sendal
LIVE BETTER

Breathe

Frequently Asked Questions

Q: *Does Breathe meet the ASHRAE 62.2 standard for IAQ?*

A: ASHRAE 62.2 does not have a specific IAQ requirement. Breathe does have a "Fixed" mode to deliver to the ASHRAE 62.2- 2019 ventilation CFM requirement. Breathe goes beyond the ASHRAE standard when in the "Predictive" mode to provide breathable air at a reduced energy cost while improving indoor air quality, saving money, and helping to decarbonize to make for a greener planet.

Q: *How does Breathe differ from a demand control solution?*

A: Breathe delivers the functionality of a demand control solution that calls for ventilation when dilution is required to reduce the concentration of contaminants VOCs and CO2 identified by IAQ sensors. The Breathe service goes beyond this reactive mode to a predictive mode by engaging ventilation and filtration at appropriate times to help prevent contaminant levels from getting too high based on activities that create poor air quality.

Q: *Does Breathe provide fresh air ventilation or filtration?*

A: The Breathe service provides ventilation and filtration services based on the type of activity that generates contaminants or from air quality sensor data for indoors and outdoors.

Q: *Does Breathe always provide filtration and ventilation together every time it runs?*

A: The Breathe service responds to the activities in the home that lead to poor air quality or sensor data-specific contaminants and engages appropriately with ventilation or filtration. At times both will be employed based on specific circumstances. For example, ventilation solutions typically have low MERV filters necessitating a filtration system engagement to reduce particulate matter. Similarly, most filtration systems have little impact on VOCs or CO2 and require fresh air delivered by ventilation. Some situations require both filtration and ventilation to be engaged simultaneously.

Q: *Do high MERV rating filters lead to blower motor failures due to increased pressure build-up?*

A: Since 2019, the building code has required ECM motors that are variable speed and resilient to increased pressure. In addition, a proper mechanical system design that increases the filter's surface area significantly reduces the pressure gradient across higher MERV filters.

Q: *Is the Breathe service a replacement for stand-alone or in-vent purification?*

A: The Breathe services complement purification solutions. Often these solutions are focused on a subset of indoor contaminants that are harmful to your health. Purification solutions are not a replacement for fresh air ventilation, or filtration-purification adds another layer of protection.

Q: *If Breathe engages the air handler's blower motor, will it use significantly more energy than ventilation approaches that only use the ventilation equipment blower?*

A: The Breathe service will use significantly less energy and provide cleaner air. By engaging the air handler blower (typical 20 watts), Breathe reduces run-time of ventilation equipment (100 watts) net gain of 80 watts of savings. When added to an already diminished run-time as an outcome of the predictive actions-overall power usage is decreased.

Q: *Does the Breathe service only work with Sendal hardware?*

A: As with all of Sendal's services, the hardware in the home is provided by our technology partners; Sendal has no hardware that it provides. The technology partners Sendal works with are connected home property tech companies that have software integrations with Sendal.

Q: *Does the Breathe service completely get rid of all air toxins?*

A: Air will always contain a certain level of toxins; however, Breathe's Predictive mode is the most advanced solution to keeping your air at its cleanest. Predictive mode responds to your home's air quality based on environmental factors, living behaviors, and energy settings. For example, by setting the energy level to "cleanest air," Breathe will use as much energy as necessary to deliver clean air.

Q: *Does outdoor climate or pollutant levels affect how Breathe operates?*

A: Breathe is aware of your local current climate and types of pollutants. When the Breathe service is looking to provide outdoor air ventilation, and certain conditions are not met, Breathe will prompt the user for permission to ventilate. Users can make decisions based on several factors. For example, suppose high PM levels exist outdoors, and the home has a proper level of filtration, the owner may choose to ventilate comfortably so that the system will filter the identified pollutants. The ability for users to override exists for humidity levels and temperature.