What Is Variable Speed?

When you hear the term "variable-speed" it refers to the furnace blower motor. The blower motor is the component that determines the airflow (or amount if air) that your blower will deliver to your home.

How Does It Work?

When your furnace is installed, the ideal speed and airflow for your home is set (depending upon your specific situation such as the size of your home, etc...) However, there are situations that can occur within the household to restrict this airflow such as ductwork design, unit location, zoning, or dirty filters to name just a few. A variable-speed motor allows the blower to automatically adjust to always achieve the required amount of air in your home despite the circumstances. Other motors cannot adjust to overcome the situation and the airflow in your home would not be at its required level. Variable-speed motors have intelligent technology to monitor incoming data from the blower and adjust accordingly so you can feel confident that your system is working to control your environment...giving you...One Less Thing to Worry About®.

Why Should I Buy A Unit With A Variable-Speed Motor?

Having the technology of variable-speed in yourfurnace offers many benefits:

EFFICIENCY

Variable-speed motors can actually save you money on your energy bill as they consume less electricity than standard motors.

Also, having a variable-speed furnace as part of your home's comfort system means you will gain air conditioning efficiency or SEER. The higher the SEER (Seasonal Energy Efficiency Ratio) the more energy efficient the unit. This means even more energy savings for your household.

ELECTRICAL SAVINGS – SINGLE SPEED VS. VARIABLE-SPEED

	Cooling Electrical Cost	Heating Electrical Cost	Continuous Fan Electrical Cost	Total Savings
New York @ $0.152/kw h				
Single Speed Blower	$101.69	$246.73	$550.33	
3Dimension (with Variable Speed Blower)	66.85	48.22	100.76	
Annual Electric Savings	34.84	198.51	449.56	**$682.91**
Based on 2500 heating hours + 600 cooling hours in a year				
California @ $0.137/kw h				
Single Speed Blower	$152.76	$177.91	$496.02	
3Dimension (with Variable Speed Blower)	100.42	34.77	90.82	
Annual Electric Savings	52.33	143.14	405.2	**$600.67**
Based on 2500 heating hours + 600 cooling hours in a year				

ZONING

Variable-speed furnaces are ideal for zoning, where you control the conditioning of your home. Zoning allows you to customize your comfort in different areas or zones in your home and control your energy bills.

AIR QUALITY

Humidity plays a big role not only in the comfort of your home but also its air quality. The relative humidity in your home should be between 30-60%. This range is most ideal to minimize growth of biological pollutants such as mold and mildew. A variable-speed motor combined with a humidistat, allows you to control humidity in your home.

It's All About Control

Most homeowners know that heating and cooling the home uses more energy than any other appliance. This inevitably shows up every month on the energy bill. It is a necessary evil we all put up with in order to be comfortable. What most people don't know is that energy expenditures can be controlled!

Manufacturers now have the technology to deliver energy efficient products. Look for high efficiency products (90% AFUE or above.). These products really can help you control energy costs. Also, take advantage of other efficiency technologies such as variable-speed and zoning. Not only will you see a difference in your monthly bill,you'll also *feel* the difference.