

Times Have Changed – What You Might Be Missing (And not even realize)!

If you have an older heating and cooling system, you need to be aware of all of the changes that have occurred over the last 20 years. We have seen a true revolution in heating and cooling equipment. Today's technology is over two times as efficient (SEER), has advanced humidity control along with sophisticated temperature controls, provides built-in air purification options and has the ability to program and monitor your system from a remote location. If you haven't kept up, here's what you're missing ...

	1990	vs. 2010
Minimum SEER	10 SEER	13 SEER
Humidity Control	NO	YES
Digital Thermostat	NO	YES
Remote Access	NO	YES
Built-In Air Purification	NO	YES

Comparison of Heating & Cooling Systems

1. SEER

In the 1990s the DOE (Department of Energy) mandated a minimum SEER rate of 10 for all new air conditioners sold in the United States. Since January 23, 2006, all air conditioners manufactured in the United States now must have a Seer of 13 or higher.

If you have a 10 SEER air conditioning system from 20 years ago, you can upgrade to a 16 SEER and experience a 50% savings in your monthly cooling costs. That's a huge savings! The efficiencies of heating and cooling equipment have greatly increased and with these energy savings, if you are considering replacement of old equipment, you will experience a much quicker payback on your equipment.

2. Heat or Humidity?

What makes you feel hot – is it the heat or the humidity? I remember last summer sitting by the pool with friends and one of them said, “You know it wouldn't be so bad out here if it weren't so humid.” Heat and humidity are a very uncomfortable combination, however, it's humidity that most affects your body's ability to cool itself. Your body is cooled when you sweat and the sweat evaporates off of your body. When the concentration of water vapor in the air, or humidity, is high it affects the potential for evaporative cooling. Basically, there is too much moisture in the air and the sweat on your body can't evaporate.

Twenty years ago if you wanted to add or take away humidity from your home you could have purchased a room humidifier/dehumidifier and it would have done an adequate job for a small area. Current heating and cooling systems have integrated humidifier and dehumidifier options. You can now control the humidity in your whole home and by controlling humidity levels you can greatly increase the comfort of your home. In the summer, by decreasing the level of humidity in your home, you will even be able to turn down the air conditioning, as it will feel cooler in your home. Turning down the air conditioning means lower utility bills for you!

3. Digital Thermostats

Today's electronic models are a vast departure from earlier mechanical styles, which basically allowed you to set and adjust temperatures manually. Digital thermostats offer more accuracy than ever before - perfect temperature control within 1° F. The new

digital thermostats have microprocessors that allow you to program your home temperatures to suit your lifestyle, so you can keep things comfortable while you're home and automatically set back temperatures to save energy when you're away or sleeping.

Did you know that properly using a digital programmable thermostat in your home is one of the easiest ways you can save energy, money, and help fight global warming? (<http://www.energystar.gov>) A programmable thermostat helps make it easy for you to save by regulating your home's temperature in both summer and winter - when you are asleep or away. The settings that come with programmable thermostats are intended to deliver savings without sacrificing comfort. Depending on your family's schedule, you can see significant savings by sticking with those settings or adjust them as appropriate for your family.

Unlike the older, mechanical thermostats, a digital room thermostat also offers users a large LCD screen for easy reading. This is especially beneficial for older people or those with poor eyesight, as the older mechanical thermostats of the past are very difficult to read.

4. Remote Access

Remote Access is a major innovation in heating and cooling. We have nothing to compare it to 20 years ago. Systems with this feature allow homeowners to monitor the components and get system status feedback. It can also halt the system when a major problem is detected.

Another benefit of Remote Access is the ability for homeowners to adjust temperatures when they are away from home. This is a great feature for those individuals that travel a lot for work or for those on vacation. Remote Access gives homeowners peace of mind, knowing that when you are away from home everything is functioning, as it should. This feature saves homeowners money, by adjusting temperatures while away and resuming them to a comfortable level prior to returning home. So that you're not heating or cooling your home when you are not there.

5. Built-in air purification

Twenty years ago air quality was not recognized as an important issue like it is today. The products on the market were for single room air purifiers. Today indoor air quality has become a major issue in our lives. According to the EPA (<http://www.epa.gov/iaq/pubs/insidest.html>), "In the last several years, a growing body of scientific evidence has indicated that the air within homes and other buildings can be more seriously polluted than the outdoor air in even the largest and most industrialized cities. Other research indicates that people spend approximately 90 percent of their time indoors. Thus, for many people, the risks to health may be greater due to exposure to air pollution indoors than outdoors."

The HVAC (heating, cooling and ventilation) industry has responded to these concerns and many products available on the market today help with poor air quality problems. You can add whole home air purifiers and air cleaners to your heating and cooling system. So now instead of merely cleaning the air in one room, your HVAC system is providing clean air to your entire home.

The heating and cooling industry has come a long way in 20 years. The innovations that have occurred during this time are allowing homeowners to conserve energy, lower utility costs, and increase overall comfort and convenience. If you are still living in the dark ages with a 15-20 year old heating and cooling system now is a great time to upgrade and reap the many benefits!

Sources: www.bayonet-inc.com
www.epa.gov
www.energystar.gov