

# Participating Contractor Manual

March 2018



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## DOCUMENT REVISION HISTORY

### March 8, 2018

- The minimum leakage requirement for the 6% Duct Leakage Measure has been revised to 5%.
- 15-29% leakage reduction will no longer qualify for the Whole Building Air Sealing measure.
- A minimum of one base measure is now required to receive a rebate through the program.
- The program will no longer provide bonuses for installing a second or third base measure.
- Rebates will no longer be offered for Heat Pump replacements.
- Rebates will no longer be offered for High Performance Dual-Pane Windows installations.
- The program has changed rebates offered per measure to align with the SCE/SoCalGas program.
- The minimum required rebate amount for a project to be eligible will be \$1,200 unless a project achieves at least 10% energy.

### September 8, 2017

- The specific leakage area (SLA) and Whole Building Leakage Reduction calculations have been updated to match the statewide requirements. Please refer to the blower door test-in defaults on page 34 for details.
- Language added to clarify that projects requiring PACM abatement must submit abatement letters or certificates from a licensed remediation company that describes the work done, project site, and date performed. A certificate from a licensed lab that shows no asbestos found in samples taken can also be used to show that there is no PACM.
- Language added to clarify that CF3R reports for a sample group that is not specifically for the project's address, or with results that are above 10% duct leakage, will not qualify as supporting documentation for a duct sealing measure.

### August 15, 2017

- Dual submissions will no longer be allowed; only one project per home per year may be reserved. The \$3,000 incentive limit will be enforced per SCE/SCG customer account per year.
- Homes built in 2002 or later are not eligible to participate in the SoCalREN Home Upgrade program. (They may be submitted through the SCE/SoCalGas Energy Upgrade California Home Upgrade Program's Advanced Home Upgrade pathway.)
- Projects claiming a furnace measure (sole or part of larger installation) also require proof of permit closure.
- For the duct insulation measure, all accessible ducts must be insulated (50% minimum of all ducts). Note: All new ducting must be insulated 100%.
- Itemized measure costs will now be required on invoices detailing the cost per measure and work done for each measure intended to be incentivized. Total project costs should not include costs not required for the project (e.g. 80 AFUE furnace, solar PV systems, new heating or cooling system that is not replacing like-for-like existing system). Costs required for the project are allowed (permit fees, testing costs, engineering, etc.). You can add a project cost subtotal on the invoice that excludes any non-related costs.

**July 1, 2017**

- The Reservation deadline is extended from 60 to 90 days.
- Language added to clarify the measure-specific supporting documents required for all projects.
- Projects will be deemed Inactive if a response to a data/document request is not received within seven (7) days.
- Projects that become Inactive will now be immediately closed out within one (1) business day of becoming Inactive and will require resubmittal as a new project if the project is still viable.
- Declined or expired projects will need to be resubmitted to continue with the incentive application. Incentive funds will no longer be reserved for expired projects.
- Insurance requirements shall now be maintained by contractor per program agreements and contractor will provide copies upon request.
- Language added to clarify that homeowners may not receive incentives for the same measure twice within a five-year period. Exceptions may apply to houses with multiple HVAC systems with separate ducts and/or where the current efficiency standard is exceeded by the new system.
- Health and safety requirements must be met in order to receive incentive approval. Language added to clarify PACM, Knob-and-Tube surveys, and updated CO action levels to meet SoCalGas® requirements.
- QC mentoring will be tracked per BPI test-out individual performer instead of contractor company.
- Change orders received after the project was inspected will need to be inspected again. Exceptions apply on a case-by-case basis depending on the change order received and may incur a fee for re-inspection.
- Utility bills are now required when the application is submitted.
- The Incentive Calculator has been updated to match program requirements (removed one base measure requirement, changed high performance window U factor requirement from 0.32 to 0.30, and removed R30 attic insulation measure).
- References to *The Energy Network* changed to *County of Los Angeles/Southern California Regional Energy Network ("SoCalREN")*.

**January 1, 2017**

- Revised Window efficiency to U-Factor  $\leq 0.30$  and SHGC  $\leq 0.25$
- Revised Wall Insulation efficiency to  $\geq R-13$  for 2'x4' frame and  $\geq R-19$  for 2'x6' frame
- Projects that include central air conditioning or a heat pump, or their related fans, must submit proof of permit closure.

**August 1, 2016**

- Added requirements and Home Upgrade Incentive Calculator
  - The home must have a minimum of 10% energy savings or measure rebate value of \$2,000 or greater.
  - Rebate and incentive amount can be a maximum of 50% of the total project cost, up to a \$3,000 cap.



**June 1, 2016**

- Updated with ANSI/BPI-1200 Standards
- Added Whole Building Air Sealing Calculator

**July 20, 2015**

- Adopted Testing by Measure

**April 1, 2015**

- Removed Air Conditioner ( $\geq 14$  SEER &  $\geq 12$  EER)
- Added Gas Storage Water Heater ( $EF \geq 0.70$ )
- Minimum Electric Water Heater efficiency increased from 0.93 EF to 2.00 EF
- Removed Showerhead, Heating and Cooling, and Duct requirements

**October 15, 2014**

- Removed base measure requirement

**August 1, 2014**

- Added Attic Insulation and Plane Sealing (Insulate  $\geq R-44$ )
- Added Air Conditioner ( $\geq 14$  SEER and  $\geq 12$  EER)
- Raised Incentive Amount of Air Conditioner ( $\geq 15$  SEER and  $\geq 12$  EER)
- Added Central Furnace ( $\geq 95\%$  AFUE)
- Added Wall Furnace ( $\geq 70\%$  AFUE)
- Added Windows ( $U\text{-Factor} \leq 0.32$  and  $SHGC \leq 0.25$ )

**June 11, 2014**

- Minimum Central Furnace efficiency decreased from 95% AFUE to 92% AFUE

**February 17, 2014**

- Increased Floor Insulation incentive to \$550
- Removed Gas Storage Water Heater ( $EF \geq 0.62$ )

## HOME UPGRADE OVERVIEW

Energy Upgrade California® Home Upgrade provides assistance and incentives for home improvement projects that can reduce energy consumption and costs. This statewide program is managed locally by utilities and Regional Energy Networks (RENs), and directed by the California Public Utilities Commission (CPUC) in collaboration with the California Energy Commission (CEC). Incentives are offered on a first-come, first-served basis and are effective until funding is expired or the program is discontinued. Programs may be modified or terminated without prior notice.

***This Participating Contractor Manual focuses on The County of Los Angeles/Southern California Regional Energy Network ("SoCalREN") implementation of the Home Upgrade offering.***

SoCalREN implements Home Upgrade for owners of single-family detached homes in Los Angeles County who are customers of **both** Southern California Edison (SCE) and SoCalGas.

Home Upgrade as offered by SoCalREN offers **up to \$3,000** in rebates and incentives for homeowners who want to make their homes more energy efficient. Contractors must use the Contractor Portal to reserve funding for their customer's Home Upgrade project.

For more information, please visit <http://tenres.com>

If you have any additional questions, please call (877) 785-2237 or email [scr@icf.com](mailto:scr@icf.com).

## THE COUNTY OF LOS ANGELES/SOUTHERN CALIFORNIA REGIONAL ENERGY NETWORK (SOCALREN)

### SoCalREN:

- Local government organization
- Created by the California Public Utilities Commission
- Provides resources and assistance to homeowners, businesses and public agencies planning energy efficiency upgrades
- Serving Southern California

### Services Include:

- Community education and outreach
- Rebate and incentive offerings
- Attractive financing terms
- Tools to help identify contractors with energy efficiency training
- Other resources that help homeowners take the next step toward saving energy

Although our organization provides resources for many communities, SoCalREN implements Home Upgrade **only in Los Angeles County** (see figure at right for Home Upgrade service area map).



## HOMEOWNER ELIGIBILITY

In order for homeowners to qualify for Home Upgrade offered by SoCalREN, they must meet ALL of the following requirements:

- The home must be located in Los Angeles County.
- The home must be a detached single-family home built before January 1, 2002.
- The homeowner must receive utility service from both SCE and SoCalGas.
- The homeowner must not have participated previously in a similar incentive program through SCE/SoCalGas at this service address in the past five (5) years. Exceptions may apply to houses with multiple HVAC systems with separate ducts and/or where the current efficiency standard is exceeded by the new system if they have not participated within the same year.

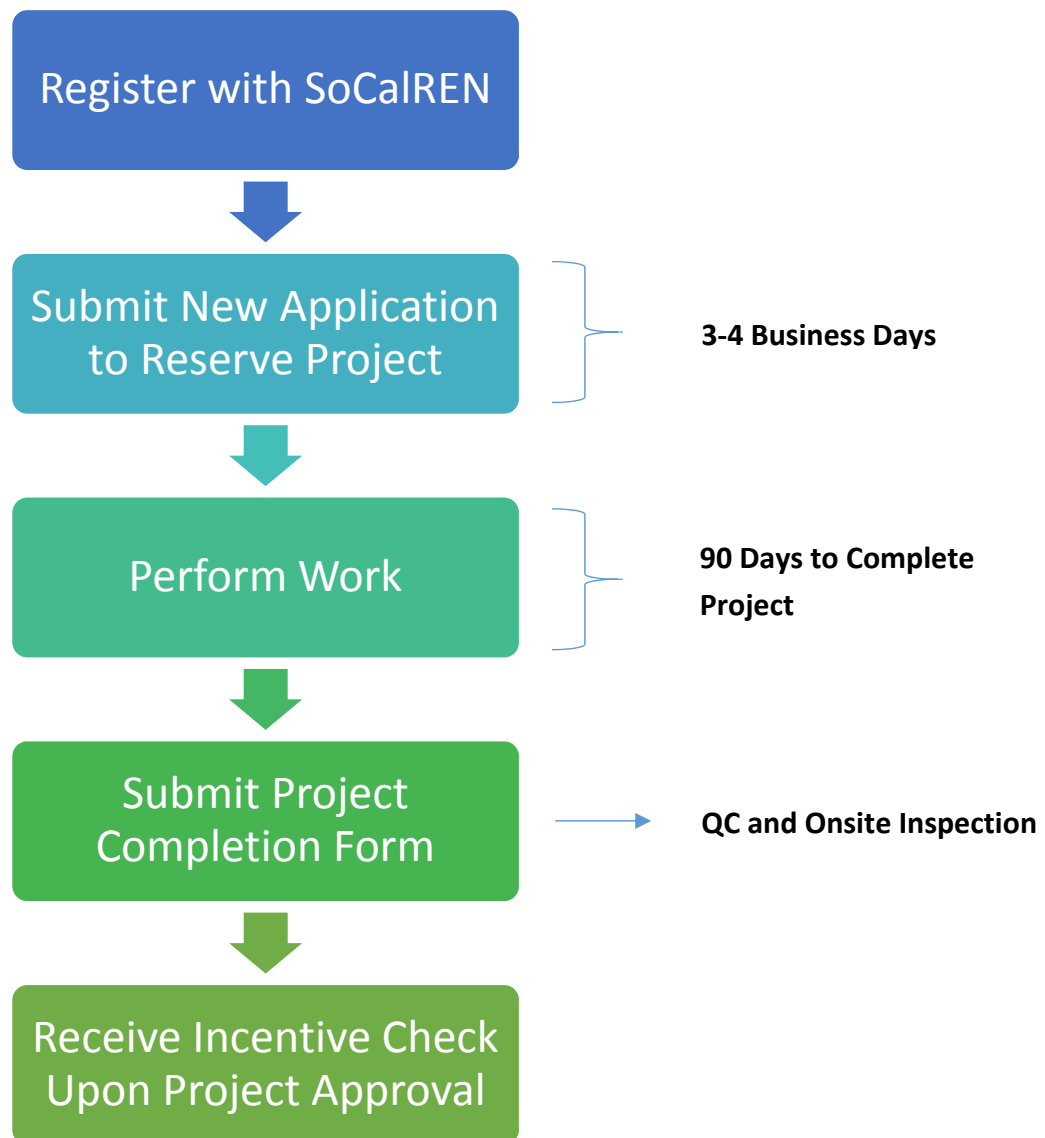
## REQUIREMENTS AND CONDITIONS

To participate in Home Upgrade, the following requirements must be met:

- A Home Upgrade Participating Contractor must perform the work.
- Install a total of three or more measures.
- A carbon monoxide detector must be present or installed on each floor.
- Install a minimum of one base measure.
- Testing must be performed after work is completed to ensure quality and occupant safety.
- The home must have a minimum of 10% energy savings **OR** measure rebate value of at least \$1,200.
- Rebate and incentive amounts are capped at 50% of the total project cost, up to a maximum of \$3,000.
- Projects that include central air conditioning, furnaces, or their related fans must submit proof of permit closure.
- HVAC heating and/or cooling systems must be a like-for-like replacement (e.g. a central air conditioning system replacing an existing central air conditioning system, a wall furnace replacing an existing wall furnace, etc.)
- Projects must submit supporting documentation and test-out data as detailed in "Supporting Documentation" section.
- Projects must submit itemized invoices detailing the cost per measure and work done for each measure intended to be incentivized.
- The home must be a single-family detached home and have a vintage/build date before January 1, 2002.

## REGISTRATION AND APPLICATION PROCESS

The following is an overview of the Home Upgrade process. Details for each of these steps are explained in the sections below.





**REGISTER WITH SOCALREN**

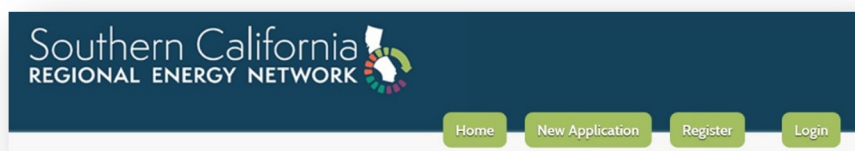
In order to offer Home Upgrade incentives offered by SoCalREN, a contractor must be qualified to participate. To qualify, a contractor must have one of the following credentials:

- SCE/SoCalGas Home Upgrade Participating Contractor
- SoCalREN Participating Contractor

To register to become a SoCalREN Participating Contractor, call (877) 785-2237 or email [scr@icf.com](mailto:scr@icf.com). An account manager will reach out and guide you through the steps to becoming a Participating Contractor.

**CREATE AN ACCOUNT IN THE CONTRACTOR PORTAL**

- Go to <http://tenres.com/contractorportal>.
- Click “Register” to go to the account registration page.

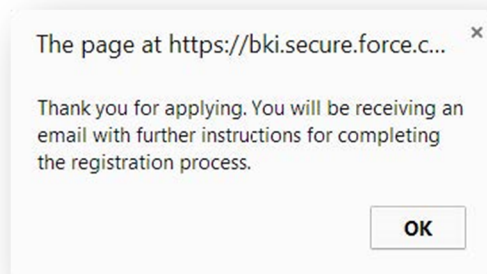


Enter the following information in the corresponding fields:

- Company Name
- License Number
- Street Address
- City
- State/Province
- ZIP/Postal Code
- First Name of Primary Contact
- Last Name of Primary Contact
- Email Address of Primary Contact
- The primary contact should be an individual who is principally responsible for coordinating all Home Upgrade projects. Please contact us if your primary contact needs to be updated.

Company Name:	<input type="text"/>
License Number:	<input type="text"/>
Street:	<input type="text"/>
City:	<input type="text"/>
State/Province:	<input type="text"/>
Zip/Postal Code:	<input type="text"/>
First Name of Primary Contact:	<input type="text"/>
Last Name of Primary Contact:	<input type="text"/>
Email Address of Primary Contact:	<input type="text"/>
Phone:	<input type="text"/>
<input type="button" value="Apply"/> <input type="button" value="Cancel"/>	

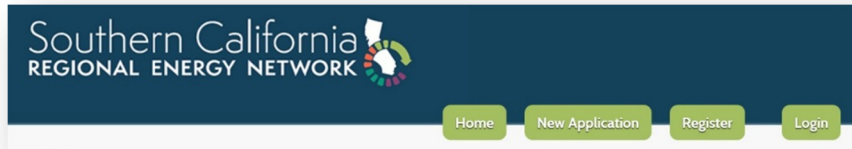
- Click “Apply.”
  - A pop-up will confirm the application has been submitted. Click “OK” to be redirected to the main login page.



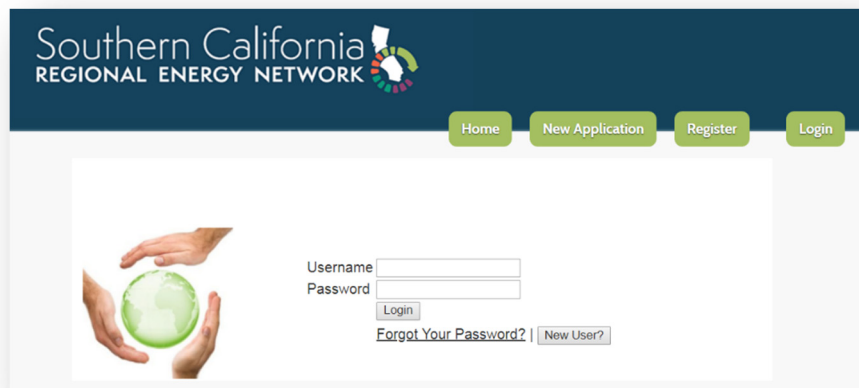
- Program administrator will verify contractor eligibility.
  - Once approved, contractor will receive a confirmation email with a temporary password.
  - Contractor will be instructed to change their temporary password after logging in to the portal for the first time.

**LOG IN TO THE CONTRACTOR PORTAL**

- Go to <http://tenres.com/contractorportal>.
- Click “Login” on the top right-hand corner to go to the login page.



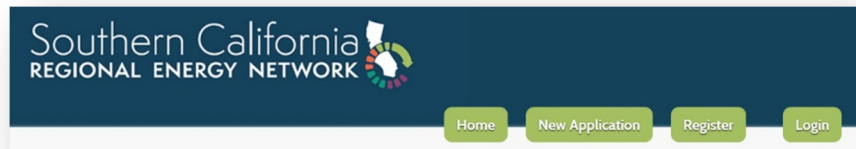
- Use the registered Primary Contact email as the “Username” and enter password.
  - Click “Login.”



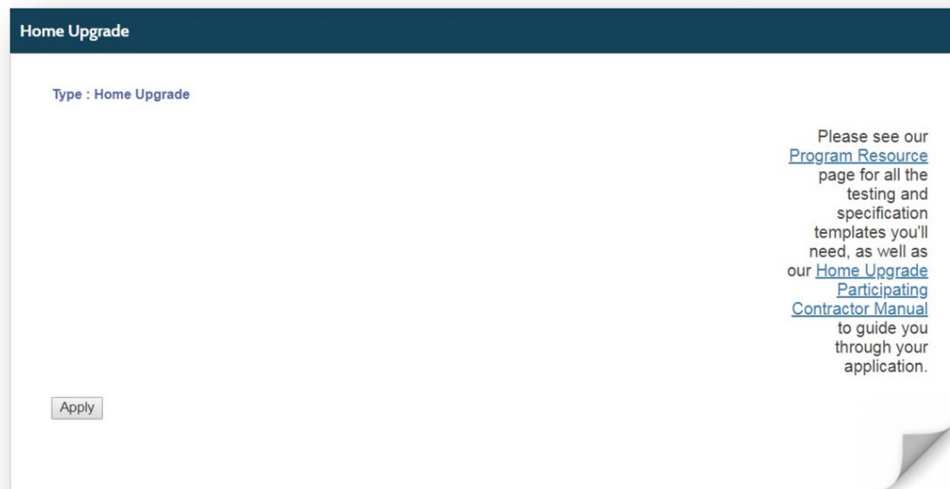
**SUBMIT NEW APPLICATION TO RESERVE PROJECT**

Participating contractors must submit an application before starting work to ensure the homeowner qualifies for Home Upgrade. Program administrators will verify the SCE and SoCalGas account information to ensure that the measures selected had no prior participation in an overlapping SCE/SoCalGas incentive program(s) within the past five (5) years. Exceptions may apply to houses with multiple HVAC systems with separate ducts and/or where the current efficiency standard is exceeded by the new system. The contractor and homeowner will be notified within three to four business days if funds are reserved. Work completed before notification of reservation will not be guaranteed an incentive nor does the reservation itself guarantee an incentive. Incentives are paid upon project approval.

- Login to the Contractor Portal.
- Click “New Application” to submit a new project.



- Click “Apply” link under Home Upgrade section.



Click “Create New Customer Account.”

Southern California  
REGIONAL ENERGY NETWORK

Home New Application Register Logout

New Rebate Application/Project

Existing Account?

☐ Verify Existing Customer Account Information ☒ Create New Customer Account

- Enter the following information in the corresponding fields to create an account:
  - Account Name
  - SoCalGas Account #
  - Southern California Edison (SCE) Service Account #
  - Service Account Street Number
  - Service Account Street Name
  - Service Account City
  - Service Account ZIP
  - Service Account State
  - SoCalGas Account Holder First Name
  - SoCalGas Account Holder Last Name
  - SCE Account Holder First Name
  - SCE Account Holder Last Name
  - Service Account Holder Email
  - Service Account Holder Phone

▼ Create Customer Account

Account Information

Account Name

SoCalGas Service Account #

Southern California Edison (SCE) Service Account #

Service Account Street Number

Service Account Street Name

Service Account City

Service Account Zip

Service Account State CA

SoCalGas Account Holder First Name

SoCalGas Account Holder Last Name

Contact Information

SCE Account Holder First Name

SCE Account Holder Last Name

Service Account Holder Email

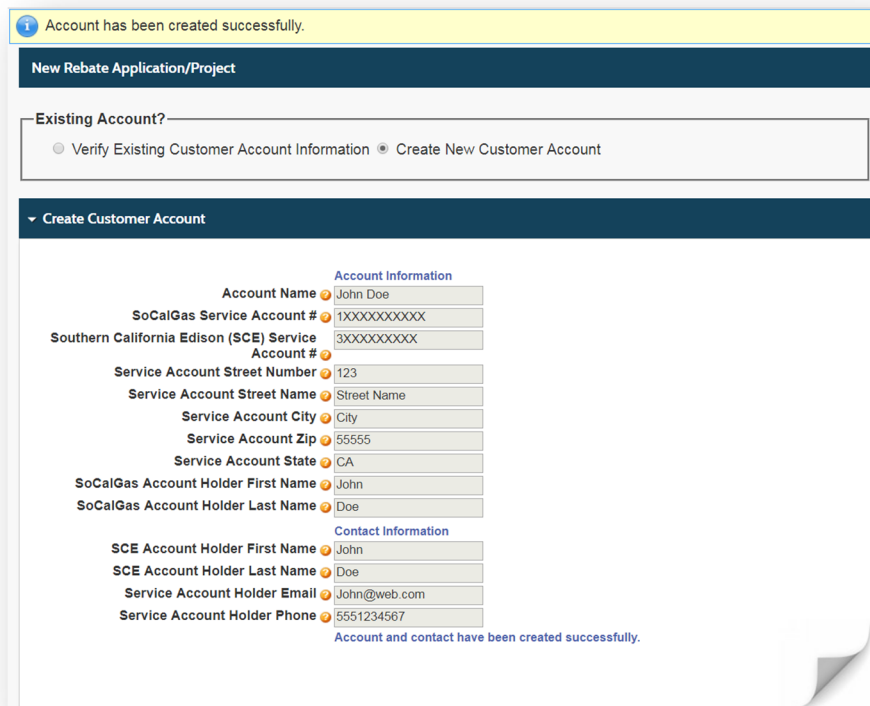
Service Account Holder Phone

Create Account & Contact

The utility service account number, name, and address must exactly match the homeowner's utility bills. If the information provided is incorrect, the Participating Contractor will be notified by program administrators to provide the correct information. Funds for your project cannot be reserved until the information has been verified.

Contractors must provide a valid email and phone number for the homeowner. Do not provide an invalid email and phone number. The application will not be approved until the correct information is received.

- Click "Create Account & Contact" to create the account. A notification will appear if the account was created successfully or if there was an error.



Account has been created successfully.

New Rebate Application/Project

Existing Account?

☐ Verify Existing Customer Account ☒ Create New Customer Account

▼ Create Customer Account

Account Information

Account Name John Doe

SoCalGas Service Account # 1XXXXXXXXXX

Southern California Edison (SCE) Service Account # 3XXXXXXXXXX

Service Account Street Number 123

Service Account Street Name Street Name

Service Account City City

Service Account Zip 55555

Service Account State CA

SoCalGas Account Holder First Name John

SoCalGas Account Holder Last Name Doe

Contact Information

SCE Account Holder First Name John

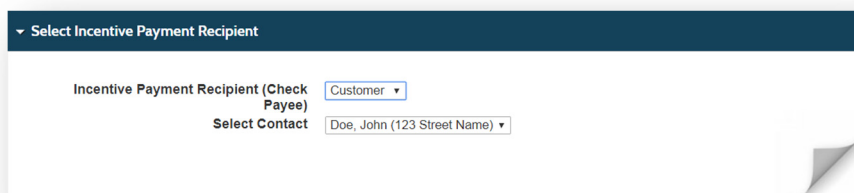
SCE Account Holder Last Name Doe

Service Account Holder Email John@web.com

Service Account Holder Phone 5551234567

Account and contact have been created successfully.

- Select Incentive Payment Recipient. The completed and signed terms and conditions must match the payment recipient selected.



▼ Select Incentive Payment Recipient

Incentive Payment Recipient (Check Payee) Customer ▼

Select Contact Doe, John (123 Street Name) ▼



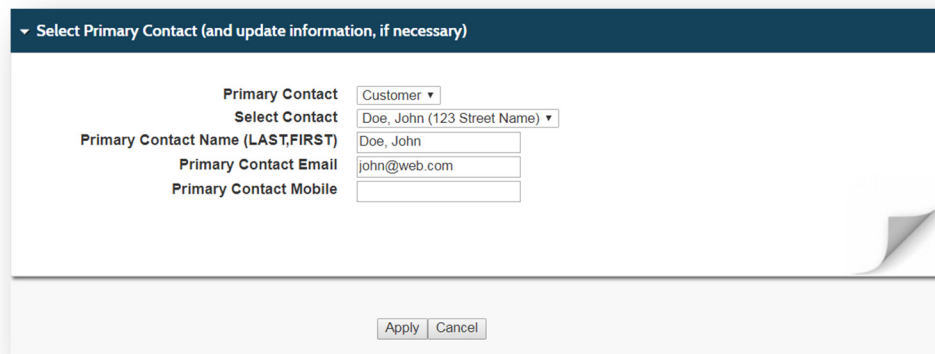
- Select “Customer” as the Primary Contact.



▼ Select Primary Contact (and update information, if necessary)

Primary Contact

- “Primary Contact Mobile” is optional. Click “Apply” to proceed to the next step.



▼ Select Primary Contact (and update information, if necessary)

Primary Contact

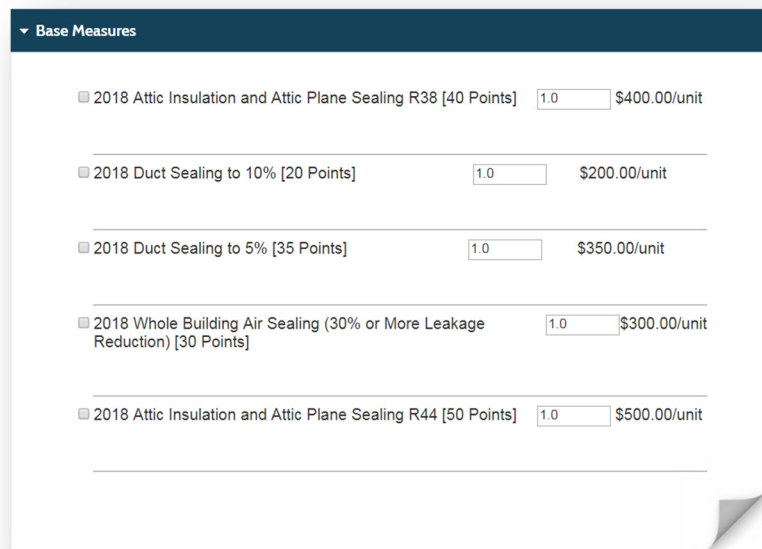
Select Contact

Primary Contact Name (LAST, FIRST)

Primary Contact Email

Primary Contact Mobile

- Select Base Measures by checking the box to the left of the measure name and entering the quantity to the right. The quantity cannot exceed one per measure.



▼ Base Measures

<input type="checkbox"/> 2018 Attic Insulation and Attic Plane Sealing R38 [40 Points]	<input type="text" value="1.0"/>	\$400.00/unit
<hr/>		
<input type="checkbox"/> 2018 Duct Sealing to 10% [20 Points]	<input type="text" value="1.0"/>	\$200.00/unit
<hr/>		
<input type="checkbox"/> 2018 Duct Sealing to 5% [35 Points]	<input type="text" value="1.0"/>	\$350.00/unit
<hr/>		
<input type="checkbox"/> 2018 Whole Building Air Sealing (30% or More Leakage Reduction) [30 Points]	<input type="text" value="1.0"/>	\$300.00/unit
<hr/>		
<input type="checkbox"/> 2018 Attic Insulation and Attic Plane Sealing R44 [50 Points]	<input type="text" value="1.0"/>	\$500.00/unit
<hr/>		

- Select Flex Measures by checking the box to the left of the measure name and entering the quantity to the right. The quantity cannot exceed one per measure. Click “Next” to proceed.

▼ Flex Measures

<input type="checkbox"/> 2018 Wall Insulation [40 Points]	<input type="text" value="1.0"/>	\$400.00/unit
<hr/>		
<input type="checkbox"/> 2018 Duct Insulation [25 Points]	<input type="text" value="1.0"/>	\$250.00/unit
<hr/>		
<input type="checkbox"/> 2018 Electric Storage Water Heater (EF Greater Than 2.00) [50 Points]	<input type="text" value="1.0"/>	\$500.00/unit
<hr/>		
<input type="checkbox"/> 2018 Floor Insulation [40 Points]	<input type="text" value="1.0"/>	\$400.00/unit
<hr/>		
<input type="checkbox"/> 2018 Furnace 92% AFUE [35 Points]	<input type="text" value="1.0"/>	\$350.00/unit
<hr/>		
<input type="checkbox"/> 2018 Furnace 95% AFUE [40 Points]	<input type="text" value="1.0"/>	\$400.00/unit
<hr/>		
<input type="checkbox"/> 2018 Gas Storage Water Heater (EF Greater Than 0.67) [20 Points]	<input type="text" value="1.0"/>	\$200.00/unit
<hr/>		
<input type="checkbox"/> 2018 Gas Storage Water Heater (EF Greater Than 0.70) [30 Points]	<input type="text" value="1.0"/>	\$300.00/unit
<hr/>		
<input type="checkbox"/> 2018 Gas Tankless Water Heater (EF Greater Than 0.82) [50 points]	<input type="text" value="1.0"/>	\$500.00/unit
<hr/>		
<input type="checkbox"/> 2018 Wall Furnace [25 Points]	<input type="text" value="1.0"/>	\$250.00/unit
<hr/>		
<input type="checkbox"/> 2018 Air Conditioner 15 SEER [50 Points]	<input type="text" value="1.0"/>	\$500.00/unit
<hr/>		

- Enter the following required information in the corresponding fields:
  - Year Built
  - Number of Stories/Floors
  - Ceiling Height (ft)
  - Conditioned Floor Area (ft<sup>2</sup>)
  - How did your customer hear about the program?
  - Climate Zone
  - Floor Construction
  - Existing Central Air Conditioning Present?
  - Existing Heating System?
  - Existing Water Heating System?
  - Thermostatic Shut-Off Valve and Low Flow Showerhead

Question or Requirement	Response
Year Built *	<input type="text"/>
Number of Stories/Floors *	<input type="text"/>
Ceiling Height *	<input type="text"/>
Conditioned Floor Area *	<input type="text"/>
How did your customer hear about the program? *	<input type="text" value="Contractor"/>
Climate Zone *	<input type="text"/>
Floor Construction *	<input type="text" value="Crawlspace"/>
Existing Central Air Conditioning Present? *	<input type="text" value="AC"/>
Existing Heating System? *	<input type="text" value="Furnace"/>
Existing Water Heating System? *	<input type="text" value="Electric"/>
Thermostatic Shut-Off Valve and Low Flow? *	<input type="text" value="No"/>

- Upload required “Homeowner Signed Terms and Conditions” and “Utility Bills.”

Home Owner Signed Terms and Conditions *	<input type="button" value="Choose File"/> No file chosen
Utility Bills	<input type="button" value="Choose File"/> No file chosen
Additional Upload	<input type="button" value="Choose File"/> No file chosen

- Check “I Accept” to agree to the Contractor Terms and Conditions.

**Energy Upgrade California™ Home Upgrade Terms and Conditions**

I understand that the County of Los Angeles/Southern California Regional Energy Network (“SoCalREN”) Energy Upgrade California® Home Upgrade incentive is available to property owners on a first-come, first-served basis while funds are available or until discontinued by the California Public Utilities Commission (CPUC). This funding will end December 31, 2018 or earlier if all allocated funds are depleted before that date. Project Completion Forms and all supporting documentation must be submitted by midnight December 31, 2018. I understand that a completed Application and Project Completion Form, including a copy of an itemized paid invoice, must be submitted within 90 days of the incentive reservation date for my incentive to be guaranteed. Funds cannot be guaranteed after the 90-day reservation date has passed. Once the Application is approved for payment, an incentive check is generally mailed within four to eight weeks to the utility service account address or to the mailing address provided in the Application.

I attest that I am a current Home Upgrade Participating Contractor, in good-standing with Southern California Edison (SCE) and SoCalGas®.

I understand the incentive will be reserved once a complete and accurate Application is submitted, received, and approved by the Program Administrator. At that time the property owner and I will be notified by email and the 90-day reservation will commence. The incentive reservation is valid for the approved scope of work only. I understand that if there is a change in qualifying upgrades, I must notify SoCalREN for written approval to alter the scope of work. Rebates and incentives are not guaranteed for upgrades completed outside the scope of work.

I understand that the incentive amount provided by SoCalREN is NOT GUARANTEED and it may change based on a number of factors including, but not limited to, verification of the measures installed.

I understand that a property owner cannot receive energy efficiency incentives for the same measures or for the replacement of the measure installed from more than one California investor-owned utility or other third party programs offering rebates, financing, and other incentives funded with CPUC Public Goods Charge funds.

I understand that the property owner has the authority to assign their incentive to the Participating Contractor installing the measures in their residence. I understand that under certain circumstances incentives are taxable and will be reported to the IRS unless I am exempt from reporting. I understand that I should consult my tax advisor concerning the taxability of incentives. SoCalREN is not responsible for any taxes that may be imposed as a result of the receipt of this incentive.

I understand incentives cannot exceed 50% of the combination of purchase price and installation cost.

SoCalREN will not be liable for any type of damages, whether direct, indirect, incidental, consequential, exemplary, reliance, punitive or special damages, including damages for loss of use, regardless of the form of action, whether in contract, indemnity, warranty, strict liability or tort, including negligence of any kind. I waive any and all claims against SoCalREN, its special districts, its officials, officers and employees and will indemnify SoCalREN for any claims arising out of or relating to the installation and/or use of energy efficiency measures referred to in this Application.

I am responsible for meeting all Program requirements and complying with my state/county/city government, property owner and/or homeowners’ association requirements (if any) regarding local conditions, restrictions, codes, ordinances, rules and regulations pertaining to all project installations. I further understand that it is my sole responsibility to ensure all incentivized measures are installed in accordance with all manufacturers’ specifications.

I understand that the choice of qualifying product(s), choice of manufacturer, merchant, dealer, purchase, installation and ownership/maintenance of the qualifying product(s) referenced in this Application are my sole responsibility, and the manufacturer, dealer, supplier or Participating Contractor of these products is not an agent or representative of SoCalREN.

I understand that SoCalREN is not responsible for items lost, damaged, or destroyed in the mail/transit.

I Accept ☐

- Click “Submit” to submit the application.
  - A pop-up notification will appear confirming the application has been submitted. Click “OK” to be redirected to the Home page.



Thank you! Your application has been successfully submitted for processing. Please come back periodically to check its status on the 'My Rebates/Projects' page.

OK

## SUBMIT TESTING VERIFICATION FORM

Upon completion of work, the Participating Contractor must perform all required tests designated by Testing by Measure to ensure quality and occupant safety. It is assumed that if a contractor subcontracts the test-out, they will provide their testing professional their login information in order to complete the Testing Verification Form. The contractor can complete the Testing Verification Form on behalf of the testing professional as long as they received their consent and approval.

- Login to the Contractor Portal.
- Click “Home” to see a list of current projects.
- Go to desired project and click “Submit Testing Verification.”

**Southern California REGIONAL ENERGY NETWORK**

Home New Application Register Logout

**Energy Upgrade California™ Home Upgrade: Contractor Portal**  
 You can view the status of your current projects on this page. You can also use the links below to start a new project, provide combustion safety testing results, or submit your Project Completion Form. Feel free to call us at (877) 785-2237 with any questions.

When you are getting ready to submit a project, please have the homeowner name, address, and service account numbers (both SCE and SoCalGas®) handy. What phase of the project would you like to submit today?

My Account My Rebates/Projects

**Current and Past Projects and Applications**

Rebate Application/Project	Location	Initiated	Rebate Amount	Status	Action
SCHU13241 (Test Test s.T)	Test Test s.T, Los Angeles, CA 90015	08/02/2017	\$2800.00	SC2. Reservation Complete	<a href="#">Submit Testing Verification</a> <a href="#">Submit Project Completion Form</a>

- Enter the following information in the corresponding fields to complete the Testing Verification form.
  - Technician First and Last Name

▼ Participating Contractor Team

Complete this section only if required. By entering my name below, I certify that

1. I am a certified Building Performance Institute Building Analyst, or appropriately licensed technician, in good standing.
2. As required by the measuers installed, the combustion safety test-out was performed for applicable measures and passed with all necessary repair work having been completed.

Technician Name

(First)

Technician Name

(Last)



- Date of Test-Out
- Repairs Required for Home to Pass

▼ Test-Out

Date of Test-Out

Repairs Required for Home to Pass

## SUBMIT PROJECT COMPLETION FORM

The final step of completing a project submission is the Projection Completion Form. This step includes uploading all the required photos, final invoice, and information or data on installed measures.

- Log in to the Contractor Portal.
- Click “Home” to see a list of current projects.
- Go to desired project and click “Submit Project Completion Form.”

- Measures that have been reserved will already be selected.
  - If measures have changed, email the program team or call your account manager. Attempts to change measures will result in an error. Changes received after the project was inspected will need to be inspected again and may incur a fee for re-inspection. Exceptions apply on a case-by-case basis depending on the change order received.
- Enter the following information in the corresponding fields to complete the Base Measures:
  - Whole Building Air Sealing (30% or More Leakage Reduction)

- Attic Insulation and Attic Plane Sealing (R-38)

<input checked="" type="checkbox"/> 2018 Attic Insulation and Attic Plane Sealing R38 [40 Points]	1.0	\$400.00/unit
Attic Insulation  --None-- ▾	Attic Insulation  --None-- ▾	
Type	Depth (inches)	
Attic R-Value  --None-- ▾	Attic Area	
	Insulated (SqFt)	








- Attic Insulation and Attic Plane Sealing (R-44)

<input checked="" type="checkbox"/> 2018 Attic Insulation and Attic Plane Sealing R44 [50 Points]	1.0	\$500.00/unit
Attic Insulation  --None-- ▾	Attic Insulation  --None-- ▾	
Type	Depth (inches)	
Attic R-Value  --None-- ▾	Attic Area	
	Insulated (SqFt)	



- Duct Sealing (seal to 5%)

<input checked="" type="checkbox"/> 2018 Duct Sealing to 5% [35 Points]	1.0	\$350.00/unit
Duct Sealing	Duct Sealing  --None-- ▾	
Post-Retrofit	Calculation	
CFM 25	Method	
Duct Sealing	Duct Sealing	
Cooling System	Heating System	
Tonnage	Output BTU	
Duct Sealing	Duct Sealing	
Total System	Leakage %	
Airflow		









- Duct Sealing (seal to 10%)

<input checked="" type="checkbox"/> 2018 Duct Sealing to 10% [20 Points]	<input type="text" value="1.0"/>	\$200.00/unit	
Duct Sealing 	<input type="text"/>	Duct Sealing 	--None-- 
Post-Retrofit		Calculation	
CFM 25		Method	
Duct Sealing 	<input type="text"/>	Duct Sealing 	<input type="text"/>
Cooling System		Heating System	
Tonnage		Output BTU	
Duct Sealing 	<input type="text"/>	Duct Sealing 	<input type="text"/>
Total System		Leakage %	
Airflow			

- Enter the required information in the corresponding fields to complete the Flex Measures:
  - Duct Insulation



<input checked="" type="checkbox"/> 2018 Duct Insulation [25 Points]	<input type="text" value="1.0"/>	\$250.00/unit	
Duct Insulation 	--None-- 	Buried Duct 	--None-- 
Type		Insulation	
Duct Sleeve R- 	--None-- 	Type	
Value (Duct			
Insulation)			

- Air Conditioner (15 SEER)

<input checked="" type="checkbox"/> 2018 Air Conditioner 15 SEER [50 Points]	<input type="text" value="1.0"/>	\$500.00/unit	
AC System Type 	--None-- 	AC Brand 	<input type="text"/>
AC Model # 	<input type="text"/>	AC SEER Rating 	--None-- 
AC Tonnage 	--None-- 		

- Furnace (92% AFUE)



☒ 2018 Furnace 92% AFUE [35 Points]  \$350.00/unit

Furnace Type  --None--  
Furnace Model # 

Furnace Brand   
Furnace AFUE 





- Furnace (95% AFUE)

☒ 2018 Furnace 95% AFUE [40 Points]  \$400.00/unit





Furnace Type  --None--  
Furnace Model # 

Furnace Brand   
Furnace AFUE 




- Wall Furnace

<input checked="" type="checkbox"/> 2018 Wall Furnace [25 Points]	<input type="text" value="1.0"/>	\$250.00/unit
Furnace Type  <input type="text" value="--None--"/>	Furnace Brand 	<input type="text"/>
Furnace Model # 	Furnace AFUE 	<input type="text"/>

- Wall Insulation

<input checked="" type="checkbox"/> 2018 Wall Insulation [40 Points]	<input type="text" value="1.0"/>	\$400.00/unit
Wall Insulation  <input type="text" value="--None--"/>	Wall R-Value 	<input type="text" value="--None--"/>
Type		
Wall Insulation 	Wall Framing 	<input type="text" value="--None--"/>
Depth (inches)		


- Floor Insulation


<input checked="" type="checkbox"/> 2018 Floor Insulation [40 Points]	<input type="text" value="1.0"/>	\$400.00/unit
Floor Insulation  <input type="text" value="--None--"/>	Floor Insulation 	<input type="text" value="--None--"/>
Type	Depth (Inches)	
Floor R-Value 		<input type="text" value="--None--"/>





- Gas Storage Water Heater (EF  $\geq$  than 0.67)

☒ 2018 Gas Storage Water Heater (EF Greater Than 0.67) [20  \$200.00/unit Points]

Gas Storage   
Water Heater  
Brand EF > 0.67

Gas Storage   
Water Heater  
Gallons EF >.67

Gas Storage   
Water Heater  
Model # EF>.67

Gas Water Heater   
Energy Factor  
EF>.67

- Gas Storage Water Heater (EF  $\geq$  than 0.70)

☒ 2018 Gas Storage Water Heater (EF Greater Than 0.70) [30 Points]  \$300.00/unit

Gas Storage    
Water Heater  
Brand EF > 0.67

Gas Storage    
Water Heater  
Gallons EF > .67


Gas Storage    
Water Heater  
Model # EF>.67


Gas Water Heater    
Energy Factor  
EF>.67

- Gas Tankless Water Heater (EF  $\geq$  than 0.82)

☒ 2018 Gas Tankless Water Heater (EF Greater Than 0.82) [50 points]  \$500.00/unit

Gas On-Demand    
Water Heater  
Brand EF > .82

Gas On-Demand    
Water Heater  
Energy Factor

Gas On-Demand    
Water Heater  
Model# EF>.82

- Electric Storage Water Heater (EF  $\geq$  than 2.00)

☒ 2018 Electric Storage Water Heater (EF Greater Than 2.00) [50 Points]  \$500.00/unit

Electric Storage    
Water Heater  
Brand

Electric Storage    
Water Heater  
Gallons

Electric Storage    
Water Heater  
Model #

Elect. Storage    
WaterHeater  
EnergyFactor

- Enter the following information in the corresponding fields to complete the Project Information:
  - Total Project Cost (excluding costs not related to the project)
  - Estimated Job Hours
  - Were Permits Required?
  - Permit Number
  - Number of Carbon Monoxide Detectors
    - A carbon monoxide (CO) detector is a device that detects the presence of CO gas in order to prevent carbon monoxide poisoning. One CO detector must be installed on every floor of the home. If there is an existing CO detector on every floor, the contractor is not required to purchase and install a new one.
    - If a new CO detector is purchased, contractors must include it as a line item on the final invoice. If the CO detector was already present, make a note on the final invoice that a CO detector did not need to be purchased.
  - Thermostatic Shut-Off Valve and/or TSV with Low-Flow Showerhead combo
    - Please indicate which, if any, were installed.

Project Information	
Question or Requirement	Response
Total Project Cost *	<input type="text"/>
Estimated Job Hours *	<input type="text"/>
Were Permits Required? *	Yes <input type="button" value="v"/>
Permit Number *	<input type="text"/>
Carbon Monoxide Detectors *	<input type="text"/>
Thermostatic Shut-Off Valve	<input type="text"/>
Thermostatic Shut-Off Valve & Low Flow	<input type="text"/>
Assessment Voucher Code	<input type="text"/>

- Attach Required Supporting Documentation

Project Information	
Project Invoice	<input type="button" value="Choose File"/> No file chosen
Photo Documentation	<input type="button" value="Choose File"/> No file chosen
Asbestos Abatement Letter	<input type="button" value="Choose File"/> No file chosen
Insulation Certificate	<input type="button" value="Choose File"/> No file chosen
CF-3R HERS Certificate	<input type="button" value="Choose File"/> No file chosen
Knob and Tube C-10 Certificate	<input type="button" value="Choose File"/> No file chosen
Window Supplier Invoice	<input type="button" value="Choose File"/> No file chosen
WBAS calculator	<input type="button" value="Choose File"/> No file chosen
Closed permit upload	<input type="button" value="Choose File"/> No file chosen

**QUALITY CONTROL ONSITE INSPECTION/QC MENTORING**

To ensure quality, a random sample of all the projects submitted by contractors will require a Quality Control (QC) On-Site Inspection. Our QC Team will go into the home to verify the work was completed to Home Upgrade standards and that the information submitted by the contractor is accurate. If a project is selected for the random on-site inspection, the contractor will receive a notification email after submitting the Project Completion Form.

For the first Home Upgrade application, every contractor is REQUIRED to contact our QC Team and schedule a QC Mentoring session. Mentoring entails having our inspector present as the contractor is performing the test-out for their first project. This ensures the contractor's test-out procedures are completed in accordance to Home Upgrade standards. Contractors will be notified if mentoring is required once the project's funds are reserved.

To schedule a QC Mentoring session, email [HomeUpgrade@rhainc.com](mailto:HomeUpgrade@rhainc.com) or call (626) 363-2551.

If the contractor's test-out procedures meet Home Upgrade standards during their first mentoring session, the contractor will not need to be mentored again. The rest of the contractor's projects will be included in the pool of projects for random on-site inspections. For training purposes, a contractor may request to be mentored by our QC Team for a maximum for five times. However, the mentoring is not a substitute for the random QC On-Site Inspections.

If the contractor performs the test-out incorrectly and does not meet Home Upgrade standards during their first mentoring session, they will be required to schedule another mentoring session for their next Home Upgrade application. The mentoring will continue until the QC Team is confident that the contractor has learned the standards of the program and can perform the required tests independently. If the contractor is hiring an already QC-mentored third party BPI BA professional to perform the test-out, they may be exempt from QC mentoring. Please contact your account manager or email [scr@icf.com](mailto:scr@icf.com) to confirm if your project is exempt from QC mentoring.

**RECEIVE INCENTIVE CHECK**

In order for the incentive check to be disbursed, contractors must resolve any issues discovered during the inspection and Project Completion Form review.

Program administrators will send an email to the homeowner and contractor as soon as the project has been approved for payment. The incentive check will arrive via United States Postal Service within 4 to 8 weeks of this email. Checks will be sent to the designated payee on the application, either the homeowner or contractor.

## HOME UPGRADE MEASURES

This section reviews all Home Upgrade measures, technical specifications and rebate amounts of each measure. For more information or questions, please call (877) 785-2237 or email [scr@icf.com](mailto:scr@icf.com).

### BASE MEASURES

Upgrade Measure	Technical Specifications	Rebate Amount
<b>Whole Building Air Sealing</b>	≥ 30% leakage reduction from the defaults or test-in CFM50 result	\$300
<b>Attic Insulation &amp; Plane Sealing</b>	Insulate ≥ R-38	\$400
	Insulate ≥ R-44	\$500
<b>Duct Sealing</b>	Seal to ≤ 10%	\$200
	Seal to ≤ 5%	\$350

**FLEX MEASURES**

Upgrade Measure	Technical Specifications	Rebate Amount
<b>Duct Insulation</b>	Insulate $\geq$ R-8	\$250
<b>Central Air Conditioner</b>	$\geq$ 15 SEER	\$500
<b>Central Furnace</b>	$\geq$ 92% AFUE	\$350
	$\geq$ 95% AFUE	\$400
<b>Wall Furnace</b>	Natural Gas Gravity Wall Furnace $\geq$ 70% AFUE	\$250
<b>Wall Insulation</b>	Insulate $\geq$ R-13 for 2x4 Frame	\$400
	Insulate $\geq$ R-19 for 2x6 Frame	
<b>Floor Insulation</b>	Insulate $\geq$ R-19	\$400
<b>Gas Storage Water Heater</b>	EF $\geq$ 0.67	\$200
	EF $\geq$ 0.70	\$300
<b>Gas Tankless Water Heater</b>	EF $\geq$ 0.82	\$500
<b>Electric Storage Water Heater</b>	EF $\geq$ 2.00	\$500

**INCENTIVE STRUCTURE**

The Home Upgrade incentive amount depends on the qualifying energy efficiency upgrades completed, up to \$3,000.

Incentives for Home Upgrade are not considered taxable income for homeowners. However, if a homeowner signs the incentive funding over to a Participating Contractor, that is considered taxable income for the contractor. The contractor will need to submit a W-9 form in order for the program to issue their incentive check.

**EXAMPLE 1 OF INCENTIVE STRUCTURE**

<b>Base Measure</b>	Duct Sealing ( $\leq 5\%$ )	\$350
<b>Flex Measures</b>	Duct Insulation ( $\geq R-8$ )	\$250
	Central Air Conditioner ( $\geq 15$ SEER)	\$500
	Central Furnace ( $\geq 95\%$ AFUE)	\$400
<b>Rebate and Incentive Amount</b>		<b>\$1,500</b>

**EXAMPLE 2 OF INCENTIVE STRUCTURE**

<b>Base Measures</b>	Attic Insulation & Plane Sealing ( $\geq R-44$ )	\$500
	Whole Building Air Sealing ( $\geq 30\%$ )	\$300
	Duct Sealing ( $\leq 5\%$ )	\$350
<b>Flex Measure</b>	Duct Insulation ( $\geq R-8$ )	\$250
<b>Rebate and Incentive Amount</b>		<b>\$1,400</b>

## TESTING BY MEASURE

Upon completion of work, the contractor must perform diagnostic testing according to the chart below to ensure quality and occupant safety.



### Energy Upgrade California® Home Upgrade Testing by Measure

In collaboration with Southern California Gas Company (SoCalGas®), the County of Los Angeles/SoCalREN requires Testing by Measure effective since July 20, 2015.

- **Pre-retrofit** diagnostic testing is no longer required, but is highly recommended.
- **Post-retrofit** diagnostic testing is required by measure, according to the table below.

The below applies to Energy Upgrade California® Home Upgrade as implemented by the County of Los Angeles/SoCalREN, which includes Los Angeles County homes served by both SoCalGas and Southern California Edison.

Installed Measure	Combustion Safety Test <sup>1</sup>	Blower Door	Duct Test or CF3R	Appliance Ambient/ Whole-House Gas Leak <sup>2</sup>	None
Whole Building Air Sealing	✓	✓			
Attic Insulation & Plane Sealing	✓	✓			
Duct Sealing			✓		
Duct Insulation					✓
Air Conditioner			✓		
Central Furnace			✓	✓	
Wall Furnace				✓	
Wall Insulation	✓	✓			
Floor Insulation					✓
Gas Storage Water Heater				✓	
Gas Tankless Water Heater				✓	
Electric Water Heater					✓

<sup>1</sup> Combustion Safety Test – A Building Performance Institute (BPI) Building Analyst (BA) must complete CAZ/CAS inspection to BPI BA standards. This includes CAZ depressurization testing, combustion appliance safety inspection, CO testing, and where appropriate draft and spillage testing.

<sup>2</sup> Appliance Ambient / Whole House Gas Leak – Contractor must check for presence of carbon monoxide in the ambient air around the appliance. For furnace replacements, perform a carbon monoxide test in the air stream of the supply register closest to the furnace. Additionally, inspect for gas leaks at all accessible interior and exterior gas lines, line valves, gas control valves, pilot lines, joints, fittings and meter using an electronic leak detector and micro-leak solution to identify leak location.

Energy Upgrade California® Home Upgrade provides assistance and incentives for home improvement projects that can reduce energy use and make homes more comfortable. This statewide program is managed locally by utilities and regional energy networks and directed by the California Public Utilities Commission in collaboration with the California Energy Commission. Funding comes from utility customers under the auspices of the California Public Utilities Commission. Incentives are offered on a first-come, first-served basis and are effective until the funding is expended or the program is discontinued. Terms and conditions apply. See program rules for details. Programs may be modified or terminated without prior notice. ©2018 Southern California Regional Energy Network. Trademarks are property of their respective owners. All rights reserved.



<sup>1</sup>Combustion Safety Test - A Building Performance Institute (BPI) Building Analyst (BA) must complete CAZ/CAS inspection to BPI BA standards. This includes CAZ depressurization testing, combustion appliance safety inspection, CO testing, and where appropriate draft and spillage testing.

<sup>2</sup>Appliance Ambient/Whole House Gas Leak - Contractor must check for presence of carbon monoxide in the ambient air around the appliance. For furnace replacements, perform a carbon monoxide test in the air stream of the supply register closest to the furnace. Additionally, inspect for gas leaks at all accessible interior and exterior gas lines, line valves, gas control valves, pilot lines, joints, fittings and meter using an electronic leak detector and micro-leak solution to identify leak location. BPI BA is not required for this test.

## COMBUSTION SAFETY TESTING

Combustion safety testing must be completed by a Building Performance Institute (BPI) Building Analyst (BA) to ANSI/BPI-1200 standards. This includes combustion appliance safety inspection, carbon monoxide testing, and spillage testing under worst case and/or natural conditions where appropriate.

The contractor can perform these tests if they have a BPI BA on staff OR the work can be subcontracted to a third-party BPI BA professional. If a third-party BPI BA is subcontracted, contractors should properly vet the capabilities and certification of the individual. **A BPI BA who has not worked with SoCalREN will need to undergo QC Mentoring with our QC Team.**

All natural gas and propane appliances are subject to full appliance safety testing. All combustion appliances located in conditioned space, unconditioned space, utility room, attached garage, attic, crawlspace, outside storage closet with structural framing connected to the house or in any location that may have a direct effect on the living space are subject to full combustion appliance safety testing.

Combustion safety testing is required if any of the following measures are selected:

- Whole Building Air Sealing
- Attic Insulation and Plane Sealing
- Wall Insulation

A signed BPI combustion safety form is required upon completion of the combustion safety test.

## BLOWER DOOR

A blower door test is used to measure the airtightness of a building and locate air leakage sites in the building envelope. A BPI BA must complete a blower door test and evaluate post-retrofit ventilation requirements. Photos of test-out blower door test manometer must be submitted upon completion of project when blower door testing is required.

Mechanical ventilation is required or recommended per ASHRAE 62-89 standards, existing ventilation systems must be evaluated and whole-building ventilation requirement determined according to ANSI/BPI-1200 and ASHRAE 62.2-2016 standards.

A blower door test is not permitted if there are any health or safety issue that will impact the occupants. This includes the presence of possible asbestos containing materials (PACM), other hazardous materials or combustion hazards. Contractors must resolve any issues before proceeding with a blower door test.

Blower door testing is required if any of the following measures are selected:

- Whole Building Air Sealing
- Attic Insulation and Plane Sealing
- Wall Insulation

## BLOWER DOOR TEST-IN DEFAULTS

A building's pre-retrofit leakage is determined using default values or by performing a blower door test-in. Refer to the table below for SoCalREN default values.

Year of Construction	Default	Test-In	Eligibility
Pre- 1978	7.1 Specific Leakage Area (SLA)	Test-in data is allowed in place of default (date-stamped blower door manometer photo required).	No air sealing allowed when test-in is $\leq 0.35$ Natural Air Changes per Hour (ACHn).
1978 to 1992	5.2 SLA		
1993 to 2001	4.9 SLA		

- For all homes built before 1978, use 7.1 SLA as the default level. If the contractor chooses not to use the default, they have the option to perform a blower door test-in to determine the baseline. If the existing home ACHn is  $\leq 0.35$ , air sealing is not allowed.
- For homes built between 1978 and 1992, use 5.2 SLA as the default level. If the contractor chooses not to use the default, they have the option to perform a blower door test-in to determine the baseline. If the existing home ACHn is  $\leq 0.35$ , air sealing is not allowed.
- For homes built between 1993 and 2001, use 4.9 SLA as the default level. If the contractor chooses not to use the default, they have the option to perform a blower door test-in to determine the baseline. If the existing home ACHn is  $\leq 0.35$ , air sealing is not allowed.

If the default values are used, the contractor must use this equation to determine Test-In CFM50:

$$\text{Test-In CFM50} = \text{default SLA} \times \text{conditioned floor area} / 3.819$$

## CALCULATING WHOLE BUILDING LEAKAGE REDUCTION

In order to calculate the leakage reduction percentage, contractors must use the following equation:

$$\% \text{ leakage reduction} = 100\% \times (1 - (\text{Test-Out CFM50} / \text{Test-In CFM50}))$$

Test-Out CFM50 comes from the results of the post-retrofit blower door test. Test-In CFM50 comes from either the pre-retrofit blower door test or the default values.

## BUILDING AIRFLOW STANDARD

Building airflow provides passive ventilation of the building interior, introducing fresh air into the building and removing moisture, carbon dioxide, fumes, etc. The Building Airflow Standard

(BAS) determines the minimum natural building air changes per hour (ACH) that will meet air exchange requirements established by ASHRAE. Home Upgrade uses this calculation to determine if mechanical ventilation needs to be installed.

BAS is calculated using two methods: *BAS(building)* or *BAS(occupants)*. BAS is the greater value of *BAS(building)* or *BAS(occupants)*.

$$BAS(building) = 0.35 \times (\text{conditioned floor area} \times \text{average ceiling height}) / 60$$

$$BAS(occupants) = \# \text{ of occupants} \times 15$$

Multiply the BAS with the N-Factor to determine BAS(CFM50). For homes in SoCalREN's offering of Home Upgrade, the N-Factor is **24.5 for single-story homes** and **19.85 for two-story homes**.

$$BAS(CFM50) = BAS \times N - \text{Factor}$$

*% BAS Calculation:* The Test-Out CFM50 is divided by the BAS(CFM50) to determine the ventilation needs of the building.

$$\% BAS = \text{Test-Out CFM50} / BAS(CFM50)$$

- If test-out CFM50 is  $\geq 100\%$  BAS, mechanical ventilation is not necessary.
- If test-out CFM50 is  $< 100\%$  BAS and  $\geq 70\%$  BAS, mechanical ventilation is recommended.
- If test-out CFM50 is  $< 70\%$  BAS, mechanical ventilation must be installed.

### MECHANICAL VENTILATION AIRFLOW REQUIREMENT

If mechanical ventilation is required, contractors must install mechanical ventilation per ASHRAE 62.2-2016 standards. SoCalREN has created the Whole Building Air Sealing Calculator for contractors to assist in determining the minimum airflow required. A copy of the Whole Building Air Sealing Calculator is available for download on the program website. Date stamped photos of the installed mechanical ventilation and its nameplate will be required as proof of installation.

### DUCT TEST

A duct test is used to measure the airtightness of a building's duct system. Home Upgrade offered by SoCalREN will accept results from a total leakage test or a leakage-to-outside test.

Duct testing is not permitted if there are any health or safety issue that will impact the occupants. This includes the presence of possible asbestos containing materials (PACM), other

hazardous materials or combustion hazards. Contractors must resolve any issues before proceeding with duct leakage testing.

Duct testing is required if any of the following measures are selected:

- Duct Sealing
- Central Air Conditioner
- Central Furnace

### CALCULATING DUCT LEAKAGE

In order to calculate the duct leakage percentage, contractors must use the following equation:

$$\text{Duct Leakage (\%)} = \text{CFM25 (duct test)} / \text{Total System Airflow}$$

*CFM25 (duct test)* comes from the required manometer result of the post-retrofit duct test. *Total System Airflow* can be measured by using a flow hood. A common alternative method is to estimate the *Total System Airflow* using the following *Nominal Cooling/Heating Airflow* equations:

$$\text{Nominal Cooling Airflow (CFM)} = \text{cooling tonnage} \times 400$$

$$\text{Nominal Heating Airflow} = 21.7 \times \text{heating output (kBTU)}$$

**COMBUSTION APPLIANCE AMBIENT/WHOLE-HOUSE GAS LEAK TEST**

Appliance ambient test requires the contractor to check for presence of carbon monoxide (CO) in the ambient air around the appliance. For furnace replacements, perform a carbon monoxide test in the air stream of the supply register closest to the furnace.

Whole-house gas leak test requires a contractor to inspect for gas leaks at all accessible interior and exterior gas lines, line valves, gas control valves, pilot lines, joints, fittings and meter using an electronic leak detector and micro-leak solution to identify leak location.

Appliance ambient and whole-house gas leak test is required if any of the following measures are selected:

- Central Furnace
- Wall Furnace
- Gas Storage Water Heater
- Gas Tankless Water Heater

## HOME UPGRADE INCENTIVE CALCULATOR


The Home Upgrade Incentive Calculator estimates the energy savings and incentive amount associated with the installed measures. Completion of the calculator does not guarantee that a project meets minimum requirements. Final incentives and savings can increase or decrease depending on the quality of the completed work, the actual scope of work conducted and the timely and accurate submittal of information.

### DIFFERENCES

The previous Incentive Calculator was developed by SCE and SoCalGas. SoCalREN has adopted the calculator for consistency between programs. The incentive calculator was updated to follow program-specific requirements.

**DIRECTIONS**

Input your project information into the light blue cells in Steps 1, 2, and 4. Review your results in the gray cells in Steps 3 and 4. (Note that Step 4 includes both input and results.) You may reset the calculator using the button on the top right hand side of the screen.



### SoCalREN Home Upgrade Incentive Calculator

**This calculator estimates the energy savings and incentives associated with installed measures completed under Energy Upgrade California Home Upgrade®. In order to qualify for rebate each project must meet all Home Upgrade requirements.**

**Directions:** Input your project information into the light blue cells in Steps 1, 2 and 4. Review your results in the gray cells in Steps 3 and 4. You may reset the calculator using the button on the top right hand side of the screen.

Reset this Calculator

**Customer Information**

Customer Last Name	
Customer Street Address	
Project Number	

**Home Upgrade Requirements<sup>4,5</sup>**

Each Home Upgrade project must meet all of the following:

1. Minimum of 10% energy savings or \$1,200.
2. At least three (3) qualifying measures installed.

Step 1: Describe Existing Home Conditions	appropriate characteristic below:	Step 3: Verify Estimated Energy Savings Results
Climate Zone	9	
Vintage	pre78	
Floor Construction	Slab-on-grade	
Existing Central Air Conditioning Present?	AC	
Heating	Furnace	
Water Heating	Gas	
Number of Stories	1	

Step 2: Select Upgrade Measures Installed	Was the measure installed? Choose Yes/No	Step 4: Estimate the Incentive
<b>Whole Building Air Sealing - ≥30% leakage reduction<sup>1,2</sup></b>	Yes	Dollars \$1,650.00
Insulate Ductwork to ≥R-8 - \$250	No	Meets three measure minimum? Yes
Reduce Duct Leakage to ≤10% <sup>1,2</sup> - \$200	No	Meets base measure minimum? Yes
Reduce Duct Leakage to ≤5% <sup>1,2</sup> - \$350	Yes	Meets at least 10% Energy Savings? Yes
Insulate Attic - ≥R38 <sup>1,2</sup> - \$400	No	Meets 10% or \$1,200? Yes
Insulate Attic - ≥R44 <sup>1,2</sup> - \$500	No	What is the final project cost? \$10,000.00
Insulate Floor to ≥R-19 - \$400	No	Estimated Incentive (max \$3,000) \$1,650.00
Wall Insulation to ≥R-13 - \$400	No	
<b>Split/Packaged Central Air Conditioner ≥15 SEER</b> (≥80% AFUE for Packaged System) - \$500	Yes	
Natural Gas Central Furnace - ≥92% AFUE <sup>2</sup> - \$350	No	
Natural Gas Central Furnace - ≥95% AFUE <sup>2</sup> - \$400	No	
Natural Gas Gravity Wall Furnace - ≥70% AFUE <sup>2</sup> - \$250	No	
Electric Domestic Hot Water (DHW) <sup>2</sup> - \$500	No	
Gas Storage DHW EF ≥.67 and ≤.69 <sup>2</sup> - \$200	No	
Gas Storage DHW EF ≥.70 <sup>2</sup> - \$300	No	
Tankless DHW - EF ≥0.82 <sup>2</sup> - \$500	Yes	
Thermostatic Shut-Off Valve <sup>3</sup>	No	
Thermostatic Shut-Off Valve & Low-Flow <sup>3</sup>	No	



## CUSTOMER INFORMATION

The Customer Information section is designed to help keep track of the projects on which you are working. Save a copy of the Incentive Calculator for your internal project folder.

Customer Information	
Customer Last Name	
Customer Street Address	
Project Number	

## STEP 1: DESCRIBE EXISTING HOME CONDITIONS

Use the drop-down menu to select the appropriate conditions of the home:

- Climate Zone
  - To determine the appropriate Climate Zone, reference the List of Climate Zone Areas by ZIP Code:  
[http://www.energy.ca.gov/maps/renewable/building\\_climate\\_zones.html](http://www.energy.ca.gov/maps/renewable/building_climate_zones.html)
- Vintage
- Floor Construction
- Existing Central Air Conditioning Present?
- Heating
- Water Heating
- Number of Stories

Step 1: Describe Existing Home Conditions	Choose the appropriate characteristic below:
Climate Zone	
Vintage	
Floor Construction	
Existing Central Air Conditioning Present?	
Heating	
Water Heating	
Number of Stories	

**STEP 2: SELECT UPGRADE MEASURES INSTALLED**

Use the drop-down menu to select “Yes” for each measure that was installed. For measures with tiers (duct sealing, attic insulation, central furnace, gas storage water heater), do not select more than one tier for the same measure:

- Whole Building Air Sealing -  $\geq 30\%$  leakage reduction
- Insulate Ductwork to  $\geq R-8$
- Reduce Duct Leakage to  $\leq 10\%$
- Reduce Duct Leakage to  $\leq 5\%$
- Insulate Attic -  $\geq R-38$
- Insulate Attic -  $\geq R-44$
- Insulate Floor to  $\geq R-19$
- Wall Insulation to  $\geq R-13$
- Split/Packaged Central Air Conditioner -  $\geq 15$  SEER ( $\geq 80\%$  AFUE for Packaged Systems)
- Natural Gas Central Furnace -  $\geq 92\%$  AFUE
- Natural Gas Central Furnace -  $\geq 95\%$  AFUE
- Natural Gas Gravity Wall Furnace -  $\geq 70\%$  AFUE
- Electric Domestic Hot Water (DHW EF  $\geq 2.00$ )
- Gas Storage DHW EF  $\geq .67$  and  $\leq .69$
- Gas Storage DHW EF  $\geq .70$
- Tankless DHW - EF  $\geq 0.82$
- Thermostatic Shut-Off Valve
  - Optional add-on measure that does not count toward the three measure minimum requirement.
  - Thermostatic Shut-Off Valve should not be installed when a Tankless Water Heater is present.
- Thermostatic Shut-Off Valve & Low-Flow
  - Optional add-on measure that does not count toward the three measure minimum requirement.
  - Thermostatic Shut-Off Valve should not be installed when a Tankless Water Heater is present.
  - Low-Flow showerheads must have an efficiency of 1.5 gpm or less.

Step 2: Select Upgrade Measures Installed	Was the measure installed? Choose Yes/No
<b>Whole Building Air Sealing - <math>\geq 30\%</math> leakage reduction<sup>1,2</sup> - \$300</b>	No
<b>Insulate Ductwork to <math>\geq R-8</math> - \$250</b>	No
<b>Reduce Duct Leakage to <math>\leq 10\%</math><sup>1,2</sup> - \$200</b>	No
<b>Reduce Duct Leakage to <math>\leq 5\%</math><sup>1,2</sup> - \$350</b>	No
<b>Insulate Attic - <math>\geq R38</math><sup>1,2</sup> - \$400</b>	No
<b>Insulate Attic - <math>\geq R44</math><sup>1,2</sup> - \$500</b>	No
<b>Insulate Floor to <math>\geq R-19</math> - \$400</b>	No
<b>Wall Insulation to <math>\geq R-13</math> - \$400</b>	No
<b>Split/Packaged Central Air Conditioner <math>\geq 15</math> SEER</b> ( $\geq 80\%$ AFUE for Packaged Systems) - \$500	No
<b>Natural Gas Central Furnace - <math>\geq 92\%</math> AFUE<sup>2</sup> - \$350</b>	No
<b>Natural Gas Central Furnace - <math>\geq 95\%</math> AFUE<sup>2</sup> - \$400</b>	No
<b>Natural Gas Gravity Wall Furnace - <math>\geq 70\%</math> AFUE<sup>2</sup> - \$250</b>	No
<b>Electric Domestic Hot Water (DHW)<sup>2</sup> - \$500</b>	No
<b>Gas Storage DHW EF <math>\geq .67</math> and <math>\leq .69</math><sup>2</sup> - \$200</b>	No
<b>Gas Storage DHW EF <math>\geq .70</math><sup>2</sup> - \$300</b>	No
<b>Tankless DHW - EF <math>\geq 0.82</math><sup>2</sup> - \$500</b>	No
<b>Thermostatic Shut-Off Valve<sup>3</sup></b>	No
<b>Thermostatic Shut-Off Valve &amp; Low-Flow<sup>3</sup></b>	No

### STEP 3: VERIFY ESTIMATED ENERGY SAVINGS RESULTS

Based on the measures selected in Step 2, the estimated energy savings results will appear in Step 3.

Step 3: Verify Estimated Energy Savings Results		
	Savings	Percent Saved
Energy (kWh)	309.4	3.8%
Demand (kW)	0.690	25.7%
Energy (therms)	44.1	9.2%
	Overall	7.2%

#### Step 4: Estimate the Incentive

Input the final cost of the project.

Step 4: Estimate the Incentive	
Dollars	\$1,650.00
Meets three measure minimum?	Yes
Meets base measure minimum?	Yes
Meets at least 10% Energy Savings?	Yes
Meets 10% or \$1,200?	Yes
What is the final project cost?	\$10,000.00
Estimated Incentive (max \$3,000)	\$1,650.00

Based on the measures selected and the total project cost, the estimated incentive results will appear on Estimated Incentive.

Step 4: Estimate the Incentive	
Dollars	\$1,650.00
Meets three measure minimum?	Yes
Meets base measure minimum?	Yes
Meets at least 10% Energy Savings?	Yes
Meets 10% or \$1,200?	Yes
What is the final project cost?	\$10,000.00
Estimated Incentive (max \$3,000)	\$1,650.00

If the final invoice or deemed project cost is less than 50% of the estimated incentive amount, the incentive amount that will appear will be adjusted.

## SUPPORTING DOCUMENTATION

The following supporting documentation is REQUIRED for all Home Upgrade projects:

1. Signed Homeowner Energy Upgrade California Home Upgrade Terms and Conditions.
2. Accepted Participating Contractor Energy Upgrade California Home Upgrade Terms and Conditions.
3. Itemized invoice
  - a. All measures completed must be listed on the invoice and the cost per measure must be shown.
  - b. The invoice must include a “paid” statement or a zero balance. Financing agreements between the contractor and homeowner are acceptable, but a notation of this must appear on the invoice.
  - c. If the incentive is signed over to the contractor, the invoice must show a credit to the homeowner for the full amount of the Home Upgrade incentive.
  - d. Total project costs should not include costs not required for the project (e.g. 80 AFUE furnace, solar PV systems, new heating or cooling system that is not replacing like-for-like existing system). Costs required for the project are allowed (permit fees, testing costs, engineering, etc.). You can add a project cost subtotal on the invoice that excludes any non-related costs.

## ADDITIONAL REQUIRED SUPPORTING DOCUMENTATION

The following documents are required when a health and safety issue has been identified:

1. Asbestos abatement letter or certificates (when asbestos in the home has been removed or abated) from a licensed remediation company that describes the work done, project site, and date performed. A certificate from a licensed lab that shows no asbestos found in samples taken can also be used to show that there is no PACM.
2. Knob and Tube C-10 Survey (when knob and tube wiring exists in the home, it must be surveyed to determine if the wiring is energized). See Page 69 Frequently Asked Questions for further information on Knob and Tube C-10 Survey requirements.

The following chart lists the required supporting documentation per measure:

Measure	Supporting Documentation Required
Duct Sealing	<ul style="list-style-type: none"><li>• Test-out manometer photo at CFM25 or CF3R HERS certificate (if NOT part of a HERS sample group)</li></ul>
Whole Building Air Sealing	<ul style="list-style-type: none"><li>• Whole Building Air Sealing Calculator</li><li>• Test-In Manometer Photo at CFM50 (if default values are not used)</li><li>• Test-Out Manometer Photo at CFM50</li><li>• BPI Combustion Safety Form</li></ul>
Attic Insulation and Air Plane Sealing	<ul style="list-style-type: none"><li>• Test-Out Manometer Photo at CFM50</li><li>• BPI Combustion Safety Form</li></ul>
Furnace	<ul style="list-style-type: none"><li>• Proof of permit closure</li><li>• Ambient Test Form or BPI Combustion Safety Form</li></ul>
Air Conditioner	<ul style="list-style-type: none"><li>• Proof of permit closure</li><li>• AHRI Certificate (if SEER requirement is not met per the model number and specification sheet)</li></ul>
Wall Insulation	<ul style="list-style-type: none"><li>• Wall Insulation Certificate</li><li>• Test-Out Manometer Photo at CFM50</li><li>• BPI Combustion Safety Form</li></ul>
Gas Water Heater (Storage or Tankless)	<ul style="list-style-type: none"><li>• Ambient Test Form or BPI Combustion Safety Form</li></ul>

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**SUPPORTING DOCUMENTATION SAMPLES**

## HOMEOWNER ENERGY UPGRADE CALIFORNIA HOME UPGRADE TERMS AND CONDITIONS



## Energy Upgrade California® Home Upgrade Homeowner Terms and Conditions

### Terms and Conditions

I understand that the County of Los Angeles/Southern California Regional Energy Network ("SoCalREN") Energy Upgrade California® Home Upgrade incentive is available to homeowners on a first-come, first-served basis while funds are available or until discontinued by the California Public Utilities Commission (CPUC). This Program funding will end December 31, 2018 or earlier if all allocated funds are depleted before that date. Project Completion Forms and all supporting documentation must be submitted by midnight December 31, 2018. I understand that a completed Application and Project Completion Form, including a copy of an itemized paid invoice, must be submitted within 90 days of the incentive reservation date for my incentive to be guaranteed. Funds cannot be guaranteed after the 90-day reservation date has passed. Once the Application is approved for payment, an incentive check is generally mailed within four to eight weeks to the utility service account address or to the mailing address provided in the Application.

I am the property owner of a detached, single-family home in Los Angeles County and I am a customer of both Southern California Edison (SCE) and SoCalGas®. If I am not the property owner, I attest that I have obtained the property owner's permission to install the measures listed on this Application for which I am applying for an incentive.

I understand that the installation of the measures must (a) qualify for a SoCalREN Home Upgrade incentive, (b) be installed in a residential building which is not currently under construction and which is certified for occupancy and (c) be installed by a Home Upgrade Participating Contractor.

I understand the incentive will be reserved once the complete and accurate Application is submitted and approved by the Program Administrator. At that time, my Participating Contractor and I will be notified by email and the 90-day reservation will commence. The incentive reservation is valid for the approved scope of work only. I understand that if there is a change in qualifying upgrades, my Participating Contractor must reapply, and the original Application will be cancelled.

I am responsible for meeting all Program requirements and complying with my state/county/city government, property owner and/or homeowners' association requirements (if any) in my area regarding local conditions, restrictions, codes, ordinances, rules and regulations pertaining to all installations. I further understand that it is my sole responsibility to ensure all incentivized measures are installed in accordance with all manufacturers' specifications.

I understand that the choice of qualifying product(s), choice of manufacturer, merchant, dealer and/or Participating Contractor, and purchase, installation and ownership/maintenance of the qualifying product(s) referenced in this Application are my sole responsibility, and the manufacturer, dealer, supplier or Participating Contractor of these products is not an agent or representative of SoCalREN.

SoCalREN will not be liable for any type of damages, whether direct, indirect, incidental, consequential, exemplary, reliance, punitive or special damages, including damages for loss of use, regardless of the form of action, whether in contract, indemnity, warranty, strict liability or tort, including negligence of any kind. I waive any and all claims against SoCalREN, its special districts, its officials, officers and employees and will indemnify SoCalREN for any claims arising out of or relating to the installation and/or use of energy efficiency measures referred to in this Application.

If requested, I will permit SoCalREN and its agents reasonable admittance to my home to validate installation of the qualifying products, either before payment of an incentive and/or after payment of an incentive check. I acknowledge that an incentive will not be mailed if I decline to partake in any mandatory authentication. If an Application is selected for authentication, additional time may be necessary before an incentive check is mailed.

I understand that I cannot receive energy efficiency incentives for the same measures or for the replacement of the measure installed from more than one California investor-owned utility or other third-party programs



offering rebates, financing and other incentives funded with California Public Utilities Commission (CPUC) Public Goods Charge funds.

I understand incentives cannot exceed 50% of the combination of purchase price and installation cost.

I understand that I have the authority to assign my incentive to the Participating Contractor installing the measures in my residence. I understand that if I do assign my incentive to the Participating Contractor, it is my sole responsibility to ensure that all work performed by the

Participating Contractor is completed to my satisfaction. SoCalREN is not responsible for any taxes that may be imposed as a result of the receipt of this incentive.

I understand that the incentive amount provided by SoCalREN is NOT GUARANTEED and it may change based on a number of factors including, but not limited to, verification of the measures installed.

I understand that SoCalREN is not responsible for items lost, damaged or destroyed in the mail/transit.

### Agreement

☐ I certify that I am an SCE and SoCalGas Service Account Holder. I understand, acknowledge and agree to the Terms and Conditions listed above.

☐ Mailing address is the same as project address.

**Mailing Address** (if different than project address)

Address

City

State

ZIP

3											
---	--	--	--	--	--	--	--	--	--	--	--

**Southern California Edison Service Account Number** (10 digit number starting with the number 3, entered above for convenience)

--	--	--	--	--	--	--	--	--	--	--	--	--

**Southern California Gas Company Service Account Number** (11 digit number starting with 0 or 1)

SCE Service Account Holder Name (please print)

SCE Service Account Holder Signature

Date (M/D/Y)

Property Owner Name (please print)  
(If different than Service Account Holder)

Property Owner Signature

Date (M/D/Y)

### Assignment of Incentive Payment to Participating Contractor

Participating Contractor Name:

Participating Contractor Address:

City

State

ZIP

Participating Contractor Phone:

☐ I understand and agree that by signing this page, I am authorizing payment of my incentive to the third party named above, and that I will not be receiving the incentive check from SoCalREN. I also understand that my release of the payment to a third party does not exempt me from meeting the Terms and Conditions of the Program or the Program requirements outlined in the Application package. I authorize this payment release on condition that the third party is a Home Upgrade Participating Contractor and is the installer of the energy-efficient measures for which I am requesting an incentive. I further acknowledge that it is my sole responsibility to ensure that all work is completed to my satisfaction.

SCE Service Account Holder Name (please print)

SCE Service Account Holder Signature

Date (M/D/Y)

Energy Upgrade California® Home Upgrade provides assistance and incentives for home improvement projects that can reduce energy use and make homes more comfortable. This statewide program is managed locally by utilities and regional energy networks and directed by the California Public Utilities Commission in collaboration with the California Energy Commission. Funding comes from utility customers under the auspices of the California Public Utilities Commission. Incentives are offered on a first-come, first-served basis and are effective until the funding is expended or the program is discontinued. Terms and conditions apply. See program rules for details. Programs may be modified or terminated without prior notice. ©2018 Southern California Regional Energy Network. Trademarks are property of their respective owners. All rights reserved.

Southern California  
REGIONAL ENERGY NETWORK

# FINAL INVOICE

TO: [Homeowner Name]  
[Street Address]  
[City, ST ZIP Code]  
[Phone]  
[E-mail address]

QUANTITY	DESCRIPTION	UNIT PRICE	LINE TOTAL
X,000	Attic Insulation & Attic Plane Sealing • Loose Fill Cellulose to R-38	\$X.00 per ft. <sup>2</sup>	\$X,000.00
1	Whole Building Air Sealing • 30% Leakage Reduction	\$X,000.00	\$X,000.00
1	Gas Storage Water Heater • Manufacture Name • Model # • EF = 0.67	\$X,000.00	\$X,000.00
1	Carbon Monoxide Detector	\$X0.00	\$X0.00
1	Rebate and Incentive from Energy Upgrade California® Home Upgrade Offered by The County of Los Angeles/SoCalREN – paid to the Participating Contractor		-\$1,500.00
		Subtotal	\$X,000.00
		Sale Tax	\$X00.00
		Total	\$X,000.00

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## CF3R MCH-20 HERS CERTIFICATE

STATE OF CALIFORNIA

**DUCT LEAKAGE DIAGNOSTIC TEST**

CEC-CF3R-MCH-20-H (Revised 12/15)

CALIFORNIA ENERGY COMMISSION

**CERTIFICATE OF VERIFICATION**

CF3R-MCH-20-H

**Duct Leakage Diagnostic Test**

(Page 1 of 3)

Project Name:	Enforcement Agency:	Permit Number:
Dwelling Address:	City:	Zip Code:

**A. System Information**

01	Space Conditioning System Identification or Name	
02	Space Conditioning System Location or Area Served	
03	Building Type from CF1R	
04	Verified Low Leakage Ducts in Conditioned Space (VLLDCS) Credit from CF1R?	
05	Verified Low Leakage Air-handling Unit Credit from CF1R?	
06	Duct System Compliance Category	

**MCH-20a - Completely New Duct System****B. Duct Leakage Diagnostic Test**

01	Condenser Nominal Cooling Capacity (ton)	
02	Heating Capacity (kBtu/h)	
03	Conditioned Floor Area Served by this HVAC System (ft <sup>2</sup> )	
04	Duct Leakage Test Conditions	
05	Duct Leakage Test Method?	
06	Leakage Factor	
07	Air-Handling Unit Airflow (AHU Airflow) Determination Method	
08	Measured AHU Airflow (cfm)	
09	Calculated Target Allowable Duct Leakage Rate (cfm)	
10	Actual Duct Leakage Rate from Leakage Test Measurement (cfm)	
11	Compliance Statement:	
12	Notes:	

**C. Additional Requirements for Compliance**

01	System was tested in its normal operation condition. No temporary taping allowed.
02	Outside air (OA) duct connections to the central forced air duct system shall not be sealed/taped off during duct leakage testing. OA ducts used for Central Fan Integrated (CFI) Indoor Air Quality ventilation systems, or Central Fan Ventilation Cooling Systems, that utilize dampers that open only when OA is required and automatically close when OA is not required, may configure the OA damper to the closed position during duct leakage testing.
03	All supply and return register boots were sealed to the drywall.
04	Building cavities were not used as plenums or platform returns in lieu of ducts.
05	If cloth backed tape was used it was covered with Mastic and draw bands.
06	All connection points between the air handler and the supply and return plenums are completely sealed.
<b>Visual Inspection at Final Construction Stage (applicable if system was tested at rough-in)</b>	
After installing the interior finishing wall and verifying that the above rough-in tests was completed, the following procedure must be performed:	
07	For all supply and return registers, verify that the spaces between the register boot and the interior finishing wall are properly sealed.
08	If the house rough-in duct leakage test was conducted without an air handler installed, inspect the connection points between the air handler and the supply and return plenums to verify that the connection points are properly sealed.
09	Inspect all joints to ensure that no cloth backed rubber adhesive duct tape is used.
10	Verification Status:
11	Correction Notes:
The responsible person's signature on this compliance document affirms that all applicable requirements in this table have been met unless otherwise noted in the Verification Status and the Corrections Notes in this table.	

\*Please note that CF3R reports for a sample group that is not specifically for the project's address, or with results that are above 10% duct leakage, will not qualify as supporting documentation for a duct sealing measure.



## MANOMETER PHOTOS

BLOWER DOOR TEST MANOMETER



DUCT LEAKAGE TEST MANOMETER



## WHOLE BUILDING AIR SEALING CALCULATOR



## Homeowner Information

Name:

Address:

Project ID:

## STEP 1: Determine if Mechanical Ventilation is Required (per ASHRAE 62-89)

## 1a. Structure and Occupancy:

Year Built:

Number of Stories:

Average Ceiling Height:

Conditioned Floor Area:

Volume:

(auto-calculates)

Number of Bedrooms:

Number of Occupants:

## 1b. Building Air Leakage:

Pre-Retrofit CFM50 (enter tested CFM50 or use auto-calculated default) :

(default CFM50  
auto-calculates)

30% Reduction Target CFM50:

(auto-calculates)

Post-Retrofit Measured CFM50:

Building Leakage Reduction %

(auto-calculates)

Post-Retrofit ACHn

(auto-calculates)

Post-Retrofit BAS<sub>(building)</sub>

(auto-calculates)

Post-Retrofit BAS<sub>(occupant)</sub>

(auto-calculates)

Post-Retrofit BAS<sub>(CFM50)</sub>

(auto-calculates)

Post-Retrofit CFM50 as % of BAS<sub>(CFM50)</sub>

(auto-calculates)

Mechanical Ventilation is...

**STEP 2. Calculate Mechanical Ventilation Airflow Requirement (per BPI 1200 and ASHRAE 62.2-2016)****2a. Initial Ventilation Airflow Requirement:**

Conditioned Floor Area: (auto-calculates)

# of bedrooms: # of occupants: (auto-calculates)

**Initial Ventilation Airflow Requirement: (auto-calculates)****2b. Local (Existing) Mechanical Ventilation Adjustment:**

	Does room exist? (yes or no)	ASHRAE Required Airflow	Measured Airflow ("0" if not measured)	Operable Window? (yes or no)	Airflow Deficit
Kitchen	yes	100			(auto-calculates)
Full Bathroom #1:	yes	50			(auto-calculates)
Full Bathroom #2:		(auto-calculates)			(auto-calculates)
Full Bathroom #3:		(auto-calculates)			(auto-calculates)

\* Kitchens and full bathrooms only - bathrooms must have a shower or bathtub.

x .25

**Local Mechanical Ventilation Airflow Adjustment: 0****2c. Infiltration Credit:**

Test-Out Blower Door Reading (CFM50): 0

Story Factor: (auto-calculates)

Weather Station Factor (see WSF table below):

**Infiltration Credit: (auto-calculates)****2d. Final Whole-House CONTINUOUS Mechanical Ventilation Airflow Requirement:**

Initial Ventilation Requirement: (auto-calculates)

Local Mechanical Ventilation Adjustment: (auto-calculates)

Total Infiltration Credit: (auto-calculates)

**Whole-House Mechanical Ventilation Continuous Airflow Requirement: (auto-calculates)**

☒ By checking this box, I certify that whole house mechanical ventilation has been installed per the requirements shown above.

**2e. Whole-House INTERMITTENT Mechanical Ventilation Airflow Calculation:**

Intermittent whole-house mechanical ventilation requires increased airflow (greater cfm) depending on number of hours of operation per day.

The fan controller must be programmed to cycle ON at least 1 hour every 3 hours, and operate at least 8 hours per day.

Desired number of hours of whole-house mechanical ventilation per day:

**Whole-House Mechanical Ventilation Intermittent Airflow Requirement: (auto-calculates)**

## WALL INSULATION CERTIFICATE

Energy Upgrade California® Home Upgrade  
Wall Insulation Certificate

Please fill out the following to complete the certificate.

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

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

Customer/Project Name: \_\_\_\_\_

Project Address: \_\_\_\_\_

**Wall Insulation Information:**

Insulation Type: \_\_\_\_\_

Installed Depth (inches): \_\_\_\_\_

Installed R-Value: \_\_\_\_\_

☐ I hereby certify that the wall insulation was installed in compliance with Energy Upgrade California® Home Upgrade requirements and in accordance with Energy Efficiency Standards for Residential Buildings.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Printed Name

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WALL INSULATION CERTIFICATE

Updated 08/27/17



**ASBESTOS ABATEMENT LETTER****NOTICE OF COMPLETION**

AUGUST 18, 2017

**XYZ  
ABATEMENT  
LEAD-MOLD  
ASBESTOS**

ATTN:  
COMPANY:  
ADDRESS:

PHONE:  
FAX:

JOB#:

JOBSITE:

On 08/18/17 XYZ Abatement performed removal of asbestos containing material at the  
aforementioned site as specified on our Proposal/Contract, job #20408 date 08/11/17.

SCOPE OF WORK: REMOVAL AND DISPOSAL OF ASBESTOS CONTAINING ALL HVAC  
SUPPLY DUCTING THROUGHOUT AS ACCESSIBLE. SCRAPED, CLEANED AND  
ENCAPSULATED ALL BOOTS AND PLENUM BOX. ENCAPSULATION OF PLUMBING PIPE  
AND DHW TRANSITE PIPE.

All work was performed in accordance with Federal, State, and Local Regulations.

If you have any questions, or need any further assistance, please contact me.

Sincerely,

John Q. Sample

President  
XYZ Abatement

## KNOB AND TUBE C-10 SURVEY

<h2 style="margin: 0;">Notice of Survey by Electrical Contractor</h2>	
<p>This is verification that the existing knob-and-tube wiring was surveyed at this address:</p>	
<p>Number _____</p>	<p>Street _____</p>
<p>City _____</p>	<p>Zip _____</p>
<p>The existing wiring was found to be:</p>	
<div style="border: 1px solid black; padding: 10px;"> <p>(A) <input type="checkbox"/> In good condition with:</p> <div style="margin-left: 20px;"> <input type="checkbox"/> No evidence of deterioration  <input type="checkbox"/> No improper connections or splices  <input type="checkbox"/> No evidence of improper overcurrent protection         </div> <p style="text-align: center; margin: 10px 0;"><b>OR</b></p> <p><input type="checkbox"/> In poor condition and was brought up to acceptable standards by:</p> <div style="margin-left: 20px;"> <input type="checkbox"/> Installing tamperproof overcurrent protection with fuses  <input type="checkbox"/> Installing new service panel with breakers  <input type="checkbox"/> Other: _____         </div> <p style="margin-top: 10px;">Therefore the attic has been approved for the installation of ceiling insulation.</p> </div>	
<div style="border: 1px solid black; padding: 10px;"> <p>(B) <input type="checkbox"/> In poor condition and not suitable to be brought up to acceptable standards because of:</p> <div style="margin-left: 20px;"> <input type="checkbox"/> Evidence of deterioration  <input type="checkbox"/> Evidence of improper connection or splices  <input type="checkbox"/> Evidence of improper overcurrent protection  <input type="checkbox"/> Other: _____         </div> </div>	
<p><input type="checkbox"/> A copy of this certificate will be filed with the local code-enforcement authority if so required.</p> <p><input type="checkbox"/> Prior to installation of new overcurrent devices, their effect on usage habits was explained to the occupant(s) and permission to install them was obtained.</p>	
<p>_____</p> <p>Date</p>	<p>_____</p> <p>Contractor Signature</p>
<p>_____</p> <p>License Number</p>	<p>_____</p> <p>Company Name</p>
<p><b>NOTICE TO CUSTOMER:</b> This Electrical survey is required before your ceiling can be insulated by the Energy Upgrade California Home Upgrade Program.</p> <p>You are advised that if tamperproof overcurrent protection devices are installed to protect the wiring system, your electrical usage habits may require modification to avoid nuisance tripping of the fuses. Prior to installing overcurrent protection, the electrical contractor performing this survey is required to explain the difficulties you may experience after the devices are installed.</p> <p><b>I CERTIFY THAT I HAVE READ AND UNDERSTAND THIS NOTICE:</b></p>	
<p>_____</p> <p>Date</p>	<p>_____</p> <p>Customer Signature</p>

## HOME UPGRADE MEASURE GUIDANCE

The following sections review the requirements and details what is expected from the contractor for each measure. These are expectations of contractors participating in Home Upgrade; contractors must still comply with local codes and standards.

### WHOLE BUILDING AIR SEALING

Whole Building Air Sealing is accomplished by sealing gaps in the building envelope, including those that often occur around penetrations for windows, exterior doors, attic access doors, electrical outlets, plumbing, and light fixtures. A blower door test must be used to determine how much building leakage the contractor was able to reduce.

Technical Specification	Rebate Amount	Required Supporting Documentation	Required Test
≥ 30% leakage reduction from the defaults or test-in CFM50 result	\$300	<ul style="list-style-type: none"> <li>Whole Building Air Sealing Calculator</li> <li>Test-Out Manometer Photo at CFM50</li> <li>Test-In Manometer Photo at CFM50 if default values are not used</li> <li>BPI Combustion Safety Form</li> </ul>	<ul style="list-style-type: none"> <li>BPI Combustion Safety Test</li> <li>Blower Door</li> </ul>

### ATTIC INSULATION AND PLANE SEALING

To qualify for Attic Insulation and Plane Sealing, the contractor must seal and insulate 100% of the attic surface area over conditioned space in the home. If there are areas in the attic that are not accessible for sealing and insulating, the homeowner may still qualify. Contact your account manager or email [scr@icf.com](mailto:scr@icf.com) to request an exception.

The contractor must seal all the open cavities on the attic plane. There is no set leakage reduction target the contractor must meet. The contractor must ensure the following conditions are met:

1. Kitchen and bath fan vent(s) connected for outdoor vent termination
2. Barriers must be installed around or over any Heat Producing Devices (HPDs)

3. Knob-and-tube wiring, if present, must be surveyed by C-10 electrician and certified as safe to be covered/encapsulated with insulation and warning placards posted at entrances

Heat Producing Devices in the attic include but are not limited to the following:

- Recessed light fixtures
- Exposed fluorescent fixtures
- Doorbell transformers
- Fan motors
- Metal flues/vent pipes
- Masonry chimneys
- Gas and electric appliances (e.g. water heaters and furnaces)
- Abandoned vents
- Any other device that produces heat

Once all of the conditions above are met, the contractor can insulate all the accessible attic surface area to the desired level.

Technical Specification	Rebate Amount	Required Supporting Documentation	Required Test
Insulate $\geq$ R-38	\$400	<ul style="list-style-type: none"> <li>• BPI Combustion Safety Form</li> <li>• Test-Out Manometer Photo at CFM50</li> </ul>	<ul style="list-style-type: none"> <li>• BPI Combustion Safety Test</li> <li>• Blower Door</li> </ul>
Insulate $\geq$ R-44	\$500		

**DUCT SEALING**

To qualify for Duct Sealing, contractors must seal the existing ducts to reduce the duct leakage to 10% of the total system's airflow or replace the ducts and reduce duct leakage to 5% of the total system's airflow.

Technical Specification	Rebate Amount	Required Supporting Documentation	Required Test
Seal to $\leq$ 10%	\$200	<ul style="list-style-type: none"> <li>Test-out manometer photo at CFM25 or CF3R HERS certificate (if NOT part of a HERS sample group)</li> </ul>	<ul style="list-style-type: none"> <li>Duct Test</li> </ul>
Seal to $\leq$ 5%	\$350		

**DUCT INSULATION**

To qualify for Duct Insulation, the contractor must insulate 100% of all accessible ducts. If there are ducts that are not accessible, the homeowner may still qualify if at least 50% of all ducts are replaced. Contact your account manager or email [scr@icf.com](mailto:scr@icf.com) to request an exception.

Insulating the ducts is accomplished by duct wrap or duct replacement. Duct wrap requires contractors to wrap additional insulation onto the existing ducts. Duct replacement requires the contractor to remove the existing duct system and replace it with new R-8 ducts.

Buried ducts may qualify for duct insulation as long as the ducts are completely covered with attic insulation. If you would like to bury the ducts, contact your account manager or email [scr@icf.com](mailto:scr@icf.com) to request an exception.

Technical Specification	Rebate Amount	Required Supporting Documentation	Required Test
Insulate $\geq$ R-8	\$250	<ul style="list-style-type: none"> <li>Proof of R-8 insulation (duct invoice OR photo of duct label)</li> </ul>	

**CENTRAL AIR CONDITIONER**

Central Air Conditioner requires a contractor to replace the existing central air conditioner unit with a more efficient unit.

The homeowner will not qualify for this measure if:

- The home does not have an existing central air conditioner. Therefore, homes that have existing window air conditioners, wall air conditioners, heat pumps, or ductless mini splits will not qualify for this measure.
- Replacing the existing unit requires switching to a different fuel source (fuel-switching).

Contractor must submit a proof of permit closure for work involving central air conditioner, furnace, or any related HVAC fans. Proof of permit closure must come from the city's local building department. If the city does not provide proof of permit closure, SoCalREN has created a permit closure certificate that can be signed by the building inspector. This certificate should only be used if the city does not provide documentation of a closed permit.

Contractor may need to obtain and submit an AHRI Certificate if SEER requirement is not met per the model number and specification sheet. AHRI certificate must match installed condenser, indoor coil and furnace model numbers.

Technical Specification	Rebate Amount	Required Supporting Documentation	Required Test
≥ 15 SEER	\$500	<ul style="list-style-type: none"> <li>• Proof of permit closure</li> <li>• AHRI Certificate (if SEER requirement is not met per the model number and specification sheet)</li> </ul>	<ul style="list-style-type: none"> <li>• Duct Test</li> </ul>

**CENTRAL FURNACE**

Central Furnace requires a contractor to replace the existing central gas furnace unit with a more efficient unit.

The homeowner will not qualify for this measure if:

- The home does not have an existing central furnace. Homes that have an existing wall furnace will not qualify for the Central Furnace measure, but the home does qualify for the Wall Furnace measure.
- Replacing the existing unit requires switching to a different fuel source (fuel-switching).

Contractor must submit a proof of permit closure for work involving central air conditioner, furnace, or any related HVAC fans. Proof of permit closure must come from the city's local building department. If the city does not provide proof of permit closure, SoCalREN has created a permit closure certificate that can be signed by the building inspector. This certificate should only be used if the city does not provide documentation of a closed permit.

Technical Specification	Rebate Amount	Required Supporting Documentation	Required Test
≥ 92% AFUE	\$350	<ul style="list-style-type: none"> <li>• Proof of permit closure</li> <li>• Ambient Test Form or BPI Combustion Safety Form</li> </ul>	<ul style="list-style-type: none"> <li>• Appliance Ambient/Whole-House Gas Leak or BPI Combustion Safety Test</li> </ul>
≥ 95% AFUE	\$400		

**WALL FURNACE**

Wall Furnace requires a contractor to replace the existing natural gas, gravity wall furnace with a more efficient unit.

Technical Specification	Rebate Amount	Required Supporting Documentation	Required Test
≥ 70% AFUE	\$400	<ul style="list-style-type: none"> <li>• Proof of permit closure</li> <li>• Ambient Test Form or BPI Combustion Safety Form</li> </ul>	<ul style="list-style-type: none"> <li>• Appliance Ambient/Whole-House Gas Leak or BPI Combustion Safety Test</li> </ul>

**WALL INSULATION**

To qualify for Wall Insulation, the contractor must insulate 100% of the outside walls that touch conditioned space in the home. If this cannot be accomplished, the homeowner may still qualify. Contact your account manager or email [scr@icf.com](mailto:scr@icf.com) to request an exception.

Contractor must provide the Wall Insulation Certificate as supporting documentation to the program. The insulation certificate certifies that the contractor has insulated the walls to meet program requirements.

Technical Specification	Rebate Amount	Required Supporting Documentation	Required Test
Insulate ≥ R-13 for 2x4 frame	\$400	<ul style="list-style-type: none"> <li>• Wall Insulation Certificate</li> <li>• BPI Combustion Safety Form</li> <li>• Test-Out Manometer Photo at CFM50</li> </ul>	<ul style="list-style-type: none"> <li>• BPI Combustion Safety Test</li> <li>• Blower Door</li> </ul>
Insulate ≥ R-19 for 2x6 frame			



**FLOOR INSULATION**

To qualify for Floor Insulation, the contractor must insulate 100% of all accessible floor surface area under conditioned space in the home. If this cannot be accomplished, the homeowner may still qualify. Contact your account manager or email [scr@icf.com](mailto:scr@icf.com) to request an exception.

Technical Specification	Rebate Amount	Required Supporting Documentation	Required Test
Insulate $\geq$ R-19	\$400	<ul style="list-style-type: none"> <li>Insulation Certificate</li> </ul>	

**GAS STORAGE WATER HEATER**

Gas Storage Water Heater requires the contractor to replace the existing gas water heater with a more efficient unit.

The homeowner will not qualify for this measure if:

- The home does not have an existing gas water heater.
- The home currently uses a propane water heater or electric water heater (fuel-switching). If the home has an existing electric water heater, they will qualify for the Electric Storage Water Heater measure.

Technical Specification	Rebate Amount	Required Supporting Documentation	Required Test
EF $\geq$ 0.67	\$200	<ul style="list-style-type: none"> <li>Ambient Test Form or BPI Combustion Safety Form</li> </ul>	<ul style="list-style-type: none"> <li>Appliance Ambient/Whole-House Gas Leak or BPI Combustion Safety Test</li> </ul>
EF $\geq$ 0.70	\$300		

**GAS TANKLESS WATER HEATER**

Gas Tankless Water Heater requires the contractor to replace the existing gas water heater with an on-demand (tankless) gas water heater. TSVs should not be installed on showers served by tankless water heaters.

The homeowner will not qualify for this measure if:

- The home does not have an existing gas water heater.
- The home currently uses a propane water heater or electric water heater (fuel-switching). If the home has an existing electric water heater, they will qualify for the Electric (Storage) Water Heater measure.

Technical Specification	Rebate Amount	Required Supporting Documentation	Required Test
EF $\geq$ 0.82	\$500	<ul style="list-style-type: none"> <li>• Ambient Test Form or BPI Combustion Safety Form</li> </ul>	<ul style="list-style-type: none"> <li>• Appliance Ambient/Whole-House Gas Leak or BPI Combustion Safety Test</li> </ul>

**ELECTRIC WATER HEATER**

Electric Water Heater requires the contractor to replace the existing electric storage water heater with a more efficient unit.

The homeowner will not qualify for this measure if:

- The home does not have an existing electric water heater.
- The home currently uses a propane water heater or gas water heater (fuel-switching). If the home has an existing gas water heater, they will qualify for the Gas Water Heater measure.

Technical Specification	Rebate Amount	Required Supporting Documentation	Required Test
EF $\geq$ 2.00	\$500		

## COMBUSTION SAFETY TEST CHARTS

### UNDILUTED CO ACTION LEVELS

	If Appliance passes Spillage under WCD* or Natural Conditions	If Appliance FAILS Spillage under WCD or Natural Conditions
	<b>FAIL</b> (Remediation Required)	<b>FAIL</b> (Remediation Required)
<b>Natural Draft FAU</b>	Exceeds 275 ppm	Exceeds 25 ppm
<b>Induced Draft FAU</b>	N/A	N/A
<b>Sealed Combustion FAU</b>	N/A	N/A
<b>Floor Furnace</b>	Exceeds 275 ppm	Exceeds 25 ppm
<b>Gravity Furnace</b>	Exceeds 275 ppm	Exceeds 25 ppm
<b>Vented Room Heater</b>	Exceeds 125 ppm	Exceeds 25 ppm
<b>Wall Furnace</b>	Exceeds 125 ppm	Exceeds 25 ppm
<b>Direct Vent</b>	Exceeds 275 ppm	Exceeds 25 ppm
<b>Domestic Hot Water (Storage w/ Natural Draft)</b>	Exceeds 125 ppm	Exceeds 25 ppm
<b>Tankless Water Heater (Open Combustion)</b>	Exceeds 125 ppm	Exceeds 25 ppm
<b>Tankless Water Heater (Sealed Combustion Indoors)</b>	N/A	N/A

\*Worst Case Depressurization

**UNDILUTED CO ACTION LEVELS FOR ATTENDED APPLIANCES**

	<b>FAIL</b> (Remediation Required)
<b>Gas Log</b>	Exceeds 25 ppm
<b>Cooktop*</b>	Exceeds 25 ppm each burner
<b>Oven Vented Properly*</b>	Exceeds 225 ppm
<b>Oven Not Vented Properly*</b>	Exceeds 100 ppm
<b>Gas Dryer</b>	Exceeds 25 ppm

*\*If a unit is below the CO Action Level in the SoCalGas region and it fails draft and or spillage it will be recommended for correction and retested under Natural conditions.*

**APPLIANCE AMBIENT CO ACTION LEVELS**

<b>Natural Draft FAU at the Supply Register</b>	Exceeds 1 ppm above zone ambient CO = <b>FAIL (Remediation)</b>
<b>Induced Draft FAU at the Supply Register</b>	
<b>Sealed Combustion FAU at the Supply Register</b>	
<b>Floor Furnace</b>	Exceeds 2 ppm above zone ambient CO <b>(Recommend Service or Repair)</b>
<b>Gravity Furnace</b>	
<b>Vented Room Heater</b>	
<b>Wall Furnace</b>	
<b>Fireplace</b>	Exceeds 9 ppm above zone ambient CO <b>(Recommend Service or Repair)</b>
<b>Storage Water Heater (Natural Draft)</b>	
<b>Tankless Water Heater (Open Combustion)</b>	
<b>Gas Dryer</b>	

*\*If a unit is below the CO Action Level in the SoCalGas region and it fails draft and or spillage it will be recommended for correction and retested under Natural conditions.*

**SOCALGAS ZONE AMBIENT CO ACTION LEVELS**

<b>Zone/Room Ambient (other than kitchen)</b> <b>(Exceeds 35 ppm = FAIL (Remediation Required))</b>	<b>9 to 35 ppm:</b> a. Advise the occupants. b. Open windows and exterior doors to ventilate the dwelling. c. When CO appears to be created by gas appliance(s), advise the homeowner or their designated representative to have the appliance(s) serviced by a qualified professional.
	<b>36 – 69 ppm:</b> a. Advise the occupants. b. Open windows and exterior doors to ventilate the dwelling. c. Immediately shut down all possible sources of CO. d. When CO appears to be created by gas appliance(s), advise the homeowner or their

	designated representative to have the appliance(s) serviced by a qualified professional.
	<b>≥ 70 ppm:</b> a. Terminate the inspection immediately. b. Notify the occupants and evacuate the area. c. From outside the home, immediately contact a certified professional to address the hazard. d. Notify the homeowner or their designated representative, if not present at the jobsite.
<b>Kitchen Ambient**</b>	Exceeds 9 ppm = FAIL ( <b>Remediation</b> )

*\*\*The kitchen ambient CO test will be conducted at 6 ft. in the center of the kitchen with oven, broiler, and cooktop burners running individually. No other combustion appliances will be activated. The only exception to this is that a water heater pilot may be on, but main burner shall not be operating.*

## FREQUENTLY ASKED QUESTIONS

**Q: What is Home Upgrade, and who is eligible?**

A: Home Upgrade allows a participant and his/her Participating Contractor to choose a selection of qualifying retrofit measures that make the most sense for the home. Each measure is related to a reduction in electricity and/or gas use. Home Upgrade offers homeowners up to \$3,000 in rebates and incentives for completing qualifying energy efficiency improvements. Home Upgrade offered by SoCalREN is open to homeowners of single family detached homes in Los Angeles County built prior to 2002 and who are customers of both SCE and SoCalGas.

**Q: What is the difference between Home Upgrade and Advanced Home Upgrade?**

A: Home Upgrade offers up to \$3,000 in rebates and incentives to qualified homeowners. Home Upgrade uses a menu-based approach, making it easier to estimate the rebate at the beginning of the project.

The utilities' offering of Advanced Home Upgrade can provide up to \$5,500 or more in incentives and comes with some additional requirements and variability. There are assessment requirements at the beginning of the project, and incentives are determined outside of a simplified system after the project has been completed based on modeled energy efficiency savings.

We encourage homeowners who would appreciate easy rebate and incentive estimation and are planning to focus on a key set of energy measures to consider Home Upgrade. Homeowners who are interested in pursuing more extensive upgrades and a comprehensive assessment or live in a home built in 2002 or later should take advantage of Advanced Home Upgrade.

**Q: How much is the incentive?**

A: The Home Upgrade incentive amount depends on the qualifying energy efficiency upgrades you complete, up to \$3,000. For more information on the values of individual qualifying upgrade measures, please see Home Upgrade Measures.

**Q: Is Home Upgrade available to homeowners other than SCE and SoCalGas customers (e.g. LADWP, Pasadena Water & Power, and Long Beach Gas & Oil)?**

A: Yes. Home Upgrade is available to these homeowners; however the upgrade measures, technical requirements, rebates and incentive levels may be different. To learn about the other Home Upgrade offerings, please visit the [SCE](#) or [SoCalGas](#) Energy Upgrade California Home Upgrade page.

**Q: Is Home Upgrade available for condos, apartments and townhouses?**

A: No. Home Upgrade is only available to single family detached homes. Homeowners who live in a multi-unit (2-4 unit) home may be eligible for Advanced Home Upgrade.

**Q: Can I submit multiple Home Upgrade applications for one home?**

A: No. Home Upgrade, as offered by SoCalREN, no longer allows contractors to submit more than one Home Upgrade applications for one home within the same program year. An additional application with different or improved measures may be accepted beyond one year of the first application. Each application submitted must meet all the requirements of the Home Upgrade program. This includes selecting a minimum of three measures for each application. All homes that apply for multiple applications will be subject to a mandatory field inspection by the Home Upgrade QC Team.

**Q: Can I get more than one incentive for replacing multiple HVAC systems?**

A: No. Multiple HVAC systems will no longer be accepted within the same program year. Additionally, the systems must operate independently from each other. Each duct system must be completely separate and be connected to a different heating and cooling unit that is controlled by a separate thermostat. All homes that apply for multiple applications will be subject to a mandatory field inspection by the Home Upgrade QC Team.

**Q: Can I combine a Home Upgrade project with an Advanced Home Upgrade project?**

A: Projects can go through both Home Upgrade and Advanced Home Upgrade, but they cannot be done at the same time or use the same measures. The contractor can do a Home Upgrade job first, and once the Home Upgrade work is completed, you can choose to do Advanced Home Upgrade or vice versa. However, contractors cannot claim the measures or energy savings for the measures done in Home Upgrade or vice versa.

**Q: Who do I contact regarding additional questions about Home Upgrade?**

A: Please send your inquiry to [scr@icf.com](mailto:scr@icf.com) or call (877) 785-2237 and a program administrator will follow up with you.

**Q: What is involved in the QA/QC process?**

A: The QA process will involve a complete review of the Application Form submitted to ensure that the house and measures selected qualify for an incentive and that they have not been applied toward another incentive. Additionally, the Project Completion Form will be reviewed along with all required supporting documentation submitted. This will also ensure that the measures installed are in line with the requirements. We will conduct random QC field inspections to ensure that the test out results are accurate along with verifying that the measures have been installed to the specifications required.

**Q: Why do we need the homeowner's SCE and SoCalGas account numbers? Where can I find them?**

A: We need to verify that the SCE and SoCalGas account numbers are valid. The account numbers can be found on the homeowner's utility bills. All SoCalGas account numbers are 11 digits long and SCE **service** account numbers start with a "3" and are 10 digits long. The homeowner's utility bills are required with the submittal of the application.

**Q: Does the homeowner have to submit a W-9 form?**

A: No. Although previous programs have required a W-9, the rebates and incentives for Home Upgrade are not considered taxable income for homeowners. However, if a homeowner signs the incentive funding over to a Participating Contractor, that might be considered taxable income to the contractors. Therefore, the W-9 form must be submitted in order for the administrator to issue an incentive check to a Participating Contractor.

**Q: Why is there a 90-day reservation period for the incentive funds?**

A: This is in place to ensure that funds are available. The incentive funds may be issued after the 90-day period; however, funds cannot be guaranteed at that point. The contractor or homeowner may also request an extension by emailing [scr@icf.com](mailto:scr@icf.com).

**Q: What happens if the measures I install differ from those I selected initially on my application?**

A: You must inform a program administrator that the measures have changed so that the application can be modified. Program administrators will need to verify the new measures are eligible and that there are still funds remaining for the project. Late changes to the scope of work may also require an additional inspection. Change orders received after the project was inspected will need to be inspected again. Exceptions apply on a case-by-case basis depending on the change order received and may incur a fee for re-inspection.

**Q: How will I know if the Application and Project Completion Form have been approved?**

A: When you submit the initial application, you will receive an email stating that your application has been received and is under review. If your application is complete and accurate, you will be notified by email that your application has been approved and the funds have been reserved.

After the work is complete and you submit the Project Completion Form, you will receive an email stating that your Project Completion Form has been received and under review. If there is no missing information or required supporting documentation, you may receive an email saying that your application has been approved. If required information and documentation is not provided in a timely manner, the application may be declined.

**Q: When will I receive my incentive check?**

A: You will receive your check within 4 to 8 weeks of your Project Completion Form being approved for payment. The incentive check will mail via U.S. Postal Service to the designated payee on the Application, either the homeowner or contractor.

**Q: Can a completed project be denied an incentive check?**

A: Denial of an incentive to a completed project may occur if the post-retrofit conditions for the measures installed do not comply with the Home Upgrade Terms & Conditions which are signed by the utility service account holder and uploaded by the Participating Contractor during the Application process to confirm compliance with Home Upgrade. Measures may be determined outside compliance via an on-site inspection or by information contained within submitted documentation, including specification sheets, photos, test-in results, test-out results, and CAS/CAZ results. Incentives may also be denied if requests for information and remediation are not responded to in a timely manner. Projects will be deemed inactive if no response to a data/document request is responded to



within 7 business days. Projects that become Inactive will now be immediately closed out within one (1) business day of becoming Inactive and will be required to be resubmitted as a new project if the project is still viable. Declined or expired projects will need to be resubmitted to continue with the incentive application. Incentive funds will no longer be reserved for expired projects.

**Q: How does a contractor qualify to offer the Home Upgrade offering to clients?**

A: Only active Home Upgrade Participating Contractors may offer Home Upgrade to their customers. This includes active contractors with either the SCE/SoCalGas Home Upgrade credential or SoCalREN Home Upgrade credential. SoCalREN Home Upgrade Participating Contractors are required to maintain insurance certificates per program agreements (i.e. Contractor Participation Agreement) and are required to provide copies upon request.

**Q: I was an Energy Upgrade California Home Upgrade Participating Contractor, but am currently inactive. How do I become active?**

A: You can regain your active status with a SoCalREN Home Upgrade credential. To register to become a SoCalREN Home Upgrade Contractor, call (877) 785-2237 or email [scr@icf.com](mailto:scr@icf.com). An account manager will reach out to you and guide you through the steps in becoming a Participating Contractor.

**Q: What is a Knob-and-Tube Survey and why do I need to submit one for the Home Upgrade project?**

A: If knob-and-tube wiring is present in the home where insulation will be installed, a certificate verifying that the knob-and-tube system is safe to be covered/encapsulated must be submitted as part of the required project documentation. Additionally, a safety placard needs to be placed at all access points to the attic, crawlspace, or wherever knob-and-tube wiring is located indicating that concealed knob-and-tube wiring is present.

This is a requirement of the California Electrical Code. The purpose is to provide for the safety of the contractor, the homeowner, the QC inspector, and anyone who may enter the space containing knob-and-tube wiring. Not all contractors and their crews are qualified to determine if a knob-and-tube system is completely de-energized. Contractors spot-checking wiring in the attic is not sufficient. The verification process includes removing the service panel cover to view wire-to-breaker and wire-to-fuse connections. This verification should only be performed by qualified personnel (a C-10 electrical contractor).

If you are not a C-10 contractor, you will need to hire a C-10 contractor to verify whether the knob-and-tube system is energized or de-energized and the C-10 contractor will fill out the certificate that attests to this. If you are a C-10 contractor, you can complete the verification and certificate yourself.