

## What should I expect from my heating and cooling contractor?

Your contractor should always check the Static Pressure of your system whenever repairing or planning to replace your heating and/or cooling equipment. A familiar comparison is when you go to your doctor, someone always checks your blood pressure.



Like blood pressure, Static Pressure is one of the key vital signs of your comfort system. This test helps your contractor identify any significant blockage or leakage.



With this initial testing along with an in-depth interview, your contractor can recommend the appropriate diagnostic tests followed by recommendations to correct existing issues and optimize your home's comfort and energy efficiency.

## Home Comfort Reports®



**Home Comfort Reports®** Consumer Information Series is a service of National Comfort Institute. NCI is the largest training and certification organization in the US in the areas of home comfort diagnostics, air balancing, Indoor Air Quality, combustion efficiency and carbon monoxide safety. This information series was created to help consumers make informed decisions about their air conditioning and heating system purchases so they can achieve the comfort, safety and performance they desire.



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What Is Air Balancing?

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## Home Comfort Reports®

Presents:

# What Is Air Balancing?



**Are you preparing to make a major decision on your heating and air conditioning system?**

**Perhaps this is your first comfort system purchase.**

**This information can help you make an informed, confident decision.**

# What Is Air Balancing?



## A History Lesson

Air balancing is an ancient trade dating back to 1732 when a French Engineer named Henri Pitot created a method for measuring fluid pressure. Even though air balancing is critical to the performance of your air conditioning and heating system, less than 5000 individuals in the world are trained and certified in air balancing today. Make sure your contractor employs Certified Air Balancing Technicians.

## Air Balancing Defined

In it's simplest form, Air Balancing is the process of testing and adjusting your air conditioning system to deliver the right amount of air to each room in your home. The actual Air Balancing process includes a number of related tests that determine the performance of your air conditioning and heating system. Air balancing hoods are used to measure the amount of air at each grille. Manometers measure system pressures. Hygrometers measure system temperature and humidity. The results of all these tests are compiled into a report to determine how well your system is functioning.



## What Air Balancing Can Do For Your System

It's not uncommon to find a system 30% to 50% low on airflow. Air passes through the equipment and carries the heating or cooling inside.

The effectiveness of the equipment is entirely dependent on the amount of airflow. When your certified technician measures the airflow he can "see" system performance. With this information he can diagnose, repair and balance the duct system for maximum system performance. The end result is rooms that are the same temperature, cleaner air, better humidity control and real energy savings.



## Frequently Asked Questions

**QUESTION** Can any system be balanced?

**ANSWER** A contractor with the right tools and training can improve the performance of virtually any system. The more accessible your ductwork is, the easier it is to perform balancing and duct renovation work.

**QUESTION** What's the difference between an NCI Certified Technician and other heating and air conditioning techs?

**ANSWER** Most companies are in business to just fix or replace heating and cooling equipment. Your certified Air Balancing Technician considers the entire system and is qualified to test, diagnose, and repair your ducts as well as your equipment.

**QUESTION** Most contractors tell me that I'll save big on my utility bills and be more comfortable by just replacing my existing equipment with a more efficient model. Is this true?

**ANSWER** It could be, as long as the duct system is in the same condition as the new equipment. If it isn't, the system will only function as well as the ducts do. Compare it to installing a brand-new race car engine on an old beat up sedan.

**QUESTION** How will air balancing solve my problem of rooms with different temperature?

**ANSWER** The airflow through the system is what carries the heating or cooling. By adjusting the volume of airflow, we adjust the amount of heating or cooling a room needs to become comfortable.