



DATE: 2009  
TO: Potential New Cool Homes Participating Contractors  
FROM: Maria Anzalone, LIPA Cool Homes Program Manager  
RE: 2009 Cool Homes (Residential HVAC) Program

---

I'd like to invite you to join the Cool Homes Program as a Participating Contractor. In order to do that, you must:

- 1) Review, sign and return the 2009 Cool Homes Contractor Participation Agreement (CPA), with all required documentation, to:

Maria Anzalone  
LIPA  
25 Hub Drive  
Melville, NY 11747

- 2) Obtain an ACCA approved Manual J (version 8) software package
- 3) Schedule (and take) the required CheckMe! Airflow and system charging training by calling 1-866-383-6001. Training will not be scheduled unless the CPA and all required documentation have been received.

Please read the additional information below and the enclosed Contractor Participation Agreement regarding the three steps listed. If you have any questions after reviewing the detailed information, please call me at 631-755-5305.

Sincerely,

*Maria Anzalone*

Maria Anzalone  
LIPA Cool Homes Program Manager

### **Contractor Participation Agreement:**

To be eligible to participate in the 2009 Cool Homes program, contractors must sign the 2009 Contractor Participation Agreement. Approved Participating Contractors will be eligible for the Cool Homes tool and installation related incentives, and will be listed on LIPA's Cool Homes website. Please review, sign and return the participation agreement in order to be included in this year's program.

**Contractors must sign and return the Contractor Participation Agreement, attend CheckMe! training and obtain the required ACCA approved Manual J Version 8 software before submitting Cool Homes' rebate applications.**

### **ACCA Manual J Version 8:**

Over sizing of residential cooling equipment causes poor equipment performance and excessive energy consumption, particularly during times of peak electricity demand.

Since 2000, Cool Homes has required that all participating installations include equipment sized according to the Air Conditioning Contractors of America (ACCA) Manual J. Starting in 2006 all load calculations were required to be based on ACCA Manual J version 8.0, and must be performed using ACCA approved software. As of the date of this letter, the ACCA approved Manual J (cooling load calculation) software packages are:

- Elite Software RHVAC ([www.elitesoft.com](http://www.elitesoft.com))
- Wrightsoft Right-J8 ([www.wrightsoft.com](http://www.wrightsoft.com))
- Nitek HVAC Wizard ([www.niteksoftware.com/hvacwizardbrochure.pdf](http://www.niteksoftware.com/hvacwizardbrochure.pdf))
- Adtek AccuLoads ([www.adteksoft.com/software.htm](http://www.adteksoft.com/software.htm))

For the latest information on ACCA approved software, please visit <http://www.acca.org/software/>

### **CheckMe! Airflow and System Charging Verification:**

Improper refrigerant charge and system airflow can significantly reduce both the performance and energy efficiency of central cooling equipment. Starting in 2006, Cool Homes requires independent verification that newly installed central air conditioners and heat pumps have been charged with the correct amount of refrigerant and have appropriate airflow across the indoor coil.

LIPA has selected CheckMe!<sup>®</sup>, provided by Conservation Services Group, as the Cool Homes independent quality assurance service. CheckMe! provides immediate third-party quality assurance on every installation. CheckMe also offers free technical assistance to Cool Homes participating technicians, and sends your customer a certificate documenting your good work.

#### **The Four Steps of CheckMe!**

1. Utilizing the *CheckMe! Air Conditioner Data Entry Form*, the Cool Homes participating technician phones data from charge and air flow testing at the customer installation site to the CheckMe! Hotline Operator.
2. Real time data analysis generates results of refrigerant charge and airflow test data *in less than five minutes*.
3. If the results show that the equipment is not operating to manufacturer specifications, CheckMe! technical support suggests solutions, and helps the technician to retest the unit.
4. Customer receives a certificate by mail declaring that the unit has been correctly installed and an explanation of the testing process.

We are so enthusiastic about the benefits of CheckMe! that the **Cool Homes Program will pay the CheckMe! fee per installation.**

\* Starting in 2006, use of the CheckMe! Quality Assurance System became mandatory on every installation submitted for Cool Homes incentives.

\* All technicians must complete the one day CheckMe! training before they can use CheckMe!, or submit Cool Homes Rebate Applications.

You will be contacted by the Conservation Services Group once all proper documentation is received to schedule your *one day training class*.

**Miscellaneous:**

Current contractor and customer installation incentives are listed on the 2009 Cool Homes - Rebate Application enclosed.

As always, please call LIPA's Energy Infoline at 1-800-692-2626 for further information throughout the year. You can also visit <http://www.lipower.org/Efficiency> for additional Cool Homes Program information.

# LIPA's 2009 Cool Homes Program

## Contractor Participation Agreement:

The goal of the Long Island Power Authority's (LIPA) Cool Homes program is to improve the energy efficiency, performance, and reliability of central cooling equipment installed in homes in LIPA's service territory. LIPA works with independent residential HVAC contractors to implement Cool Homes. In addition, Conservation Services Group (CSG) has been contracted to provide quality control and other technical services. Cool Homes promotes the use of industry standard diagnostic tools and equipment sizing and installation techniques to maximize energy efficiency and optimize cooling performance. Cool Homes works to support a market for energy efficient cooling equipment, high quality installation services and an infrastructure of trained contractors to deliver such services.

This Agreement sets out the terms and conditions under which independent, residential HVAC contractors may participate in Cool Homes, thereby becoming Participating Contractors. Under this Agreement, Participating Contractors contract with property owners to provide residential HVAC services that comply with the Cool Homes requirements and standards. Cool Homes, in return, agrees to provide financial incentives, technical and marketing support for Participating Contractors.

This Agreement is completely voluntary and can be terminated at any time for any reason by either LIPA or the Participating Contractor.

By executing this Agreement, the Participating Contractor agrees to play an active role in LIPA Cool Homes by providing high-quality services to Cool Homes customers. As a condition of participating in Cool Homes and accessing program benefits, the Participating Contractor must meet the following requirements:

**1. The Participating Contractor must demonstrate the capability to conduct business successfully by providing Cool Homes with:**

- i. A copy of valid EPA refrigerant handling certificate for each technician to be certified
- ii. Documentation of valid Nassau and/or Suffolk County home improvement contractor license,
- iii. Documentation showing a current, general liability insurance policy with a minimum coverage \$1 million
- iv. At least two of the following reference requirements:
  - a) a satisfactory banking reference
  - b) a minimum of three satisfactory professional/trade references, such as suppliers of materials, tools, credit, etc
  - c) a minimum of three satisfactory customer references

Contractors unable to meet these requirements may submit, in writing, a Request for Waiver to LIPA. The Request for Waiver must provide a detailed, reasonable, and credible explanation of the reasons why the Contractor is unable to comply with the terms of the requirement. LIPA reserves the right to reject any and all Request for Waivers.

**2. The Participating Contractor shall demonstrate technical excellence by:**

- Submitting as part of each application for Cool Homes incentives a cooling load calculation performed using ACCA approved, Manual J v.8 compliant software, and follow relevant LIPA guidelines for equipment selection (see application for details)
- Following the Cool Homes refrigerant charge and system airflow test procedures defined below:
  - ◆ Using CheckMe!<sup>®</sup> during each Cool Homes participating installation to ensure correct refrigerant charge and system airflow
  - ◆ Respond to the results of random field inspections of Cool Homes participating installations (by LIPA and/or CSG)
  - ◆ Upon request from LIPA or CSG, and at no additional cost to the customer, make reasonable repairs or corrections so that work will meet Cool Homes standards

**3. The Participating Contractor shall maintain necessary equipment as indicated on the attached Required Equipment List.** In addition to the listed equipment, contractors need a cell phone for calling in CheckMe! information at the installation site.

- 4. The Participating Contractor shall observe the following in order to retain a good relationship with the Cool Homes program:**
- The Participating Contractor shall submit, and have approved, a minimum of twenty (20) completed program applications between January 1 and December 31, 2009. Contractors who submit fewer than 20 completed program applications may not be eligible to participate in Cool Homes, and may be removed from any lists, Web sites or promotional materials upon LIPA's discretion.
  - The Participating Contractor must submit rebate applications, and all required documentation, in a timely manor and in accordance with the current program requirements, otherwise the rebate incentives will be denied.
  - The Participating Contractor shall accurately represent the relationship between the Contractor and the State of New York, LIPA, and CSG as follows - The Contractor is an independent contractor, and a participant in LIPA's Cool Homes Program. Participating Contractors shall not represent themselves as working for, approved by, or certified by, the State of New York, LIPA or CSG
  - The Participating Contractor shall maintain all relevant licenses required by federal, state, county or municipal governments or any other agencies with jurisdiction over work performed under Cool Homes
  - The Participating Contractor shall provide all program customers with information materials as required by Cool Homes
  - The Participating Contractor shall provide the customer with a written warranty of labor for a minimum of one (1) year from the date the service is performed and, for materials, and the equipment installed shall carry the full manufacturer's warranty. Occasionally, during Quality Control inspections, CSG professionals may connect gauges or other testing devices to installed equipment. In the event that equipment malfunctions occur during CSG's testing, CSG will within reason, make repairs.
  - If a Participating Contractor becomes involved in a dispute with a customer over business practices, the Participating Contractor shall work with LIPA and CSG to resolve the dispute amicably. In any event, the Participating Contractor shall hold LIPA and CSG harmless from any suit arising from work performed under Cool Homes;
  - The Participating Contractor must disclose whether any individual(s) including owners, principles, shareholders, associates and employees affiliated with the Participating Contractor have previously participated in, or are currently participating in, any of LIPA's programs including LIPA Cool Homes. If so, list any and all individuals on the Signature Page of this document. This is an ongoing requirement. As such, the participating Contractor shall notify LIPA immediately of any changes or updates to this information.
- 5. The Participating Contractor shall recognize that participation in Cool Homes is a privilege:**
- LIPA will not initiate processing of an application for Cool Homes incentives until a fully executed contract (Contractor Participation Agreement) between the Participating Contractor and Cool Homes is received. It is expressly understood that only quality installations made after the date of execution of the Contractor Participation Agreement will be eligible for submittal to Cool Homes.
  - The Participating Contractor acknowledges that failure to follow Program requirements and procedures, including processing of required documents, will result in a loss of applicable incentives, and possible suspension or termination of the Contractor's participation in Cool Homes.
  - The Participating Contractor acknowledges that participation in Cool Homes is a privilege, and that LIPA or CSG may suspend or terminate Contractor's participation in Cool Homes for any reason, including failure to maintain program standards. In all cases involving a Contractor's participation status, or denial of Cool Homes incentives, LIPA's written decision is final;
  - LIPA reserves the right to make changes to the Cool Homes program requirements and incentives upon notice to the Participating Contractors. Such notification shall be by email and posting on [www.lipower.org](http://www.lipower.org).

## 2009 Cool Homes Program Installation Incentives

For a current listing of installation rebate levels and eligibility requirements, see the latest version of the 2009 LIPA Cool Homes Program’s “Customer / Contractor Rebate Application Form”

## 2009 Cool Homes Program Tool Incentives

<b>Contractor Tool Incentives</b>		
<b>Eligible Tools</b>	<b>Proof of Purchase Requirements</b>	<b>Contractor Incentive</b>
See attached Required Equipment List for eligible tools.	Copy of original receipt for purchase of eligible tools in support of the program.	LIPA will reimburse 75% of the cost of <u>eligible</u> tools purchased in support of the program. (Program cap of \$10,000 per contractor applies)
ACCA approved Manual J v. 8 Software	Copy of original receipt, or vendor notification	LIPA will reimburse 50% of the cost of eligible software (Program limit of one purchase per contractor applies)

### Eligibility Requirements for Tool Incentives

- Only approved Cool Homes Participating Contractors will be eligible for the Contractor Tools Incentives
  - To be eligible for the Contractor Tool Incentives, 20 CheckMe! runs must be completed first
  - ACCA approved Manual J (Ver 8) Software may be purchased directly from vendors
    - Elite Software RHVAC ([www.elitesoft.com](http://www.elitesoft.com))
    - Wrightsoft Right-J8 ([www.wrightsoft.com](http://www.wrightsoft.com))
    - Nitek HVAC Wizard ([www.apluswizard.com/lw\\_web.pdf](http://www.apluswizard.com/lw_web.pdf))
- (or visit <http://www.acca.org/software/> for current list of ACCA approved software)

## LIPA Cool Homes Program CheckMe! Required Equipment List

### CheckMe! Equipment Eligible for LIPA Reimbursement:

- **1 Fluke digital thermometer with two type K thermocouples.**  
Fluke Model# 52  
Graingers part # 4YV90
- **1 Fluke carrying case.**  
Fluke Model #C90 Graingers part #1A742
- **2 -Fluke pipe clamp probes.**  
Fluke Model #80PK-8. Graingers part #1W503
- **2 -Fluke type K thermocouples**  
Fluke Model #80PK-1. Graingers part #1T322
- **2- 4 Valve Manifold Gauges w/ Enviro-Safe Hose Set (One for R-22 One for R-410A)** Manufacture: J/B Industries  
Mfg. # M4-5IP-410A  
Johnstone # H26-378
- **1 DG 700 Pressure and Flow Gauge**
- **1 TrueFlow Air Handler Flow Meter kit**
- **Electronic Charging Scale TIF**  
Manufacture: TIF  
Mfg# TIF9010A,  
Johnstone # H25-270
- **Digital Vacuum Gauge**  
Manufacture: Supco  
Mfg. # VG-64  
Johnstone # H26-062

\* True Flow Plate and DG700 manometer must be provided, without substitution. All other equipment brands are listed for example of quality and grade required; other brands of equal quality are acceptable.

\* If contractor is not currently working on R410A systems, the R410A specific tools may be omitted.

## LIPA Cool Homes Program CheckMe! Required Equipment List

**Items contractor should already have – NOT eligible for LIPA reimbursement:**

- **Refrigerant Recovery Unit / weighs 35 lbs.**  
Manufacture: Promax  
Johnstone # H93-074
- **Recovery Cylinders with R-22 and R-410A stickers**  
Manufacture: Amtrol  
Mfg. # 941-1169  
Johnstone # H93-084
- **Vacuum Pump**  
Manufacture: Robinair  
Mfg. # 15400  
ohnstone # H93-073
- **R Nitrogen Tank / 20 cu. ft.**  
Johnstone # H93-091
- **Nitrogen Regulator (Delivery Pressure 500 PSIG / Gauge Delivery 600 PSIG)**  
Manufacture: Prest-O-Lite  
Mfg. # 21365  
Johnstone # H25-204
- **2- Core Removal Tool**  
Johnstone # H24-611
- **Refrigerant Leak Detector**  
Model: TIFRX-1A  
Brand: TIF  
Johnstone # H85-25
- **Standard refrigeration/ Air Conditioning Hand tools**
- **Vacuum Pump Oil**  
Manufacture: J/B Industries  
Mfg. # DVO-12-BX Quart  
Johnstone # H85-227
- **25 Lbs R-410A**  
Johnstone # B92-910
- **30 Lbs. R-22**  
Johnstone # B92-085

# 2009 Cool Homes Program

## Refrigerant Charge and Air Flow Testing Procedures

### **1. When the outdoor temperature is above 55 degrees F and indoor temperature is above 65 degrees F:**

#### **Determining Refrigerant Charge**

The contractor must use the CheckMe! superheat test (for fixed orifice/capillary systems) or the subcooling test (for TXV equipped systems) to determine proper refrigerant charge. For certain Lenox® brand equipment the “Approach” method may be utilized.

#### **Determining Air Flow Across the Indoor Coil**

The contractor may:

1. Submit a flow plate reading, or
2. Request that CheckMe! use temperature split data collected during either the superheat, subcooling or approach method to determine whether adequate airflow has been achieved.

#### **Obtaining incentives**

To obtain the customer equipment and the contractor sizing and installation incentives, the contractor must call in the relevant information to CheckMe! for refrigerant charge and for air flow from the installation site at the time that the system is commissioned. The contractor must enter the job code provided by CheckMe! on the LIPA Cool Homes application form for the installation.

To initiate LIPA payment of the customer equipment incentive, the contractor must also fill out and submit the LIPA Cool Homes application along with documentation showing a cooling load calculation that is in compliance with ACCA manual J v.8. Units must be sized accordingly.

LIPA will pay the sizing and installation incentive to the contractor after a complete LIPA Cool Homes application (as described above) has been received, and CheckMe! has verified correct refrigerant charge and air flow.

### **2. When outdoor temperature is below 55 degrees F:**

#### **Determining Refrigerant Charge**

The contractor must weigh in the system charge using a digital electronic charging scale.

The contractor must call in the relevant information to CheckMe! when the system is charged, with the job code from the LIPA Cool Homes application form.

#### **Determining Air Flow Across the Indoor Coil**

The contractor must:

1. Submit a flow plate reading.

#### **Obtaining incentives**

If the refrigerant charge is weighed in, the contractor must call in the relevant information to CheckMe! when the system is charged. The contractor should call CheckMe! again with the airflow information when conditions allow the relevant air flow test to be performed. The contractor must enter the job code provided by CheckMe! for that installation in the appropriate space on the LIPA Cool Homes application form.

To initiate LIPA payment of the customer equipment incentive, the contractor must also fill out and submit the LIPA Cool Homes application along with documentation showing a cooling load calculation that is in compliance with ACCA Manual J version 8. Units must be sized accordingly

LIPA will pay the customer incentive after a completed application has been received, and after an inspection has been performed, if required. Customer incentives are only available on installations performed by contractors who have signed the LIPA Cool Homes Contractor Participation Agreement.

(These procedures were freely adapted from the Specification of Energy-Efficient Installation and Maintenance Practices for Residential HVAC Systems, Consortium for Energy Efficiency, 2000.)

# 2009 Cool Homes<sup>®</sup> Program Contractor Participation Agreement:

(Funded by the Long Island Power Authority)

## Signature Form (1 of 2)

I have read, understand, and agree to comply with, all partnership commitments described in LIPA's 2009 Cool Homes Contractor Participation Agreement, including all supporting policies described or referenced therein. The provisions of this Agreement are effective from January 1, 2009 through December 31, 2009. LIPA reserves the right to modify, at any time during the term of this agreement, the provisions of this Agreement.

**I certify, under the penalties of law, that the statements made in this Agreement have been examined by me and are true and complete. I understand that by signing this Agreement, I consent to any other inquiry to verify or confirm the information I have given.**

**Customer Contact Information (for LIPA Web Site Listing):**

Company Name: \_\_\_\_\_

Company Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Customer Contact Name: \_\_\_\_\_

Phone: \_\_\_\_\_ Fax: \_\_\_\_\_

E-mail: \_\_\_\_\_ Web Site: \_\_\_\_\_

Counties Served: \_\_\_\_\_

Tax ID # (not posted on Web site): \_\_\_\_\_

Name of Authorized Company Representative: \_\_\_\_\_

Title of Authorized Company Representative: \_\_\_\_\_

Signature / Date: \_\_\_\_\_ / \_\_\_\_\_

**Please complete, sign and return both signature pages. An original, including both authorized signatures, will be returned to you for your records.**

**Maria Anzalone  
LIPA Cool Homes Program Manager  
25 Hub Drive  
Melville, NY 11747  
Phone: 631-755-5305  
Fax: 631-755-5381**

**LIPA Authorized Signature / Date: \_\_\_\_\_ / \_\_\_\_\_**

# 2009 Cool Homes<sup>®</sup> Program Contractor Participation Agreement:

(Funded by the Long Island Power Authority)

## Signature Form (2 of 2)

I have read, understand, and agree to comply with, all partnership commitments described in LIPA's 2009 Cool Homes Contractor Participation Agreement, including all supporting policies described or referenced therein. The provisions of this Agreement are effective from January 1, 2009 through December 31, 2009. LIPA reserves the right to modify, at any time during the term of this agreement, the provisions of this Agreement.

**I certify, under the penalties of law, that the statements made in this Agreement have been examined by me and are true and complete. I understand that by signing this Agreement, I consent to any other inquiry to verify or confirm the information I have given.**

**Customer Contact Information (for LIPA Web Site Listing):**

Company Name: \_\_\_\_\_

Company Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Customer Contact Name: \_\_\_\_\_

Phone: \_\_\_\_\_ Fax: \_\_\_\_\_

E-mail: \_\_\_\_\_ Web Site: \_\_\_\_\_

Counties Served: \_\_\_\_\_

Tax ID # (not posted on Web site): \_\_\_\_\_

Name of Authorized Company Representative: \_\_\_\_\_

Title of Authorized Company Representative: \_\_\_\_\_

Signature / Date: \_\_\_\_\_ / \_\_\_\_\_

**Please complete, sign and return both signature pages. An original, including both authorized signatures, will be returned to you for your records.**

**Maria Anzalone  
LIPA Cool Homes Program Manager  
25 Hub Drive  
Melville, NY 11747  
Phone: 631-755-5305  
Fax: 631-755-5381**

**LIPA Authorized Signature / Date: \_\_\_\_\_ / \_\_\_\_\_**

# ARI Reference Numbers can be found on the following Web sites:



[www.ceedirectory.org](http://www.ceedirectory.org)



## CEE Verified Directories



[Air Conditioners and Air Conditioner Coils Single Package and Split Systems \(Std. 210/240-2005\)](#)

[Heat Pumps and Heat Pump Coils Single Package and Split Systems \(Std. 210/240-2005\)](#)

[Variable-Speed Mini-Split and Multi-Split Air Conditioners](#)

[Variable-Speed Mini-Split and Multi-Split Heat Pumps](#)

Quality HVAC Installations Save Energy [Click Here for the CEE OI Specification](#)



Air-Conditioning, Heating,  
and Refrigeration Institute

[www.ahridirectory.org](http://www.ahridirectory.org)

## Directory of Certified Product Performance

The AHRI Certification Programs are the trusted sources of performance for heating, ventilation, air-conditioning, and commercial refrigeration equipment.

### RESIDENTIAL

- > Air Conditioners and Air Conditioner Coils
- > Baseboard Radiation
- > Boilers
- > Direct Geo Exchange Heat Pumps
- > Direct Heaters

### COMMERCIAL

- > Air Cooled Chilling Packages
- > Air-to-Air Energy Recovery Ventilators
- > Automatic Commercial Ice-Cube Machines and Ice Storage Bins
- > Boilers
- > Central Station Air-Handling Units
- > Combo Systems
- > Comm. Refrigerated Display Merchandisers And Storage Cabinets
- > Finned Tube
- > Forced Circulation Air Cooling and Air Heating Coils

### TRUSTED MARKS OF PERFORMANCE ASSURANCE



Are you a Manufacturer? | [Sign In](#)

### Resources

- Find ENERGY STAR Qualified Air Conditioning and Heat Pump Systems
- Find Standards
- Learn more about Certification Programs
- Find NATE-certified HVACR contractors
- Help with this site