
ASHRAE Guidance | Frequently Asked Questions (FAQ)

- Q. How do I measure building height?
- A. Per DOE Guidance, SP is to measure the lowest point above grade (excludes window wells) to the highest point of the conditioned space (ceiling or peak). For manufactured homes, enter the height of the home measured from the floor to the highest point of the ceiling in the interior of the home.
- Q. What area do I consider for calculation for sq ft?
- A. Space that is conditioned year-round and meets the ANSI Z764 definition of “finished area” which is: “An enclosed area in a house that is suitable for year-round use, embodying walls, floors, and ceilings that are similar to the rest of the house.” A decrease in “finished” area will result in a lower continuous ventilation requirement.
- Q. When selecting an airport in WA, should Service Providers use the closest airport? Or should I use the same airport for every home in my area?
- A. Climate information can impact energy modeling outputs, including Savings to Investment Ratio (SIR). Weatherization Assistant (WA) offers Minnesota users four options for “Weather File” in the Audit Information tab: Duluth, International Falls, Minneapolis, and Rochester. The ASHRAE tab within the Health and Safety tab of the audit offers a larger selection (about 64 cities). The WA user manual instructs the user to “select a city close to the client’s home that has similar weather using the drop-down list in the Weather File field.” Commerce recommends that auditors select the airport/location that is the closest distance to their client, even if that may vary within the geographic area of your organization. This will provide the most accurate calculations within the ASHRAE tool. For additional details on location entry, see the WA User Manual.
- Q. Must exhaust fans always be installed to meet the ASHRAE 62.2 2016 ventilation standard?
- A. No. While exhaust fans are the most common method of meeting ASHRAE 62.2, they are not the only method. In fact, considering the high price of exhaust fan installations, now more than ever Service Providers should consider the ASHRAE 62.2 standard in its entirety and not just presume that a low-sone continuously running exhaust fan is the best solution. A few things to consider:
- Controlling Costs:
 - Considering high health and safety costs statewide, Service Providers should attempt to find the least expensive method of meeting ASHRAE 62.2 for each home, a method that is both compliant and effective.
 - The Relationship Between Continuous and Local Ventilation:
 - ASHRAE 62.2 has both a whole building ventilation and a local ventilation requirement.
 - ASHRAE 62.2 provides an alternative path to meeting the local ventilation requirement through additional whole building ventilation.
 - The alternative path is most often used in weatherization and was designed to meet ASHRAE 62.2 in existing homes while installing less ventilation equipment.
 - Installing more than one piece of ventilation equipment should be rare.

- Improving existing local ventilation equipment, either through fan cleaning or vent duct improvements, can remove local ventilation deficits thus lowering the amount of continuous ventilation required. This approach could result in a lower priced equipment being utilized, or even a scenario with the calculated ventilation requirement under 15 CFM and no additional equipment being required. A small investment in improving existing equipment could mean a lower total cost expenditure to meet ASHRAE 62.2 requirements.
- Minnesota Weatherization Audit Process Review:
 - The last section of the Minnesota Weatherization Audit Process Review Training on Commerce’s Learning Management System covers this topic in detail. Please review this section of the training.

Q. What factors does Commerce consider when assessing Service Provider requests to repair or replace heat recovery ventilators (HRVs) and energy recovery ventilators (ERVs)? What information should be included in these requests?

A. Service providers should submit information on the following items when requesting to repair or replace HRVs:

- Cost Comparison: The cost of a repair or replacement should be less expensive than, or reasonably close to, the cost of the alternative exhaust only ventilation.
- HRV/ERV Maintenance and Client Education: Because HRV/ERVs require more regular maintenance than exhaust only ventilation, Service Providers must deliver client education related to maintenance. The client must be willing and able to perform regular maintenance, especially cleaning or changing of filters.
- HRV/ERV Testing: Whether providing exhaust only or balanced ventilation, Service Providers or their contractor must demonstrate the HRV/ERV meets the ASHRAE 62.2 2016 standard at the onsite inspection.

Q. What if I get a high CFM number, can I install 2 fans?

A. We would ask that you consider all options including an HRV/ERV. Depending on the fan selected, they can only operate to a certain CFM continuously.

Q. What are the requirements for the fan?

A. Sone 1.0 or less, designed for continuous use, and Energy Star with a manual override.

Q. Do I need a shut off or can the breaker be sufficient?

- The “control” required by the standard can be the circuit breaker if it is properly labeled. Ensure the fan can be disconnected and accessible for service and inform the client as part of the client education how to service and maintain the equipment.

Q. What are my options for variable speed?

A. You can install a switch for low and high use or a motion sensor that detects the need to ramp up.

Q. What is the minimum time to run the high side of the fan?

A. 10 minutes.

- Q. Should the fan be tested at both low and high speed at the QCI and how to do this?
- Yes, it is important to get both readings. If using high/low switch – take both measurements, if using motion, tape off sensor and adjust timer to lowest value once it is on low – take measurement.
- Q. How do I test HRV/ERVs?
- A. Training on testing HRV/ERV's is currently being developed. Ensure existing systems are sized adequately to meet ASHRAE standards and ensure the system is balanced. This information must be measured and provided by the installing contractor. Once training is developed, this FAQ will be updated.
- Q. Do I count bath fans in ½ baths or just areas with a tub and shower?
- A. Include all exhaust fans regardless of location.
- Q. What if we don't achieve air sealing goals and we install an ASHRAE fan and now it is below 15 cfm?
- A. Make notes in WA as to why you believe occurred and try to avoid making a similar mistake in the future.
- Q. What are the kitchen fan requirements?
- A. If a kitchen fan is being used to meet ASHRAE 62.2, requirements for continuous flow are based on the calculation with a sone rating of 1.0 or less and Energy Star. If it is used for spot ventilation, then flow must be equal to or greater than 100 cfm and 3 sones or less and Energy Star.
- Q. Can I install or replace spot ventilation fans for H&S reasons for moisture and cooking?
- A. Depending on the outcome desired for a particular project, there are times where additional ventilation may be installed or replaced. If a bath fan is installed only for spot ventilation, the flow must be equal to or greater than 50 cfm and 2 sones or less and Energy Star. Make notes in the H&S tab for justification.