

Aldes ME Flash

N°21 - April, 2011

Technical Information

One application, one solution, one Aldes fan







→ Which fan for which application?

Ventilation is an essential requirement for everyone and a must for maintaining indoor air quality. Entire building shall be ventilated in order to bring fresh air for a daily comfort (Aldes ME Flash n°16 of January, 2011*)

* Any Aldes ME Flash is available on www.aldes.ae

Each part of a building can be proned to apparition and development of humidity, pollution of the indoor air with health issues, which could consequently lead to the decrease of the staff's productivity in the office.

As a global manufacturer and a European expert in ventilation, Aldes always seeks for the best ventilation solution, fulfilling the customer needs. With an engineering approach, Aldes has designed a complete range of fans, well adapted in terms of installation and performance for an optimal on-site integration.

Aldes doesn't only manufacture products, Aldes also supports customers in each stage of their projects, providing advices, selection tools, trainings and technical support.

→ Which kind of fan to select?

At first step, it is essential to define the type of fans:

Axial Fans

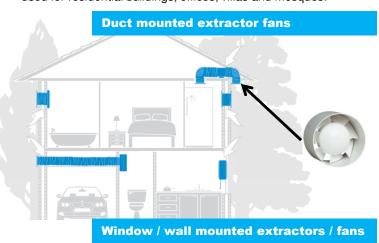
Axial fans discharge air parallel to the axis of the impeller rotation. As a general rule, these fans are preferred for high volume, low pressure and non-ducted systems.

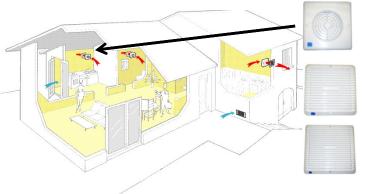
Centrifugal Fans

Centrifugal fans discharge air perpendicular to the axis of the impeller rotation. As a general rule, these fans are preferred for higher pressure ducted systems.

Intermittent extraction

Aldes proposes a range of extractor fans for bathroom, toilet, shower and kitchen applications to meet low airflow (maximum: 550m³/h), with forced and intermittent air exhaust requirements, where both acoustic and energy consumption are not predominant key factors. Duct mounted (Integrated) or window/wall mounted (XW100A, XW150A, XW200), with auto-shutter or timer, these fans are mainly used for residential buildings, offices, villas and mosques.





aldes air&people

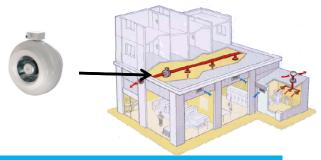
Aldes ME Flash

Technical Premises & Big Volumes Areas

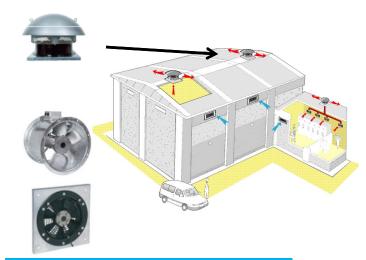
Aldes has developed a specific and comprehensive range of fans for technical premises (changing and storage rooms, attics...) and big volume areas (factory, warehouse), where there is no special need for comfort.

Depending on the fan location. Aldes in-line duct-mounted fans (VC), roof-mounted fans (THELIA) and axial wallmounted fans (HELIONE, HELICA) allow a great versatility in design configurations and requirements with a minimum comfort for small, medium and big volume technical areas.

In-line duct fans



Roof fans

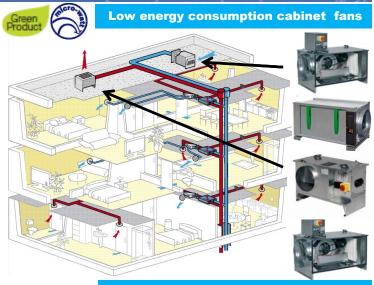


Tube axial fans

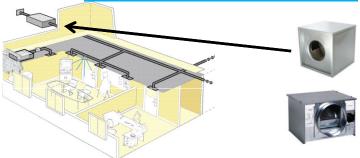
Constant pressure and demand-controlled ventilation

Aldes delivers a wide range of efficient cabinet fan solutions for fixed airflow (self-balanced ventilation) or modulated airflow (demand-controlled ventilation) to ensure the best possible comfort and the lowest energy consumption. The micro-watt range of fans (VIK, inoVEC, C.VEC, T.VEC GII) allows a constant pressure system in multizone areas with variable frequency drive or electronically commutated motor, and pressure transducer controls (Aldes ME Flash n°19 of March, 2011).

This fully packaged solution is ideal for hotels, apartments, offices and student home accommodation. In commercial buildings, this range is also considered as the best solution for demand-controlled ventilation (CO2 detectors or optical sensors) in offices or schools.



Insulated cabinet fans

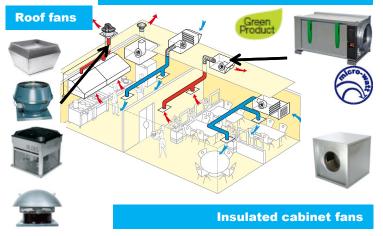


Professional kitchen

Aldes offers a large range of kitchen fan solutions to suit all design requirements. To maintain a constant airflow in the ductwork despite a potential cookerhood filter clogging, Aldes offers a range of supply/exhaust fans, roof or duct mounted, with backward-curved blades allowing more pressure loss variations (VELONE and VDA roof fans, VEKITA SILENCE-O cabinet fans).

Vekita Silence-O is a typical kitchen cabinet fan with motor outside airstream, bottom grease pan, double skin insulation, aluminum impeller, and variable speed control. For short ductwork, THELIA roof fan with forward-curved blades represents also an ideal solution.

Low energy consumption cabinet fans



aldes air&people

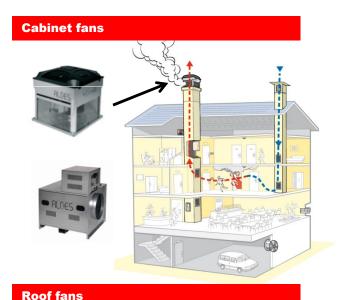
Aldes ME Flash

Smoke extraction inside buildings

As a French specialist and a European leader in smoke extraction, Aldes has developed a comprehensive know-how along with a full range of smoke exhaust fans, up to 32000m3/h. These fans extract in the early stages the biggest part of smoke and combustion gases, to keep the escape and access routes free from smoke and gases.

A special focus has to be made for hotels, hospitals, schools and care homes as the occupants might have limited mobility or the building is not familiar to them. These public buildings are requiring the highest level of safety with efficient compartmentation and smoke extraction.

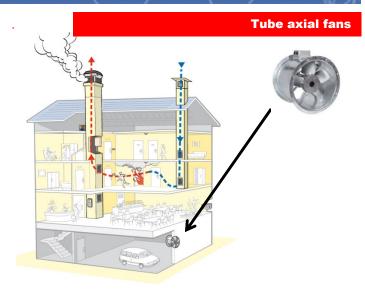
VELONE roof fans or **CYCLONE** cabinet fans are designed and tested as per EN 12101-3 with a fire resistance classification of 400 °C for 2 hours. Both range hold **Civil Defence Approval**. These two ranges are complementary and offer a large choice, according to designer requirements: forward wheel and belt-driven fans for CYCLONE range, and backward wheel and direct-driven fans for VELONE range.



<u>Car parks ventilation, smoke extraction & staircase</u> pressurisation

To complement conventional smoke extraction, Aldes offers a comprehensive range of high temperature axial fans up to 72000m3/h.

HELIONE axial fans operate perfectly for fresh air supply, air exhaust and occasional smoke exhaust. These fans are ideal for car parks and staircase, where high airflows and low pressures are required, and where acoustic requirements are not predominant. HELIONE range is designed and tested as per EN 12101-3 with a fire resistance classification of 200 ⁴400 ℃ for 2 hours. It holds Civil Defence Approval. HELIONE fans can be wall or duct mounted with numerous accessories, 1 or 2 speeds, and 50/60Hz versions available.



Aldes has always focused to bring a **high level of expertise** in fire protection, ventilation and air distribution systems, to support our clients and to act as a **reliable supplier fully committed to deliver quality and efficient solutions** from fans, sound attenuators, VCDs, fire dampers... to grilles and diffusers.

Consequently, Aldes Middle East daily works to provide the best support and solutions to the GCC market, by enhancing Safety, Comfort & Indoor Air Quality in any project.









You need more information on ventilation? You want to discover our documentations?

Visit our website: www.aldes.ae or Ask for our General Catalogue 2011