Life inspired.



# Falmec air solutions.

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Choosing the right hood is a fundamental step for a correct design of a kitchen that satisfies every need and aesthetic taste.

The study of the most suitable solution necessarily involves a preliminary assessment of the technical and aesthetic constraints of the kitchen where the hood will be inserted.

Falmec, thanks to its expertise in the field of extraction, today offers multiple technological and aesthetic proposals, suitable to every style and need, always proposing the best option.

Let yourself be inspired by the countless Falmec air solutions!

# Types of installation.

# Wall.

The wall hood is traditionally the most used option, perfect for optimal fumes extraction, if chosen and installed correctly. The wall hood combines functionality and design, often representing a decorative element of separation and customization of the kitchen.

# Built-in.

Built-in hoods, integrated into the wall unit, grant linearity and optimization of the spaces in the kitchen; they are therefore recommended in environments with an essential design or where there is the need to maximize the space on the wall.

# Corner.

Corner hoods are the perfect choice in compositions where the cooking is inserted in one of the corners of the kitchen.

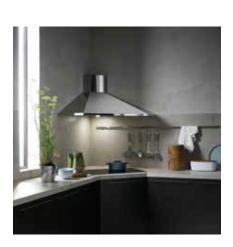
These hoods are traditionally characterized by linear and geometric shapes, easily inserted into different contexts.











# Island.

Kitchen is more and more a convivial space, central to the home project, integrating with the living environment. Island hoods become fundamental elements from a functional and design point of view. It performs its function of suction and lighting, adding value and personality to the kitchen itself. Falmec offers a wide choice of island hoods, with unique solutions, in exhausting or recirculating versions, to always guarantee the best air.

# Suspended.

Falmec suspension hoods are distinguished by their unique design, featuring high-quality finishes and materials as well as ambient light to create a unique atmosphere in the kitchen. With no need for pipes or flues, suspension hoods allow complete freedom of installation and significant energy saving.

Equipped with innovative filter technology, Falmec filter solutions guarantee excellent results when it comes to absorbing odours and improving air quality at home.

# Ceiling.

Falmec ceiling hoods are designed to fit perfectly into any living environment. Thanks to their clean and minimal shapes and the discreet visual impact, they are suitable for open spaces where the kitchen area integrates with the living space.

These solutions collect the cooking fumes that rise naturally and are then captured directly in the ceiling. The hood can be integrated into the false ceiling or installed directly in the ceiling, in recirculating mode.

# Integrated cooking systems.

Perfect for minimalist designs where absence of volume is key, Falmec integrated cooking systems meet the most demanding design requirements, offering extraction efficiency, functionality and ease of installation, both in extraction and recirculation mode, thanks to Carbon. Zeo technology.

These systems feature the intelligent integration of the extractor element within the cooking area, offering two functions in a single product: fumes are collected, captured and filtered at their source.

Falmec models are equipped with an extraction system with an openable flap to enhance aerodynamic air flow, at the same time preserving clean lines.

# Downdraft.

The hood is integrated into the worktop, and emerges for use by means of a motorised system. It extracts cooking fumes and vapours near to their source, at the same time lighting the worktop. This system provides great flexibility and versatility when it comes to installation, including different motor options, which can be installed in the hood or in a remote position.

To achieve the best results from this type of hood, we advise that it is used with panoramic in-line hobs.



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# Choosing the right hood.

Technical notes.

# Choosing the right hood.

The study of the most suitable solution necessarily involves a preliminary assessment of the technical and aesthetic constraints of the kitchen where it will be inserted, taking into consideration multiple variables.

# Distance from cooking hob.

It is suggested to respect the minimum or maximum distance between the hood and the hob, indicated in the catalog for each model.

# Air Flow/Suction power.

An important point to check is the required airflow that normally depends on the size of the room and also on the frequency of use of the hood.

The correct airflow is obtained by multiplying the room volume by ten, which is the number of air changes recommended every hour. For example, for a 4x4 m kitchen with a height of 2.7 m, the following calculation should be applied: (4 x  $4 \times 2.7$ ) x 10 = 432 m<sup>3</sup>/h. Therefore any hood with a suction capacity of 432 m<sup>3</sup>/h will provide sufficient ventilation.

## Dimensions.

# Perimeter suction.

Fumes are conveyed along the perimeter of the suction area, allowing a higher speed of the air flow and an effective performance. Falmec hoods with perimetral suction are equipped with a steel panel with a sound-absorbing material that reduces noise. This panel, easy to remove, also helps the cleaning and maintenance operations.

# Pipes and ducting.

**Another fundamental aspect** concerns a correct installation and the use of appropriate pipes for the fumes ducting.

Errors or carelessness in the installation can result in a significant drop in performance and an increase in the noise level of the hood.

# Airflow friction.

The engine generates an airflow that passes through a pipe, whose walls cause friction, leading to a decrease in performance. For a correct installation and optimal functioning, it is advisable to: use rigid pipes with smooth walls and a diameter not smaller than the one indicated:

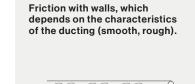
avoid too long piping (longer than 7 m) and reduce the number of bends to a minimum.

# Motor position.

Regardless of the position of the motor (internal, under-roof remote or external remote), the evacuated air flow will always be the same, depending on the friction that it undergoes along the ducting route. There will be a difference in pressure at the inlet and outlet of the piping, but the final result will always be the same. Therefore the installation of a

remote motor (under-roof or external) does not involve any loss of performance.

To be really effective, the suction surface must cover at least the length of the hob. However, a model that is longer than the surface of the hob is recommended.



Drawing of a circular pipe through which airflow is circulating

# Friction due to curve in the ducting.



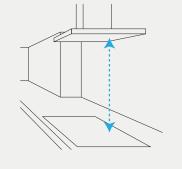
Drawing of a 90° circular bend through which airflow is circulating.

# Friction due to a change in the section of the ducting (difference in diameter).

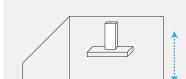


Drawing of a constriction in the pipe through which airflow is circulating.

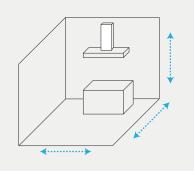
# Distance from cooking top,



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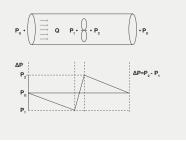


Airflow / air displacement.



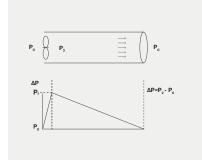


# Behaviour of airflow with a remote under-roof motor installed in intermediate position.

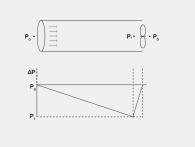


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# Behaviour of airflow with onboard motor.



# Behaviour of airflow with the motor at the end of the



# Recirculation or extraction?

# Recirculation or extraction?

Each of the two installation options offers features that should be considered when choosing your hood.

# **Extracting Hoods.**

These hoods use a fan to capture the fumes, extract them through a metal grease filter and physically take them out, together with smells and moisture.

# Advantages:

- high airflow;
- humidity is conveyed to the outside;
- high efficiency even at low speeds;
- reduced noise (if the hood has been installed correctly);
- no additional cost for activated charcoal filters (and their periodic replacement).

# Disadvantages:

- more complex and not always optimal installation;
- energy waste due to the extraction of the air to the outside.

# Extraction hood. The air is channelled through piping to a flue, and from there out of your home.

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# Recirculating hoods.

These hoods use a fan to capture the fumes, drive them through a grease filter and lead them towards an additional filtering area dedicated to the elimination of odors. The clean air is then conveyed back into the room. Recirculating hoods normally work in multiple filter cycles, requiring more time.

It is therefore advisable to leave the hood switched on longer (compared to extraction hoods) once the cooking operations have been completed.

# Advantages:

- easy installation and flexibility in the choice of the hood;
- no additional structural work;
- significant energy savings due to the maintenance of energy in the home environment (waste is avoided).

Disadvantages (traditional filtration):

- humidity deriving from the cooking vapors is not eliminated;
- traditional charcoal filters require frequent replacement;
- generally filtering solutions are significantly noisier (phenomenon due to the non-channeled air flow outlet);
- suction flow rate is reduced by the use of traditional charcoal filters which partially obstruct the flow of air.

# Filtering Innovation.

Sensitivity and attention to the quality of the air in domestic environments has led Falmec to invest in research and development of innovative solutions in filtration and air treatment.

These largely solve the contraindications of traditional recirculating solutions, thus representing an effective and real alternative to extraction hoods.



Carbon.Zeo:



Filter hoods.
The air passes through an active carbon filter to be purified, and is then reintroduced into the room.