



Indiana Housing &
Community Development
Authority



Electric Heat Inspection Form

Audit Date: _____

Existing furnace ☐

New Furnace ☐

Job/Client Information

Client name: _____

Client/Job number: _____

Phone: _____

Home: _____

Work: _____

Address: _____

Cell: _____

Equipment Information

Primary Heat Source: ☐ Heat Pump ☐ Electric furnace ☐ Baseboard ☐ Cable ceiling

Auxiliary Heat ☐ Electric ☐ Gas ☐ Oil Other: _____

If there are gas or oil appliances, include appropriate forms

Application: ☐ Up flow ☐ Down flow ☐ Horizontal ☐ Site-built ☐ Mobile home

Heat Pump Information:

Make: _____ Model: _____

Serial: _____ Btuh: _____

Furnace Information:

Make: _____ Model: _____

Serial: _____ Btuh/Kw: _____

Coil Information(if coil is separate from furnace, e.g.. heat pump with gas or oil furnace)

Make: _____ Model: _____

Serial: _____

Electric Furnace Inspection

Service disconnect/breaker in unit, or within reach of unit

Breakers/fuses correct size

Conductor(s) correct size

Terminals/connections tight and good condition

Wiring dark, discolored or burnt

Unit properly grounded

All elements operational

Sequencer/heat relay/board operating properly

All elements on for 5 minutes

Blower on with first element, off with or after last

Auditor		Tech		Final
NA	Pass Fail	Pass Fail	Pass Fail	Y
☐	☐	☐	☐	☐
☐	☐	☐	☐	☐
☐	☐	☐	☐	☐
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Element Amperage: Auditor: E1: _____ E2: _____ E3: _____ E4: _____ E5: _____

Tech: E1: _____ E2: _____ E3: _____ E4: _____ E5: _____

Final: E1: _____ E2: _____ E3: _____ E4: _____ E5: _____

Airflow Calculation

$$CFM = Btuh\ output \div (temperature\ difference \times 1.08)$$

Final airflow cfm must be calculated after duct sealing is performed

	Inspection	Technician	Final
Total amps of elements :	amps	amps	amps
Voltage applied:	volts	volts	volts
Multiply volts and amps	watts	watts	watts
Multiply watts x 3.413	 Btuh	 Btuh	 Btuh
Supply air temperature:	°F	°F	°F
Return air temperature:	°F	°F	°F
Temperature rise	°F	°F	°F
Temp rise x 1.08	 °F	 °F	 °F
Divide Btuh output by the adjusted temp rise	cfm	cfm	cfm

Minimum airflow for heat pump system 400 cfm per

Blower, Coil, Ducts and Electric Water Heater

	Auditor		Tech		Final
	NA	Pass Fail	Pass Fail		Y
Blower clean	☐	☐ ☐	☐ ☐		☐
Filter clean, supported and user friendly	☐	☐ ☐	☐ ☐		☐
Coil and condensate drain pan clean	☐	☐ ☐	☐ ☐		☐
Secondary drain pan installed if above finished ceiling	☐	☐ ☐	☐ ☐		☐
Condensate drain trapped and terminated properly	☐	☐ ☐	☐ ☐		☐
Ducts outside thermal/pressure boundary sealed	☐	☐ ☐	☐ ☐		☐
Ducts outside thermal/pressure boundary insulated	☐	☐ ☐	☐ ☐		☐
Water heater level and free of leaks	☐	☐ ☐	☐ ☐		☐
T & P correct and properly piped	☐	☐ ☐	☐ ☐		☐
Water temperature set to 120 °F or less	☐	☐ ☐	☐ ☐		☐
Record water temperature	°F	°F	°F		°F

Baseboard and Ceiling Cable Heat

	Auditor		Tech		Final
	NA	Pass Fail	Pass Fail		Y
All base board heaters and ceiling cable heaters operational	☐	☐ ☐	☐ ☐		☐
All base board heaters clean and free of obstructions	☐	☐ ☐	☐ ☐		☐
All base board covers in place	☐	☐ ☐	☐ ☐		☐
Properly sized breaker panel and circuit breakers	☐	☐ ☐	☐ ☐		☐

Mechanical Work

Completed

1		Y	☐	N	☐
2		Y	☐	N	☐
3		Y	☐	N	☐
4		Y	☐	N	☐
5		Y	☐	N	☐
6		Y	☐	N	☐
7		Y	☐	N	☐
8		Y	☐	N	☐
9		Y	☐	N	☐
10		Y	☐	N	☐

Additional Comments: _____

Audit performed by: _____ Date: _____

Mechanical work performed by: _____ Date: _____

Mechanical inspection performed by: _____ Date: _____

Final inspection performed by: _____ Date: _____

Agency reviewer: _____ Date: _____

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Worst Case Draft Testing

Turn all combustion appliances off or to pilot
 Check for clean furnace filter or remove filter
 Close all exterior doors and windows
 Close all interior doors (except for rooms with exhaust and no supply)
 Open all supply registers (except supplies in CAZ)
 Close all fireplace and wood stove dampers
 Turn on dryer and all exhaust fans (clean or remove lint trap)
 Set-up blower door to exhaust 300 cfm for each working fireplace
 Set-up pressure to read CAZ pressure with reference to outside

Audit	Interim	Final
☐	☐	☐
☐	☐	☐
☐	☐	☐
☐	☐	☐
☐	☐	☐
☐	☐	☐
☐	☐	☐
☐	☐	☐
☐	☐	☐
☐	☐	☐

Is there a door between the CAZ and the rest of the house?
 Is there a forced air blower on the heating equipment?

☐ Yes	☐ No
☐ Yes	☐ No

Determine Worst Case Configuration

Audit		Interim		Final	
Open	Closed	Open	Closed	Open	Closed
Fan off _____	_____	Fan off _____	_____	Fan off _____	_____
Fan on _____	_____	Fan on _____	_____	Fan on _____	_____
Outdoor temp. _____	_____	Outdoor temp. _____	_____	Outdoor temp. _____	_____

Draft Test Water Heater (5 - 2 - 5 Test)

	Audit	Interim	Final
Fire the water heater	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N
Establishes flow in the vent within 5 seconds?	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N
Spillage disappears within 2 minutes?	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N
Record draft pressure after 5 minutes	_____ Pa	_____ Pa	_____ Pa
	_____ "w.c	_____ "w.c	_____ "w.c
Record CO in flue gas after 5 minutes	___/___ ppm	___/___ ppm	___/___ ppm

Draft Test Furnace (5 - 2 - 5 Test)

	Audit	Interim	Final
Fire the Furnace:	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N
Establishes flow in the vent within 5 seconds?	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N
Is there flame interference when blower starts?	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N
Spillage disappears within 2 minutes?	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N
Record draft pressure after 5 minutes	_____ Pa	_____ Pa	_____ Pa
	_____ "w.c	_____ "w.c	_____ "w.c
Record CO in flue gas after 5 minutes	_____ ppm	_____ ppm	_____ ppm

CO in each cell on draft hood furnace

☐	☐	☐	☐	☐	☐
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☐	☐	☐	☐	☐	☐
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☐	☐	☐	☐	☐	☐
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Re-test draft on water heater

_____ Pa
_____ "w.c

_____ Pa
_____ "w.c

_____ Pa
_____ "w.c

Did the heating appliance operation cause
 spillage or a reduction in draft on water heater?

☐ Y ☐ N

☐ Y ☐ N

☐ Y ☐ N

Measure Temperature Rise

	Audit	Interim	Final
Supply air temperature	_____ deg.	_____ deg.	_____ deg.
Return air temperature	_____ deg.	_____ deg.	_____ deg.
Temperature rise	_____ deg.	_____ deg.	_____ deg.

Is the temp. rise within manufacturer specs.?

☐ Y ☐ N

☐ Y ☐ N

☐ Y ☐ N
