

# Going Green is Easier than you think...Building Specs can show you how

Green can mean many things, it could be building practices, preventative maintenance decisions, purchases and actions that effect our environment everyday. The concept is simple, start making small changes to your day to day life and we can make a huge impact as a collective group over time. Many people may not recognize how they can make small changes that help. Building Specs can help you identify ways to go green, save money, and improve your home. Contact us for our current locations that offer energy efficiency audits, green building audits, and indoor air quality investigations.

# The term "Green" has found its way into our modern day lexicon.

How can you make a difference

**Building and Remodeling Practices** 

Upgrades to our homes

Behaviors & Choices that we make

Cleaning Products that we use

Recycling Trash, electronics and light bulbs

# **Building Specs offers the following Residential and Commercial Services to Help you Achieve your Green Goals!**

**Energy Efficiency Audits** 

Water Quality and Water Conservation

Indoor Air Quality

Storm Water and Waste Water Management



# Heat & Cool Efficiently

As much as half of the energy used in your home goes to heating and cooling. So making smart decisions about your home's heating, ventilating, and air conditioning (HVAC) system can have a big effect on your utility bills - and your comfort. Take these steps to increase the efficiency of your heating and cooling system. For more information, see the **EPA's Guide to Energy Efficient Heating & Cooling**.

#### **Insulation**

Sufficient Insulation can increase your comfort and reduce your cooling costs up to 30 percent. Start with the attic - which can reach temperatures of 115 degrees - followed by exterior and basement walls, floors, and crawl spaces. To learn where your home is losing energy due to insufficient insulation have an **Infrared Inspection** performed by one of our qualified thermal inspectors.

# Change your air filter regularly

Check your filter every month, especially during heavy use months (winter and summer). If the filter looks dirty after a month, change it. At a minimum, change the filter every 3 months. A dirty filter will slow down air flow and make the system work harder to keep you warm or cool - wasting energy. A clean filter will also prevent dust and dirt from building up in the system - leading to expensive maintenance and/or early system failure.

# Tune up your HVAC equipment yearly

Just as a tune-up for your car can improve your gas mileage, a yearly tune-up of your heating and cooling system can improve efficiency and comfort. Place gravel around your HVAC system to keep rain water from splashing mud into the coils.

## Learn More ... Maintaining your Equipment: A Checklist

Install a programmable thermostat

<u>Programmable thermostat</u> is ideal for people who are away from home during periods of time throughout the week. Through proper use of pre-programmed settings, a programmable thermostat can save you about \$150 every year in energy costs.

# **Seal your heating and cooling ducts**

Ducts that move air to-and-from a forced air furnace, central air conditioner, or heat pump are often big energy wasters. Sealing and insulating ducts can improve the efficiency of your heating and cooling systems by as much as 20% and sometimes much more.

Focus first on the sealing ducts that run through the attic, crawlspace, unheated basement, or garage. Use duct sealant (mastic) or metal-backed (foil) tape to seal the seams and connections of ducts. After sealing the ducts in those spaces, wrap the ducts in insulation to keep them from getting hot in the summer or cold in the winter. Next, seal ducts that you can access in the heated or cooled part of the house.



**EPA Duct Sealing Brochure** for more information.

Consider installing ENERGY STAR qualified heating and cooling equipment

If your HVAC equipment is more than 10 years old or not keeping your house comfortable, you should have it looked at by a professional HVAC contractor. If it is not performing efficiently or needs upgrading, consider replacing it with a unit that has earned the ENERGY STAR. Installed correctly, these high-

efficiency heating and cooling units can save up to 20% on heating and cooling costs. But before you invest in a new HVAC system, make sure that you have addressed the big air leaks in your house and the duct system. Sometimes, these are the real sources of problems rather than your HVAC equipment.

Remember that getting the proper size and a quality installation is essential to getting the most from your new equipment. When replacing HVAC equipment, bigger doesn't always mean better. If the unit is too large for your home, you will be less comfortable and might actually have higher utility bills. Oversized equipment will operate in short run cycles, not allowing the unit to reach efficient operation and remove humidity from the air - resulting in an uncomfortable home. Your contractor should determine the right size for your HVAC equipment by using ACCA/ANSI Manual J or an equivalent sizing calculation that takes into account specific information about your home.

# Residential Applications of Spray Polyurethane Foam

Spray Polyurethane Foam (SPF) insulation is rigid, lightweight, flexible, wind resistant, and effective in extreme temperatures and weather conditions. SPF insulation has the highest R-value per square inch of any commercially available insulation material.

## What is R-value?

R value insulation ratings are used to measure insulations ability to resist heat flow. The higher the R-value, the more effective it is. When you are purchasing insulation for your home do so based on its R-value.

#### **Energy Efficiency**

According to a 2002 US Department of Energy report, heating and cooling costs amount to 50-70% of the energy used in the average American home. With the costs of heating and cooling going up, this is a concern of most home and building owners. Most of us know to turn off the lights to conserve energy but don't think to look to insulate our homes/buildings to more efficiently heat and cool them.

Builders and architects are now turning to spray polyurethane foam (SPF) to curb these problems. SPF is one of the most efficient insulation materials on the market today for roof and wall insulation, insulated windows and doors, and air barrier sealants.