



Reduce the Use: Residential

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1.1 Program Overview

Santee Cooper is pleased to offer its 2017-2018 Smart Energy Existing Homes (SEEH) Rebate Program (“Rebate Program” or “Program”). The Program promotes the implementation of high-efficiency energy efficiency measures. Rebates promoted through this Program aim to reduce Santee Cooper customers’ incremental cost to upgrade to high-efficiency equipment over standard-efficiency options and to install other energy efficient products.

This manual outlines the requirements for the 2017-2018 Rebate Program Year. This Rebate Program is available for two consecutive Program Years beginning December 1, 2016 and ending November 30, 2018. The 2017 Program Year runs from December 1, 2016 to November 30, 2017. The 2018 Program Year runs from December 1, 2017 to November 30, 2018.

1.2 Program Administrator

Santee Cooper has contracted and authorized Nexant, Inc. (“Program Administrator”) to administer this Program including such activities, but not limited to: facilitating project information requests from Trade Allies; being a Trade Ally liaison; and conducting measurement and verification activities.

1.3 Santee Cooper Residential Trade Ally Network

Customers are required to use a vendor or installer (“Trade Ally”) who is a member of Santee Cooper’s Residential Trade Ally Network for the purchase and installation of all the energy efficiency measures offered by the Program except heat pump water heaters, solar water heaters and smart thermostats. Trade Allies are independent contractors with respect to Santee Cooper and the Program and are not authorized to make representations or incur obligations on behalf of Santee Cooper. Participation as a Trade Ally does not constitute an endorsement by Santee Cooper, nor does it certify or guarantee the quality of work performed. A full list of Trade Allies can be found at <https://www.santeecooper.com/Residential/Reduce-the-Use-and-Save/Trade-Ally-List.aspx>.

1.4 Santee Cooper Energy Advisors

Santee Cooper Energy Advisors (“Energy Advisors”) are Santee Cooper employees who complete Home Energy House Calls (See Section 3.1.1) for residential customers and are available to answer questions related to the Program.

1.5 Program Contact Information

1.5.1 For Questions and Additional Information

Questions about the Program can be directed to Santee Cooper via:

- Web: www.reducehouse.com
- Telephone:
 - (843)-347-3399 ext. 3910 (Horry and Georgetown)
 - (843)-761-8000 ext. 3910 (Berkeley)
- Toll-Free Fax: 843-347-8781
- Email: energy.advisor@santeecooper.com

1.5.2 Submittals

Customers can send their completed applications and the required documentation to:

Email to:

Energy.advisor@santeecooper.com

Fax to:

843-347-8781

Mail to:

Santee Cooper Energy Support Services
305-A Gardner Lacy Road
Myrtle Beach, SC 29579

Section 2 **Eligibility Requirements and Rebate Information**

2.1 Customer Eligibility Requirements

The Program is available to Santee Cooper residential customers who meet all of the following requirements:

- Customers applying for the rebates must be the sole owner of the home or be authorized by the landlord to make necessary modifications to the home to install the eligible energy-efficient upgrades
- The home must be separately metered and receive electrical service from Santee Cooper through the Residential General Service rate (RG or its successors)
- The home must be a single family¹ construction or a unit in a multi-family² building that has its own heating, cooling and hot water systems, separate from other units
- The home must be at least five (5) years old, excluding Home Energy House Calls
- Any home rebated through the Smart Energy New Home Program will be ineligible to receive a Home Energy House Call for five (5) years
- The home must be all electric, excluding hybrid heat pumps, gas cooktops and gas fireplaces, excluding Home Energy House Calls
- Tenants of rental homes can only participate if the residential homeowner submits a Homeowner Participation Agreement and the appropriate rebate and/or loan application to Santee Cooper

¹ Single Family means a single, detached residential dwelling.

² Multi-Family means a residential dwelling attached to one or more other residential dwellings.

2.2 Program Measures and Rebate Amounts

This Rebate Program provides rebates for many types of energy-efficient technologies, as shown in Table 2-1 below.

Table 2-1 Rebate Program Eligible Measures and Equipment Summary

Heat Pump Measures (Maximum of two (2) Heat Pump rebates per customer address)	Minimum Efficiency Requirements	Rebate Amount
Variable Speed Mini-Split Heat Pump	<ul style="list-style-type: none"> ≥ 16 SEER, 8.5 HSPF 	\$75 per installed system
	<ul style="list-style-type: none"> ≥ 18 SEER, 9.5 HSPF 	\$175 per installed system
Single-Phase Heat Pump (System Size ≤ 65 kBTU/h)	<ul style="list-style-type: none"> ≥ 15 SEER, 8.5 HSPF 	\$200 per installed system
	<ul style="list-style-type: none"> ≥ 17 SEER, 9.0 HSPF (Single Family Only) 	\$600 per installed system
Heat Pump Measures (Maximum of two (2) Heat Pump rebates per customer address)	Minimum Efficiency Requirements	Rebate Amount
Geothermal Heat Pump (System Size ≤ 65 kBTU/h)	<ul style="list-style-type: none"> ENERGY STAR[®] certified Geothermal system (Single Family Only) 	\$600 per installed system
Hybrid Heat Pump (System Size ≤ 65 kBTU/h)	<ul style="list-style-type: none"> ≥ 15 SEER, 8.5 HSPF 	\$500 per installed system
	<ul style="list-style-type: none"> ≥ 17 SEER, 9.0 HSPF or ENERGY STAR[®] certified Geothermal system (Single Family Only) 	\$700 per installed system
Weatherization	Minimum Efficiency Requirements	Rebate Amount
Duct Improvement	Whole Home Duct Sealing <ul style="list-style-type: none"> May not be combined with Duct Replacement 	\$250 per system
	Whole Home Duct Replacement <ul style="list-style-type: none"> May not be combined with Duct Sealing 	\$500 per system
Ceiling Insulation	<ul style="list-style-type: none"> Existing ceiling insulation must be ≤ R-19 Ceiling insulation must be increased to at least R-38 	\$6 per 100 sq. ft.
	<ul style="list-style-type: none"> Existing ceiling insulation must be ≤ R-11 Ceiling insulation must be increased to at least R-38 	\$13 per 100 sq. ft.
Air Infiltration Reduction	<ul style="list-style-type: none"> Must reduce CFM leakage by at least 10% 	\$15 per 100 CFM ₅₀ Reduced

Smart Thermostats	Minimum Efficiency Requirements	Rebate Amount
Single Family Smart Thermostat	<ul style="list-style-type: none"> • Must be WiFi Enabled • Must be EITHER Self-learning OR Occupancy Sensing • Must not be installed in a Multi-Family facility • Limited to two Smart Thermostats per Customer Address 	\$125 per system
Water Heaters	Minimum Efficiency Requirements	Rebate Amount
Heat Pump Water Heater	<ul style="list-style-type: none"> • ENERGY STAR certified system 	\$400 per system
Solar Water Heater	<ul style="list-style-type: none"> • SRCC OG-300 certified system 	\$700 per system
Other	Minimum Efficiency Requirements	Rebate Amount
Smart Energy Existing Home Bonus	<ul style="list-style-type: none"> • Install 3 or more of the above measures within 60 days of the first measure's Rebate Application date 	\$200 per home

2.2.1 Smart Energy Existing Home Bonus

To qualify for the Smart Energy Existing Home Bonus rebate, a customer must install or complete 3 or more of the above eligible measures. If submitting separate Rebate Applications for each measure, the qualifying measures must be installed within 60 days of the date of the Rebate Application for the first measure installed.

2.3 Measure Eligibility Requirements

In order to be eligible for rebates, energy-efficiency measures must meet the following requirements:

- For Heat Pump installations, equipment must be installed and Program documentation submitted by November 30 of the year the project is started to be eligible for Program rebates
- Qualifying equipment and materials installed must be new
- Qualifying measures must not be previously rebated through any other Santee Cooper rebate program within the ineligibility period (See Table 2-2)
- Qualifying measures must be completed in a manner that meets or exceeds all applicable codes and regulatory requirements
- The equipment that is removed and replaced with more energy-efficient equipment cannot be re-installed elsewhere and must be disposed of in accordance with all applicable local, state and federal codes and regulations
- Detailed information on specific eligibility for qualifying energy-efficiency measures and instructions to complete the Rebate Application along with documentation required for each measure are included in the Equipment Catalogs provided in Section 4

2.4 Measure Ineligibility Periods

Customers who have received rebates through the Program for eligible measures are not eligible to receive rebates related to those measures through any other program for the period specified in Table 2-2 below.

Table 2-2 Measure Ineligibility Periods

Measure	Future Measure Considered as Duplicate	Ineligibility Period
Heat Pumps	Heat Pumps Heat Pump Tune-Up	15 years 3 years
Heat Pump Tune-Up	Heat Pump Tune-Up	3 years
Whole Home Duct Sealing or Replacement	Whole Home Duct Sealing or Replacement	15 years
Ceiling Insulation	Ceiling Insulation	20 years
Air Infiltration Reduction	Air Infiltration Reduction	10 years
Single Family Smart Thermostat	Single Family Smart Thermostat	15 years
Heat Pump Water Heater	Heat Pump Water Heater, Solar Water Heater	10 years
Solar Water Heater	Solar Water Heater, Heat Pump Water Heater	15 years

2.5 Program Funding

Program funds are limited and rebates are subject to funding availability. Rebate applications are accepted on a first come, first-served basis until the conclusion of the Program term or until Program funds are no longer available, whichever occurs first. Customers requesting rebates after all available Program funding for the Program Year is committed will be offered the option to be placed on a waiting list, in the order that the applications are received by Santee Cooper for consideration in a subsequent Program Year.

2.6 Rebate Payments

Rebate payments are one-time only and are capped at 50% of the eligible project costs. Eligible project costs are based upon the actual costs incurred by the customer in connection with the evaluation, construction, installation, implementation and commissioning of an eligible energy-efficiency measure.

Rebates will be in the form of a check and made out to customer or its designated assignee and will be mailed within 2-3 weeks after the final approval of the customer's rebate application. Program rebates for Heat Pump Tune-Ups are paid directly to the Trade Ally. Customers have the option to assign their rebate to a third party by completing the Rebate Release Information section of the Rebate Application authorizing the payment to be sent to the third party designated. A 1099 tax form will be sent with each rebate check processed over \$600.

Customers participating in the Existing Homes program may also qualify for a loan through Santee Cooper's loan program. Additional information can be found here: www.santecooper.com/loans.

3.1 Participation Process

Detailed information about the Program participation process is provided in this section and participation information, including instructions on required project completion forms for each eligible measure, is included in the Equipment Catalogs provided in Section 4.

3.1.1 Home Energy House Call

Any Program eligible customer may request a Home Energy House Call. As part of a Home Energy House Call, a Santee Cooper Energy Advisor will conduct an evaluation of the home to identify program measures which the customer may be eligible for rebates through the Program. Energy Advisors may provide a list of energy efficiency recommendations to the customer and discuss any financial assistance available from Santee Cooper to help offset the cost of the improvements.

3.1.2 Program Participation Steps

Customers interested in participating in the Program can participate by completing the steps outlined below:

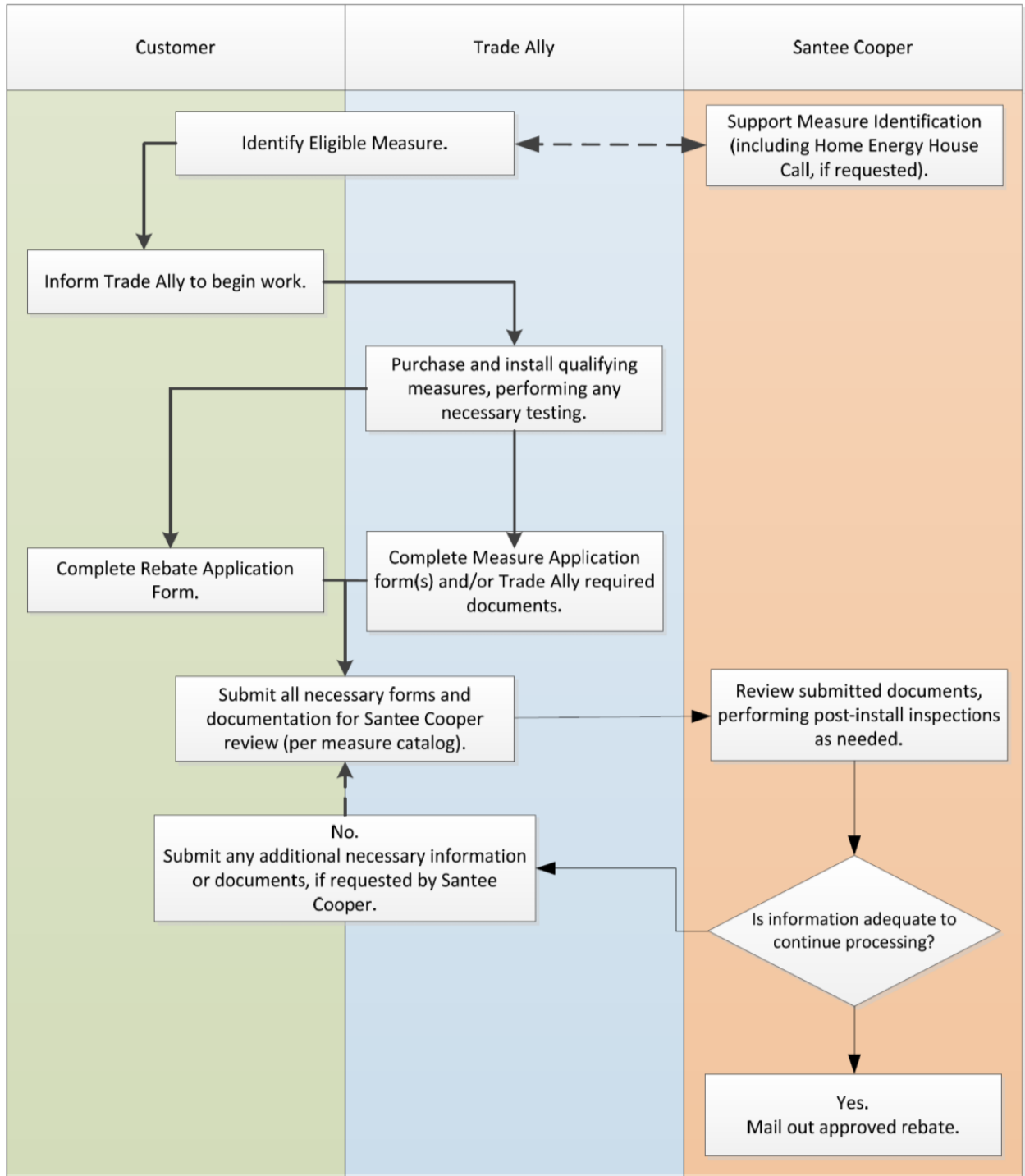
- Step 1: *Customer* selects a qualified Trade Ally to purchase and install the qualifying measures. See the exception below regarding water heaters and smart thermostats.
- Step 2: *Trade Ally* determines if the customers and equipment meet eligibility requirements for the Program; upon Santee Cooper approval
- Step 3: *Customer* submits a Smart Energy Existing Homes Program Rebate Application and the Trade Ally submits all required documentation as outlined in Section 4

All work related to Program eligible measures must be completed by a Trade Ally in order to qualify for Program rebates except for the following Program eligible measures:

- Heat Pump Water Heater
- Solar Water Heater
- Single Family Smart Thermostats

Figure 3-1 below shows a graphical representation of the participation process.

Figure 3-1 Participation Process for SEEH Measures



3.1.3 Rebate Application and Required Documentation

Customers are required to submit a fully completed Smart Energy Existing Homes Program Rebate Application (“Rebate Application”) along with required documentation. Submission of a Rebate Application, even if correct and complete, does not guarantee payment of rebates. Please review the documentation requirements for each measure as specified in the Equipment Catalogs provided in Section 4.

The 2017 Program Year runs from December 1, 2016 to November 30, 2017. Customers applying for measures installed during the 2017 Program Year must submit the Rebate Application by November 30, 2017, and be in accordance with Program requirements.

The 2018 Program Year runs from December 1, 2017 to November 30, 2018. Customers applying for measures installed during the 2018 Program Year must submit the Rebate Application by November 30, 2018, and be in accordance with Program requirements.

3.1.4 Inspections

Santee Cooper or its designee, at its sole discretion, may inspect the associated residence prior to or up to two (2) years after approving the Rebate Application. The inspection may include a telephone survey and/or site visit. Such visits may also include the installation of temporary monitoring equipment. Discrepancies identified during an inspection from information listed on the Customer’s application or incorrect installation of systems may delay or void rebate payment. Customers will be notified upon completion of the inspection if any discrepancies were identified and any specific action items that will be required in order to complete the rebate fulfillment process. If Santee Cooper requests a site inspection or survey to be completed, the customer must complete the inspection or survey within 30 calendar days of such request.

Additional information on inspections for Trade Allies can be found in the Trade Ally Manual located on the TA Portal.

Section 4

Equipment Catalogs

Detailed information on measure eligibility, rebate amounts and participation information are provided in the following Equipment Catalogs:

- Heat Pump Equipment
- Weatherization
- Smart Thermostats
- Water Heaters

4.1 Heat Pump Equipment Catalog

This Heat Pump Equipment Catalog outlines the eligibility requirements and rebate amounts for Program qualifying Heat Pump upgrades. Please read the following sections carefully to ensure that you purchase and install qualifying equipment.

4.1.1 Variable Speed Mini-Split Heat Pumps

Measure Description: Variable speed mini-split heat pumps (“mini-splits”) serve as good retrofit add-ons to homes. They can also be a good alternative for room additions where extending or installing distribution ductwork is not feasible.

Equipment Eligibility: The following requirements must be met in order to be eligible for rebates:

- Equipment must be purchased from and installed by a Trade Ally. Please visit <https://www.santeecooper.com/Residential/Reduce-the-Use-and-Save/Trade-Ally-List.aspx> to find a qualifying Trade Ally
- Split system equipment must be a matched system (tested and rated) per AHRI certificate.
- The Trade Ally must perform an ACCA Manual-J 8th edition residential load calculation on the home prior to equipment selection and purchase. The calculation must include the mini-split that is considered for installation and the equipment sizing must not exceed 0.5 tons of the whole home load recommended by the Manual-J calculation. Please download the Heat Pump Quality Installation form for instructions and details
- Heat Pump Quality Installation Requirements must be met and the QI form submitted within 10 business days of the work being completed
- Duplicate installations of mini-splits are ineligible for another retrofit rebate on the same equipment for a period of 15 years from the date on the approved Rebate Application
- Multi-split systems are not eligible for this rebate measure

Rebates: See Table 4-1 for rebate amounts. Rebates are limited to a maximum of two (2) qualifying Heat Pump units per customer address.

Table 4-1 Eligibility Requirements and Rebate Amount for Variable Speed Mini-Split Heat Pumps

Tiers	Minimum Efficiency Requirements	Rebates
Tier 1	≥ 16 SEER ≥ 8.5 HSPF	\$75 to Customer
Tier 2	≥ 18 SEER, ≥ 9.5 HSPF	\$175 to Customer \$25 to Trade Ally

Documentation Requirements: The following items must be submitted with the Rebate Application in order to be eligible for a Program rebate for the installation of a mini-split system:

- 1) Completed Rebate Application form
- 2) Mini-split's AHRI certificate
- 3) Completed Heat Pump Quality Installation Form
 - ACCA QA Program Quality Installation Contractor Checklist is an acceptable substitute for the Heat Pump Quality Installation Form when the outside temperature is > 55°F

4.1.2 Single Phase Heat Pumps

Measure Description: Similar to a refrigerator, heat pumps use electricity to move heat from a cool space to a warm space, making the cool space cooler and the warm space warmer. Because they move heat rather than generate heat, heat pumps can provide equivalent space conditioning at as little as one quarter of the cost of operating conventional heating or cooling appliances.

Equipment Eligibility: The following requirements must be met in order to be eligible for rebates:

- Equipment must be purchased from and installed by a participating Trade Ally. Please visit <https://www.santeecooper.com/Residential/Reduce-the-Use-and-Save/Trade-Ally-List.aspx> to find a qualifying Trade Ally
- Split system or packaged unit ≤ 65,000 Btu/h (5.4 tons)
- Split system equipment must be a matched system (tested and rated) per AHRI
- A Trade Ally must perform an ACCA Manual J 8th edition residential load calculation on the home prior to equipment selection and purchase. The calculation must include the Heat Pump that is considered for installation and the equipment sizing must not exceed 0.5 tons of the whole home load recommended by the Manual-J calculation. Please download the Heat Pump Quality Installation form for instructions and details
- Heat Pump Quality Installation requirements must be met and the QI form submitted within 10 business days of the work being completed
- Duplicate installations of Single Phase Heat Pumps are ineligible for another retrofit rebate on the same equipment for a period of 15 years from the date on the approved Rebate Application
- Tier 2 units are only eligible when installed in a Single Family residence

Rebates: See Table 4-2. Rebates are limited to a maximum of two (2) qualifying Heat Pump units per customer address.

Table 4-2 Eligibility Requirements and Rebate Amount for Heat Pumps

Tiers	Minimum Efficiency Requirements	Rebates
Tier 1	≥ 15 SEER, 8.5 HSPF	\$200 to Customer \$50 to Trade Ally
Tier 2	≥ 17 SEER, 9.0 HSPF (Single Family Only)	\$600 to Customer \$75 to Trade Ally

Documentation Requirements: The following items must be submitted with the Rebate Application in order to be eligible for a Program rebate for the installation of a Single Phase Heat Pump:

- 1) Completed Rebate Application Form
- 2) Heat Pump’s AHRI Certificate
- 3) Completed Heat Pump Quality Installation Form
 - ACCA QA Program Quality Installation Contractor Checklist is an acceptable substitute for the Heat Pump Quality Installation Form when the outside temperature is > 55°F

4.1.3 Geothermal Heat Pumps

Measure Description: Geothermal Heat Pumps achieve higher efficiencies by transferring heat between your house and the ground or a nearby water source. Geothermal Heat Pumps have some major advantages - they can reduce energy use by 30%-60%, control humidity, are sturdy and reliable and fit in a wide variety of homes.

Performance Eligibility: The following requirements must be met in order to be eligible for rebates:

- Equipment must be purchased from and installed by a participating Trade Ally. Please visit <https://www.santeecooper.com/Residential/Reduce-the-Use-and-Save/Trade-Ally-List.aspx> to find a qualifying Trade Ally
- Split system or packaged unit ≤ 65,000 Btu/h (5.4 tons)
- Split system equipment must be a matched system (tested and rated) per AHRI certificate
- Must be ENERGY STAR certified
- A Trade Ally must perform an ACCA Manual J 8th edition residential load calculation on the home *prior* to equipment selection and purchase. The calculation must include the Geothermal Heat Pump that is considered for installation and the equipment sizing must not exceed 0.5 tons of the whole home load recommended by the Manual-J calculation. Please download the Heat Pump Quality Installation form for instructions and details
- Heat Pump Quality Installation Requirements must be met and the QI form submitted within 10 business days of the work being completed

- Duplicate installations of Geothermal Heat Pumps are ineligible for another retrofit rebate on the same equipment for a period of 15 years from the date on the approved Rebate Application
- Only eligible when installed in a Single Family residence

Rebates: See Table 4-3. Rebates are limited to a maximum of two (2) qualifying Heat Pump units per customer address.

Table 4-3 Eligibility Requirements and Rebate Amount for Geothermal Heat Pumps

Measure Name	Minimum Efficiency Requirement	Rebates
Geothermal Heat Pump	ENERGY STAR Certified (Single Family Only)	\$600 to Customer \$75 to Trade Ally

Documentation Requirements: The following items must be submitted with the Rebate Application in order to be eligible for a Program rebate for the installation of a Geothermal Heat Pump:

- 1) Completed Rebate Application Form
- 2) Heat Pump’s AHRI Certificate
- 3) Completed Heat Pump Quality Installation Form
 - ACCA QA Program Quality Installation Contractor Checklist is an acceptable substitute for the Heat Pump Quality Installation Form when the outside temperature is > 55°F

4.1.4 Hybrid Heat Pumps

Measure Description: Hybrid Heat Pumps typically use a furnace to provide supplemental gas heat during the heating season when the Heat Pump alone is not able to provide enough heat. The system automatically selects the most economical fuel (electricity or gas) to heat the home with maximum efficiency.

Equipment Eligibility: The following requirements must be met in order to be eligible for rebate:

- Equipment must be purchased from and installed by participating Trade Ally. Please visit <https://www.santeecooper.com/Residential/Reduce-the-Use-and-Save/Trade-Ally-List.aspx> to find a qualifying Trade Ally
- Split system or packaged unit ≤ 65,000 Btu/h (5.4 tons)
- Split system equipment must be a matched system (tested and rated) per AHRI certificate
- A Trade Ally must perform an ACCA Manual J 8th edition residential load calculation on the home **prior** to equipment selection and purchase. The calculation must include the Hybrid Heat Pump that is considered for installation and the equipment sizing must not exceed 0.5 tons of the whole home load recommended by the Manual-J calculation. Please download the Heat Pump Quality Installation form for instructions and details
- Heat Pump must have supplemental gas heat and all required controls must be properly functioning
- Heat Pump Quality Installation Requirements must be met and the QI form submitted within 10 business days of the work being completed

- Duplicate installations of Hybrid Heat Pumps are ineligible for another retrofit rebate on the same equipment for a period of 15 years from the date on the approved Rebate Application
- Tier 2 units are only eligible when installed in a Single Family residence

Rebates: See Table 4-4. Rebates are limited to a maximum of two (2) qualifying Heat Pump units per customer address.

Table 4-4 Eligibility Requirements and Rebate Amount for Hybrid Heat Pumps

Tiers	Minimum Efficiency Requirements	Rebates
Tier 1	≥ 15 SEER, 8.5 HSPF	\$500 to Customer \$50 to Trade Ally
Tier 2	≥ 17 SEER, 9.0 HSPF or ENERGY STAR certified Geothermal system (Single Family Only)	\$700 to Customer \$75 to Trade Ally

Documentation Requirements: The following items must be submitted with the Rebate Application in order to be eligible for a Program rebate for the installation of a Hybrid Heat Pump:

- 1) Completed Rebate Application Form
- 2) Heat Pump’s AHRI Certificate
- 3) Completed Heat Pump Quality Installation Form
 - ACCA QA Program Quality Installation Contractor Checklist is an acceptable substitute for the Heat Pump Quality Installation Form when the outside temperature is > 55°F

4.1.5 Heat Pump Tune-Up

Measure Description: As with all electrical and mechanical equipment, a home’s Heat Pump system requires regular maintenance in order to perform at its peak capacity. Having a licensed contractor perform a tune-up on a home’s Heat Pump once every three years is an excellent way to improve the performance and longevity of the Heat Pump system.

Service Eligibility: The following requirements must be met in order to be eligible for rebate, which will be paid directly to the Trade Ally performing the services:

- Services must be performed by a Trade Ally. Please visit <https://www.santeecooper.com/Residential/Reduce-the-Use-and-Save/Trade-Ally-List.aspx> to find a qualifying Trade Ally
- Outside temperature must exceed 55 degrees Fahrenheit to qualify
- General tune-up, inspection, cleaning of the system and proper refrigerant charge testing conducted by the Trade Ally are eligible for rebate. The Trade Ally’s service technician must perform and document the following information:
 - Check thermostat settings to ensure the heating and cooling system turns on and off at the programmed temperatures

- Tighten all electrical connections on motors
- Measure voltage and current on motors
- Lubricate moving parts as required
- Check and clean the condensate drain if needed
- Check system controls to ensure proper and safe operation
- Inspect, clean or change the air filter
- Clean indoor and outdoor coils, note coil conditions after cleaning
- Clean and adjust blower components to provide proper system airflow
- Check refrigerant charge per the requirements listed on Tune-up Form and adjust if necessary to make sure it meets program requirements
- Duplicate Heat Pump tune-ups are ineligible for another rebate on the same equipment for a period of 3 years from the date on the approved Rebate Application. Air-conditioners are not eligible

Rebates: \$50 per qualifying Heat Pump Tune-Up, paid directly to the Trade Ally that completes the work. Rebates are limited to a maximum of two (2) qualifying Heat Pump units per customer address.

Documentation Requirements: The following items must be submitted in order to be eligible for a Program rebate for the Heat Pump Tune-Up:

- 1) Completed Rebate Application Form
- 2) Completed Heat Pump Tune-Up Form

4.2 Weatherization Catalog

This Weatherization Catalog outlines the eligibility requirements and rebate amounts for qualifying weatherization installations offered through the Program. Please read the following sections carefully to ensure that qualifying upgrades are purchased and installed.

4.2.1 Duct Improvement Measures – Whole Home Duct Sealing and Whole Home Duct Replacement

Measure Description: Efficient and well-designed duct systems distribute air properly throughout your home without leaking to keep all rooms at a comfortable temperature. If ducts are in ill repair or have no insulation, the heating and cooling losses can cause the Heat Pump system to use more energy than it needs to. Maintaining well sealed and insulated ducts can improve the effectiveness of a home's air-distribution system and optimize the energy used by a home's Heat Pump system.

Equipment Eligibility: The following must be met in order to be eligible for a rebate for Whole Home Duct Sealing and Duct Replacement measures:

- Duct sealing and duct replacement material must be purchased from and the work performed by participating Trade Ally. Please visit <https://www.santeecooper.com/Residential/Reduce-the-Use-and-Save/Trade-Ally-List.aspx> to find a qualifying Trade Ally
- Trade Allies must provide supporting documentation of CFM leakage reduction using either Duct Blaster or Blower Door test to determine pre-improvement and post-improvement CFM leakage
- After the duct improvement work is done, Trade Allies must verify if the CFM meets the requirements of ACCA Standard 5¹
- Total duct leakage must not exceed 20% of the total system air-flow². Refer to specific equipment method in the Heat Pump Duct Improvement Form for system pressurization requirements for testing
- Duplicate instances of Duct Improvement measures are ineligible for future rebates on the duct work for a period of 15 years from the date on the Rebate Application

¹ Final CFM/ton must fall within 350-425.

² The total duct leakage requirement pertains to the percentage of CFM leakage as compared to the overall air handling fan flow operating at design conditions. The total duct leakage shall be based on the higher design airflow, i.e. the higher of the winter heating airflow or of the summer cooling airflow.

Rebates: See Table 4-5.

Table 4-5 Eligibility Requirements and Rebate Amount for Duct Improvement Measures

Measure Name	Measure Details	Rebates
Whole Home Duct Sealing	<ul style="list-style-type: none"> Cannot be combined with Duct Replacement 	\$250/System
Whole Home Duct Replacement	<ul style="list-style-type: none"> Must replace over 50% of total Ductwork Cannot be combined with Duct Sealing 	\$500/System

Note: Rebates are based on repairing or replacing the system, retesting the system and meeting minimum requirements. If the pre-installation testing results on a home’s air-distribution system passes the minimum requirements and no repair is deemed necessary, the home will not be eligible for any Duct Improvement Rebates.

Documentation Requirements: The following items must be submitted in order to be eligible for a Program rebate for Duct Improvement measures:

- 1) Completed Rebate Application Form
- 2) Completed Heat Pump Duct Improvement Form
- 3) Test documentation from a Blower Door test or Duct Blaster test showing the pre- and the post-CFM leakage values

Requirements for Whole Home Duct Sealing: Duct Sealing is designed to complement the operation of existing heat pump systems that may be currently operating below their design efficiency. The Trade Ally must follow the acceptable procedures, requirements and duct repair recommendations listed below.

Acceptable Procedures

- Duct pressurization test (also known as the “Duct Blaster” test) through a calibrated fan or orifice - duct registers are sealed, a fan is attached to one opening, the ducts are pressurized to match the Heat Pump system’s designed operating pressures and the amount of air flowing through the fan is quantified
- Blower door subtraction method - a calibrated fan measures whole-building leakage, then the duct grilles are sealed and the house re-measured; the difference is the amount of leakage attributable to the duct system

Requirements

- Measure airflow across the indoor coil as per stated above in acceptable procedures and verify if the CFM meets the requirements of ACCA Standard 5
- No more than 20% total CFM duct leakage (the total duct leakage requirement pertains to the percentage of CFM leakage as compared to the overall air handling fan flow operating at design conditions; the airflow leakage shall be based on the higher design airflow i.e. the higher of the winter heating airflow or of the summer cooling airflow), or 50% improvement on existing leakage

or until 20% leakage requirement is met. Refer to specific equipment method for system pressurization requirements for testing

- Construct and install ductwork in accordance with the latest editions of Sheet Metal and Air Conditioning Contractors National Association (SMACNA) manuals, entitled Fibrous Duct Construction Standard, Heat Pump Duct Construction Standards and Duct Electric Heat Guide for Air Handling Systems.
- Existing systems with initial testing results of less than 20% leakage are not eligible for rebates
- Only systems requiring repair are eligible for rebates

Please see the current Duct Improvement Form for more specific details.

4.2.2 Air-Infiltration Reduction

Measure Description: If your home feels drafty and cold in the winter or too warm in the summer even with proper insulation, chances are you need to reduce the air-leakage from your home which can help keep your conditioned air inside your home.

Equipment Eligibility: The following requirements must be met in order to be eligible for an Air-Infiltration rebate:

- Air-Infiltration Reduction must be performed by a participating Trade Ally. Please visit <https://www.santeecooper.com/Residential/Reduce-the-Use-and-Save/Trade-Ally-List.aspx> to find a qualifying Trade Ally
- Home envelope leakage must be reduced by at least 10 percent
- Air filtration improvement requires test-in value ≥ 8 ACH₅₀
- Mechanical ventilation must be referenced as recommended or installed in accordance with BPI's technical standard (see http://www.bpi.org/standards_approved.aspx)
- Duplicate instances of Air-Infiltration Reduction measures are ineligible for future rebates for a period of 10 years from the date on the approved Rebate Application

Rebates: \$15 per 100 CFM₅₀ reduced to Customer, up to a maximum of 50% of the eligible project costs.

Documentation Requirements: The following items must be submitted in order to be eligible for a Program rebates for Air-Infiltration Reduction measures:

- 1) Completed Rebate Application Form
- 2) Test documentation from a Blower Door test showing the test-in and test-out values

4.2.3 Ceiling Insulation

Measure Description: Properly insulating your home's ceilings will allow ceiling temperatures to remain closer to room temperatures by creating a thermal barrier that slows down the movement of heat and cold through the ceiling, providing an even temperature distribution throughout the house. The greater the R-Value of insulation when installed correctly, the better it is at providing that thermal barrier.

Equipment Eligibility: The following requirements must be met in order to be eligible for a rebate for Ceiling Insulation:

- Ceiling Insulation must be purchased from and installed by participating Trade Ally. Please visit <https://www.santeecooper.com/Residential/Reduce-the-Use-and-Save/Trade-Ally-List.aspx> to find a qualifying Trade Ally.
- Ceiling Insulation must be increased to at least R-38:
 - Tier-1: Existing ceiling insulation must be \leq R-19
 - Tier-2: Existing ceiling insulation must be \leq R-11
- Duplicate instances of Ceiling Insulation are ineligible for future rebates for a period of 20 years from the date on the approved Rebate Application

Rebates: There are two rebate tiers offered, with rebates capped at 50% of the eligible project costs.

- Tier-1: \$6 per 100 sq. ft.
- Tier-2: \$13 per 100 sq. ft.

Documentation Requirements: The following items must be submitted with the Rebate Application in order to be eligible for a Program rebates for Ceiling Insulation measures:

- 1) Completed Rebate Application Form
- 2) Documentation of square footage being insulated

4.3 Smart Thermostat Catalog

This Smart Thermostat Catalog outlines the eligibility requirements and rebate amounts for Program qualifying Smart Thermostats. Please read the following sections carefully to ensure qualifying products are purchased and installed.

4.3.1 Single Family Smart Thermostat

Measure Description: Smart Thermostats use advanced technology to iteratively learn the occupancy patterns and monitor the energy use in your home while optimizing your comfort and reducing energy use. Many Smart Thermostats conveniently connect to your smart phone, tablet or computer through Wi-Fi to enable control of your home's temperature from anywhere where Wi-Fi is available.

Equipment Eligibility: The following requirements must be met in order to be eligible for a Smart Thermostat rebate:

- Must be Wi-Fi enabled
- Must be either Self-Learning or Occupancy Sensing
- Must not be installed in a Multi-Family Residence
- Duplicate instances of Smart Thermostats are ineligible for future rebates for a period of 15 years from the date on the first approved Rebate Application

Note: It is recommended that the customer call a Santee Cooper EA (contact information given above) to confirm the eligibility of the proposed thermostat before installation. A list of pre-approved smart thermostat units can be found at www.reduceuse.com

Rebates: \$125 per qualifying thermostat, up to a maximum of two (2) thermostats per home.

Documentation Requirements: The following items must be submitted in order to be eligible for Program rebates for Smart Thermostats:

- 1) Completed Single Family Smart Thermostat Application Form
- 2) Picture(s) of installed Smart Thermostat(s)
- 3) Proof of purchase

4.4 Water Heater Catalog

This Water Heater Catalog outlines the eligibility requirements and rebate amounts for Program qualifying Water Heaters. Please read the following sections carefully to ensure qualifying products are purchased and installed.

4.4.1 Heat Pump Water Heater

Measure Description: Heat Pump Water Heaters use electricity to move heat from one place to another instead of generating heat directly in order to heat water for a home. These systems can be stand-alone or a heat pump can be retrofitted to work with an existing conventional storage water heater.

Equipment Eligibility: The following requirements must be met in order to be eligible for a rebate for Heat Pump Water Heaters:

- ENERGY STAR certified
- System must be installed in unconditioned attached space
- System must be installed according to manufacturer specifications
- Duplicate instances of Heat Pump Water Heaters and Solar Water Heaters are ineligible for future rebates for a period of 10 years from the date on the approved Program application

Rebates: \$400 per qualifying Heat Pump Water Heater purchased and installed

Documentation Requirements: The following items must be submitted in order to be eligible for a Heat Pump Water Heater rebate:

- 1) Completed Rebate Application Form
- 2) Heat Pump Water Heater Installation Form
- 3) Heat Pump Water Heater's AHRI Certificate
- 4) Proof of purchase

4.4.2 Solar Water Heater

Measure Description: Solar Water Heaters, also known as solar domestic hot water systems, can be a cost-effective way to generate hot water for your home. They can be used in any climate and the only fuel they use is sunlight. Solar water heating systems include storage tanks and solar collectors. There are two types of solar water heating systems: active, which have circulating pumps and controls and passive, which do not have circulating pumps and controls.

Equipment Eligibility: The following requirements must be met in order to be eligible for a Solar Water Heater rebate:

- SRCC OG-300 certified
- The system collector(s) must have a ten-year warranty
- System installation must maximize available solar resource, with no shading
- System must have a tilt $\leq 55^\circ$ and azimuth angle $\leq 65^\circ$
- System must be in compliance with all applicable codes and standards and must have all necessary permits
- Systems that heat pools or hot tubs separate from the property's main water heating system are not eligible for this incentive
- Duplicate instances of Solar Water Heaters and Heat Pump Water Heaters are ineligible for future rebates for a period of 15 years from the date on the approved Rebate Application

Rebates: \$700 per qualifying Solar Water Heater purchased and installed

Documentation Requirements: The following items must be submitted in order to be eligible for a Solar Water Heater rebate:

- 1) Completed Rebate Application
- 2) Solar Heat Pump Water Heater Installation Form
- 3) Solar Water Heater Manufacturer's Specifications Sheet
- 4) Proof of purchase

Appendix A

Sample Santee Cooper Electric Bill

The following sample electric bill highlights the location of the customer account number and meter number to be included in the Rebate Application.

483510000000000000000000332842

SANTEE COOPER
PO BOX 188
MONCK'S CORNER, SC 29461-0188

ACCOUNT NUMBER
[REDACTED]

PLEASE PAY BY
09/21/2016

AMOUNT DUE
\$332.84

AMOUNT PAID

[REDACTED]
[REDACTED]
MYRTLE BEACH SC 29577-6332

Please make checks payable to SANTEE COOPER

Check here for address change, comments.
If you would like to sign up for Autopay,
Please write on the reverse side and return.

Detach this stub and return with your payment. See back for payment options

Bill Date: 09/06/2016

MYRTLE BEACH SC 29577-6332

Previous balance	303.38
Payments received	-303.38
Electric Service Residential	327.64
Outdoor Lighting	5.20
Total Charges	\$ 332.84

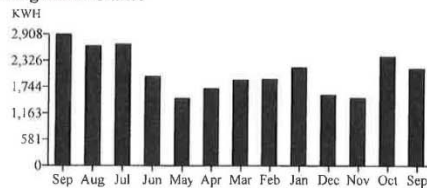
You can now chat live online with a customer service representative during regular business hours. Look for the live chat icon on our homepage at www.santeecooper.com.

MYRTLE BEACH, SC 29577

Residential Transition Adjustment (R-TA) from 8/3/16 through 9/6/16 for 35 days

Meter Number	Previous Meter Read		Current Meter Read		Usage / Consumption
	Date	Reading	Date	Reading	
[REDACTED]	8/2/2016	36271	9/6/2016	39174	2903 KWH

Usage At-A-Glance



Electric Service Residential - 08/03/16 to 09/06/16

Customer Charge	17.00
Energy charge	348.94
GC Credit	-8.00
Energy Credit	-12.19
Fuel Adjustment	-14.60
Demand Sales Adjustment	-3.28
Economic Development Adj	-0.23
Total New Charges	\$327.64

Important: This bill is due and payable on or before **September 21, 2016**. If payment in full is not received by the due date, a late charge of 2% of the unpaid balance, or 50 cents and applicable taxes - whichever is greater - will be added to the amount due.
* If your bill has a PAST DUE AMOUNT, your service may be subject to immediate suspension.

SANTEE COOPER
PO BOX 188
MONCK'S CORNER, SC 29461-0188

Power outage? Call (888) 769-7688
Billing questions? Call (843) 448-2411
Your Account Number: [REDACTED]

Visit our website at www.santeecooper.com

ACCA: Air Conditioning Contractors of America

AHRI: Air-Conditioning, Heating and Refrigeration Institute

ANSI: American National Standards Institute

ARI: Air-Conditioning and Refrigeration Institute, which has become AHRI. ARI standards have been renamed as AHRI standards and compliance with AHRI standards is inclusive of ARI standards.¹

ASHRAE: American Society of Heating, Refrigerating and Air-Conditioning Engineers

Btu/h (British thermal units per hour): energy that is produced or rejected from a system.

CEE: Consortium for Energy Efficiency

CFM (cubic feet per minute): measurement of airflow.

EER (energy-efficiency ratio): the ratio of net cooling capacity in Btu/hour to total rate of electric input in watts.

HSPF (heating seasonal performance factor): a single number figure of merit expressing the seasonal heating efficiency of heat pumps, in Btu/watt-hour. The term is generally applied to heat pump systems less than 65,000 Btu/hour.

Heat Pump: heating, ventilation and air-conditioning

IECC: International Energy Conservation Code

lbs: pounds

R-value: a measure of thermal resistance used in the building and construction industry.

SEER (seasonal energy-efficiency ratio): the total cooling output of an air conditioner or heat pump during its normal annual usage period for cooling, in Btu, divided by the total electric energy input during the same period, in watt hours.

SF or sq-ft: square foot

¹ See <http://www.ahrinet.org/Pages/ShowMeMore.aspx?src=single&lpk=908> and <http://www.ashrae.org/publications/detail/16574> for press releases.

Appendix C **Energy Code Heat Pump Minimum Efficiencies**

The energy code used in South Carolina, effective January 1, 2014, is the International Energy Conservation Code (IECC) 2009. Heat Pump standards for IECC 2009 are based on ASHRAE Standard 90.1-2007.



General Program Information:

Email: energy.advisor@santeecooper.com

Phone: (843)-347-3399 ext. 3910 (Horry and Georgetown)

(843)-761-8000 ext. 3910 (Berkeley)