

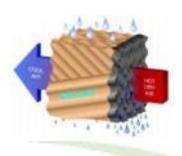
# EcoCooling Evaporative Cooling

## **Industrial Cooling**

Evaporative cooling provides a simple, safe and low cost solution to the cooling of people and processes. This technology can produce up to an amazing 50KW of cooling for every 1.5KW of electricity consumed.

The EcoCooling range of evaporative coolers has been specifically designed to take into account the UK's climate, water quality, and health & safety regulations.

The basic specification of the all plastic ECP cooling unit is given below.



- Maximum airflow 14,000 m<sup>3</sup>/hr Cooling performance
  DT 9°C @ 30°C 30%RH
- > Average usage 20 L/hr
- > Power consumption 1.5 KW single phase
- Five speed fan
- Cooling or ventilation modes
- > Warranty
  - Cabinet corrosion 25 yrs
  - Structural components 10 yrs
  - All parts 2 yrs

This is a simple and robust device which costs less than 14p per hour to run and can typically cover an area over 200 square meters.

**Salix Funding:** Evaporative cooling is now included in this scheme and has a Persistence Factor of 15.85 reflecting the longevity and sustainability of this technology. Other loans and grants also available – for more details please visit our web site.

# For more information and our full range of cooling solutions please visit **www.ecocooling.org**

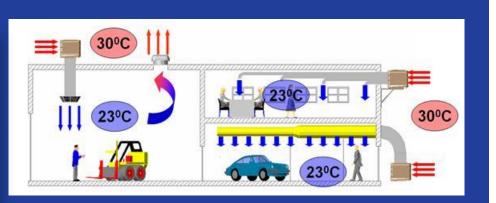


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## **Industrial Cooling**

## Installation of Systems

EcoCoolers are installed as part of a balanced ventilation system to provide a constant flow of fresh and cooled air to provide comfortable conditions.





**External – Roof Mounted -** The building is ventilated using the evaporative cooler to provide a constant source of cooled air. The system is balanced using extract ventilation.

The control systems can accommodate a timer, thermostat and humidistat. Coolers can be controlled individually or in groups.



**Top and Side Discharge** cooler options are available where roof access or roof penetrations are not possible.

Plenums, conventional ducts or fabric socks are used to distribute the air.

Open doors and windows have no adverse effect on the performance.

Typically installed for under £7,000 these systems are less than the cost of a comparable air conditioning system. Total costs will vary according to the building structure, air distribution system and availability of services.



## **EcoCooling Evaporative Cooling**

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### Legionnaires' disease

Many potential end-users are concerned with Legionnaires' disease. Sophisticated process controls and a low water operating temperature provide a low risk cooler. Full documentation is available to fulfill all requirements of ACOP L8.

The simple controls provide both peace of mind and confidence that all legislative responsibilities have been fulfilled. 2006 saw the first installation of EcoCooling evaporative coolers in a UK hospital at Queens NHS Trust, Burton on Trent.

#### **Energy Consumption**

Running Costs for a Single Unit based on an average airflow of 12,000 m<sup>3</sup>/hr

| Utility   | Usa   | Usage and cost per hour |        |
|---|-------|-------------------------|--------|
| Electrical consumption                                | 1.5KW | @8p/KWhr                | £0.120 |
| Water Consumption (typical average during hot period) | 20L   | @100p/m <sup>3</sup>    | £0.020 |
| Total Cost per Hour                                   |       |                         | £0.140 |
| Total Cost per 168 hour continuous working week       |       |                         | £23.52 |

# At under 14p per hour to run an EcoCooling evaporative cooler is typically less than 10% of the running cost of a comparable air-conditioning system.

#### Maintenance

For both operational and hygiene reasons it is recommended that the unit has a minimum of an annual service. This will be quoted separately by your installer.

Pad life is normally 2-5 years and the four pads cost a total of £330 to replace.

### **CPD** seminars

CPD seminars are available please visit our web site for further details

#### Warranty

2 years warranty on all components.

A demonstration of a mobile unit can be arranged at your premises. This shows in detail the construction of the system, the approach to Legionella control and the thermal performance of evaporative coolers.