

# INDOOR AIR QUALITY SOLUTIONS



## DEHUMIDIFICATION

**FACT:** By maintaining balanced humidity between 40% and 60% year-round, you can reduce the airborne incidence of health concerns like bacteria, viruses, and dust mites. Proper dehumidification can also reduce mildew and musty odors and improve respiratory issues in the summer.

According to the EPA, improper humidity levels can also increase concentrations of some pollutants.

Sometimes, humidity or dampness (water vapor) in the air can supply enough moisture for bacterial growth. Indoor relative humidity (RH) should be below 60 percent, ideally between 30 percent and 50 percent if possible. Low humidity may also discourage pests such as cockroaches and dust mites.

Humidity levels can rise in a building because of the use of moisture-generating appliances such as clothes dryers, and combustion appliances such as space heaters. Cooking and bathing can also add to indoor humidity.



## DUCT CLEANING

**FACT:** According to the EPA “a growing body of scientific evidence indicates that the air within homes and other buildings can be more polluted than the outdoor air in even the largest and most industrialized cities. Other research indicates people spend 90 percent of their time indoors. Thus, for many people, the risks to health may be greater due to exposure to air pollution indoors rather than outdoors.

In addition, people exposed to indoor air pollutants for extended periods of time are often those most susceptible to the effects of indoor air pollution. Such groups are the young, the elderly and the chronically ill, especially those suffering from respiratory or cardiovascular disease.

## FILTRATION AND AIR PURIFICATION

**FACT:** The indoor air quality in your home can be FIVE TIMES MORE POLLUTED than outdoor air, primarily because indoor air is not properly sanitized. There are other contaminants that simply are not filtered out of the air, but instead accumulate over time in our modern, tightly sealed homes. This happens because bacteria, viruses, bacterial growth spores and other toxins are too small to be captured by passive traditional air filters. Some particles are small enough to pass through a HEPA filter.

So, since you spend up to 90% of your time indoors, it is important to consider the impact these pollutants can have on your long-term health. We can solve your indoor air quality problems in the most innovative and effective way and improve the quality of the air in your home.



# DUCT SYSTEM SOLUTIONS

## DUCT SYSTEM SEALING



**FACT:** 20% to 40% of the air that is supposed to flow through your supply ducts may be escaping through poor duct connections or holes and cracks in your air ducts as well as the supply box penetrations in your ceiling. These duct leaks reduce your systems efficiency by a corresponding percentage and may cause your return air to pull in unconditioned and unfiltered air causing your cooling and heating system to work harder and longer than necessary. You could be wastefully heating and cooling areas like your attic crawl space and even behind walls. What is worse is that dust, debris, and allergens are being sucked in and blasted all over your home.

That is why your bedroom may be hotter in summer and colder in winter, your coffee table is always dusty, and you are over-paying the utility company. But there is great news - we make it easy and affordable to fix! Our professional crews seal all accessible connections and caulk the supply boot to the sheetrock penetration for a much better air seal then pressure test the duct system. In some instances, sealing may not be appropriate due to damaged or broken ducts so duct replacement may be a better option.

## DUCT SYSTEM REPLACEMENT



**FACT:** When your ducts are not serving you well, they will usually let you know. The key is to know what to look, smell, listen, and even feel for. That is right, your ducts will give you clues that something is up, so make sure you pay attention for any of the following signs that you need a new HVAC air distribution system. Your home is very dusty, you smell mildew, your HVAC system is noisy, or your home's temperature is inconsistent throughout the rooms. Old poorly insulated ducts can pick up attic heat in the summertime causing the cold air coming from the vents to be 3-5 degrees and sometimes 7-8 degrees warmer than the air leaving the cooling coil.

According to the EPA, inadequate ventilation can increase indoor pollutant levels. Our Home Comfort Specialists can examine your ductwork to see if there are any issues. Several issues can be resolved with duct sealing. More serious issues may require installing an entirely new air distribution system.

A vast portion of the duct systems in our area are not sized properly for the return airflow causing the system to pull in unconditioned and unfiltered air. Supply ducts not sized properly and without balancing dampers can create hot and cold rooms throughout your home leading to systems running excessively and higher energy bills. Our professional technicians can design a duct system to maximize your comfort and system performance.