

Emergency Commercial Boiler Installers in London

Combination boilers and system boilers both carry pressure gauges and we're often asked about the pressure shown on these gauges. Any sealed central heating system needs an expansion vessel, a pressure gauge and a pressure relief safety valve.

If you heat water it expands. In an open vented central heating system (with a header tank) some of the water moves back up into the header tank. The expansion does not increase the overall volume of water by a huge amount (maybe 3 or 4 litres, depending on the size of the heating system) but it would be more than enough to burst the pipes if it had nowhere to go.

In a sealed system you have to allow for this expansion. This is done by adding an expansion vessel to the system pipework and it's often inside the boiler. The expansion vessel is just a chamber with a rubber diaphragm across the middle. One side of the expansion chamber is connected to the system pipework. The other side has a car tyre type valve so it can be pumped full of air.

In manufacture the air side is pumped full of air, typically to about 1 bar (about 15 psi). This forces the diaphragm right across to the opposite wall of the chamber. When the central heating system is filled with water and pressurised (to about 1 bar) the water pushes the diaphragm back to about the middle

Commercial Electric Heating Boilers

Electric boilers are closed containers that are used for water heating (for bath, shower, sink, other daily living needs). Electric boilers (electric storage water heaters) can be mounted in houses, flats, hotels, restaurants, shops, supermarkets, offices, pensions, etc. with central

heating system or water heating vat.

Benefits of electric boilers:

- Quick preparation of hot water.
- Precise water temperature control.
- Easy installation and connection.
- Protection against water overheat or freezing.
- Protection against corrosion.
- Economy of heat and money (hot water on demand).
- Safe exploitation.
- Comfortable, easy handling

Types of electric boilers:

- Suspended vertical electric boilers (rounded, square, small volumes up to 20 litres, non-pressure, pressure) – these water heaters can be suspended on the wall and have volumes up to 200 litres. The temperature ranges from 0 °C to 80 °C. The boilers have very low thermal loss.

- Horizontal electric boilers – these water heaters can be mounted on the wall with suspensions or attached to any appropriate construction. The boilers have volumes of 100-200 litres. The temperature ranges from 0 °C to 80 °C.

- Stationary electric boilers – these water heaters can be placed on the floor and have volumes of 100-1000 litres. The temperature ranges from 0 °C to 80 °C

