# Massachusetts COOL SMART®



2015
RESIDENTIAL
CENTRAL
AC/DUCTED
AIR SOURCE
HEAT PUMP
Rebate
Application

















## COOL SMART CENTRAL AC/HP PROGRAM

COOL SMART is a residential central air conditioning rebate program that promotes best installation practices through rebates to customers; training for HVAC technicians/contractors; and the sales and purchase of qualified high-efficiency air conditioning equipment.

#### **HOW THE COOL SMART PROGRAM WORKS**

Contact your HVAC professional to determine which HVAC equipment is right for your home. Review the COOL SMART Rebate Application together. When the work is completed, fill out and submit the attached rebate form.

#### **COOL SMART BENEFITS**

- ✓ Rebates up to \$500 for qualified central AC systems and air source heat pumps\*
- ✓ Lower your energy use

- ✓ Improved comfort
- ✔ Qualify for 0% Mass Save HEAT Loan\*\*

#### OTHER CONSIDERATIONS BEFORE INSTALLATION







#### **Duct Sealing**

Proper duct sealing makes a huge difference in system performance. A typical duct system can leak 30% of its airflow! Supply ducts waste cooled air when they leak into an unconditioned attic. Leaky return ducts can "pull" attic air (often 120°F or higher) into the system and reduce system performance. If your ducts are also used to deliver heat, those leaks could be costing you even more! Duct sealing can reduce heating and cooling costs by as much as 15%.

#### **Airflow**

If your duct system is undersized or poorly designed, you may not be able to cool your home with maximum efficiency. A COOL SMART trained contractor can provide solutions that will increase your comfort and lower your operating costs.

#### **Proper Sizing**

In order to cool your home most efficiently, and provide the highest level of comfort, your contractor should size the equipment using software that is ACCA Manual J Version 8 approved.

Oversized equipment will cost you more, use more energy, and provide a lower level of comfort. Proper sizing takes into account insulation, windows, shading, doors, ducts system sealing and insulation, and internal gains, among other specific details recorded by your contractor during a site survey.

<sup>\*</sup>Rebates are available for new or replacement installations completed between January 1 and December 31, 2015.

<sup>\*\*</sup>Must use a COOL SMART participating contractor listed on www.MassSave.com/coolsmartcontractors



#### 2015 MA COOL SMART® Residential Central AC/ Air Source Heat Pump Application

Offer valid on equipment purchased and installed between January 1, 2015—December 31, 2015 (subject to funding availability). All submissions must be postmarked by January 31, 2016





#### TO RECEIVE YOUR REBATE CHECK BY MAIL, FOLLOW THESE STEPS

- 1) Purchase and install a qualified product at a property with an active residential electric account with one of the participating utilities or energy efficiency service providers.
- 2) Obtain your contractor's invoice with equipment make, coil and condenser model numbers, size in tons, date and location of installation and total installation cost. (all items required)
- 3) Mail the following required documents to the address on the right:
  - a. This application, completed accurately and legibly.
  - **b.** Contractor's invoice showing required information and proof of purchase.
  - c. Copy of "ACCA approved version 8 Manual J" Load (Sizing) Calculation
  - d. Copy of the AHRI Certificate. Visit www.ahridirectory.org or contact your heating and air conditioning contractor to obtain a copy.
  - e. Copy of your most recent electric utility bill.

(!) IMPORTANT: Sign and photocopy your entire submission for your records.

You could be required to mail these photocopies.

## Send completed application with all corresponding documentation to:

COOL SMART (MA) Offer# H346568 PO Box 540064 El Paso, TX 88554-0064

Please allow 6-8 weeks for processing. To review the status of your application or to ask questions, call **1-877-333-8153**.

Save Time! Submit Online! www.smartenergy-zone.com/coolsmart for application and more information

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Rebate Amount	Qualify	ying Products	SEER1	EER	2	Rebate	Amount	Qı	alifying Products	SEER <sup>1</sup>	HSPF <sup>3</sup>
\$250	Central AC		≥ 16 ≥ 13		3	\$2	50	Air	Source Heat Pum	p ≥ 16	≥ 8.5
\$500 Central AC		<u>≥</u> 18	<u>≥</u> 13	3	\$5	00	Air	Source Heat Pum	p ≥ 18	<u>≥</u> 9.6	
NEW EQUIPMENT INSTALLED (to be completed by contractor)											
New Construction ☐ Replacement system ☐ Adding cooling to existing ductwork ☐ New or additional ductwork & AC ☐ Replaced failed equipment											
Central AC Air Source Heat Pump			n/dd/yyyy):	/yyy): AHRI Ref. #:		Quality Installation Verification To				Rebate Amount:	# of Units:
Central AC Air Source Heat Pump			ı/dd/yyyy):	AHRI Ref. #:	Qua			ation T	est Performed?	Rebate Amount:	# of Units:
Central AC Air Source Heat Pump			n/dd/yyyy):	AHRI Ref. #: Quality Installation  Yes No				ation Tending		Rebate Amount:	# of Units:
RESIDENTIAL CUSTOMER INFORMATION (check one) NSTAR Electric National Grid Western Massachusetts Electric Co Cape Light Compact Unitil											
Customer Name: Residential Electric Account Number (must match ins											ch install address):
Installation Address:					Installa	ition City:			State: MA Installation Zip Code:		Code:
Home Phone: Business Phone:						E-mail Address:					
Did you have a sponsored site visit? Yes No						Is Heat Loan Financing being used? Yes No					
What is your existing heating fuel?  Natural Gas Electric Oil Propane Wood/Other						Do you know about Cold Climate Heat Pumps? Yes No					
PAYEE INFORMATION (If payee information		_	Same as Aco		ric utility p	provider is Na	tional Grid,	additic	onal processing time	e will be needed for	r payee verification.)
Payee/Company Name:						Tax I.D. Number (if owner is incorporated and rebate is over \$600):					
Mailing Street Address:					City:		State:		Zip Code:		
Contact Person: E-mail Address:										Telephone:	
CONTRACTOR INF	ORMATIO	N (Contractor Qu	estions: Call 1	1-800-473-110	5 or e-m	nail info@m	coolsmar	t.com)			
Company Name:						Contact Person:					
Address:					City:				State:	State: Zip Code:	
Telephone: E-mail Address:									Is technician NATE Certified? (not required for rebate eligibility) Yes No		
I certify that all information above is correct to the best of my knowledge and that I adhere to all terms and conditions of this rebate.											
Date: (MM/DD/YYYY) X Customer Signature:											

Terms and conditions on back side.



#### 2015 MA COOL SMART Residential Central AC/Air Source Heat Pump Application

Terms and Conditions



#### **EQUIPMENT REQUIREMENTS**

**System Requirements:** All rebated central air conditioning (AC) units/systems or electric air source heat pumps must be qualified, listed with and certified by the Air Conditioning, Heating, and Refrigeration Institute (AHRI), and meet the program SEER, EER (where applicable) and HSPF requirements (see table on page 1). The AC condenser and the evaporator coil must be new and replaced together. The condenser and coil are separate components in a split AC or heat pump system, but for rebate purposes, are considered one unit. All units must have a TXV or EXV to qualify for rebate.

Sizing: Load calculation requires proper design temperatures for area, and unit installed must be within ½ ton of calculation. Load calculation is a code requirement in MA. Contractors must use ACCA Manual J v8.

Proof of Purchase: A copy of the customer's invoice itemizing the purchased equipment must accompany each rebate application form. The invoice must indicate the equipment type, size, make, model, name of purchaser, installation date and location, date of purchase and total installed cost.

Information Sources to Verify ENERGY STAR Equipment: SEER, EER (where applicable) and HSPF ratings (for heat pumps only) for condenser, evaporator and air handler (if applicable) must be provided. Both the Consortium for Energy Efficiency (ceehvacdirectory.org) and the AHRI directory (ahridirectory.org or call 703-600-0384) web sites list SEER and EER values. AHRI also provides AHRI numbers. Manufacturer's spec sheets may be accepted ONLY if equipment is not yet AHRI rated and ONLY if AHRI listing is pending.

Owner's Certification: Owner certifies that he/she has purchased and installed the equipment listed on this application at the defined location. Owner agrees that all information is true and that he/she has conformed to all offer and equipment requirements listed. Owner has verified that the units(s) listed on this application have been installed or serviced correctly. There are no unusual noises or vibrations and all controls have been calibrated. Owner or owner's representative has been instructed on how to operate and maintain this equipment and has received all necessary operation and maintenance manuals provided by the manufacturer with the new unit(s).

#### **GENERAL REQUIREMENTS**

**Time Limit:** Qualifying units for equipment rebate must be purchased and installed between January 1, 2015 and December 31, 2015. Applications must be postmarked by January 31, 2016. For new construction only, extension of 2015 offers up to the end of 2016 must be requested and approved in 2015. Program is subject to change without prior notice, including rebates and incentive levels.

<sup>1</sup>SEER—Seasonal Energy Efficiency Ratio. <sup>2</sup>EER—Energy Efficiency Ratio is a measure of instantaneous cooling efficiency. <sup>3</sup>HSPF—Heating Seasonal Performance Factor. AHRI SEER and EER rating of outdoor condenser and indoor coil working together. Rounding up of SEER/EER ratings is not acceptable.

**Geographic Requirements:** Offers valid only for residential electric customers in MA where COOL SMART is offered by Cape Light Compact, National Grid, NSTAR Electric, Unitil and Western Massachusetts Electric Co.

**Application Form:** This application must be filled out completely, truthfully, and accurately. The customer or contractor must date and submit the completed application along with all required documentation for specific rebates and/or incentives. By submitting the rebate application, the customer and contractor agree to abide by these Terms and Conditions.

Payments: From the time the application is processed and approved, please allow 6-8 weeks for payment. Payment processing will take longer if information or documentation are missing from the application.

**Voluntary Quality Installation Verification Rebate:** Qualifying equipment must be installed and properly tested by a COOL SMART trained participating contractor listed on www.MassSave.com/coolsmartcontractors. The additional rebate applies to each system tested and will be mailed separately from the equipment rebate. Contractor must verify proper refrigerant charge and operating capacity of the unit. Test conditions must be 60°F+ Outdoor (not raining), 65+F Indoor Dry Bulb / 55F+ Indoor Wet Bulb Temperatures and cannot be performed after October 15th, 2014.

**Approval and Verification:** Sponsors reserve the right to verify and to have reasonable access to the residence to inspect the HVAC system installed prior to issuing rebates; this right to access extends up to one year after date of application, even if rebates have been paid.

Tax Liability: Sponsors will not be responsible for any tax liability that may be imposed on the customer or contractor as a result of the payment of rebates.

Endorsement: Sponsors do not endorse any particular manufacturer, product, system design, or technology in promoting these offers.

Warranties: SPONSORS DO NOT WARRANT THE PERFORMANCE OF INSTALLED OR SERVICED EQUIPMENT, EXPRESSLY OR IMPLICITLY. Program sponsors make no warranties or representations of any kind, whether statutory, expressed, or implied, including, without limitations, warranties or merchantability or fitness for a particular purpose regarding the HVAC equipment or services provided by a manufacturer or vendor. Contact your contractor for details regarding equipment performance and warranties.

Limitation of Liability: Sponsors and their rebate administrator's liability is limited to paying the rebate and incentive specified. Sponsors and their rebate administrator are not liable for any consequential or incidental damages or for any damages in tort connected with or resulting from participation in these offers.

**Contractor Certification:** Contractor certifies that installation and services performed have been in accordance with all applicable municipal, state and federal codes, standards and regulations, as well as program requirements pertaining to the installed system.

#### Ask your Contractor for a Quality Installation Verification Test.

Have your ducted air source Heat Pump or Central AC equipment installed and properly tested by a COOL SMART trained participating contractor and receive a separate \$150 check.















**Energy Benefits:** Customer agrees that the Energy Efficiency Program Provider (EEPP) has the unilateral right to apply for any ISO-NE capacity payments or environmental credits resulting from this energy efficiency project, and agrees not to file for such payments or credits either directly or indirectly. Manufacturer and/or retailer agree to provide the EEPP with such further documentation as the EEPP may request to confirm the EEPP's ownership of such benefits.

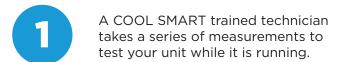
#### MASS SAVE® HEAT LOAN PROGRAM

The Mass Save HEAT Loan program offers 0% loans to help you make qualified energy efficient home improvements. Learn more about the Mass Save HEAT Loan Program, visit MassSave.com/HEATLoan.

Central AC/Ducted Heat Pumps **must be** installed to COOL SMART QIV Standards, by a COOL SMART participating contractor to qualify for HEAT Loan financing.\*\*

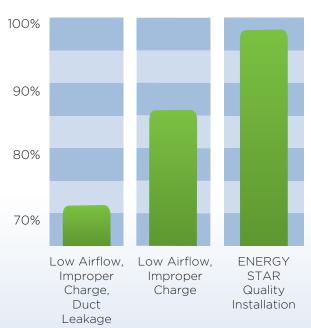
#### ASK ABOUT QUALITY INSTALLATION VERIFICATION (QIV)

COOL SMART Contractors provide the most comprehensive level of cooling system optimization. After your program qualified ducted system passes the QIV Test, you are eligible to receive an extra incentive of \$150. (Ask your COOL SMART contractor for details.)



- The results are instantly analyzed.
- Needed adjustments are made.
  You are assured that your system was properly tested and adjusted at the time of service.

#### % of Heating & Cooling Delivered\*\*\*



- \*\* Must use a COOL SMART participating contractor listed on www.MassSave.com/coolsmartcontractors. Does not guarantee financing.
- \*\*\* Your results may vary

### For more information about the COOL SMART Program

Visit MassSave.com/coolsmart or email info@coolsmart.com for program details.

This program is available to Massachusetts residential electric customers of Cape Light Compact, NSTAR, National Grid, WMECO, and Unitil.



#### FAQs about your Central Air Conditioning installation

#### Q: How do I qualify for 0% financing through the MA HEAT Loan Program?

A: The first step to qualify is to have a no-cost Mass Save sponsored site visit. To arrange for this please call 1-866-527-7283 or visit MassSave.com/residential.

#### Q: What is the value of the QIV test to homeowners?

A: QIV testing ensures that your AC or heat pump system is properly charged and has sufficient airflow. A **COOL SMART**Participating Contractor will provide this service, which is not always performed by other HVAC technicians. The QIV test also helps ensure the ducted air conditioner or heat pump operates most efficiently.

#### Q: My system is new - how can refrigerant charge be a problem?

A: Incorrect refrigerant charge is a common problem with residential air conditioning systems. Even newly installed air conditioning systems are often incorrectly charged.

In a recent New England study where AC systems were tested for refrigerant level, 31% were under-charged, while 28% were over-charged. This means only 41% – less than half – of all the units tested were properly charged. These results are consistent with other industry research in studies throughout the U.S.

#### Q: If we are getting cool air, how bad can refrigerant charge problems be?

A: Incorrect charge significantly reduces the cooling capacity and energy efficiency of your unit and can also damage your system. If a unit is significantly undercharged, the compressor can overheat, causing it to burn up internally. Overcharging can flood the compressor with liquid refrigerant, causing the piston to catastrophically fail. In both cases, premature compressor failure is the likely result.

#### Q: If air is flowing out of the ducts, what could the airflow problem be?

A: Almost all air conditioners are designed to operate with between 350 and 400 cubic feet of air per minute flowing across the indoor coil of the unit for every ton (12,000 BTUH) of cooling capacity.

Greater Airflow: Difficulty removing humidity, leaving your home cool but humid and uncomfortable.

**Lower Airflow:** System will operate much longer to cool your home, and possibly cause mechanical problems. This has the same effect as making your system smaller (less tons)

QIV testing will verify that your system is operating at optimal capacity.

#### Q: What temperature should I set my new system unit to?

A: In general, based on International and Local Codes, this temperature is 70°F in heating (or colder), and 75°F in cooling (or warmer).

#### Q: Should I weatherize my home before installing/replacing an AC or heat-pump?

A: Yes. It is a best practice to investigate energy saving insulation and air sealing opportunities before replacing your heating and/or cooling systems, so that the new equipment can be sized accordingly. If you plan to insulate and/or air seal your home, be sure to inform your HVAC contractor. It is far more cost effective to weatherize your home and install smaller system(s).