

# Heating Industry Glossary of Terms



## Glossary of Terms

**AFUE** - Annual Fuel Utilization Efficiency, a standard government rating for energy Efficiency.

**Air Conditioner** - a device used to decrease the temperature and humidity of air which moves through it.

**Anode Rod** - a sacrificial metal used to protect against corrosion in a hot water heater.

**Baseboard Heating** - heating elements around the perimeter of a room used to give off heat produced by hot water circulating through them.

**Blower** - a unit used with a furnace to circulate air through a network of ducts.

**Boiler** - a heating unit that uses water (or steam) circulated throughout the home in a system of baseboard heating units, radiators, and/or in-floor radiant tubing.

**BTU/h** - (British Thermal Units per hour) a standard rating for heat transfer capacity.

**Burner** - a device which supplies a mixture of air and gas to the combustion area.

**Cast Iron** - a durable metal with an exceptional capability to hold and transfer heat.

**Chimney Venting** - a vertical vent used to transfer exhaust products from a boiler or furnace to the outdoors.

**Combustion** - the process of converting fuel into heat, requires oxygen.

**Convective Heat** - the natural circulation of air across a heat source to heat the air.

**Direct Vent** - a boiler design where all the air for combustion is taken from the outside atmosphere and all exhaust products are released to the outside atmosphere, also known as sealed combustion.

**Draft Hood** - a device that prevents a backdraft from entering the heating unit or excessive chimney draw from affecting the operation of the boiler or furnace.

**Ductless Split A/C Systems** - A system that cools and dehumidifies air without the use of conventional duct work. The equipment location is split, with the condenser and heat pump outside of the home and the air handler and controls inside.

**Efficiency Rating** - the ratio of heat actually generated versus the amount of heat Theoretically possible from the amount of fuel inputted.

**Flue** - the passageway that takes combustion exhaust from the combustion chamber to the flue collector and venting system.

**Forced Hot Air** - a furnace system using a blower to circulate air from within the home through the furnace and back into the home. (As opposed to gravity circulation).

**Furnace** - a heating unit that heats air by transferring heat in a metal combustion chamber to the air and circulating it through the house in a network of ducts.

**Heat Exchanger** - the part of the boiler or furnace used for transmitting heat from the flame to air or water for heating.

**Heat Transfer** - the transmission of heat from the source (flame) to air or water.

**Heating Capacity** - the amount of usable heat produced by a heating unit

**High-boy** - a term used to describe a furnace which has a small "footprint" but is tall. The blower is under the heat exchanger.

**Hot Water Boiler** - a heating unit that uses water circulated throughout the home in a system of baseboard heating units, radiators, and/or in-floor radiant tubing.

**Hot Water Heater** - a unit with its own energy source that generates and stores hot water.

**Hydronics** - the science of heating or cooling with water.

**Indirect Hot Water Storage Tank** - a unit that works in conjunction with a boiler to generate and store domestic hot water, it does not require its own energy source.

**In-floor Radiant Tubing** - tubing, typically plastic or rubber, used in conjunction with heated boiler water to heat floors.

**Low-boy** - a term used to describe a furnace which has a low profile. The blower is located on the same level plane as the heat exchanger.

**Low Water Cut-off** - a device used to shut down a boiler in the event a low water Condition exists.

**Natural Gas** - any gas found in the earth (e.g. methane gas) as opposed to gases which are manufactured.

**Oil Heating** - the production of heat by burning oil.

**Propane** - a manufactured gas typically used for cooking or heating.

**Push Nipples** - metal sleeves used to join adjacent sections of a boiler.

**Radiant Heating** - the method of heating the walls, floors or ceilings in order to transfer heat to the occupants of a room.

**Radiator** - a heating element, typically metal, used in conjunction with water or steam to give off heat.

**Safety Shut-off Device** - any device used to shut down a heating appliance in the event an unsafe condition exists.

**Sealed Combustion** - a boiler design where all the air for combustion is taken from the outside atmosphere and all exhaust products are released to the outside atmosphere, also known as direct vent.

**Steam Boiler** - a heating unit designed to heat by boiling water, producing steam, and circulating it to radiators or steam baseboard units throughout the home.

**Stack Damper** - a device installed in the venting system that will automatically close when the appliance shuts down.