

AIVC  
#13,395


[advanced search](#) | [Use SearchButton](#)
☒ Find archives containing ALL keyword

☐ Find archives containing at least one keyword

[About Home Energy](#) | [The Magazine](#) | [Advertise](#) | [Home Page](#) | [Links](#) | [Subscribe](#)

## Home Performance Contractors

are specialists who make homes more comfortable,  
improve indoor air quality, reduce moisture damage,  
lower utility bills, and save energy.



Checklist of Problems that can  
be solved by a  
**Home Performance  
Contractor:**

- drafts
- peeling paint
- sooty deposits
- a rotting roof
- stuffy air
- hot or chilly rooms
- high energy bills
- mold or mildew
- a smokey fireplace
- allergy symptoms
- lingering odors
- ice dams
- foggy windows
- carbon monoxide

(left) The cover of Home Energy  
magazine's **Home Performance  
Brochure**.  
(6 pages, 8 1/2 X 11")

Illustration/Cartoons by Rick Stover

**Home Performance Contractors** analyze the house as an integrated whole. They are trained and equipped to find and fix these problems at the source. Read on to learn more about how your house performs and what a **Home Performance Contractor** can do to make it work better for you.

### Understanding a House as a System

#### The Source of Problems

#### Moisture Damage

#### Health Hazards

#### Heating and Cooling Systems

#### Insulation

---

This publication is sponsored by the U.S. Department of Energy. It was developed by Affordable Comfort, Inc. and Home Energy magazine, two non-profit organizations working to make homes comfortable, healthy, and affordable through information and training.

[next page: Understanding a House as a System](#) / [back to Home Energy home page](#)



search

[advanced search](#) | [Use SearchButton](#)

- ☐ Find archives containing ALL keywords
- ☐ Find archives containing at least one keyword

[About Home Energy](#) | [The Magazine](#) | [Advertise](#) | [Home Page](#) | [Links](#) | [Subscribe](#)

## Understanding a House as a System

**Many homeowners think problems like drafts, mildew, and peeling paint are "normal." But often these are signs that something in your house is way out of balance. And it's no wonder, because...**

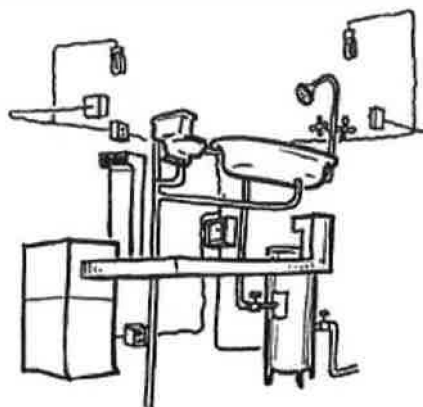


Illustration by Rick Stover

### A House Is a Complicated System . . .

Our homes keep changing. We put in new furnaces, air conditioners, and ventilation fans--and the ducts they need to move air in and out of rooms. These change the way air flows throughout the house. We add clothes washers, dryers, dishwashers, computers, more and brighter lights, extra bathrooms, and even jacuzzis and tropical aquariums. These produce moisture and heat that most houses were not designed to remove.

### . . . And That Can Mean Trouble . . .

Only recently, researchers discovered that all these common household conveniences interact with each other--and with the house--in ways that can cause serious problems. Mold and moisture damage, carbon monoxide poisoning, large energy losses, long-term health effects, and malfunctioning equipment are just a few examples of what can happen.

Researchers also found that problems in one part of the house often originate from surprising sources far away. To identify those sources quickly, they developed new "diagnostic" tools that can examine the entire house as a single, interactive system.

### . . . Unless Your Contractor Knows How the System Works.

This "systems" approach to fixing problems in houses is now being used by **Home Performance Contractors**. They are technicians trained in building science, and they use the same tools developed by researchers.

Unlike the average contractor, who knows only one trade and rarely understands what another contractor does, **Home Performance Contractors** provide whole-house service. With their specialized training and advanced equipment, they can see the unique way your house works as a system, pinpoint the cause of problems, and provide lasting solutions.

---

#### Finding and Fixing Flaws in the House System.

Here a **Home Performance Contractor** uses a diagnostic tool called a blower door--a fan in an adjustable frame that fits into a doorway. When the fan is running, he can locate air leakage sites throughout the entire house.



photo courtesy of Brad Andrews

[next page: The Source of Problems](#) / [back to Introduction](#)

/ [back to Home Energy home page](#) /

☐ Find archives containing ALL keywords

☐ Find archives containing at least one keyword

[advanced search](#) | [Use SearchButton](#)

[About Home Energy](#) | [The Magazine](#) | [Advertise](#) | [Home Page](#) | [Links](#) | [Subscribe](#)

## The Source of Problems

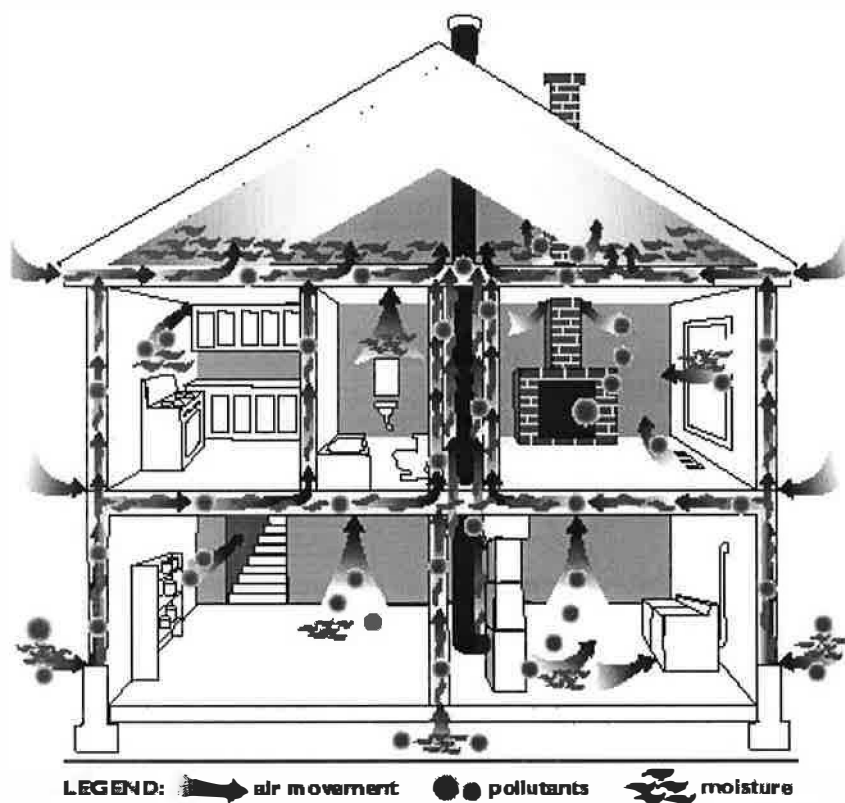


Illustration by Inna Jane Ray

### Air on the Move.

Air travels just about everywhere in your house, even where you can't see it. As air moves about, it carries several hitchhikers in the form of moisture and pollutants. When **Home Performance Contractors** find the routes air takes, they can solve a number of problems--from drafty rooms, to mold growth, to poor air quality.

You and your family need a continuous supply of fresh air in your home. But uncontrolled air flow can cause drafts, make rooms too hot or too cold, and create serious health hazards. The way air moves in and around your house reveals an awful lot about problems you may have and how they can be fixed. You may notice unwanted air entering your house around windows and doors. But air also travels through random cracks and holes, under floors, inside walls, and up plumbing and electrical shafts. It's actually these hidden passageways that are the cause of most drafts and high energy losses in homes.

A chilly bathroom is a typical example. Drafts can be created as air follows the pathway made for pipes from the basement to the bathtub and sink. Cranking up the thermostat or using space heaters to warm the bathroom will just waste money and energy--and never solve the problem.

But air is invisible. Without special equipment, it is impossible to know exactly how and

where air is circulating. A Home Performance Contractor uses tools designed to quickly find the leaky passageways in your home.

As holes are sealed, tests can be run to check how work is progressing. When the sealing job is complete, the **Home Performance Contractor** will run a final test to ensure that your home stays comfortable while getting the proper amount of fresh air when and where you need it.

[next page: Moisture Damage](#) / [back to Introduction](#)

/ [back to Home Energy homepage](#) /