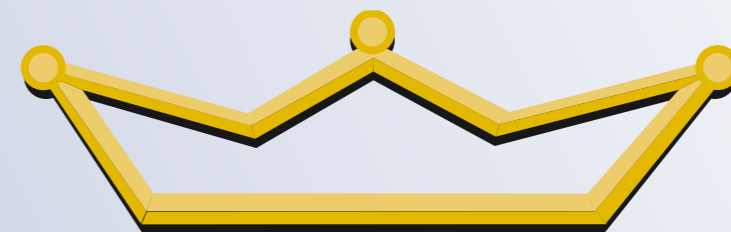


# Ventilation



**CROWN  
AIR**

Crown air can provide you with a broad range of ventilation solutions for almost any application. From simple ceiling extraction fans to large underground parking lots and storage facilities, Crown Air can provide what you need to keep the air in circulation!



Fresh Air



Extraction

## Ventilation Guidelines

ROOM TYPE	ACH*	ROOM TYPE	ACH*
Bakeries	20 to 30	Hair Salons	10 to 15
Banks	3 to 4	Hospitals	4 to 6
Cafes & Coffee bars	10 to 12	Kitchens	15 to 30
Canteens	5 to 10	Laboratories	8 to 12
Cinemas & Theatres	5 to 8	Laundries	15 to 60
Conference Rooms	8 to 12	Libraries	3 to 5
Dance Halls	6 to 8	Offices	4 to 8
Engine rooms	20 to 30	Paint Shops	30 to 60
Entrance Hall	3 to 5	Photo & X-ray rooms	10 to 15
Foundries	30 to 60	Restaurants	6 to 10
Garages & Workshops	3 to 10	Schoolrooms	2 to 4
Gyms	6 to 12	Stores & Warehouses	3 to 6
Welding Shops	15 to 30	Toilets / Changerooms	10 to 15

\* Air Changes Per Hour



Mid Wall Split



Ducted Systems



Cassette



Under Ceiling

## MISSION STATEMENT

**TO PROVIDE OUTSTANDING VALUE-ADDED PRODUCTS AND SERVICES THAT MEET THE NEEDS OF OUR CUSTOMERS**

## VISION

**TO BE AN INDUSTRY LEADER IN EVAPORATIVE COOLING, REFRIGERATION AND AIRCONDITIONING**

## CORE VALUES

**INTEGRITY  
QUALITY  
IMPROVEMENT**

**Integrity  
Quality  
Improvement**

Service  
Excellence

In our quest for service excellence, our aim is to build long term relationships with all our customers so that we can be of on going service to them by anticipating future requirements or problems through consistent preventative maintenance. This significantly reduces costly and stressful breakdowns caused by poorly serviced machinery.

## What Some of our Customers Say

*"This is the best thing that I have ever put in my house (evaporative cooler) I don't know how I managed without it" Rip van Wyk (Kosmos)*

*"Crown Air is the best contractor that I have worked with on this project, they were on time, neat and tidy. I almost didn't know they were there" Chris Burgess (Pecanwood)*

*"Crown Air is the best subcontractor that I have ever worked with" Verna Nethercott (Sandton)*

*"It was an absolute pleasure doing business with Crown Air, neat efficient and reliable. They did the job on time and any problems were sorted out promptly" Billy Oosthuizen (Edenvale)*

**WWW.CROWNAIR.CO.ZA  
TEL 08611 CROWN**

# Airconditioning

For the environment that needs exact comfort or temperature control, Crown Air can offer you a solution that will give you the best value for money. Crown Air can design and supply you with an airconditioning system to meet the most demanding requirements. So whether you want to aircondition a single room, your whole house, your office or an entire building, Crown Air is the superior choice.

## Design Considerations

- Size of room
- Ceiling Insulation
- Amount of windows
- Orientation of the room
- Number of people in the room
- What they are doing
- Other heat sources such as lights or computers etc

**TEL 08611 CROWN WWW.CROWNAIR.CO.ZA**

# Evaporative Cooling

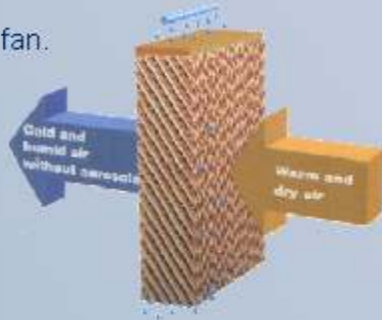


Modern evaporative cooling systems offer a healthy, natural and cost effective alternative to conventional refrigerative airconditioning. With running costs up to 90% cheaper than conventional airconditioners and no recycling of air, evaporative cooling is rapidly becoming the first choice for cooling homes, offices, factories & workplaces. You do not have to feel like you are in a fridge to be cool in summer



## HOW IT WORKS

Water is circulated by a pump and discharged on to the top of the cooling pads. This saturates the pads. Air is then drawn through the pads by a fan. As the air passes through the pads, it causes the water to evaporate, thus dropping the temperature. This cool air is then blown into the area to be cooled.



**COOLING PERFORMANCE**  
If you have a dry bulb temp of 31°C Relative humidity of 35% Then the wet bulb temp is approx. 20° c

The temperature out of the cooler will be about 21°C Depending on the heat load in the room the final room temperature should be between 22-25°C



Plenum



Ceiling Diffuser



Wall Grill



Domestic



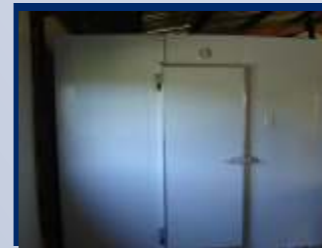
Commercial

## Simple Requirements Calculation

Calculate Volume of room (LengthxWidthxHeight)  
Multiply Volume by Air Changes per Hour (Recommended 35ACH)  
Divide by 3600 to get Cubic Meters per Second (CMS)  
Add all rooms together to get total CMS  
It is not necessary to include bathrooms & garages  
The total CMS will determine the size of machine(s) that you require

# Refrigeration

Passionate about "doing things properly" means that Crown Air will provide you with the right equipment for the job. Short cuts and "cutting corners" never pay off in the long run, especially for the end user. We at Crown Air always endeavor to "do it right first time", saving you the customer not only money but also costly down time and wasted product that was not kept cold enough. So whether you are looking for a cold room, freezer, drop temp or any other refrigerative device, Crown Air is the "coolest" choice



Cold Rooms / Freezers



Drop Temp Areas



Display Fridges



Package Units



Free Standing Units

**Design & Supply**



**Repairs & Maintenance**



**Installation**