

PTCS® Air Source Heat Pump Form

All fields must be completed by a PTCS Certified Technician.

- 1) Enter this information online at ptcs.bpa.gov or fax it to 1-877-848-4074 for entry.
- 2) Submit this form to customer's utility with additional documentation required by utility, including sizing documentation.

Have questions? Visit www.bpa.gov/goto/reshvac, call 1-800-941-3867, or email ResHVAC@bpa.gov.

Site Information (Please print clearly)

PTCS Tech #	PTCS Tech Name	Install Date	Electric Utility
Customer Name		Installation Site Address*	
Site City*	Site Zip*	Customer Phone # () -	Customer email
*Mailing address if different (#, City, St, Zip):			
Home Type: <input type="checkbox"/> Existing Site Built <input type="checkbox"/> New Construction Site Built <input type="checkbox"/> Manufactured: # of Sections <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3			
Heated Area: Sq Ft		Foundation Type (Site Built) : <input type="checkbox"/> Crawlspace <input type="checkbox"/> Full Basement <input type="checkbox"/> Half Basement <input type="checkbox"/> Slab	
Existing Heating System Being Replaced (If new home, indicate heating system installed):			
<input type="checkbox"/> Electric Forced Air w/out AC <input type="checkbox"/> Electric Forced Air w/ AC <input type="checkbox"/> Electric Zonal <input type="checkbox"/> Air Source Heat Pump <input type="checkbox"/> Ground Source Heat Pump <input type="checkbox"/> Natural Gas Furnace (Gas Company: _____) <input type="checkbox"/> Other Non-Electric Space Heating: _____			
Back up Heat: <input type="checkbox"/> None <input type="checkbox"/> Electric Forced Air <input type="checkbox"/> Electric Zonal <input type="checkbox"/> Natural Gas Furnace <input type="checkbox"/> Non-Electric Space Heating			

New Heat Pump Equipment Data

***PTCS requires minimum 9.0 HSPF, 14 SEER. Commissioning, Controls & Sizing requires Federal minimum. Check with utility for requirements.*

AHRI #	SEER**	HSPF**	Outdoor HP Capacity (tons)
Heat Pump Make	Outdoor HP Model #		<input type="checkbox"/> Non Variable Speed HP <input type="checkbox"/> Variable Speed HP
	Indoor HP Model #		What is the Balance Point? _____ Provide BP documentation to utility.

Did you perform all of your tests in Test Only/Check Charge mode? <input type="checkbox"/> Yes <input type="checkbox"/> No

External Static Pressure Test

Check unit operating at full capacity unless conditions do not permit.

1. Measure return static pressure 2. Measure supply plenum static pressure 3. Calculate external static pressure: add values in #1 and #2 values; ignore the minus sign	1. Return Static Pressure <hr/> 2. Supply Static Pressure	Units: <u>Use same units for TrueFlow test</u> <input type="checkbox"/> Pa <input type="checkbox"/> Inches H2O 3. External Static Pressure	Note: Any External Static Pressure above 200 Pa or 0.8 Inches H ₂ O will result in a rejection.
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TrueFlow Test

1. Measure NSOP (Normal System Operating Pressure) [A] 2. Check TrueFlow plate size and location 3. Measure TFSOP (Supply Pressure with TrueFlow Plate) [B] 4. Calculate Correction Factor [C] 5. Measure plate pressure 6. Enter Raw Flow CFM from tables [D] 7. Calculate Corrected Flow 8. Calculate CFM/ton	1. NSOP [A] <hr/> 3. TFSOP [B] <hr/> 5. Plate Pressure <hr/> 7. Corrected Flow CFM = [C] x [D]	2a. Plate Size: <input type="checkbox"/> 14 <input type="checkbox"/> 20	2b. Plate location: <input type="checkbox"/> Air Handler <input type="checkbox"/> Return Grille	4. Correction Factor [C] from table or calculate $\sqrt{[A]/[B]}$ <hr/> 6. Raw Flow CFM from tables [D] <hr/> 8. CFM/ton <i>Please submit proof of manufacturer's target CFM/Ton if under 325.</i>
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Refrigerant Charge Information

Outside Air Temp	°F	Mode unit tested in: <input type="checkbox"/> Heating (if ≤ 65°F) <input type="checkbox"/> Cooling (if > 65°F)
Total lineset length	ft.	Refrigerant adjustment: <input type="checkbox"/> Added _____oz. <input type="checkbox"/> Removed _____oz. <input type="checkbox"/> None

Performance Test

Run unit for at least 15 minutes in compressor-only mode before taking readings.

Heating Mode (65°F or lower)	Cooling Mode (higher than 65°F)	Alternative Test Method
Supply Air (SA) Temp	Discharge Pressure	Specify method used
Return Air (RA) Temp	Discharge Temp [A]	Target
Temp Split (SA – RA)	Liquid Line Temp [B]	Test result
Expected Temp Split from table: Meets specification? <input type="checkbox"/> Y <input type="checkbox"/> N	Sub cooling [A] – [B] Meets specification? <input type="checkbox"/> Y <input type="checkbox"/> N	Meets specification? <input type="checkbox"/> Y <input type="checkbox"/> N

Controls

Compressor Low Ambient Lockout control (LAL) setting at 5° or less? <input type="checkbox"/> Yes <input type="checkbox"/> Not Installed/Disabled <input type="checkbox"/> Non-Electric Backup <input type="checkbox"/> No		Auxiliary (strip) heat lockout has been set to: <input type="checkbox"/> 35°F <input type="checkbox"/> Below 35°F
HP Thermostat Make	HP Thermostat Model	
Multiple Capacity Compressor systems (<input type="checkbox"/> Applicable <input type="checkbox"/> Not Applicable) <input type="checkbox"/> If the discharge air sensor control is used to control auxiliary heat, confirm it is set no higher than 85 °F or, <input type="checkbox"/> If staging thermostat is set warmer than 85 °F, confirm resistance heat cannot operate at temperatures above 35°F		

Notes

Required Signatures: This section shall 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	Installation Company	
Technician Signature	Date	Tech Phone # () -

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.