

"High efficiency and comfort are achieved through a proper installation"

HEATING & COOLING



Duct-Rite Mechanical, L.L.C.

HVAC GLOSSARY OF TERMS

AFUE

Annualized Fuel Utilization Efficiency is a measure of your furnace's heating efficiency. The higher the AFUE percentage, the more efficient the furnace. The minimum percentage established by the DOE for furnaces is 78.

Airflow

The distribution or movement of air.

Air Handler/Coil Blower

The indoor part of an air conditioner or heat pump that moves cooled or heated air throughout the ductwork of your home. An air handler is usually a furnace or a blower coil.

Bioaerosols

Microscopic living organisms that grow and multiply in warm, humid places.

Btu

A British thermal unit is a unit of heat energy. One Btu is the amount of heat required to raise one pound of water by one degree Fahrenheit. The higher the Btu rating, the greater the heating capacity of the system.

Btuh

British thermal units per hour.

CAE

The Combined Annual Efficiency is a measure of the amount of heat produced for every dollar of fuel consumed for both home and water heating.

Central Air Conditioning System

System in which air is treated at a central location and distributed to and from rooms by one or more fans and a series of ducts.

Compressor

The part of the outdoor air conditioner or heat pump that compresses and pumps refrigerant to meet household cooling requirements.

Condenser Coil

The outdoor portion of an air conditioner or heat pump that either releases or collects heat, depending on the time of the year.

dB

A decibel is a unit used to measure the relative intensity of sound.

DOE

The Department of Energy is a federal agency responsible for setting industry efficiency standards and monitoring the consumption of energy sources.

Ductwork

The method by which air is channeled from the furnace or the blower coil throughout your home.

Electronic Air Cleaner

An electronic device that filters out large particles and bioaerosols in indoor air.

ENERGY STAR®

A label attached to HVAC systems that meet or exceed the EPA guidelines for energy efficiency.

EPA

The Environmental Protection Agency develops and enforces federal environmental regulations. The EPA oversees the nationwide Energy Star® program.

Evaporator Coil

The part of the air conditioner or heat pump that is located inside the air handler. Its primary function is to absorb the heat from the air in your house.

Heat Exchanger

Located in the furnace, the heat exchanger transfers heat to the surrounding air, which is then pumped throughout the home.

Heat Pump

A heat pump is an HVAC unit that heats or cools by moving heat. During the winter, a heat pump draws heat from outdoor air and circulates it through your home's air ducts. In the summer, it reverses the process and removes heat from your house and releases it outdoors.

Horizontal Flow

A type of furnace, installed on its side, which draws in air from one side, heats it and sends the warm air out the other side. Ideal for attic and crawl space installations.

HSPF

The Heating Seasonal Performance Factor is the heating efficiency rating for heat pumps. The higher the rating, the more efficient the heat pump. There is no legislated minimum HSPF rating.

Humidifier

An indoor air quality device that introduces moisture to heated air as it passes from the furnace into the ductwork for distribution throughout the home.

Humidistat

An automatic device used to maintain humidity at a fixed or adjustable set point.

HVAC

Heating, Ventilation and Air Conditioning.

ISO 9000

A family of international standards for quality management and assurance.

MERV Rating

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

Micron

A unit of measure equal to one millionth of a meter, or one thousandth of a millimeter.

Odors/Chemicals

Air contaminants in the form of gases.

Particles

Any substances measuring less than 100 microns in diameter. The EPA has found that small particles (less than 2.5 microns) are responsible for the health effects of greatest concern.

Programmable Thermostat

A thermostat with the ability to record different temperature/time settings for your heating and/or cooling equipment.

R410A Refrigerant

A chlorine-free refrigerant that meets the EPA's newest, most stringent environmental guidelines.

Refrigerant

A chemical that produces a cooling effect while expanding or vaporizing. Most residential air conditioning units contain the standard R-22 refrigerant, or Freon.

Refrigerant Lines

Two copper lines that connect the outdoor air conditioner or heat pump to the indoor evaporator coil.

Scroll Compressor

A specially designed compressor that works in a circular motion, as opposed to up-and-down piston action.

SEER

The Seasonal Energy Efficiency Ratio is an energy efficiency rating for air conditioners. The higher the SEER, the better the energy performance, the more you save. The DOE's established minimum SEER rating for cooling is 10.00.

Single Package

A heating and cooling system contained in one outdoor unit.

Split System

A combination heat pump or air conditioner with indoor components, such as a furnace or blower coil. Split systems should be matched for optimal efficiency.

Thermostat

Monitors temperature and humidity and adjusts heating or cooling system to maintain desired levels.

Thermostat

Usually found on an inside wall, this device operates as a control to regulate your heating and cooling equipment, allowing you to adjust your home comfort at the touch of a switch.

Ton

Unit of measurement for determining cooling capacity. One ton equals 12,000 Btuh.

Two-Stage Operation

Provides two levels of heat output for greater temperature control.

Upflow

A type of furnace that draws cool air from the bottom and blows the warm air out the top into the ductwork. Designed for basement or closet installations.

Variable Speed Motor

Automatically adjusts the control of heat airflow for ultimate comfort.

Ventilator

A system that exchanges stale, recirculated indoor air with fresh, filtered outside air.

Zoning

A method of partitioning a home into independently controlled comfort zones for enhanced comfort and efficiency.

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