

To maintain comfort, health, and good indoor air quality in your home, you need whole-home mechanical ventilation. According to the EPA, indoor air is typically **2 to 5 times more polluted** than the air we breathe outdoors. There are numerous factors that contribute to poor indoor air quality including environmental factors, toxic household products, and bacteria and mold growth to name a few.

Ventilation in your home is crucial for keeping occupants healthy and comfortable. Proper mechanical ventilation keeps air flowing through the home, which in turn eliminates harmful bacterias, moisture buildup, and most odors.

How Much Fresh Air Does Your Home Need

Without correct ventilation, fresh air in your home easily becomes stagnant. Stale air means that the many harmful air pollutants remain in our breathing spaces longer. For most, we don't think twice about the ventilation in our homes, offices and indoor spaces. You may have no idea if your home needs more ventilation. Some quick factors to watch out for are increased allergies or respiratory illness and excessive moisture. So, to keep such things at bay, how much fresh air does your house really need?

The answer is of course dependent on the size of the indoor space. The technical breakdown? The ideal air exchange rate for residential spaces is **0.35 air changes per hour** or not less than 15 cfm (that's cubic feet per minute—a measure of volume of air or gas in a space) per minute per person. This is the rule of thumb. You likely aren't sure what that means or exactly how to apply it to your space, but just know, it means a *lot* of fresh air and proper air circulation. As indoor air quality experts, we can help ensure your living space has the proper ventilation necessary.

How To Properly Ventilate Your Home

Homes benefit from a combination of both natural and mechanical ventilation. Natural ventilation is an easy fix. This is done simply by opening windows and doors to allow fresh outdoor air to flow into your space. This is easily controlled in the moment. However, it can be difficult to provide proper

ventilation during long days spent away from home and throughout the colder weather months.

Mechanical Ventilation

Instead, mechanical ventilation is a solution that's working in your home's favor at all times. A [mechanical ventilation system](#) is a series of fans and air ducts that work together to force fresh air throughout the space. These systems collect fresh outdoor air, filter the air and then circulate the clean air throughout the entire home. They do this while simultaneously also capturing stale indoor air and moving it outside.

There are different types of mechanical ventilation models with different methods of achieving this, such as [energy ventilators](#) and [heat recovery ventilators](#). But the key takeaway: they are whole-home ventilation systems. It's wildly beneficial to have a system working directly with your HVAC system for your whole home.

You likely already have a couple of small targeted mechanical ventilation system. The most common localized mechanical ventilation units are in the bathroom and kitchen. You turn the exhaust fans on in bathrooms when taking a hot shower to remove moisture buildup. While cooking, you might run the fan above the stovetop to remove moisture, smoke, and food odors.

Whole-home ventilation systems operate within the air ducts of your home to keep air moving and fresh. They work together with a home's ductwork and HVAC system. It's an easy, low maintenance upgrade.

By making sure your vents are open and unblocked, you can help improve your home's ventilation. Move furniture or rugs over or in front of supply and return registers. These are quick and easy fixes.

Ventilation Is Vital for Moisture Control

Moisture collects even in the cleanest homes. Moisture build-up is naturally caused by common activities that take place indoors. Showering and cooking are the usual suspects – and intensified by poor ventilation.

Without proper ventilation, moisture will seep into walls and stick to surfaces, causing damage to your home, furniture, and valuables. That's because it creates a habitable environment for mold. The way microscopic mold spores spread makes excess moisture dangerous for you and your family's health.

Exposure to mold for extended periods of times can cause serious health issues such as:

- Headaches
- High fevers
- Respiratory issues
- Immune system damage
- Irritation of the eyes and throat

Installing a whole-home mechanical ventilation system ensures moisture build-up in your home is eliminated and clean air circulating. That's because removing the excess moisture from living areas limits mold growth and prevents health issues. You reduce damage to structures and furnishings as well. If mold is a particular issue in your home, you should consider humidity control solutions in addition to ventilation. Depending on your location, excess moisture can be intensified by excess humidity.

Fill Your Home With Fresh Air

The importance of ventilation cannot be understated. Think of ventilation as breathing. Your home wants to breathe. It wants fresh air for healthy proper circulation. Similar to how we rely on lungs, our homes and indoor spaces rely on ventilation. If you think your home is due for a mechanical ventilation upgrade, we can help guide you in the right direction.