

# HEATING RADIATORS

Keeping your radiators well-maintained will save energy as they will function more efficiently. They should be bled from time to time to release trapped air, so that they heat up evenly. If a radiator has become corroded or damaged, replacing it with one of the same style and size is a simple job. Another easy improvement is to fit thermostatic radiator valves, which will provide automatic adjustment of each radiator's heat output, ensuring better temperature control throughout your home.

## Bleeding radiators

All radiators are provided with a bleed valve in one top corner to allow trapped air to be released, ensuring that the radiator heats up evenly. The valve takes the form of a square shaft inside a threaded plug. Turn off the heating and use a radiator bleed key (or in some cases a flat-head screwdriver) to turn the shaft anti-clockwise by between a quarter- and a half-turn to open the valve – don't unscrew it by more



than one complete turn. You will hear the trapped air hissing as it escapes. Hold a cloth beneath the valve to catch any water, and as soon as the first trickle appears close the valve. If you find you have to bleed your radiators frequently, have the system checked by a heating engineer, as there is likely to be a fault somewhere.



## Fitting a thermostatic radiator valve

Many central heating systems are controlled by a single thermostat, usually sited in the hall. Unfortunately, this arrangement doesn't take into account local variations in temperature, and some rooms may become too hot or cold unless you keep adjusting the manual radiator valves. The answer is to fit thermostatic valves, which open and close automatically in response to room temperature. In many cases, a thermostatic valve will be a straight replacement for an existing manual valve, but do check first to ensure that it will fit.

### project essentials

- adjustable spanner
- wire wool
- thermostatic radiator valve
- new connector, if required
- PTFE tape

1 First drain the heating system (see page 329). Disconnect the valve from the radiator by unscrewing its capnut, but before releasing it completely, slacken the nut holding the valve to the pipe. Then unscrew both nuts fully and lift the valve together with its capnut and olive from the end of the pipe. The radiator here has been removed, but you can replace a valve without taking the radiator off the wall.



2 Clean the end of the pipe with wire wool and slip the capnut and olive of the new valve on to it. Hold the valve in place and screw the capnut on to the valve, making sure the olive is seated properly. Don't tighten the capnut fully at this stage.



3 Fit the radiator with a new connector if necessary, wrap a few turns of PTFE tape around its threads, align the valve and start turning the capnut onto it. Then tighten both capnuts fully. Refill the system, checking for leaks, and finally set the thermostatic valve in accordance with the manufacturer's instructions.

### ideal tool

#### PTFE tape

This is used by plumbers to ensure a watertight joint on threaded fittings. Wrap around the threads about five times clockwise before you screw the fitting together.



### Get the most from your radiators

Thermostatic valves allow much more efficient control of your heating system. The position of radiators can also make a big difference to their effectiveness. If they are screened by big pieces of furniture, they will heat a room much less efficiently. If you want to change the room layout, you can reposition radiators by running extra lengths of copper pipe. If your radiator is on an outside wall, up to 25% of its heat can be absorbed into the wall. To avoid this, fit radiator foil behind it to reflect heat back into the room (see opposite).