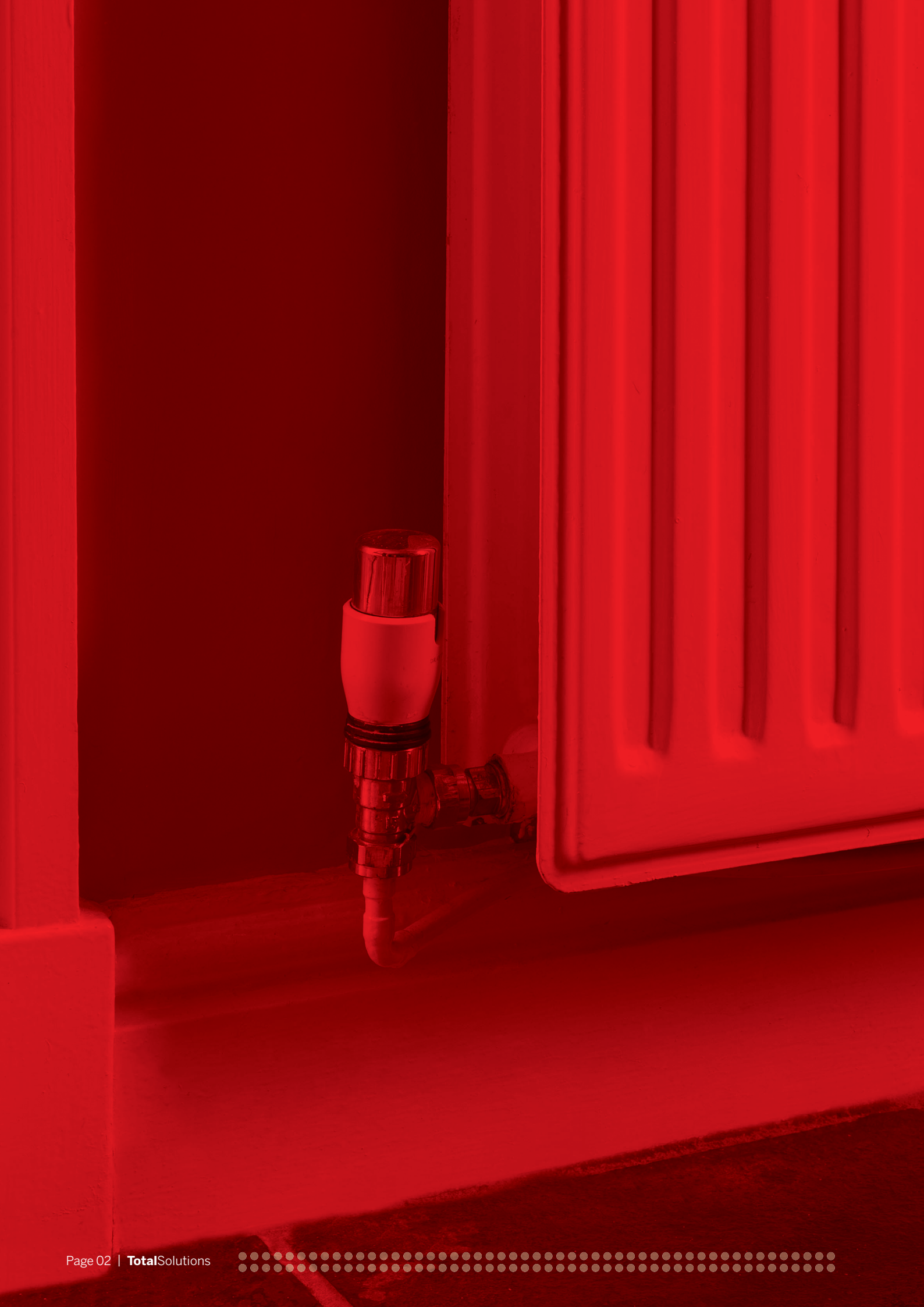




Total Solutions

Sentinel's Complete Product Range





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Sentinel water treatment products and services provide the best lifetime protection for heating and hot water systems.

For over 25 years we have delivered innovative, practical products and solutions to the heating industry internationally.

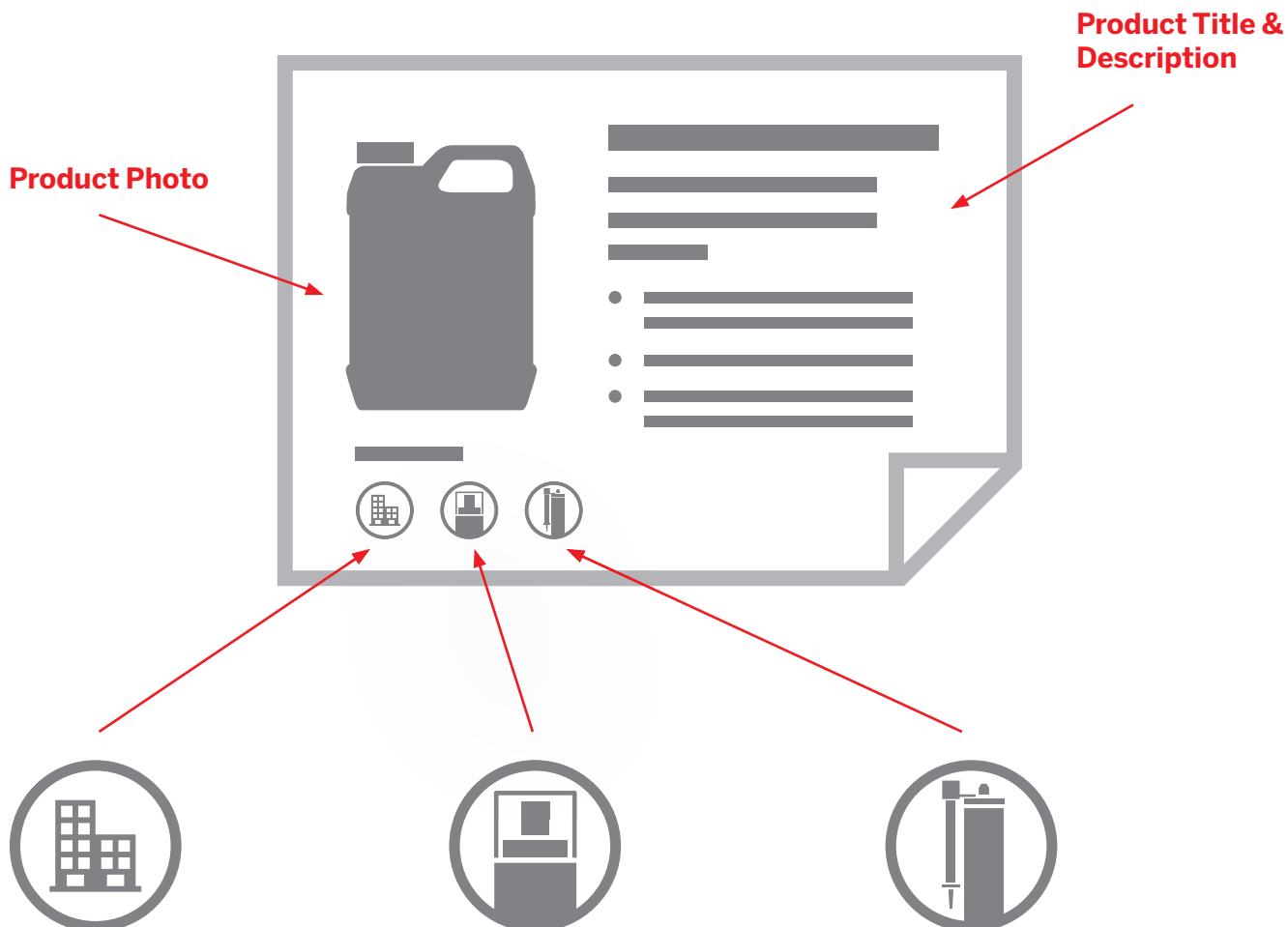
Our experts work with equipment manufacturers and industry partners to lead the growth in awareness of best practice water treatment and its benefits. We are committed to developing comprehensive training and communication tools to support this initiative.

Our products are available in all major plumbing and heating merchants.



Product Format Key

Some of our products come in a variety of formats in addition to our iconic 1 litre domestic range. Please use the format key below to select the right format for your requirements:



Commercial

Available for commercial and non-domestic systems

- 10L liquid
- 20L liquid

Rapid Dose

Designed to make dosing into the system quicker than ever

- Quicker dosing means less time on the job
- No need to drain or depressurise the system*
- Adaptor included for application into Sentinel Eliminator®, radiator or boiler filling loop

* It is only necessary to release system pressure when it is above 2.3 bar.

Concentrate

Slimline format to make dosing in to the system fuss-free

- Easy dosing means less time on the job
- Smaller size enables easy storage
- Controlled application using skeleton gun

For more in-depth product information including product fact sheets, safety data sheets and usage guidance visit www.sentinelprotects.com



The Sentinel System



We've organised our products into three categories; **Clean, Protect and Maintain** to help make best practice solutions simple.

The Sentinel System encourages lifetime protection for heating and hot water systems with the best practice process of Clean, Protect and Maintain.





Clean

to prepare for greater performance

- The Compliance Guide to Part L of the UK Building Regulations now states that when installing a boiler onto a new or existing central heating system, the system should be thoroughly cleaned
- Cleaning a new system will remove any installation debris and flux residues which if left inside the system will cause corrosion
- Restoring a dirty system will remove sludge build-up, improving the efficiency of the system and help save on fuel costs

Protect

to prolong system life and efficiency

- After cleaning, it is important to protect your system from limescale, corrosion and sludge build-up
- Chemical inhibitors and physical system filters are proven to provide ongoing protection
- Electrolytic devices on secondary hot water systems help comply with Part L regulations for limescale reduction in hard water areas

Maintain

to ensure durable protection

- Once a system is cleaned and protected it is important to ensure that the protection is maintained on a regular basis
- Many factors can impact the level of protection a central heating system has, for instance the removal of a radiator whilst decorating. We advise checking the quality of water and level of protection annually as a minimum

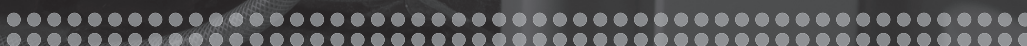


Clean

to prepare for greater performance

"Cleaning a dirty central heating system could **save** you upto **£142 each year.**"

*Based on the cost of replacement heat using an electric heater.



Products available to **Clean** your system



JetFlush Rapid®

Effective, easy cleaning for dirty heating systems

Powerflushing is a method of accelerating the process of cleaning a central heating system. The Sentinel JetFlush Rapid unit is designed to be used in conjunction with the Sentinel range of chemical cleaning products for the safe and easy removal of sludge and debris from central heating systems.

- Rapid removal of system debris
- High flow rate for maximum cleaning
- Instant flow reversal
- Complete with hoses and fittings
- Easy to handle and operate - only 17KG



Also available in...



X300 Cleaner for New Systems

For the removal of flux grease, oil and installation debris

- Cleans new heating systems (up to 6 months old)
- Prevents harmful copper deposits being left in the system
- Prepares system for protection with X100 Inhibitor



Also available in...



X400 High Performance Cleaner

Thorough cleaner for systems older than 6 months

- Restores systems suffering with circulation problems
- Eliminates radiator cold spots
- Prepares older systems for the installation of new components



X800 Fast Acting Cleaner

Rapid cleaner for systems older than 6 months being powerflushed

- Powerful removal of all major foulants and debris
- For all systems; old or new, running hot or cold
- Ideal with or without powerflushing



Deposit Remover

Cleaner for removing stubborn deposits for systems older than 6 months

- Heavy duty organic acid cleaner
- Powerful magnetite and limescale removal
- Suitable for use with all commonly encountered metals and alloys



Protect

to prolong system life and efficiency

"The absence of correct water treatment can **reduce system effectiveness** by typically 15%."

Kiwa GASTEC at CRE



Products available to **Protect** your system



Also available in...



X100 Inhibitor

Leave-in protection against corrosion and limescale

Sentinel X100 Inhibitor provides protection for clean central heating systems against corrosion and limescale. Suitable for use in all types of indirect central heating systems, Sentinel X100 Inhibitor will extend the life of the system, ensuring maximum efficiency and minimising fuel usage.

- Heavy duty inhibitor
- Protects against corrosion and limescale
- Suitable for all system metals



Eliminator

Hydrocyclone filter to capture all types of circulating debris

- Protects boiler from ALL types of debris
- Continuous, powerful separation through Quadra-Cyclone® Technology
- Separated debris retained out of system flow to prevent blocking and recontamination



Also available in...



X900 Filter Aid

Leave-in additive to circulate residual debris

- Frees and lifts hidden debris
- Increases capture of circulating solids by filter
- Suitable for use with all filter types



X100 Towel Rail Inhibitor

Leave-in protection for electric towel rails against corrosion and limescale

- Protects all water-filled towel rails
- Suitable for all system metals including aluminium
- Can be used as a system inhibitor top up



Also available in...



X500 Inhibited Antifreeze

Leave-in protection against freezing temperatures, corrosion and limescale

- Prevents system water from freezing
- Enhanced limescale and corrosion protection
- Protects all system metals from corrosion



X700 Sanitiser and Biocide

Remove existing biological contamination and prevent re-contamination for underfloor heating systems

- Effective biocide and fungicide
- Removes blockages caused by slimes
- Long lasting protection



System Filter

Compact brass filter to capture all types of circulating debris

- Eliminates all types of circulating solids
- Integrated self-cleaning magnet for faster removal of debris
- Compact, solid brass unit





Maintain

to ensure durable protection

"1 in 5 households in the UK have suffered a heating breakdown."

uSwitch

Products available to **Maintain** your system



Also available in...



SystemCheck

Independent, in-depth analysis of water system quality

Sentinel SystemCheck is a water treatment analysis service which provides rapid confirmation to installers, engineers, homeowners and authorities that a central heating system has been correctly cleaned and then protected with Sentinel X100 Inhibitor. It can be used during the commissioning of a new system or an older system following the replacement of any components.

- Independent laboratory analysis
- Validation of correct cleaning and then treatment with X100 Inhibitor
- Full report of results and recommendations provided online or by mail
- Quick access to results using online portal:
www.sentinelprotects.com/systemcheck

Sample SystemCheck results and recommendations report



Biocheck Test Kit

On-site measurement of microbiological activity and confirmation of X700 Sanitiser and Biocide levels

- Check bacteria and fungi levels with dipslides
- Product concentration test strips and sample bottle provided
- Ensures the correct application of Sentinel X700 Sanitiser and Biocide



Also available in...



X100 Quick Test Kit

On-site confirmation of X100 Inhibitor levels

- Confirms correct dosage of Sentinel X100 Inhibitor
- Quick and simple test
- Available as two-test or ten-test packs



Also available in...



X200 Noise Reducer

Non-acidic leave-in treatment to cure boiler noise

- Cures boiler noise
- Helps restore boiler efficiency
- Suitable for all metals including aluminium



Also available in...



Leak Sealer

Leave in additive for sealing minor leaks and weeping joints

- Seals all minor leaks
- Will not cause blockages within the system
- Suitable for all metals including aluminium



Seal X

External jointing compound and leak sealer

- Fast cure; tack free in 30 minutes
- Excellent adhesion to non-porous surfaces
- Retains flexibility after curing

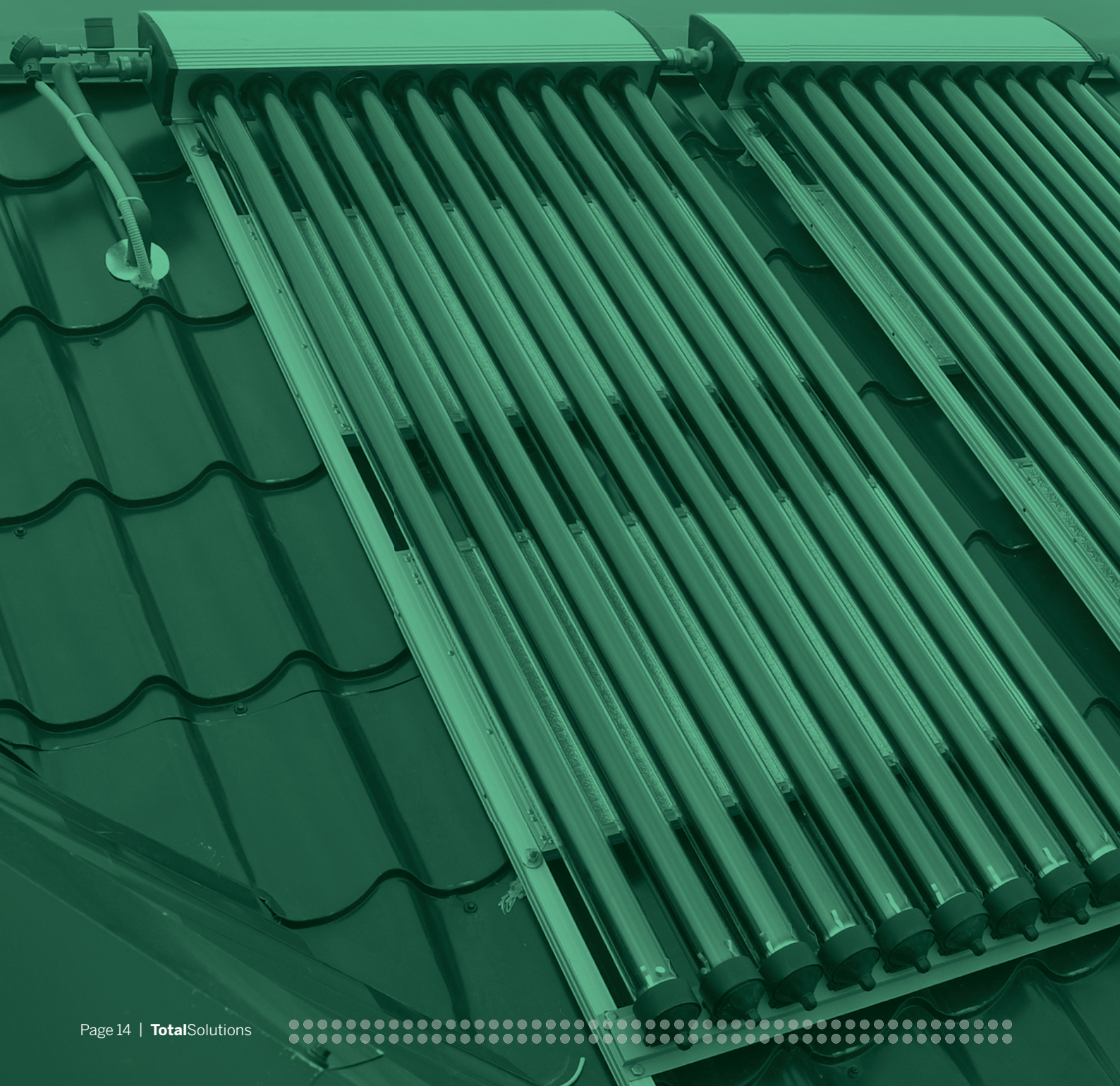


Condensafe+

Condensate neutraliser for domestic condensing boilers

- Fits all domestic condensing boilers
- Eliminates the need for a soakaway
- Easy-to-replace cartridge

Renewable systems



Renewable systems

We have developed a comprehensive range of products to ensure the efficiency, reliability and cost effective operation of solar thermal, ground source and air source heating systems.



Solar Thermal

Bespoke solutions following The Sentinel System for continued maintenance and thermal efficiency of solar collector heat transfer circuits.



Air Source

The Sentinel System offers a total solution for the maintenance and protection of your air source system.



Ground Source

Our ground source range follows The Sentinel System to ensure effective system performance, allowing the maximum return on investment to be achieved.



Test Kits

For monitoring system health and confirming correct water treatment.

For your **Solar Thermal** system



R100 Solar Thermal Fluid

Ready-to-use heat transfer fluid for solar thermal systems

- Protects system from corrosion in both liquid and vapour states
- Resistant to degradation
- Effective frost protection down to -25°C



R200 Solar Cleaner

Ready-to-use cleaner for solar thermal systems

- Removes sludge and deposits from degraded thermal fluid
- Cleans with only 20 minutes circulation time
- Ready to use without dilution



Solar Flush

For flushing, filling and venting solar thermal systems

- -40°C to 60°C temperature resistant hose
- Manual drain valve
- Dry self-priming pump

For your **Air Source** system



R600 Thermal Fluid

Concentrated thermal fluid for air source heat pump systems

- Provides effective corrosion and scale protection for system metals
- Effective frost protection
- Resistant to degradation



R700 Sanitiser and Biocide

Provides protection for ground and air source systems against contamination from bacteria and fungi

- Effective biocide and fungicide
- Prevents slime-forming bacteria
- Long lasting protection



For your **Ground Source** system



R500 Heat Transfer Fluid

Ready-to-use heat transfer fluid for ground source heat pump systems

- Provides effective corrosion and scale protection for system metals
- Resistant to degradation
- Effective frost protection

Also available in...



Also available in 20L concentrate



R800 Cleaning and Flushing Fluid

Helps to restore the efficient operation of ground source heat pump systems

- Removes degraded thermal fluid
- Cleans within 20-30 minutes
- Effective at low temperature

Also available in...



For **Testing** your system



Frost Check Test Kit

For installation and maintenance checks on ground and air source heat pump systems

- Confirms successful frost protection
- Checks system performance
- Helps determine when fluid replacement is required



R700 Test Kit

For monitoring the correct use of Sentinel R700 Sanitiser and Biocide

- Check bacteria and fungi levels with dipslides
- Product concentration test strips
- Ensures the correct application of Sentinel R700 Sanitiser and Biocide



Solar Check Test Kit

For installation and maintenance checks on solar thermal systems

- Checks frost protection level to determine if fluid replacement is required
- Checks orientation of solar panels
- Checks thermal performance



Hot Water systems



For your **Hot Water** system

When hard water is heated, limescale build-up can occur, causing household appliances to run less effectively and increasing the likelihood of premature breakdown. Many homeowners don't realise that they are paying more by not addressing the problems that limescale can cause.

We provide a range of cost-effective, low-maintenance products for the prevention of limescale build-up.



SESI

Electrolytic limescale inhibitor for protecting hot water systems

The Sentinel SESI is a high-performance, cost-effective solution to help tackle limescale build-up and could save up to £130 a year on typical energy bills.

- Protects against limescale encrustation
- Available in 15mm and 22mm
- Whole house protection
- WRAS approved



ScalePro

Electrolytic limescale inhibitor with performance indicator LED for protecting hot water systems

Sentinel ScalePro® is a non-polluting, electrolytic physical water conditioning device that helps protect a pipe system or appliance from the formation of harmful limescale encrustation.

- Integrated performance indicator LED
- Protects against limescale encrustation
- WRAS approved
- Performance proven by independent studies



CombiGuard

Polyphosphate limescale prevention for domestic mains water

The Sentinel CombiGuard is designed to reduce scale build-up by proportionally blending a tiny amount of food-grade polyphosphate into the water.


- Prevents scale formation on all critical heat surfaces
- Unit indicates when cartridge needs replacing
- Easy to install

Approximately 65% of the UK is supplied with mains water which is described as hard.

Commercial and Non-Domestic systems



Commercial and Non-Domestic products

Many of our domestic range products are also available for commercial and non-domestic size systems, these products are identified using the  icon throughout this brochure.

For more information on our Sentinel Commercial range, please visit www.sentinelprotects.com/commercial

Heating systems



Senticide 7500

Fast acting biocide for commercial and non-domestic heating and cooling systems

- Effective biocide, algaecide and fungicide
- Long lasting protection against contamination
- Fast acting, non-corrosive formula



Senticlene 8500

Heavy duty cleaner for commercial and non-domestic heating and cooling systems

- Removes iron and calcium based deposits to restore circulation and system efficiency
- Heavy-duty, effective hot or cold
- Prepares older systems for the installation of new components



Condensafe C4000

Condensate neutraliser for commercial and non-domestic condensing boilers and heaters

- Effectively neutralises acid waste
- Eliminates need for a soakaway
- Helps protect the environment

Hot Water systems



KaiGUARD®

Proven electrolytic limescale inhibitor for commercial and non-domestic heating systems

- One kit required to protect entire hot and cold water system
- Independently proven
- Permanent protection against limescale build-up
- WRAS approved
- Can deliver ROI within 12 months
- New 22mm unit available

KaiGUARD Pulse Splitter now available for Building Management Systems (BMS) monitoring of water flow rate or water usage





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

Postcode selector, helping you to find the right person to speak to.



Product Selector

A simple tool to quickly help you find the best practise solutions for the job.



Support Centre

Everything you need for best practice support including 'How To' guides, latest videos and FAQ's.





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SentinelCPM