

PTCS Program Newsletter: February 2021

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Upcoming PTCS Training Opportunities

If you or other HVAC professionals want to be certified to complete PTCS Heat Pump or Duct Sealing installations, contact us to register for one of the sessions below.



Heat Pump Trainings

- March 22, 7:30 a.m. 1:00 p.m. PST
- April 19, 7:30 a.m. 1:00 p.m. PST

Duct Sealing Trainings

April 20 - 21, 7:30 a.m. - 12:30 p.m. PST

To become certified and access PTCS Heat Pump utility incentives, technicians must attend a 5 1/2-hour online class and have access to a TrueFlow metering system from The Energy Conservatory and a digital pressure gauge. The PTCS Duct Sealing class consists of two half-day online classes. For each of those classes, technicians schedule a time after the class for a 30-minute video call with our instructors to show proficiency with the testing processes.

New testing equipment from The Energy Conservatory can be purchased at a 12.5% discount through the PTCS program. Please contact us at 1.800.941.3867 or ResHVAC@bpa.gov for more information.



I'm a Contractor. What Are the Benefits of Joining Comfort Ready Home?

As a weatherization, HVAC or high-efficiency water-heating contractor, you are a go-to resource for homeowners who want to improve the comfort of their home and save money on their utility bills. Expanding your knowledge and proficiency with these installations is a great way to create more business opportunities, and keep your customers happy.

<u>Join Comfort Ready Home</u> and get access to free resources that give you a leg up on the competition. Benefits include:

- A listing in the searchable contractor database.
- Access to the online <u>Learning Center</u>, which features a growing list of sales and technical training courses.
- A comprehensive Comfort Ready Home Field Guide.
- A specialized <u>marketing toolkit</u>, which can help you boost your presence in your community and online.
- Dedicated support from a Field Specialist in your region.

If you're interested in learning more, the <u>Contractor Orientation course</u> provides an overview of the features and benefits of joining the program. This training module shows you how to become a participating contractor with free access to resources and support to help ensure your success in the field.

The Contractor Orientation course, along with all other program materials, are available at no cost to contractors in BPA's territory.

Incentives & Events for Commercial Buildings

Get a workout for your brain at the <u>Trade Ally Network NW 2021 webinar series</u> to ensure you are up to speed on commercial incentives and processes. With the best tips from the top coaches in the field, you'll keep your brain in shape and stay sharp. <u>View the schedule and register here</u>.

Wait 15 Minutes to Test a Heat Pump

Accurate heat pump testing requires the correct timing and test conditions to interpret the operation and performance of the system. If timing and conditions are off, the data might not represent real-world system performance.

Heat pump installation instructions commonly recommend a 15-minute runtime for systems to stabilize before testing and adjusting refrigerant charge. After 15 minutes, the heat pump has reached "steady state," or the ideal test conditions.

R-410A Minimum Expected Temperature Split

Outdoor Temp °F	CFM/Ton	
	350	400
15	15.0	13.0
17	15.6	13.6
19	16.2	14.2
21	16.8	14.8
23	17.4	15.4
25	18.0	16.0
27	18.6	16.4
29	19.2	16.8
31	19.8	17.2
33	20.4	17.6

- When measuring airflow, ensure that the fan is fully ramped up. This is critical when measuring system static pressures.
- When measuring temperature split, verify that the compressor is at full capacity. Verify all stages are calling (if the system is multi-stage or variable speed) so you can accurately conduct the test.

To avoid potential errors in the registry and needing additional project time, wait for the system to be in steady state and running at full capacity before taking measurements.

Filtration and Static Pressure

Last year, the Northwest experienced extended periods of poor air quality related to wildfire smoke, and once again, HVAC contractors were inundated with requests from homeowners to remove the smoke from their homes. High smoke-particulate levels can be dramatically reduced with proper air filter selection and application. However, with improved filtration comes

higher static-pressure drop.

A human hair is about 60 microns. In comparison, smoke particles range in size from 0.4 to 0.7 microns. To trap particles of this size, a filter needs a Minimum Efficiency Reporting Value (MERV) rating of 13 or higher. Airflow resistance is measured by the pressure drop across the filter. Typically, pleated filters have a much lower pressure drop than one- or two-inch filters. Keeping pressure drops at no higher than 0.12 inches of water column will help keep the total external static pressure low, maintain appropriate airflow, and meet PTCS specifications.

Duct Testing for Energy Code Compliance

A PTCS duct sealing certification may qualify you to perform tests to meet building energy codes in your state. However, please note that energy codes may have different testing requirements compared to PTCS. If you test for code compliance, confirm you are testing at the appropriate duct



pressure and if the code requires a total duct leakage test or duct leakage to outside test. Inquiries about state energy-code requirements should be directed to local code experts.

Access additional information about duct leakage testing code requirements in the Northwest using the links below.

Idaho Montana Oregon Washington

Ask the Contact Center

What is a company admin account? A company admin account allows a user to enter jobs on behalf of any certified technicians listed under your company, all from the same account, even if they haven't attended the training themselves.

Should our company notify PTCS of staff changes? Keep your company information up-to-date and let us know if any technicians need to be added or removed from your company in the PTCS registry.

Do you need to have a measure reviewed, updated, or corrected? We can update any completed measure, just send us an email or give us a call. See below for contact information.

If you have any questions about the program or proper procedures, contact us to be connected to an expert. Email ResHVAC@bpa.gov or call 1-800-941-3867 for assistance.

Performance Tested Comfort Systems | 800-941-3867 | ptcs.bpa.gov