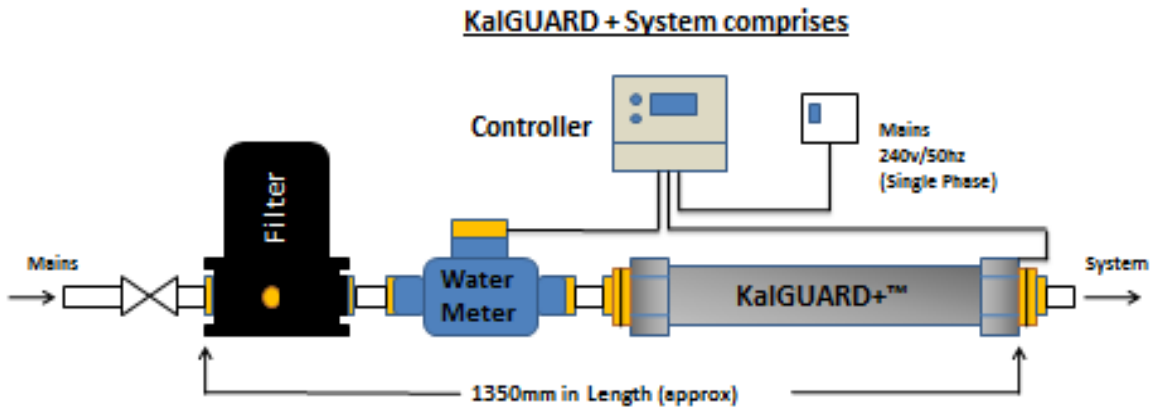


KaIGUARD Qs + As

Q1. What does a KaIGUARD system look like?



Q2. What's special about it following on from the earlier ranges of electrolytic products?

A2. This is the first ever powered and controllable zinc anode based water treatment product, designed to specifically prevent lime scale formation in water for a known level of hardness.

Q3. Does any independent body approve of the electrolytic technology used in KaIGUARD?

A3. Yes, UK Building Regulations 2010 – Part L Domestic Building Services Compliance Guide.

See Section 2: Gas-fired Space Heating and Hot Water Systems Table 1 – Gas or oil -Fired Wet Systems.

The Compliance Guide does not mention “external to pipe” water conditioners.

Q4. How should we describe the KaIGUARD+ treatment process?

A4. This is PERMANENT water treatment. Once dosed with zinc, the lime scale protection is never lost from the water system.

- It is present wherever the water goes and it makes a change to the water chemistry.
- It does not decay on passing through a booster set or on storage.
- It is water treatment, not “external to pipe” water conditioning.
- It is a proven, independently tested Electrolytic process.
- It is WRAS approved technology.

Q5. What water treatment is taking place?

A5. The KaIGUARD equipment doses zinc into the water.

- The zinc promotes the formation of Aragonite, which does not form deposits when the water is heated.
- Without the zinc, nature wants to promote Calcite when water is heated, which is the hard gritty form normally seen in stalagmites and kettles at home.
- Calcite is the deposit forming type and should be avoided.

When lime scale forms it looks like this...



When a system is clean it looks like this...



Q6. What cost benefits are obtained when replacing a water softener with KalGUARD?

A6. Return on investment (ROI) is usually < 12 months.

- Salt use is eliminated, saving typically many £1,000s p.a.
- Water use reduces as no regeneration is needed. This can save many £100s p.a.
- Labour and maintenance are eliminated as KalGUARD is very reliable and once commissioned needs little attention, a periodic service is all that is needed.
- Every 4 tonnes of bagged salt eliminated reduces your CO2 footprint by 1 tonne.

Q7. How many treatment systems do I need for lime scale protection and where is it installed?

A7. Only 1 KalGUARD is needed to treat the whole location water system and it is best installed on the rising main.

Q8. What installation guidelines should be followed?

A8. See KalGUARD Operating and Installation Guide.

All anode units can be mounted horizontally or vertically and must not be fitted closer than 3 meters to the heater appliance. The filter must be upstream of the KalGUARD. The water meter can be either side, so long as all the treated water passes through the meter unit. The anode can be fitted on the discharge from a water tank, either side of booster set.

Q9. Does it require power ?

A9. It uses mains power to drive the anode and also the controller. Estimated power cost is about £3 per year.

Q10. Life expectancy? What is the life of the system before renewal of any part?

A10. The life of the KalGUARD anode is dependent on demand. Life in most applications is about 8 years. Periodic service will prolong its life and ensure optimal performance.

Q11. Can the anode unit be changed?

A11. The anode unit is designed to be used up and can be changed when it's been consumed. The controller will tell you when this is required; see the traffic light status indicator.

At anode change out, the controller should be 're-set' and the system re-commissioned.

If you have any more queries or would like more information on KalGUARD, please contact us at Sentinel Commercial 01928 583 281, or email stacey.killen@sentinel-solutions.net