



14 Common Myths About Heating, Air Conditioning and Energy Efficiency!

Today more than ever, everybody's looking for ways to use energy more efficiently around the house and cut down on utility bills. Unfortunately, there are plenty of myths in the marketplace today. So we decide to address the most common ones. In fact, some of the more popular myths that you may think are saving you energy and money are actually doing the opposite.

So let's see if we can set the record straight. Here are the facts on some of the most common home energy myths and fallacies. (This information is supported by TOP building scientists):

MYTH #1

"Energy Efficiency And Energy Conservation Are One And The Same Thing."

Well-intentioned information campaigns during oil crises of the 1970's created a lot of confusion about how to save energy. Energy efficiency means getting a job done with less energy. Energy conservation, on the other hand, means reducing the level of services, e.g. reducing comfort (of course who wants that). Consumers CAN improve energy efficiency without lowering the quality of life. Think of it this way:

Conservation - turning your thermostat back and being uncomfortable. Maybe saving 3 - 5%.

Energy Efficient Improvements - leaving your thermostat where everyone is comfortable. Saving 30-70%. Having the right information can make all the difference.

MYTH #2

"It's Easy To Tell Where My Home Is Losing Energy".

Fact. Many homeowners think the biggest air leaks are around windows and doors. While these leaks can be significant, most air leaks are hidden from view, passing through floors and ceilings, around chimneys, pipes, ductwork, etc. With today's technology, you can pinpoint where you're losing heat in Winter or cooling in Summer; and then fix it.

MYTH #3

"The Best Way To Deal With Uncomfortably Hot Rooms Is Sticking An Air Conditioner In The Window."

Fact. It's always best to treat the source of the problem vs. the symptom. Improper airflow is one of the biggest culprits. The way your HVAC system distributes conditioned air through your duct system is another major impact. Also, with professional weatherization you can often address the source of the discomfort without using energy draining air conditioners. Weatherization cannot only keep rooms warmer in the winter, but also keep them cooler in the summer

MYTH #4

"Energy Efficiency Home Improvements Don't Increase The Value Of A Home."

A 2008 NAHB study shows that 51 percent of homebuyers are willing to pay up to \$11,000 more if energy costs are reduced by just \$1,000 annually.

MYTH #5

"Buying An Energy Efficient Furnace Or Air-Conditioner Will Automatically Reduce My Energy Bill."

Not necessarily true. Even the highest efficiency-rated heaters and air conditioners can cost you more money to operate if they are improperly sized or installed. According to the Department of Energy, shoddy installation and improper sized equipment can waste as much as one-third of your energy consumption. This is true to some extent, but you won't realize all the possible savings if the equipment is not sized or installed properly. Studies have shown that typical air conditioner and duct systems are improperly installed, wasting 1/3 or more of the energy used by the air conditioner. New and replacement equipment (and ducts) need to be properly designed and installed to realize all the possible savings.

MYTH #6

"A Dehumidifier Is The Best Solution For Damp And Musty Basements."

Fact. It's alarming when you can smell that musty basement smell on the first floor. Even the basement should not smell that way. First you need to identify moisture sources and recommend ways to reduce moisture in your home — check the bottoms of exterior walls for signs of mildew or mold, and manage the water at its source. Work on improving exterior drainage, putting vapor barriers over damp walls and floors, and dehumidifying, among other things.

MYTH #7

"A humidifier is the best way to keep your home comfortable during a dry winter."

Fact. Air leakage is the most common cause of excessive dryness. When cold air enters the house and is heated, the relative humidity is significantly reduced. Air sealing can help keep your home at a comfortable humidity level, without the need for a humidifier.

MYTH #8

"Making Your House 'Too' Airtight Is Dangerous; Houses Have To Breathe."

Fact. While houses do need fresh air, most homes have more air leaks than necessary. Even worse, incoming air usually enters homes through basements, garages and crawl spaces, which can compromise air quality. Controlling the flow of air in your home can save energy and improve air quality. The true secret to optimum energy efficiency is to make the structure as airtight as possible while keeping the air quality very pure," says Richard Rue, CEO of EnergyWise Structures, McKinney, TX.

MYTH #9

"R-Value Is The Best Measurement Of How Energy Efficient Your Walls And Ceilings Are; Or How Well Your Home Is Insulated."

People think I've got to have R19 in the wall and R38 in the ceiling. It's more important to have it installed correctly. If you have cracks, air leaks and drafts anywhere in your house, the cold air will seep in no matter how much insulation you have. Air sealing is the most important thing you can do to plug these holes and gaps and keep the chill from creeping in. A few more rolls of R13 fiberglass insulation in your attic probably won't do what you hope for. You see R-Value ratings work great in the laboratory, not so good in real life. "If air can go through it you have an effective R-Value of ZERO!"

MYTH # 10**"Closing Off Vents And Registers Will Reduce Your Heating Bill."**

False. If you have a modern forced air heating system, the pressure load is balanced throughout the house. Blocking the vent will impact how the system inhales and exhales air; it can throw the system out of balance, causing it to have to work harder or possibly break down. Also the most energy efficient practice you can do is to have heat evenly distributed throughout the house. Blocking vents in certain rooms will make those rooms colder. Because heat moves from greater concentrations to lesser concentrations, these colder rooms will draw heat from other rooms in the house, making the whole house feel colder and causing you to raise the thermostat.

MYTH # 11**"Turning Up (Down) The Thermostat Will Make Your Home Get Warm (Cool) Faster."**

It's tempting to think of a thermostat like a water tap, i.e. the wider you open it the more water (heat/cool) will come out. In reality, it works more like a light switch in that if it's "on" the same amount of light (heat/cool) will come out. Let's illustrate using a real life story. Last Thanksgiving my family met at my Father's house for Thanksgiving dinner. It was a large group, and what happens is it can get pretty hot with the cooking and all the people in the room. My sister shared with me that she turned down the thermostat to compensate for the heat. I just laughed. I was going to tell her, she'd be better off opening the door and letting in the colder outside air. It made me think how many people think that's how a thermostat works.

MYTH # 12**"The Higher You Set Your Thermostat, The Faster Your Furnace Will Heat Up Your House."**

False. Furnaces deliver heat at the same rate no matter how high the thermostat is set. If you set your thermostat at the desired temperature, it will reach that point just as quickly as if you set it higher. And since you'll probably end up having to move the temperature down a few degrees anyway, you'll probably wind up using more energy than you intended in the long run. The same applies to air conditioning. Setting your A/C at full-blast will not make it reach a comfortable temperature any faster. It's just going to make the room colder and make your system work harder.

MYTH # 13**"The Best Way To Solve Ice Dams Is To Call A Roofer."**

Fact. Ice dams aren't a roofing problem. Ice dams form when attics are unintentionally heated by air leaks and/or insufficient insulation. This causes snow on the roof to melt, and freeze on the eaves, creating ice dams. You can reduce the risk of ice dams by sealing attic air leaks and adding insulation.

MYTH # 14**"The Shorter My HVAC System Runs The More I'll Save On My Energy Bill."**

Facts: HVAC Systems use more energy in the first three to five minutes of start-up time than in the next 25 minutes of continuous running. In the heat of the summer, if your A/C system is turning on and off four to five times per hour, it's not operating efficiently. Instead, the system should run continuously for 40 to 50 minutes out of every hour to maintain consistent room temperatures and achieve more comfortable humidity levels. Running for longer periods of time allows the HVAC to remove the excess humidity that is put into the home. If this occurs with your furnace, you end up drying out your house to the point that interior caulking will actually crack and peel.

