

What should I expect from my heating/cooling contractor?

An NCI-certified contractor will first ask you questions about the system, what you like and don't like about it, problem areas, air quality concerns, health issues, etc. He should then perform some preliminary testing to determine the condition of your system, the biggest problem areas, and so forth. This is generally performed using several instruments including a manometer which measures your systems pressure, much like a doctor checks blood pressure. He will typically measure the amount of air coming out of each vent with a special instrument called a "Flow Hood." Other measurements might include temperature, humidity and carbon monoxide testing.

How can I be assured the ducts have been renovated properly?

Your Contractor should test and adjust the results of his work when the duct renovation has been completed. This step is called **air balancing**. Up to just 10 years ago, air balancing was performed only on large commercial buildings. Today you can get this same precision adjustment in your home from an NCI trained and certified contractor. He will provide you with a test report showing the final operating condition of your system compared to how it functioned before the repairs were made. In other words, your contractor will prove that you got what you paid for – in writing!

Home Comfort Reports®



Home Comfort Reports® Consumer Information Series is a service of National Comfort Institute, Inc. 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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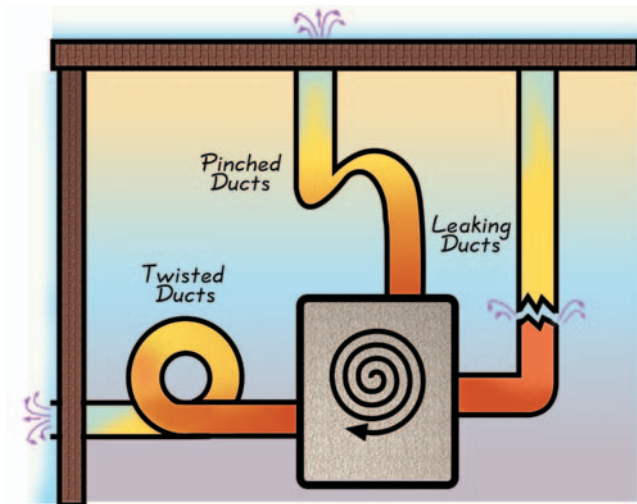
Why Should I Have My Ducts Fixed?

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Home Comfort Reports®

Presents:

Why Should I Have My Ducts Fixed?



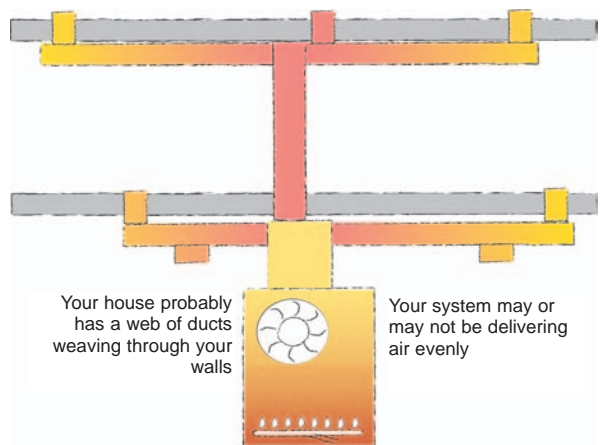
A poorly performing duct system can cause air comfort problems, high utility bills and could become hazardous.

A qualified contractor can measure your entire system's performance and show you how to get the most out of your central heating and air conditioning.

Your Duct System Can Directly Affect Your Home Comfort

What is a duct system?

The duct system is a series of conduits that carry the warm and cool air from your air conditioning and heating equipment into your home and then take it back to the equipment. The ducts also control how much air is delivered to each room. The right amount of air will keep the room temperatures where they need to be. If ducts are damaged, improperly installed or the wrong size, they can cut your system's ability to heat or cool by more than half on hot or cold days, when you need it the most.



How well do my ducts work?

Ducts move air, and air is invisible. So to determine if your ducts work or not, air properties must be measured. An NCI-certified contractor can measure how much air goes to each room and compare it to how much is needed. He will also take other measurements including temperatures and pressures to determine how well your ducts work. Then your contractor will review the results of the test with you



Can my ducts be fixed?

The typical duct renovation includes removing damaged ducts, straightening them, adding proper suspension and sealing all the joints. Sometimes larger ducts need to be installed to certain rooms or the registers and grilles need to be replaced. Your contractor should review the test results with you and make recommendations for duct repairs or additions. Other improvements might include adjusting fan speeds or improving your air filtration system.



Frequently Asked Questions

QUESTION: Why don't other contractors address my duct system?

ANSWER: Unfortunately few have the knowledge or own the tools and instruments to measure the performance of your duct system. If they can't measure it, they have no idea how to fix it, or even where to begin. They assume that the ducts are just fine.

QUESTION: How can ducts affect my system performance?

ANSWER: Here's an example: A 30% return duct leak on a hot or cold day can decrease your heating or cooling capacity more than 50%. That may sound extreme, but it's not an uncommon condition.

QUESTION: Other contractors have offered to seal my ducts. Isn't that the same thing?

ANSWER: No. While duct sealing is definitely done as part of a renovation, sealing by itself cannot address many of the flaws in a duct system. In many cases, just sealing the duct can make the problem worse, as it could choke down airflow causing equipment failure, major comfort problems. In extreme cases, it has caused back-drafting of flues leading to dangerous carbon monoxide problems.

QUESTION: Will renovating my ducts make the rooms that are uncomfortable finally more comfortable?

ANSWER: Comfort will increase. A good renovation should also improve indoor air quality and reduce energy use.