Common central heating problems
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This guide explains some of the common issues seen in domestic central heating systems, and more importantly, shows how to fix and prevent them using high quality products and the best practice water treatment process of Clean, Protect and Maintain.
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Poor system circulation

⚠️ Common cause

Sludge in the radiators: a product of corrosion.
Fix it:

Remove sludge by **cleaning the system**, preferably by **powerflushing** with an appropriate **cleaner**.

Stop it happening again:

Treat the clean system with **X100 Inhibitor** and install an **Eliminator Vortex** system filter to protect against future sludge build up in the radiators.

To ensure protection is maintained, check inhibitor levels annually with **X100 Quick Test**.
System noise

⚠️ Common cause

Limescale deposits on the heat exchanger of the boiler.
Fix it:
Add Sentinel X200 Noise Reducer for a quick and easy solution.

If it persists:
Clean the system with an appropriate cleaner to remove deposits.

Stop it happening again:
Treat the clean system with X100 Inhibitor to prevent future build up of limescale.
To ensure protection is maintained, check inhibitor levels annually with X100 Quick Test.
Boiler pump failure

⚠️ Common cause

Magnetite sludge from corrosion can collect in components such as pumps, leading to blockages and breakdowns.
Stop it happening again:

Prevention is best here, so protect all clean systems with X100 Inhibitor.

If you suspect that there may already be debris in the system, clean it using an appropriate cleaner beforehand.

To ensure protection is maintained, check inhibitor levels annually with X100 Quick Test.

Installing an Eliminator Vortex system filter will protect against future corrosion build up.
Radiator cold spots: bottom

⚠️ Common cause

Magnetite sludge from corrosion restricts water flow by settling at the bottom of the radiator.
Fix it:

Clean the system to remove this built-up sludge.

Stop it happening again:

Treat the clean system with X100 Inhibitor and install an Eliminator Vortex system filter to protect against future sludge build up in the radiators.

To ensure protection is maintained, check inhibitor levels annually with X100 Quick Test.
Radiator cold spots: top

⚠️ Common cause
Trapped air or hydrogen gas from corrosion prevents water from circulating effectively to the top of radiators.
Fix it:

Bleed radiator to remove air or gasses from system.

Stop it happening again:

Air in systems is a sign that water has been lost and therefore the level of inhibitor has been diluted; ensure protection by topping up inhibitor using Sentinel X100 Inhibitor Rapid-Dose®.

To ensure protection is maintained, check inhibitor levels annually with X100 Quick Test.
Frozen pipes

⚠️ *Common cause*

Sub-zero temperatures can result in exposed system pipework freezing and potentially bursting.
Stop it happening again:

If the property is exposed to very low temperatures use X500 Inhibited Antifreeze to protect against corrosion, limescale build up and freezing.
Leaking pipes

⚠️ Common cause

Corrosion in the system can cause minor perforations (pinholes) in pipes and radiators, causing leaks.
Fix it:

The solution depends upon the size and severity of the leak. For small, pinhole leaks and weeping joints; add an internal leak sealer to the system. This can also be useful where there is a small leak that you cannot find in the system. If you’re dealing with a larger leak, Sentinel Seal X can be applied as a temporary external seal for weeping joints or leaking pipes.

Stop it happening again:

Always clean, protect and maintain to prevent the corrosion build up that causes pinhole leaks.
Underfloor heating: cold spots and smells

35-45°C is the perfect temperature for bacterial growth, leaving underfloor heating vulnerable to microbiological problems.

Common cause
Fix it:

Clean and protect the system with **X700 Sanitiser and Biocide** to clear and cure systems of biological slime.

Stop it happening again:

Protect the sterile system with another dose of the dual-purpose **Sentinel X700 Sanitiser and Biocide** to prevent the problem from recurring.
Corrosion and limescale are the most common causes of problems that affect the efficiency and effectiveness of the boiler and heating system.
Stop it happening again:

Follow The Sentinel System best practice process of **Clean**, **Protect** and **Maintain** to achieve optimum system efficiency for both new and older heating systems.
Any questions?

Your local Sentinel expert will be happy to help.

Alternatively, visit our website sentinelprotects.com to find out more about delivering best practice protection for your heating and hot water system.
My Local Expert
Find the right person to speak to.

Product Selector
Find the right products for the job.

Support Centre
Get best practice support including ‘How To’ guides, latest videos and FAQs.