

TYPES OF HEAT SOURCES FOR HEATING SYSTEMS

BOILERS



A boiler heats water to provide hot water or steam for heating that is then distributed through a series of pipes.

*Fuel: Natural gas, propane, heating oils, biodiesel blends, electricity

FURNACES



A furnace heats air and uses a blower motor and air ducts to distribute warm air throughout the house.

*Fuel: Natural gas, propane, heating oil, electricity.

HEAT PUMPS



A heat pump pulls heat from the surrounding air to warm the house. It can also be used for home cooling.

Fuel: Electricity, geothermal energy

ACTIVE SOLAR HEATING



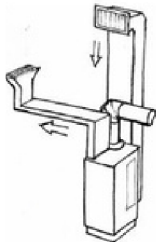
The sun heats a liquid or air in a solar collector to provide immediate heat.

Fuel: Solar energy

***Smoke and Carbon Monoxide are required to be installed and maintained in operable condition in every residence in accordance with Massachusetts State Codes and accepted standards.**

TYPES OF DISTRIBUTION SYSTEMS FOR HEATING SYSTEMS

FORCED AIR SYSTEM



It distributes heat from a furnace throughout the home using air ducts and vents.

Heat Source System: Furnace*, heat pump, active solar heating

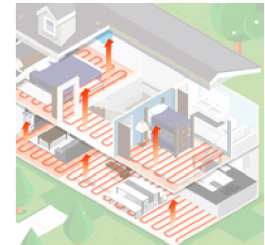
STEAM RADIANT



One of the oldest types of heating systems. Steam radiant heating uses radiators to distribute heat.

Heat Source System: Boiler*.

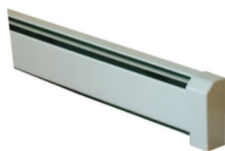
RADIANT HEATING



It can be installed as floors, ceiling or wall panels. Transfers heat directly from a hot surface in the room.

Heat Source System: Boiler*, heat pump, active solar heat, electric heating.

HOT WATER BASEBOARDS



Similar to radiant heating, hot water baseboards use hot water to heat a space via well-mounted baseboard units.

Heat Source System: Boiler*, active solar heating

ELECTRIC BASEBOARDS



Electric baseboards release heated air out of the top while pulling cooler air to the bottom of the unit.

Heat Source System: Electric heating.

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Central Massachusetts Public Health Training Hub

Resources: [Home Heating Systems & Energy Saver 101 Infographic: Home Heating](#) from [Energy.gov](#); [Carbon Monoxide Safety](#) from the Office of the State Fire Marshal