

Healthy home airflow balance means creating a cleaner, healthier, higher quality indoor living environment. Airflow, air circulation, ventilation, fresh air—it all has a [significant impact](#) on home quality. And, on the health and wellness of you, your family and every occupant in the space.

Good airflow balance also means comfortable indoor spaces. Poor home airflow has a noticeable impact. Airflow imbalance sometimes look likes hot rooms and cold rooms because of temperature imbalance. It can look like drafty spaces and apparent wind tunnels because of pressure imbalance. It can even look like high energy and utility bills because the HVAC system is working twice as hard to compensate. Do any of these problems sound familiar? Find out how to improve the airflow in your home and ensure a healthy home airflow balance.

## Why Does Home Airflow Matter?

This section could also read: what even is airflow? Airflow is simply the movement of air. In the HVAC world, airflow also refers to the measurement of air flowing through the HVAC system. After all, one of the primary purposes of ductwork and the many vents, registers and grilles in your home is to supply and return air.

As a main function of the HVAC system, airflow impacts quite a few aspects of indoor spaces. There are many reasons why airflow matters and why *good* airflow in particular is crucial for a healthy indoor environment. Here are a couple of factors to consider.

1. [Improved Air Circulation](#) – Good airflow means good air circulation. When air circulation is poor, indoor air pollutants and contaminated indoor air remains in the space longer. Without an influx of fresh air, you and everyone else are constantly breathing in polluted, [stale air](#). Whole-home solutions like [mechanical ventilation](#) help increase the amount of fresh air entering a space.
2. [Lower Energy Bills](#) – This is a popular reason among homeowners to improve home airflow balance and pursue IAQ upgrades. Poor, unbalanced airflow forces the HVAC system to work harder. In fact, both the HVAC system's overall performance and longevity is directly related

to airflow. Good airflow means better energy-efficiency and lower energy bills, saving you money!

3. **Longer HVAC System Lifespan** – In addition to lower utility costs, if the HVAC system doesn't need to work overtime to compensate for poor home airflow, then the system itself will last longer. This also means less necessary system fixes.
4. **Improved Comfort** – Airflow directly impacts indoor living spaces. Good airflow means balanced temperatures and pressure in every room of the home, AKA a comfortable worry-free environment.
5. **Healthy Indoor Environment** – Good airflow balance also means good indoor air quality. As indoor air quality experts, we have a lot of reasons [why IAQ matters](#)! From reducing the amount of indoor air pollutants and contaminants, to improved ventilation and filtration, airflow impacts the health of you and your home.

## Common Complaints of Poor Airflow

For most, we pay very little attention or care to our home's HVAC system until something goes wrong. Even if something does seem off, what are signs of poor airflow or bad home airflow balance? The most noticeable effect is temperature distribution. Uneven temperatures throughout the home is a common complaint HVAC contractors receive.

Noticeable hot and cold spaces might only be in specific areas of the home or dependent on the season. Uneven temperature also includes detectable temperature changes just from one room to the next. Or even, specific spots that seem perpetually hot or cold.

Another observable factor of poor home airflow balance is pressure imbalance. This includes drafty spaces, doors shutting on their own or doors that are difficult to open and whistling or strange noises.

## Air Balancing

You can think of air balancing as HVAC system optimization. Air balancing helps improve home airflow. And it also addresses the previously mentioned poor airflow complaints. Air balancing improves air circulation, increases energy savings and helps the HVAC system perform effectively. Good home

airflow balance ensures the right amount of air reaches every room. Thus, increasing comfort and living quality while providing even temperature and pressure distribution for the home.

Air balancing has been the go-to method for measuring an HVAC system's efficacy and performance for many years. It is a trusted air quality evaluation. Proper airflow balance can also be an important part of regular or seasonal HVAC maintenance.

## How to Improve Home Airflow Balance

There are multiple ways to improve home airflow balance. A few of the options can easily be done on your own. However, if problems continue if there are other indoor air quality concerns or you simply want the help of an expert, expert HVAC and IAQ contractors can help. A technician will [test airflow throughout the home](#) and adjust the system accordingly. Here are a couple of quick tips and methods for air balancing.

- **Prevent Airflow Restrictions:** It's important to prevent airflow restrictions. Do not cover floor registers and do not block wall or ceiling registers! Look around your home and make sure items like furniture, rugs, decorations, etc. are not placed on or near registers. Doing so restricts airflow. And blocked vents make the HVAC system work harder to provide air to the room—hurting the system and worsening air quality. Preventing restrictions is an easy way to ensure household objects aren't reducing airflow.
- **Close & Open Registers:** Adjusting registers is the first step to balancing home airflow. You can close and open registers in your home to measure airflow in different spaces and rooms of the home. To do so, simply adjust the damper blade on the register (small tab on the register) and it will accordingly adjust the amount of air entering the room. [Adjusting the damper](#) is easy, both during installation and at any point after. Make sure to not close the register altogether! Air still needs to be able to enter the room. Completely closed registers hurt the HVAC system. Most contractors suggest that the homeowner completes this step because it's helpful to adjust registers and observe airflow over a period of days. This means testing both heat and A/C, changing system

temperature and adjusting dampers to notice potential problem areas in the home.

- **Update Home Registers:** If adjusting registers in the home doesn't significantly improve airflow, then upgrading registers is a potential next step. Most registers only provide air in two directions. This style is based in old construction methods and ventilation needs. The original idea was to install registers along the perimeter of a room to create a curtain of air that helped minimize air loss and keep outside air out. However, today, homes have better windows, improved insulation and sealed builds—meaning the original concerns are no longer an issue. Even so, most standard residential register designs have not changed. There are some three-way registers options on the market. These [registers provide improved airflow](#) and home airflow balance because more air enters the room, yet through the same-sized opening. We recommend these three-way registers which push air along the perimeter *and* directly into the room, improving circulation.
- **Routinely Check or Upgrade HVAC Filters:** A final way to improve home airflow balance and create a healthier indoor space is to check air filters. It's important to regularly check and replace air filters to improve overall indoor air quality. Also, it's important to regularly check air filters because dirty or clogged filters make it harder for air to pass through. This reduces potential energy-efficiency and the efficacy of the HVAC system. [Clogged filters](#) are actually one of the most common reasons HVAC systems break. It's absolutely imperative to change them routinely for good airflow and air quality. You can also upgrade to a higher-rated air filter. [MERV-13](#) filters are the best home HVAC system option. They remove more indoor pollutants without affecting airflow. Higher quality filters also [last longer](#), aka less frequent filter changes. It's a great long-term air quality and airflow balance investment.

Choosing one or a combination of these options will help improve your home's airflow balance and indoor air quality. Ensuring good airflow in your space is important! If you are considering pursuing IAQ upgrades or want expert help balancing airflow, we can help you find a [local expert](#).