



DATE: February, 2012

TO: Cool Homes Participating Contractors

FROM: Maria Anzalone, LIPA Cool Homes Program Manager

RE: 2012 Cool Homes (Residential HVAC) Program

2012 Contractor Participation Agreement:

To be eligible to participate in the 2012 Cool Homes program, contractors must sign the 2012 Contractor Participation Agreement. As Participating Contractors, you are eligible for the Cool Homes tool and installation related incentives, and will continue to be listed on LIPA's Cool Homes website, <http://www.lipower.org/efficiency>.

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

You can fax the signed agreements to 631-820-3099 (Attn: Brian Loughlin) or scan and email to Brian.Loughlin@csgroup.com.

If you have any questions, please call Brian Loughlin at 631-590-5725 or myself at 631-755-5305.

Sincerely,

Maria Anzalone

Maria Anzalone
LIPA Cool Homes Program Manager

PLEASE ENSURE YOU ARE COMPLIANT WITH ALL REQUIREMENTS OF THE PROGRAM.

Quality Installation:

All Cool Homes contractors pledge to adhere to Central Air Conditioner and Heat Pump quality installation standards in order to protect the inherent efficiency and performance of the installed equipment. The Cool Homes QI standard is based on the ANSI / ACCA 5 QI 2007 HVAC Quality Installation Specification and addresses equipment selection, installation, and commissioning.

ACCA Manual J Version 8:

Improper 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 installations eligible for incentives include equipment sized according to ACCA Manual J version 8 procedures for sensible and latent loads. Although any Manual J version 8 program will be accepted, LIPA recommends the use of ACCA approved software. For the latest information on ACCA approved software, please visit <http://www.acca.org/software/>

Equipment Selection:

The capacity of the equipment shall be within 15% tolerance of the Manual J load calculations and the system components will be verified as matched by ARI certification

Airflow and System Charging

Improper refrigerant charge and system airflow will significantly reduce both the performance and energy efficiency of central cooling equipment. The Cool Homes contractor will therefore be required to measure and verify that system airflow and refrigerant charge is within acceptable ranges and establish the system installation meets ACCA 5 Quality Installation Standards. The contractor will note the airflow and charge specifications, measurements, and testing techniques on the LIPA Airflow & Charge Form.

LIPA will maintain a rigorous schedule of verification or quality assurance visits to verify the quality installation.

IMPORTANT INFORMATION:

Current contractor and customer installation incentives are listed on the 2012 Cool Homes Rebate Application as are the instructions and requirements for submission.

Please note: The customer and contractor are only eligible for the incentive if the following items (with no exception) are submitted for all Central Air Conditioner and Heat Pump installations.

1. Rebate Application Form
2. Completed LIPA Airflow and Refrigerant Charge form
(*not required for Ductless Mini Split Systems*)
3. ACCA approved Manual J Version 8 software cooling load calculation printout

4. Invoice / Contract must contain total cost, equipment make, model & serial number as well as customer name, installation address, and installation date
5. Early Retirement Reservation number (if applicable)
6. Rebate Assignment Form (if applicable)
7. Equipment certificate printout from the ARI On-Line Directory
please indicate ARI Reference # on application
- 8. Submission of documentation within the specified timeframe**

Failure to submit all required documentation will result in rebate payment delays or denial of the application.

As always, you can 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 2012 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 commit to performing quality installations including:

- Properly sized systems as determined by cooling load calculations performed using ACCA approved, Manual J v.8 compliant software, and relevant LIPA guidelines for equipment selection (see application for details). Submitting a Manual J report as part of each application for Cool Homes incentives is required.
- Follow industry standards system airflow and refrigerant charge test procedures and report results on the LIPA Airflow & Charge Form.

- 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.**
- 4. The Participating Contractor shall observe the following in order to maintain status as a Participating Contractor with the Cool Homes program:**
- The Participating Contractor shall submit, and have approved, a minimum of twenty (20) completed program applications in every 12 month cycle of participation in the program. This is a requirement in order to be eligible for program benefits (Tool and Software reimbursements) as well as your company listing on the Contractor Participation website.
 - Contractors who submit fewer than 20 completed and approved program applications will still be eligible to extend the rebates to their customers, however they will not be eligible to receive the full benefits of the program such as being listed on the participation webpage, or promotional materials upon LIPA's discretion. Inadequate performance will also be reviewed for potential removal from the program including the ability to communicate to customers that the company is a LIPA Participating Contractor
 - The Participating Contractor must submit rebate applications and all required documentation within 90 days from system installation as stipulated on the 2012 Customer/Contractor Rebate Application Form. If you are unable to satisfy this requirement, no contractor incentive will be paid on that application. All applications for systems installed in 2012 MUST be received by January 5th, 2013.
 - If the Participating Contractor is unable to perform the airflow and charge testing, due to outdoor temperature restrictions, the application must be submitted without the Airflow and Charge form. The box on page one of the 2012 Applications must be checked to indicate the test will be conducted in warmer weather and submitted by June 30, 2012.
 - The Participating Contractor must complete the 2012 Rebate Reservation Form (See Attachment A) upon request, periodically throughout the year, and submit to LIPA Rebate Processing.
 - The Participating Contractor must provide the customer with the actual date the rebate application and supporting documentation was submitted to LIPA for processing.
 - 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.

2012 Cool Homes Program Installation Incentives

For a current listing of installation rebate levels and eligibility requirements, see the latest version of the 2012 LIPA Cool Homes Program’s “Customer / Contractor Rebate Application Form”

2012 Cool Homes Program Tool Incentives

Contractor Tool Incentives		
Eligible Tools	Proof of Purchase Requirements	Contractor Incentive
See attached Required Equipment List for eligible tools.	Copy of original receipt for purchase of eligible tools in support of the program.	After 20 approved applications , 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	After 20 approved applications , 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 and to be listed on the Participation Website a total of 20 Cool Homes approved applications must be received and approved first.**
- ◆ ACCA approved Manual J (Ver 8) Software may be purchased directly from vendors
 - Elite Software RHVAC (www.elitesoft.com)
 - Wrightsoft Right-J8 (www.wrightsoft.com)
 - Nitek HVAC Wizard (www.apluswizard.com/lw_web.pdf)
 - Adtek AccuLoads (www.adteksoft.com/software.htm)

(or visit <http://www.acca.org/software/> for current list of ACCA approved software)
www.adteksoft.com/software.htm

LIPA Cool Homes Program Eligible Equipment List

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. # M45-410A : (3) 60” hoses included
CLB-60 : (1) Black Hose
Can order through Grainger or Johnstone Supply with special request for price.
- **1 DG 700 Pressure and Flow Gauge**
Energy Conservatory (www.energyconservatory.org/how2order.htm) # DIG7CH
- **1 TrueFlow Air Handler Flow Meter kit**
Energy Conservatory (www.energyconservatory.org/how2order.htm) # FLOWTRUE
- **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 Contractors Equipment List

Items contractor are expected to 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

2012 Cool Homes Program

Refrigerant Charge and Air Flow Testing Procedures

Determining Refrigerant Charge

The contractor must use the 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. Proper charge will be determined as $\pm 5^{\circ}$ F of the OEM-recommended optimal charge for the superheat method or $\pm 3^{\circ}$ F for the subcooling method. Superheat or subcooling tests must be done within the outdoor ambient temperature ranges as specified by the OEM, (typically 55° F or 60° F respectively).

Determining Air Flow Across the Indoor Coil

The contractor may use these methods:

1. True Flow Plate and DG700 manometer readings.
2. Measure total static and velocity pressures.
3. Pressure drop across coils as compared with values from the OEM CFM/pressure drop coil tables

Obtaining incentives

The contractor must enter all relevant information on the Airflow & Refrigerant Charge Document and include OEM specifications as required.

The contractor must also fill out and submit the LIPA Cool Homes application along with the results of ACCA Manual J v. 8 verifying that the installed system size is in compliance with the calculated load. LIPA will initiate incentive payment after a complete LIPA Cool Homes application has been received and verified. Some applications will be selected for field verification; incentive payment will be withheld until successful completion of the field verification.

When outdoor temperature is below required outdoor ambient temperature:

Determining Refrigerant Charge

The contractor must weigh in the system charge using a digital electronic charging scale according to OEM specifications.

Determining Air Flow Across the Indoor Coil

The contractor must use a True Flow Plate and DG700 manometer to secure readings.

Obtaining incentives

If the refrigerant charge must be weighed in, the contractor must complete the relevant charge section and True Flow Plate and DG700 manometer to readings on the Airflow & Refrigerant Charge Document and submit with complete LIPA Cool Homes application. The contractor should return to the installation when ambient conditions allow to conduct the more accurate charge and air flow test methods..

The LIPA Cool Homes application must include the results of ACCA Manual J v. 8 verifying that the installed system size is in compliance with the calculated load.

LIPA will initiate incentive payment after a complete LIPA Cool Homes application has been received and verified. Some applications will be selected for field verification; incentive payment will be withheld until successful completion of the field verification.

(These procedures were freely adapted from the ANSI / ACCA 5 QI-2007 HVAC Quality Installation Specification.)

2012 Cool Homes 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 2012 Cool Homes Contractor Participation Agreement, including all supporting policies described or referenced therein. The provisions of this Agreement are effective from January 1, 2012 through December 31, 2012. 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.

Brian Loughlin
Conservation Service Group
3075 Veterans Memorial Highway, Suite 181
Ronkonkoma, NY 11779
Phone: 631-590-5725
Fax: 631-820-3099

LIPA Authorized Signature / Date: _____ / _____

2012 Cool Homes 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 2012 Cool Homes Contractor Participation Agreement, including all supporting policies described or referenced therein. The provisions of this Agreement are effective from January 1, 2012 through December 31, 2012. 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.

Brian Loughlin
Conservation Service Group
3075 Veterans Memorial Highway, Suite 181
Ronkonkoma, NY 11779
Phone: 631-590-5725
Fax: 631-820-3099

LIPA Authorized Signature / Date: _____ / _____

