

**WX-900E**

(REV. 08-09)

**Kentucky Housing Corporation**  
**Department of Design & Construction Review**  
**(Weatherization)**

**Electric Heat System Evaluation:**

Clients Name: \_\_\_\_\_ Job #: \_\_\_\_\_ Date: \_\_\_\_\_

		AC / Heat Pumps	
Unit Type	PK / SS	Year	Tons / BTU
A. AC SEER	_____	_____	_____
B. HP HSPF COP	_____	_____	_____
C. Window EER	_____	_____	_____

	Heating Unit Location	Make & Model #	Unit Type	KW'S	Primary/Secondary
A.	_____	_____	_____	_____	_____
B.	_____	_____	_____	_____	_____
C.	_____	_____	_____	_____	_____

**PRE-EVALUATION**

(Visual Inspection: Complete Unit)

**POST INSPECTION**

P/F	PASS OR FAIL	Comments	P/F
	Coil Condition		
	Refrigerant Lines (Leaks)		
	Condensate Lines		
	Filter Condition / Size		
	Blower Motor Condition		
	Organic Debris in Ducts		
	Condensation on / in Ducts		
	Duct Sized Correctly		
	Supply Registers Open		
	Return Ducting Unrestricted		
	<b>Wiring Conditions</b>		
	Burned or Frayed Wires		
	Missing or Disconnected Wires		

- 1) Verify the presence of electricity with Volt-Ohm-Meter or tic tracer. \_\_\_\_Y \_\_\_\_N.  
 (Safety: Make sure the furnace cabinet is not energized!)
  
- 2) From the manufacturers data plate, record the following: *(Electric Furnace or Indoor Split system)*  
**Indoor Supply Circuit Type:** \_\_\_\_ Single \_\_\_\_ Dual.  
 VAC Rating: \_\_\_\_ Total AMP Draw \_\_\_\_ **Maximum** over current protection rating: \_\_\_\_.  
 Circuit 1: Wire Size L1\_\_\_\_, L2\_\_\_\_, C\_\_\_\_, G\_\_\_\_. Equipment Breaker/Fuse: \_\_\_\_.  
 Circuit 2: Wire Size L1\_\_\_\_, L2\_\_\_\_, C\_\_\_\_, G\_\_\_\_. Equipment Breaker/Fuse: \_\_\_\_.  
 Circuit 3: Wire Size L1\_\_\_\_, L2\_\_\_\_, C\_\_\_\_, G\_\_\_\_. Equipment Breaker/Fuse: \_\_\_\_.  
 Minimum Return air grill size: \_\_\_\_\_. Note Location of the Thermostat: \_\_\_\_\_.
  
- 3) From the manufacturers data plate, record the following: *(Outdoor Split System or Package Unit)*  
**Outdoor Supply Circuit Type:** \_\_\_\_ Single. **Disconnect (W/I Sight)** \_\_\_\_\_.  
 VAC Rating: \_\_\_\_ Total AMP Draw \_\_\_\_ Wire Size L1\_\_\_\_, L2\_\_\_\_, C\_\_\_\_, G\_\_\_\_.  
**Maximum** over current protection rating: \_\_\_\_ Equipment Breaker/Fuse: \_\_\_\_.
  
- Auxiliary Heat - Circuit Type:** \_\_\_\_ Single \_\_\_\_ Dual \_\_\_\_\_. **Disconnect** \_\_\_\_\_  
 VAC Rating: \_\_\_\_ Total AMP Draw \_\_\_\_ **Maximum** over current protection rating: \_\_\_\_.

Circuit 1: Wire Size L1\_\_\_\_, L2\_\_\_\_, C\_\_\_\_, G\_\_\_\_. Equipment Breaker/Fuse: \_\_\_\_.  
Circuit 2: Wire Size L1\_\_\_\_, L2\_\_\_\_, C\_\_\_\_, G\_\_\_\_. Equipment Breaker/Fuse: \_\_\_\_.

- 4) At service panel: Record fuse/breaker size of the furnace circuit: **Indoor** \_\_\_\_ **Outdoor** \_\_\_\_.  
**Indoor:** Are the breakers amp ratings within proper size range? \_\_\_\_Y \_\_\_\_N.  
**Outdoor:** Are the breakers amp ratings within proper size range? \_\_\_\_Y \_\_\_\_N.  
Is branch circuit wiring correctly sized? \_\_\_\_Y \_\_\_\_N. Use wire gauge to verify wire size.

NOTE: If data plate information is not present, refer to NFPA-70 NEC for circuit breakers and wiring size. Skip to the analysis section to determine amp draw of unit.

**UNIT ANALYSIS (To be performed by qualified evaluator or technician)**  
**Heating unit voltage check: (unit not activated)**

- 1) Take a voltage reading across the two hot legs: **Indoor:** \_\_\_\_ **Outdoor:** \_\_\_\_ **Aux:**\_\_\_\_ Volts  
(Voltage should be 240 volts, plus or minus 10%)

**TOTAL AMP DRAW UNIT ACTIVATED.**

- 1) Take an amp draw test by clamping an amp meter around one of the 120 volt "hot" legs of incoming main supply. On a dual circuit supply, clamp amp meter around one leg of each supply circuit, measure the amp draw of each, and add together for the total amp draw. Record total amp draw after unit has operated a sufficient time: Indoor \_\_\_\_ Outdoor \_\_\_\_ AMPS. Do these amp readings match the data plate? \_\_\_\_Y \_\_\_\_N. *IF NO, a problem exists in the unit that must be diagnosed.*

**PERFORM TEMPERATURE RISE / DROP TEST**

- 1) Supply Temp \_\_\_\_ minus Return Temp \_\_\_\_ = Temperature Rise \_\_\_\_\_. (40-70 degrees is normal) Proper range \_\_\_\_ Y \_\_\_\_N.  
2) Supply Temp \_\_\_\_ minus Return Temp \_\_\_\_ = Temperature Drop \_\_\_\_\_. (18-20 degrees is normal) Proper range \_\_\_\_ Y \_\_\_\_N.

**Description of problems:** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**POST INSPECTION**

VAC Rating: \_\_\_\_ **Maximum** over current protection rating: \_\_\_\_.  
Circuit 1: Wire Size L1\_\_\_\_, L2\_\_\_\_, C\_\_\_\_, G\_\_\_\_. Equipment Breaker/Fuse: \_\_\_\_.  
Total AMP Draw \_\_\_\_\_. VAC Rating: \_\_\_\_ **Maximum** over current protection rating: \_\_\_\_.  
Circuit 2: Wire Size L1\_\_\_\_, L2\_\_\_\_, C\_\_\_\_, G\_\_\_\_. Equipment Breaker/Fuse: \_\_\_\_.  
Total AMP Draw \_\_\_\_\_. VAC Rating: \_\_\_\_ **Maximum** over current protection rating: \_\_\_\_.  
Circuit 3: Wire Size L1\_\_\_\_, L2\_\_\_\_, C\_\_\_\_, G\_\_\_\_. Equipment Breaker/Fuse: \_\_\_\_.  
Total AMP Draw \_\_\_\_\_. VAC Rating: \_\_\_\_ **Maximum** over current protection rating: \_\_\_\_.  
Wire Size Correct? \_\_\_\_Y \_\_\_\_N

**POST INSPECTION CERTIFICATION:** I certify that ALL repairs have been performed in compliance with Energy Systems policies and testing standards of the Kentucky Weatherization Program Manual, and to the best of my knowledge all energy systems are functioning properly and Regular Weatherization measures can now be performed.

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Post Inspector

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Date