

Electric Heat Inspection Form

Revised September 2012

ACTION ASSOCIATION				Audit <u>Dat</u>	.e:		
Taking Action. Improving Lives.	Existing furn	ace	New F	urnace			
		Job/Client Info	ormation		_		
			Cli	ient/Job numb	er:		
Client name:			F	Phone:	Home:		
					Work:		
Address:					Cell:		
Equipment	Information						
Primary Heat Source: He	eat Pump	Electric furna	ісе Пва	seboard	Cable ceilir	ng	
Auxiliary Heat Electric	Gas			Other	_	S	
• —		oil appliances	include appr		•		
		i i				مسمط مانط	
Application: Up flow	Down flo	w Horizo	ontai	Site-built		bile home	
Heat Pump Information:							
Make:			Model:				
Serial:			Btuh:				
Furnace Information:							
Make:			Model:				
Serial:			Btuh/Kw:				
Coil Information(if coil is separ	rate from furn	ace, e.g heat	pump with ga	s or oil furnace	e)		
Make:			Model:				
Serial:							
Electric Fu	rnace Inspecti	on		Audito NA Y		_	
Service disconnect/breaker in u	unit, or within	reach of unit			\Box		
Breakers/fuses correct size	•				\forall		
Conductor(s) correct size							
Terminals/connections tight and good condition Wiring dark discolared or burnt							
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, o	off with or afte	r last					
Element Amperage:	Auditor:	E1:	E2:	E3:	E4:	E5:	
	Tech:	E1:	E2:	E3:	E4:	E5:	
	Final:	E1:	E2:	E3:	E4:	E5:	

Airflow Calculation

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

Final airflow cfm must be calculated <u>after</u> duct sealing is performed

		Inspection		Technician			Final	
Total amps of elemen	nts:		_amps		_amps			_ amps
Voltage applied:			volts		_volts			volts
Multiply volts and am	nps	0	watts	0	_watts	0		watts
Multiply watts x	3.413	0	Btuh	0	Btuh	0		Btuh
Supply air temperatu	re:		_°F		_°F			°F
Return air temperatu	re:		_°F		_°F			°F
Temperature rise		0	°F	0	°F	0		°F
Temp rise x 1.08		0	°F	0	_ _°F	0		°F
Divide Btuh output l adjusted temp ri	ise	inimum airflow fo	cfm or heat pu	mp system 400 cfm	cfm		·	cfm
		, ,	<u> </u>					
Blower, Co	oil, Ducts a	and Electric Water	Heater		Audi		Tech	Final
Blower clean					NA T	Y N	YN	Y
Filter clean, supported and user friendly						\top		
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 s		°F or less						
Record water temper	rature				°F		_°F	°F
Basebo	oard and	Ceiling Cable Heat	t		Audi	tor	Tech	Final
		-			NA _	Y N	Y N	<u>Y</u>
All base board heater		· ·	•	al				
All base board heaters clean and free of obstructions								
All base board covers in place								
Properly sized breaker panel and circuit breakers								

Heat Pump Inspection	Auditor	Tech Final						
	NA Y N	YNY						
Heat pump level and elevated above snow gra								
Entire vapor line insulated								
Outdoor coil clean								
Terminals, connections, wiring tight and good Crankcase heater or trickle circuit functional	condition							
System wired to stage auxiliary heat correctly								
Reversing valve operational								
Outdoor metering device Expansion	valve Fixed	restrictor	R410A					
Indoor metering device Expansion	=	Refrigeran restrictor	nt: R22					
	Heat Pump Operatio							
Only EPA Section 608 CFC certified System tested in heating or cooling?	Heat AC	Heat AC	Heat AC					
Outdoor temperature	*F	*F	°F					
High pressure	Inspection	' Technician	Final					
Liquid line pressure	N/A psig	psig	N/A psig					
Saturation temperature	N/A °F	°F	N/A °F					
Liquid line temperature	N/A °F	 °F	N/A °F					
Calculated subcooling	N/A °F	 0 °F	N/A °F					
Required subcooling NA	N/A °F	 °F	N/A °F					
Low pressure		<u> </u>						
Suction pressure	N/A psig	nsia	N/A psig					
·		psig						
Saturation temperature	N/A °F	°F	N/A°F					
Suction line temperature	N/A °F	°F	N/A°F					
Calculated superheat	N/A °F	0 °F	N/A°F					
Required superheat NA	N/A °F	°F	N/A°F					
Indoor air temperatures								
Dry bulb return air	°F	°F	°F					
Wet bulb r/a (superheat charging) NA	N/A °F	°F	N/A °F					
Supply air temperature	°F	°F	°F					
Temperature rise or drop(dry bulb)	0 °F	0 °F	0 °F					
		Auditor	Tech Final					
If in heating mode, meets factory charging spe	cifications	NA Y N	Y N Y					
Meets expected indoor temp rise ± 2°F: (ODA								
Meets expected indoor temp rise ± 2 1. (ODA)		HHH						
meets expected model temp drop(14 1 to 22	,,							

Heat pump indoor temp rise when 32°F outdoor = 18-20°F, add/subtract 1° rise for every 3° ± outside

Mechanical Work

	•	-omp	ιeτ	<u>3a</u>
1	Y		N	
2	Y		N	
3	Y		N	
4	Y		N	
5	Y		N	
6	Y		Ν	
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:			

Worst Case Draft Testing

					Audit	Interim	Final
Turn all combustion appliances off or to pilot							
Check for clean furnace filter or remove filter						П	
Close all exterior doors and windows							
Close all interior doors	(except for roon	ns with exha	aust and no	supply)			
Open all supply register	's (except suppli	es in CAZ)					
Close all fireplace and w	vood stove dam	pers					
Turn on dryer and all ex			• •				
Set-up blower door to e						Ш	
Set-up pressure to read	CAZ pressure v	vith referen	ce to outsi	de			
Is there a do	or between the	CAZ and the	e rest of the	house?	Yes	∏No)
	orced air blowe		-		Yes	No)
	D	etermine W	/orst Case (Configuration			
Aud	lit		Inte	rim			Final
Open	Closed		Open	Closed		Open	Closed
Fan off		Fan off			Fan off		_
Fan on		Fan on			Fan on		
Outdoor temp.		Outdoor to	emp		Outdoor t	emp	
	Dı	raft Test Wa	iter Heater	(5 - 2 - 5 Test))		
				dit	Interim		Final
Fire the water heater			ПΥ	Пи	ПүП	N	∏y ∏N
Establishes flow in the v	ent within 5 se	conds?	ΠY	ΠN		N	$\prod_{Y}\prod_{N}$
Spillage disappears with	nin 2 minutes?		ΠY	ΠN		N	$\prod_{Y} \prod_{N}$
Record draft pressure a				Pa	Pa		Pa
				 "w.c	"w.c	3	"w.c
Record CO in flue gas af	ter 5 minutes			ppm	ppm	ı	ppm
		Draft Test	Furnace (5	- 2 - 5 Test)			
Fire th	ne Furnace:		=	dit	Interim		Final
Establishes flow in the v	ent within 5 se	conds?	ΠY	N	Y	N	\square Y \square N
Is there flame interfere	nce when blow	er starts?	ΠY	N	Y	N	Y N
Spillage disappears with	nin 2 minutes?		Y	N	Y	N	Y N
Record draft pressure a	fter 5 minutes			Pa	Pa		Pa
				"w.c	"w.c		"w.c
Record CO in flue gas af	ter 5 minutes			ppm	ppm	1	ppm
CO in each cell on draft h	ood furnace						
Re-test draft on water h	neater			Pa Pa	Pa	<u> </u>	Pa
				 "w.c	"w.c	3	"w.c
Did the heating applian	ce operation ca	use		_			
spillage or a reduction i	n draft on wate	r heater?	Y	N	Y	N	Y N
		Measur	e Temperat	ure Rise			
			Au		Interim		Final
		temperatu		deg.	deg		deg.
		temperatui		deg.	deg		deg.
	Tem	perature ris		deg.	deg		deg.
Is the temp. rise	within manufac	turer specs	.? _Y	N	Y	N	Y N