

HVAC TERMS YOU SHOULD KNOW

The HVAC industry can be full of unfamiliar acronyms, confusing terminology and a host of industry terms. When it comes time to purchase a new HVAC system, we want you to feel comfortable through the whole process. These terms can help!

- A**
- AFUE** Annualized Fuel Utilization Efficiency; this measures your furnace's heating efficiency. Higher the number, the more efficient the furnace.
 - AHRI** The Air-Conditioning, Heating & Refrigeration Institute; this association measures HVAC product performance.
 - AIR HANDLER** The indoor component of an air conditioner or heat pump that moves cooled or heated air through your ductwork.
- B**
- BTU** British Thermal Unit; the amount of heat required to raise or lower the temperature of 1 pound of water, 1 degree Fahrenheit. The higher the BTU, the greater the heating capacity of the system.
 - BLOWER** The part of your HVAC system that pushes filtered air over the coil or heat exchange. After this, the blower also moves the air into the supply ducts to be redistributed in your home.
 - BOILER** A vessel where water is boiled to generate heat. The heated or vaporized fluid is used for central heating, water heating, power generation and more.
- C**
- CAE** Combined Annual Efficiency; measures the amount of heat produced per dollar of consumed fuel for home and water heating
 - CENTRAL HVAC** A heating or cooling system where air is treated at a central location and supplies the entire building by fans and a network of air ducts
 - CFM** Cubic Fee Per Minute; measures how many cubic feet of air pass by a stationary point per minute. The higher the number, the more air that moves through your ductwork.
 - COMPRESSOR** The part of the outdoor air conditioner or heat pump that compresses refrigerant in order to cool warm air.
 - CONDENSER COIL** Part of the outdoor air conditioner or heat pump that removes heat from refrigerant in the summer and collects heat in the winter.
 - CONDENSER FAN** A fan that moves air over the condenser coil, ultimately to remove heat from the refrigerant.
- D**
- DOE** Department of Energy; sets the industry standards on efficiency and monitors the consumption of energy sources
 - DAMPER** A movable plate, found in the ductwork that opens and closes to direct air to the areas that need it the most
 - DEHUMIDIFIER** A device that removes moisture from the air and cools it. This moisture condenses into water droplets and collects into a pan or down a drain.
 - DOWNFLOW FURNACE** A furnace with an intake on the top and an air discharge at the bottom
 - DUCTWORK** The network which delivers air from an HVAC unit to the rest of the zones in a home
 - DUCTLESS HVAC** A similar system to central heating or cooling, except it doesn't require ductwork. Instead, the indoor and outdoor units are connected by a tube of refrigerant cut through the exterior wall.
- E**
- EVAPORATOR COIL** Part of the air conditioner that is located inside the air handler or attached to the furnace designed to absorb heat in the air
 - ENERGY STAR** A designation by the Environmental Protection Agency for HVAC products that meet or exceed high-efficiency performance above the standard government minimums
 - EER** The Energy Efficiency Ratio; the ratio of output cooling to input electrical energy (measured in BTU's)
- F**
- FORCED AIR HEATING** A system where heated or cooled air is forced by a fan over the coil or heat exchanger into the ductwork
 - FURNACE** A device that facilitates the combustion of fuel and air to create heat and circulate it through your home via fan

H HEAT EXCHANGER A device that transfers heat to the surrounding air

HEAT PUMP A device that draws heat from outdoor air and transfers it indoors during winter and removes heat from the indoors and releases it outdoors during summer.

HSPF The Heating Seasonal Performance Factor; measures the efficiency of a residential heat pump system

HORIZONTAL FLOW When an air handler or furnace is positioned side-ways, usually for attic or crawl space situation, circulating air in one end and out the other

HUMIDIFIER A device that adds moisture back into the air

HUMIDISTAT Measures the humidity and regulates the moisture in the air by turning the humidifier on and off

M MERV Minimum Efficiency Reporting Value; describes the size of the holes in the filter that allow air to pass through. The higher this rating, the smaller the holes, the higher the efficiency.

MINI-SPLIT see Ductless HVAC

R REFRIGERANT A chemical used in air conditioners, heat pumps and refrigerators to transfer heat into or out of an interior space while expanding or vaporizing.

R-410A A chlorine-free refrigerant that meets the EPA's environmental guidelines

REGISTER the vent that is connected to your ductwork where air is redistributed through your home

S S.E.E.R. Seasonal Energy Efficiency Ratio; the energy efficiency rating for air conditioners. The higher this number, the more efficient the product.

SPLIT SYSTEM An outdoor unit combined with an indoor unit; frequently with more efficiency options.

T THERMOSTAT An operating device that allows you to control your heating and cooling equipment. A programmable thermostat has the ability to record temperature and time settings.

TON A unit of measurement that determines cooling capacity. One ton is equal to 12,000 BTU

TWO-SPEED A high-efficiency air conditioner motor that cycles on low gear, only moving to high gear if necessary. This reduces start-up noises, operates with greater energy efficiency and reduces mechanical stress on this system

U UPFLOW When an air handler or furnace is installed in an upright position, usually for basement and attic situations, circulating the air through the side or bottom and out the top.

V VARIABLE SPEED MOTOR A motor that automatically adjusts the flow of warm or cool air

VENTILATOR Exchanges stale indoor air with fresh, filtered outdoor air

Z ZONING The practice of dividing a home, office or other space into different regions in order to better control the temperature and ultimately, increase the effectiveness of a heating and cooling system