Future proof your car park

Contemporary ventilation for multi-storey and underground car parks.

Green Ventilation

www.pacificventilation.com

Pacific Ventilation

Pacific Ventilation Complete CO Car Park Solution

Green Ventilation – The standard for efficient car park ventilation

With EC motors, the proportion of energy utilised effectively is higher, resulting in considerable energy savings compared with traditional AC motors.

Another notable feature of EC fans is their energy-saving potential at full load, primarily when speed controlled, i.e. at part load. When operating at part-load, the energy used is much lower than with an asynchronous motor of equivalent output. Reduced energy usage guarantees a drop in operating costs and a faster time to recover your investment.

CO Control System

Pacific Ventilation's Car Park Control System is suitable for multi-story and underground car parks. Our system is compatible with all global ancillary control products, including VFD's. Using a combination of modern fans (including EC fans) and simple to use intelligent controls, our control system meets all market requirements.

Features

- Fully compliant to AS1668.2 2012
- 24-hour volume purge
- Works with fans internal smoke detectors
- Audio and visual alarms for fans, sensors, and excessive CO
- Connects to fire panel and MSSB
- Records usage and conditions for 12 months
- Suitable for remote monitoring and diagnostics
- Configured to suit your car park.
- Controls up to:
  - 31 jet fans per zone
  - 3 supply fans per zone
  - 3 exhaust fans per zone
- Connects up to 31 CO sensors per zone
- Integrates with BMS
- CFD and commissioning support available

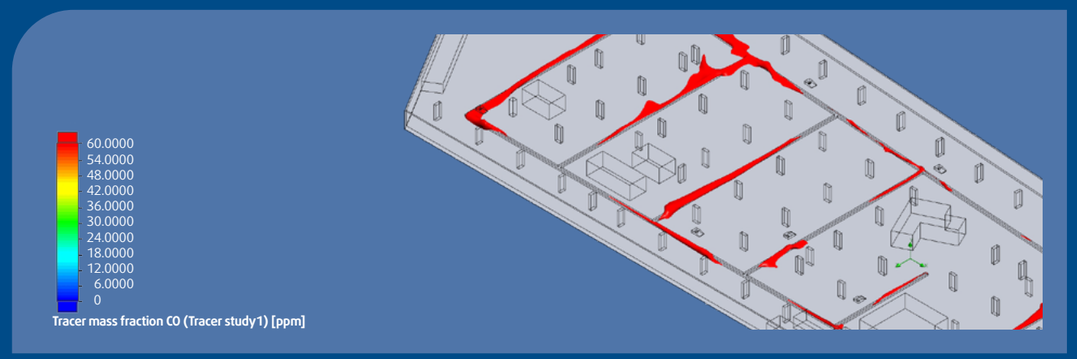
Computational Fluid Dynamics (CFD) Analysis – for project design

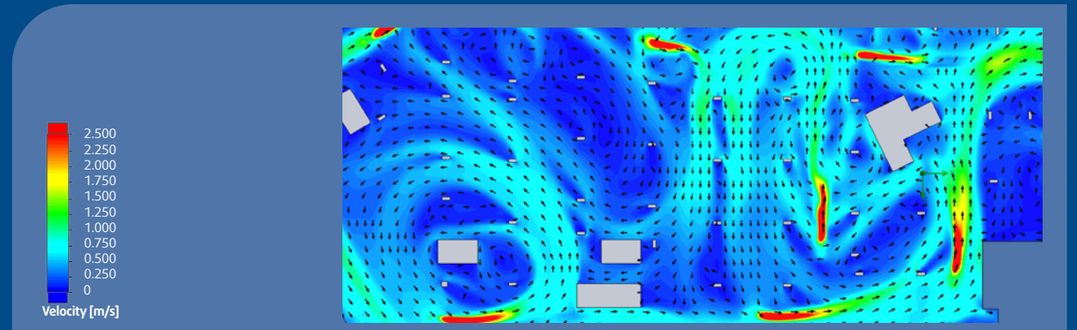
Pacific Ventilation offers a comprehensive CFD package to assist with project and compliance requirements. We provide an engineered solution deemed-to-satisfy the requirements for car park ventilation under AS1668.2, and National Constructions Code (NCC).

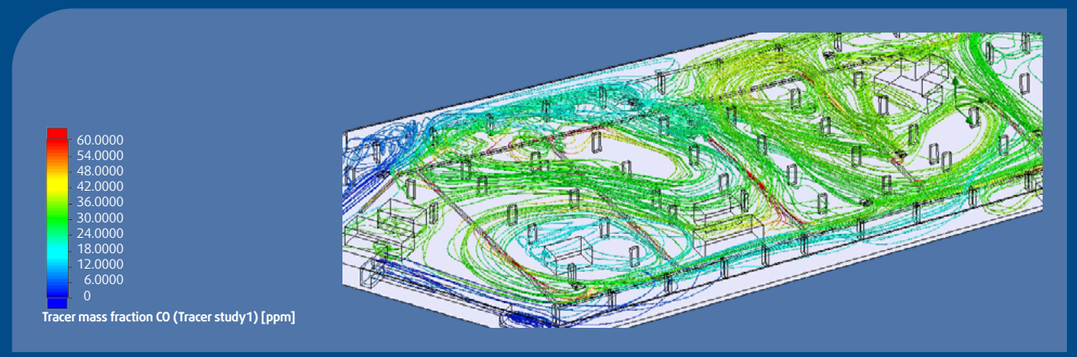
Our CFD package includes in-house computational fluid dynamic (CFD) analysis simulating airflow behaviour around obstructions and objects in a fully enclosed volume, i.e. car park. Our completed analysis successfully demonstrates our engineered solution and its performance satisfactorily to acceptable agency approvals. CFD modelling for all projects is supported locally in Australia by Pacific Ventilation engineers. Throughout the design process, we consult with you to ensure design process, layouts, and compliance are clear at all times.

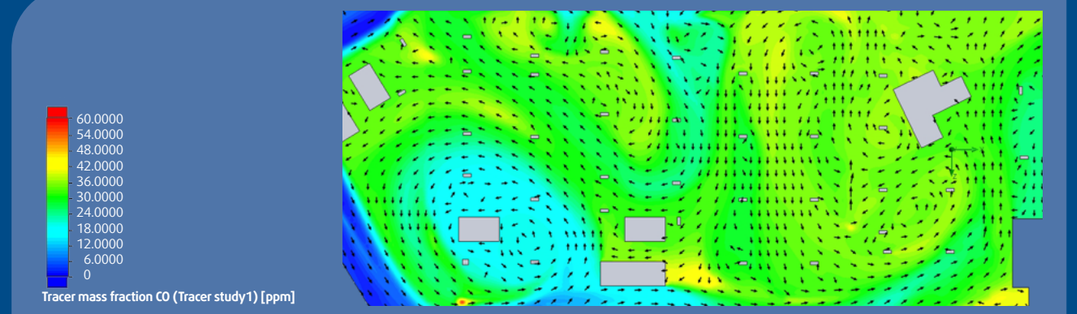
The following information is required to ensure we can model your space successfully:

- Mechanical drawings
- Architectural drawings
- Exhaust and supply airflow rates – provided by the consulting engineer
- Objective for modelling, i.e. acceptable CO level per Australian standards
- Car park usage factors as per AS1668.2, Section 4 for CO calculation
- Proposed jet fan models and control methodology









AX series supply and exhaust fans

Adjustable pitch axial flow direct drive fans with high efficiency impellers

Impellers

High efficiency aerofoil adjustable pitch impellers are available in various materials, including pressure die-cast aluminium and injection moulded glass reinforced polypropylene (GRP). Impellers are balanced to ISO1940 Grade G6.3. All hubs are pressure die-cast aluminium alloy.

Casing

Made from hot-dipped galvanised steel to AS1650 with roll-formed or welded inlet and outlet flanges.

Motors

- TEFC design
- Motor enclosure has IP54 protection standard with higher ratings available
- Motor windings incorporate class 'F' insulation; 'H' class is available
- Motor bearings are either sealed for life and maintenance-free or supplied with grease lines terminated outside the fan case

Quality

Pacific Ventilation is ISO 9001:2008 certified. We test every fan before leaving the factory. All AX fans are performance tested to ISO 5801:2007 for airflow, ISO 13347.3:2004 or AMCA 300 for sound, and certified to meet the requirements of AS4429:1999 when used as smoke spill fans.

Features

- Case diameters 315-2000 mm
- Airflow to 75,000 L/s
- Static pressure to 1,500 Pa
- Matching attenuators
- Installation ancillaries
- Speed control range
- Heavy gauge galvanised steel
- High-temperature options
- Direct drive
- Dual fan – contra-rotating
- Dual fan – run & standby
- Flameproof options
- Energy-efficient smart control options

Comprehensive information for selecting the most suitable fan for your car park application is available via our fansSelect selection software.

www.pacificventilation.com/downloads

Centrifugal supply & exhaust fans

SWSI & DWDI centrifugal fans for car parks. Bespoke sized industrial blowers.

Pacific Ventilation's range of centrifugal fans offers engineers the flexibility to choose the most suitable sizes and configurations to suit any site condition. With over 2000 variations of diameter, width and length type, specifications are virtually tailor-made to individual needs. Additional features and ancillaries are available on request.

Impellers

Carbon steel and stainless steel impellers.

Casing

Made from welded mild steel, using semi-universal construction, allows the discharge angle to be modified to suit a wide variety of car park design requirements.

Motors

TEFC motors, compliant with the Australian MEPS standard

Ancillaries

- Flexible inlet and outlet connections
- Outlet dampers
- Inlet/outlet guard
- Inspection door
- Base frame
- Anti-vibration mountings
- Inlet/outlet mating flanges

Quality

Fully welded steel construction with coatings to suit the application, the fans have AMCA guaranteed performance and are manufactured in a Systemair AB facility.

Features

- Drive guard and base frame included as standard
- Inspection hatches included as standard
- Fully welded, mild steel cases
- Various coatings available to suit the conditions
- Sizes and features of all car park centrifugal fans are built to spec and can be altered as needed

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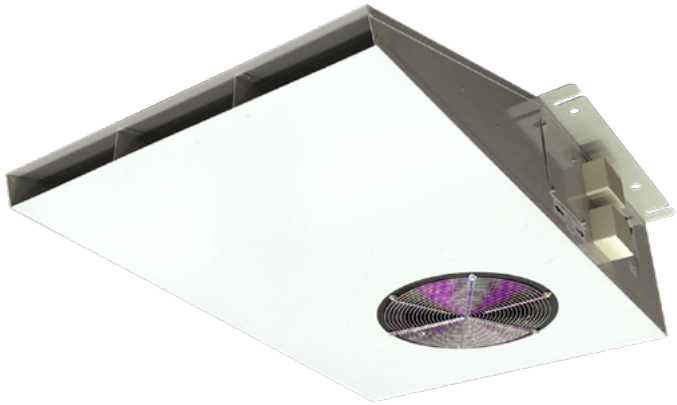
JVC – EC jet fans



The efficient, silent, and low profile option.

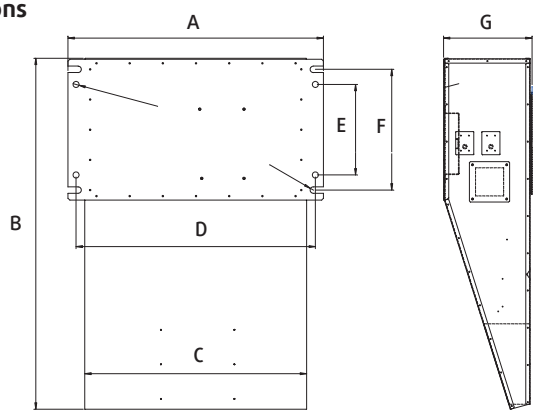
The JVC is an advanced EC jet impulse fan based on the technically superior ebm-papst RadiCal backward curved centrifugal impeller. The centrifugal wheel design delivers exceptional air efficiency. The low profile design is particularly useful where head clearances are restricted.

The fans incorporate high efficiency permanent magnet EC motors with onboard speed control and intelligent interface capability with BMS (building management systems) or optional CO sensors.

Features

- Cases formed from corrosion-resistant galvanised sheet steel
- Powder coat finish
- Input for sensor 0-10 V or 4-20 mA External 24 V input (programming)
- Integrated PID controller
- RS485 MODBUS RTU compatible
- Soft start
- Control input 0-10 VDC/PWM
- Over-temperature protected electronics / motor
- No expensive, bulky, complex duct systems – ideal for renovations.
- Unmatched quietness

Dimensions



Fan size	A	B	C	D	E	F	G
JVC 25	1070	1445	900	990	400	600	343
JVC 50	1270	1744	1103	1190	450	600	440

Performance

Fan model	Thrust	N Motor k/W	Amps	Air Speed m/s	Airflow m³/h	RPM	kg
JVC 25	50	0.97	1.7	25	5,800	1550	85
JVC 50	90	2.90	4.43	28	11,000	1750	155

Sound

dB(A) @ 3m	Sound Power Level dB							
	63	125	250	500	1K	2K	4K	8K
52	72	75	73	70	66	66	60	55
55	65	77	75	73	71	68	65	59

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We are the safe choice.

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