



In an effort to reduce energy cost and use, construction methods have changed over the past few decades. These changes result in buildings that are tightly sealed to prevent conditioned indoor air from escaping. The unintended consequence of a tightly sealed building is that stale indoor air cannot get out of the building and fresh outdoor air cannot get in. This lack of air exchange can cause an unhealthy indoor environment. Studies of human exposure to air pollutants by the Environmental Protection Agency (EPA) indicate that indoor levels of pollutants may be 2-to-5 times – and in extreme cases more than 100 times – higher than outdoor pollutant levels.

There are two key methods to improving the indoor air quality in your home:

1. Reduce or eliminate the sources of indoor air pollution

- a. Major sources of indoor air pollution include chemicals that we introduce into our homes such as cleaning products, laundry products, hair spray, perfume, air fresheners, candles, and insecticides. Chemicals are also introduced into our homes from some unlikely sources that include carpet, furniture, and even dry-cleaned clothes. Another major source of chemical pollution in our homes is the attached garage. Every time the door between the home and garage is opened, chemicals from vehicles, fertilizer, insecticides and other toxic materials that are stored in an attached garage enter the home. Additionally, any air leakage around the garage door or through the shared wall will result in these chemicals entering the home.
- b. Another major source of indoor air pollution is caused by human activity inside the home. Smoking, cooking, showering, walking across the carpet, and even breathing causes indoor air pollution. Additionally, the pets that live with us are a source of pollution.

2. Remove indoor air pollution that is present

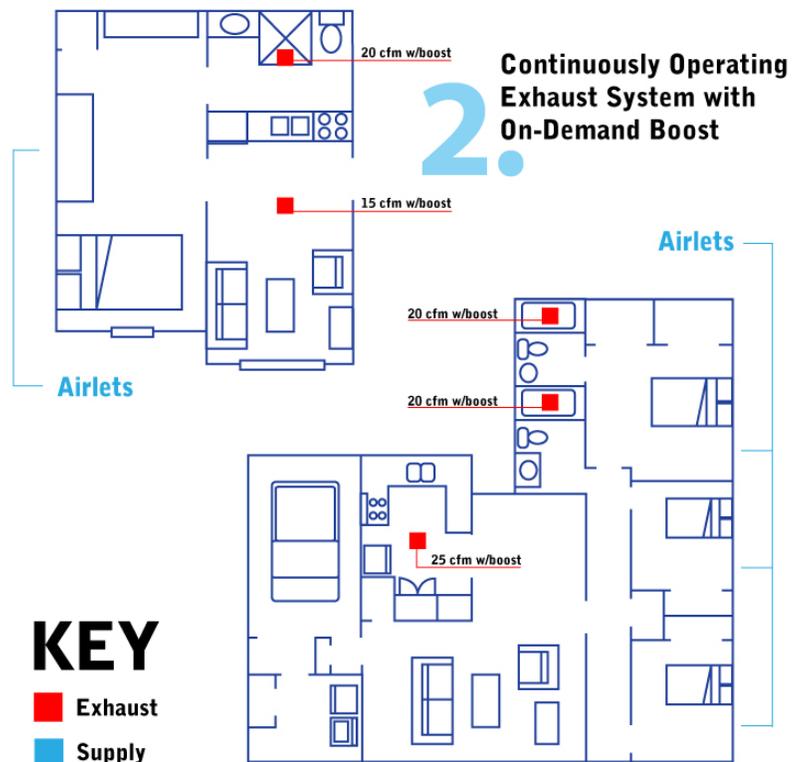
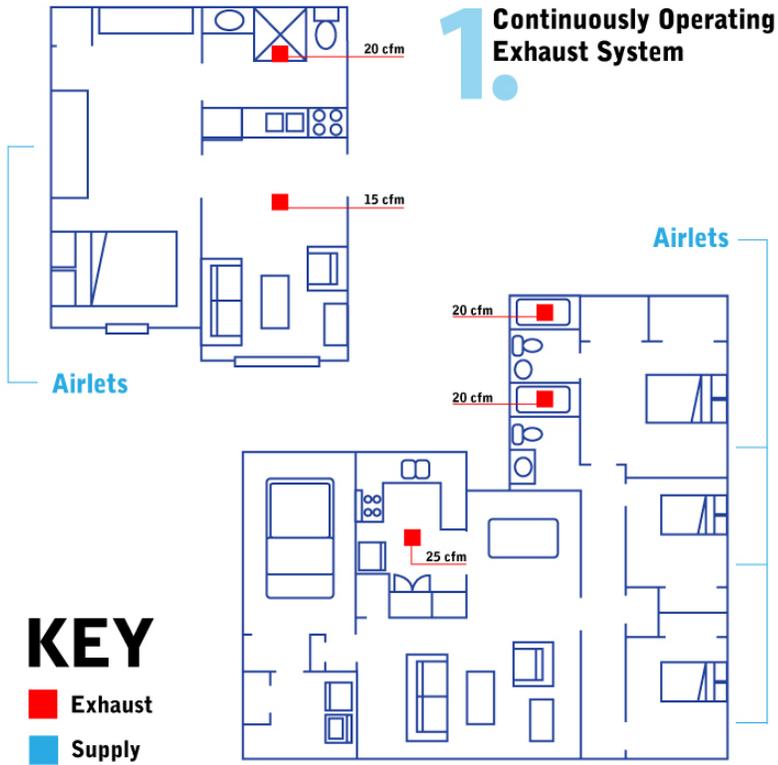
- a. A continuously operating whole-house mechanical ventilation system is the best method to ensure a proper amount of ventilation. The amount of continuous ventilation that is required for a home varies with the size of the home, number of occupants, and the activities, lifestyle and any special needs of the occupants. ASHRAE Standard 62.2 2010 is a good source for the minimum amount of continuous whole-house ventilation that is required based on the size of the home and the number of occupants. Always check local building codes for additional requirements. American ALDES Ventilation Corporation offers a full range of continuously operating whole-house ventilation products. This allows us to provide the best solution based your location, type of construction, lifestyle, and special needs.
- a. In areas that produce high levels of pollution, local mechanical ventilation is also necessary to provide good indoor air quality. The areas that require local ventilation include bathrooms, kitchens, and garages. The amount of ventilation required for these areas varies based on the size of the room, the type and size of appliances/ fixtures in the room, and how the room is used. As an example, a bathroom with a high-capacity shower or a whirlpool tub will require more ventilation than a standard bathroom. Additionally, a kitchen with a large, professional-style cooking surface or a kitchen that is used for indoor grilling or other non-typical cooking will require additional ventilation. ASHRAE Standard 62.2 2010 is a good source for the minimum amount of local ventilation that is required for bathroom and kitchen applications. Always check local building codes for additional requirements. American ALDES Ventilation Corporation offers a full range of ventilation products for bathrooms, kitchens, and garages.

INDOOR AIR POLLUTANTS

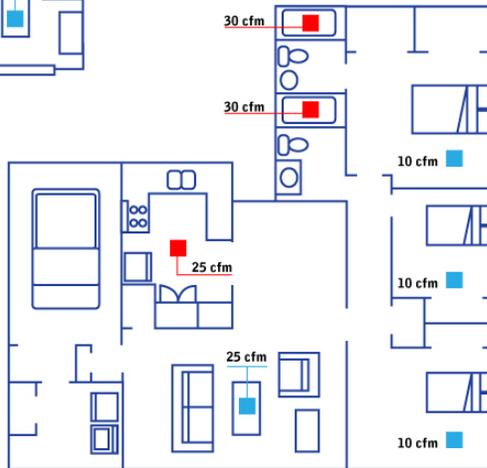
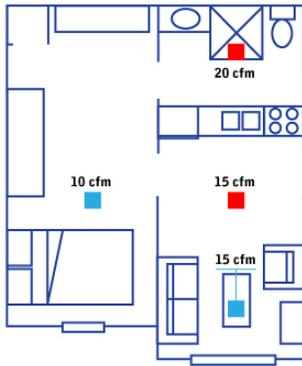


KEY

- (B)** Biological Contaminants
- (C)** Carpet
- (Co)** Combustion
- (F)** Formaldehyde
- (H)** Household Products
- (Hu)** Humidity
- (P)** Pesticides
- (T)** Environmental Tobacco Smoke



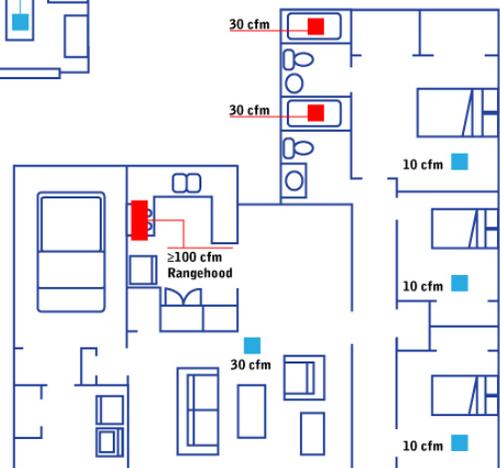
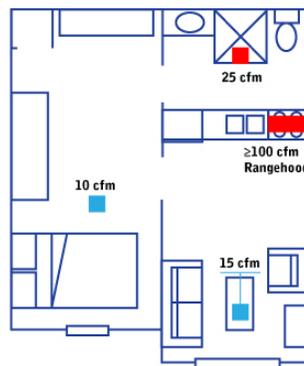
3. Continuously Operating HRV/ERV or Fans with or without boost.



KEY

- Exhaust
- Supply

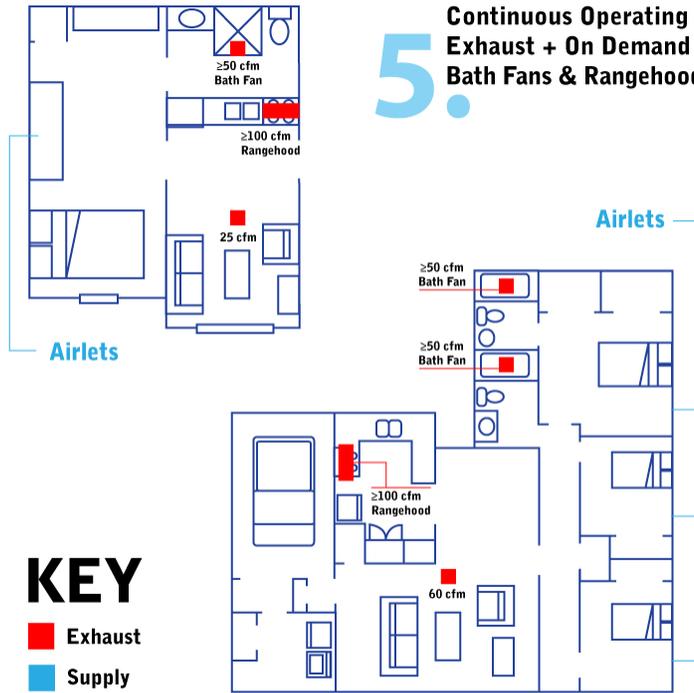
4. Continuously Operating HRV/ERV or Fans plus On-Demand Rangehood



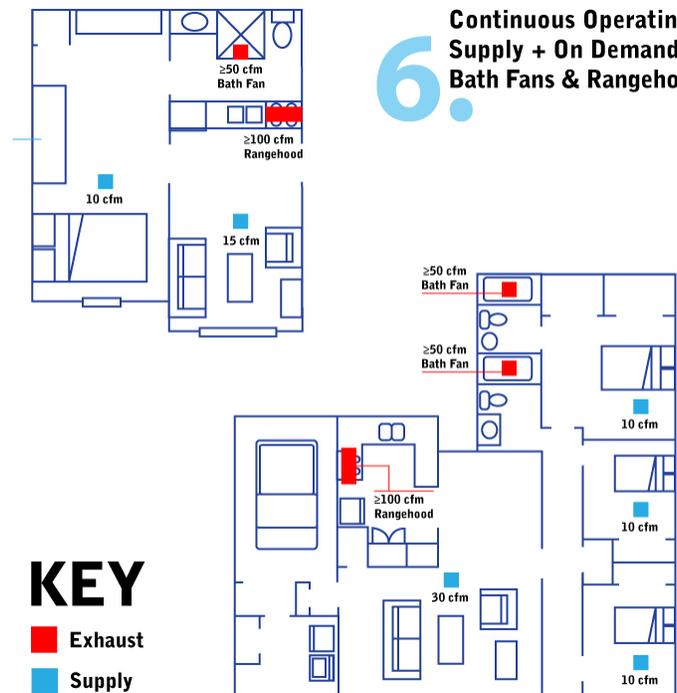
KEY

- Exhaust
- Supply

5. Continuous Operating Exhaust + On Demand Bath Fans & Rangehood



6. Continuous Operating Supply + On Demand Bath Fans & Rangehood



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