

➤ **Insulation and Air Sealing Rebate**

A. Description

The Insulation and Air Sealing Rebate product offers rebates for installing insulation and air sealing measures in existing single-family homes or properties with four units or fewer. Eligible customers must be those customers with a combination of residential electric and natural gas service, gas-only service, or electric-only service who are electrically-heating their residences.

The Insulation and Air Sealing Rebate product also offers rebates for installing cellular shades measures in existing single family homes. Eligible customers must be those customers with a combination of residential electric and natural gas service or electric-only service who are electrically-heating their residences. Customers must also have central air conditioning in the residence to qualify for this rebate.

Public Service will rebate the following qualifying measures:

- Air sealing, bypass sealing and weather stripping (required with insulation applications unless the home is 0.50 NACH (Natural Air Changes per Hour) or better). If air sealing is required, a minimum of a 20% reduction in air leakage must be achieved to qualify for insulation rebates;
- Attic insulation (where existing insulation is R-15 or less) to a minimum R-value of R-49 and R-60 maximum; and
- Wall insulation to an R-value of R-13 (existing exterior wall cavities must be empty).
- Qualifying cellular shades must be AERC certified.

B. Targets, Participants & Budgets

Targets and Participants

The Company anticipates approximately 85% of participating homes will require air sealing. The Company has split the air sealing measure into two tiers based on the percent of air leakage reduction achieved and associated savings. The savings for air sealing measures are calculated using the same baseline home compared against the anticipated average savings within each tier:

	Estimated Therm Savings per home	Estimated kWh Savings per home
20-29% reduction	9.77 therms	306 kWh
30% reduction and higher	19.81 therms	663 kWh

Residential customers who can expect the most return from air sealing and insulation improvements are, electrically heated homes, natural gas heated and AC cooled, and natural gas heated with no AC cooling. Participation targets and rebate amounts are aligned with marketing and trade partner education plans to encourage participation from customer-types who will benefit the most. Advanced meter interval data would also help target high use customers and

provide support to trade partners as they work to educate customers on the unseen benefits of insulation. Residential customers who can expect the most return from cellular shades are electrically heated homes with AC.

Budgets

Budgets for the insulation and air sealing measures are based on 2016 and 2017 product performance. The air sealing incremental costs include the costs to the customer for bypass attic air sealing, weatherization and envelope, and additional costs of blower door testing. M&V costs are based on a percentage of the installations to ensure they meet quality installation standards and achieve the expected energy savings.

Budgets for the cellular shade measure are based on external projected sales numbers and rebate budgets are the single largest expense component.

Typically, this product is promoted through the Company's website, communications to local area insulation and air sealing contractors, community events and by the Xcel Energy consumer education team. For that reason, the product has required little budget for promotion and marketing purposes but the Company has allocated some budget for contractor trainings and educational opportunities for the trade community.

C. Application Process

For insulation and air sealing, the application process requires customers to use a participating trade partner, to qualify for the rebate; customers can only receive the rebate application from those trade partners. Air sealing and weather-stripping are required for each install, unless the home meets the 0.50 NACH threshold. Pre and post-blower door results in CFM 50 are required for all projects, with the exception of homes that meet the 0.50 NACH value.

The Company must receive a copy of the dated invoice reflecting the qualified installation work performed. Applications will be reviewed and processed accordingly by the rebate operations team and checks issued within six to eight weeks. The Company will issue the rebate directly to the customer, or the alternate rebate recipient if designated on the rebate application form.

Participating trade partner companies must have a technician on staff that is currently certified in one of the following: BPI Analyst, Envelope or Residential Whole House Air Leakage Control Installer or Crew Chief. A technician's certification may not be used by another trade partner company to meet the program requirements. All registered contractor companies must also be listed on the Company's trade partner website.¹ These contractors have agreed to the terms of the Company's trade partner agreement and meet the requirements related to quality installation practices per BPI.

Starting in 2019, the Company will offer a prescriptive rebate for cellular shades. A prescriptive rebate application will be developed and be available on the Company's website.

¹ www.xcelenergy.com/cotrades

D. Marketing Objectives & Strategies

The Company will market the Insulation and Air Sealing product through a variety of channels such as the Home Energy Audit product, the Company's website, direct mailings to local area BPI-certified insulation contractors, and environmentally-focused community events. The Company will support this overall marketing strategy with seasonal bundled direct mail and email efforts, and social media to targeted customers. Historically, this strategy has worked well when implemented during the key heating months of December, January, and February, and during the summer months to highlight cooling benefits.

Additionally, the Company will incorporate communications activities to local insulation contractors so they can educate qualified customers on how they can benefit from this rebate. By collaborating with the Company on outreach to our customers, local contractors may be able to drive more customers to commit to quality assured insulation installations.

Finally, the Company may initiate cross-marketing efforts with our other natural gas rebate products. An example of this could be a winter bill insert that outlines existing rebate and energy efficiency products available to natural gas customers of Public Service. This strategy has proved successful in the past. Other, emerging strategies may also be incorporated.

E. Product-Specific Policies

The customer must use a trade partner company who employs an employee or subcontractor who holds a BPI Analyst, Envelope, Residential Whole House Air Leakage Control, Quality Control Inspector, or Advanced Energy Auditor certification. This person's certification can only be used by one trade partner company to qualify them for participation. All participating contractors in good standing will be listed on the Company's trade partner website.² These contractors have agreed to the terms of the Company's trade partner agreement and meet the requirements related to quality installation practices per BPI.

Air sealing and weather-stripping are required for each installation, unless the home meets the 0.50 NACH (Natural Air Changes per Hour) threshold, using the Company's modified NACH formula. A pre-improvement blower door test, measured in CFM 50, is required for all projects that have not had a recent Home Energy Audit that included a blower door test. If the home's results show the home is already "tight enough" (.50 NACH value) then no further air sealing work is required will not be rebated; in that instance, a post-improvement blower door test is unnecessary. The customer may then qualify for attic and/or external wall insulation improvements. If the pre-improvement NACH reveals the house is not already "tight enough," meeting the air sealing improvement criteria is a pre-qualification for the attic and/or wall insulation measure rebates.

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Most homes have a NACH higher than the threshold and will require air sealing improvements, and a post-improvement blower door test must be done and show a minimum improvement of 20% air leakage reduction, before insulation improvements can qualify for the rebate.

Self-installations, or installations done by contractors without the BPI certifications listed above, do not qualify for rebates.

This product excludes new residential construction, new residential additions, insulation of doors, garages, sheds, workshops, below-ground basements, mobile homes, projects with pre-improvement R-values of R-16 or greater, and residential properties with more than four units. To qualify for a rebate, all insulation must be installed to the manufacturer's specifications and meet all state and local codes and federal regulations. Air sealing and weather stripping must follow industry-accepted practices for mitigating air leakage. For safety reasons, residences with asbestos and/or vermiculite cannot receive a blower door test and are disqualified from the product until they can prove mitigation work has been done to remove all asbestos and/or vermiculite from the residence.

A combustion appliance zone (CAZ) test check box is included on the rebate application—contractors are required to acknowledge that testing was completed and/or note a recommendation for CAZ testing to be performed by an HVAC contractor. The Company reserves the right to inspect installations before or after issuing a rebate. Rebates will not be issued if the same purchase has already been rebated through other Public Service rebate products, such as through the Home Performance with ENERGY STAR Product. Customers are eligible for one rebate per calendar year.

Starting in 2019, qualifying cellular shades that are purchased and installed by customers will be eligible for a prescriptive rebate. Qualifying cellular shades must be AERC certified. Certification can be verified on the AERC website using the AERC Certification number located on the cellular shade packaging. Eligible customers must be those customers with a combination of residential electric and natural gas service or electric-only service who are electrically-heating their residences. Customers must also have central air conditioning in the residence to qualify for this rebate.

F. Stakeholder Involvement

The quarterly DSM Roundtable Meetings provide a forum for stakeholder involvement and feedback regarding this product. The Company continues to conduct meetings with interested trade partners and stakeholders to improve and implement this product, particularly around the issues of quality assurance and air sealing requirements. The Company will continue to engage stakeholders in garnering product feedback.

G. Rebates & Incentives

For insulation and air/bypass sealing, the rebate structure aligns with the anticipated energy savings a customer can expect, based on the way the customer's home is heated and cooled. Air/bypass sealing rebates are 60% of ~~project~~the actual incremental costs, up to the maximums allowed, based on the type of the heating and cooling of the Company's individual residential customers. Attic and wall insulation rebates are 30% of ~~project~~ the actual incremental costs, up to the maximums allowed, based on the type of the heating and cooling of the residential customer's home.

Rebate measure category	Rebate for natural gas-heated home, no central AC	Rebate for natural gas heated homes with central AC	Rebate for electric resistance-heated homes with or without central AC
Air-sealing, 20-29% improvement	\$175 <u>100</u>	\$300 <u>130</u>	\$350 <u>100</u>
Air-sealing, 30% improvement or greater	\$250 <u>150</u>	\$400 <u>300</u>	\$450 <u>300</u>
Attic Insulation	\$350	\$500	\$600 <u>300</u>
Exterior wall insulation	\$350 <u>300</u>	\$500	\$600 <u>150</u>

If a customer does multiple measure improvements, the measure rebates are added together. For example, if a qualified customer in a natural gas heated home with central AC gets a 32% reduction in the air sealing, and has the attic and wall insulation as well, the rebates would be $\$300 + \$500 + \$500 = \$1,300$ total. A customer may submit a rebate application one time per calendar year. The Company will not provide additional rebates for the same improvement type at the same address unless the customer has experienced a catastrophic loss, such as a fire.

Starting in 2019, the Company will offer a prescriptive rebate on cellular shades. The cellular shade rebate is 71% of the actual incremental costs based on the type of the heating and cooling of the residential customer's home.

Measure	Rebate
Cellular shade	\$1.33 per square foot