

# **Home Energy Savings Program**

## **California Trade Ally Program Manual**

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## Purpose of This Manual

This manual is meant to provide trade allies with a comprehensive overview of Pacific Power's Home Energy Savings program. It has been developed with a companion set of reference materials and applicable worksheets to assist trade allies with the installation of program-approved services.

## Home Energy Savings Overview

The PP HES program offers cash incentives on a variety of HVAC, plumbing, and weatherization equipment and services. The program promotes installation practices that are designed to maximize system performance and efficiency. By helping customers minimize their energy use, the HES program saves customers money on their energy bill and also reduces the growing demand for power in the region.

The program was originally designed for single family installation. However, due to increased interest in multifamily<sup>1</sup> and manufactured home installations, the program has extended incentives for each category in select states, each involving its own unique application process. For multifamily projects, please refer to the Pacific Power Trade Ally Manual and contact the program via the website at [homeenergysavings.net](http://homeenergysavings.net), by phone 1-800-942-0281, or [HesTradeAllyPP@pacificpower.net](mailto:HesTradeAllyPP@pacificpower.net) for additional requirements or to make an appointment for a pre-qualification inspection. Please refer to the HES website at [homeenergysavings.net](http://homeenergysavings.net) for additional requirements regarding new or manufactured homes incentives.

## Trade Ally Overview

A trade ally is a contractor (general, HVAC, weatherization, or plumber) or retailer who sells or installs qualifying equipment or performs services for home energy efficiency upgrades. There are two types of program trade allies: participating or qualifying.

### Participating trade allies:

Participating applies to a trade ally that has met the basic requirements (outlined on the next pages) to perform work for the HES program.

### Qualified trade allies:

Qualified applies to a trade ally that has met the basic requirements (outlined in the next pages) and that has also successfully completed additional relevant industry training(s) required for specific services (e.g. PTCS, BPI, NATE, etc.). Documentation of the completed training must be submitted with the participation agreement and must include the name of the individual trained, certification number, certification type, date trained, and expiration date (if applicable). If you or your technicians require additional training in order to meet program requirements, please let us know and we will work with you to identify appropriate local resources or provide on-site technical coaching.

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<sup>1</sup> 5 or more attached units with shared floors and/or walls

Program-Eligible trade allies:

The term “program-eligible trade ally” is used when an installation can be completed by either a participating or qualified trade allies. This term is used on HES marketing materials and the website to explain to customers what type of trade ally they need to hire in order to receive an incentive.

### Trade Ally Overview

Equipment or Service	Qualifying certifications
Air Sealing	BPI Building Analyst BPI Envelope Professional BPI Advanced Home Energy Professional BPI Air Leakage Control Installer BPI Infiltration and Duct Leakage RESNET Certified Rater
Duct Sealing alone  Duct Sealing and Duct Insulation	PTC5 Duct Seal NATE HVAC Efficiency Analyst BPI Infiltration and Duct Leakage RESNET Certified Rater
Central Air Conditioner with Best Practice Installation and Sizing  Heat Pump Measure with Best Practice Installation and Sizing	PTC5 Heat Pump NATE Air Conditioning NATE Heat Pump NATE Light Commercial Refrigeration NATE Commercial Refrigeration NATE HVAC Efficiency Analyst NATE HVAC Performance Verified
Heat Pump PTC5 Commissioning, Controls, and Sizing	PTC5 Heat Pump

## Existing Single Family Homes Incentives

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### **Air Sealing**

15%-29.9% Reduction Customer Incentive: \$200

30% Reduction or Greater Customer Incentive: \$200

15%-29.9% Reduction Trade Ally Incentive: N/A

30% Reduction or Greater Trade Ally Incentive: \$200

### **Qualifications:**

- Work must be completed by a Program-Qualified Trade Ally
- Work must be installed according to the Technical Specification Manual

### **Ensure the home qualifies:**

- Must be an existing home, not new construction
- An electric heating system must serve at least 80% of the home's conditioned living space

### **Application:**

- **Insulation Application-** completed and signed

### **Itemized receipt or invoice:**

- Date of purchase
- Date work initiated
- Date work completed
- Product and/or service description and costs

### **Additional Documents:**

- W-9 for businesses receiving an incentive
  - Third party addendum for landlords property owners who are not listed on the utility account and who are applying for incentives
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## Existing Single Family Homes Incentives Continued

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### Attic Insulation

Electrically Heated Home Customer Incentive: \$0.20/sq. ft.

#### Qualifications:

- Existing insulation: R-19 or less
- Final insulation: R-38 or greater

### Wall Insulation

Electrically Heated Home Customer Incentive: \$0.75/sq. ft.

#### Qualifications:

- Existing insulation: No existing wall insulation
- Final insulation: R-13 or greater or fill wall cavity
- Basements do not qualify
- Interior walls, such as walls between rooms, do not qualify
- Insulation along rim joists does not qualify

### Ensure the home qualifies:

- Work must be completed by a Program-Eligible Trade Ally or self-installed by the homeowner
- Must be an existing home, not new construction
- Electric heating system must serve at least 80% of the home's conditioned living space
- Work must be installed according to the Technical Specification Manual
- Electrically cooled homes do not qualify for insulation incentives
- For each area of the home, limit one incentive per insulation type, for the lifetime of the home
- Insulation must be installed between unconditioned and conditioned living spaces

### Application:

- **Insulation Application-** completed and signed

### Itemized receipt or invoice:

- Date of purchase
- Date work initiated
- Date work completed
- Square footage of area(s) insulated
- Pre-existing R-value
- Added R-value

### Additional Documents:

- W-9 for businesses receiving an incentive
  - Third party addendum for landlords property owners who are not listed on the utility account and who are applying for incentives
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## Existing Single Family Homes Incentives Continued

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### **Whole Home Upgrade Package**

**Customer Incentive:** \$1,000 bonus per home

#### **Qualifications:**

- Must be an existing home, not new construction
- Work must be completed by a Program-Eligible Trade Ally as outlined in each measures qualifications/requirements
- Work must be completed within a 6 month time frame
- Package Options:
  1. Ductless heat pump, whole home attic insulation, whole home wall insulation, and air sealing
  2. Heat pump conversion, whole home attic insulation, whole home wall insulation, and air sealing
  3. Heat pump upgrade, whole home attic insulation, whole home wall insulation, and air sealing

#### **Application:**

The following applications must be completed and signed:

- **Insulation Application**
  - **Heat Pump Application**
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## Multi-family Incentives

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### Attic Insulation

Electrically Heated Home Customer Incentive: \$0.35/sq. ft.

#### Qualifications:

- Existing insulation: R-19 or less
- Final insulation: R-38 or greater

### Wall Insulation

Electrically Heated Home Customer Incentive: \$0.75/sq. ft.

#### Qualifications:

- Existing insulation: No existing wall insulation
- Final insulation: R-13 or greater or fill wall cavity
- Basements do not qualify
- Interior walls, such as walls between rooms, do not qualify
- Insulation along rim joists does not qualify

#### Ensure the home qualifies:

- Work must be completed by a Program-Eligible Trade Ally or self-installed by the property owner or landlord
- Must be a multifamily structure
- Electric heating system must serve at least 80% of the home's conditioned living space
- Work must be installed according to the Technical Specification Manual
- Electrically cooled homes do not qualify for insulation incentives
- For each area of the home, limit one incentive per insulation type, for the lifetime of the home
- Insulation must be installed between unconditioned and conditioned living spaces

#### Application:

- **Multifamily One Pager**- completed and signed
- **Multifamily Spreadsheet**

#### Itemized receipt or invoice:

- Date of purchase
- Date work initiated
- Date work completed
- Square footage of area(s) insulated
- Pre-existing R-value
- Added R-value

#### Additional Documents:

- W-9 for businesses receiving an incentive
  - Third party addendum for landlords property owners who are not listed on the utility account and who are applying for incentives
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## **Existing Single Family Homes Incentives**

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### **Central Air Conditioner**

**Customer Incentive:** \$100

#### **Qualifications:**

- Work must be completed by a Program-Eligible Trade Ally
- Minimum 15 SEER as determined by AHRI Standard 210/240
- New, air source-split equipment with a matched condensing unit and evaporator coil or packaged unitary air conditioner
- AHRI Standard Rating Cooling Capacity of 65,000 BTU/hr (5.4 tons) or less
- Homes 3,500 square feet or less may qualify for one unit, while homes greater than 3,500 square feet may qualify for two units. Homes greater than 3,500 square feet requiring more than two units may apply for additional incentives (additional documentation required, contact program for more information).
- Work must be installed according to the Technical Specification Manual

#### **Application:**

- **Central Air Conditioner Application**– completed and signed

#### **Itemized receipt or invoice:**

- Product and/or service description and costs
- Model number
- Date of purchase
- Date work initiated
- Date work completed

#### **Additional Documents:**

- **AHRI Certificate**
  - W-9 for businesses receiving an incentive
  - Third party addendum for property owners who are not listed on the utility account and who are applying for incentives
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## **Existing Single Family Homes Incentives Continued**

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### **Duct Sealing (Stand Alone)**

**Electrically Heated Home Customer Incentive: \$200**

#### **Qualifications:**

- Work must be complete by a Program-Qualified Trade Ally
- All physically accessible ducts located in unconditioned living space must be sealed
- Duct sealing must reduce leakage by 50% or more with a 100 CFM minimum reduction
- Work must be installed according to the Technical Specification Manual

#### **Ensure the home qualifies:**

- Must be an existing home, not new construction
- Must have a minimum of 10 linear feet of exposed ductwork located in unconditioned living space
- An electric heating system must serve at least 80% of the home's conditioned living space
- Cannot be claimed if also converting or upgrading heat pump or central air conditioner

#### **Application:**

- **Duct Sealing & Duct Insulation Application** - completed and signed

#### **Itemized receipt or invoice:**

- Product and/or service description and costs
- Date of purchase
- Date work initiated
- Date work completed

#### **Additional Documents:**

- W-9 for businesses receiving an incentive
  - Third party addendum for property owners who are not listed on the utility account and who are applying for incentives
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## Existing Single Family Homes Incentives Continued

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### Duct Sealing and Duct Insulation

**Electrically Heated Home Customer Incentive:** \$500

**Electrically Heated Home Trade Ally Incentive:** \$100

*\*When applying for Duct Sealing & Duct Insulation, separate trade allies may perform the two services. The duct sealing trade ally listed in section 2 of the application will receive the trade ally incentive*

### Qualifications:

- Work must be completed by a Program-Qualified Trade Ally
- Pre-existing duct insulation levels must be less than or equal to R-2 or replace all existing insulation
- Duct work must be insulated to R-8 or greater
- All physically accessible ducts located in unconditioned living space must be sealed and insulated
- Cannot be claimed if also converting or upgrading heat pump or central air conditioner
- Duct sealing must reduce leakage by 50% or more with a 100 CFM minimum reduction
- Duct sealing and duct insulation must be performed in the same project, with insulation installed after the ducts are sealed
- Work must be installed according to the Technical Specification Manual
- Services must result in final duct insulation of R-8 or greater

*\*\*CAZ tests required for properties with non-sealed combustible heating and/or water heating appliances*

### Ensure the home qualifies:

- Must be an existing home, not new construction
- Must have a minimum of 10 linear feet of exposed ductwork located in unconditioned living space
- An electric heating system must serve at least 80% of the home's conditioned living space

### Application:

- **Duct Sealing & Duct Insulation** - completed and signed

### Itemized receipt or invoice:

- Product and/or service description and costs
- Date of purchase
- Date work initiated
- Date work completed

### Additional Documents:

- W-9 for businesses receiving an incentive
  - Third party addendum for property owners who are not listed on the utility account and who are applying for incentives
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## Multifamily Incentives

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### Duct Sealing and Duct Insulation

**Electrically Heated Home Customer Incentive:** \$500

**Electrically Heated Home Trade Ally Incentive:** \$100

*\*When applying for Duct Sealing & Duct Insulation, separate trade allies may perform the two services. The duct sealing trade ally listed in section 2 of the application will receive the trade ally incentive*

### Qualifications:

- Work must be completed by a Program-Qualified Trade Ally
- Pre-existing duct insulation levels must be less than or equal to R-2 or replace all existing insulation
- Duct work must be insulated to R-8 or greater
- All physically accessible ducts located in unconditioned living space must be sealed and insulated
- Cannot be claimed if also converting or upgrading heat pump or central air conditioner
- Duct sealing must reduce leakage by 50% or more with a 100 CFM minimum reduction
- Duct sealing and duct insulation must be performed in the same project, with insulation installed after the ducts are sealed
- Work must be installed according to the Technical Specification Manual
- Services must result in final duct insulation of R-8 or greater

*\*\*CAZ tests required for properties with non-sealed combustible heating and/or water heating appliances*

### Ensure the home qualifies:

- Must be multifamily property
- Must have a minimum of 10 linear feet of exposed ductwork located in unconditioned living space
- An electric heating system must serve at least 80% of the home's conditioned living space

### Application:

- **Multifamily One Pager**- completed and signed
- **Multifamily Spreadsheet** – completed and signed

### Itemized receipt or invoice:

- Product and/or service description and costs
- Date of purchase
- Date work initiated
- Date work completed

### Additional Documents:

- W-9 for businesses receiving an incentive
- Third party addendum for property owners who are not listed on the utility account and who are applying for incentives

## Existing Single Family Homes Incentives Continued

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### Ductless Heat Pump

Single-Head Unit Customer Incentive: \$1,000

Multi-Head Unit Customer Incentive: \$1,500

Single-Head Unit Trade Ally Incentive: \$300

Multi-Head Unit Trade Ally Incentive: \$30

### Qualifications:

- Work must be completed by a Program-Eligible Trade Ally
- Minimum 9 HSPF and 16 SEER
- Equipment must be a new AHRI rated ductless (mini-split) system listed in the AHRI Certified Directory: [ahridirectory.org](http://ahridirectory.org).
- Work must be installed according to the Technical Specification Manual
- Must employ an inverter driven outdoor compressor unit and a variable speed fan for indoor blower and be fully ductless
- One incentive per compressor unit

### Ensure the home qualifies:

- Must be existing home, not new construction
- Previous primary heat source must have been a permanently installed electric resistance heating system (e.g. electric baseboard, electric furnace, electric ceiling/wall heat) serving at least 80% of the home's conditioned living space
- Gas, oil, wood heating, pellet stoves, and propane systems conversions do not qualify
- Incentive is not offered to customers replacing an existing ducted heat pump
- Homes 3,500 square feet or less may qualify for one unit, while homes greater than 3,500 square feet may qualify for two units. Homes greater than 3,500 square feet requiring more than two units may apply for additional incentives (additional documentation required, contact program for more information).

### Application:

- **Heat Pump** - completed and signed

### Itemized receipt or invoice:

- Product and/or service description and costs
- Model numbers: indoor and outdoor
- Date of purchase
- Date work initiated
- Date work completed

**Additional Documents:**

- **AHRI certificate**
  - W-9 for businesses receiving an incentive
  - Third party addendum for property owners who are not listed on the utility account and who are applying for incentives
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**New Homes Incentives Continued**

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**Ductless Heat Pump**

**Incentive:** \$1,300

**Qualifications:**

- Work must be completed by a Program-Eligible Trade Ally
- Must be new construction
- Minimum 19 HSPF, 16 SEER
- Work must be installed according to the Technical Specification Manual
- Ductless Heat Pump must listed on the AHRI Certified Directory
- Ductless Heat Pump must be a new AHRI rated ductless (mini-split) system
- Must employ an inverter driven outdoor compressor unit and a variable speed fan for indoor blower and be fully ductless
- Homes 3,500 square feet or less may qualify for one unit, while homes greater than 3,500 square feet may qualify for two units. Homes greater than 3,500 square feet requiring more than two units may apply for additional incentives (additional documentation required, contact program for more information).

**Application:**

- **New Homes Application** – completed and signed

**Itemized receipt or invoice:**

- Product and/or service description and costs
- Model number
- Date of purchase
- Date work initiated
- Date work completed

**Additional Documents:**

- **AHRI Certificate**
  - W-9 for businesses receiving an incentive
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## Existing Single Family Homes Incentives Continued

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### Heat Pump Conversion

**Tier 1 Customer Incentive:** \$1,000

**Tier 1 Trade Ally Incentive:** \$50

**Tier 2 Customer Incentive:** \$1,000

**Tier 2 Trade Ally Incentive:** \$550

### Qualifications:

- Work must be completed by a Program-Eligible Trade Ally
- Tier 1: Minimum 9.0 HSPF and 15 SEER
- Tier 2: Minimum 9.5 HSPF and 16 SEER
- Equipment must be a new, air-source split or packaged unitary heat pump with an AHRI Standard Rating Cooling Capacity of 65,000 BTU/hr (5.4 tons) or less
- New heat pump must be the current primary heat source and must service at least 80% of the home's conditioned living space
- Work must be installed according to the Technical Specification Manual

### Ensure the home qualifies:

- Must be existing home, not new construction
- Previous primary heat source must have been a permanently installed electric furnace serving at least 80% of the home's conditioned area
- Gas, oil, wood heating, pellet stoves, and propane system conversions do not qualify
- Incentive is not offered to customers replacing an existing ducted heat pump
- Homes 3,500 square feet or less may qualify for one unit, while homes greater than 3,500 square feet may qualify for two units. Homes greater than 3,500 square feet requiring more than two units may apply for additional incentives (additional documentation required, contact program for more information).

### Application:

- **Heat Pump Application-** completed and signed

### Itemized receipt or invoice:

- Product and/or service description and costs
- Model numbers: indoor and outdoor
- Date of purchase
- Date work initiated
- Date work completed

**Additional Documents:**

- **AHRI certificate**
  - W-9 for businesses receiving an incentive
  - Third party addendum for property owners who are not listed on the utility account and who are applying for incentives
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## Existing Single Family Homes Incentives Continued

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### Heat Pump Upgrade

Tier 1 Customer Incentive: \$100

Tier 1 Trade Ally Incentive: \$50

Tier 2 Customer Incentive: \$100

Tier 2 Trade Ally Incentive: \$150

### Qualifications:

- Work must be completed by a Program-Eligible Trade Ally
- Tier 1: Minimum 9.0 HSPF, 15 SEER
- Tier 2: Minimum 9.5 HSPF, 16 SEER
- Equipment must be a new, air-source split or packaged unitary heat pump with an AHRI Standard Rating Cooling Capacity of 65,000 BTU/hr (5.4 tons) or less
- New heat pump must be the current primary heat source and must service at least 80% of the home's conditioned living space
- Equipment must be listed on the AHRI Certified Directory
- Work must be installed according to the Technical Specification Manual

### Ensure the home qualifies:

- Must be existing home, not new construction
- Previous primary heat source must have been a ducted heat pump that served at least 80% of the home's conditioned area
- Gas, oil, wood heating, pellet stoves, and propane systems conversions do not qualify
- Homes 3,500 square feet or less may qualify for one unit, while homes greater than 3,500 square feet may qualify for two units. Homes greater than 3,500 square feet requiring more than two units may apply for additional incentives (additional documentation required, contact program for more information).

### Application:

- **Heat Pump Application** - completed and signed

### Itemized receipt or invoice:

- Product and/or service description and costs
- Model numbers: indoor and outdoor
- Date of purchase
- Date work initiated
- Date work completed

### Additional Documents:

- **AHRI certificate**
- W-9 for businesses receiving an incentive
- Third party addendum for property owners who are not listed on the utility account and who are applying for incentives

## **Existing Single Family Homes Incentives Continued**

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### **Whole Home Upgrade Package**

**Customer Incentive:** \$1,000 bonus per home

#### **Qualifications:**

- Must be an existing home, not new construction
- Work must be completed by a Program-Eligible Trade Ally as outlined in each measure's qualifications/requirements
- Work must be completed within a 6 month timeframe
- Package Options:
  1. Ductless heat pump, whole home attic insulation, whole home wall insulation, and air sealing
  2. Heat pump conversion, whole home attic insulation, whole home wall insulation, and air sealing
  3. Heat pump upgrade, whole home attic insulation, whole home wall insulation, and air sealing

#### **Application:**

The following applications must be completed and signed:

- **Insulation Application**
  - **Heat Pump Application**
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## **Existing Single Family Homes Incentives**

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### **Heat Pump Water Heater**

**Customer Incentive:** \$600

**Trade Ally Incentive:** \$200

#### **Qualifications:**

- Work must be completed by a Program-Eligible Trade Ally or self-installed by homeowner
- Product must meet the Northern Climate Specifications found at [neea.org/northernclimatespec](http://neea.org/northernclimatespec)
- Previous product must be an electric water heater
- Replacing heat pump water heater does not qualify
- Work must be installed according to the Technical Specification Manual

#### **Ensure the home qualifies:**

- Must be an existing home, not new construction

#### **Application:**

- **Heat Pump Water Heater Application** - completed and signed

#### **Itemized receipt or invoice:**

- Model number
- Product and installation costs
- Date of purchase
- Date work initiated
- Date work completed

#### **Additional Documents:**

- W-9 for businesses receiving an incentive
  - Third party addendum for property owners who are not listed on the utility account and who are applying for incentives
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## Glossary

Home's Primary System		
	Heating	Cooling
Electrically Heated System	Electric	Electric or Non-Electric
Electrically Cooled System	Non-Electric	Electric

<b>Electric Heating</b>	<p>Permanently installed, ducted system consisting of an electric furnace, heat pump or electric zonal heating system (baseboard or ceiling/wall heaters) serving as the home's current primary heat source (space heaters do not qualify)</p> <p><u>Duct Sealing (Stand Alone) and Duct Sealing and Duct Insulation Specific:</u> Permanently installed, ducted system consisting of an electric furnace or heat pump serving as the home's current primary heat source</p>
<b>Electric Cooling</b>	Permanently installed, electric heat pump or ducted electric central air conditioner serving as the home's current primary cooling source. Room air conditioners and evaporative cooler do not qualify
<b>Non-Electric Heating</b>	Heating system with gas, oil, wood, pellet stoves, and propane serving as the home's current primary heat source
<b>Finished or Conditioned Living Space</b>	Living space that has a permanently installed heating or cooling system
<b>Unconditioned Living Space</b>	Spaces that exist outside of the home's thermal boundary (e.g. garages, crawlspaces, the exterior of the home, or potentially the basement)

**ACCA** Air Conditioning Contractors of America

**AFUE** Annual Fuel Utilization Efficiency

**AHRI** Air Conditioning, Heating and Refrigeration Institute

**CAC** Central Air Conditioner

**CAZ** Combustion Appliance Zone Testing

**CFM** Cubic Feet per Minute

**ECM** Electronically Commutated Motor

**EER** Energy Efficiency Ratio

**HES** Home Energy Savings

**HSPF** Heating Seasonal Performance Factor

**HVAC** Heating, Ventilation, and Air Conditioning

**Pa** Pascal

**RMP** Rocky Mountain Power

**SEER** Seasonal Energy Efficiency Ratio

**TXV** Thermal Expansion Valve

**QPL** Qualified Products List

**WCI** Water Column Inches