



# **Efficiency Works Homes Retrofit Rebate Service Provider Guide**

Effective as of January 1, 2025

# Overview

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This service provider guide outlines the standards and expectations for service providers who want to participate in Platte River Power Authority's Efficiency Works Homes program.

We want service providers who are interested in continuing to grow the residential energy-efficiency market in northern Colorado and have demonstrated commitment to that goal.

A high level of cooperation and communication is expected of participating service providers, including workforce-development opportunities, trainings and leads generated through the Programs.

**Please note:** Efficiency Works also provides services for local businesses. Please visit [EfficiencyWorks.org/Business](https://EfficiencyWorks.org/Business) for more information on commercial programs.

# Contact information

## Program administrator/sponsor

### General program information

Efficiency Works

1-877-981-1888 (toll-free)

Website: [efficiencyworks.org](http://efficiencyworks.org)

Email: [Homes@EfficiencyWorks.org](mailto:Homes@EfficiencyWorks.org)

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## About the Efficiency Works rebate and retrofit program

The Efficiency Works Rebate and Retrofit Program (or the “Program”) is a joint utility program to support efficiency in Northern Colorado. Developed as a partnership between Platte River Power Authority and the utilities of its owner municipalities—Estes Park, Fort Collins, Longmont and Loveland—Efficiency Works unites all five utilities’ efficiency offerings under one Program.

The Efficiency Works Rebate and Retrofit Program has the following goals:

- Provide utility customers with a simple, timely and effective process for making home improvements that save energy and water and improve comfort, health and safety
- Maintain a high commitment to installation standards based on quality, best practices and building science
- Provide the customer with accurate, unbiased information to help them select energy- and water-improvement measures and choose service providers that will best meet their needs
- Provide utilities with cost-effective electricity savings
- Ensure that utility rebate funding is effectively utilized by confirming that service provider work meets Program standards
- Offer or inform the customer of financing options available from the utility or local financial institutions, in addition to rebates

Rebate and Retrofit program participants may receive a home efficiency assessment from an Efficiency Works advisor. The Efficiency Works advisor also provides assistance with:

- Understanding and prioritizing energy efficiency upgrades
- Facilitating service provider bidding
- Partnering with service providers to drive conversions for upgrades
- Promoting and discussing available rebates, financing and other incentives
- Assessments are required for Insulation and Air Sealing and Window/Sliding glass door measures. HVAC rebates are available to customers without an assessment.

## Service provider requirements

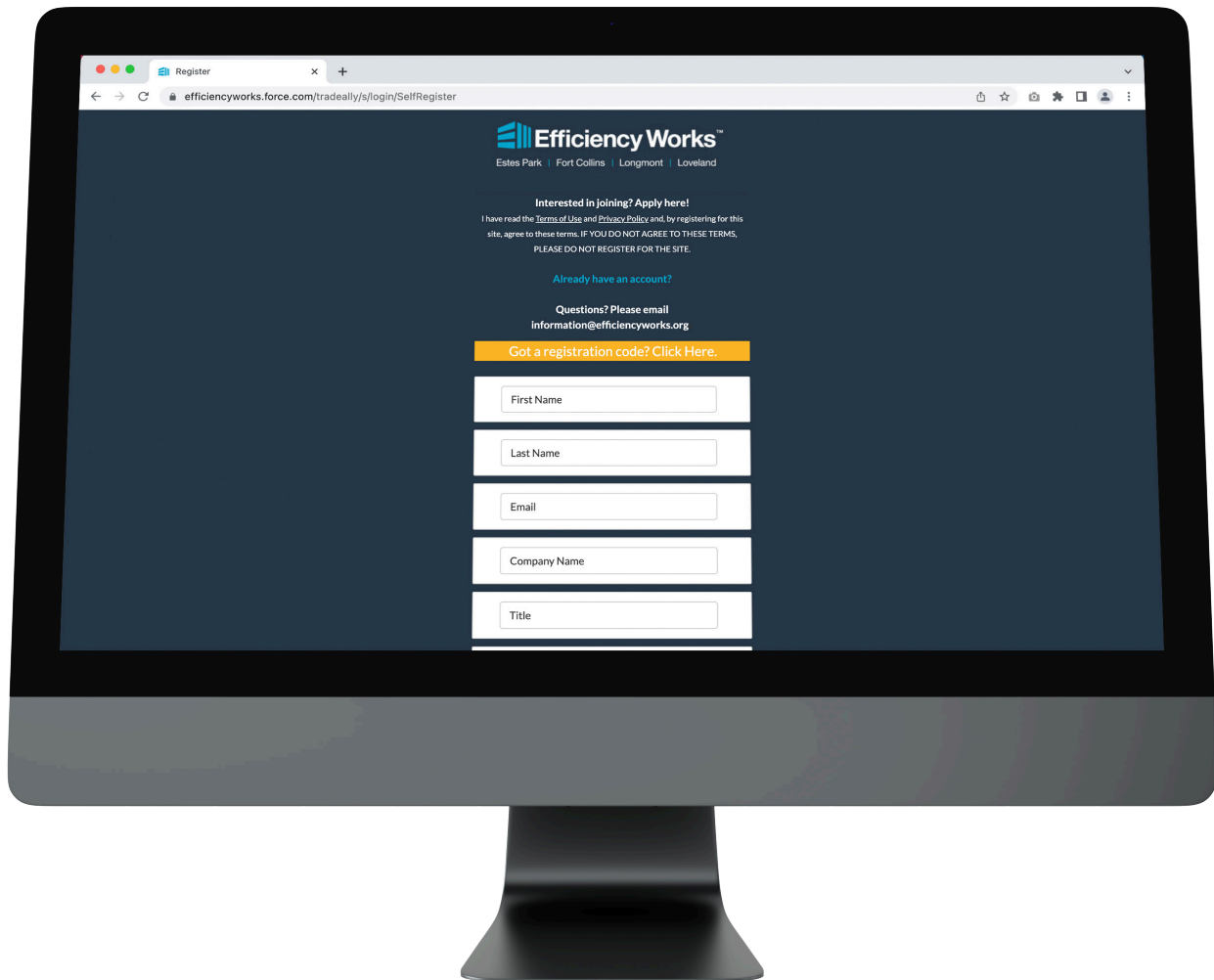
The following elements are required for all service providers. While only a few of these will be stored in the Trade Ally Connect (TAC) platform, all of these are to be maintained as we have the right to request them at any time:

- Service provider licenses (if applicable)
- Current W9 (required in TAC)
- EPA lead-safe certification (for window and insulation service providers)
- Proof of general liability insurance with Platte River Power Authority named (required in TAC)
- Certificate of good standing from Colorado Secretary of State
- Certificate of workman’s comp
- Signed service provider agreement (digital signature required in TAC)
- Program orientation & rebate processing training
- Trade-specific technical training
- Complete an MIV (Mentoring Improvement Verification) within the first five completed rebate applications

## Service provider application and agreement

The first step in the process of joining the Efficiency Works Rebate and Retrofit Program service provider pool is to set up a profile in our service provider portal (Trade Ally) using the following link:

[efficiencyworks.force.com/tradeally/s/login/SelfRegister](https://efficiencyworks.force.com/tradeally/s/login/SelfRegister)



By entering in the required information, you receive a customized landing page that displays your company's website, contact info, services provided, territories covered, etc. The portal will also present you with our service provider agreement for you to sign.

Once you have completed your profile setup, the system will contact our team to let us know that you are wanting to join the Program. At this point, we will reach out to you to discuss your next steps of orientation and technical training.

## Service provider onboarding process

- All contractors entering the service provider pool must watch our Orientation/Rebate Application training videos found in the online portal under the Resources tab.
- All service providers must have appropriate team members attend an Efficiency Works Rebate and Retrofit Program technical training with the Program manager or technical consultant.
- Until both requirements are met the new service provider will not be **Approved - Listed**.

## Minimum training requirement

- All service providers are required to attend at least one training annually.
- This can include any Efficiency Works technical training, MIV or a staff/program overview with the program staff.
- Efficiency Works delists service providers who have not met the minimum training requirement annually on March 1st.

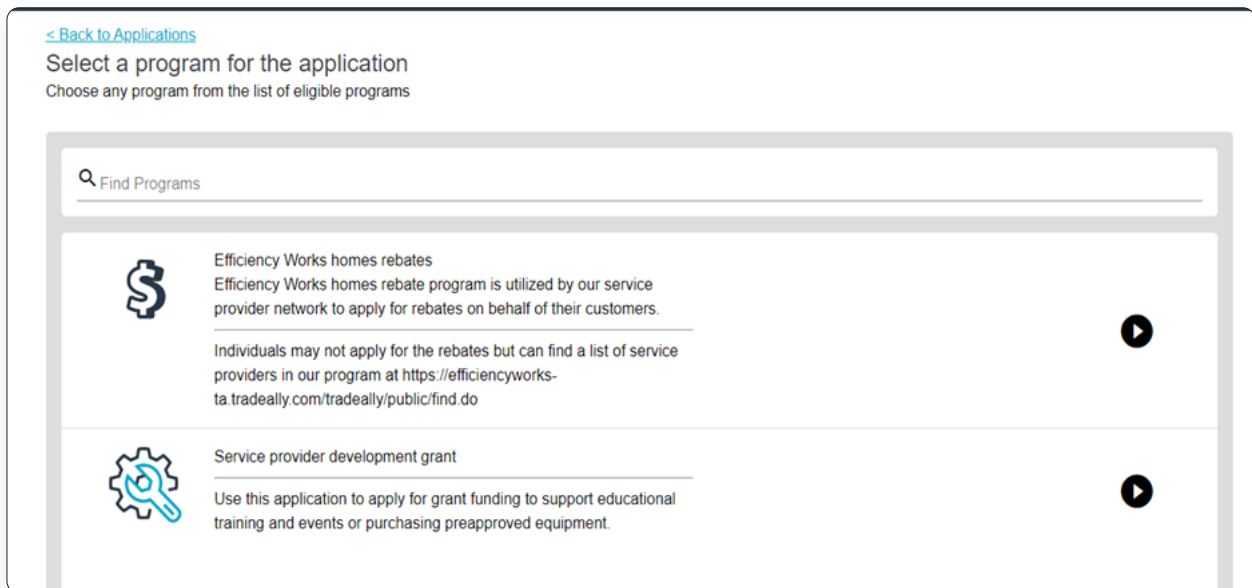
## Minimum work requirement

- All service providers are required to complete at least one job within the first twelve months of joining the program and a minimum of one job annually thereafter.
- Twelve jobs annually is required to achieve Premium status on the Service Provider finder tool.
- Efficiency Works delists service providers who have not met the minimum work requirement annually on March 1st.



## Service provider development grant

Please be reminded that our Service Provider Development Grant application is now accessible through your portal. Applying for the grant will be visible when applying for a rebate, as depicted in the attached screenshot.



### It is important to note the following guidelines:

Preapproval is mandatory for all applications, including equipment purchases. Applications must be submitted **BEFORE** attending training sessions.

Once preapproved, final applications for training and equipment purchases must be submitted within 45 days of the purchase or training date.

Eligible items for the grant include custom training, approved EW Training (of multiple types), and various equipment such as a precision manometer, blower door with precision manometer, combustion analyzer, personal low-level CO alarm, and TEC flow plate with precision manometer. Additionally, MeasureQuick approved tools is also eligible for funding.

The total funds available may be subject to limitations based on the remaining total of grant funds, or rebates may be capped by available funds, 50% of training/equipment, or a total of \$2,000, whichever is less.

## Service provider status

Within the Efficiency Works Rebate and Retrofit Program, service providers may change statuses depending on their performance and minimum work requirements.

The service provider statuses are defined here:

### **Approved – Onboarding**

- Company has successfully signed the Efficiency Works agreement.
- Company has provided required insurance documentation.
- Company has basic access to online portal but not applications.

### **Approved - Listed:**

- Company has successfully signed the Efficiency Works agreement.
- Company has provided required insurance documentation.
- Appropriate company staff has completed required technical training and orientation.
- Company is now listed on the Efficiency Works website.
- Company staff now has full access in portal allowing submittal of rebate applications.

### **Approved - Delisted:**

- Service provider does not have updated required paperwork. Ex. Certificate of Insurance (COI)
- Company has basic access to online portal but not applications.

### **Delisted - Unapproved:**

- Was removed from the Program through an official letter. The possible reasons for removal include not meeting the minimum work requirement, not meeting technical standards, not meeting professional expectations, or the service provider requesting to be removed.

## Performance tiers

All new service providers are started on the Standard Tier

### **Standard tier:**

- Service provider maintains “Approved” status
- Company name will appear below premium listed service providers on the website.
- Rebates can be processed
- Meets minimum work requirement

### **Premium tier:**

- Service provider maintains “Approved” status
- Rebates can be processed
- Meets premium work requirement of twelve jobs annually
  - Window service providers get an exception to the Minimum Work Requirement. They are only required to complete 9 jobs/year to maintain Premium Tier status.
- The company’s name will be listed higher on the website compared to service providers classified under the Standard Tier.

## Report cards

Service providers receive a monthly report card that reflects relevant data regarding the jobs they have completed since they joined the Program, quality-control inspections and rebate-application statuses, among other metrics. The content of the reports will be year to date for the current year with the exception of service provider score.

## Service provider score

The service provider score will provide feedback to the Program on service provider strengths and weaknesses and who is providing the best services. The scoring system is a reflection of the quality of work and customer-service satisfaction scores.

All service providers in the Program will maintain a running service-provider score. This scoring system evaluates service providers based on:

- Inspection results reported by the technical team
- Feedback received from homeowners and advisors
- Responsiveness to various requests (bids, scheduling visits, invoices and other forms, etc.)
- The quality of required forms (commissioning sheets, photo docs, etc.)

**All new service providers will begin with a score of 100 points** that will be tracked in our system and reported to them at the end of each quarter in their report card.

Under this system, service providers have the ability to improve their overall quality. If the work requires corrective action, we can provide them with training and guidance to comply with the Program standards. Service providers will be required to maintain a minimum service provider score of 70 to remain in good standing in the Program. The score does not impact tier status but will be used as part of the customer-facing facets of the Program—such as the website—to allow companies to differentiate themselves.

## Ways to earn or lose points

### Insulation and air sealing example:

The quality-control agent completes an inspection and finds three items that are not up to Program standards:

- No attic card (-1)
- Knee-wall insulation not fully encapsulated (-2)
- Attic insulation not up to the level specified in the invoice/on the attic card (-2)

This example would result in the service provider losing 5 points overall.

### Example:

The quality-control agent completes an inspection and finds two items that are not up to Program standards.

- No insulation attic card (-1)
- Knee-wall insulation not fully encapsulated (-2)
- Customer provides positive feedback about the service provider (+5)

This would result in the service provider gaining 2 points overall.

Any change in service provider score will be automatically emailed to the company contact.

Maximum allowable score is 130 points.

## Falling under the minimum score

When a service provider's score gets below 70 points, the participation status will be changed to Active - Delisted. This means that the company will be taken off the website, and no leads will be sent through the Program. However, service providers in this position may process rebates for any existing jobs in-progress.

In order to bring back a Delisted/Unapproved service provider to the Approved - Listed status, an improvement plan is facilitated by the Program manager or technical consultant in collaboration with the impacted company. This plan will have to be completed within 60 days of being issued. Refer to **Appendix L** to see the template for an example of the improvement plan. This appendix is a template that may be customized according to what the specific service provider will need to return to Approved - Listed status. Service providers in the Approved - Delisted status due to falling under minimum score are not subject to the minimum work requirement.

In some cases, the improvement plan may include quality-control inspections that must result in no correction notices in addition to photo documentation of completed work.

Failure to complete the improvement plan with the Efficiency Works Rebate and Retrofit Program will result in removal from the Program and the participation status will be changed to Delisted/Unapproved.

## Suspension from the program (one-year minimum)

Service providers who fail to maintain either Premium Tier Status or Standard Tier Status will be removed from the pool. Any remaining jobs under contract with the suspended/terminated company shall be completed by the service provider under the supervision of Program management. If a suspended/terminated service provider wants to re-enter the Program, they would need to provide evidence that the previous problems have been corrected and develop a Program-approved improvement plan (**Appendix L**).

The Efficiency Works Rebate and Retrofit Program mentors and trains service providers to promote high-quality work and an excellent customer experience. To protect the reputation of the Program, suspension can occur based on any occurrences of service providers not meeting the criteria outlined in this Participant Guide and in the Participation Agreement. Examples include, but are not limited to, the following:

- Repeated failure to meet Program standards
- One or more field-inspection failures in especially egregious circumstances or if a serious health/safety issue is created
- Repeated customer complaints related to customer service and professionalism
- Failure to address homeowner complaints
- Failure to respond in a timely manner to requests for information from homeowners and Efficiency Works Program personnel (two business days)
  - Each service provider shall designate a primary contact for Platte River Power Authority to reach regarding homeowner complaints, quality-control results, and time-sensitive Program information.
- Repeated failure to submit paperwork within the time frames outlined in this guide
- An egregious interaction with a customer or Program staff

## Service provider certification and quality-control process

Efficiency Works requires that all service providers complete required Program trainings and mentoring sessions. An overview of Program mentoring requirements is attached in **Appendix G**.

Efficiency Works performs Mentoring Improvement Verifications (MIVs) and Post-Improvement Verification (PIVs) inspections on a sampling of all work performed where a rebate application has been submitted. Service providers are expected to perform work to municipal-building code and the Efficiency Works Rebate and Retrofit Program installation standards. Each service provider will have a minimum of one MIV session to assess the company's command of the Program's Installation Standards when joining the program. When corrections are identified, a corrections notice will be sent to the company contact. The service provider has five business days (or at the homeowner's convenience) to remedy any issues that were identified. All corrections shall be recorded with the appropriate photo documentation that should be submitted to the quality-control agent.

## Program installation standards

Service providers who wish to participate in the Efficiency Works Rebate and Retrofit Program are expected to complete all upgrades using the Program standards outlined in this guide. The Program standards are attached in **Appendix A: Installation Standards**.

In addition, all work must be completed to meet all OSHA safety standards, all applicable building codes and manufacturer installation standards. It is the provider's responsibility to know which version of the International Energy Conservation Code applies to the home they are working on. All required permits for work completed in the Program must be pulled prior to the work being completed.

Where Program standards require combustion-safety testing, such tests should be performed in compliance with the process outlined in **Appendix B: Combustion safety testing process**.

## Combustion safety testing

All trades are required to provide combustion safety testing documentation (**Appendix F**) for all jobs in the Program. See **Appendix B** for more details. Exception: Window jobs are required to present **Appendix F - Windows Post-improvement carbon monoxide and ventilation disclosure**.

### Appendix F – Windows Post-improvement carbon monoxide and ventilation disclosure

Program standards require the commissioning of all HVAC units, ductless mini splits, and split system heat pumps. Commissioning forms must accompany all rebate applications. Please reference the electronically fillable forms below:

- **Appendix E - Heat pumps commissioning form**
- **Appendix E2 - Ductless mini split CX form**

The **Post-improvement carbon monoxide and ventilation disclosure** can be found in **Appendix F**. This disclosure is **required for every job** in the Program regardless of whether a combustion test was required.

## Program documentation requirements

In order to be eligible for rebates, all trades in the Program have their own quality-control documentation process. That process is outlined below:

- HVAC service providers must take photo documentation and fill out commissioning forms for heat pumps, ductless mini splits.
- Window service providers must take photo documentation of their installs and provide window specifications.
- Insulation and air-sealing service providers must take photo documentation of each measure before and after.

## Applying for rebates

Service providers in the Efficiency Works Homes program applies for all customer rebates using our online portal Trade Ally Connect (TAC). There are **two steps** to complete the rebate application.

1. Have the customer sign the appropriate documents found in the online portal Resource page which includes the following documents:
  - a. Terms and Conditions:** This is our legal document that must be signed for the customer to receive any rebates. This must be signed by the owner or person having authority to sign.
  - b. Appendix F – Efficiency Works Rebate and Retrofit Program post-improvement carbon monoxide and ventilation disclosure:** This is required for certain measures as it clearly identifies any possible dangers that might exist from any combustion appliances such as their hot-water heater with regards to carbon monoxide.
- 2 The next step involves logging into your Service Provider portal. Once in your portal, click on the dollar sign symbol on the right side of the screen which will take you to the rebates that are already in the system under your company as well as let you start a new rebate application.

There are two options for how service provider can apply for our rebates.

**Submit for final review and payment** = Work is completed and is ready for review for payment

**Preapproval\*** = Work has not begun, and you are applying to get a Rebate Reservation ensuring that the funding will be available once work has been completed.

*\*Rebates \$2,500 and over as well as available bonuses and special offerings may require preapproval.*



## Rebate training videos

We have created online training videos for all of our trades regarding how to apply for rebates at the following links:

### HVAC rebate example

<https://vimeo.com/896341728>

### Windows rebate example

<https://vimeo.com/581865419>

### Insulation and air sealing rebate example

<https://vimeo.com/581863921>

### Contractor takes rebate example

<https://vimeo.com/581861301>

### AC in cold weather rebate example

<https://vimeo.com/581861590>

### Landlord gets check rebate example

<https://vimeo.com/581866603>

### Rebate folder explained

<https://vimeo.com/585118447>

## HVAC specialty videos

How to Use the Flow Plate

How to Measure Static Pressure

<https://vimeo.com/album/5061174>

**Password:** HVACROCKS1

In addition to the online training videos you should also take advantage of **Appendix K**, as it was created to show screenshots of the rebate application process.

## Appendix K – Rebate application procedure

**Appendix C - Rebate checklist** – provide a documentation summary for qualifying rebate.

## Applying for Heat Pumps rebates during cold weather - HVAC service providers

If you install a heat pump in cold weather and would like to wait for warmer weather to commission the system, we have a process for that.

Choose “Yes” for the question: “Does the system need to be commissioned at a later date?” in the heat pump measure screen before submitting your application. This tells our team that the heat pump was installed and that you will be following up with the commissioning process/form as soon as the weather turns warm again. This sets the application status to “Waiting on Commissioning” and also sends a notification to the customer and service provider saying that we have the application and are waiting on the service provider to return to commission in warmer weather. After you commission the unit, go back into the application and attach **Appendix E** and then submit. Cold weather commissioning for heat pumps is now available using the Appendix E commissioning form.

### Rebate application time frame

Submit your rebate paperwork after the work is finished. **We have a 45-day grace period after the work is done before we expect to see your rebate application.** This 45 day timer begins based on the date the Certificate of Completion was signed. However, if you wanted to be proactive and help make sure your customer gets their rebate quickly you are encouraged to submit this information immediately after the work is completed. If the rebate application is more than 45 days past the work completion date, a deduction will be applied to the service provider's contractor score.

Once rebates are received, they are processed in a two week timeline. If there are any issues with your application, it will be sent back to you with a message explaining how to correct the application. Once a rebate has been approved, an email stating that fact along with how much money has been rewarded will be sent to the customer and the service provider for a paper trail. This process will keep the customer informed as to what is happening with their rebate funds.

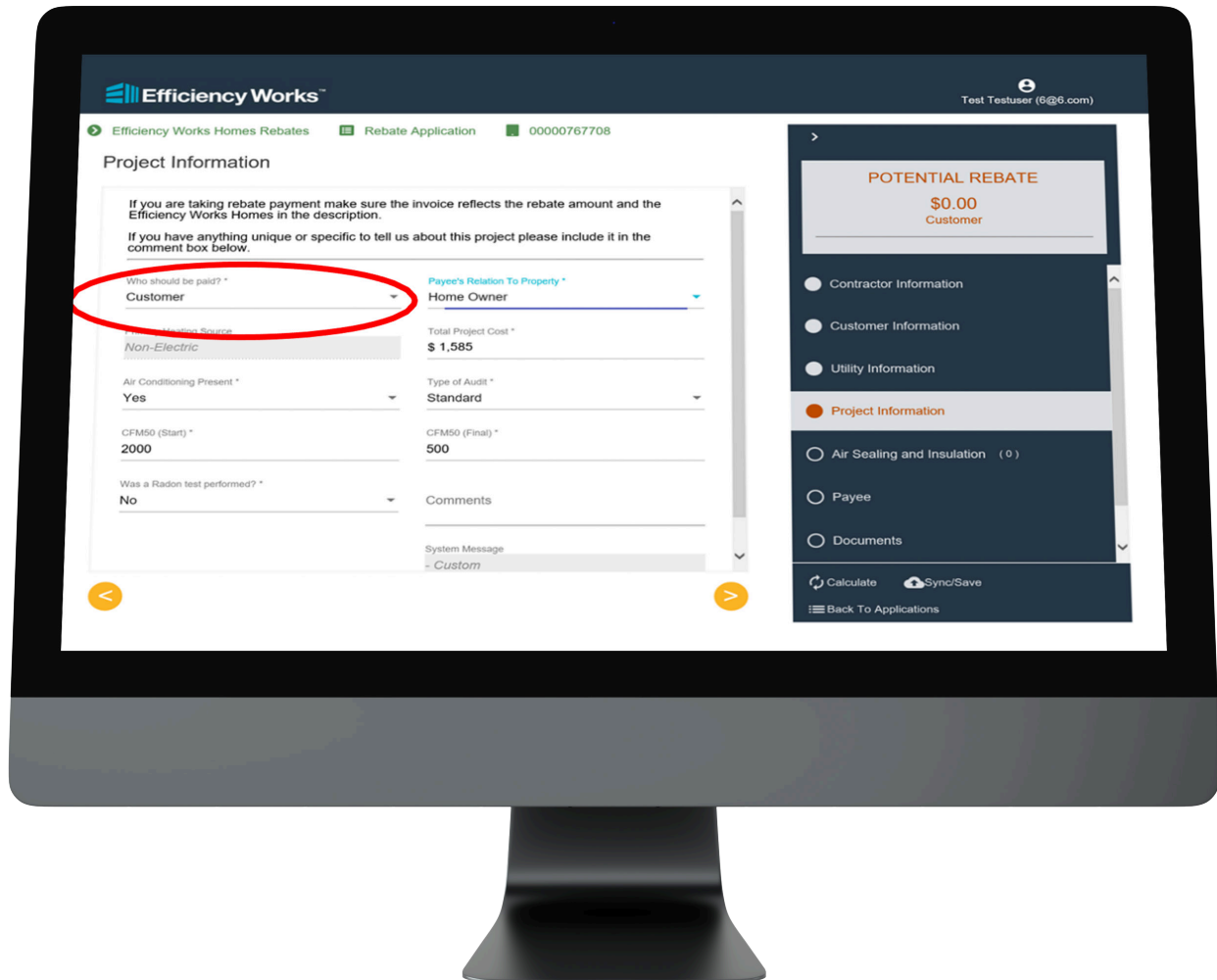
## Opportunity to use rebate to discount projects up-front

Efficiency Works Rebate and Retrofit Program provides service providers with the option to present customers with an up-front discount by allowing them to accept the Efficiency Works rebate as payment.

### Example:

**Before:** *"The project will cost \$5,000 out of pocket, and you can apply and wait for a \$500 rebate."*

**After:** *"The project will cost \$5,000, but rather than make you wait on the \$500 rebate, we are going to discount your out-of-pocket cost down to \$4,500, and we will wait on the rebate and accept it as payment."*



There is an option in the **Project Information** section of the online rebate application that allows you to select who gets paid. By selecting service provider, you are stating, “I wish to accept the rebates as partial payment for the completed work, and I have provided the customer with a discount equal to the total rebate amount on the final invoice.” **If you wish to take the rebate, include it as a line item on the invoice as a Discount for the Efficiency Works Rebate and Retrofit Program rebate. See Appendix K to learn how to do this process.**

## Service provider referral process and response time requirements

The most common method that efficiency advisors use to communicate a request for service provider bidding will be email referrals containing the customer’s contact information and information about the home.

When an advisor provides an email customer referral to a service provider, the following timeline will be strictly enforced:

- Service provider must contact the customer to schedule an estimate meeting within two business days (48 hours) of receiving the customer referral email.
- Following an on-site estimate meeting, providers must provide a written estimate to the customer **within five business days of the visit to the customer's house**
- **Decision not to bid after visit:** If a provider visits a home for an estimate meeting and determines that they do not wish to bid the project, the provider must notify the advisor within one business day (**24 hours**) of the visit to the customer's house

Some customers prefer to contact service provider companies directly without their Efficiency Works advisor sending a referral. When a homeowner informs their Energy Advisor of their decision to contact service providers directly, the Efficiency Works advisor will ask the homeowner to notify companies that they are in the Efficiency Works Program. However, the Efficiency Works advisor cannot guarantee that homeowners will follow through. To ensure that rebate Program requirements are met for all Efficiency Works projects, ***it is the responsibility of the service provider to determine whether the customer is participating in the Efficiency Works Rebate and Retrofit Program.***

## Invoices and rebates

Any time a service provider sells a job that qualifies for rebates it should be clearly stated on the invoice. This includes using the Efficiency Works program name, the measure name, and total rebate amount.

## Professionalism guidelines and contact with customers

High standards of professionalism are necessary to maintain your good reputation in the community, and we encourage you to strive for the best in customer service. Efficiency Works Rebate and Retrofit Program and its partner utilities rely heavily upon positive word of mouth for marketing. Our goal is to ensure that clients are completely satisfied with their experience, including their interactions with participating service providers. It is expected that service providers will handle all interactions with Efficiency Works clients with the utmost respect and professionalism. Efficiency Works Rebate and Retrofit Program reserves the right to remove a service provider from the participating service provider pool based upon repeated customer complaints related to customer service or professionalism.

The Program has established the following general guidelines for service providers:

- Respect the customer's time and be prompt for all appointments. If you expect to be more than a few minutes late, call the customer ***before the appointment time*** and let them know that you're running late and when you expect to be there.
- Follow through on your commitments to customers, including providing estimates in a timely manner.
- Educate all company customer service representatives to provide accurate information to customers about Efficiency Works. The person answering the phone needs to know about the Program for which you are providing service.
- Respect the customer's home and follow all rules of the house (i.e. taking off shoes, not parking in the driveway).
- If you make a mess of any kind, clean it up before leaving the job site.

## Streamlined overview

Streamlined projects were integrated into the Efficiency Works Rebate and Retrofit Program in 2017. It is the result of a pilot Program in 2016 whose goal was to help customers complete more comprehensive Insulation and Air Sealing jobs while providing them turnkey service. Service providers must meet additional eligibility requirements that go beyond the basic eligibility requirements of the Efficiency Works Rebate and Retrofit Program. There are also additional installation standards that go beyond the basic Program standards. A Efficiency Works advisor is responsible for the energy assessment and the sales consult with standardized pricing on most insulation and air-sealing measures. **Refer to Appendix M and N in this guide for more details of this optional pathway.** Streamlined projects only address Insulation and Air Sealing measures.

### Requirements for service providers participating in Streamlined projects

A service provider must meet the following requirements to be eligible for the Streamlined option.

- Successfully complete a minimum of 5 jobs in the program.
  - 1 of these jobs must have a MIV.
  - 2 of these jobs must have a PIV along with any needed corrections completed.
- Service provider must have no egregious PIV failures
- Service provider must be able to provide its own combustion safety testing and/or blower door testing

### Unique Streamlined standards

- Vacuuming of attics
- Spray foaming (closed cell) of external top plates (with blocking)
- Installing bath fans – ability to test performance once installed
- Removing drywall – repairing drywall – subs allowed
- Painting - subs allowed
- Installing moisture/soil gas barrier to radon industry standards – including perforated pipe under poly
- Designated Quality Assurance Officer on the team

### Next steps to participate

If you have reviewed the program structure and requirements and are interested in participating: Contact the Program Manager to start the process: [homes@efficiencyworks.org](mailto:homes@efficiencyworks.org)

### 1. Nature of streamlined projects

Efficiency Works has developed standardized prices for completing some of the individual measures required to create packages of home efficiency projects based on a home's characteristics and the wishes and needs of individual homeowners ("Package"). Each measure will have standardized pricing per square foot (or applicable unit of measure) that can be relied upon in representing costs for all projects, ("Unit Price"). The Unit Price shall include all:

- Costs
- Labor
- Benefits
- Materials
- Equipment
- Transportation
- Storage
- Overhead
- Applicable federal, state, and local taxes
- Other expenses and profit margins associated with performing that home-improvement component

### 2. Streamlined projects workflow

The Efficiency Works advisor will be responsible for initiating all Streamlined Projects. The Efficiency Works advisor will also assign individual Streamlined Projects to SSPs based on their qualifications to meet the specific goals of individual Streamlined customers and their spot in the rotation. If the customer specifically requests a certain energy-efficiency service provider that is participating in the Program, it is at the discretion of Platte River Power Authority and the Program manager whether to meet that request. Within two business days of receiving such assignment from the Efficiency Works advisor, the SSP shall notify the Efficiency Works advisor of its decision to accept or opt out of the specific project. Failure to respond to the Efficiency Works advisor within two business days shall be deemed a rejection of that project. If SSP opts out of a Streamlined Project either directly or a failure to respond to the bid request, the Efficiency Works advisor shall assign the project to another streamlined service provider. The SSP understands and agrees that specific Streamlined Projects will be undertaken at the request of interested residential homeowners and that Platte River Power Authority will use its best efforts to match individual streamlined service providers to suitable Streamlined Projects. Platte River is not obligated to assign any projects to every SSP.

### 3. Customer contracts

Upon accepting a Streamlined Project assigned by the Efficiency Works advisor, SSP shall provide an official "Customer Proposal" to the Efficiency Works advisor. This proposal shall include, at a minimum, the description and scope of the home-efficiency project, the unit prices at the agreed-upon rate in Appendix N, the line-item price of each measure, and the total package price for all measures for such project with a line-item package discount equal to the calculated sum of all energy-efficiency rebates for all qualifying measures in the Package, as well as SSP's standard terms and conditions.

### 4. Streamlined pricing

Service providers who are accepted into Streamlined projects will be provided with a complete version of Appendix N that includes the latest pricing.

## 5. Streamlined projects installation standards

In performing streamlined projects, SSP shall comply with the Efficiency Works streamlined project installation standards and pricing contained within and attached hereto as **Appendix N** and incorporated herein by reference (“Efficiency Works Homes-SP Standards”). When no EW- SP Standard applies to a specific measure, streamlined projects shall be completed in accordance with the Efficiency Works Rebate and Retrofit Program installation standards described in the Service Provider Guide attached to and incorporated in the agreement. The EW-SP Standards are subject to review and revision by Platte River, who shall seek feedback and comment on existing Efficiency Works Homes standards and potential revisions to the same from SSP. Any deviation from the applicable standards shall be clearly documented by SSP through photographs and a detailed description. Platte River has the authority to approve any deviations.

## 6. Certificate of completion, invoice, and billing

Upon completion of a streamlined project, SSP shall provide the customer with a Certificate of Completion. SSP shall obtain the customer’s signature on the Certificate of Completion acknowledging the work has been performed as described. Once the Certificate of Completion is signed by the customer, you shall provide a final invoice to the customer. The customer shall remain solely responsible for payment of all amounts due to the SSP who agrees not to seek payment from Platte River Power Authority, its member municipalities, and the Program administrator for all unpaid customer contracts.

Notwithstanding the foregoing, Platte River Power Authority agrees to coordinate with the SSP on a case-by-case basis in order to arrive at an agreed-upon resolution for any substantial oversights or unanticipated conditions related to energy-efficiency measures and not reflected in the SSP work order created by the Efficiency Works advisor.

## Home performance service providers

The Efficiency Works Rebate and Retrofit program allows assessments to be offered by service providers who have the required tools and have met our training requirements. Service providers who meet this designation will be referred to as Home Performance (HP) service providers.

### Home Performance Service Provider Eligibility:

- Must be actively participating in the program and in good standing
- Must attend training for assessment orientation and template evaluation
- Technician conducting assessment must be BPI or RESNET certified
- Must acquire all customers via internal marketing as the program will not send assessment leads to HP service providers

### Assessment Expectations:

- SNUGGPro is required for the assessment
- If not using Efficiency Works assessment template - you must attach our rebate summary document to the customer report, so they are aware of the offerings
- Customer must sign Efficiency Works Assessment Terms and Conditions
- The assessment must be fair to the customer and the program, meaning that whatever is wrong with the home is the focus of the assessment, not the specific specialty of the service provider
- Optional: Home Energy Score (HES) is desired in Fort Collins

### Quality Control:

- Efficiency Works Quality Control staff will shadow the first job to make sure the expected process is in place
- First five assessments will get 100% paper review prior to providing the report to the customer.

### Home Performance Assessment Rebate Table

Measure	Customer	EW	Xcel
Assessment (Gas)	\$60	\$140	\$200
Assessment (Electric)	\$60	\$340	\$0
HES	\$0	\$75	\$0

To inquire about becoming a HP service provider - contact [Homes@efficiencyworks.org](mailto:Homes@efficiencyworks.org).



## Assessment handoff for home performance service providers

When you meet a customer who wants to do rebate eligible work in the Insulation and Air Sealing trade, you always have to check on their eligibility.

- Do they buy electricity from one of these entities?: Fort Collins, Loveland, Longmont, Estes Park
- Is the home more than 365 days old?
- Have you had an Efficiency Works assessment before?

If you meet a customer who meets the eligibility list above but does not have the assessment, use the following protocol to hand them over to the program.

Send an email with the customer's address and last name to both emails listed below:

- [efficiencyworks@arusconsulting.com](mailto:efficiencyworks@arusconsulting.com)
- [Homes@efficiencyworks.org](mailto:Homes@efficiencyworks.org)

*“Greetings Efficiency Works Energy Advisors,*

*I am sending you a customer last name, [Last Name], who resides at:*

*[Street Address]*

*[City, CO Zip]*

*We are in discussions about doing rebate eligible insulation and air sealing work and are sending them over to you to get that required energy assessment scheduled. Please let us know when the customer's assessment report is complete so that we can schedule their upgrades.*

*Let us know if you have any questions.*

*Sincerely,”*

This protocol will prevent the customer from automatically being handed over to our “Streamline Service Providers” where they would see standardized pricing.

However, if the customer during their conversation with their Efficiency Works Energy Advisor decides they want to see “Streamlined “ pricing and be introduced to a Streamlined Service Provider, we would be obligated to do that as the customer drives the process. The streamlined offering including standardized pricing will not be offered to the customer unless the customer requests to see it. Platte River Power Authority in no way guarantees that the customer will continue to complete the air sealing and insulation work with the contractor who originally handed them over for an assessment.

## Health and safety

The Efficiency Works Rebate and Retrofit Program works on existing homes across Northern Colorado. Due to the age of the homes participating, we occasionally run into health and safety concerns. According to Platte River Power Authority service provider Participation Agreement, “The service provider agrees to meet OSHA and department of labor requirements regarding personal protective equipment and safe work practices.” This means that it’s up to you to do safe work, and it is expected. Please read through these scenarios as many of them impact the eligibility of rebates.

The following sections address the Program’s stance on different health-and-safety concerns. Some of this language is in our assessment report, and some of it is in signed paperwork with the customers.

### Asbestos

“The presence of suspected non-rigid asbestos in the home disqualifies the home for all rebates, blower door tests, duct pressurization tests or any activity that will introduce asbestos particles into the living space. Non-rigid asbestos materials that can be a source of airborne asbestos if material can be disturbed by movement or air currents. Examples of non-rigid asbestos include, but are not limited to, vermiculite, boiler and pipe insulation, ceiling coatings, etc. Blower door tests shall not be conducted if asbestos is present or suspected. Vermiculite used as loose fill insulation should be presumed to contain asbestos.

To move forward after possible asbestos is identified:

- The customer must either produce qualified lab test results showing that the home does not have asbestos

or

- A qualified remediation service provider must remediate the asbestos to meet industry standards and provide proof that the work is complete.

or

- If the planned work will not disturb the area with possible asbestos, then the work can move forward. This approach follows the Federal Weatherization Program’s model.

### Mold

“According to the EPA, any mold area less than 10 square feet is considered the lowest level of contamination and can be handled by the customer. When you get over this amount, expert service providers are recommended.

<https://www.epa.gov/mold/mold-cleanup-your-home> <https://www.epa.gov/mold/mold-course-chapter-6>

When a mold-like substance is found to be present in an area of the home and it exceeds an area greater than 10 square feet, the blower door test shall NOT be done. Air sealing and insulation work may not be installed until one of the following conditions have been met:

1. A certified mold abatement professional has remediated the mold and has attested to its remediation in writing.
2. A certified mold abatement professional has determined that the substance is not mold and does not need to be remediated and has attested to this determination in writing.

3. If the area of suspected mold-like substance is less than 10 square feet, the homeowner should be informed and directed to consult the EPA's "A Brief Guide to Mold, Moisture, and Your Home."

**Consider radon testing**

Radon typically occurs near mountainous regions, and Colorado has one of the highest radon danger designations in the United States.

**Test for lead**

Your home may also contain lead paint. Lead was used in paint until the late 1970s. Test for lead before insulating, air sealing, or renovating. If lead is found, your service provider may have additional requirements to perform your work.

**Knob and tube wiring**

Due to its age (pre-1950), your home may have knob-and-tube wiring. This is a potential fire hazard due to its age, improper modifications, and insulation covering the wires. In addition, knob and tube has no ground wire and cannot service three-pronged appliances (which violates modern electrical codes). If the wiring has never been upgraded, it will need to be replaced.

**To move forward after knob and tube wiring is identified:**

- Work with a licensed electrician to verify that it is not energized before air sealing or insulating.
- Once a licensed electrician has signed off (on their business letterhead) that the knob and tube is no longer energized, the work may proceed.

**Chemical sensitivity**

"Disclaimer: This assessment/report does not offer medical advice or establish if a home is "safe to occupy." If you have any health condition that represents a compromised immune system, chemical sensitivities, or any similar issue, you should seek expert medical advice about the impacts of altering your home and what products should be used.

## Appendix A: Installation standards

Effective 1/1/2025

### General notes

- An Efficiency Works Energy Assessment required as prerequisite for all jobs (Exceptions: Windows can be installed pre-assessment & HVAC jobs do not require an assessment).
- To participate in the Efficiency Works Rebate and Retrofit Program (EWR), service providers must apply for inclusion, and pass the applicable training requirements.
- Do-It-Yourself installation will not qualify for incentives.
- The information in this matrix is subject to change. Platte River Power Authority (PRPA) will provide thirty (30) days' notice of any changes in installation standards.
- All efficiency measures must be installed per the manufacturer's installation instructions, industry standards, and all applicable federal, state, and local codes and regulations.
- Where possible, all insulation measures must meet the R-value requirements prescribed by the IECC version adopted in each Authority Having Jurisdiction (AHJ).
- Refer to the program website to see the latest incentive summary: [efficiencyworks.org/homes/rebates](https://efficiencyworks.org/homes/rebates)
- Homes participating in the Efficiency Works Program are evaluated for tightness and whole house controlled mechanical ventilation rates using ASHRAE 62.2-2013. The initial tightness is reported in the Assessment Report and the Homeowner is provided a post-improvement disclosure acknowledging the potential need for controlled mechanical ventilation.
- Where any building envelope improvement measures (attic insulation, frame wall insulation, window replacement, etc.) are undertaken, the corresponding building component(s) must be durably air sealed.
- Where required, combustion safety testing must be performed the day of the completion of improvements.
- An Efficiency Works assessment is required to be completed prior to the rebate application for all building envelope measures.

## Air sealing

### Existing conditions

- Initial blower door test: ACH50 = 3.0 or greater.

### Installation standards

#### Attic to living space air sealing:

1. In order to qualify for rebates, efforts must be taken to air seal significant leaks and bypasses that allow connection between the outside and living space. Areas to air seal may include bypasses around chimneys, drop soffits, shower inserts or other large penetrations; interior and exterior wall top plates; and plumbing and wiring penetrations.
2. Use approved high temp sealant around heat sources like B-vents, fireplaces and chimneys, and make sure they maintain the required clearance to combustibles.

#### Minimum shell leakage (CFM50) reduction of:

- 15% reduction to qualify for Tier 1 rebate
- 25% reduction to qualify for Tier 2 rebate
- 33% reduction to qualify for Tier 3 rebate
- 50% reduction to qualify for Tier 4 rebate
- **If the Combustion Safety Test fails under Worst Case Conditions**, the service provider is required to counsel the Homeowner about possible solutions.
- **If the Combustion Safety Tests fail under Natural Conditions**, the service provider is required to counsel the Homeowner on possible solutions and refer them to the list of participating HVAC service providers for further diagnostics and solutions. **No rebates will be approved for houses that have CAZ failures under Natural Conditions until those failures are remedied.**

### Post-installation tests

- Combustion Safety Test required record results on Appendix F.
- Blower door test required prior to air sealing and after insulating in order to measure house tightness improvement.

### Field Manual Notes

- Need to fully educate customer on front end so they understand about house as a system, ventilation and combustion safety.
- Options to mitigate a **failed Combustion Safety Test** may include:
  1. Replace natural draft gas burning appliances with sealed combustion or electric equipment.
  2. Seal return air ducts and filter slot in CAZ.
  3. Re-line the old common B- vent.
  4. Add combustion air ducts.
  5. Obtain further diagnostics and solutions from an EW-H Participating HVAC service provider.
- Service provider to educate homeowner about these options.

## Conditioned crawl space insulation

### Existing conditions

- Service provider must inspect for proper grading, downspout leaders, moisture evidence on foundation walls, cracks in the foundation, and damp ground. **All moisture problems must be mitigated.**
- If any evidence of moisture intrusion having occurred at any time is present, (efflorescence on the foundation wall, cracked soil, mold, staining) the crawl space must be treated as having moisture present.
- Un-insulated or poorly installed insulation.
- If framed floor above is insulated with anything except closed cell foam, a vapor barrier which is attached to the cold side of the framed floor assembly is not allowed.

### Installation standards

- All three elements (rim joist, foundation wall, and moisture/soil gas barrier) of a conditioned crawl space must be completed in order to qualify for a rebate. If any one of the elements already exists, it must meet EWR Installation Standards AND the other elements must be completed to EWR Installation Standards for a conditioned crawl space rebate.
- **Moisture/ soil gas barrier installation requirements:**
  1. Barrier must meet ASTM specs listed in Field Manual Notes Notes.
  2. Remove all debris and major ground surface irregularities.
  3. Cross laminated polyethylene barrier is required; the barrier must be sealed and mechanically fastened at least 12" up crawl space foundation wall or, in cases involving moisture, to the foundation plate (urethane caulk meets sealing and mechanical fastening requirements) [**Permthane Preferred**]. Seams must be overlapped 6" minimum and be sealed w/ approved tape or sealant.
  4. **If the foundation or soil in the crawl space is damp or shows evidence of moisture intrusion, the soil gas barrier must be extended up to and be sealed to the foundation plate to keep moisture out of wall insulation.** Provision must then be made for moisture under the barrier or in the foundation wall to be removed so covered areas can dry to the outside.
    - **Field stone foundation wall will need to be air sealed. (See Field Manual Notes Notes)**
    - **Insulate and air seal rim joists and foundation plate to R-value prescribed by the IECC as adopted by the Authority Having Jurisdiction (AHJ):**
      1. XPS foam board cut to fit, foamed-in place.
      2. Closed or open cell 2-part spray foam.
    - Foam insulation does not require thermal barrier on rim joist (per IRC), **but does require an ignition barrier** as outlined in 2012 IRC Section R316.5.4.
- **Insulate interior of foundation walls to R-value prescribed by the IECC as adopted by the AHJ:**
  1. **Perforated vinyl faced fiberglass blanket**
    - **Vinyl faced insulation blanket is NOT allowed if foundation or ground shows evidence of past or present moisture-** Unless the moisture barrier extends up to and is sealed to the foundation plate.
    - Insulation blanket must be full height and be in substantial contact with the foundation wall along its entire width and not be pulled out by the footing.

## Appendix A: Installation standards

- Seal vinyl facing to top of wall and soil barrier so conditioned inside air cannot reach foundation wall and condense.

### 2. Foam board: Polyisocyanurate, XPS or EPS

- **Ignition barrier required**, unless listed and approved for use without a thermal or ignition barrier in this application by the ICC ES (see Field Manual Notes notes).

### 3. Two-part closed or open cell spray foam

- **Ignition barrier required**, unless listed and approved for use without a thermal or ignition barrier in this application by the ICC ES (see Field Manual Notes notes).
- **Open cell spray foam is only allowed** on the interior of foundation walls if there is **no indication of moisture**, unless the soil moisture barrier extends to the foundation plate with mechanical ventilation underneath.

## Post-installation tests

- Combustion Safety Test required. Record results on Appendix F.
- Blower door test required prior to air sealing and after insulating in order to measure house tightness improvement.

## Field Manual Notes

- **Moisture/ soil gas barrier specifications:**
  1. Cross laminated poly sheeting used as a moisture and soil gas barrier in crawl spaces must be performance tested to ASTM E-1745 and installed per ASTM E-1643 with a minimum of Class C rated. It must resist deterioration from contact with the soil and maintain a perm of 0.3 or less (per ASTM E-154 section 13). The moisture and soil gas barrier must have a minimum strength of 13.6 lbs./in (ASTM E-154 section 9) and puncture resistance of 475 grams (ASTM D-1709 method B).
  2. Field stone and brick foundation details: moisture barrier must run up to foundation plate and be fastened and caulked; or apply closed cell spray foam with an ignition barrier covering all fieldstone or brick foundation walls.
- **Crawl spaces that contain atmospherically vented combustion appliances must have adequate volume for combustion air and/ or provide outside combustion air per 2012 International Residential Code (IRC) Section G2407.**
- No spot ventilation exhaust vents may terminate in the crawl space.
- No insulation needed on wall between crawl space and basement.
- All foam must meet ASTM E-84 Class 1 standards for Flame Spread and Smoke Development.
- **Ignition barriers may be required over spray foam or foam board installed on the inside of crawl space foundation walls depending on product specifications:**
  1. Ignition barriers include intumescent coatings listed for this use, 1½" mineral fiber (includes fiberglass), and other materials listed in the 2012 IRC, Section 316.5.4.
  2. Spray foam insulation that has been approved by the ICC ES for use in these locations without the addition of an ignition barrier can be used. The ICC ES Report for such material must be provided to the Program Manager for reference prior to the issuance of rebates.
- Rim joist and sill plate in a crawlspace can have up to 3.25" of spray foam applied without a **thermal** barrier being required (2012 IRC Section R316.5.11). An ignition barrier may still be required in this location depending on product specifications.

## Basement wall insulation

### Existing conditions

- No existing insulation.
- Exterior grade must drain away from foundation or be mitigated as part of the job scope.
- Foundation cracks shall be completely sealed.
- **If evidence of moisture exists, it must be or have been mitigated prior to insulating.**

### Installation standards

- Insulate interior of basement walls to the R-value prescribed by the IECC as adopted by the AHJ.
  1. Exterior foundation wall: XPS foam board
    1. Exterior foam board insulation must be closed cell and extend down 48" below grade or to top of footer - whichever is less. Insulation must be protected above grade w/ non-organic exterior finish. Provide flashing from under existing exterior finish, over top of foam exterior finish, flashed from under finish on walls.
  2. Interior Foundation Wall Insulation:
    1. Old brick or field stone foundations **must have closed cell spray foam** installed over entire interior foundation wall and rim joist.
    2. 1" XPS, EPS or Polyisocyanurate foam board + R-13 Batt
      - R-13 un-faced batt is installed in the finished frame wall so foundation can dry to the inside. (See Field Manual Notes).
    3. Interior foundation wall insulation: XPS or EPS foam board or spray foam.
      - Basement walls with foam insulation must be finished with drywall or equivalent thermal barrier, except where material is listed and approved for use in this application by the ICC ES.
      - Open cell spray foam is approved only if there is no indication of moisture on the foundation walls
    4. Perforated vinyl faced fiberglass blanket:
      - Vinyl faced insulation blanket is NOT allowed if foundation shows evidence of past or present moisture.
      - Insulation blanket must be full height and be in substantial contact with the foundation wall along its entire width and not be pulled out by the footing.
      - Seal vinyl facing to top of wall and soil barrier so conditioned inside air cannot reach foundation wall and condense.
- Insulate and air-seal rim joist and foundation plate to R-value prescribed by the IECC as adopted by the AHJ:
  1. XPS or Polyisocyanurate foam board cut to fit, foamed-in place.
  2. Closed or open cell 2-part spray foam
  3. Foam insulation does not require **thermal** barrier on rim joist (per IRC), but may require an **ignition** barrier as outlined in 2012 IRC Section R316.5.4 depending on product specifications.



## Appendix A: Installation standards

### Post-installation tests

- Combustion Safety Test required. Record results on Appendix F.
- Blower door test required prior to air sealing and after insulating in order to measure house tightness improvement.

### Field Manual Notes

- Cracks causing moisture intrusion into basement shall be sealed as part of the job scope.

## Cantilever floor insulation

### Existing conditions

- No restriction on existing condition of exterior cantilevers or cantilevers into garage.

### Installation standards

- Exterior finish material must be removed if water pipes are located below the top 1/2 of the floor joist cavity.
- Inside end of joist space must be blocked and air sealed (see Field Manual Notes for options).
- If interior blocking is not in place, and there is adequate room, remove soffits to block and air seal.
- If soffits cannot be removed to block and air seal interior, other methods of interior blocking can be used.
- Floor cavities used as a return air duct must have the header block or pan sealed prior to insulation installation. **Make sure insulation does not enter return air floor cavity.**
- Disconnected ducts must be repaired prior to insulation installation.
- Final condition: intact, sealed air barrier, inside and outside.
- Final condition: joist cavities dense packed with blown insulation.
- If water pipes are in the bottom half of the joist cavity in the cantilevered floor area, they must be protected from freezing by installing net under the bottom of pipes so that insulation is only blown on the cold side of the pipe.
- Seal around any supply boots where they meet the subfloor to prevent insulation from blowing into the house.
- **Service providers must provide photo documentation of the following details:**
  1. Netting of pipes in floor cavities.
  2. Blocking of inside end of joist space.
  3. Return air duct sealing to prevent insulation from entering forced air system.
  4. Air sealing around any supply boots at the subfloor.

### Post-installation tests

- Combustion Safety Test required. Record results on Appendix F.
- Blower door test required prior to air sealing and after insulating in order to measure house tightness improvement. Record results on Appendix F.

## Appendix A: Installation standards

### Field Manual Notes

- Other kinds of end blocking that will create the 6th side of insulation cavity:
  - Change in direction of floor joists
  - Rim joist on other side of a narrow room adjacent to cantilever
  - House with insulation in interior floors (for sound)
  - Install an onion bag in each floor cavity that is filled with insulation to act as a block
- Do not dense pack near panned or leaky return system without air sealing ducts.
- The phrase dense-pack refers to a specific process where the insulation is blown into the cavity and then dense-packed. We do not rebate a cantilever that has simply been filled with insulation. It must be dense-packed to 3.5lbs/cubic foot (cellulose) – ~2.5lbs/cubic foot for (fiberglass).

## Floor over garage insulation

### Existing conditions

- Existing insulation does not fill floor cavity.

### Installation standards

- Drywall must be removed if the joist space over wall between garage and house is not air sealed.
- Inside end of joist space must be blocked and air sealed (see Field Manual Notes for options).
- Drywall must be removed if water pipes are located below the top 1/2 of the floor joist cavity.
- If water pipes are located in the bottom half of the joist cavity in the floor over the garage area, they must be protected from freezing by installing net/tyvek under the bottom of pipes so that insulation is only blown on the cold side of the pipe.
  - In order to install net/tyvek, drywall must be removed from the garage ceiling to gain access to pipes.
  - Drywall must be replaced with 5/8" Type X gypsum board or other material approved for use in this location by the IRC as adopted by the AHJ.
- Floor cavities used as a return air duct must have the header block or pan sealed prior to insulation installation. **Make sure insulation does not enter return air floor cavity.**
- Air seal around any visible supply boots at the subfloor to prevent insulation from entering the living space.
- Disconnected ducts must be repaired prior to insulation installation.
- Insulation must be dense packed (see field notes).
- Drywall on garage ceiling must be complete and sealed.
- Garage ceiling with living space floor above is a Firewall. If removed, it must be restored to current code compliance.
- **Service providers must provide photo documentation of the following details:**
  1. Netting of pipes in floor cavities
  2. Blocking of inside end of joist space
  3. Return air duct sealing to prevent insulation from entering forced air system
  4. Air sealing around any supply boots at the subfloor

## Appendix A: Installation standards

### Post-installation tests

- Combustion Safety Test required. Record results on Appendix F Form.
- Blower door test required prior to air sealing and after insulating in order to measure house tightness improvement. Record results on Appendix F Form.

### Field Manual Notes

- Other kinds of end blocking that will create the 6th side of insulation cavity when dense packing floor joist cavity:
  1. Change in direction of floor joists
  2. Rim joist on other side of a narrow room adjacent to cantilever
  3. House with insulation in interior floors (for sound)
  4. Install a burlap bag in each floor cavity that is filled with insulation to act as a block
- Do not dense pack near panned or leaky return system without air sealing ducts.
- The phrase dense-pack refers to a specific process where the insulation is blown into the cavity and then dense-packed. **We do not rebate a garage floor that has simply been filled with insulation.** It must be dense-packed to 3.5lbs/cubic foot (cellulose) – ~2.5lbs/cubic foot for (fiberglass).

## Exterior frame wall insulation

### Existing conditions

- Existing condition: R-9 or less.
- Do not dense pack walls if knob and tube wiring is present.
- Measure includes garage/house walls.

### Installation standards

- Use dense-pack cellulose or short fiber fiberglass in all wall cavities, installed with fill tube.
- Air seal around windows, doors, and electrical boxes in wall assembly prior to insulating.
- Must seal all penetrations into electrical panels, outlet and switch boxes to keep out insulation.
- Plug, seal and refinish all drill holes used to fill exterior walls after insulating.
- Cloth sheathed electrical wire must be evaluated or replaced with contemporary code complying 90 degree C temperature rated wiring prior to dense packing walls by an electrical service provider licensed to perform work in the local jurisdiction.
- Knob and tube wiring must be replaced with contemporary code complying 90 degree C temperature rated wiring prior to dense packing walls by an electrical service provider licensed to perform work in the local jurisdiction.
- Lead safe practices should be followed if appropriate.

## Appendix A: Installation standards

### Post-installation tests

- Combustion Safety Test required. Record results on Appendix F.
- Blower door test required prior to air sealing and after insulating in order to measure house tightness improvement.

## Attic insulation (flat ceiling)

### Existing conditions

- Existing insulation of assembly must be  $< R-30$  to qualify for attic insulation rebate.
- Insulation areas compressed to  $< R-30$  after air sealing can qualify for a rebate.

### Installation standards

- Attic must be air sealed and have mechanical / duct issues corrected prior to blowing insulation.
- Insulation baffles must be installed between rafters or trusses to allow air flow from the box soffit to the attic. Baffles must be installed adjacent to all soffit vent locations, with air impermeable insulation stops between all other truss rafter ends (recommend adding passive ventilation to minimum code amounts).
- Install an insulation stop on the outside edge of the top plates to maximize R-value at exterior edge of exterior wall top plates and minimize wind washing. This can consist of insulation batts or bags to blow insulation into. Closed-cell spray foam is preferred here for higher R-values.
- Air-seal all shell components interfacing with attic, including the back side and underneath knee walls.
- Extend any unvented bath or kitchen fan vent to exterior (vents not allowed to terminate in attic).
- Cloth sheathed electrical wire must be evaluated or replaced with code complying wiring prior to insulating.
- Knob and tube wiring must be abandoned or removed and new code complying wiring installed prior to insulating.
- Repair and seal any disconnected HVAC prior to blowing attic insulation:
  1. Un-insulated ducts must be insulated to minimum R-8.
  2. Fix ducts that severely restrict airflow.
- **Insulation**  $< R-30$  must be improved to at least R-60 to qualify for a rebate:
  1. If blowing cellulose on top of fiberglass, add an additional 2" of cellulose to the total to account for compression of the fiberglass underneath.
- **Seal thermal bypasses:**
  1. Chases, plumbing vents, b-vents, chimneys, top plate penetrations, etc. Insulate and air seal knee walls and skylight shafts and provide an air barrier. Separate knee wall and skylight requirements and incentives are listed below.
- Whole house fan in ceiling must have a sealed, insulated cover, or install fan w/ motorized insulated cover.
- Recessed lighting (except ICAT rated recessed lighting) must be air-sealed with either can inserts or covers. Covers must maintain 3" clearance to can and unrated cans must not be covered with insulation. If installing inserts also seal gap in drywall around can.

## Appendix A: Installation standards

- Attic hatch must be insulated to the same level as the adjacent attic insulation (with a minimum of R-20 of that insulation being rigid foam), be air-sealed with a dense foam weather strip, and have full depth insulation dam around the hatch installed in accordance with IECC as adopted by the AHJ (The dam must support the weight of a 200 lb. adult). Seal all trim around hatch to drywall. The hatch must be fully functional, that is, the hatch must be able to be removed from the access opening, either up into the attic, or down into the house. If the location and spacing of the hatch prevents it from being insulated to our standards to stay functional – an exception will be allowed.
  - Alternatively, if hatch is insulated with rigid foam board **only**, R-38 is adequate.
- Attic hatches that are pull-down stair assemblies must have some system to air seal and insulate that assembly. This can be a site-built system or a store-bought system. See Field Manual Notes for suggestions.
- Foam panel can be undersized by ½ inch maximum compared to drywall surface area. This means the foam should be as close to the size of the drywall as possible.
- Insulation dams are required at all ceiling level transitions (including tops of knee walls, the attic hatch entrance and around whole house fans) and around whole house fans. This is typically cardboard or return panning material.
- **Ignition barrier not required** on exposed foam, provided the following conditions are met, and it is allowed by the product's ESR:
  1. Entry to the attic or crawl space is only to service utilities and no storage is permitted.
  2. Air in the attic is not intentionally circulated to other parts of the building.
  3. Attic ventilation is provided in accordance with IRC Section R806, as applicable.
  4. Combustion air is provided in accordance with IMC (International Mechanical Code®) Section 701.
- If attic storage is present or possible (pull-down stair, platform, etc.) **ignition barrier is required** on all exposed foam.
- A vertical insulation dam should be mechanically fastened to the vertical face of the knee wall right below where the wall transitions to the ceiling. This will allow the insulation on the ceiling to make great contact with the actual top plate and provide the thermal resistance.

### Post-installation tests

- Combustion Safety Test required. Record results on Appendix F.
- Blower door test required prior to air sealing and after insulating in order to measure house tightness improvement. Record results on Appendix F.

### Field Manual Notes

- Alternative details are allowed for installing adequate insulation at exterior wall top plates (while maintaining ventilation path at soffit vents).
- Recommend flagging electrical J boxes that will be buried under insulation.
- Recommend adding attic ventilation that meets the requirements of IRC as adopted by the AHJ.
- Pull-down stair options:
  1. Build a rigid foam box around the perimeter of the stair assembly that is air sealed where it meets the ceiling plane. (Foam insulation requires an ignition barrier in this case where storage or pull-down stair is present).

## Appendix A: Installation standards

2. Install a kit like an Attic Tent, Draft Cap, or Energy Guardian that is designed to seal this location.
- Insulation dams at ceiling level transitions can be made of cardboard.

## Attic knee wall and skylight shaft

### Existing conditions

- Un-insulated or insulated to R-11 or less.

### Installation standards

1. If un-insulated, first fill cavity, then add a minimum R11 spray foam, foam board or vinyl faced fiberglass blanket over cavity insulation:
  1. Seal all edges and seams of insulation
  - 2. Ignition barrier not required** on exposed foam, provided the following conditions are met, and it is allowed by the product's ESR:
    - Entry to the attic is only to service utilities and no storage is permitted.
    - Air in the attic is not intentionally circulated to other parts of the building.
    - Attic ventilation is provided in accordance with IRC Section R806, as applicable.
    - Combustion air is provided in accordance with IMC (International Mechanical Code®) Section 701.
  3. If attic storage is present or possible (pull-down stair, platform, etc.) **ignition barrier may be required** on all exposed foam depending on product specifications.
  4. Insulation must meet flame spread and smoke development requirements of IRC version adopted by the AHJ.
  5. Insulation must be installed to RESNET Grade I.
2. If already insulated, add a minimum R-11 spray foam, foam board or vinyl faced fiberglass blanket over existing cavity insulation:
  1. Seal all edges and seams of insulation
  - 2. Ignition barrier not required** on exposed foam, provided the following conditions are met, and it is allowed by the product's ESR:
    - Entry to the attic or crawl space is only to service utilities and no storage is permitted.
    - Air in the attic is not intentionally circulated to other parts of the building.
    - Attic ventilation is provided in accordance with IRC Section R806, as applicable.
    - Combustion air is provided in accordance with IMC (International Mechanical Code®) Section 701.
  3. If attic storage is present or possible (pull-down stair, platform, etc.) ignition barrier may be required depending on product specifications.
  4. Insulation must meet flame spread and smoke development requirements of IRC version as adopted by the AHJ.
  5. Insulation must be installed to RESNET Grade I.
3. Insulation dams are required at the tops of knee walls. (See Field Manual Notes)

## Appendix A: Installation standards

### Post-installation tests

- Combustion Safety Test required. Record results on Appendix F.
- Blower door test required prior to air sealing and after insulating in order to measure house tightness improvement. Record results on Appendix F.

### Field Manual Notes

- An air barrier alone does not address the significant thermal bridging problems experienced in these assemblies, especially in the summer when attic temperatures often exceed 130°F.
- While an air barrier only is a requirement for attic insulation rebates –rebates for attic knee wall insulation requires the addition of a thermal break.
- It is recommended, but not required, that un-insulated solar tubes be insulated to R-11.
- A vertical insulation dam should be mechanically fastened to the vertical face of the knee wall right below where the wall transitions to the ceiling. This will allow the insulation on the ceiling to make contact with the actual top plate and provide the thermal resistance.
- Insulation dams at ceiling level transitions can be made of cardboard.

## Cathedral ceiling insulation (unvented attic and unvented enclosed rafter spaces)

### Existing conditions

A cathedral ceiling is present.

### Installation standards

- No Class 1 vapor retarders may be installed on the inside face of the roof rafters.
- Where wood shingles or shakes are used, a minimum ¼” vented air space must separate the shingles or shakes and the roofing underlayment above the structural sheathing.
- In order to earn rebates, unvented attic and unvented enclosed rafter spaces must have R-20 continuous exterior rigid board or sheet insulation installed directly above the structural roof sheathing and covered by an approved roofing material (per the IRC version adopted by the AHJ).
  - R-20 continuous exterior rigid board or sheet insulation must meet the requirements of the 2012 IRC Section R806.5 & R906.2.
  - All seams in the exterior rigid board or sheet insulation must be sealed at the perimeter of each individual sheet in order to form a continuous layer.
- Dense packed short fiber fiberglass **insulation (no cellulose will be allowed)** must be installed to completely fill the cavity between the structural roof sheathing and the interior drywall to the required density.
- Replace or air seal any IC recessed lights in vaulted rafter space with Air Tight (ICAT) cans or install an insert and air seal drywall cutout to can.

## Appendix A: Installation standards

### Post-installation tests

- Combustion Safety Test required. Record results on Appendix F.
- Blower door test required prior to air sealing and after.

### Field Manual Notes

- Allowable unvented vaulted ceiling assemblies are addressed in the 2012 IRC Section 806.5. In addition to the method described in the Installation Standards, unvented vaulted ceilings may also be insulated without the use of exterior rigid board or sheet insulation, but only when an adequately thick layer of air impermeable, vapor impermeable insulation is installed in direct contact with the inside face of the structural roof sheathing. These alternative methods would require the complete removal of the interior drywall.

## Conditioned Attics

### (unvented attics with spray foam on the underside of the roof deck)

#### Existing conditions

Attic cannot have any major signs of moisture damage.

#### Installation standards

- All existing insulation must be removed from the attic floor (vacuum out all blown insulation – remove all batts).
- All sources of interior moisture must be properly vented.
  - No unvented grow operations.
  - Clothes dryers and kitchen & bath fans must be operational and vented to the outside.
  - Relative Humidity should not exceed 40%.
- Spray foam must be closed cell if insulation is only on the underside of the roof deck.
  - Open cell (air permeable) foam is allowed on the underside of the roof deck only if there is R-20 worth of air impermeable insulation (rigid closed cell foam) installed directly above the structural roof sheathing for condensation control.
- An ignition barrier is required to cover all exposed foam.
- Minimum R-30 on underside of roof deck.
- Spray foam insulation must extend down over the top plate and must have backing (e.g. rolled up fiberglass batt) where roof deck meets the top plate.
- All attic ventilation (soffit, gable, roof vents) must be removed or sealed.
- All gable walls must now meet wall R-Value requirements.
- No interior Class 1 vapor retarders are allowed on the ceiling side (attic floor) of the unvented attic assembly.
- Where wood shingles or shakes are used, a minimum of ¼” vented air space separates the shingles or shakes and the roofing underlayment above the structural sheathing.



## Appendix A: Installation standards

- Where rigid insulation board is used as the air-impermeable insulation layer, it shall be sealed at the perimeter of each individual sheet to form a continuous layer.

### Post-installation tests

- Combustion Safety Test required. Record results on Appendix F.
- Blower door test required prior to air sealing and after insulating in order to measure house tightness improvement. Record results on Appendix F.

### Field Manual Notes

- The unvented attic space is completely within the building thermal envelope.

## Window replacement (including sliding glass doors)

### Existing conditions

- Existing windows and/or sliding glass doors must have one of the following conditions: single pane; clear glass; metal frames; or leaky/poor sealing.
- Walls must be insulated or be insulated as part of this job scope to receive rebate.

### Installation standards

- Window installations must be completed by EW-H certified window installers.
- **Full frame replacement window installation is preferred whenever possible.**
- Replacement windows must meet Northern Climate Zone Energy Star requirements (version 6 or 7) to qualify for Efficiency Works rebates:
- Windows/sliding glass doors must have low maintenance exterior: clad, fiberglass, composite or vinyl. Exception: If house is being considered for or is registered as a Historic Home, and wood trim is required.
- When a replacement window is installed inside an existing window frame (Block Frame method), air sealing is required around the existing window frame (remove interior trim, insulate and air seal between framing and existing window frame).
- Replacement windows must be properly insulated, and air sealed in the opening with low expansive foams.
- Dense pack old weight pockets with cellulose or short fiber fiberglass, or spray full with low expansive foam.
- Photo-Documentation is required for all window rebates. This can be as simple as taking a picture with your phone during the installation process. We are not expecting a photo of each window - however, we will need to see enough proof to verify the install method and to easily be able to identify the home from the photo.
- Must use window wrap approved by the manufacturer; typically, urethane sealant.
- Use manufacturer approved Low expansive foams to air seal windows in the opening.

## Appendix A: Installation standards

### Post-installation tests

- Appendix F – Window version must be signed by customer.

### Field Manual Notes

- Replacement window types/ methods:
  1. Block frame- replacement windows are installed inside frame of existing window frame. Block frame installations must include air sealing around existing window frame and insulating the weight pockets in old single/double hung windows.
  2. Full frame - replacement windows are installed in existing framing after old window and trim is removed on the inside, and the mounting flange trim is removed on the outside and re-flashed. This method is less prone to leakage.

## Heat pumps

### Existing conditions

- Allowed in gas or electrically heated homes

### Installation standards

- System must be right-sized using an ACCA approved Manual J (Version 7 minimum) block load calculations.
- Determine if existing forced air system duct size is large enough for heat pump.
- **Tier 1: Non-Cold Climate Heat Pump**
  - 15.2 SEER2 and 7.8 HSPF2
  - Heat pump condenser, evaporator, and furnace must be AHRI matched.
  - Shall not exceed .8 IWC TESP
  - Change over temperature < 35 F
  - Size for cooling load
- **Tier 2: Cold-Climate Heat Pump**
  - 15.2 SEER2 and 8.1 HSPF2
  - Heat pump condenser, evaporator, and furnace (if applicable), must be AHRI matched.
  - Shall not exceed .8 IWC TESP
  - Cold climate HP certified by NEEP, ENERGY STAR®, CEE, or AHRI
  - Change over temperature of 5F or less
  - Size for 100% of the heating load

### Post-installation tests

- Complete Appendix E and return with rebate application.
- Combustion Safety Test required. Record results on Appendix F.

### Field Manual Notes

- Outdoor temps must be >60 degrees F to commission unless using cold weather commissioning protocol.

## Ductless mini split

### Existing conditions

- Allowed in gas or electrically heated homes

### Installation standards

- System must be right-sized using an ACCA approved Manual J (Version 7 minimum) block load calculations.
- 21 SEER2 & 9.1 HSPF2
- Cold climate HP, certified by NEEP, ENERGY STAR, CEE, or AHRI
- Can be designed for the heating load

### Post-installation tests

- Complete Appendix E2.

### Field Manual Notes

## Heat pump water heater

### Existing conditions

- Gas or electrically heated home

### Installation standards

- Must be ENERGY STAR certified.
- Follow all local codes and OEM installation instructions including air volume requirements.
- Invoice must include unit specifications and model number

## Smart thermostat

### Existing conditions

- Non-programmable, non-Smart thermostat being replaced.

### Installation standards

- Must be ENERGY STAR certified.
- New thermostat must be smart thermostat and installed in a manner where all of the features are available.
- Thermostat must be clearly called out on invoice.

## Appendix A: Installation standards

### Exterior doors (hinged doors on the exterior of the home or between home and unconditioned space, i.e., garage.)

#### Existing conditions

- Any exterior door qualifies for replacement.

#### Installation standards

- Replacement hinged doors must meet Northern Climate Zone Energy Star requirements (version 6 or 7) to qualify for Efficiency Works rebates.
- Replacement doors must meet Northern Climate Zone Energy Star requirements to qualify for our incentives.
- Must be installed to meet local code.
- Replacement doors must be properly insulated, and air sealed in the opening with low expansive foams.
- Flashing tapes are not required around doors installed between garage and home.
- Photo-Documentation is required for all door rebates. This can be as simple as taking a picture with your phone during the installation process. We are not expecting a photo of each door - however, we will need to see enough proof to verify the install method and to easily be able to identify the home from the photo.
- Must use window wrap approved by the manufacturer; typically, urethane sealant.
- Use manufacturer approved Low expansive foams to air seal doors in the opening.

#### Post-installation tests

- Appendix F – Window version must be signed by customer

## Mechanical ventilation

#### Existing conditions

- Per ASHRAE 62.2-2013 calculation, home requires mechanical ventilation.

#### Installation standards

- Install Ventilation per ASHRAE 62.2-2013 mechanical ventilation requirements
- Must have greater than 50% sensible heat exchange efficiency
- System must be:
  - Heat Recovery Ventilator (HRV) or
  - Energy Recovery Ventilator (ERV)

#### Post-installation tests

- Combustion Safety Test required. Record results on Appendix F.
- Commission any installed ventilation system.
- Measure all system airflows to verify they meet ASHRAE 62.2 2013 ventilation requirements.
- Document intake and/or exhaust flow rates for rebate application submittal.

## Service panel upgrade

### Existing conditions

- Gas or electrically heated home

### Installation standards

- Must be installed by a licensed electrician
- Must provide photo documentation of final installation
- Must provide an invoice for rebate application
- Must be replaced with a minimum of a 200 amp panel for the following qualifying reasons
  - a. Heat pump upgrade
  - b. Heat pump water heater upgrade
  - c. Solar and battery installations
  - d. EV charger installation
  - e. Home electrification appliances

## Appendix B: Combustion safety testing process (cst)

### Assessment CST Process:

- Assessor performs the following tests:
  1. Gas Leak Detection
  2. Worst Case Depressurization Test
  3. Carbon Monoxide (CO) Test in vent pipe
  4. Spillage and Draft Test
- Assessor records results on audit data sheet for installation contractor's use.
- Assessor will follow Building Performance Institute's (BPI) Building Analyst Legacy **Standards**

### Combustion Safety Test Action Levels:

	CO Test Result*	And/Or	Spillage and Draft Test Results	Retrofit Action
<input type="checkbox"/>	Fails at Worst Case Only			Recommend that spillage problem be fixed. Have owner sign disclosure form.
<input type="checkbox"/>	Fails at Natural Conditions			Turn off the appliance. Have the owner call for service immediately. Have owner sign disclosure form.
<input type="checkbox"/>	Between 9 & 35 ppm ambient CO in breathing zone			Advise homeowner that CO has been detected. Recommend all CO sources checked and windows/doors opened.
<input type="checkbox"/>	> 35 ppm ambient CO in breathing zone			Abort the test. Turn off the appliance, ventilate the space, and evacuate the building. Have owner call for service immediately and sign disclosure form.
<input type="checkbox"/>	0 - 100 ppm	And	Passes	No Signature – Refer to back for Possible Recommendations
<input type="checkbox"/>	>100 ppm	And	Passes	Work may not proceed until the system is serviced and the problem is corrected. (Atmospheric DHW only) Have owner sign disclosure form.
<input type="checkbox"/>	>200 ppm	And	Passes	Work may not proceed until the system is serviced and the problem is corrected. (Cat 3 & 4 DHW only) Have owner sign disclosure form.
<input type="checkbox"/>	0 - 400 ppm	And	Passes	No Signature (Boilers and Furnaces only) Refer to back for Possible Recommendations
<input type="checkbox"/>	>400 ppm		Passes	Work may not proceed until the system is serviced and the problem is corrected. (Boilers and Furnaces only)

\*CO measurements for undiluted flue gases in the vent at steady state.

NOTICE: As of 7/1/15 all sealed combustion equipment tested in the EW program will be referenced to the ANSI/BSR AZ223.1/NFPA 54 CO Threshold Chart. This means that water heaters will be allowed to up to 200 ppm CO (Air Free) and boilers and furnaces will be allowed up to 400 ppm CO (Air Free). All other equipment will be referenced to the BPI Building Analyst Legacy Standard. See table at end of this document.

## Appendix B: Combustion safety testing process (cst)



Building  
Performance  
Institute, Inc.

*A national non-profit working for you.*

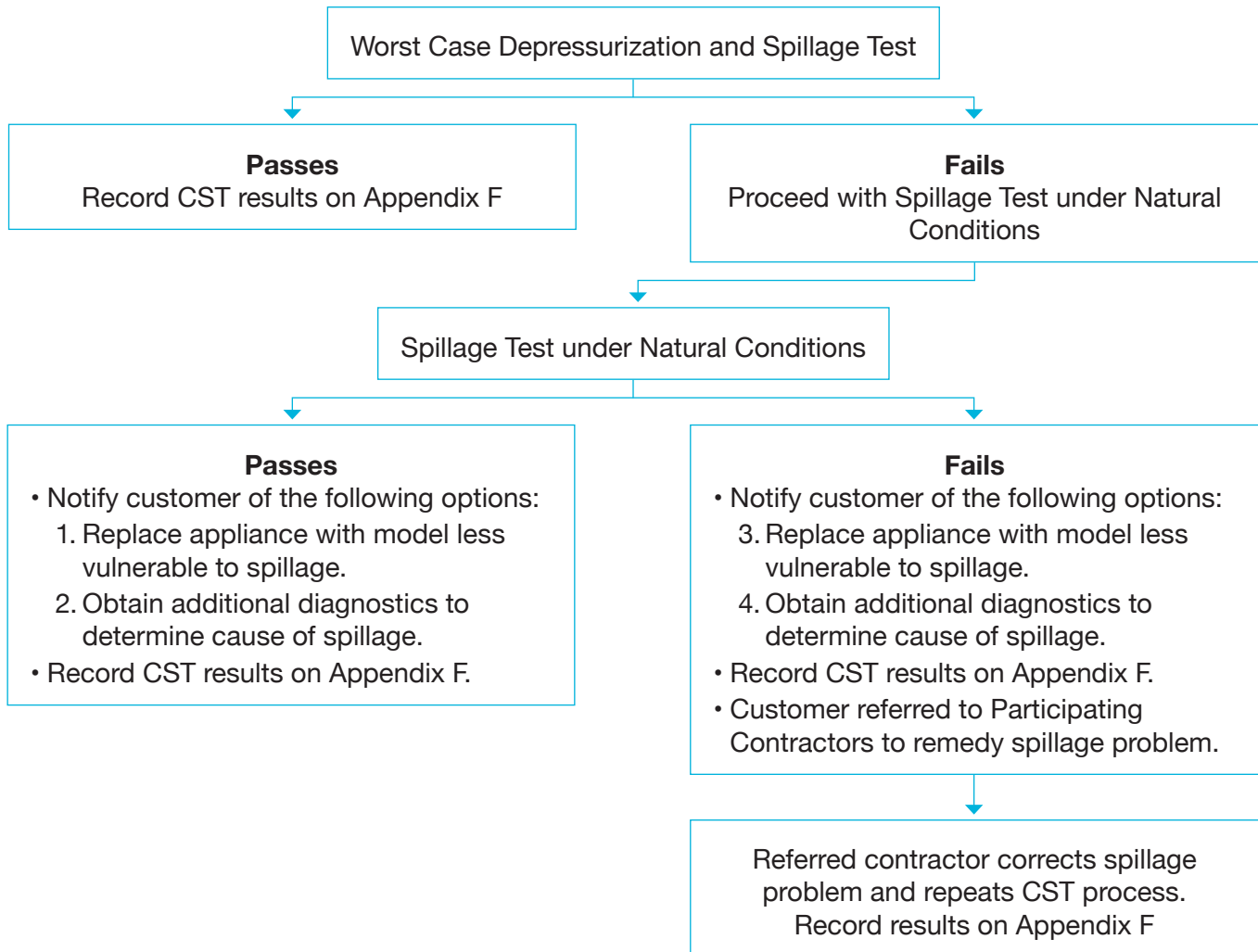
### Post-installation CST process:

Installation contractor performs worst case depressurization and spillage test as well as spillage test under natural conditions if needed (see flow chart below) after the following installations:

- Air sealing
- Conditioned crawl space insulation
- Cold crawlspace insulation
- Basement wall insulation
- Cantilever floor insulation
- Floor over garage insulation
- Exterior frame wall insulation
- Masonry exterior wall insulation
- Attic insulation (flat ceiling)
- Attic knee wall insulation
- Cathedral ceiling insulation
- Replacement gas furnace
- Replacement gas boiler
- Replacement water heater
- Duct sealing
- Mechanical ventilation



### Appendix B: Combustion safety testing process (cst)



#### Overall combustion safety review:

**Question:** What appliances are required to be tested?

**Answer:** Only atmospheric ones (Category 1)

**Question:** What are the four required components of the required combustion test?

**Answer:**

- Worst Case Depressurization (Record with DG-700 or manometer)
- Spillage Testing (with mirror or smoke)
- Undiluted CO Testing (with Combustion Analyzer)
- Capture results on Appendix F – Discuss results with customer

**Question:** When do I need to test the equipment under Natural Conditions?

**Answer:** Only when the appliance fails Worst Case spillage.

## Appendix B: Combustion safety testing process (cst)

**Question:** What happens if the appliance fails spillage under Worst Case/Natural Conditions?

**Answer:** Both situations mean you need to talk to the homeowner about possible next steps to improve the results. Please remember that a spillage failure at Natural conditions is a VERY SERIOUS situation that you need to be very clear about not operating the device until it is fixed by a qualified professional.

**Question:** Do we have to get Appendix F signed by the homeowner if the appliance fails testing?

**Answer:** The advisors will handle getting the final signature on Appendix F – However, you will still be required to provide your relevant test results on the Rebate application (you will see Appendix F there now) and you must discuss any failures with the homeowner immediately after finding the results.

**Question:** Are there ever situations where we do not have to perform the Combustion Safety Testing?

**Answer Part 1:** The following measures are exempt from testing if they are the only measure being installed.

- Window replacements
- New AC or Heat Pump

**Answer Part 2:** The following scenarios **do not** have to be tested.

- 80% Furnace in crawlspace with independent flue
- 80% Furnace in an attic with independent flue
- Sealed combustion equipment only

**Appendix B: Combustion safety testing process (cst)**

Technology	Original Approach	Current Approach
<b>Atmospheric DHW</b>	less than 26 ppm (as measured) - No Action	less than 26 ppm (air free) - No Action
<b>Atmospheric DHW</b>	26-100 ppm (as measured) - recommend tune up and get signature	26-100 ppm (air free) - recommend tune up and get signature
<b>Atmospheric DHW</b>	100+ ppm (as measured) - STOP WORK - get signature - no rebate can be paid unless this is resolved	100+ ppm (air free) - STOP WORK - get signature - no rebate can be paid unless this is resolved
<b>Sealed DHW (this includes tankless)</b>	less than 26 ppm (as measured) - No Action	less than 26 ppm (air free) - No Action
<b>Sealed DHW (this includes tankless)</b>	26-100 ppm (as measured) - recommend tune up and get signature	26-199 ppm (air free) - No Action
<b>Sealed DHW (this includes tankless)</b>	100+ ppm (as measured) - STOP WORK - get signature - no rebate can be paid unless this is resolved	200+ ppm (air free) - STOP WORK - get signature - no rebate can be paid unless this is resolved
<b>Atmospheric 70% -80% Furnace</b>	less than 26 ppm (as measured) - No Action	less than 26 ppm (air free) - No Action
<b>Atmospheric 70% -80% Furnace</b>	26-100 ppm (as measured) - recommend tune up and get signature	26-399 ppm (air free) - No Action
<b>Atmospheric 70% -80% Furnace</b>	100+ ppm (as measured) - STOP WORK - get signature - no rebate can be paid unless this is resolved	400+ ppm (air free) - STOP WORK - get signature - no rebate can be paid unless this is resolved
<b>Sealed Combustion Furnace</b>	less than 26 ppm (as measured) - No Action	less than 26 ppm (air free) - No Action
<b>Sealed Combustion Furnace</b>	26-100 ppm (as measured) - recommend tune up and get signature	26-399 ppm (air free) - No Action
<b>Sealed Combustion Furnace</b>	100+ ppm (as measured) - STOP WORK - get signature - no rebate can be paid unless this is resolved	400+ ppm (air free) - STOP WORK - get signature - no rebate can be paid unless this is resolved
<b>Atmospheric Boiler</b>	less than 26 ppm (as measured) - No Action	less than 26 ppm (air free) - No Action
<b>Atmospheric Boiler</b>	26-100 ppm (as measured) - recommend tune up and get signature	26-399 ppm (air free) - No Action
<b>Atmospheric Boiler</b>	100+ ppm (as measured) - STOP WORK - get signature - no rebate can be paid unless this is resolved	400+ ppm (air free) - STOP WORK - get signature - no rebate can be paid unless this is resolved
<b>Sealed Combustion Boiler</b>	less than 26 ppm (as measured) - No Action	less than 26 ppm (air free) - No Action
<b>Sealed Combustion Boiler</b>	26-100 ppm (as measured) - recommend tune up and get signature	26-399 ppm (air free) - No Action
<b>Sealed Combustion Boiler</b>	100+ ppm (as measured) - STOP WORK - get signature - no rebate can be paid unless this is resolved	400+ ppm (air free) - STOP WORK - get signature - no rebate can be paid unless this is resolved

## Appendix C: Required documents for rebate application

This is a checklist of required documentation when applying for Efficiency Works Retrofit Program rebates.

### **Air sealing**

Invoice - Clearly calling out Program Measures by Name  
Appendix F - Post Improvement Carbon Monoxide and Ventilation Disclosure  
Efficiency Works Paperwork: Terms and Conditions signed by customer  
Photo Documentation of Before and After Work

### **Conditioned crawlspace insulation**

Invoice - Clearly calling out Program Measures by Name  
Appendix F - Post Improvement Carbon Monoxide and Ventilation Disclosure  
Efficiency Works Paperwork: Terms and Conditions signed by customer  
Photo Documentation of Before and After Work

### **Basement wall insulation**

Invoice - Clearly calling out Program Measures by Name  
Appendix F - Post Improvement Carbon Monoxide and Ventilation Disclosure  
Efficiency Works Paperwork: Terms and Conditions signed by customer  
Photo Documentation of Before and After Work

### **Cantilever floor insulation**

Invoice - Clearly calling out Program Measures by Name  
Appendix F - Post Improvement Carbon Monoxide and Ventilation Disclosure  
Efficiency Works Paperwork: Terms and Conditions signed by customer  
Photo Documentation of Before and After Work

### **Floor over garage insulation**

Invoice - Clearly calling out Program Measures by Name  
Appendix F - Post Improvement Carbon Monoxide and Ventilation Disclosure  
Efficiency Works Paperwork: Terms and Conditions signed by customer  
Photo Documentation of Before and After Work

### **Exterior frame wall insulation**

Invoice - Clearly calling out Program Measures by Name  
Appendix F - Post Improvement Carbon Monoxide and Ventilation Disclosure  
Efficiency Works Paperwork: Terms and Conditions signed by customer  
Photo Documentation of Before and After Work

## Appendix C: Required documents for rebate application

### Attic insulation - flat ceiling

Invoice - Clearly calling out program measures by name  
Appendix F - Post Improvement Carbon Monoxide and Ventilation Disclosure  
Efficiency Works Paperwork: Terms and Conditions signed by customer  
Photo Documentation of Before and After Work

### Attic knee wall and skylight shaft

Invoice - Clearly calling out program measures by name  
Appendix F - Post Improvement Carbon Monoxide and Ventilation Disclosure  
Efficiency Works Paperwork: Terms and Conditions signed by customer  
Photo Documentation of Before and After Work

### Cathedral ceiling insulation

Invoice - Clearly calling out Program Measures by Name  
Appendix F - Post Improvement Carbon Monoxide and Ventilation Disclosure  
Efficiency Works Paperwork: Terms and Conditions signed by customer  
Photo Documentation of Before and After Work

### Window Replacement (Including Sliding Glass Doors)

Invoice - Clearly calling out Program Measures by Name  
Photo Documentation of the Window Install (photos during install)  
NFRC Labels for All Glass (This can be photos or scans)  
Efficiency Works Paperwork: Terms and Conditions, Appendix F2 (window version) & Certificate of Completion signed by customer

### Exterior Door (hinged doors on the exterior of the home or between home and unconditioned space, i.e., garage.)

Invoice - Clearly calling out Program Measures by Name  
Photo Documentation (photos during install)  
Efficiency Works Paperwork: Terms and Conditions, Appendix F (window version) & Certificate of Completion signed by customer

### Ductless Mini - Splits

Invoice with equipment size, manufacturer, model number (both evaporator and condenser), and efficiency SEER2, HSPF2  
Appendix E-2 Ductless CX form  
AHRI Documentation  
Efficiency Works Paperwork: Terms and Conditions signed by customer

## Appendix C: Required documents for rebate application

### Central Heat Pump - Split Systems

Commissioning Form Has Been Completed - Appendix E

Invoice with equipment size, manufacturer, model number (both evaporator and condenser), and efficiency SEER2, HSPF2

AHRI Documentation

Cold Climate Certification documentation

Manual J ACCA Approved - summary report

Appendix F - Post Improvement Carbon Monoxide and Ventilation Disclosure

Efficiency Works Paperwork: Terms and Conditions signed by customer

### Heat Pump Water Heater

Invoice with the equipment size, manufacturer, model #, previous water heater fuel type

Appendix F - Post Improvement Carbon Monoxide and Ventilation Disclosure

Efficiency Works Paperwork: Terms and Conditions signed by customer

### Mechanical Ventilation

Invoice with the equipment size, manufacturer, model #

Combustion Safety Testing Completed and Recorded -Appendix F

Efficiency Works Paperwork: Terms and Conditions signed by customer

### Smart Thermostat

Invoice with manufacturer brand & model #

Efficiency Works Paperwork: Terms and Conditions signed by customer

### Service Panel Upgrade

Invoice with manufacturer brand & model #

Efficiency Works Paperwork: Terms and Conditions signed by customer

## Appendix D: This document is no longer in use

## Appendix E: AC/Heat pump commissioning form

<b>Customer Name:</b>				<b>Date:</b>				
<b>Address:</b>								
<b>Installing Company:</b>				<b>Installing Technician:</b>				
<b>Split System AC/Heat Pump</b>								
<b>Section 1. HVAC Service Provider Checklist</b> Please complete the following section.								
<b>Equipment Specifications</b>								
Unit Type	AC	<input type="checkbox"/>	Heat pump	<input type="checkbox"/>	Blower motor name plate size (HP):			
Manufacturer				Compressor RLA (Amps):				
Air Handler Model #				2 stage? Yes or No				
Outdoor Unit Model #				Expansion Valve Type		TXV		<input type="checkbox"/>
Indoor Coil Model #						Fixed orifice		<input type="checkbox"/>
Nominal capacity(tons)								
<b>Controls</b>								
Tstat mfgr/model #								
Tstat type:		Manual	<input type="checkbox"/>	Programmable	<input type="checkbox"/>	Communicating	<input type="checkbox"/>	
Temperature Setpoints:		Heating / unoccupied (F)				Fan Setting		<input type="checkbox"/> On
		Cooling / unoccupied (F)						<input type="checkbox"/> Off
<b>Indoor Measurements</b>								
Return air DB temp		(F)	Blower motor electrical power			Volts		
Supply air DB temp		(F)				Amps		
<b>System Air Flow</b>								
Total air flow CFM				Supply ESP (IWC)				
				Return ESP (IWC)				
				Ext. Static Pressure (IWC)				
				Total ESP is 0.80 IWC or lower		<input type="checkbox"/> Pass/Fail		
				CFM per ton is 350 to 500		<input type="checkbox"/> Pass/Fail		
<b>Outdoor Measurements</b>								
Compressor electrical power			Volts	Notes				
			Amps					
<b>Electrical Work</b>								
All electrical work performed by authorized electrician or as authorized by Electrician's board								
Disconnect box wiring shock risk reduced by lock, strap tie and/or box that provides other means of protection								
<b>Heat Pump (If Applicable)</b>								
System was run in both heating and cooling modes to ensure proper operation								
				Switchover Temperature		(F)		



Appendix E: AC/Heat pump commissioning form

<b>Notes</b>
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<b>Cold Weather Commissioning</b>
<i>If you choose to perform cold weather commissioning of air conditioners or heat pumps you must either fill out the section below or provide approved additional documentation in rebate application.</i>

Manufacturer specified lengths (feet): Minimum: _____ Maximum with factory charge: _____ Maximum: _____					
Maximum line set for factory charge (manufacturer): _____					
Actual line set length: _____					
Refrigerant added, if required by manufacturer: _____ Pounds _____ Ounces _____					<input type="checkbox"/> NA
Line set purged with nitrogen, pressure tested & evacuated with pump per manufacturer's instructions.					
	OEM Guideline	Actual		OEM Guideline	Actual
Pressure test pressure (PSI)		# of evacuations performed			
Duration (minutes)		Vacuum Level (microns)			
Flare connections tightened using manufacturer's torque specification					
Visible line sets run through line set covers with transition and termination fittings					
Insulation covers full length of line sets (no exposed copper)					
Floor/wall/ceiling penetrations sealed					
Condensate line installed without dips or traps					
System was run in both heating and cooling modes to ensure proper operation					

<b>Warm Weather Commissioning</b>
<i>Minimum of 65 F unless otherwise stated by OEM</i>

<b>TXV only</b>	
Target subcooling (F) <input style="width: 100%;" type="text"/>	Actual subcooling (F) <input style="width: 100%;" type="text"/>
Actual subcooling is +/- 3 F of target, 2 F minimum <input style="width: 100%;" type="text"/>	Pass/Fail

<b>Fixed Orifice Only</b>	
Target Superheat (F) <input style="width: 100%;" type="text"/>	Actual Superheat (F) <input style="width: 100%;" type="text"/>
	Actual Super heat is +/- 5 (F) of target <input style="width: 100%;" type="text"/> Pass/Fail

<b>Trained Technician's Signature</b>	
---------------------------------------	--

<b>Section 2. Homeowner Checklist</b> Please check all boxes to confirm that all requirements have been met.	
<input type="checkbox"/>	I have been supplied with an Owner's Manual for the ac/heat pump
<input type="checkbox"/>	The installer taught me how to turn the unit on and off, clean the filter, switch between heating and cooling modes (if applicable), change the temperature set point, adjust air flow direction, and call for services.
<input type="checkbox"/>	Noise and vibration levels are acceptable
<input type="checkbox"/>	Line set covers are aesthetically acceptable

<b>Customer's Signature</b>	
-----------------------------	--

## Appendix E2: Ductless minisplit commissioning form

Customer Name:				Date:	
Address:					
Installing Company:			Installing Technician:		
<b>Ductless Heat Pump</b>					
Section 1. HVAC Service Provider Checklist Please complete the following section.					
<b>Outdoor Unit</b>					
Unobstructed airflow					
Level					
Does not interfere with walkway, porch, window or door					
Installed at a servicable height					
Secured to wall or stable base					
Protected by rain cap (required if installed under roof drip line)					
<b>Line Set</b>					
Manufacturer specified lengths (feet): Minimum: _____ Maximum with factory charge: _____ Maximum: _____					
Maximum line set for factory charge (manufacturer): _____					
Actual line set length: _____					
Refrigerant added, if required by manufacturer: _____ Pounds _____ Ounces _____				<input type="checkbox"/> NA	
Line set purged with nitrogen, pressure tested & evacuated with pump per manufacturer's instructions.					
	<b>MFG Guideline</b>	<b>Actual</b>		<b>MFG Guideline</b>	<b>Actual</b>
Pressure test pressure (PSI)			# of evacuations performed		
Duration (minutes)			Vacuum Level (microns)		
Flare connections tightened using manufacturer's torque specification					
Visible line sets run through line set covers with transition and termination fittings					
Insulation covers full length of line sets (no exposed copper)					
Floor/wall/ceiling penetrations sealed					
Condensate line installed without dips or traps					
<b>Indoor Unit</b>					
Level					
Adequate clearances for services and operation					
<b>Electrical Work</b>					
All electrical work performed by authorized electrician or as authorized by Electrician's board					
Disconnect box wiring shock risk reduced by lock, strap tie and/or box that provides other means of protection					
<b>System</b>					
System was run in both heating and cooling modes to ensure proper operation					
<b>Trained Technician's Signature</b>					
Section 2. Homeowner Checklist Please check all boxes to confirm that all requirements have been met.					
I have been supplied with an Owner's Manual for the heat pump					
The installer taught me how to turn the heat pump on and off, clean the filter, switch between heating and cooling modes, change the temperature set point, adjust air flow direction, and call for services.					
Noise and vibration levels are acceptable					
Line set covers are aesthetically acceptable					
<b>Customer's Signature</b>					

## Appendix F: Efficiency Works retrofit program post-improvement carbon monoxide and ventilation disclosure

Customer Name: \_\_\_\_\_ Customer Address \_\_\_\_\_

### Combustion Safety

Your participating contractor has tested the functioning of the exhaust system of your gas furnace and/or water heater to the standards of the Building Performance Institute. This includes a spillage (a.k.a. “back-drafting”) test performed under two test conditions: **natural conditions** and **worst-case conditions** as well as undiluted and ambient carbon monoxide (CO) measurements.

Under **worst-case conditions** a potential carbon monoxide hazard has been identified in the home  
**Worst-case conditions** occur when all exhaust systems (bathroom fans, stovetop fans, dryers, furnace, etc) are all running at the same time. This simulates a depressurization condition where exhaust from gas burning appliances could enter the living space.

Under **natural conditions** a carbon monoxide hazard has been identified in the home  
**Natural conditions** occur when all the systems in the home are operating in a manner most similar to the typical state of the home. Failure under natural conditions means that exhaust from gas burning appliances is likely to enter the living space regularly. Immediate actions should be taken to correct the spillage from the natural draft gas vent.

### Health and Safety Issues

Breathing the exhaust from gas burning appliances is hazardous to your health. Carbon monoxide can be fatal in high doses or cause chronic health problems in lower concentrations. Nitrogen oxides, which are irritants, are also combustion by-products. Safe combustion means that there is little or no carbon monoxide production and that 100% of the combustion products are vented to the outside at all times.

### Building Envelope Tightness and Indoor Air Quality

Your participating contractor has tested the amount of air leakage through your home’s exterior surfaces, referred to as the “building envelope”. This test is used to estimate the heating and cooling energy cost savings attributable to air-sealing measures, and to estimate the amount of available fresh air that enters the home through leaks in the building envelope.

While home efficiency upgrades often focus on reducing air leaks as a key strategy for saving energy and increasing comfort, these retrofits simultaneously reduce the amount of fresh air that is introduced into the home, potentially leading to increased levels of moisture and pollutants in the indoor air. It is often recommended that, when implementing air-sealing measures, a controlled mechanical ventilation system also be installed. It may seem counterintuitive to seal leaks in the building envelope only to add a mechanical system to re-introduce fresh air; however, this strategy maximizes energy savings while safeguarding indoor air quality. Relying on building envelope air leakage alone to provide fresh air means that 1) the “fresh” air often enters through leaks from undesirable locations such as an attached garage, crawl space, or attic, and 2) the more extreme the outdoor conditions (extreme heat or cold, high winds, etc.), the more leakage occurs – leaving the home over-ventilated on the days and nights when a minimum level of air leakage is advantageous. A mechanical ventilation system provides a consistent, controlled amount of ventilation air to a tight and energy efficient home.

### Disclosures (Check all that apply)

I understand there is a potential carbon monoxide hazard in my home.  
(Contractor has provided Combustion Safety Details on page 2 of this document.)

\_\_\_\_\_  
Customer Name\_\_\_\_\_  
Customer Signature\_\_\_\_\_  
Date

**Appendix F: Efficiency Works retrofit program post-improvement carbon monoxide and ventilation disclosure**

*Note - Spillage must be checked with a mirror or smoke pencil*

Appliance 1: \_\_\_\_\_  
 Worst Case Depressurization (Pa) [if measured]: \_\_\_\_\_  
 Natural draft gas appliance flue gas spillage time @ Worst Case? \_\_\_\_\_ Pass Test?  YES  NO  
 Natural draft gas appliance flue gas spillage time @ Natural Conditions? \_\_\_\_\_ Pass Test?  YES  NO  
**Note: Natural Conditions are only required if spillage fails Worst Case.**  
 Water Heater Orphaned?  YES  NO  
 Has original flue been relined?  YES  NO Existing Flue Size? \_\_\_\_\_  
 CO @ Steady State (ppm): \_\_\_\_\_ Ambient Carbon Monoxide (ppm): \_\_\_\_\_  
 Next Steps? \_\_\_\_\_

Appliance 2: \_\_\_\_\_  
 Worst Case Depressurization (Pa) [if measured]: \_\_\_\_\_  
 Natural draft gas appliance flue gas spillage time @ Worst Case? \_\_\_\_\_ Pass Test?  YES  NO  
 Natural draft gas appliance flue gas spillage time @ Natural Conditions? \_\_\_\_\_ Pass Test?  YES  NO  
**Note: Natural Conditions are only required if spillage fails Worst Case.**  
 Water Heater Orphaned?  YES  NO  
 Has original flue been relined?  YES  NO Existing Flue Size? \_\_\_\_\_  
 CO @ Steady State (ppm): \_\_\_\_\_ Ambient Carbon Monoxide (ppm): \_\_\_\_\_  
 Next Steps? \_\_\_\_\_

Blower Door Pre: \_\_\_\_\_ Blower Door Post: \_\_\_\_\_  
 %Difference: \_\_\_\_\_ Wind Conditions: \_\_\_\_\_

**Combustion Safety**

As the participating contractor in Efficiency Works, I acknowledge that I have tested the functioning of the exhaust system of the gas furnace and/or water heater to the standards of the Building Performance Institute as called out by Efficiency Works. This includes a spillage (a.k.a. “back-drafting”) test performed under two possible test conditions: natural conditions and worst case conditions as well as undiluted and ambient carbon monoxide (CO) measurements. **I also acknowledge that I have discussed the results of those tests and any health/safety issues with the homeowner directly.**

CAZ Tester Name \_\_\_\_\_ CAZ Tester Signature \_\_\_\_\_ Date \_\_\_\_\_

Contractor Notes: \_\_\_\_\_

## Appendix F2: Windows post-improvement carbon monoxide and ventilation disclosure

Customer Name: \_\_\_\_\_ Customer Address \_\_\_\_\_

### Health and Safety Issues

Older windows can be the cause of comfort problems including cold surfaces and excessive air leakage. Fixing these air leakage issues can cause a home to become tighter if all or most of the older windows are replaced with newer ones. A more airtight home could potentially create difficulties for atmospherically vented HVAC equipment, including water heaters, to vent their combustion gases outside the home. Atmospherically vented appliances depend on air coming into the house as fast as it goes out to vent properly. The newer, tighter windows reduce much of the previous air leakage from occurring, which in some situations can cause the combustion gases (including irritants such as Carbon Monoxide and Nitrogen Oxides) to be pulled back down the HVAC equipment's flues/chimneys and into the home; a situation called back-drafting.

A basic Combustion Appliance Zone safety test (CAZ test) is the best way to ensure that all combustion equipment vents properly after windows are replaced. The CAZ test verifies that space- and water-heating equipment successfully exhausts all combustion gases while the house is in the worst-case scenario (i.e. being depressurized by bath fans, kitchen fans, and the main blower of the furnace/AC). **Please consider hiring a contractor to provide this service.**

Additionally, it is important that the home have properly located, working Carbon Monoxide detectors. Breathing the exhaust from gas burning appliances is hazardous to your health. Carbon monoxide can be fatal in high doses or cause chronic health problems in lower concentrations. Safe combustion means there is little or no carbon monoxide production and that 100% of the combustion products are vented to the outside at all times.

### Building Envelope Tightness and Indoor Air Quality

While home efficiency upgrades often focus on reducing air leaks as a key strategy for saving energy and increasing comfort, these retrofits simultaneously reduce the amount of fresh air that is introduced into the home, potentially leading to increased levels of moisture and pollutants in the indoor air. It is often recommended that, when implementing air-sealing measures, a controlled mechanical ventilation system also be installed. It may seem counterintuitive to seal leaks in the building envelope only to add a mechanical system to re-introduce fresh air; however, this strategy maximizes energy savings while safeguarding indoor air quality. Relying on building envelope air leakage alone to provide fresh air means that 1) the "fresh" air often enters through leaks from undesirable locations, such as an attached garage, crawl space, or attic, and 2) the more extreme the outdoor conditions (extreme heat or cold, high winds, etc.), the more leakage occurs, leaving the home over-ventilated on the days and nights when a minimum level of air leakage is advantageous. A mechanical ventilation system provides a consistent, controlled amount of ventilation air to a tight and energy efficient home.

### Disclosures (Check all that apply)

- I understand that Indoor Air Quality is tied to building tightness and that mechanical ventilation will often improve indoor air quality. Further information on mechanical ventilation strategies and rates are available from an Efficiency Works Advisor.
- In the event that my audit occurred prior to my window upgrade, I understand that it is advisable to hire a contractor to conduct a follow up CAZ Test to ensure my combustion appliances are functioning properly with a tighter building envelope.
- In the event that my audit occurred after my window upgrade, I understand that the CAZ test recommendation has been fulfilled.

Customer Name

Customer Signature

Date

Contractor Notes:

## Appendix G: Mentoring requirements

### **Program mentoring requirements:**

Completing the Efficiency Works Retrofit Program Service Provider enrollment requires an Orientation, remote or in person training **AND** on-the-job mentoring with Efficiency Works Homes' program staff.

It is required to schedule an MIV (Mentorship Improvement Verification) within the first 5 jobs submitted. This service is provided to ensure that further in field training is available resulting in quality rebate submittals for customers.

### **To schedule a mentoring session please contact:**

homes@efficiencyworks.org

## Appendix H: Rebate matrix

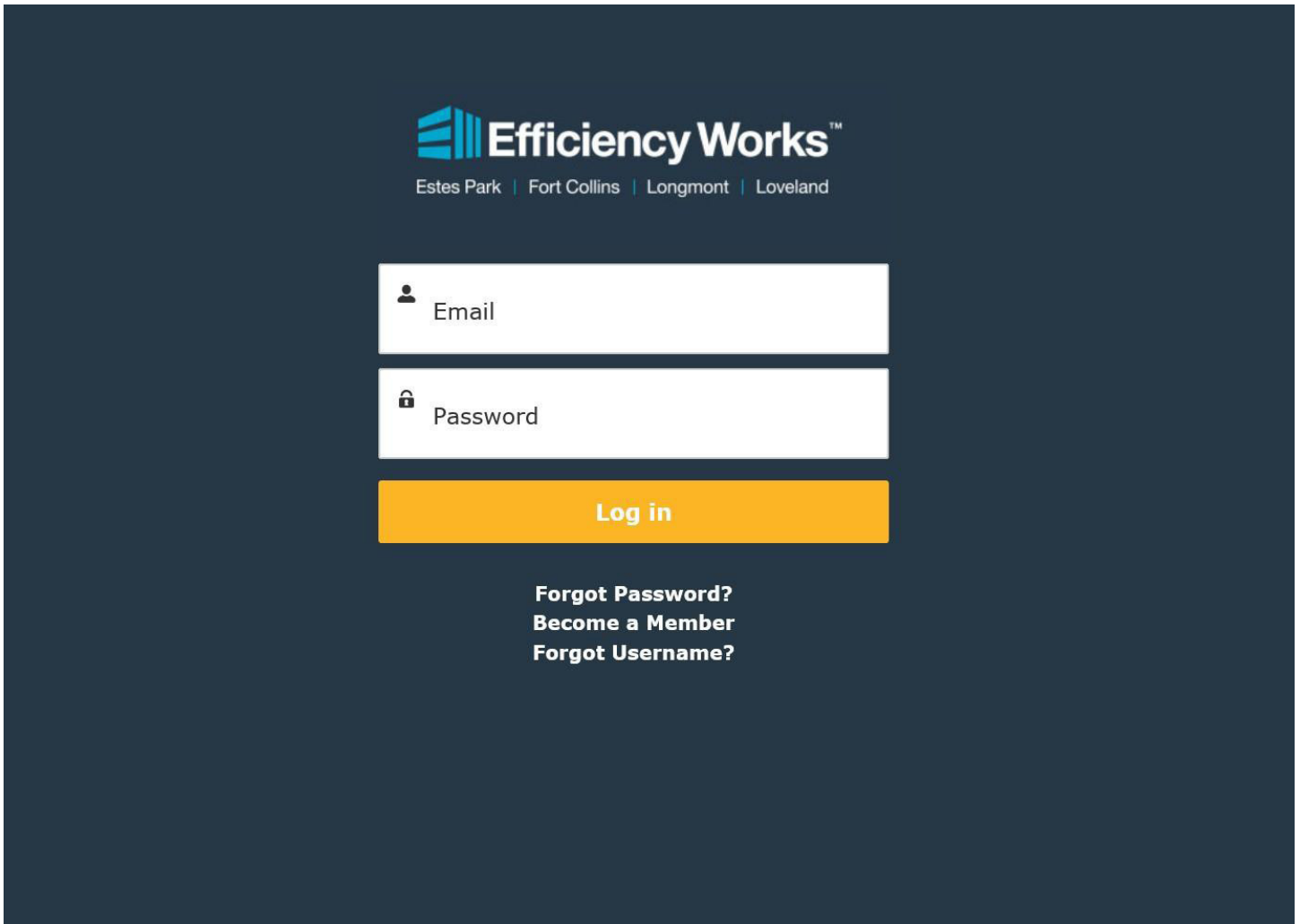
Visit the [EfficiencyWorks.org](https://efficiencyworks.org) website for the most up to date information:  
<https://efficiencyworks.org/homes/rebates/#retrofit>

## Appendix I: This document is no longer in use



## Appendix J: This document is no longer in use

## Appendix K: How to apply for a rebate in Efficiency Works Homes

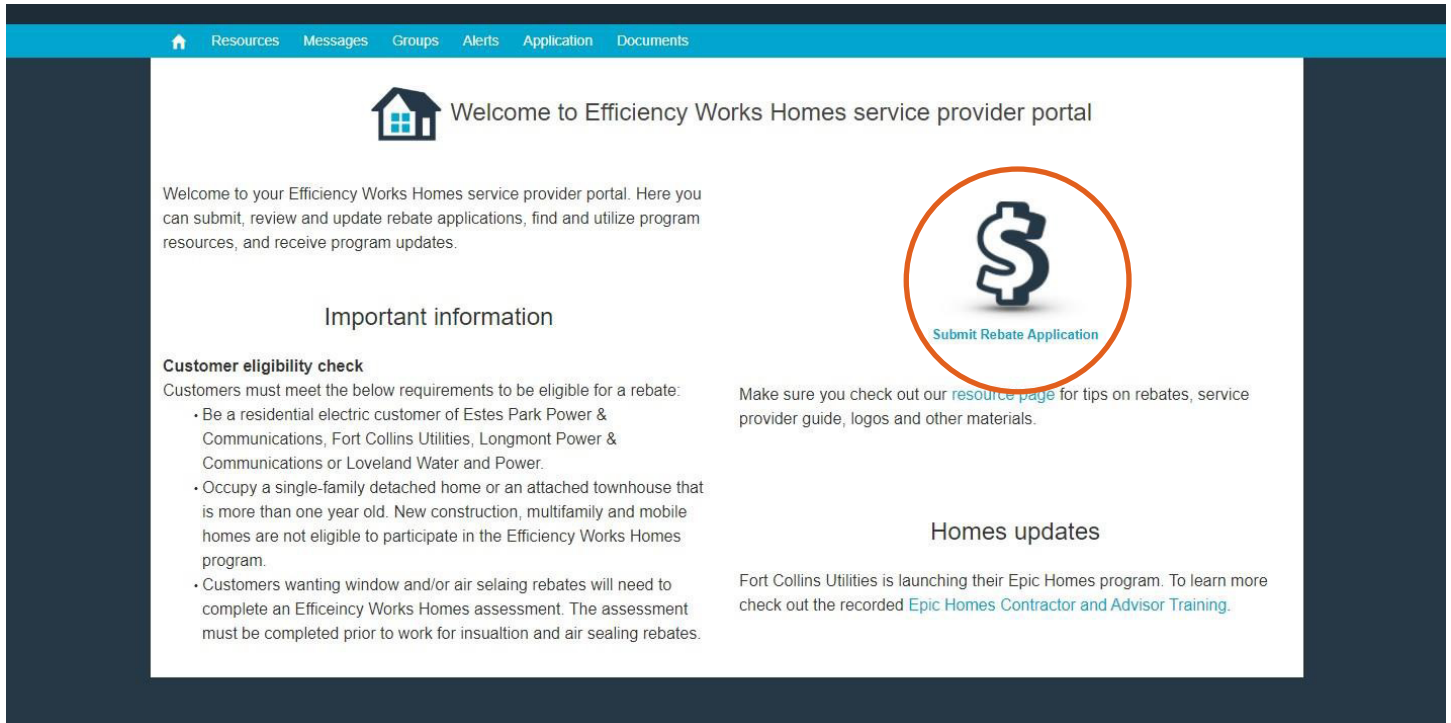


The screenshot shows the Efficiency Works login interface. At the top, the logo and company name are displayed, followed by the locations: Estes Park | Fort Collins | Longmont | Loveland. Below this, there are two input fields: one for 'Email' with a person icon and one for 'Password' with a lock icon. A prominent orange 'Log in' button is centered below the fields. Underneath the button, there are three links: 'Forgot Password?', 'Become a Member', and 'Forgot Username?'.

When you are ready to apply for a rebate or manage an existing rebate you need to log into your Trade Ally portal.

<https://efficiencyworks.force.com/tradeally/s/login/>

## Appendix K: How to apply for a rebate in Efficiency Works Homes



The screenshot shows the Efficiency Works Homes service provider portal. At the top, there is a navigation bar with links for Resources, Messages, Groups, Alerts, Application, and Documents. Below the navigation bar, a house icon is followed by the text "Welcome to Efficiency Works Homes service provider portal". A paragraph of text explains that users can submit, review, and update rebate applications, find and utilize program resources, and receive program updates. A section titled "Important information" contains a "Customer eligibility check" with a list of requirements: being a residential electric customer of Estes Park Power & Communications, Fort Collins Utilities, Longmont Power & Communications, or Loveland Water and Power; occupying a single-family detached home or an attached townhouse more than one year old; and completing an assessment for window and/or air sealing rebates. To the right, a large orange circle highlights a "Submit Rebate Application" button, which features a dollar sign icon. Below this, a note advises checking a resource page for tips on rebates, service provider guides, logos, and other materials. A "Homes updates" section mentions that Fort Collins Utilities is launching their Epic Homes program and provides a link to recorded training.

### Step 1


Once on this page you click on **Submit Rebate Application**.

## Appendix K: How to apply for a rebate in Efficiency Works Homes


[< Back to Applications](#)

Select a program for the application

Choose any program from the list of Eligible programs



**Efficiency Works Homes Rebates**  
Efficiency Works Homes Rebate Program is utilized by our service provider network to apply for rebates on behalf of their customers. Individuals may not apply for the rebates but can find a list of service providers in our program at <https://efficiencyworks-ta.tradeably.com/tradeably/public/find.do>



.exe ^

### Step 2

This page will list the Efficiency Works Homes rebates program. Click on the forward button to continue.

## Appendix K: How to apply for a rebate in Efficiency Works Homes

The screenshot shows the Efficiency Works application management interface. At the top left is the Efficiency Works logo. At the top right is the user profile for scott.suddreth@prpa.org. Below the header is the 'Applications' section. A yellow 'New Application' button is circled in orange. Below this are search and sort options: 'Search by Program Name' with a search icon and 'Find Applications' button, and 'Sort by Last Updated: Descending'. The main content area displays two application cards. The first card is for 'Miss Piggy' at '321 out there place, Fort Collins, CO, 80526'. It shows application details for 'Efficiency Works Homes Rebates' with application number 00001415309, status 'In Progress - Draft', and creation/last update dates of Feb 12, 2021. The second card is for 'Kermit The Frog' at '123 somewhere lane, Fort Collins, CO, 80526'. It shows application details for 'Efficiency Works Homes Rebates' with application number 00001415200, status 'Completed - Request Payment', and creation/last update dates of Feb 12, 2021.

### Step 3

You should now see the page above. This page allows you to look at your existing rebates you have in the program listed vertically down the page.

To access an existing application simply find it in the list and click on the green link under the application number.

To enter a new rebate application click on **(New Application)**.

## Appendix K: How to apply for a rebate in Efficiency Works Homes

Efficiency Works Homes Rebates | Rebate Application | 00000767708

### Contractor Information

Please review and make sure the below information is correct. You can update any incorrect or out of date information in your profile in Trade Ally.

Company Name *	Partner Number
Test Construct	5034
Address 1 *	Address2
123 Test Ave	
City	State *
SF	CA
Zip Code *	
94404	
Phone Number	
(970) 111 - 2222	

#### Contact Information

Contact First Name *	Contact Last Name *
Ted	Testing
Contact Email *	Contact Phone
ted@testina.com	910 012 0123

POTENTIAL REBATE

\$0.00  
Customer

- Contractor Information
- Customer Information
- Utility Information
- Project Information
- Air Sealing and Insulation (0)
- Payee
- Documents

Calculate | Sync/Save | Back To Applications

Test Testuser (6@6.com)

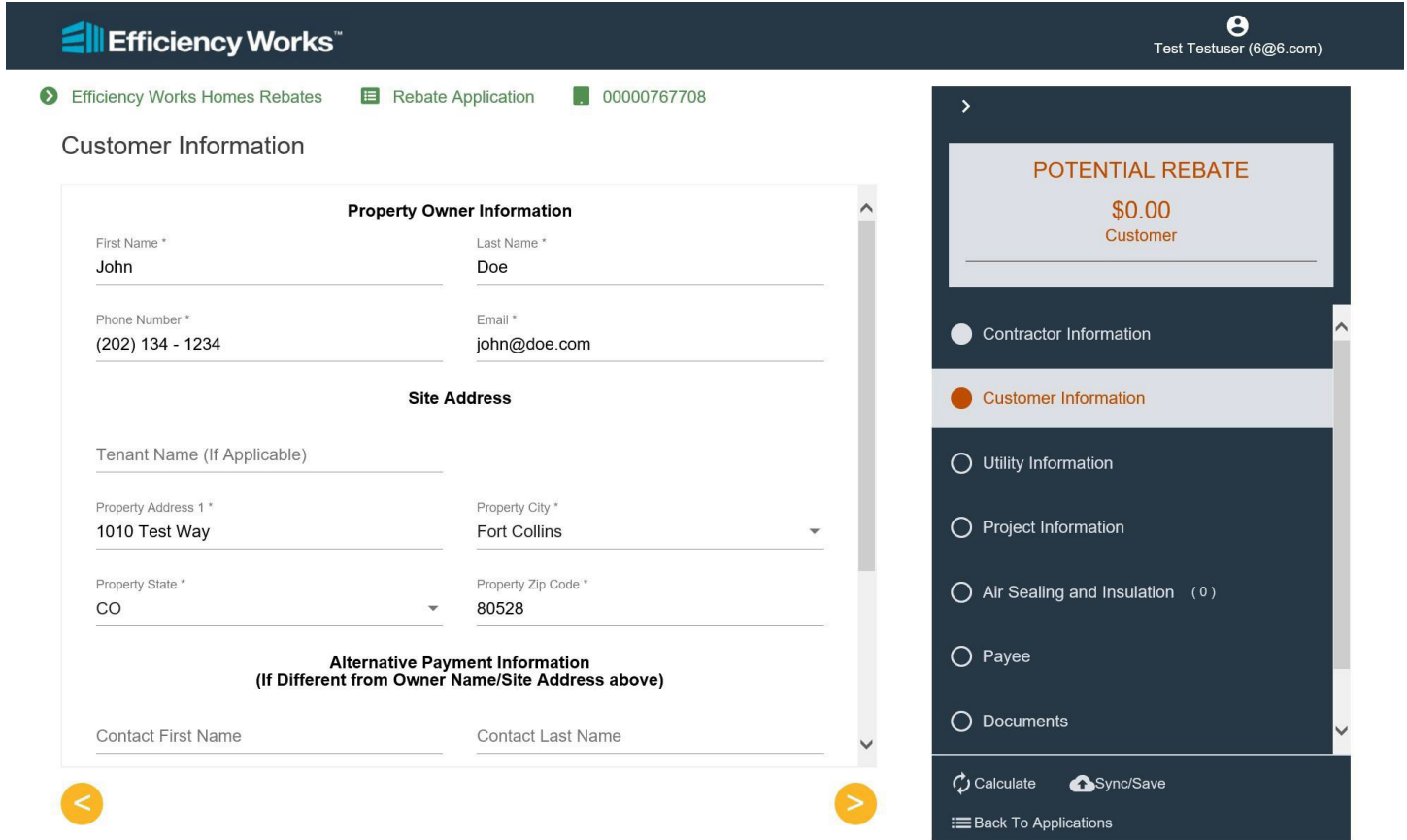
### Note:

The column on the right-hand side of the page will track your progress throughout the application. You can only move forward one page at a time using the orange advance button (circled on this page in red) but you can move back as many pages as required.

### Step 4

You should now see the page above. This is the **Contractor Information** page, and it should be auto-populated with your correct information as it is pulled from your profile page. If any of this information is incorrect – it should be changed in your Profile settings – see top blue circle. Click on **the orange advance button circled** to move forward.

## Appendix K: How to apply for a rebate in Efficiency Works Homes



The screenshot displays the Efficiency Works Rebate Application interface. At the top, the Efficiency Works logo is on the left, and the user's name 'Test Testuser (6@6.com)' is on the right. Below the header, a breadcrumb trail shows 'Efficiency Works Homes Rebates' > 'Rebate Application' > '00000767708'. The main content area is titled 'Customer Information' and contains a form with the following sections:

- Property Owner Information:**
  - First Name \*: John
  - Last Name \*: Doe
  - Phone Number \*: (202) 134 - 1234
  - Email \*: john@doe.com
- Site Address:**
  - Tenant Name (If Applicable):
  - Property Address 1 \*: 1010 Test Way
  - Property City \*: Fort Collins
  - Property State \*: CO
  - Property Zip Code \*: 80528
- Alternative Payment Information (If Different from Owner Name/Site Address above):**
  - Contact First Name:
  - Contact Last Name:

Navigation arrows are visible at the bottom of the form. To the right, a sidebar shows a summary of the application:

- POTENTIAL REBATE:** \$0.00 Customer
- Contractor Information
- Customer Information** (highlighted in orange)
- Utility Information
- Project Information
- Air Sealing and Insulation (0)
- Payee
- Documents

At the bottom of the sidebar, there are buttons for 'Calculate', 'Sync/Save', and 'Back To Applications'.

### Step 5

You should now see the page above. This page is the **Customer Information** page. You will need to fill out all the cells that have asterisks as they are the required fields. The Alternative Payment Information section will be covered in a later example in this document. Click on **the orange advance button** to move forward.

## Appendix K: How to apply for a rebate in Efficiency Works Homes

The screenshot displays the 'Utility Information' section of the rebate application. At the top, a red notification states: 'Based upon the site address entered, this customer may have already had a rebate submitted for them. Please handle accordingly.' Below this, the 'Electric Utility' is set to 'Fort Collins Utilities' and the 'Gas Utility Provider' is 'Xcel Energy'. A section titled 'Select one or more Trade to indicate what type(s) of rebate is being applied for.' includes checkboxes for 'Air Sealing and Insulation' (checked), 'Windows', and 'HVAC'. The 'Completed Install Date' is '2/2/2021', with a calendar icon circled in red. A 'System Message' field is also present. On the right, a sidebar shows a 'POTENTIAL REBATE' of '\$0.00 Customer' and a list of sections: Contractor Information, Customer Information, Utility Information (highlighted), Project Information, Air Sealing and Insulation (0), Payee, and Documents. At the bottom of the sidebar are buttons for 'Calculate', 'Sync/Save', and 'Back To Applications'.

### Note:

The red text at the top of the page is a notification that the system recognizes this address. If you ever see this, double check to make sure you have not already applied for the same rebate.

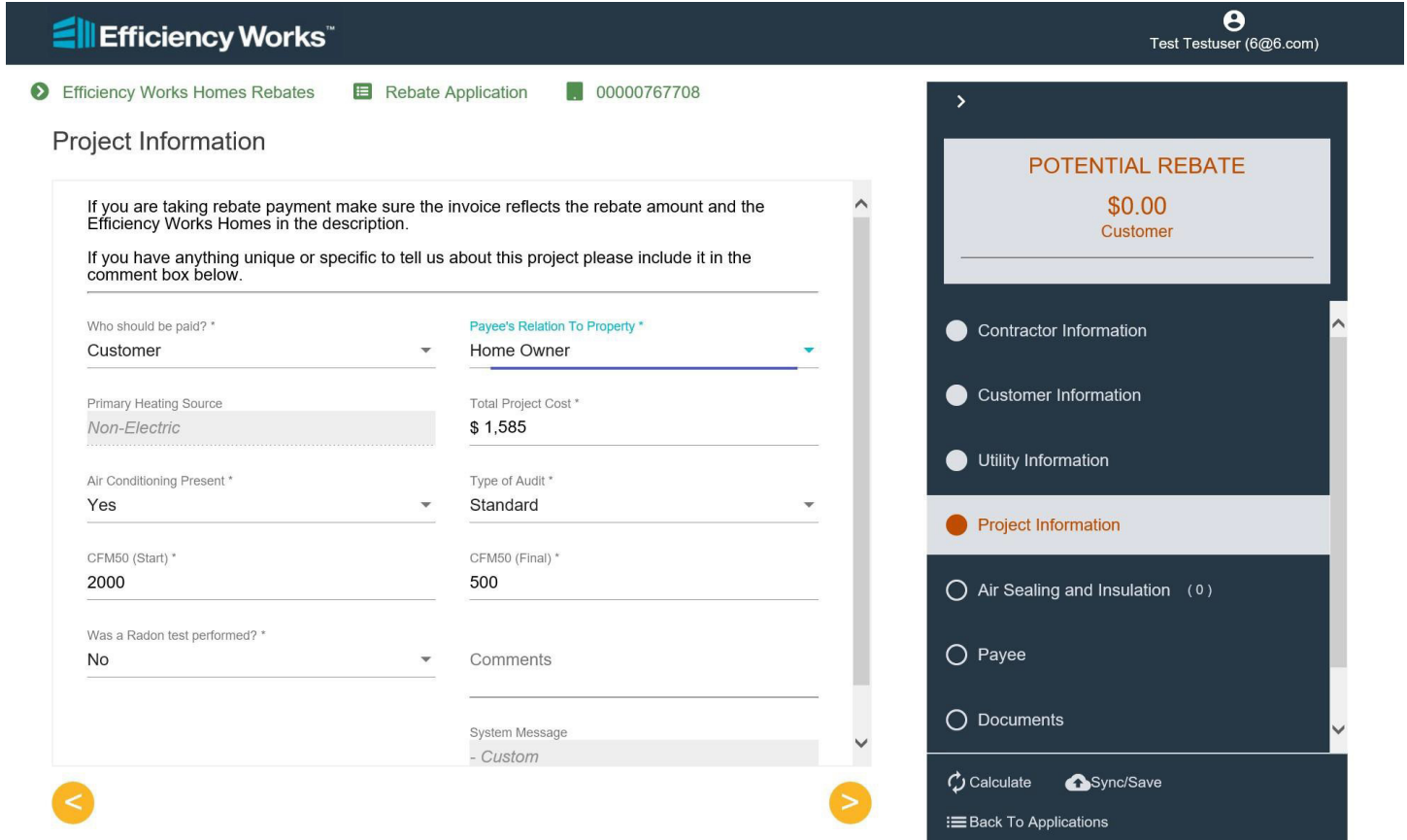
### Step 6

You should now see the page above. This is the **Utility Information** page. Simply select the appropriate electrical and gas utility provider. Then you need to check the box beside your trade and choose the **Completed Install Date** by clicking on the calendar icon circled in red.

Click on the orange advance button to move forward.



## Appendix K: How to apply for a rebate in Efficiency Works Homes



The screenshot displays the Efficiency Works Rebate Application interface. At the top, the Efficiency Works logo is on the left, and the user's name 'Test Testuser (6@6.com)' is on the right. Below the logo, there are three navigation items: 'Efficiency Works Homes Rebates', 'Rebate Application', and '00000767708'. The main section is titled 'Project Information' and contains a form with the following fields:

- Who should be paid? \***: Customer
- Payee's Relation To Property \***: Home Owner
- Primary Heating Source**: Non-Electric
- Total Project Cost \***: \$ 1,585
- Air Conditioning Present \***: Yes
- Type of Audit \***: Standard
- CFM50 (Start) \***: 2000
- CFM50 (Final) \***: 500
- Was a Radon test performed? \***: No
- Comments**: (empty text area)
- System Message**: - Custom

On the right side, there is a sidebar with a 'POTENTIAL REBATE' section showing '\$0.00 Customer'. Below this, there are several menu items: Contractor Information, Customer Information, Utility Information, Project Information (highlighted in orange), Air Sealing and Insulation (0), Payee, and Documents. At the bottom of the sidebar, there are buttons for 'Calculate', 'Sync/Save', and 'Back To Applications'.

### Step 7

You should now see the page above. This is the **Project Information** page. Once again – fill out all cells with an asterisk. Note that this is the page where you tell us **who** will receive the rebate.

**Customer** = Customer gets rebate (You will be asked to select Payee's Relation To Property)

**Contractor** = Contractor gets rebate.

Click on the orange advance button to move forward.

## Appendix K: How to apply for a rebate in Efficiency Works Homes

The screenshot displays the Efficiency Works Rebate Application interface. At the top, the logo and navigation links are visible. The main section is titled "Air Sealing and Insulation" and includes a note: "• Estes Park rebates are only applicable for homes with electric heat." Below this is a search bar with the text "Search by: Name" and a search icon. A list of measures is shown with checkboxes: "Air Sealing - Whole House" (checked), "Air Sealing - Home/Garage", "Attic - Blown Fiber Glass/Cellulose", and "Attic Knee Wall Insulation - Adding to Existing Insulation". A "+ Add To Project" button is circled in orange at the bottom of the list. On the right, a sidebar shows a "POTENTIAL REBATE" of "\$440.00 Customer" and a list of sections: Contractor Information, Customer Information, Utility Information, Project Information, Air Sealing and Insulation (0), Payee, and Documents. At the bottom of the sidebar are buttons for "Calculate", "Sync/Save", and "Back To Applications".

### Step 8

You should now see the page above. This is an Air Sealing and Insulation example. Select all the measures you want to apply for and click + Add To Project.

Click on the orange advance button to move forward.

## Appendix K: How to apply for a rebate in Efficiency Works Homes

Efficiency Works Homes Rebates | Rebate Application | 00000768204

Test Testuser (6@6.com)

**Air Sealing and Insulation** + Add Equipment or Measures

INCENTIVES  
Customer : \$ 440.00

**Air Sealing - Whole House** + Duplicate - Delete

CFM values entered on Project Information will automatically populate as you move forward in the application. To see the information immediately click the calculate button.

CFM50 (Start) 2000	CFM50 (Final) 500
Install Cost \$ 1,500	CFM Reduction (Percent) 75%
Rebate \$440	

POTENTIAL REBATE  
\$440.00  
Customer

- Contractor Information
- Customer Information
- Utility Information
- Project Information
- Air Sealing and Insulation (1)**
  - Air Sealing - Whole House
- Payee
- Documents

Calculate Sync/Save  
Back To Applications

### Step 9

Each measure has different inputs required. In this example we are applying for the Whole House Air Sealing rebate which is asking for a pre and post blower door value. The grey box above will provide a summary of the measures entered.

Click on the orange advance button to move forward once all measures are applied for.

## Appendix K: How to apply for a rebate in Efficiency Works Homes

The screenshot displays the 'Payee' information page in the Efficiency Works Rebate Application. The page is titled 'Payee' and includes a header with the Efficiency Works logo and the user 'Test Testuser (6@6.com)'. The breadcrumb trail shows 'Efficiency Works Homes Rebates' > 'Rebate Application' > '00000768204'. The main content area contains a 'Pay To:' section with the following fields:

Pay To:	
Remit to Company name	Remit to First Name John
Remit to Last Name Doe	Remit to Address Line 1 123 Testing Ave
Remit to Address Line 2	Remit to City Fort Collins
Remit to State CO	Remit to Zip Code 80528
Remit to Country USA	

Below the 'Pay To:' section is the 'Customer Name' section with the following fields:

Customer Name	
First Name John	Last Name Doe

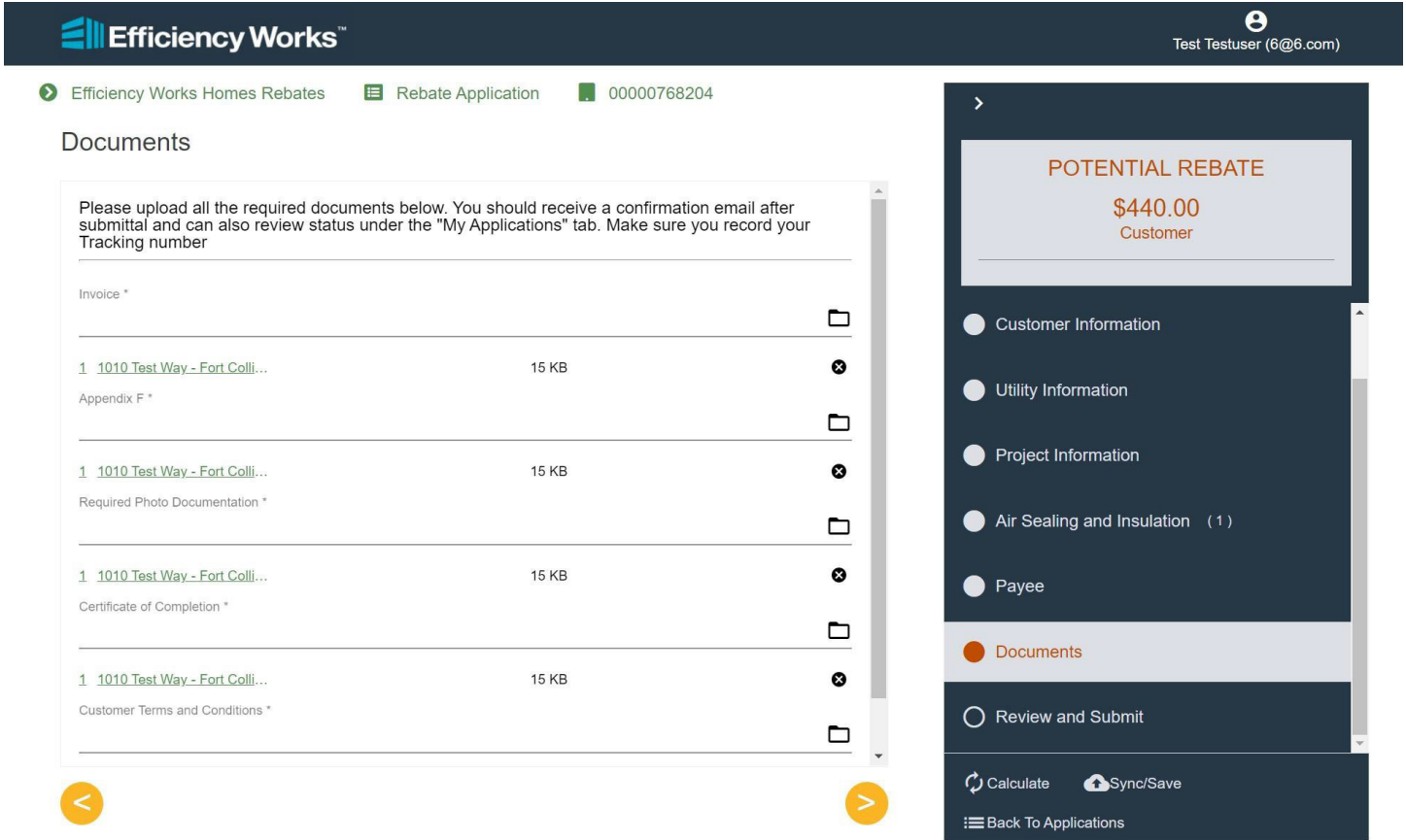
At the bottom of the form are yellow navigation buttons with left and right arrows. To the right of the form is a sidebar with a 'POTENTIAL REBATE' summary showing '\$440.00 Customer'. The sidebar also contains a list of sections: Contractor Information, Customer Information, Utility Information, Project Information, Air Sealing and Insulation (1), Payee (selected), and Documents. At the bottom of the sidebar are buttons for 'Calculate', 'Sync/Save', and 'Back To Applications'.

### Step 10

You should now see the page above. This is the **Payee** page and is used to clarify who will be receiving the rebate based on the Project Information pages' inputs. If this is incorrect click back onto the Project Information page to adjust.

When correct, click on the orange advance button to move forward again.

## Appendix K: How to apply for a rebate in Efficiency Works Homes



### Step 11

Once you have entered your measures you will be moved on to the Documents page. This is where the application will ask for specific paperwork depending on what you applied for. The **Certificate of Completion** and the **Terms and Conditions** are in the customer rebate folder that you either have in paper form or digitally (provided by the Efficiency Works team). Notice the files in this example are using our required naming scheme. Click on the orange advance button to

## Appendix K: How to apply for a rebate in Efficiency Works Homes

Efficiency Works™

Test Testuser (6@6.com)

Efficiency Works Homes Rebates | Rebate Application | 00000768204

### Review and Submit

Review the below summary, if there are any problems with the payee or rebate information return to the prior sections and fix them, if everything is correct, click the submit button. An e-mail confirmation will be sent to the customer and you will be copied.

Pay to: Customer  
John Doe  
1010 Test Way  
Fort Collins, CO 80528

Rebate	Estimated rebate amount
Air Sealing - Whole House: 75% leakage reduction	\$440.00
	<b>\$440.00</b>

< Submit>

POTENTIAL REBATE  
\$440.00  
Customer

- Customer Information
- Utility Information
- Project Information
- Air Sealing and Insulation (1)
- Payee
- Documents
- Review and Submit**

Calculate Sync/Save  
Back To Applications

### Step 12

This is your review page. This should summarize every measure you have applied for, along with the eligible rebates. Make sure this is correct before submitting. If everything is correct click on the **Submit > button**. If anything is incorrect click back to the appropriate page as needed using the page titles in the navy-blue box on the right-hand side.

## Appendix K: How to apply for a rebate in Efficiency Works Homes


### Application sent!

Thank you! Your application is being reviewed. We will reach out with any questions. You can check the status of your rebates from your [account view](#).

Application number 00000768204  
Sent on Feb 9, 2021, 8:29:52 PM PST

Efficiency Works Homes Rebates  
1010 Test Way, Fort Collins, CO, 80528

Equipment or measures

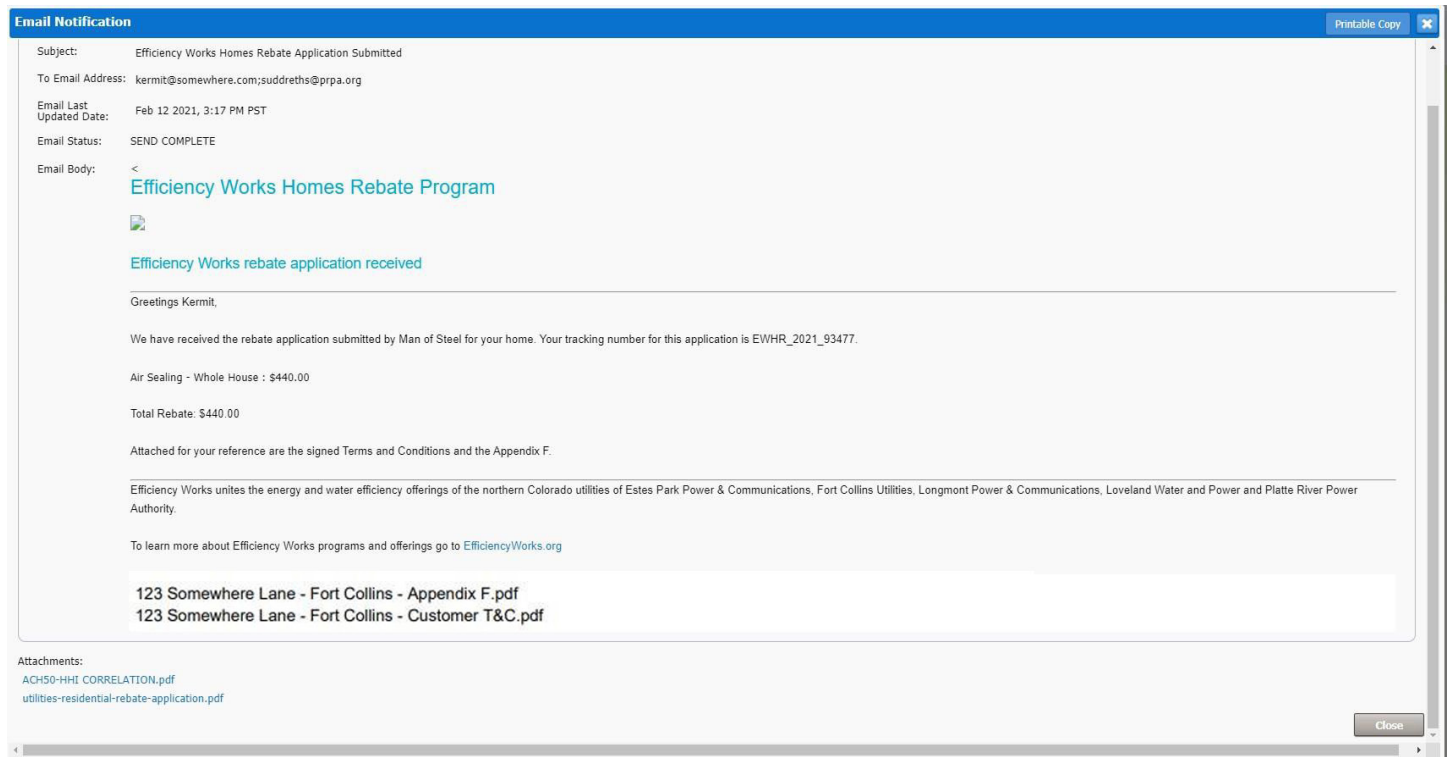
 Air Sealing - Whole House

 Print this page

Congratulations! You are now finished. This shows your **tracking number** and automates an email that is then sent to you and the customer to let everyone know that the rebate has been successfully applied for.

## Appendix K: How to apply for a rebate in Efficiency Works Homes

### Email notification for a rebate application



This is an example of the email notifying the service provider and the customer that the rebate application has been received by the program.

Take note of the tracking number in the first sentence after the Greeting. That number will allow you to find the job in your portal if necessary

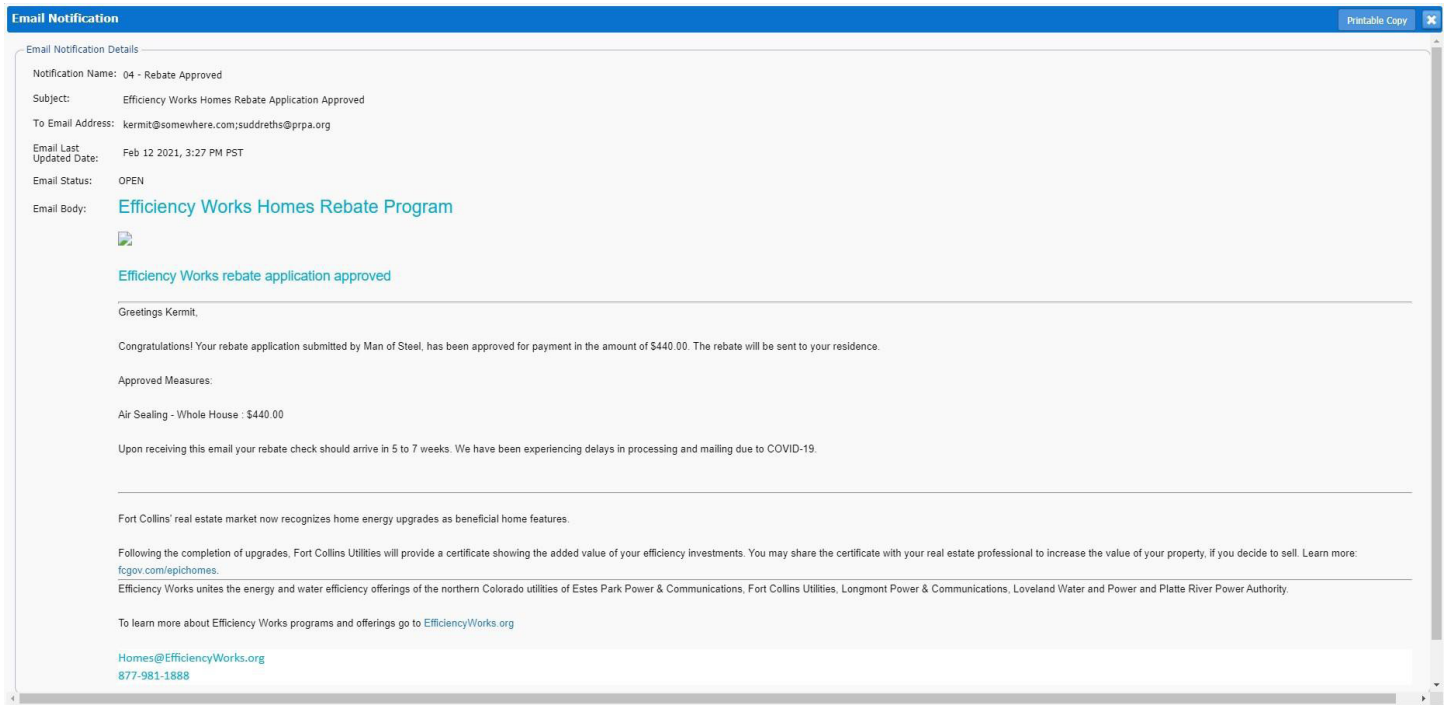
Due to the need to protect customer personal information, we will only be using the first name to distinguish this application from any other.

Note that **Appendix F** and the **Terms and Conditions** document are attached to this for the customer's records.



## Appendix K: How to apply for a rebate in Efficiency Works Homes

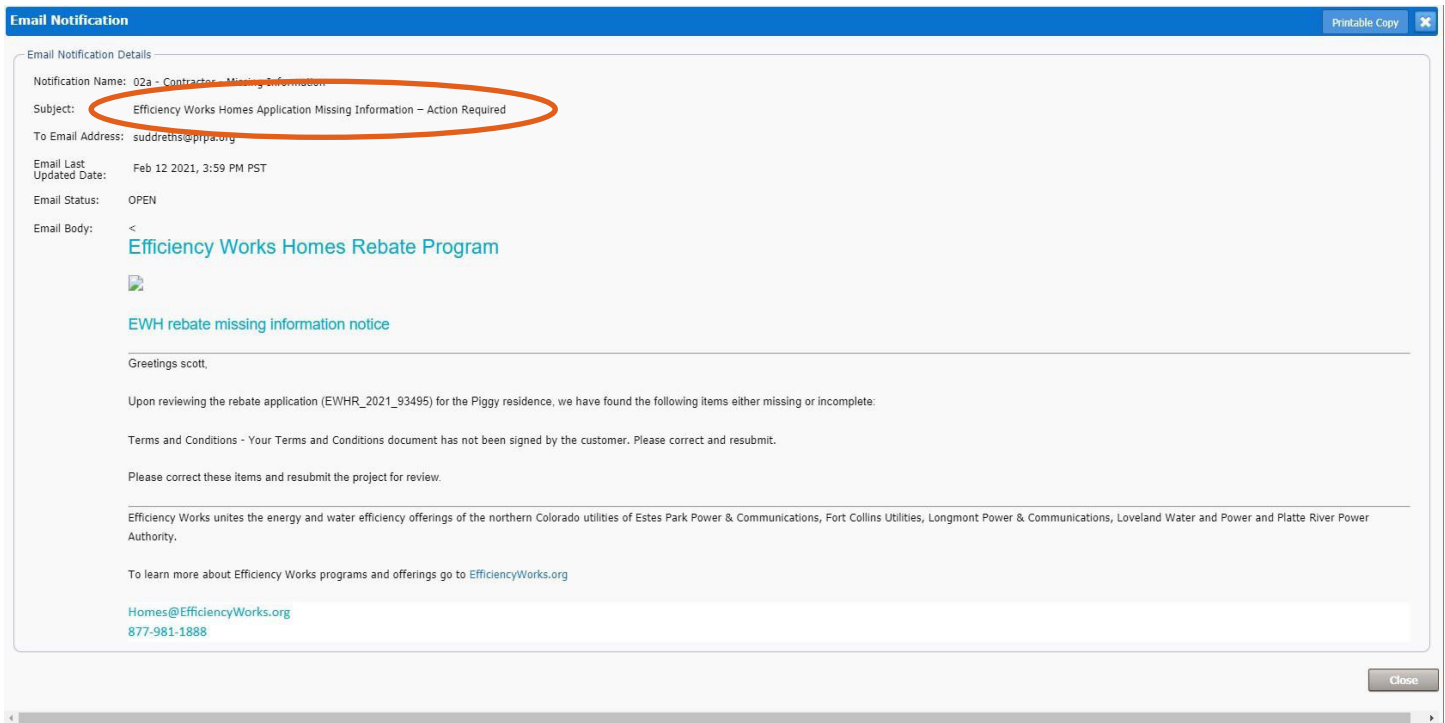
### Email notification for an approved rebate application



This is the email that will show up once the rebate has been approved. This keeps the customer, service provider, and the program on the same page as to the status of any rebate in the program.

## Appendix K: How to apply for a rebate in Efficiency Works Homes

### Rebate application returned as Missing Information



The screenshot shows an email notification interface. At the top, there is a blue header with the text "Email Notification" and a "Printable Copy" button. Below the header, the email details are listed:

- Notification Name: 02a - Contractor - Missing Information
- Subject: **Efficiency Works Homes Application Missing Information – Action Required** (circled in orange)
- To Email Address: suddreth@pppa.org
- Email Last Updated Date: Feb 12 2021, 3:59 PM PST
- Email Status: OPEN
- Email Body: < [Efficiency Works Homes Rebate Program](#)

The email body contains the following text:

[EWH rebate missing information notice](#)

Greetings scott,

Upon reviewing the rebate application (EWHR\_2021\_93495) for the Piggy residence, we have found the following items either missing or incomplete:

- Terms and Conditions - Your Terms and Conditions document has not been signed by the customer. Please correct and resubmit.

Please correct these items and resubmit the project for review.

Efficiency Works unites the energy and water efficiency offerings of the northern Colorado utilities of Estes Park Power & Communications, Fort Collins Utilities, Longmont Power & Communications, Loveland Water and Power and Platte River Power Authority.

To learn more about Efficiency Works programs and offerings go to [EfficiencyWorks.org](http://EfficiencyWorks.org)

[Homes@EfficiencyWorks.org](mailto:Homes@EfficiencyWorks.org)  
877-981-1888

At the bottom right of the email content area, there is a "Close" button.

On occasion, a rebate application will be returned to the service provider with the status **Missing Information** if something is found incorrect, missing, or confusing. This will be indicated by an email sent to the key contact person at the company. If you receive one of these emails you need to go back into your portal and update the application with the relevant info and then resubmit.


**Appendix K: How to apply for a rebate in Efficiency Works Homes****Rebate application returned as Missing Information cont.**

Applications [New Application](#)

Search by Find Applications Sort by  
Application Status Q Missing Information Last Updated: Descending


---


**Customer** Miss Piggy **Site** 321 out there place, Fort Collins, CO, 80526

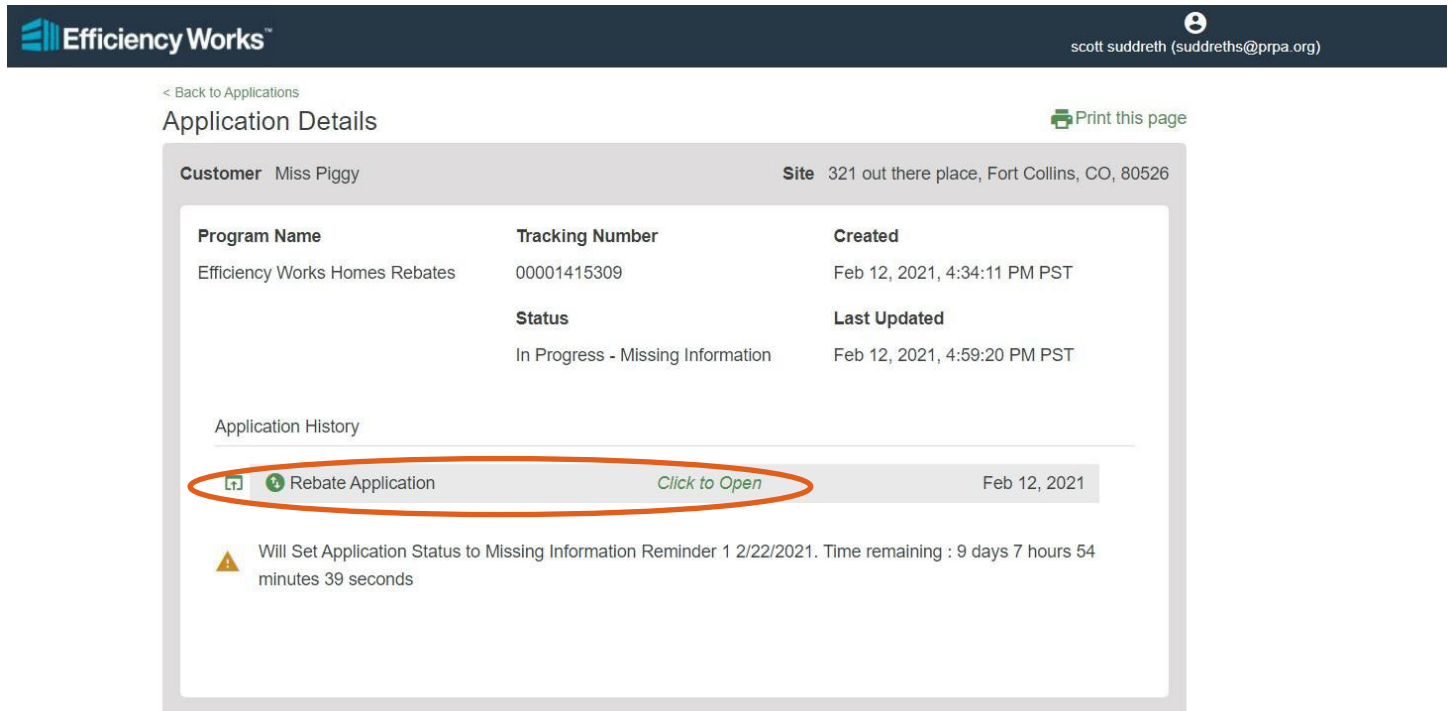
<b>Application details</b> Efficiency Works Homes Rebates	<b>Application number</b> <a href="#">00001415309</a>	<b>Created</b> Feb 12, 2021, 4:34:11 PM PST	
	<b>Status</b> In Progress - Missing Information	<b>Last Updated</b> Feb 12, 2021, 5:09:13 PM PST	

Use the search filters directly above your applications to search by “Missing Information” as the Application Status. Click on the Application number in green font to make your corrections.

**Customer** Miss Piggy **Site** 321 out there place, Fort Collins, CO, 80526

<b>Application details</b> Efficiency Works Homes Rebates	<b>Application number</b> <a href="#">00001415309</a>	<b>Created</b> Feb 12, 2021, 4:34:11 PM PST	
	<b>Status</b> In Progress - Missing Information	<b>Last Updated</b> Feb 12, 2021, 4:59:20 PM PST	

 Will Set Application Status to Missing Information Reminder 1 2/22/2021. Time remaining : 9 days 7 hours 56 minutes 51 seconds

**Appendix K: How to apply for a rebate in Efficiency Works Homes****Rebate application returned as Missing Information cont.**



< Back to Applications


Application Details Print this page

**Customer** Miss Piggy **Site** 321 out there place, Fort Collins, CO, 80526

Program Name	Tracking Number	Created
Efficiency Works Homes Rebates	00001415309	Feb 12, 2021, 4:34:11 PM PST
	Status	Last Updated
	In Progress - Missing Information	Feb 12, 2021, 4:59:20 PM PST

Application History

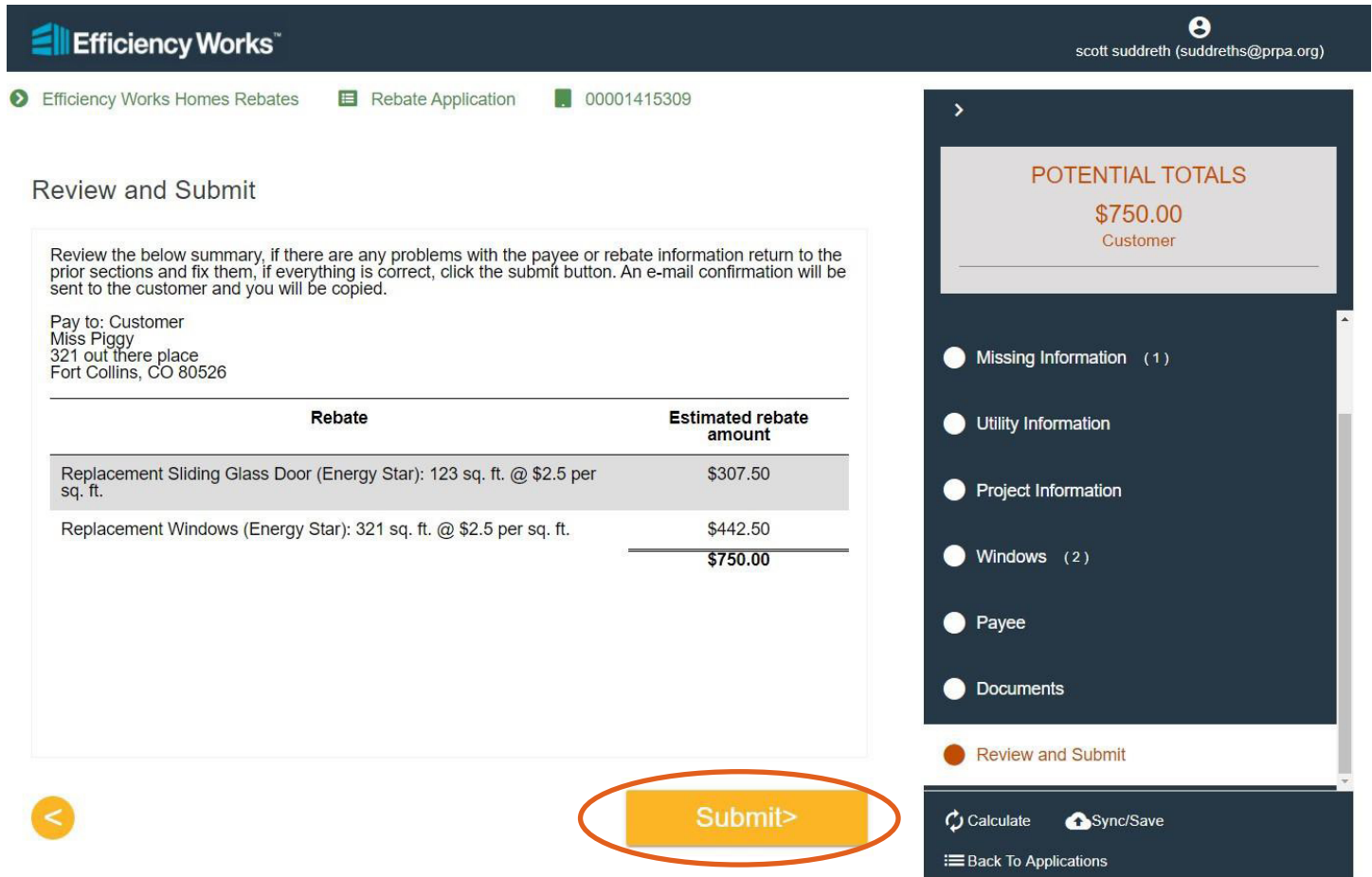
  Rebate Application <span>Click to Open</span>	Feb 12, 2021
---	--------------

 Will Set Application Status to Missing Information Reminder 1 2/22/2021. Time remaining : 9 days 7 hours 54 minutes 39 seconds

The Application Details page then pops up with a short summary of the application. To move forward click on the circled text.

### Appendix K: How to apply for a rebate in Efficiency Works Homes

## Rebate application returned as Missing Information cont.



Efficiency Works scott.suddreth (suddreths@prpa.org)

Efficiency Works Homes Rebates | Rebate Application | 00001415309

#### Review and Submit

Review the below summary, if there are any problems with the payee or rebate information return to the prior sections and fix them, if everything is correct, click the submit button. An e-mail confirmation will be sent to the customer and you will be copied.

Pay to: Customer  
Miss Piggy  
321 out there place  
Fort Collins, CO 80526

Rebate	Estimated rebate amount
Replacement Sliding Glass Door (Energy Star): 123 sq. ft. @ \$2.5 per sq. ft.	\$307.50
Replacement Windows (Energy Star): 321 sq. ft. @ \$2.5 per sq. ft.	\$442.50
	<b>\$750.00</b>

**POTENTIAL TOTALS**  
**\$750.00**  
Customer

- Missing Information (1)
- Utility Information
- Project Information
- Windows (2)
- Payee
- Documents
- Review and Submit**

Calculate | Sync/Save | Back To Applications

**Submit**

Next you will see the Review and Submit screen. Click on the Submit button to resubmit the application.

### Appendix K: How to apply for a rebate in Efficiency Works Homes

Submitting an AC during the cold months is common in our program.

To do this there are **two options**.

Air Conditioner 1 + Duplicate - Delete

Tier 1 - SEER 14.5, EER 12.0 - **\$150 rebate**  
Tier 2 - SEER 15.0, EER 12.5 - **\$250 rebate**  
Tier 3 - SEER 16.0, EER 12.5 - **\$350 rebate**  
Tier 4 - SEER 17.0, EER 12.5 ECM Motor, Multi-Stage Blower - **\$500 rebate**

New AC Installation or Replacement  
AC system sized using ACCA Manual J compliant method  
Max \$500 per customer

Installation Type \*

Stages \*  Blower Motor \*

SEER \*  EER \*

Permit Pulled?  
Checkbox is required

**Does AC need to be Cx at a later date? \***

< << >> >

**Option 1:** Furnace & AC both installed in cold weather – you simply apply for the rebate for both units like normal. The only difference is this – you toggle “**Does AC need to be CX at a later date?**” to **Yes**. This will allow you to submit the rebate with all required documentation except the AC Commissioning sheet (Appendix E).

## Appendix K: How to apply for a rebate in Efficiency Works Homes

We will process the furnace rebate during our next rebate review. Our system will pay out the furnace immediately and will tell the customer that the AC is on hold “Waiting on Commissioning” – see example below.

Email Notification Details

Notification Name: 04 - Rebate Approved


Subject: Efficiency Works Homes Rebate Application Approved

To Email Address: kklasinski1@nexant.com

Email Last Updated Date: Jan 30 2020, 10:18 AM PST

Email Status: OPEN

Email Body: [Efficiency Works Homes Rebate Program](#)



[Efficiency Works rebate application approved](#)

---

Greetings mr,

Congratulations! Your rebate application submitted by SF Const. INC, has been approved for payment in the amount of \$500.00. The rebate will be sent to your residence.

Approved Measures:

- Replacement Gas Furnace : \$500.00
- Awaiting Commissioning:
- Air Conditioner

Upon receiving this email your rebate check should arrive in 3 weeks.

---

Fort Collins' real estate market now recognizes home energy upgrades as beneficial home features.

Following the completion of upgrades, Fort Collins Utilities will provide a certificate showing the added value of your efficiency investments. You may share the certificate with your real estate professional to increase the value of your property, if you decide to sell. [Learn more: fcgov.com/epichomes](http://fcgov.com/epichomes).

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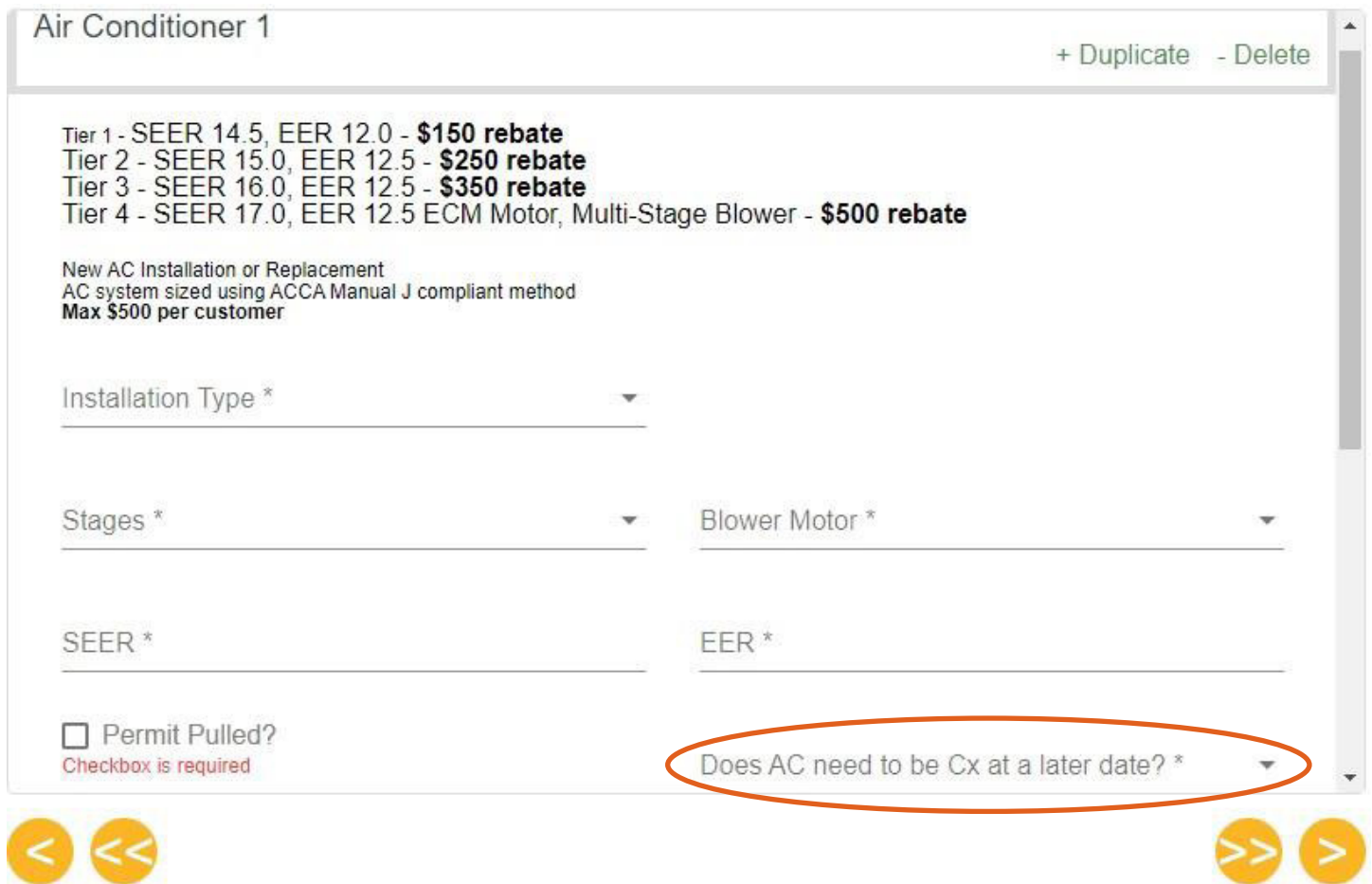
To learn more about Efficiency Works programs and offerings go to [EfficiencyWorks.org](http://EfficiencyWorks.org)

[Homes@EfficiencyWorks.org](mailto:Homes@EfficiencyWorks.org)  
877-981-1888

### Appendix K: How to apply for a rebate in Efficiency Works Homes

**Option 2:** You are installing the AC alone.

You apply for the AC by itself – toggle **Does AC need to be commissioned on a later date?** To “Yes”



Air Conditioner 1 + Duplicate - Delete

Tier 1 - SEER 14.5, EER 12.0 - **\$150 rebate**  
Tier 2 - SEER 15.0, EER 12.5 - **\$250 rebate**  
Tier 3 - SEER 16.0, EER 12.5 - **\$350 rebate**  
Tier 4 - SEER 17.0, EER 12.5 ECM Motor, Multi-Stage Blower - **\$500 rebate**

New AC Installation or Replacement  
AC system sized using ACCA Manual J compliant method  
Max \$500 per customer

Installation Type \*

Stages \*  Blower Motor \*

SEER \*  EER \*

Permit Pulled?  
Checkbox is required

Does AC need to be Cx at a later date? \*

Now, the software will allow you to submit the rebate application requiring all documents EXCEPT the AC commissioning form (Appendix E)

When warmer weather finally rolls around – this application will be waiting in your portal for Appendix E to be added and then it can be submitted.



### Appendix K: How to apply for a rebate in Efficiency Works Homes

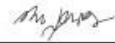
To fill out the **Certificate of Completion** so the customer receives the rebate – you fill out the top portion.

Make sure you have the rebate amount included here or the document **isn't considered a legal sign off**.

**Also make sure that the amount listed as the rebate is accurate.** If it shows more \$ than they are eligible for you will be required to get a new signature with the correct amount.

#### Efficiency Works Homes Certificate of Completion

I certify that the work and/or project I am applying for an Efficiency Works Homes rebate has been completed to my satisfaction.

Participant Signature\*  Date\* 1-30-20  
Name\* Mr. Jones Phone\* 111-111-1111  
Mailing Address\* 1234 somewhere drive  
City, State, and Zip\* Fort Collins, CO 80525  
Rebate Amount\* \$962.10

#### Authorization to Pay an Alternate Recipient (Contractor)

I (Participant) authorize Platte River Power Authority to make the incentive payment to the identified party below. This section to be completed by the participant. **ONLY COMPLETE THIS SECTION IF YOU WANT THE REBATE TO BE PAID TO AN ALTERNATE RECIPIENT.**

Participant Signature \_\_\_\_\_ Date \_\_\_\_\_  
Name \_\_\_\_\_

#### Alternate Payment Recipient (Contractor)

This section to be completed by third party (such as installing contractor)

Contact Person \_\_\_\_\_ Phone \_\_\_\_\_  
Title \_\_\_\_\_  
Company Name \_\_\_\_\_  
Mailing Address \_\_\_\_\_  
City, State, and Zip \_\_\_\_\_  
Comments \_\_\_\_\_

\* Denotes a required field.

## Appendix K: How to apply for a rebate in Efficiency Works Homes

You have the option as a service provider to offer the customer the Efficiency Works Home' rebate up front as a discount. This would mean that your invoice should show this clearly and then the program will reimburse your company for that rebate when the application is processed. To choose this option toggle the “Who should be paid?” drop-down to “Contractor” on the **Project Information** page.

The screenshot displays the Efficiency Works Rebate Application interface. At the top, the Efficiency Works logo is on the left, and the user's name 'Test Testuser (6@6.com)' is on the right. Below the header, there are navigation breadcrumbs: 'Efficiency Works Homes Rebates', 'Rebate Application', and the application ID '00000768102'. The main section is titled 'Project Information' and contains a form with the following fields:

- Who should be paid? \***: A dropdown menu with 'Contractor' selected, circled in orange.
- Primary Heating Source**: 'Non-Electric'
- Total Project Cost \***: '\$ 1,585'
- Air Conditioning Present \***: 'Yes'
- Type of Audit \***: 'Standard'
- CFM50 (Start) \***: '2000'
- CFM50 (Final) \***: '500'
- Was a Radon test performed? \***: 'No'
- Comments**: A text area with the system message '- AirConAppendix F'

On the right side, a sidebar shows a summary of the application:

- POTENTIAL REBATE**: \$440.00 (Customer)
- Contractor Information**:
- Customer Information**:
- Utility Information**:
- Project Information**:
- Air Sealing and Insulation (1)**:
- Payee**:
- Documents**:

At the bottom of the sidebar, there are buttons for 'Calculate', 'Sync/Save', and 'Back To Applications'.

## Appendix K: How to apply for a rebate in Efficiency Works Homes

### How to make sure the homeowner gets the rebate vs. the tenant

If you have a tenant/landlord situation then you have a couple of different steps required.

First you have to fill out the **Alternative Payment Information** section of the **Customer Information** Form with the landlord's address.

The screenshot displays the Efficiency Works Rebate Application interface. At the top, the Efficiency Works logo and user information (Test Testuser (6@6.com)) are visible. The main form is titled "Customer Information" and includes the following fields:

- Tenant Name (If Applicable): Ted Test
- Property Address 1 \*: 1010 Test Way
- Property City \*: Fort Collins
- Property State \*: CO
- Property Zip Code \*: 80528
- Alternative Payment Information (If Different from Owner Name/Site Address above)** (circled in orange):
  - Contact First Name: John
  - Contact Last Name: Doe
  - Contact phone number: 202 1341234
  - Contact email: johndoe@email.com
  - Address 1: 555 Imagination Drve
  - City: San Diego
  - State: CA
  - Zip Code: 22222

On the right side, a sidebar shows a "POTENTIAL REBATE" of \$440.00 for the Customer. Below this, a list of sections is shown with radio buttons: Contractor Information, Customer Information (selected), Utility Information, Project Information, Air Sealing and Insulation (1), Payee, and Documents. At the bottom of the sidebar are buttons for Calculate, Sync/Save, and Back To Applications.

## Appendix K: How to apply for a rebate in Efficiency Works Homes

### How to make sure the homeowner gets the rebate vs. the tenant - cont.

The next thing you need to do is choose **Secondary Contact** from the Who should get paid drop-down list in **Project Information**.

This will tell the software to pay using the secondary address provided on the Customer Information screen.

You can verify this by looking at the **Payee** section.

The screenshot displays the Efficiency Works software interface. At the top, the logo and user information 'Test Testuser (t@6.com)' are visible. Below the navigation bar, the breadcrumb trail reads 'Efficiency Works Homes Rebates > Rebate Application > 00000768102'. The main section is titled 'Project Information' and contains a form with the following fields:

- Instructions: 'If you are taking rebate payment make sure the invoice reflects the rebate amount and the Efficiency Works Homes in the description.' and 'If you have anything unique or specific to tell us about this project please include it in the comment box below.'
- Who should be paid? \*: A dropdown menu with 'Contractor', 'Customer', and 'Secondary Contact' (circled in orange).
- Total Project Cost \*: \$ 1,585
- Type of Audit \*: Standard
- CFM50 (Start) \*: 2000
- CFM50 (Final) \*: 500
- Was a Radon test performed? \*: No
- Comments: A text area with a placeholder 'AirConAppendix E'
- System Message: A small box with a message.

On the right side, a sidebar menu is visible with the following items:

- POTENTIAL REBATE: \$440.00 Customer
- Contractor Information
- Customer Information
- Utility Information
- Project Information (selected)
- Air Sealing and Insulation (1)
- Payee
- Documents
- Calculate
- Sync/Save
- Back To Applications

## Pre-approval requirements and process

- Rebates \$2,500 and over as well as available bonuses and special offerings may require preapproval
- Rebate applications without pre-approval will be capped at \$2,500
- Pre-approval applications are intended to be submitted with a completed install date of less than 45 days from application date
- Approved pre-approvals will be voided out if no final application is received 45 days of original listed completed install date

[Efficiency Works homes rebates](#)
[Rebate Application](#)
00002955201

Potential Rebate	
Customer Rebate:	\$0
Vendor Rebate:	\$0

### Contractor Information

Please review and make sure the below information is correct. You can update any incorrect or out of date information in your profile in Trade Ally. If all of the info is correct click on the orange arrow at the bottom of the page to move forward.

Company Name *	SF Const. INC	Partner Number	5034
Address 1 *	2nd Floor	Address2	
City *	SF	State *	CA
Zip Code *	94404		
Phone Number	(970) 285 - 8524		
<b>Contact Information</b>			
Contact First Name *	Sir Luke	Contact Last Name *	Klasinski
Contact Email *	6@6.com	Contact Phone	1 (234) 567 - 8900

- Contractor Information
- Customer Information
- Utility Information
- Project Information
- Documents
- Review and Submit

## Customer information

Inform Efficiency Works who the customer is and the address for the home. The Alternative Payment information section **should only be filled out** if the rebate payment needs to be sent to a different address for a landlord.

➤ Efficiency Works homes rebates
📄 Rebate Application
📄 00002955201

### Customer Information

**Property Owner Information**

First Name * Charlie	Last Name * Brown
Phone Number * (234) 234 - 2333	Email * charles@brown.com

**Site Address**

Tenant Name (If Applicable)	
Property Address 1 * 7833 Shultz lane	Property Address 2
Property City * Fort Collins	Property State * CO
Property Zip Code * 80526	

**Alternative Payment information**

(Fill out this section if the incentive payment needs to be sent to a different address, Ex: landlord lives in a different county or state)

Contact First Name	Contact Last Name
Contact phone number	Contact email
Address 1	Address 2
City	State
Zip Code	

>
Potential Rebate

Customer Rebate: \$0

Vendor Rebate: \$0

Contractor Information

**Customer Information**

Utility Information

Project Information

Documents

Review and Submit

## Utility information

To apply for pre-approval, work cannot be started and you need to select NO (indicated below)

Efficiency Works homes rebates | Rebate Application | 00002955201

### Utility Information

The Efficiency Work program now has a Preapproval process in place to allow contractors to apply for funding prior to work to ensure that funds do not run out too quickly. For July 1<sup>st</sup> - Dec 31<sup>st</sup> 2024 this will mostly be for our rental bonus.

This first question is asking if you want this potential rebate to be preapproved by our program to ensure the funds are available at project completion. If the work is already complete you will need to select Yes and that will send it to be reviewed for final payment. If you are wanting preapproval – you will need to answer NO

Submit for final review and payment? \*

No

Electric Utility(Calculated)

Fort Collins Utilities

All Electric House \*

No

Propane in use? \*

No

Property ownership \*

Rental

Efficiency Works reserves the right to request proof of the property's rental status.

Select one or more Trade to indicate what type(s) of rebate is being applied for.

Air Sealing and Insulation

HVAC

Windows

Completed Install Date \*

5/31/2024

Potential Rebate

Customer Rebate:	\$0
Vendor Rebate:	\$0

- Contractor Information
- Customer Information
- Utility Information
- Project Information
- HVAC
- Documents
- Review and Submit

## Project information

Please provide more information about the project parameters.

If you added Alternative Payment Information on the customer form to deliver the rebate funds to a different address – **you must choose** Secondary Contact from the drop-down list

Efficiency Works homes rebates | Rebate Application | 00002955201

### Project Information

If you are taking rebate payment make sure the invoice reflects the rebate amount and Efficiency Works Homes in the description.

If you have anything unique or specific to tell us about this project please include it in the comment box below.

if you are asking the program to send this payment to an address other than the site address or the contractor – you must choose Secondary Contact in the Who should be paid? Dropdown - which uses the address at the bottom of the customer form

Who should be paid? \*  
Customer

Payee's Relation To Property \*  
Home Owner

Total Project Cost \*  
\$ 10,000

**Additional information is required before measure selection for the follow items. Check the boxes that apply to this project.**

Ducted Air Source Heat Pump  
 Ground Source Heat Pump  
 Heat Pump Water Heater

Existing water heating fuel \*  
Electric

Comments  
Customer is trying to electrify their home.

Provide any additional project details you would like to share.

#### Potential Rebate

Customer Rebate:	\$0
Vendor Rebate:	\$0

- Contractor Information
- Customer Information
- Utility Information
- Project Information**
- HVAC
- Documents
- Review and Submit



## Measure page

For this section please provide the minimum measure information to allow calculations for the total rebate amount upon pre-approval. Detailed measure information will be captured at **Project Update** once work is complete.

[Efficiency Works homes rebates](#)
|
[Rebate Application](#)
|
00002955201

HVAC
+ Add Equipment or Measures

Heat Pump Water Heater >55 gal
+ Duplicate - Delete

3.3 UEF - \$800 rebate		
New heat pump water heater installation		
<small>Installed Cost *</small> <b>\$ 4,000</b>		
<small>Estimated equipment and installation cost associated with this measure</small>		
<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; padding: 5px;"> <small>Customer Rebate</small>  <span style="border-bottom: 1px solid #ccc; padding-bottom: 2px;">\$800</span> </td> <td style="width: 50%; padding: 5px;"> <small>Vendor Rebate</small>  <span style="border-bottom: 1px dashed #ccc; padding-bottom: 2px;">\$200</span> </td> </tr> </table>	<small>Customer Rebate</small> <span style="border-bottom: 1px solid #ccc; padding-bottom: 2px;">\$800</span>	<small>Vendor Rebate</small> <span style="border-bottom: 1px dashed #ccc; padding-bottom: 2px;">\$200</span>
<small>Customer Rebate</small> <span style="border-bottom: 1px solid #ccc; padding-bottom: 2px;">\$800</span>	<small>Vendor Rebate</small> <span style="border-bottom: 1px dashed #ccc; padding-bottom: 2px;">\$200</span>	

Potential Rebate

Customer Rebate:	\$2,400
Vendor Rebate:	\$200

- Contractor Information
- Customer Information
- Utility Information
- Project Information
- HVAC
  - Heat Pump Water Heater >55 gal
- Documents
- Review and Submit

## Documents

Please provide a proposal, our team will review both the proposal and application to ensure accuracy, validity, thoroughness.

Efficiency Works homes rebates | Rebate Application | 00002955201

### Documents

Please upload all the required documents below. You should receive a confirmation email after submittal and can also review status under the "My Applications" tab. Make sure you record your Tracking number

Proposal/Invoice \*

1 [Proposal.pdf](#)

6 KB

Potential Rebate

Customer Rebate:	\$2,400
Vendor Rebate:	\$200

- Contractor Information
- Customer Information
- Utility Information
- Project Information
- HVAC
- Documents
- Review and Submit

## Review and submit

Please review your pre-approval application to ensure accuracy of project.

*\*Note - Any variance of more than 10% of the original preapproved amount will have to be preapproved again PRIOR to project completion or the project will be capped at 110% of the original amount.*

[Efficiency Works homes rebates](#)
[Rebate Application](#)
00002955201

### Review and Submit

This is the current "estimate" based on the initial application. Once you receive preapproval notification your application will be back in your portal (Project Update) awaiting your final information once the job is complete. **If the job values/dates change, you will need to send it back to preapproval BEFORE the job is completed.**

Rebate	Estimated customer rebate	Estimated vendor rebate
Heat Pump Water Heater >55 gal	\$800.00	\$200.00
Rental Bonus	\$1,600.00	
	<b>\$2,400.00</b>	<b>\$200.00</b>

Potential Rebate

Customer Rebate: \$2,400

Vendor Rebate: \$200

- Contractor Information
- Customer Information
- Utility Information
- Project Information
- HVAC
- Documents
- Review and Submit

## Application sent

### Application sent!

Thank you! Your application is being reviewed. We will reach out with any questions. You can check the status of your rebates from your [account view](#).

Application number 00002955201

Sent on May 21, 2024, 2:41:57 PM MDT

Efficiency Works homes rebates

🏠 783355 Shultz lane, Fort Collins, CO, 80526

 Print this page

## Vendor notification

TO: e@e.com

### Efficiency Works Homes Rebate Program



Efficiency Works rebate application pre-approved

Greetings Sir Luke,

Upon reviewing the rebate application (EWHR\_2024\_137598) for the Brown residence, the following funding has been preapproved

Rebate Measure	Estimated amount	Vendor amount
Heat Pump Water Heater >55 gal	\$800.00	\$200.00
Rental Bonus	\$1,600.00	

Upon completion of the project log in and update remaining required elements, and then submit the application. If the project cost has increased more than 10% of the original request, you will need to resubmit for preapproval for those additional funds. This is achieved by logging back into the portal and clicking on this application and choosing "No" when asked "Submit for final review and payment" if you choose not get preapproval on your project that has exceeded the original amount by more than 10% the final rebate will be capped at the original preapproved amount plus 10%.

Efficiency Works unites the energy and water efficiency offerings of the northern Colorado utilities of Estes Park Power & Communications, Fort Collins Utilities, Longmont Power & Communications, Loveland Water and Power and Platte River Power Authority.

To learn more about Efficiency Works programs and offerings go to [EfficiencyWorks.org](https://www.EfficiencyWorks.org)

Homes@EfficiencyWorks.org  
877-981-1888

## Customer/vendor notification

### Efficiency Works Homes Rebate Program



#### Efficiency Works rebate preapproval application received

Greetings Charlie,

We have received the rebate application submitted by SF Const. INC for preapproval of rebate funds for your home. The Efficiency Works Homes team will be reaching out to the customer to verify project details as part of the preapproval process. Your tracking number for this application is EWHR\_2024\_137598 (00002955201). If approved, the rebate will be sent to 783355 Shultz lane.

Rebate	Estimated amount
Heat Pump Water Heater >55 gal	\$800.00
Rental Bonus	\$1,600.00

Total Potential Rebate: \$2,400.00

Efficiency Works unites the energy and water efficiency offerings of the northern Colorado utilities of Estes Park Power & Communications, Fort Collins Utilities, Longmont Power & Communications, Loveland Water and Power and Platte River Power Authority.

To learn more about Efficiency Works programs and offerings go to [EfficiencyWorks.org](https://EfficiencyWorks.org)

Efficiency Works Homes team  
[Homes@EfficiencyWorks.org](mailto:Homes@EfficiencyWorks.org)  
877-981-1888

## Contractor notification – preapproved

TO: 6@6.com

### Efficiency Works Homes Rebate Program



#### Efficiency Works rebate application pre-approved

Greetings Sir Luke,

Upon reviewing the rebate application (EWHR\_2024\_137598) for the Brown residence, the following funding has been preapproved

Rebate Measure	Estimated amount	Vendor amount
Heat Pump Water Heater >55 gal	\$800.00	\$200.00
Rental Bonus	\$1,600.00	

Upon completion of the project log in and update remaining required elements, and then submit the application. If the project cost has increased more than 10% of the original request, you will need to resubmit for preapproval for those additional funds. This is achieved by logging back into the portal and clicking on this application and choosing "No" when asked "Submit for final review and payment" if you choose not get preapproval on your project that has exceeded the original amount by more than 10% the final rebate will be capped at the original preapproved amount plus 10%.

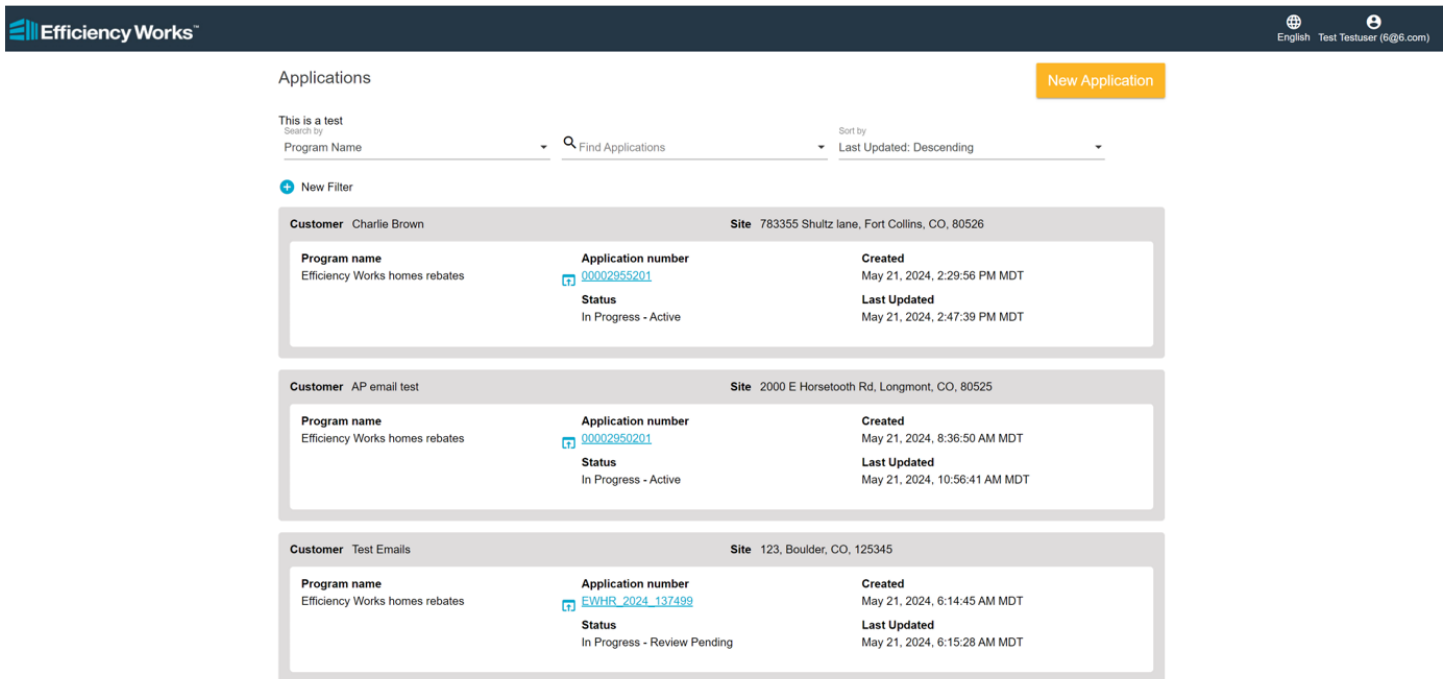
Efficiency Works unites the energy and water efficiency offerings of the northern Colorado utilities of Estes Park Power & Communications, Fort Collins Utilities, Longmont Power & Communications, Loveland Water and Power and Platte River Power Authority.

To learn more about Efficiency Works programs and offerings go to [EfficiencyWorks.org](https://EfficiencyWorks.org)

[Homes@EfficiencyWorks.org](mailto:Homes@EfficiencyWorks.org)  
877-981-1888

Upon completion of the project log in and update remaining required elements, and then submit the application. If the project cost has increased more than 10% of the original request, you will need to resubmit for preapproval for those additional funds. This is achieved by logging back into the portal and clicking on this application and choosing "No" when asked "Submit for final review and payment" If you choose not get preapproval on your project that has exceeded the original amount by more than 10% the final rebate will be capped at 110% of the originally approved amount.

## Applications in portal

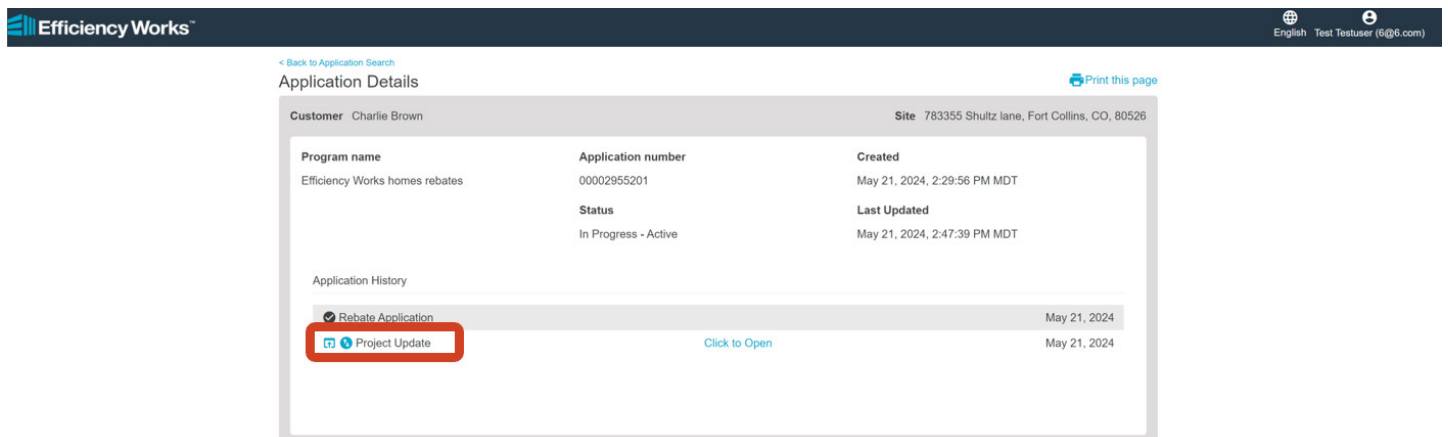


The screenshot shows the 'Applications' page in the Efficiency Works portal. At the top right, there are links for 'English' and 'Test Testuser (6@6.com)'. A 'New Application' button is visible in the top right corner. Below the header, there is a search bar with 'Find Applications' and a 'Sort by' dropdown set to 'Last Updated: Descending'. A 'New Filter' button is also present. The main content area displays three application cards, each with the following details:

Customer	Site	Program name	Application number	Created	Status	Last Updated
Charlie Brown	783355 Shultz lane, Fort Collins, CO, 80526	Efficiency Works homes rebates	00002955201	May 21, 2024, 2:29:56 PM MDT	In Progress - Active	May 21, 2024, 2:47:39 PM MDT
AP email test	2000 E Horsetooth Rd, Longmont, CO, 80525	Efficiency Works homes rebates	00002950201	May 21, 2024, 8:36:50 AM MDT	In Progress - Active	May 21, 2024, 10:56:41 AM MDT
Test Emails	123, Boulder, CO, 125345	Efficiency Works homes rebates	EWHR_2024_137499	May 21, 2024, 6:14:45 AM MDT	In Progress - Review Pending	May 21, 2024, 6:15:28 AM MDT

## Application details

Once an application is submitted, **Project Update** will be available. Complete the indicated section once work is completed.



The screenshot shows the 'Application Details' page for the first application. It includes a 'Print this page' button. The application details are as follows:

Customer	Site	Program name	Application number	Created	Status	Last Updated
Charlie Brown	783355 Shultz lane, Fort Collins, CO, 80526	Efficiency Works homes rebates	00002955201	May 21, 2024, 2:29:56 PM MDT	In Progress - Active	May 21, 2024, 2:47:39 PM MDT

Below the details is an 'Application History' section with two entries:

Application History	Date
<input checked="" type="checkbox"/> Rebate Application	May 21, 2024
<input checked="" type="checkbox"/> Project Update <a href="#">Click to Open</a>	May 21, 2024

You are now in the **Project Update** form (complete for final submittal).

## Contractor info – auto-populated from Rebate Application

Efficiency Works homes rebates



00002955201

Potential Rebate	
Customer Rebate:	\$0
Vendor Rebate:	\$0

### Contractor Information

Please review and make sure the below information is correct. You can update any incorrect or out of date information in your profile in Trade Ally. If all of the info is correct click on the orange arrow at the bottom of the page to move forward.

Company Name *	Partner Number
SF Const. INC	5034
Address 1 *	Address2
2nd Floor	
City *	State *
SF	CA
Zip Code *	
94404	
Phone Number	
(970) 285 - 8524	
<b>Contact Information</b>	
Contact First Name *	Contact Last Name *
Sir Luke	Klasinski
Contact Email *	Contact Phone
6@6.com	1 (234) 567 - 8900

- Contractor Information
- Customer Information
- Utility Information
- Project Information
- Documents
- Review and Submit

## Customer info – auto-populated from Rebate Application form

Efficiency Works homes rebates

Project Update

00002955201

### Customer Information

Property Owner Information	
First Name *	Last Name *
Charlie	Brown
Phone Number *	Email *
(234) 234 - 2333	charles@brown.com
Site Address	
Tenant Name (If Applicable)	
Property Address 1 *	Property Address 2
7833 Shultz lane	
Property City *	Property State *
Fort Collins	CO
Property Zip Code *	
80526	
Alternative Payment Information	
(Fill out this section if the incentive payment needs to be sent to a different address, Ex: landlord lives in a different county or state)	
Contact First Name	Contact Last Name
Contact phone number	Contact email
Address 1	Address 2
City	State
Zip Code	

Potential Rebate	
Customer Rebate:	\$0
Vendor Rebate:	\$0
<input checked="" type="checkbox"/> Contractor Information	
<input type="checkbox"/> Customer Information	
<input type="checkbox"/> Utility Information	
<input type="checkbox"/> Project Information	
<input type="checkbox"/> Documents	
<input type="checkbox"/> Review and Submit	



## Utility information

If there are no changes to the project and you are **Ready for Payment** select “Yes”.

If there has been changes to the project, select “No” to insert new updated information for review.

*\*Note - Any variance of more than 10% of the original preapproved amount will have to be preapproved again PRIOR to project completion or the project will be capped at 110% of the original amount.*

Efficiency Works homes rebates | Project Update | 00002955201

### Utility Information

If you have completed the job you need to answer YES

If the job has not been completed and is delayed or the total amount has increased more than 10% of the original value, you will need to choose NO so we can reevaluate the project to make sure those additional funds are available. If you choose not to send it back for preapproval your rebates will be capped at 110% of the original amount.

Based upon the site address entered, this customer may have already had a rebate submitted for them. Please handle accordingly.

Submit for final review and payment? \*  
Yes

Electric Utility(Calculated)  
Fort Collins Utilities

All Electric House \*  
No

Propane in use? \*  
No

Property ownership \*  
Rental  
Efficiency Works reserves the right to request proof of the property's rental status.

Select one or more Trade to indicate what type(s) of rebate is being applied for.

Air Sealing and Insulation  
 Windows  
 HVAC

Completed Install Date \*  
5/20/2024

#### Potential Rebate

Customer Rebate:	\$2,400
Vendor Rebate:	\$200

- Contractor Information
- Customer Information
- Utility Information
- Project Information
- HVAC
- Documents
- Review and Submit

# Project Information – auto-populated from Rebate Application form

[Efficiency Works homes rebates](#)
[Project Update](#)
00002955201

## Project Information

If you are taking rebate payment make sure the invoice reflects the rebate amount and Efficiency Works Homes in the description.

If you have anything unique or specific to tell us about this project please include it in the comment box below.

if you are asking the program to send this payment to an address other than the site address or the contractor – you must choose Secondary Contact in the Who should be paid? Dropdown - which uses the address at the bottom of the customer form

---

Who should be paid? \* Payee's Relation To Property \*

Customer Home Owner

---

Total Project Cost \*

\$ 10,000

---

**Additional information is required before measure selection for the follow items. Check the boxes that apply to this project.**

Ducted Air Source Heat Pump
  Heat Pump Water Heater

Ground Source Heat Pump

Existing water heating fuel \*

Electric

---

Comments

Customer is trying to electrify their home.

---

Provide any additional project details you would like to share.

> Potential Rebate

Customer Rebate:	\$0
Vendor Rebate:	\$0

- Contractor Information
- Customer Information
- Utility Information
- Project Information**
- HVAC
- Documents
- Review and Submit

## Measure page

Please provide the standard measure information.

Efficiency Works homes rebates
Project Update
00002955201

HVAC + Add Equipment or Measures

Heat Pump Water Heater >55 gal + Duplicate - Delete

3.3 UEF - \$800 rebate	
New heat pump water heater installation	
UEF *	Installed Cost *
4	\$ 4,000
<small>Estimated equipment and installation cost associated with this measure</small>	
Brand *	Model Number *
RHEEM	RH134-CD
<input checked="" type="checkbox"/> Permit Pulled? *	
Customer Rebate	Vendor Rebate
\$800	\$200

> Potential Rebate

Customer Rebate:	\$2,400
Vendor Rebate:	\$200

- Contractor Information
- Customer Information
- Utility Information
- Project Information
- HVAC
- Heat Pump Water Heater >55 gal
- Documents
- Review and Submit



## Document page

Please upload the required documentation for this project.

➤ Efficiency Works homes rebates
📄 Project Update
📄 00002955201

### Documents

Please upload all the required documents below. You should receive a confirmation email after submittal and can also review status under the "My Applications" tab. Make sure you record your Tracking number

Proposal/Invoice \*

1 [Proposal.pdf](#)

6 KB

Certificate of Completion \*

1 [Certificate of Completion.docx](#)

20 KB

Customer Terms and Conditions \*

1 [Terms and Conditions.docx](#)

20 KB

➤ Potential Rebate

Customer Rebate: \$2,400

Vendor Rebate: \$200

- Contractor Information
- Customer Information
- Utility Information
- Project Information
- HVAC
- Documents
- Review and Submit

## Review and submit

Please review for accuracy, before final submission.

Efficiency Works homes rebates | Project Update | 00002955201

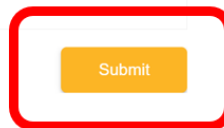
### Review and Submit

Rebate	Estimated customer rebate	Estimated vendor rebate
Heat Pump Water Heater >55 gal	\$800.00	\$200.00
Rental Bonus	\$1,600.00	
	<b>\$2,400.00</b>	<b>\$200.00</b>

Potential Rebate

Customer Rebate: \$2,400  
Vendor Rebate: \$200

- Contractor Information
- Customer Information
- Utility Information
- Project Information
- HVAC
- Documents
- Review and Submit



## Application details

The application has been successfully submitted.

[< Back to Application Search](#)

### Application Details

[Print this page](#)

**Customer** Charlie Brown

**Site** 783355 Shultz lane, Fort Collins, CO, 80526

<b>Program name</b>	<b>Application number</b>	<b>Created</b>
Efficiency Works homes rebates	00002955201	May 21, 2024, 2:29:56 PM MDT
	<b>Status</b>	<b>Last Updated</b>
	In Progress - Active	May 21, 2024, 3:02:34 PM MDT

#### Application History

<input checked="" type="checkbox"/> Rebate Application	May 21, 2024
<input checked="" type="checkbox"/> Project Update	May 21, 2024

## Final approval notification to customer/service provider

TO: charles@brown.com CC: 6@6.com;N/A

### Efficiency Works Homes Rebate Program



Efficiency Works rebate application approved

Greetings Charlie,

Congratulations! Your rebate application (EWHR\_2024\_137598, 00002955201) submitted by SF Const. INC, has been approved for payment in the amount of \$2,400.00. The rebate will be sent to 783355 Shultz lane.

#### Approved Measures:

Rebate	Estimated amount
Heat Pump Water Heater >55 gal	\$800.00
Rental Bonus	\$1,600.00

Upon receiving this email your rebate check should arrive in 4 - 8 weeks. You will be receiving a DIY Efficiency Kit from Efficiency Works as a thank you for your participation, unless you have already received one for another service. Ex. Assessment

Efficiency Works unites the energy and water efficiency offerings of the northern Colorado utilities of Estes Park Power & Communications, Fort Collins Utilities, Longmont Power & Communications, Loveland Water and Power and Platte River Power Authority.

To learn more about Efficiency Works programs and offerings go to [EfficiencyWorks.org](https://EfficiencyWorks.org)

Homes@EfficiencyWorks.org  
877-981-1888

## Appendix L: Service Provider improvement plan

The Improvement Plan is for service providers that have been put on ‘inactive’ status but are willing to correct course in order to remain active. This Improvement Plan form is used to address any of the following situations: 1.) Documenting corrective actions with respect to service provider or technician performance in the program, 2.) Resolving repetitive problems or non-conformances, 3.) Identification and resolution of technical or programmatic issues with service providers.

### Instructions:

Program Manager to complete this form with the service provider and obtain signature(s). Service provider to complete all actions listed in the Improvement Plan. Program Manager verifies effective implementation of the Improvement Plan. Improvement Plan must include specific actions to improve performance, how improvements will be monitored and measured, and timeframe to improve performance.

Plan Start Date: \_\_\_\_\_

Service Provider: \_\_\_\_\_

### Section 1: Summarize and identify contractor performance issues, causes, and action plan

Performance Issue	Cause	Action Plan for Improvement

### Program Manager Sign-off

\_\_\_\_\_  
Name (Print)

\_\_\_\_\_  
Title

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature

**Appendix L: Service Provider improvement plan**
**Service Provider Sign-off**

Name (Print)	Title
Date	Signature

*By signing, the service provider acknowledges agreement with the identified performance issues, causes, and action plan for improvement.*

**Section 2: Identify Responsible Personnel**

Action Item	Responsibility

**Section 3: Verification of Effective Implementation of Improvement Plan – Program Manager Notes****Program Manager Sign-off**

Name (Print)	Title
Date	Signature



**Appendix L: Service Provider improvement plan****Service Provider Sign-off**

---

Name (Print)

---

Title

---

Date

---

Signature

*By signing, the Program Manager and the service provider acknowledge effective implementation of the Improvement Plan.*

## Appendix M: Streamlined pathway summary

### The Streamlined Pathway

- In 2016 a Pilot was conducted in Fort Collins called Efficiency Works Neighborhoods
- The goal was to help customers complete more comprehensive jobs
- Installation standards were enhanced
- Customers were targeted using a Propensity approach
  - House type, age of home, general income, etc.
- Insulation and Air Sealing measure pricing was standardized
- An Efficiency Works assessor was responsible for energy auditing and consultative sales

### The Sales Process

What does the home need based on existing conditions such as:


- Primary leakage area
- Existing insulation
- Age of HVAC equipment
- Type of windows
- Potential for solar PV

### Customizable Packages

- Monthly cash flow, not big \$
  - Using Elevations Loan
  - Savings helps offset costs

Joe & Jane Homeowner  
123 Main Street  
Fort Collins CO 80526  
8/2/2016

## YOUR ENERGY EFFICIENCY PACKAGES



Following are recommendations for improving the safety, comfort, indoor air quality and energy efficiency of your home. When considering energy efficiency, it is important to think of your home as one large interactive system. Each part works individually but also in concert with the other parts of your home. This is known as the Whole House Approach. In order to maximize your benefits, your investment, as well as your energy savings, your home energy advisor has grouped measures into three or four packages.

Measures are based on your Energy Specialist's evaluation:		\$11,404	\$13,154	\$27,644	
Description	GOOD	BETTER	BEST		
Attic Air Sealing	✓	✓	✓		
Insulate Attic	✓	✓	✓		
Seal & Insulate Knee Walls	✓	✓	✓		
Seal & Insulate Cantilevered Floors	✓	✓	✓		
Seal Garage to House Air Leaks	✓	✓	✓		
Air Seal & Insulate Crawl Space Walls	✓	✓	✓		
Duct Sealing	✓	✓	✓		
Whole House Fan, AirScape 2.5e		✓	✓		
Rooftop Solar PV			✓		
<b>Loan Term (Years):</b>	<b>20</b>	GOOD	BETTER	BEST	
Estimated Monthly Payment:	\$ 69	\$ 80	\$ 168		
Estimated Monthly Savings:	\$ 10	\$ 10	\$ 72		
Estimated Monthly Net Payment:	\$ 59	\$ 70	\$ 96		

\*Loan payment estimates based on loan through the Home Efficiency Loan Program (H.E.L.P). Loan amount maximum is \$25,000 in this program. Packages with totals over \$25,000 can be partially financed through the program. Loan terms subject to change.

Appendix M: Streamlined pathway summary

## The streamlined pathway - goals

- Create hybrid of Home Performance and Efficiency Works Retrofit Program
- Overcome time barrier with turnkey service

### Reduce complexity with fewer steps

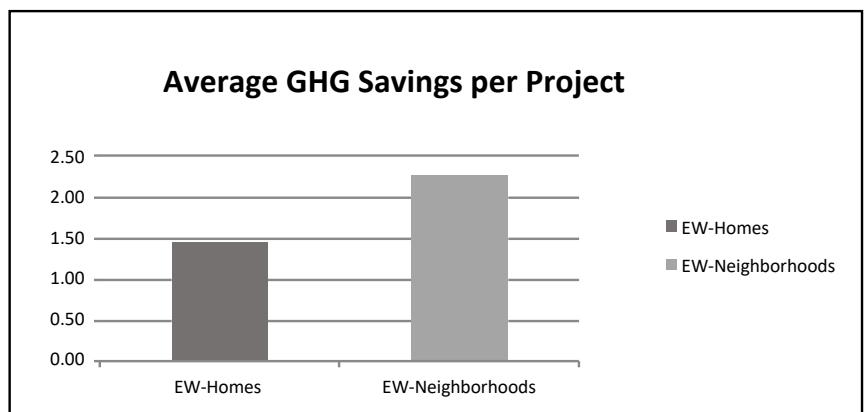
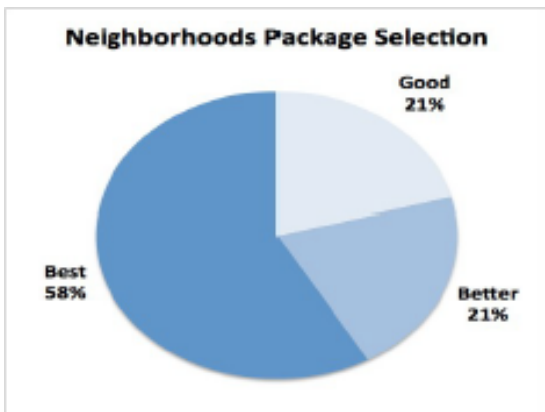
- HP auditor presents three packages of measures
  - Good: Comprehensive envelope (base package)
  - Better: Base + HVAC or windows
  - Best: Base + HVAC and windows, and/or solar PV

### Reduce project cost barriers

- Present monthly cash flow: savings offsetting costs
- Instant rebates to reduce up front project cost
- Maximum loan amount up to \$25k
- Double solar PV rebate when bundled w/ EE package










## The standard pathway - results

- 60% greater kWh, Therm & GHG savings per home compared to traditional program
- 74% participation of those marketed to
- 48% conversion rate post-audit
  - 58% choose the Best package
  - 61% of projects used financing



Appendix M: Streamlined pathway summary

## Required internal photo documentation

General Notes:			
<p>This photo documentation guide is to establish a great paper trail of the before and after on our more important details in the program. This is a piece of the EW-N program and are required on ALL jobs. While this may feel like a lot of extra work initially - we firmly believe that this will improve your internal quality control which will help the overall program.</p> <p>Please use as high a resolution setting that you camera will allow so we end up with good photos.</p>			
EXPECTED PHOTOS	EXAMPLE	EXAMPLE	EXAMPLE
Clean Attic Floor - Top Plates - Bypasses - Large Holes			
Sealed top plates- Exterior and Interior, electrical/plumbing/HV AC penetrations, chases, rulers, dams, etc.			
Unsealed Can light - Sealed Can Light			

## The streamlined pathway - Service Provider eligibility

- Service provider must be a Tier 1 service provider
  - Service provider must be completing at least one job per month
  - Service provider must have no egregious PIV failures
- Service provider must have already completed at least 10 jobs.
- Service provider must have had at least 2 passing PIVs
- Service provider must be able to provide its own combustion safety testing and/or blower door testing

## Advanced installation standards

- Vacuuming of attics
- Spray foaming (closed cell) of external top plates (with blocking)
- Installing bath fans – ability to test performance once installed
- Installing windows – subs allowed provided someone attends the required training or has FGIA certification.
- Removing drywall – repairing drywall – subs allowed
- Painting - subs allowed
- Installing moisture/soil gas barrier to radon industry standards – including perforated pipe under poly
- Designated Quality Assurance Officer on the team

## Next steps to participate

- If you have reviewed the program structure and requirements and are interested in participating:
- Contact Program Manager to start the process: [homes@efficiencyworks.org](mailto:homes@efficiencyworks.org)
- Program Manager will work with the management team to evaluate if all of the requirements are met for the interested service provider
- Once requirements are met - the interested service provider will receive the Installation Standards with pricing
- Once enrolled service provider will be required to attend a 1 Day Training that will orient you to the program and identify company Quality Assurance Officer

## Appendix N: Streamlined approach installation standards

### General notes

These installation standards are based on Efficiency Works - Homes Installation Standards That means that you will need to meet the Homes Installation Standards PLUS any additional requirements in the EW-Streamlined Pathway Installation Standards.

Measure	Installation standards	Required tests	Notes
<b>ATTIC</b>			
<b>Full vacuuming of the attic</b>	This means that you shall vacuum the entire attic floor to reveal all of the areas that need to be sealed.	Photo-documentation required	In the spirit of sustainability vacuumed insulation should be repurposed as much as possible. This should only be done if the insulation is relatively clean and not full of organic pollutants. If contractor is unwilling to vacuum rockwool - we will send job to next contractor who will.
<b>Attic prep and air seal</b>	See EWR Program Installation Standards Appendix A ADD REQUIREMENT TO SEAL EXTERIOR TOP PLATES. ADD ATTIC HATCH MUST BE OPERABLE WITH DURABLE INSULATION DAM	Combustion Safety Test required record results on Appendix F Blower door test required prior to air sealing and after insulating in order to measure house tightness improvement. Photo-documentation required	When the ACH50 is 8 or greater we expect a 25% -50% reduction in infiltration. When ACH50 is less than 4: identified bypasses must be sealed - insulation removal method prior to air sealing at the contractors discretion.
<b>Air sealing and insulating exterior top plates</b>	The exterior top plate shall be sealed (when accessible) by creating an insulation dam with a fiberglass batt shoved just past the top plate. Closed-cell spray foam is then applied to not only coat the entire top plate but to also fill the space between the top plate and baffle or roof deck - 3-5 inches of foam.	Combustion Safety Test required record results on Appendix F Blower door test required prior to air sealing and after insulating in order to measure house tightness improvement. Photo-documentation required	This is expected to be accomplished on most homes. Scissor trusses will be a possible exception.

### Appendix N: Streamlined approach installation standards

Measure	Installation standards	Required tests	Notes
<b>Air sealing non-IC rated can lights</b>	See EWR Program Installation Standards Appendix A	Combustion Safety Test required record results on Appendix F Blower door test required prior to air sealing and after insulating in order to measure house tightness improvement. Photo-documentation required	This is a real opportunity to replace Non-IC rated recessed light cans with modern air tight ICT cans.
<b>Attic hatch and dam</b>	See EWR Program Installation Standards Appendix A Dam must be built out of 2x lumber and be able to support a 200lb person	Combustion Safety Test required record results on Appendix F Blower door test required prior to air sealing and after insulating in order to measure house tightness improvement. Photo-documentation required	Advisor will determine if trim is needed at original site visit. Trim shall be installed to provide a flat surface for attic hatch. Wood joints shall be tight and done to finish carpentry standards. Trim is required to be primed at finish.
<b>Blown attic insulation</b>	See EWR Program Installation Standards Appendix A	Combustion Safety Test required record results on Appendix F Blower door test required prior to air sealing and after insulating in order to measure house tightness improvement. Photo-documentation required	This can be fiberglass or cellulose.

**Appendix N: Streamlined approach installation standards**

Measure	Installation standards	Required tests	Notes
<b>Install new or replace existing bath fans</b>	When used as spot ventilation: must be 1.25 sones or less and measure 50 cfm or more once installed. When used for mechanical ventilation use WhisperGreen Select Model #FV-05- 11VKS1	Contractors will need the ability to measure this flow Suggest Energy Conservatory Exhaust Fan Flow Meter Fan must be tested to prove 50 CFM or greater is achieved. Results & method must be reported to program. Photo-documentation required	OPTION 1: New or Replacement Fan Only using existing ductwork that terminates outside - using existing wiring OPTION 2: New or Replacement Fan Only - install new ductwork that terminates outside - using existing wiring OPTION 3: New Fan Only - install new ductwork that terminates outside - adding new wiring for fan and/or light
<b>Bath fan ducting</b>	If using flex must be careful to use long radiuses and pull flex tight. Insulated flex must be R-8 If using rigid ducting - must insulate to R-8 No 90 degree turns directly off housing Duct must be sealed to fan housing with HVAC mastic.	Contractors will need the ability to measure this flow Suggest Energy Conservatory Exhaust Fan Flow Meter Fan must be tested to prove 50 CFM or greater is achieved. Photo-documentation required. Results & method must be reported to program.	This line item is intended to address existing fans that will not be replaced and ducting is not adequate. Typically ducting for these fans is not terminated to outside or is routed with excessive bends or elevation changes. CONDITION 1) Termination cap not installed. Price to install termination cap and ducting as necessary. CONDITION 2) Poorly installed ducting with adequate termination cap (excessive length or bends). CONDITION 3) Replace all ducting and install new termination cap. Leave existing fan.



### Appendix N: Streamlined approach installation standards

Measure	Installation standards	Required tests	Notes
<b>Accessible knee walls</b>	See EWR Program Installation Standards Appendix A Must use spray foam - Can be low or medium density - Open or Closed cell - Two part only. Ignition barrier not required in attics unless storage is present or drop down stair access.	Combustion Safety Test required record results on Appendix F Blower door test required prior to air sealing and after insulating in order to measure house tightness improvement. Photo-documentation required	This price is for all knee walls. Access will be priced separately below.
<b>Skylight shafts</b>	See EWR Program Installation Standards Appendix A <b>Remove existing batt insulation if present and replace with spray foam to EW Homes Installation standards - R-11 minimum over face of framing.</b> Ignition barrier not required in attics unless storage is present or drop down stair access.	Combustion Safety Test required record results on Appendix F Blower door test required prior to air sealing and after insulating in order to measure house tightness improvement. Photo-documentation required	
<b>Batt insulation removal from attics</b>	Removing old batts from attic with intent to dispose of at landfill.	Photo-documentation Required	
<b>Whole house fans</b>	See EWR Program Installation Standards Appendix A Additionally, use rigid adjustable elbow directly out of fan when flex duct cannot be installed without collapsing. The fan should be tilted towards the roof deck slightly to avoid disturbing the insulation. Netting or Tyvek shall be spread and fastened directly below the fan's air path to help keep all insulation in place.	Photo-documentation required	Non-ducted fans are acceptable where space is limited. Must have insulated, self-sealing, mechanical dampers. All whole house fan installs shall include electrical and drywall repair and adequate attic ventilation for the standardized price. When roof venting is added to the work order we want this to occur in 144 Net Free vents

### Appendix N: Streamlined approach installation standards

Measure	Installation standards	Required tests	Notes
<b>Roof venting</b>	This is for when we add Whole House Fans or when we think additional venting is needed for an existing whole house fan.	Photo-Documentation Required To verify that the Whole House Fan is not over pressurizing the attic we now require zonal pressure test. To do this a manometer needs to have a tube up in the attic with the reference tap open to the house (with many windows open). Run the Whole House Fan on it's highest setting and simply record the resulting pressure in pascals. (We think we want 10 pascals or lower but are wanting to explore this to improve our fan performance)	Each vent shall provide 144 square inches of net free area.
<b>Whole house fan cover (for the older, existing whole house fans)</b>	A commercially available product must be used.	Photo-documentation required	Battic would be an example of the classic system with Velcro. Please make sure to remind homeowners the importance of replacing this cover on hot days and leaving it on all winter.
<b>Moving an attic access</b>	Seal over existing attic access with spray foam to bring area up to R-38. Create a new attic access with homeowner's direction. Trim shall be installed to provide a flat surface for attic hatch. Wood joints shall be tight and done to finish carpentry standards. See Attic Hatch Standard above for trim info.	Photo-documentation required	This would allow us to abandon a closet access that has bad location and find a better one for better accessibility with customer's approval.

### Appendix N: Streamlined approach installation standards

Measure	Installation standards	Required tests	Notes
<b>Adding a gable vent for access to attic</b>	Gable vent can be permanently installed upon completion of attic improvement. Verify aesthetics with homeowner.	Photo-documentation required	This access option will be recommended only when the total truss span is 24' or more and the gable is less than 16' from the ground, typically the lower attic on a tri-level. The gable vent would be used to gain access to the knee wall at the least and, if conditions warrant, full insulation removal, air sealing and insulation. This pricing request is to add the gable vent only. All other work to be priced using standard pricing.
<b>Knee wall access</b>	This could vary substantially from cutting through a bit of drywall or OSB to removing an entire porch ceiling or part of a garage ceiling. Service Provider will price per job after site visit.	Photo-documentation required	

### Appendix N: Streamlined approach installation standards

Measure	Installation standards	Required tests	Notes
<b>GARAGE</b>			
<b>Air seal between house and garage</b>	Any and all accessible penetrations shall be sealed. These include Inside end of joist space, chases, supply ducting & boots where they meet the floor or ceiling, and returns. Remember that the top and bottom of this cavity is supposed to be an air barrier. This measure requires a sealed piece trim such as a 1x4 along the bottom of the drywall to create a better air seal. See EWR Program Installation Standards Appendix A	Combustion Safety Test required record results on Appendix F Blower door test required prior to air sealing and after insulating in order to measure house tightness improvement. Photo-Documentation Required This measure shall be confirmed with the Open a Door Zonal Pressure test to the garage. The original values will be in your Tech Data Sheet.	Customers have complained about the visual of what the spray foam looks like when it spills out of its intended area. Please attempt to clean this up as much as possible to keep the appearance as clean as possible. Please note that the bottom of the wall shall be addressed with a piece of 1x4

**Appendix N: Streamlined approach installation standards**

Measure	Installation standards	Required tests	Notes
<b>Floor over garage dense pack</b>	See EWR Program Installation Standards Appendix A At least 1.5 Feet of drywall shall be removed where ceiling touches house interior wall to allow for proper air sealing (Full depth blocking must be air sealed around perimeter & any holes through blocking for utilities - if full depth blocking is not present it needs to be backed and air sealed) In addition to this a strip of drywall should be removed approximately centered in the space that allows full removal of batt insulation. Tent pipes when present per EWR Program Installation Standards When present - seal HVAC return ducts with mastic before dense packing.	Combustion Safety Test required record results on Appendix F Blower door test required prior to air sealing and after insulating in order to measure house tightness improvement. Photo-documentation required	Pricing covers dense packing only. Drywall removal and replace pricing is separate.
<b>Pipe freeze protection insulation in garage (walls &amp; ceilings)</b>	When water pipes are present: Tent pipes per Phase I Installation Standards. All rigid foam/insulation will be covered with drywall.	Photo-documentation required - Make sure this is clearly visible in photos.	Use any insulation to achieve R-19 on the unconditioned side of pipes. Install drywall to fire tape stage or finished and textured per existing conditions. The intention is to prevent frozen pipes.
<b>Drywall replacement and fire tape finish</b>	Must have a professional fire tape finish.	Combustion Safety Test required record results on Appendix F Blower door test required prior to air sealing and after insulating in order to measure house tightness improvement. Photo-documentation required	No sanding should be needed when job is complete. This detail is intended for floor over garage areas. (Drywall repair related to WHF removal is addressed in the WHF pricing)

**Appendix N: Streamlined approach installation standards**

Measure	Installation standards	Required tests	Notes
<b>Drywall replace with full finish and texture</b>	Must have a professional full finish with texture.	Combustion Safety Test required record results on Appendix F Blower door test required prior to air sealing and after insulating in order to measure house tightness improvement. Photo-documentation required	Job should be paint ready when completed. This detail is intended for floor over garage areas. Drywall repair related to WHF removal is addressed in the WHF pricing
<b>Seal return headers/panning</b>	Must expose the header and trunk to joist duct transition and seal with duct mastic.	Combustion Safety Test required record results on Appendix F Blower door test required prior to air sealing and after insulating in order to measure house tightness improvement. Photo-documentation required	
<b>Air seal supply registers</b>	This is to address the boot connections to the floor as well as the elbows of that same connection in floor over garage or cantilever situations.	Combustion Safety Test required record results on Appendix F Blower door test required prior to air sealing and after insulating in order to measure house tightness improvement. Photo-documentation required	This is to prevent the dense packing material from entering the living space and duct system.
<b>Install attic access garage ceiling</b>	It we need an attic access in areas that have more than 30" of height then we will ask to leave a permanent access	Photo-documentation required	Trim shall be installed to provide a flat surface for attic hatch. Wood joints shall be tight and done to finish carpentry standards.

Appendix N: Streamlined approach installation standards

Measure	Installation standards	Required tests	Notes
<b>CANTILEVERS</b>			
<b>Cantilevered floor dense pack</b>	<b>Four options</b>		
<b>Cantilever drill and fill from bottom</b>	See EW-Homes Installation Standards Appendix A This is the option for drilling from the basement rim joists and from underneath the cantilever. When dense packing is complete the holes must be plugged in a manner that will be aesthetically acceptable after painting. A 1 x 4 installed to cover holes is also acceptable.	Combustion Safety Test required record results on Appendix F Blower door test required prior to air sealing and after insulating in order to measure house tightness improvement. Photo-documentation required	This applies to cantilevers that are 18" and higher from the ground
<b>Cantilever drill and fill (From exterior wall with siding removed)</b>	See EWR Program Installation Standards Appendix A Drill & Fill from outside - this includes removing the bottom row of lap siding to gain access to the sheathing for drilling and replacing siding when done.	Combustion Safety Test required record results on Appendix F Blower door test required prior to air sealing and after insulating in order to measure house tightness improvement.	This will exclude aluminum siding and vertical wood siding as well as asbestos. This will include cantilevers that are lower than 18" to the ground.
<b>Cantilever drill and fill from interior</b>	See EWR Program Installation Standards Appendix A Drilling and dens packing the cantilever from the basement or crawlspace rim joists.	Combustion Safety Test required record results on Appendix F Photo-documentation required	This will only be sought if there is an unfinished basement or dropped ceilings that allow access.
<b>Cantilever dense-pack - drop the soffit</b>	See EWR Program Installation Standards Appendix A Drop the Soffit -Net and Dense pack New plywood for bottom of soffit must be primed and ready for paint.	Combustion Safety Test required record results on Appendix F Blower door test required prior to air sealing and after insulating in order to measure house tightness improvement. Photo-documentation required	

**Appendix N: Streamlined approach installation standards**

Measure	Installation standards	Required tests	Notes
<b>CRAWLSPACE/BASEMENTS</b>			
<b>Install combustion air pipe in conditioned crawlspace</b>	See EWR Program Installation Standards Appendix A This pipe and opening needs to be sized per IRC as adopted by AHJ.		This is not only the opening but an actual pipe that is routed over to beside the atmospheric appliance.
<b>Spray foam crawl space rim joists</b>	See EWR Program Installation Standards Appendix A	Combustion Safety Test required record results on Appendix F Blower door test required prior to air sealing and after insulating in order to measure house tightness improvement. Photo-documentation required	
<b>Spray foam basement rim joists</b>	See EWR Program Installation Standards Appendix A	Combustion Safety Test required record results on Appendix F Blower door test required prior to air sealing and after insulating in order to measure house tightness improvement. Photo-documentation required	
<b>Insulate crawl space walls</b>	See EWR Program Installation Standards Appendix A Additionally: Shall be a foam product (spray or board) - ignition barrier is required	Combustion Safety Test required record results on Appendix F Blower door test required prior to air sealing and after insulating in order to measure house tightness improvement. Photo-documentation required	



**Appendix N: Streamlined approach installation standards**

Measure	Installation standards	Required tests	Notes
<b>Insulate basement walls</b>	See EWR Program Installation Standards Appendix A We are going to call out a specific flash and batt. Hold framing 1" off the foundation wall and spray 1 inch closed cell behind stud and cavity and install R-13 unfaced batt	Combustion Safety Test required record results on Appendix F Blower door test required prior to air sealing and after insulating in order to measure house tightness improvement. Photo-documentation required	Only for homes going through basement remodel - follow Phase I Installation standards
<b>CRAWLSPACE/BASEMENTS</b>			
<b>Install moisture/soil gas barrier in crawl space</b>	See EWR Program Installation Standards Appendix A Additionally, use polyurethane caulk sealant ie Permthane, not spray foam, to seal barrier to walls, footings, etc. Install perforated drain pipe under barrier. (3-4" diameter pipe)	Photo-documentation required	A radon mitigation contractor should be able to add piping and a fan if necessary to reduce radon levels but not have to improve the moisture/soil gas barrier. We need to have proof that your soil gas barrier and glue system are compatible and effective. We have found that Dura-Skrim (clear) does not adhere to Permthane caulking
<b>Crawlspace exterior entrance</b>	See EWR Program Installation Standards Appendix A The door needs to be insulated with foam to R-20, should be air tight, and should not need tools to open or close .	Photo-documentation required	Locking hooks or hasps are recommended to ensure an air tight seal.
<b>Batt insulation removal from crawlspaces</b>	Removing old batts from crawlspace with intent to dispose of at landfill.	Photo-documentation required	
<b>Repairing a soil/gas barrier</b>	Simply patching with a rectangular piece of barrier and urethane caulk.	Photo-documentation required	less than 5 square feet

Appendix N: Streamlined approach installation standards

Measure	Installation standards	Required tests	Notes
<b>GENERAL</b>			
<b>Duct sealing (outside air or thermal boundary)</b>	See EWR Program Installation Standards Appendix A All duct sealing must be done with UL 181 approved tape or mastic. Mastic shall be used anywhere there isn't an access issue such as a door.	Leaky ducting in the attic must be sealed with mastic. Depressurize home with blower door and use smoke in attic to verify effective duct sealing. Photo-documentation required	When ducting is present outside of the thermal boundary sealing with mastic is <b>required</b> .
<b>Duct sealing (Inside air and thermal boundary)</b>	All duct sealing must be done with UL 181 approved tape or mastic. Mastic shall be used anywhere there isn't an access issue such as a door.	Measure pressure in basement WRT the rest of the house. Training may be required. If pressure difference is negative assess return duct leakage and seal if accessible. If duct sealing is not possible advise homeowner to contact HVAC contractor to balance airflow. Photo-documentation required	This is focused on return leakage that can depressurize areas of the home. We are trying to minimize CAZ depressurization and possible IAQ problems. The assessor/energy expert will determine the need for this based on visual inspection as well as pressure diagnostics.
<b>Wall insulation, dense pack cavities, 2 x 4</b>	See EWR Program Installation Standards Appendix A We only want to dense pack those walls that are empty - You can use either fiberglass or cellulose - if using fiberglass - make sure it's rated for dense- packing (short fiber)	Photo-documentation required	Consider putting home under a positive pressure during the installation to avoid excess dust in the home

## Appendix O: Service Provider scoring system

- Each service provider is assigned 100 points upon entering the program.
- A score of 70 or above is needed in order to maintain active (enrolled) status.
- The score does not have an impact on Tier status.
  - Score is not shared with homeowners.
  - Score is used internally for service provider management and shared with each respective service provider.

### Tracking

- PIV results, point deductions, point additions will all be recorded in I-Energy.
- Service provider scores will be displayed on:
  - Monthly report cards
  - Efficiency Works website

## Losing Points

The service provider can lose points for mistakes based on the Technical Standards checked during a PIV. Point deductions can also occur for issues such as:

- Customer complaints
- Failure to respond to info request within 1 week
- Failure to submit paperwork within 2 weeks of project completion
- Etc.

### Example:

Field Manager does a PIV and finds 3 items that are not up to program standards

- No attic card (-1)
- Knee-wall insulation not fully encapsulated (-2)
- Attic insulation not up to the level specified in the invoice/on the attic card (-2)

This would result with the service provider losing 5 points overall.

## Earning Points

The service provider can earn points from things such as:

- Positive feedback from a customer
- A PIV with no corrections
- Pattern of rebate applications submitted without any issues

## Appendix O: Service Provider scoring system

### Example:

QA does a PIV and finds 2 items that are not up to program standards.

- No Insulation Attic card (-1)
- Knee-wall insulation not fully encapsulated (-2)
- Customer provides positive feedback (+3)

This would result with the service provider gaining 2 points overall.

**Maximum allowable score is 130 points.**

## Other Ways to Earn/ Lose Points

Other Ways To Earn/Lose Points	
QC Inspection passed with no corrections on Installations	5
Received Positive Homeowner Feedback	3
Received Positive Advisor Feedback	3
Completed Improvement Plan	10
Major Customer Complaint	-5
Minor Customer Complaint	-3
Failing to Use the Communication Protocol when necessary	-3
Forgetting a single item of the Communication Protocol	-1
Customer Complaint Related to Customer Service	-1
Failure to Address Complaint w/in One Week	-1
Failure to Respond to Info Request w/in One Week (2 Day Expectation)	-1
Failure to Submit paperwork	-1
Failure to Meet Bid Request Response Time	-1
Additions or deductions are applied to completed projects post completion date	

## Appendix O: Service Provider scoring system

### Falling Below 70

If a service provider's score falls below 70 then they are required to execute an Improvement Plan:

- The Program Manager will meet with the service provider and help them figure out their main deficiencies
- Reports will be used to pin-point the exact issues and patterns that led to the inadequate score
- The service provider will have 60 days to complete the Improvement Plan
- The service provider will have an "Inactive" status
  - They cannot receive any future leads until they resolve all outstanding issues
  - They cannot bring new jobs to the program until they resolve all outstanding issues

#### Examples:

- Window service provider has very low volume in the program: The solution might be an office visit by Program Manager to teach their sales team how to sell our program better.
- Insulation and Air Sealing service provider keeps forgetting to add ignition barrier paint to their spray foam and attic cards: The solution might be to implement an internal Quality Assurance photo-documentation checklist for each job that reminds the workers what to double-check before leaving a customer's house. The Program Manager can provide guidance as needed.
- HVAC service provider continuously provides furnace commissioning forms that are incorrect: The solution might be for the Program Manager to work with the company's technician during a MIV in order to walk them through the process so that they understand the requirements and submit accurate forms moving forward.

### FAQS

#### What if a service provider does not complete the Improvement Plan?


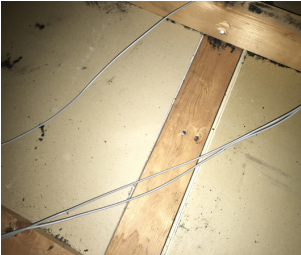







- The service provider is removed from the program.

#### Why is 100 the starting score and 70 is the minimum acceptable score?

- 100 is the starting point, but it's relationship to 70 is important.
- New service providers are allowed a 'probationary' time, or on-boarding period.
- When we see service provider scores dipping below 90, we are engaging with them in order to help remedy the situation before further deductions occur.

## Appendix P: Photo documentation guide

The purpose of this photo documentation guide is to establish a great paper trail of the before and after on our more important details in the program.

Energy efficiency measure	Expected photos	Example	Example	Example
<b>Full vacuuming of the attic</b>	Clean attic floor Top plates Bypasses Large holes			
<b>Attic prep and air seal</b>	Sealed top plates (Interior) Electrical penetrations Plumbing penetrations HVAC penetrations Chases Insulation rulers Insulation dams Attic hatch			
<b>Air seal exterior top plates</b>	Insulation dams Insulation baffles Finished top plates			

Appendix P: Photo documentation guide





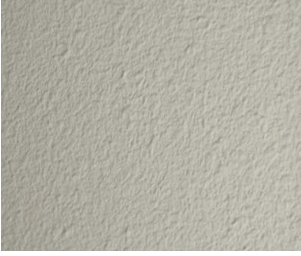







Energy efficiency measure	Expected photos	Example	Example	Example
<b>Air sealing non-IC rated can lights</b>	Unsealed can lights Sealed can lights			
<b>Attic insulation</b>	Finished shots with: Rulers Dams Insulation chart			
<b>Install new or replace existing bath fans</b>	Photos of installed fan - below & above Make sure to capture clear view of exhaust to exterior			
<b>Bath fan ducting</b>	Photos of installed duct Make sure to capture clear view of exhaust to exterior			
<b>Accessible knee walls</b>	Before After A photo of the air barrier under the wall if added			

Appendix P: Photo documentation guide
















Energy efficiency measure	Expected photos	Example	Example	Example
<b>Skylight shafts</b>	Before After			
<b>Install attic access garage ceiling</b>	Finished photos Show how door is insulated and weatherstripped			
<b>Knee wall access</b>	Finished photo Show how door is insulated and weatherstripped			
<b>Floor over garage dense pack</b>	Pictures of: Drilled holes Action shot Packing Finished plugs Removed Drywall and air sealing			
<b>Pipe freeze protection insulation in garage (walls and ceilings)</b>	Photos of the water pipes before "tenting" and after			


















**Appendix P: Photo documentation guide**

Energy efficiency measure	Expected photos	Example	Example	Example
<b>Drywall replace and firetape</b>	Drywall opened up Drywall finished with firetape			
<b>Drywall replace with full finish and texture</b>	Finished photos - with close ups to capture full finish and texture			
<b>Seal return cavities</b>	Sealed returns			
<b>Cantilevered floor dense Pack</b>	Two options:			
<b>Drill and fill</b>	Pictures of the process and finished surface			







Appendix P: Photo documentation guide

Energy efficiency measure	Expected photos	Example	Example	Example
<b>Drop the soffit</b>	Pictures of the process and finished surface			
<b>Spray foam crawl space rim joists</b>	Unsealed rim joists Sealed rim Joists Ignition barrier			
<b>Spray foam basement rim joists</b>	Unsprayed rim joists Sprayed rim joists Ignition barrier			
<b>Insulate crawl space walls</b>	Uninsulated walls Insulated walls Ignition barrier			
<b>Insulate basement walls</b>	Before and after			


## Appendix P: Photo documentation guide

Energy efficiency measure	Expected photos	Example	Example	Example
<b>Window replacement</b>	Picture with trim removed			
<b>Duct sealing (outside air or thermal boundary)</b>	Unsealed ducts Sealed ducts			
<b>Duct sealing (inside air and thermal boundary)</b>	Unsealed ducts Sealed ducts			
<b>Whole house fan cover</b>	Installed product			
<b>Wall insulation, dense pack cavities, 2 x 4</b>	Photos of process and finished surface			

**Appendix P: Photo documentation guide**

Energy efficiency measure	Expected photos	Example	Example	Example
<b>Install moisture/soil gas barrier in crawl space</b>	Close up of connection to wall Wide angle shot of installed barrier			
<b>Air seal between house and garage</b>	Photos of air sealing Bottom of drywall Drywall penetrations around electrical panel Around door to house			

## Appendix Q: Service provider score card

 <small>Estes Park   Fort Collins   Longmont   Loveland</small> <b>EWH - Homes Contractor Score Card</b> Program Participation		
<b>Contractor:</b>	Franklin Energy	
<b>Tier:</b>		
<b>Score:</b>	0	
<b>City</b>	<b>Homes Upgraded</b>	<b>Total Measures</b>
Fort Collins	0	0
Loveland	0	0
Longmont	0	0
Estes Park	0	0
<b>Total</b>	<b>0</b>	<b>0</b>
Project QCs Completed	0	
QCs with Corrections Notice	0	
<b>Rebate Status</b>	<b>Number of Status</b>	
Approved	0	
Review Pending	0	
Missing Information	0	
Waiting on Commissioning	0	
Rejected	0	
<b>kWh Savings</b>	<b>Year to Date</b>	<b>0</b>