HIGH EFFICIENCY HEAT PUMP PROGRAM

bpw

BEATRICE-BOARD OF PUBLIC WORKS

Sponsored by Nebraska Public Power District
in Partnership with its Wholesale Utility Customers

ENERGYWISE
Use less. Spend less. Do more.

G129226.ZIP

Those who are wise know it's less expense to save a kilowatt-hour of energy than it is to generate and deliver one. But you probably knew that. You may not, however, know that you could qualify to receive an incentive when you install a high-efficiency, ENERGY STAR® qualified heat pump.

As your local utility, we want to ensure that the heat pump you install at your residence is verified to ensure you receive great performance and comfort. And here's how we'll do it:

FOLLOW THESE EASY STEPS

- The homeowner selects an ENERGY STAR qualified heat pump (14 SEER or higher, and 8.2 HSPF or higher).
- The installing contractor; 1) performs a Performance Verification Test on the system, 2) records the results on the attached application form, and 3) signs it.
- The homeowner signs and submits the application to the local electric utility.
- If the installed heat pump operates within 10% of the manufacturer's specifications, then both the homeowner *and* the contractor get an incentive.
- If the installed heat pump does not pass (which may be the case with some existing homes), only the homeowner gets the incentive, because they chose an ENERGY STAR qualified heat pump. The contractor does not qualify because the desired energy performance is not obtained.
- The local utility will provide the incentive directly to the homeowner, and the Nebraska Public Power District will provide the incentive to the contractor.

Incentive Amounts
ENERGY STAR Qualified Heat Pumps (HP)
(based on ARI equipment rating)

System Type	Minimum Incentive Criteria	Incentive Recipient	Rebate
Air Source HP	14 SEER, 8.2 HSPF	Homeowner	$200
Air Source HP	15 SEER, 8.2 HSPF	Homeowner	$250
Air Source HP	16+ SEER, 8.2 HSPF	Homeowner	$300
Ground Source HP	Any EER	Homeowner	$400
HP 14+SEER	Performance Verification within 10%	Htg./Clg. Contractor	$100

ENERGY STAR PARTNER

Incentive valid as of 9-1-08, subject to change without notice, verify current incentive amounts and program information at www.nppd.com.

"Funding is limited. Contact your local utility to ensure incentives are still available. Incentives are on a first-come, first-serve basis."

High Efficiency Heat Pump Verification - APPLICATION FORM

Applications will only be processed if information is provided in all 7 sections and only if homeowner and contractor's signatures are completed on form. Complete 1 form for each residential heat pump installation. Questions?? Contact Kelly Beiermann (402-563-5415) klbeier@nppd.com, or Roger Hunt (402-239-9406) rlhunt@nppd.com, or Steve Walker (308-535-5324) shwalke@nppd.com.

1. HVAC Dealer Name: _____

Address & City: _____

Phone Number: _____ Tax ID #: _____

2. Home Owners Name: _____

Home Owner's Address & City: _____

Installation Address & City: * _____

Electric Utility Provider: _____ Acct or Meter #: * _____

3. Equipment Information: Tonnage: _____ SEER Rating: _____ HSPF: _____

Backup for Heat Pump: Electric _____ (kw), or Fossil Fuel _____ (Btuh),

If its a Geothermal Heat Pump - the (EER) * _____ ARI Performace Cert. # * _____

Equipment Mfr: _____ Furnace Model #: _____

ID Coil # _____ Heat Pump Model # _____

Type of Installation: New Construction ☐, A/C to a Heat Pump ☐, Existing Heat Pump to New Heat Pump ☐

4. Determine CFM: (A or B)

A) Total External Static Pressure in _____ inches of W.C.

_____ Equivalent CFM (per equipment specifications and associated external static pressure)

B) Airflow check - temperature rise method with electric furnace (test in emergency heat mode)

1) _____ Volts x _____ Amps = _____ Watts

2) _____ Watts x 3.414 = _____ Btuh

3) _____ Supply Air °F (minus) _____ Return Air °F = _____ Temp. Difference (TD) °F

4) _____ Btuh (divided by) 1.08 (divided by) _____ (TD) °F = _____ CFM

CUT AND RETURN COMPLETED FORM TO YOUR PARTICIPATING ELECTRIC UTILITY

High Efficiency Heat Pump Verification - APPLICATION FORM

(Both sides of application must be completed)

5. Measured Heat Pump Capacity Calculation (A or B)

A) **Heating Cycle** (test in heat pump only mode)

1) _____ Supply Air °F (minus) _____ Return Air °F = _____ (TD) °F

2) 1.08 x _____ (TD) °F x _____ CFM (section 4) = _____ Btuh

B) **Cooling Cycle** (run at least ten minutes)

1) Return - wet bulb temp. _____ = Enthalpy _____

2) Supply - wet bulb temp. _____ = Enthalpy _____

3) Enthalpy Difference = _____

4) 4.5 x _____ CFM (section 4) x _____ Enthalpy Difference = _____ Btuh

6. Quality Assurance Inspection Results:

A) Measured Total CFM (section 4): _____ Outdoor Temp: _____

1) Mfr's. Rated HP Capacity: _____ Btuh

B) Measured Heat Pump Capacity (section 5): _____ Btuh

C) Difference between rated and measured capacity (rated-measured)/rated) = _____% Passed (≤10%) or Failed (>11%)

D) If failed - reason _____?

E) Inspection performed by: _____ NATE Certification #: * _____

7. I acknowledge that this installation is in compliance with the program guidleines.

Homeowner: _____ (Print Name) _____ (Signature) _____ (Date)

Contractor: _____ (Print Name) _____ (Signature) _____ (Date)

** Fill in if applicable*

Next Step - Submit this application to your local electric utility for approval and processing.

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