PTCS
Performance Tested
Comfort Systems

PTCS™ Commissioned Heat Pump Certificate & Startup Form

All sections must be filled out by a PTCS-certified Technician at the time of installation. A copy of the completed form must be promptly submitted to the utility and homeowner in accordance with utility policy. Please enter online at www.ptcsnw.com or fax to 877-848-4074.
Questions? Call 800-941-3867 or email reshvac@bpa.gov *Last updated: January 2012.*

Site Information

PTCS #	Installation Company		Electric Utility	
Customer Name			Street Address	
Site#/Mailing Address	City	State	Zip Code	Phone Number
Site Built ☐Existing ☐New Construction			Manufactured Home ☐Y ☐N	
Year Built: _____ Energy Star? ☐Y ☐N Foundation: ☐Half Basement ☐Full Basement ☐Crawl Space ☐Slab			Sections ☐1 ☐2 ☐3 Energy Star? ☐Y ☐N Super Good Cents? ☐Y ☐N	
Old heating system being replaced: ☐Elec. Furnace ☐Heat Pump ☐Gas Furnace (check if kept as back up heat ☐) ☐Other (specify): _____			Heated Area (sq ft.)	

New Heat Pump Equipment Data

AHRI #	SEER	HSPF	EER
Outdoor (OD) Unit Make	OD Unit Mod. #		_____ Number of compressor stages or ☐ Inverter driven heat pump
Indoor (ID) Unit Make	ID Unit Mod. #		Capacity (tons)

External Static Pressure Test

Check in full capacity unless conditions do not permit. Attach additional sheets as needed if test must be re-run			
1. Record expected CFM/ton based on fan wiring board settings. 2. Measure return static pressure. 3. Measure supply plenum static pressure. 4. External Static Pres. add #2 and #3 values together (ignore minus sign)	1. Heating CFM/ton Setting	1. Cooling CFM/Ton Setting	Note: External Static Pressure of 200 Pa (0.8 in. H_2O) or more in Step 4 can result in extreme fan energy use and early fan failure
	2. Return Static Pressure	Units (check one) ☐Pa ☐Inches H_2O	
	3. Supply Plenum Static Pressure	4. External Static Pressure	

TrueFlow Test

1. Measure Normal System Operating Pressure (NSOP). 2. Check TrueFlow plate size 3. Note TrueFlow plate location	1. NSOP [A]	2. Plate Size ☐14 ☐ 20	Units ☐Pa ☐H_2O
	3. Filter Location: ☐Air Handler ☐Return Grille ☐Other (specify): _____		

4.Measure Supply Pressure with TrueFlow plate in (TFSOP)	4. TFSOP [B]	5. CF from table or square root of ✓ (NSOP/TFSOP)	
5. Enter Correction Factor (CF) 6. Measure plate pressure	6. Plate Pressure	Raw Flow CFM from tables [D]	
7. Enter Raw Flow CFM 8. Calculate Corrected CFM (Raw Flow x CF) and CFM/ton	7. Corrected Flow CFM = [CF] x [D]	CFM/ton	Is flow above 350CFM/ton? ☐Y ☐N

Refrigerant Charge Information/Testing

Does indoor unit have an ECM blower? ☐Y ☐N	Outdoor air temp.	If > 65^{0}F test in cooling, if lower test in heating. Unit tested in ☐Heating. ☐Cooling.
Stage/Capacity Tested:☐ High ☐Low ☐ Other (specify): _____	Total lineset length ft.	Refrigerant Adjustment: ☐Added _____oz. ☐Removed_____oz. ☐None

2011 PTCS™ Commissioned Heat Pump Certification & Startup Form

Performance Check: run unit for at least 15 minutes in compressor-only mode before taking readings

Heating Mode (65^{0}F or lower)	Cooling Mode (higher than 65^{0}F)	Alternative Method (specify)
Supply Air (SA) Temperature	Discharge Pressure	Other method used?
Return Air (RA) Temp.	Discharge Temp. [A}	Manufacture Target
Temperature Split (SA – RA)	Liquid Line Temp. [B]	Test result
Expected Temp Split from chart Is it acceptable? ☐Y ☐N	Subcooling [A] – [B] Is it acceptable? ☐Y ☐N	Is it acceptable? ☐Y ☐N

Controls

For ALL systems (single and multi-stage compressors. Compressor low-ambient lockout control (LAL) setting ☐0 ^{0}F _____ ^{0}F or ☐LAL not installed	Make/Model of indoor thermostat Auxiliary (strip) heat lockout > ☐35^{0}F ☐40^{0}F ☐ Other:_____
Single Capacity Compressor Systems	
Confirm discharge air temp. sensor is either not installed or is disabled ☐Confirmed	
Multiple Capacity Compressor systems (☐applicable ☐not applicable)	
☐If the discharge air sensor control is used to control auxiliary heat confirm it is set ho higher than 85 ^{0}F or, ☐If staging thermostat is set warmer than 85 ^{0}F confirm resistance heat can not operate at temperatures above 35^{0}F	

Notes:

Required Customer and Technician Signatures

To be filled out by the electrical utility account holder. This form must be signed by the person whose name appears on the electric utility account. ENERGY INFORMATION RELEASE: The undersigned utility customer requests and authorizes the specified utility to release billing and usage information for the account listed below to the PTCS program. With this authorization, the PTCS program can request billing information for up to two years pre-installation and two years post-installation. The utility customer also hereby releases the utility company from any and all liability arising from or connected with providing this information.		
Electric Utility:	Account #:	
Account holder name:		
Account holder signature:		Date:
By signing below, technician certifies that this form and any accompanying documentation are complete and accurate, and that all measures associated with this project were completed as of the signature date below.		
Technician name:		
Technician signature:		Date:

PRIVACY ACT STATEMENT

Basic authority for collecting this information is authorized by 16 U.S.C. §§ 832 et. seq., and 838 et. seq., pursuant to Bonneville Power Administration's Conservation Program system of records established in 46 FR 31700.

This information is primarily intended to further, but is incidental to the performance of, BPA's overall Energy Efficiency Program, the objective of which is to acquire energy resources through energy efficiency, to determine what cost-effective conservation and direct application renewable resources measures should be installed or adopted under different circumstances, and to provide incentives for the installation of such measures.

Other routine issues of this information include: aggregation into a public database on energy efficiency; furnished to authorized personnel for installation/repair of equipment; aggregated into a database for program publicity; and in some instances information regarding buildings will be made available to subsequent purchasers of the buildings. Your disclosure of the requested information is voluntary, however failure to provide requested information means that it will not be possible for you to participate in this BPA Energy Efficiency program.