more information about the study, please contact Dr. John Smith at (555) 123-4567 or via email at john.smith@researchinstitute.org.

Measure(s) called for and refused by customer:

	Measure called for and refused	Customer Signature/Date

All the following forms must be attached to the job in WARM3 to qualify for invoice approval:

- | | | |
|--|---|------------------------------|
| <input type="checkbox"/> WARM3 Invoice | <input type="checkbox"/> Photos of work performed that is now inaccessible | <input type="checkbox"/> N/A |
| <input type="checkbox"/> This audit form | <input type="checkbox"/> Weatherization Release Form when unvented combustion appliances are present | <input type="checkbox"/> N/A |
| <input type="checkbox"/> Seasonal Allowance Calculation Form | <input type="checkbox"/> Copy of "Air Tight Home" handout signed by customer | <input type="checkbox"/> N/A |
| <input type="checkbox"/> Our Partnership Agreement | <input type="checkbox"/> Copy of Custom Measure Payback Worksheet | <input type="checkbox"/> N/A |
| <input type="checkbox"/> Our Savings Strategy | <input type="checkbox"/> Copy of H&S Conditions and Findings Form | <input type="checkbox"/> N/A |
| <input type="checkbox"/> Customer Details from FE Human Services Web Site
Only send the kWh | <input type="checkbox"/> Information regarding referrals to other programs | <input type="checkbox"/> N/A |
| <input type="checkbox"/> Account kWh usage from FE Human Services Web Site | <input type="checkbox"/> Heat Pump Checklist for contractor | |
| <input type="checkbox"/> RT vs RS Spreadsheet | <input type="checkbox"/> AC Checklist for contractor | |
| <input type="checkbox"/> Receipts for items over \$500 - FE needs this information | <input type="checkbox"/> Lowe's Appliance POD Form (WARM LIURP only - in applicable service areas) | |
| <input type="checkbox"/> N/A | | |

Changed from Sears Appliance Fax form