

EVAPORATIVE COOLERS

service contract *visit overview*

Introduction

Evaporative Coolers offer simple and highly effective cooling for large spaces at a low cost. With regular maintenance, in accordance with the manufacturer's specifications, you can look forward to years of reliable service.

There are a number of aspects which are critical to correct operation and servicing. These include:

1. Ensuring the removal of contaminant build up, it improves performance and prolongs the life of the equipment.
2. All maintenance and repair work must be performed by trained and qualified technicians.
3. It is recommended evaporative cooling units have two services, pre-season and post-season.

It's about exceeding expectations not just meeting them.

The following is an overview of what we do. Many items are standard service procedures, or at least should be. But it is just a start.

What makes Clean Air different is that our expert engineers go the extra mile. They attend to many additional items simply because they are conscientious and have the experience to spot them. Items you might only ever know about if they were left unattended.



VISIT 1 (PRE-SEASON SERVICE)

Normally carried out in March / April. The purpose is to clean, check, service and commission the system for summer operation.

1. Check system is operating correctly in ventilation mode including fan speeds from high to low. When satisfied continue with service.
2. Remove the four Celdek pads and louvres from the unit.
3. Isolate the power on the external isolation switch.
4. Apply cleaning chemical with a brush to the water tank and surrounding areas to remove any build up of salt and scale.
5. Clean all parts within the unit if necessary, i.e. water pump, water inlet valve, float sensor, water distributor and drain valve.
6. Rinse thoroughly with water and if necessary repeat chemical clean.
7. Wash the pads with clean water to remove any dust/dirt build up. Check condition of pads to ensure no algae or scale is present. If necessary clean pads with warm steam.
8. Switch on the power to the system by the external isolator.
9. Turn on the water supply to the unit.
10. Set the controller to cooling mode checking all the working components as the system fills with water.
11. When the water valve has switched off, check the water level is correct and if necessary adjust the ball valve to suit.
12. Check all components operate correctly.
13. Ensure all operating parameters are programmed into the system from the wall controller.
14. Isolate the power from the external isolator.
15. Re-fit the Celdek pads and louvres back into the unit and secure as necessary.
16. Switch on the power to the system.

17. Operate the unit in cooling mode and check the system is operating and distributing water evenly over the pads.
18. Set necessary parameters on the electronic wall controller for customer's summer operation.

This work requires access to the roof and the evaporative unit.



VISIT 2 (END OF SEASON SERVICE)

Normally carried out in October / November. The purpose is to de-commission the cooling system for the winter which involves isolating the water supply to avoid freezing and leaving the system to operate in ventilation only mode.

1. Isolate water supply to the air cooler.
2. Using electronic wall controller operate drain valve to empty system.
3. Run the system in ventilation only mode to check system is operating correctly with the cooling mode switched off (including fan speeds high to low).
4. Set wall controller parameters to customers operating requirements for winter period (time-clock, fan speeds etc).
5. If fitted check operation of extract fans (speed controller if fitted).

This work will not require access onto the roof or evaporative unit



freephone 0800 0266383

System Components and Basic Service Checks

- 1. Cooling Pad Frames / Louvres**
Check celdek pads are secure and fastened. Any broken fixings to be replaced. Check the celdek pads for damage and replace if necessary. Check louvres are not damaged.
- 2. Water Pump**
Check pump is operating correctly and free of scale. Clean thoroughly and ensure water flows to the distributor system.
- 3. Water Management System**
Check probe is clean and firmly seated in its slot on the cabinet and check magnor sensor float is clean and operating correctly.
- 4. Drain Valve**
Check drain valve is opening and closing correctly and no leaks are visible around the O ring seal.
- 5. Cabinet**
Check the four posts are slotted together and fixed into retaining clips. Remove any scale from tank base with cleaning fluid.
(Note: cleaning fluid must be rinsed through the unit and discharged using clean water)
- 6. Float Valve**
Check free movement of valve and that water supply shuts off when correct water level is achieved.
- 7. Solenoid Valve**
Check operation when water is demanded and the cover is fitted in place. Check for leaks around all main water supply connections.
- 8. Fan**
Check the axial fan has free movement and is fixed firmly in its housing with the retaining clips in place.
- 9. Control Box / MRU**
Check all connections are made to the electronics module and secure.