

Frequently Asked Questions

This document is occasionally updated and is intended to provide program information for utilities and PTCS certified technicians and companies about BPA reimbursement minimum requirements. *Utility programs determine their own reimbursement criteria, and it may include additional requirements above and beyond what the BPA requires. Contractors should be aware of their customers' utility requirements before starting work.* Answers provided may be revised if the program, BPA Implementation Manual, or PTCS specifications change. *Last updated 2012-12-11.*

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Program and Contractor Requirements

Q: What is the difference between a PTCS specification and a BPA reimbursement requirement?

A: The Regional Technical Forum's PTCS Subcommittee is composed of industry experts who created the PTCS Specifications, and infrequently revise them. BPA may choose to adopt revised specifications, and when it does so the adopted specification will be posted on the residential HVAC webpage: www.bpa.gov/reshvac. BPA may choose to include additional requirements for reimbursement, such as a higher efficiency rating, in addition to the adopted specifications. The Implementation Manual will list these additional requirements.

Q: Why do utility program requirements sometimes differ from BPA program requirements?

A: Utilities receive reimbursements for installations in their territory that meet BPA's minimum requirements. Utilities may decide to require more than this BPA minimum standard for many reasons, such as greater energy savings or greater durability of installations. Certified Technicians should always check with their customers' utility before beginning work.

Q: Does a PTCS Duct Sealing or Heat Pump Certificate Form have to be filled out for every PTCS project?

A: Yes! Utilities are required by BPA to have a copy of the PTCS Duct Sealing or Heat Pump Certificate Forms on file for all projects. A copy of the "PTCS Registry Data Input Form" (obtained from the web registry after entry) is not sufficient.

The "PTCS Registry Data Input Form" is the registry detail data available when a user clicks on a hyperlinked Measure ID#. It can be printed from the registry and would serve as a proof of acceptance into the online registry, but it does not contain the same level of detail as the data provided in the Duct Sealing or Heat Pump Forms.

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An actual program form is required so that utilities may conduct quality control of the data entered into the registry (i.e. Ensuring that the numbers as documented by the technician are the numbers that get entered into the registry). This QC of data is part of the program requirements, so the actual form is necessary. Technicians who elect to complete program forms electronically can submit them to utilities in that fashion, so it does not have to be printed, but forms still must be submitted.

Q: If a visual Quality Assurance Inspection indicates a full diagnostic QAI test would be prudent, would the diagnostic QAI test count towards the BPA requirement to randomly inspect 10% of PTCS jobs?

A utility that visually inspects 100% of all duct sealing jobs and does diagnostic inspections of at least 10% of those where it is most apparently necessary, is in compliance with the BPA quality assurance requirements, as long as heat pumps are also subject to random inspection. For utilities offering both PTCS duct sealing and PTCS heat pumps, inspection of duct sealing alone does not meet the BPA QA requirements.

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Ducts and Insulation: Specifications and Reimbursements

Q: As a contractor, how will I know if a home has already received a PTCS duct sealing measure?

A: Contractors may call the homeowner's utility or the PTCS program directly; both can reference the PTCS database to determine if the ducts have previously been PTCS certified. BPA is exploring ways that might allow a technician to access this information directly.

Q: Do ducts always have to be sealed when a new heat pump is installed to qualify as a PTCS Heat Pump upgrade or conversion?

A: Not in all cases. Ducts must be sealed and PTCS certified when more than 50% of the heating ducts run through unconditioned space, unless: 1) the ducts were previously certified, or 2) a PTCS duct leakage test indicates that the pre-existing duct leakage is too low to qualify for the PTCS duct sealing reimbursement. However, in those cases where the ducts are already tight, duct pre-test measurements shall be submitted to meet the PTCS Heat Pump measure requirement.

Q: What is a test-only job?

A: Prior to October 1, 2011, a "test-only" job in the PTCS database indicated that a system was PTCS-certified without having work done. Effective October 1, 2011, a test-only job in the PTCS database means that the ducts were not leaky enough to qualify for the BPA reimbursement for duct sealing and that duct sealing is not required. It does not signify that the project was PTCS certified.

Q: Will a PTCS Heat Pump job fail the Quality Assurance inspection if the existing ductwork has existing duct tape instead of mastic?

A: As part of a heat pump inspection, the QA inspector will confirm tightness of the ducts. If the ducts are tight enough without sealing, then no work, including removal of duct tape, is required. PTCS Quality Assurance inspectors shall not fail a test-only job based on PTCS duct sealing specifications. Ducts with pre- and post-tests must be sealed to PTCS specifications.

Q: When duct sealing is required, does the specification require duct tape be removed before mastic is applied?

A: The PTCS Specification requires a good faith effort to remove duct tape and replace with mastic. Duct tape that cannot be removed shall be completely covered with mastic.

Q: When duct sealing is required because of a new heat pump installation, can I also claim the duct sealing measure?

A: No. The heat pump reimbursements that require duct sealing are higher than those that do not *because* the duct sealing measures are already included in this reimbursement and savings calculation.

Q: What does it mean when the PTCS Specification requires that “all accessible ducts must be sealed”?

A: If a reasonable technician can reach the ducts in an unconditioned space then the ducts must be sealed.

Q: Who verifies how much of the ductwork is outside of the conditioned space?

A: The PTCS certified technician provides this verification after identifying all ductwork in a home, including those in the crawlspace and attic. This is also verified by the Quality Assurance inspector.

Q: Are ducts buried in attic insulation considered accessible? If so, are contractors required by the program to bring the insulation back to the condition it was in before sealing work was done?

A: Ducts in attic insulation are considered accessible. The program does not require attic insulation be returned to its previous state; however, customer comfort and net energy savings will all be higher if the insulation is returned to its original state or better..

Note: New weatherization specifications recently approved by the Regional Technical Forum require that ducts be sealed before insulation is added.

Q: If the ducts are built into soffits, are they considered accessible?

A: If the ducts in the soffits are not accessible then they are not required to be sealed.

Q: How would a contractor determine if existing rigid ductwork is un-insulated and therefore require insulation to R-8, as required by Section 6.2.1.1. of the Air Source Heat Pump Specification?

A: Both internal and external ductwork is considered un-insulated, if a visual inspection finds insulation is not present.

Q: How many inches of fiberglass are required to achieve an R-8 insulation value?

A: One inch of fiberglass insulation that is not compressed and without gaps typically has an insulation value of R-3; so 2.7" of fiberglass provide an insulation value of R-8. The PTCS Air Source Heat Pump specification details requirements for duct insulation in section 6.2.

Q: According to section 5.1.2., do I have to remove all insulation from accessible wyees, elbows and other duct connections to seal them?

A: It depends on the situation. The intent of 5.1.2. is that the contractor inspects the entire duct system. When the inspection finds that an insulated duct connection of any sort shows signs of leakage (discolored insulation is the most obvious sign) or shows signs of poor fit (wiggles or has highly improbable geometry), then the connection must be exposed, properly fastened, sealed and the insulation restored in a durable fashion to cover the connection (see section 5.2).

Section 5.1.1 provides guidance on exposing, sealing, etc. every plenum connection and plenum take-off (high pressure areas of the duct system). Section 5.1.2 establishes a limited requirement to expose ductwork in branch runs (lower pressure areas of the duct system) only when inspection indicates a likely problem. The exception to 5.1.2 that states all duct connections in a newly constructed duct system shall be properly connected and sealed further clarifies the intent not to require exposing all duct connections in an existing insulated duct system, just those that look like they will yield significant benefit from doing so.

Q: Does PTCS require technicians to open the belly of single wide mobile homes in order to seal the ducts to specifications?

A: Yes. The belly of a manufactured home is considered an accessible location. PTCS requires that all accessible locations be sealed.

Q: There is loose, existing duct tape which is required to be removed before sealing. Should it be removed before the leakage test is done?

A: BPA does not require removal of duct tape prior to testing, since homeowners will likely expect the ducts be returned to their original state if they are not sealed. However, the PTCS protocol does require removal of all tape before sealing, so if pretest is close to the precondition requirement, removal of the tape for the pretest is acceptable.

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Heat Pumps: Specifications and Reimbursements

Q: Is there a duct sealing reimbursement to utilities when zonal electric is replaced with a PTCS heat pump?

A: Section 6.0 of the ASHP System Installation Standards provides extensive coverage of the design, installation and performance requirements for new ducts in the case of a heat pump installation.

Installation according to the ASHP specification results in a duct system that does not need to be sealed when the ducts are new.

Q: Can a utility claim duct sealing measures for Ground Source Heat Pumps or Variable Speed Heat Pumps?

A: Yes. GSHP and VSHP installations qualify for duct sealing measures using the “average heating system” measures. In an upcoming version of the measure list, copies of these measures will be created to make it more clear which can be used with GSHP and VSHP.

Q: Do Variable Speed heat pumps (with inverter technology) qualify for PTCS certification?

A: Please refer to the fact sheet regarding variable speed heat pumps. This can be found on the PTCS website at www.bpa.gov/reshvac, under the heading “Information for Utilities and Technicians”.

Q: Why is there a commissioning and controls measure for heat pumps?

A: This measure exists for those installations that do not meet the HSPF/SEER requirements for the PTCS heat pumps measure. The commissioning and controls reimbursement may be used on any heat pump that meets federal minimum standards, but is included in (and may not be claimed in addition to) PTCS heat pump measures.

Q: Where can I find the U.S. DOE minimum standard for Heat Pumps?

A: http://www1.eere.energy.gov/buildings/appliance_standards/residential/residential_cac_hp.html

Q: Where can I find a heat pump that fits in a manufactured home and meets the performance spec?

A: At least 13 manufacturers have heat pumps that fit manufactured homes and meet the PTCS programs certified installation requirement of 9.0 HSPF or greater. Contact your manufacturer or the PTCS program for more information.

In the case of small and/or short furnace closet spaces in manufactured homes, enlarging this opening for the new heat pump may be necessary. In some cases, this may be accomplished by removing the current door and increasing the opening height to accommodate the taller more efficiency unit. A 6- to 8-inch high base-can may be needed to transition the new heat pump to the existing duct work. This new base-can may also be necessary to ensure proper air flow across the electric back up heat, to keep it from overheating.

The larger door opening will require a new door or access panel cover. A new hinged door and frame should be considered to cover the new furnace closet opening. Alternately, a smooth, painted, heavy gauge sheet metal sheet can be used and held in place with stainless steel Ludwig or similar type clips. A properly sized return air grill will have to be installed above or in the panel or door, if either is replacing a louvered door.

Q: Does the state of Washington have requirements for heat pumps installed in manufactured homes?

A: The Washington State Legislature provides code guidance on their website
<http://apps.leg.wa.gov/wac/default.aspx?cite=296-150M-0306>.

Q: When a combustion appliance zone (CAZ) is present, does the NSI 3000 Low Level CO Monitor meet BPA's requirement for a CO monitor?

A: No. This unit is not currently UL or C-UL listed, according to the manufacturer, as of 7/5/2012.

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Contractor Participation, Qualification and Forms

Q: Where can I find the most recent program forms and spec sheets?

A: All of the most recent PTCS program information will be posted to www.bpa.gov/reshvac.

Q: I want to install Ground Source Heat Pumps for the PTCS program. What are the certification requirements?

A: All technicians who wish to install Ground Source Heat Pumps for the PTCS program must be IGSHPA certified as an Accredited Installed, **AND** have their PTCS Heat Pump Certification. You can find out more about IGSHPA certification here: <http://www.igshpa.okstate.edu/index.htm>

Q: Can a heat pump be installed by someone who is not a PTCS Certified Technician, as long as a PTCS Certified Technician "signs off" on the installation?

A: If a PTCS Certified Technician submits PTCS paperwork for a new heat pump, that individual is taking responsibility for installation's compliance with the specification. If an inspection finds that the system does not comply, the PTCS Certified Technician is responsible for bringing the project into compliance, and will have the results of all inspections attributed to their PTCS account. Previously installed heat pumps cannot be PTCS certified.

Q: Where can I find information about upcoming training sessions?

A: There are a variety of Trainers who offer PTCS Heat Pump and Duct Sealing Certification classes. Please go to the "Training" section of www.bpa.gov/reshvac to find contact information for a trainer near you. Each trainer will provide the details of when and where the next sessions will be, as well as their cost for the course. You could also work with your local utility to put on a session in your area.

Q: I just finished a PTCS certification course. How do I get to the point where I can do PTCS work and enter jobs into the registry?

A: After completing your PTCS Heat Pump or Duct Seal certification class, go to <http://ptcsnw.com/Login.aspx> and to create your new user account. You must also send a completed and signed version of the BPA Certified Technician Participation Application, found here: http://www.bpa.gov/reshvac/PTCS_Certified_Technician_Participation_Application.pdf. Program staff use this form to confirm your training and fully activate your online account by assigning a PTCS Technician ID#.

Q: What should I do if the PTCS registry will not accept a site address or AHRI # for a job I'm trying to enter?

A: Verify the address or AHRI # is valid, then fax (877-848-4074) or email (reshvac@bpa.gov) the form to the PTCS Program Team to enter the job for you.

Q: I have an AHRI # that the PTCS registry does not recognize. Can I enter a different AHRI# that has the same equipment specs instead?

A: No, this installation needs to be faxed or emailed to PTCS for entry. Only enter information that is accurate and matches the Heat Pump installed. Incorrect information will be a problem if the site is checked for Quality Assurance, as it could mean the failure of the job and ineligibility for incentives.

Q: How will I know if my participation agreement has been received?

A: Your information will be posted on the next monthly update of the BPA Certified Technicians list, found at www.bpa.gov/reshvac, under the heading "Information for Utilities and Technicians". If you need confirmation prior to the list update, please contact the program staff for confirmation at 800-941-3867 or ResHVAC@bpa.gov. Please note that this information will *not* show in the technician's online user account at www.ptcsnw.com.

Q: I finished my training and am now certified. How do I participate in BPA programs?

A: Having a signed BPA participation agreement on file is required for each technician submitting jobs for BPA reimbursement. Newly trained technicians will need to submit their signed participation agreement to activate their PTCS user accounts. Existing technicians are encouraged to submit an agreement as soon as possible to avoid any delays with their reimbursements. Many utilities also require that technicians be pre-approved to do work in their territory, so check with your local utility for details.

Q: Do QA inspectors need their own equipment?

A: QA inspectors are not required to own their own equipment, though all QA inspections require the use of equipment. QA inspectors who do not own their own equipment may need to rent or borrow equipment to conduct inspections.

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