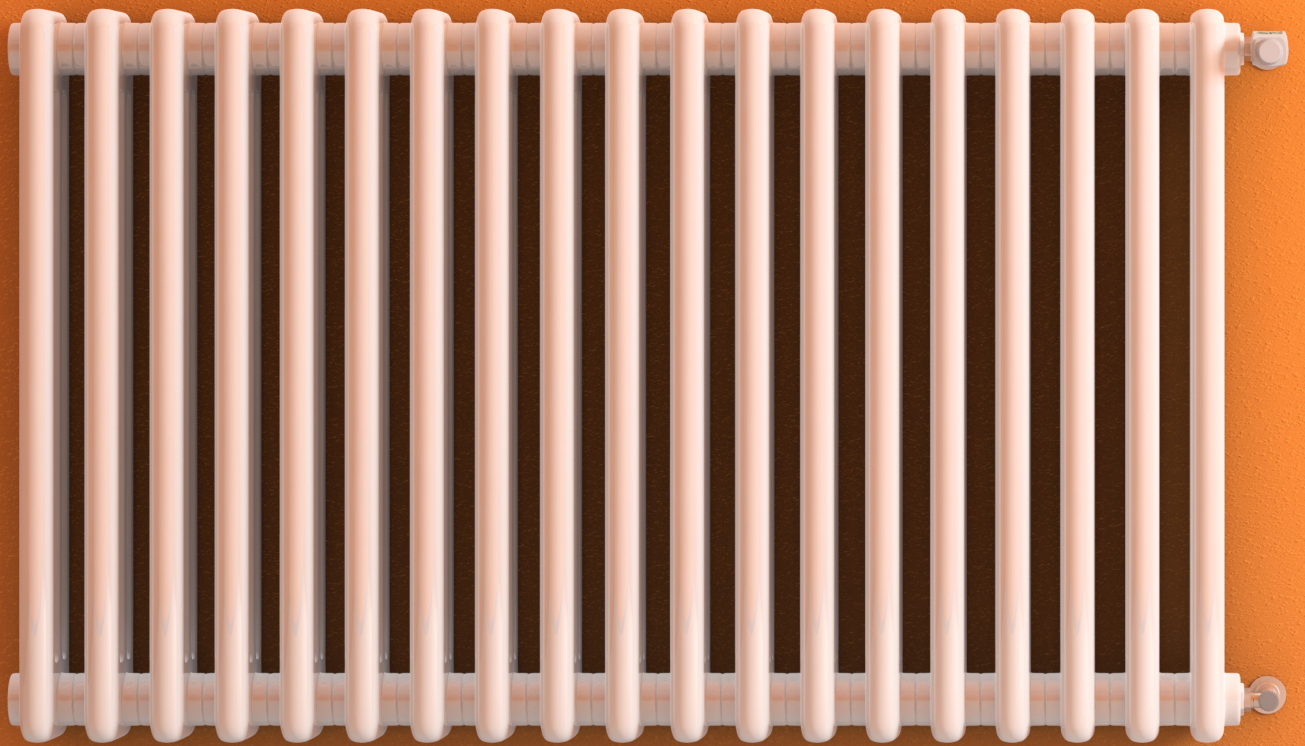




**BUILDSTORE**  
FOR SMART HOMEBUILDERS



**GUIDE**

# CENTRAL HEATING

Most self-builders will use the same plumber for the central heating as they use for the domestic hot water but, there are separate heating engineers. If separate tradesmen or companies are used, then it is important that they liaise with each other and with the electrician.

A heating engineer should be able to take your plans and design the most effective system for your home, taking into account wall thicknesses, insulation values, room sizes and window and door openings.

#### STANDARD HEATING SYSTEMS

The most commonly used and perhaps most cost-effective and efficient system for hot water and central heating is the combination of a boiler and radiators. The efficiency of this partnership significantly increases by the use of thermostatically controlled radiator valves (TRV's). These allow each room to be set at the required temperature and react to changes in temperature caused by sunshine or other extraneous factors.

#### UNDERFLOOR HEATING

Underfloor central heating is increasingly popular with self-builders and there are several companies that specialise in these systems. However, in general, they all come down to a series of pipe loops set within the floor zone and controlled by room thermostats. While radiator systems work at relatively high temperatures (65/80 degrees), underfloor systems work at relatively lower temperatures - 45/55 degrees. This suits the condensing type boilers, which are at their most efficient at the lower temperatures.

### TIPS

Consider your lifestyle before deciding on the best heating system for your new home

A heated towel rail on a separate circuit with individual time controls is an inexpensive added feature for the bathroom

If you opt for underfloor central heating don't forget to advise your designer which flooring medium you'll be using. Carpets and underlay are not as efficient at transmitting heat as tiles

Consider putting a radiator or towel rail in the linen or airing cupboard. Modern cylinders with thermal lagging do not give off much heat

Always use a plumber who is familiar with the systems you have chosen. Do not become the teacher