














SOLUTIONS FOR:

CONSTRUCTION, PRODUCTION AND LOGISTICS, RESTAURANTS,
RETAIL AND HOMES

APPLICATION						
		CCX 4.0	BC 80	BC 121, BC 221, BC 341, BCB 19	ACD 137	BCM
CONSTRUCTION						
	COOLING CONSTRUCTION SITES			●		
	COOLING WORKERS			●		
INDUSTRY & WAREHOUSES						
	SPACE COOLING			●		●
	SPOT COOLING			●	●	●
WORKSHOPS & GARAGES						
	SPACE COOLING	●	●			
	SPOT COOLING	●	●			
RESTAURANTS, RETAIL, OFFICES						
	SPACE COOLING	●	●	●		●
	SPOT COOLING	●	●	●	●	●

SOLUTIONS FOR:

AGRICULTURE, PUBLIC SPACES, EVENTS, MILITARY AND RENTAL

APPLICATION					
AGRICULTURE					
 COOLING LIVESTOCK FACILITIES					
 COOLING GREENHOUSES					
EVENTS & MILITARY					
 OUTDOOR COOLING					
 TENT COOLING					
RENTAL					
 SPACE COOLING					
 SPOT COOLING					
EMERGENCY & PUBLIC SPACES					
 SPACE COOLING					
 SPOT COOLING					

MASTER

EVAPORATIVE COOLERS

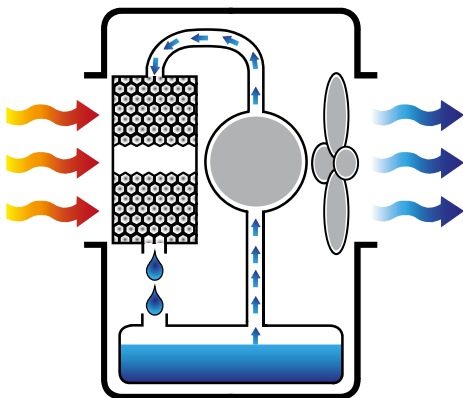
HOW DOES IT WORK?

The heart of the evaporative cooling system is the cooling pad where the water evaporates and the air passing through the pads is cooled.

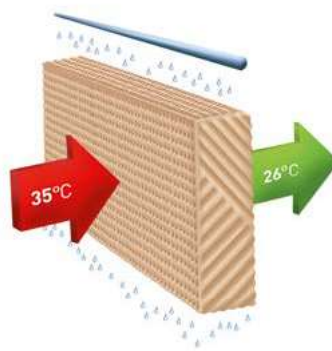
Evaporative cooling pads are manufactured from fluted cellulose sheets that are glued together. The material is chemically impregnated with special compounds to prevent rot and ensure a long service life and easy maintenance.

The integrated water distribution system spreads water evenly over the cooling pads to make sure the entire surface is kept wet. This maximises the cooling effect.

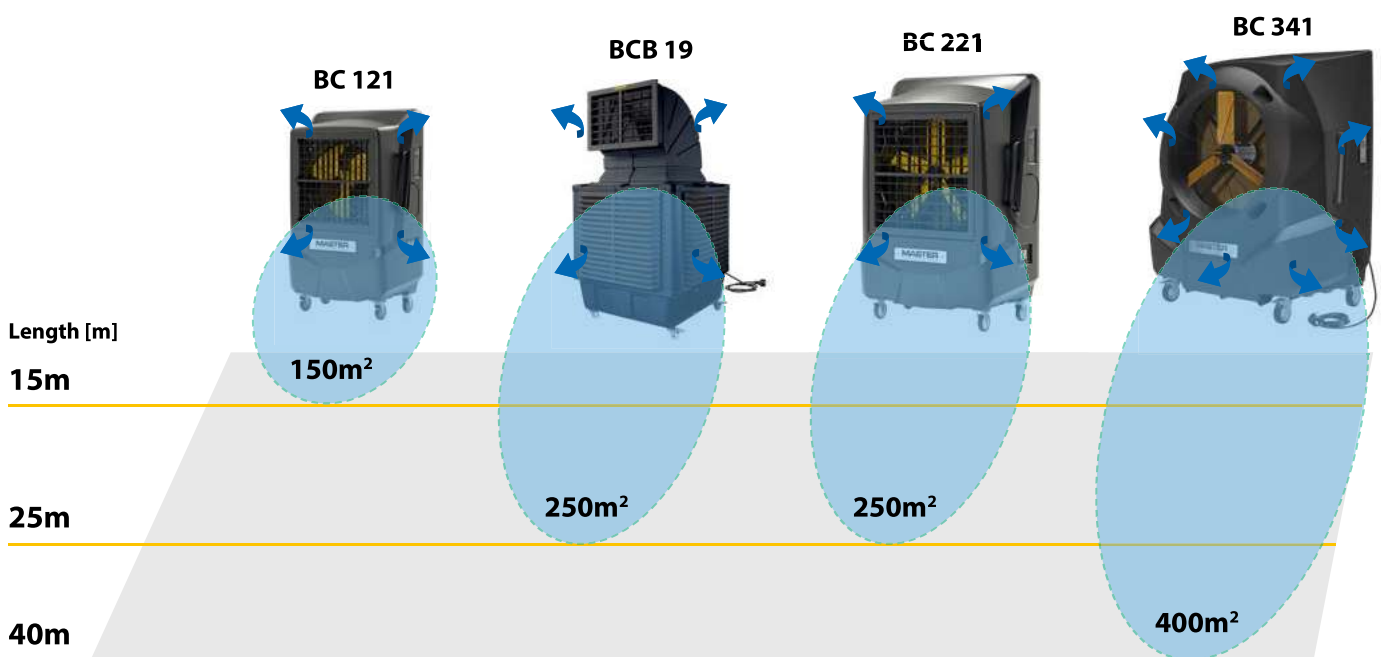
Fans create a negative pressure, causing air to be drawn through the pads.



Evaporation results from contact between air and water.



A control system operates the water pump and the fan distributes the cool air in the area.



MASTER

EVAPORATIVE COOLERS

EVAPORATIVE COOLING AND HUMIDITY

A given volume of air at a certain temperature and pressure is capable of absorbing and holding a certain amount of water vapour. If that volume of air contains 50% of the moisture it is capable of holding, we say it is at 50% relative humidity.

The hotter the day, the drier the air, the more cooling can be done by means of evaporation. In other words, the cooling effect is best when you need it most.

Our evaporative coolers are developed to work well in high-humidity environments too, however, and will remain much more efficient than a simple fan that just circulates warm air.

Our coolers will increase humidity by 2 to 5%, depending on temperature and humidity in the environment you want to cool. The slight increase is not noticeable in ventilated areas where the air produced by the unit is exhausted.

		RELATIVE HUMIDITY																
		2%	5%	10%	15%	20%	25%	30%	35%	40%	45%	50%	55%	60%	65%	70%	75%	80%
INCOMING AIR TEMPERATURE	24°C	12°C	13°C	14°C	14°C	15°C	16°C	17°C	17°C	18°C	18°C	19°C	19°C	20°C	21°C	21°C	22°C	22°C
	27°C	14°C	14°C	16°C	17°C	17°C	18°C	19°C	19°C	20°C	21°C	22°C	22°C	23°C	23°C	24°C	24°C	25°C
	29°C	16°C	17°C	17°C	18°C	19°C	20°C	21°C	21°C	22°C	23°C	23°C	24°C	24°C	25°C	26°C	27°C	
	32°C	18°C	18°C	19°C	21°C	21°C	22°C	23°C	24°C	25°C	26°C	26°C	27°C	28°C	28°C	29°C	30°C	
	35°C	19°C	20°C	21°C	22°C	23°C	24°C	26°C	26°C	27°C	28°C	29°C	29°C	30°C				
	38°C	21°C	22°C	23°C	24°C	26°C	27°C	28°C	28°C	29°C	31°C	31°C						
	41°C	22°C	23°C	25°C	26°C	27°C	29°C	30°C	31°C	32°C								
	43°C	24°C	25°C	27°C	28°C	29°C	31°C	32°C	33°C									
	46°C	26°C	27°C	28°C	30°C	32°C	33°C	34°C										
	49°C	27°C	28°C	30°C	32°C	34°C	35°C											
	52°C	28°C	30°C	32°C	34°C	36°C												

This table shows the theoretical **OUTGOING AIR TEMPERATURE** of a cooler.

The theoretical **OUTGOING AIR TEMPERATURE** depends on the **INCOMING AIR TEMPERATURE** and on the **RELATIVE HUMIDITY**.

Simply find your **INCOMING AIR TEMPERATURE** and **RELATIVE HUMIDITY**, then locate the value where the two intersect and that is your theoretical **OUTGOING AIR TEMPERATURE**.

Example:

Incoming air temperature = 35°C

Relative humidity = 30%

Outgoing air temperature = 26°C