

Wet Heating Systems Control

Programmer

This controls when the central heating system comes on and goes off thereby heating the building and hot water. It is usually, but not always, located in the boiler room, on the wall at eye level.

There are many different types of programmer and there is no uniformity between different models. The more recent digital programmers allow the individual more control of the preset heating patterns than the older mechanical programmers. Unfortunately, the more complex the programmer the more confusing it can be for the individual.

Room Thermostat

The room thermostat controls the temperature of the building. The room thermostat is frequently located in a cool part of the building. It is sited on the wall, at eye level and away from a heat source (such as a radiator or in direct sunlight) and out of draughts. It should be set at approximately 18°C for most rooms.

When the room has reached the desired temperature, the remainder of the building is deemed to be at the same, if not higher, temperature. The room thermostat sends a signal to the programmer to shut down the space heating part of the system. Many individuals inappropriately use their thermostats as an on/off switch for the system.

Boiler Thermostat

The boiler thermostat controls the temperature of the water heated by the boiler and thereby prevents the boiler from overheating. It is found on or very near to the boiler. The boiler thermostat can be turned down slightly during the summer months when there is less demand for space heating.

Thermostatic Radiator Valve (TRV)

A TRV controls the temperature of the room in which it is located. A TRV is fitted to the in-flow pipe of the radiator and it can be set for different temperatures. TRVs fitted to radiators will improve energy efficiency of the heating system. When the room reaches the desired temperature the TRV closes a valve on the in-flow pipe and hot water from the boiler by-passes that radiator.

TRVs are designed with a simple numerical scale and not temperature levels: this makes the setting of the TRV rather hit or miss. As they are located within easy reach of small children, they are vulnerable to being reset. A TRV should not be fitted on the radiator in the same room as the room thermostat.

Hot Water Cylinder Thermostat

The hot water cylinder thermostat controls the temperature of the water in the cylinder. It is located towards the bottom of the cylinder, usually strapped to the outside. It should not be covered by any of the tank insulation. On the thermostat is a small dial that can be set at different temperatures. The recommended setting is 60°C.

If the cylinder has a fitted insulation cover, the thermostat may be found on the hot water pipe outlet coming out of the top of the cylinder. Many buildings have their hot water cylinder thermostat set too high, resulting in the hot water being too hot, and resulting in unnecessary energy use.