







### Pond Mats

- It is advised that pond mats are inspected, cleaned and maintained regularly. After a period of time sediment, mud and leaves could build up around and under the pond mat collectors causing a potential loss of performance and reduced ability to harvest heat from the water.

### Open Loop

- Check the manufacturer's guidelines on maintenance for external heat exchangers. Manufacturers of plate heat exchangers can recommend that the plate gaskets are replaced every two years.
- Any external filters or treatment systems fitted to an open loop system should also be checked and maintained in line with the manufacturer's guidelines.
- Open loop heat exchangers can suffer from condensation damage due to running with liquid at lower than ambient temperatures, which if not properly controlled can cause damage. Any heat exchanger should be inspected checking that any lagging is still in good condition and any components are still fit for purpose. If corrosion has started, these areas can be treated to preserve their longevity.
- The open loop pump and pump control may also need to be maintained and it is advisable to check with the manufacturer or suppliers for their recommendations.
- Particularly for any surface water sources, check inlets and outlets are free from vegetation and also from any flotsam and jetsam.



Kensa's Evo Series of ground source heat pumps makes life easier by automatically performing some of the standard system maintenance checks listed above. Kensa has developed their own control board which is the brain of the new Evo heat pump. The custom built software provides live status updates and innovative diagnostics which permits the control board to pre-empt system irregularities using warning safety levels.

Other new features include a water pump exercise program that is activated when the heat pump is dormant for a prolonged period, eliminating the need for user interaction to ensure that the water pump still spins and is operational. The Evo's new pipework arrangement has alleviated the need for bleeding the heat pump before the heating season, as the heat pump has no internal high points for air pockets to collect.

The Evo will also warn of a lack of flow which can indicate to the homeowner that the system is losing flow possibly due to blocked filters. A warning can be set on the unit allowing planned maintenance to occur before the unit goes to alarm and shuts down to protect itself or any significant damage occurs.