TYPES OF HEAT SOURCES FOR HEATING SYSTEMS

BOILERS

A boiler heats water to provide hot water or steam for heating that is 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

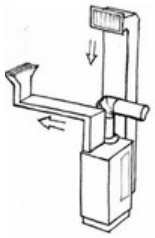
ACTIVE SOLAR HEATING

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

Fuel: Solar energy

TYPES OF DISTRIBUTION SYSTEMS FOR HEATING SYSTEMS

FORCED AIR SYSTEM



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

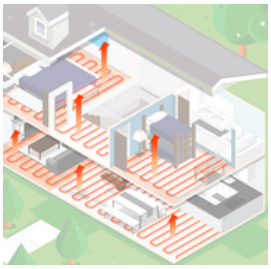
Heat Source System: Furnace*, heat pump, active solar heating

STEAM RADIANT

One of the oldest types of heating systems. Uses radiators to distribute heat.

Heat Source System: Boiler*

RADIANT HEATING



Can be installed as floor, 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. Uses hot water to heat a space via well-mounted baseboard units.

Heat Source System: Boiler*, active solar heating

ELECTRIC BASEBOARDS

Releases heated air out of the top while pulling cooler air to the bottom of the unit.

Heat Source System: Electric heating

***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.**

Source: U.S. Department of Energy

NORTHEAST
PUBLIC HEALTH TRAINING HUB