

Purified Kitchens



The definitive air recirculation system is a plasma smokes, grease, pollen, viruses, bacteria a



Easy installation:

Plasma Frecan filters have been developed to be installed in any type of hood.

Placing and installing the plasma filters is very easy. In the case of the two cylindrical filters C1000 & C600, the plasma filter should be placed on the hood motor outlet. In the case of the flat filters F800 or the C600 Box, they can be installed inline using pipes a maximum of 3 meters away from the hood's motor outlet.

Fast and easy installation (plug and play).

It can be adapted to existing extractor hoods.

Light weight and compact dimensions.

It allows both horizontal and vertical installation.

* The lifetime of the filters may vary depending on the type of cooking and the proper use of the filter.

15
YEARS
LIFETIME*

5
YEARS
WARRANTY

100
%
SELF-CLEANING

14
%
NOISE
REDUCTION



filter of Freca that eliminates unpleasant odors, and allergens at home avoiding energy loss.



Zero barriers

In addition to the many advantages of the Plasma Freca filter, it also allows all kind of possibilities for your kitchen planning. The discharge piping will no longer be a limiting factor for your design plans. You will now have complete freedom to do what you always wanted.



Energy saving

The Freca Plasma filter is an energy saving solution. As it is an air recirculation system, it does not expel air to the outside, thus both heating and air conditioning won't be wasted to the exterior. On top of this, the Freca Plasma filter has a stand-by consumption of only 0.5 watts and an annual consumption of only 3.5 Kw.



Self-cleaning

The Plasma filter is regenerated automatically, so it does not require any maintenance or replacement whatsoever unlike the traditional carbon filters. This is a long-term cost saving, as well as a guaranteed circular economy responsible with the environment.

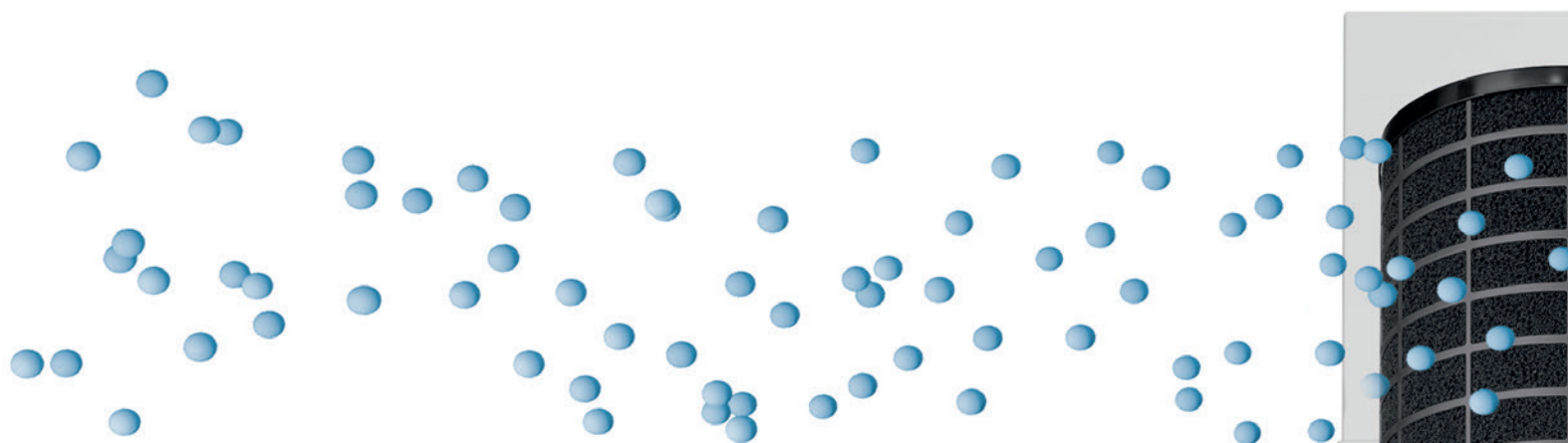


14% noise reduction*

Thanks to its conception, the Freca Plasma filter acts as a silencer, reducing noise up to 14%. Likewise, its installation system simplifies the ducting, reducing the noise generated by the air friction, especially in those long and intricate pipes.

* Laboratory Test comparing results of a Fine 90 VF700 hood at 3rd speed using a traditional 90133 carbon filter versus a Fine 90 VF700 hood at 3rd Speed using a C1000 Plasma (4 decibels less with plasma recirculation).

96% destruction of odors, smoke,



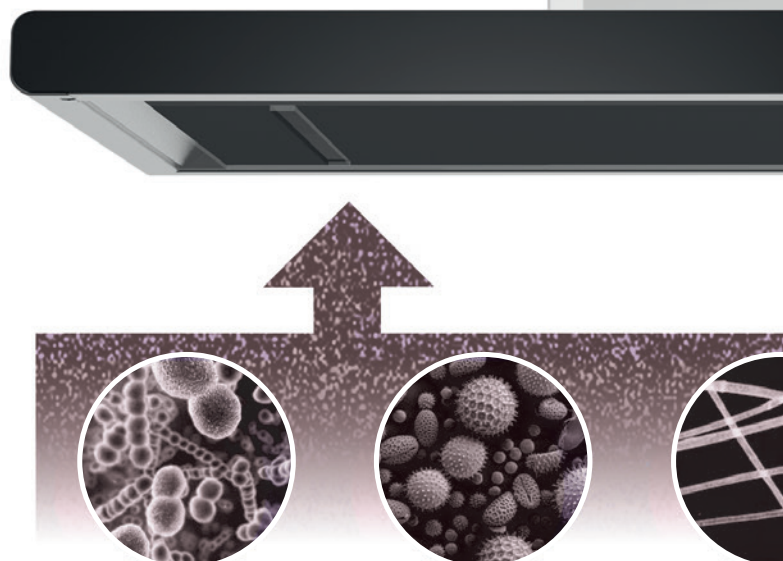
Negative ionization

Elements such as the sea, springs or waterfalls are a great source of negative ionization. The Freca Plasma filter also generates negative oxygen ions, providing a refreshing effect that improves concentration of both soul and body. It contributes to an easy relaxation, eliminate stress and anxiety, helps improve the memory, clear the mind and facilitates digestive and respiratory processes among many other benefits. The negative ions reduce the tenor of the stress hormone.

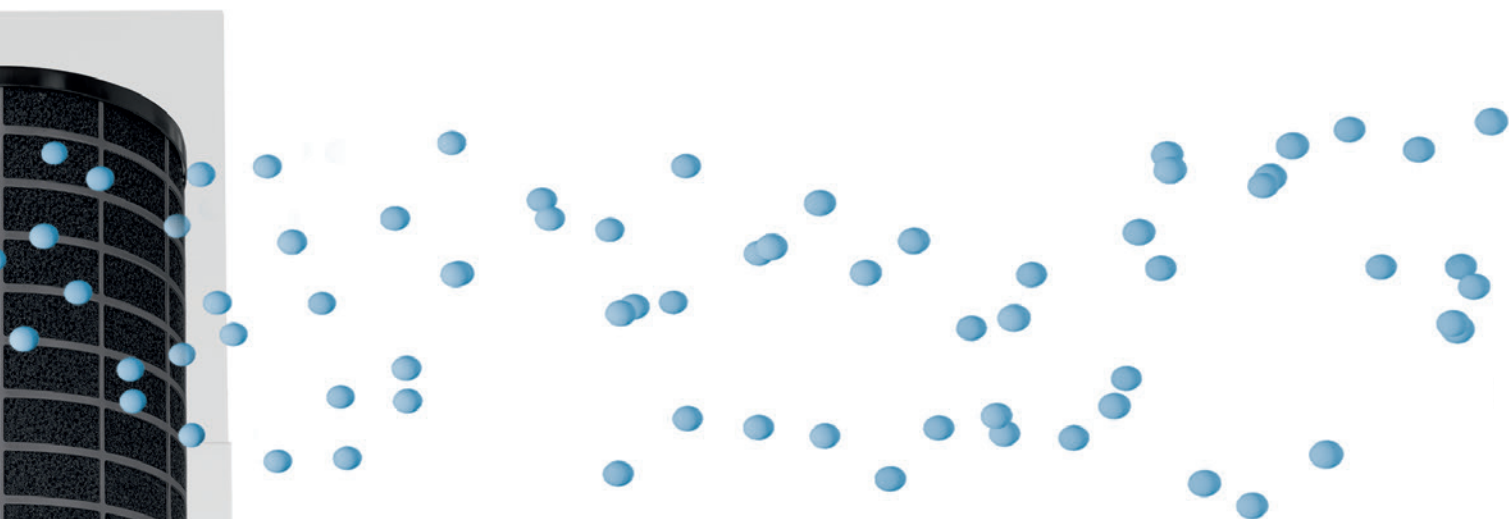
With the Freca Plasma filter, unpleasant odors from cooking, tobacco smoke or the smell of animals become a matter of the past. Freca Plasma technology decomposes the odor particles immediately ensuring that the kitchen stays fresh.

Anti-bacteria

In spaces where people live, such as living rooms, bedrooms, offices and waiting rooms, the air contains all kinds of harmful substances such as bacteria, mold and viruses. The recirculation of air with the Freca Plasma filter separates and oxidizes germs and odors at the molecular level, producing oxygen, low humidity and CO₂. It simply generates pure air.



allergens and polluting substances.

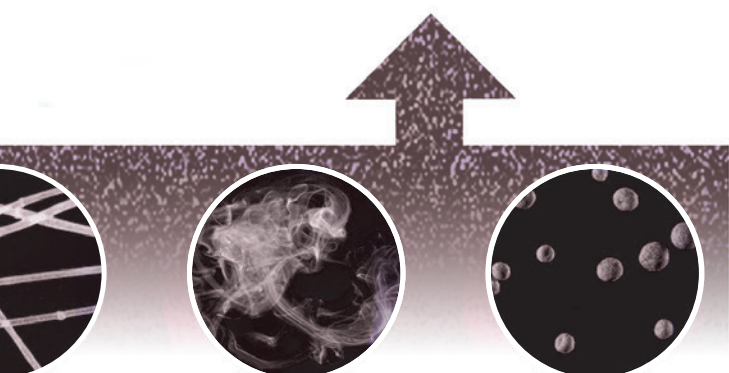


Anti-allergens

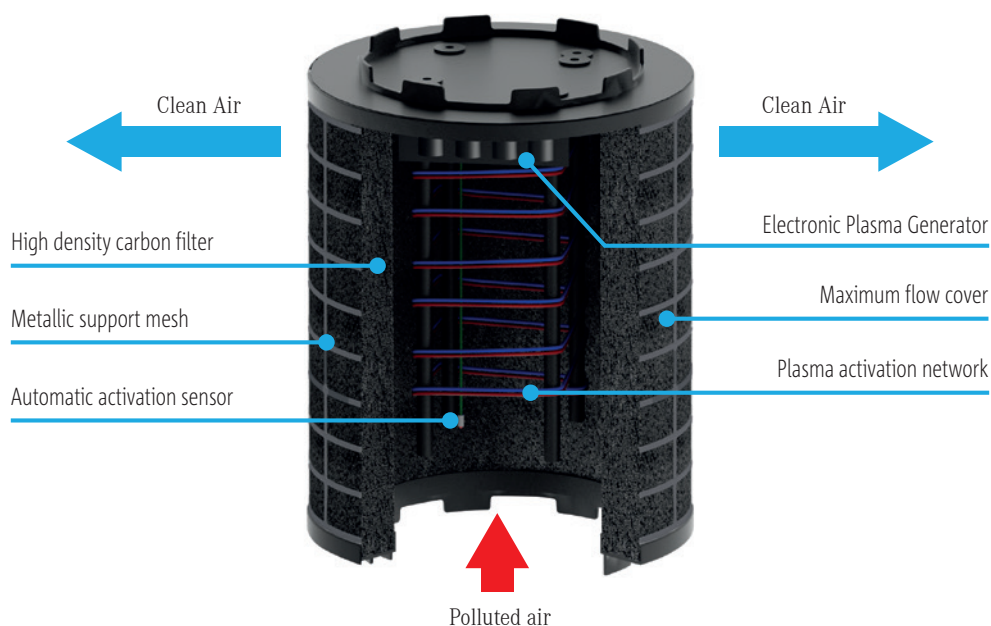
Although invisible to the naked eye, all spaces contain pollen, dust and other allergens. These allergens are not particularly harmful to humans, except when you have an allergy to them. The Plasma Freca filter ensures the elimination of these substances from the air (dust mites, pollen, dandruff or animal hair).

The technology:

Smoke from cooking is pre-filtered by the hood grease filters, which retains grease and other types of heavy air pollutants. The air flow is then introduced into the Plasma filter and is detected by a sensor that automatically activates or deactivates the filter. This flow of air polluted by fats, pollen, odors, bacteria, is filtered through the technology of plasma and activated carbon and is converted by a natural reaction into clean air and CO₂. The clean and air (recirculated) is reintroduced back into the kitchen.



Plasma is an electrical process.

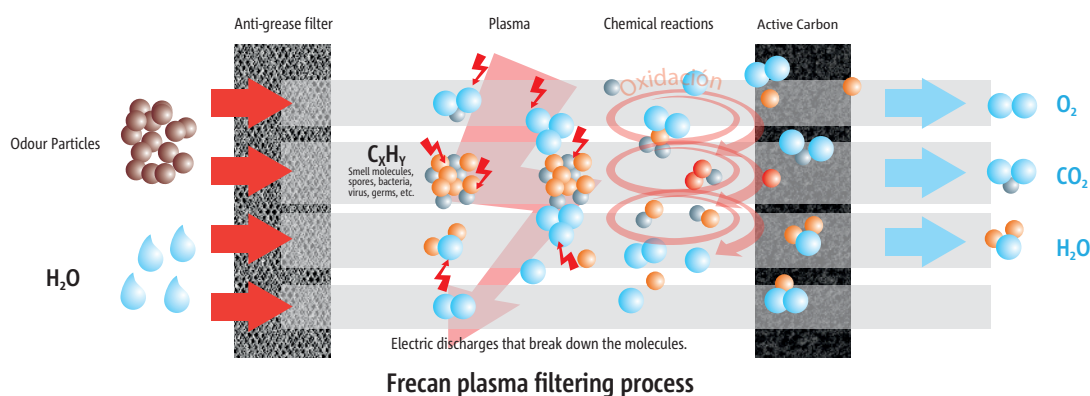


Our plasma filters host an electronic CPU inside the power supply that generates a high voltage field with very little energy.

It is an electric, safe and controlled process that also reduces the cost of electricity by its level of consumption (3.5 Kw per year), as well as to avoid the loss of energy compared to a hood with external discharge.

The air is filtered through the anti-grease filter in which fats and other heavy contaminants adhere. From there the motor of the hood pushes them towards the plasma filter, which detects the air flow and activates automatically. It starts then producing a series of plasma discharges depending on the detected air flow. These plasma discharges modify the particles at the molecular level generating a chemical reaction that literally decomposes the odor molecules, pollen and other contaminants; and eliminates them. In addition, the high content of active carbon retains and ensures the absolute elimination of any particle, transforming it into oxygen, CO₂ and a small part of moisture.

The plasma generates this chemical reaction while the hood is in continuous operation. Thus, the pores of the active carbon filter remain always clean and free of polluting materials, allowing the use of the filter for much longer without any maintenance whatsoever.



A Safe process / A safe filter for health:

The concentration of ozone outside the plasma reaction device is zero.

The electrodes have a very long life showing unbeatable performance levels at domestic cooker hoods.

The carbon filter regenerates in each filtering process.

All our plasma filters are approved by VDE.



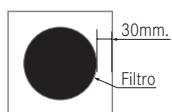
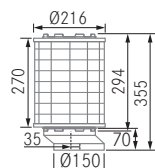
Freca Plasma Filter - Purified Kitchens

FRECAN

Cylindrical plasma 1000m³/h

Reference: 90371

Maximum 1000 m³/h



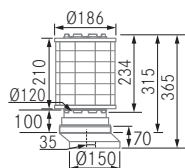
Tubo decorativo/cajeado

The cylindrical Plasma filters extract air around its perimeter reducing friction and pressure. Thus, it is recommended to leave a minimum of 30 mm between the filter and the decorative chimney to guarantee a good air circulation all around the plasma filters.

Cylindrical plasma 600m³/h

Reference: 90372

Maximum 600 m³/h



Plasma 600m³/h + Box

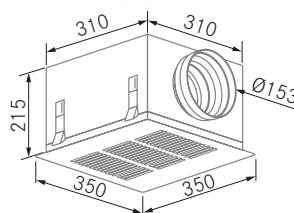
Reference: 90374

Maximum 600 m³/h

Cut Out dimensions: 320 x 320 mm

Grid white color.

Dissociable maximum 3 meters.

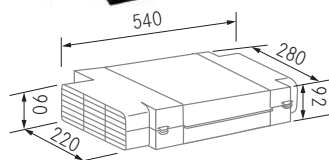


Plasma Flat 800m³/h

Reference: 90373

Maximum 800 m³/h

Disociable Maximum 3 metros.

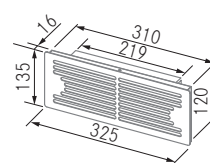


Grid for false ceilings

Reference: 90375

Connection 220 x 90 – Cut out 313 x 123

White grid.

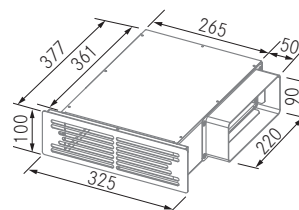


Grid for plinth

Reference: 90376

220 x 90 rear or side connection.

Stainless steel grid.

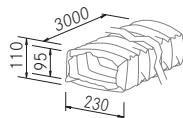


Flexible flat ducting 3m.

Reference

90346

White

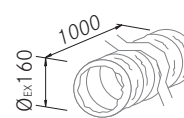


Flexible ducting 1 m. Ø150 PVC

Reference

90347

White

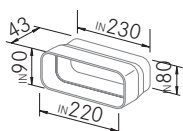


Connector adapter iTube to Naber

Reference

90348

White

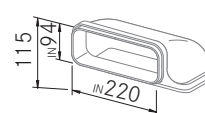


90° vertical flat bend ducting.

Reference

90340

White



Fire resistant tape (10 meters)

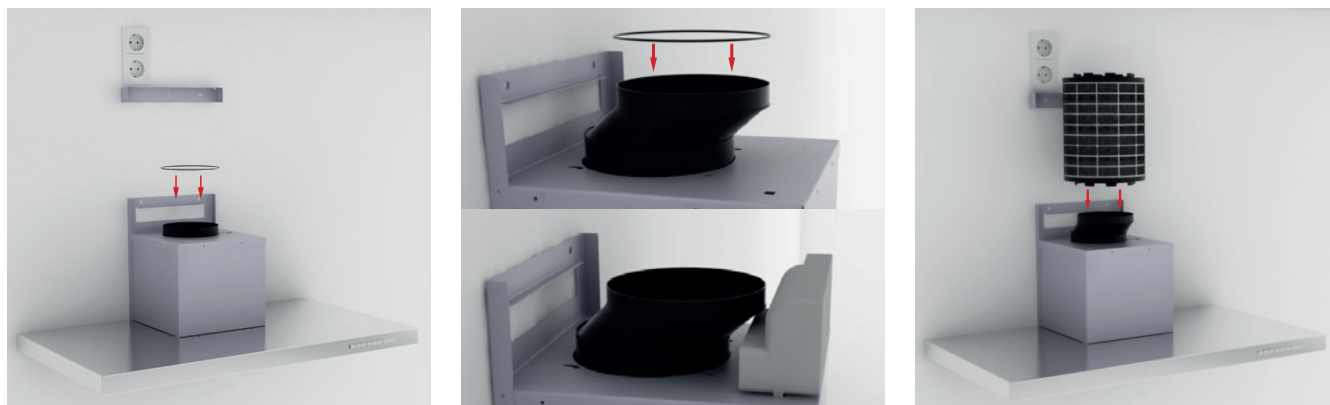
Reference

90349

White



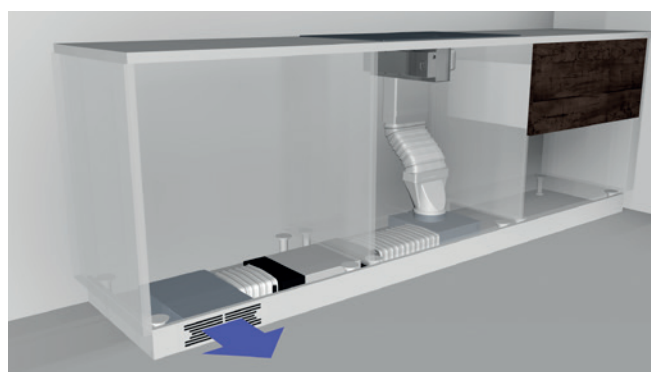
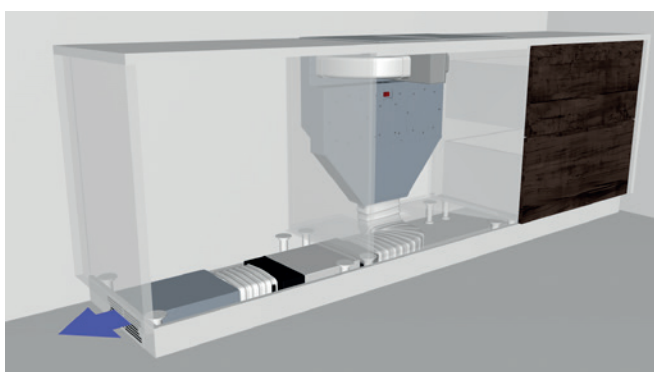
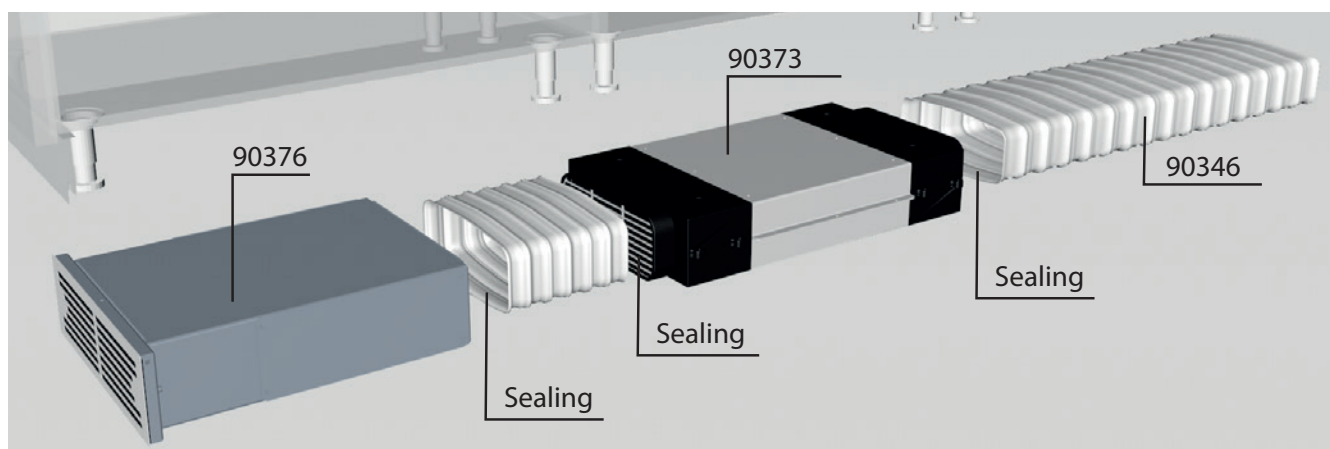
Example of installation of the C-600 and C1000 plasma filter for built in, wall and island hoods.



Recommendations: in the case of wall and island hoods, apart from making sure that the decorative chimney have the corresponding air grid, it is advisable to leave a small space between the ceiling and the decorative chimney to facilitate the correct circulation of the air. In built in hoods, special attention shall be paid to the dimension ducting inside the cabinet: a minimum distance of 30 mm all around the perimeter of the filter shall be ensured, so that the plasma filter can make its job. Likewise, the cabinet shall not reach the ceiling, and if it does, a grid must be installed for air circulation.

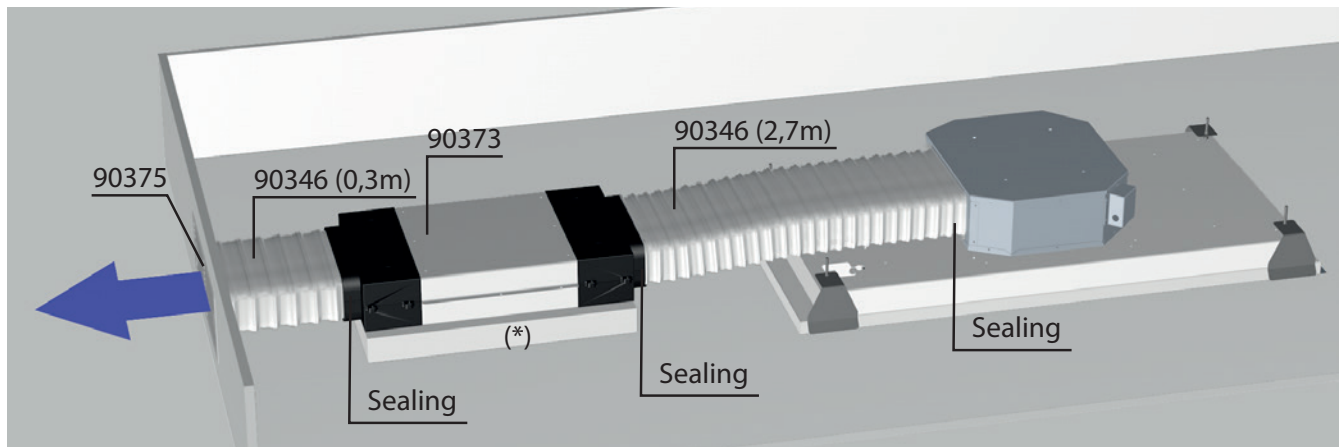
IMPORTANT: Do not install check valves on the motor outlet. Verify if they come already installed on the motor. They must be removed before placing the Plasma filter.

Example of installation of a plasma filter F800 with Plinth R-Box.

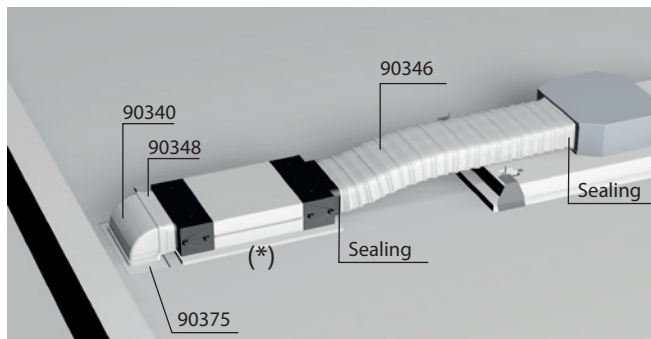


Recommendations: For an optimal operation, it is advisable to place the filter as far as possible from the hood, without exceeding 3m. Place the grid in an area away from people's working area to avoid bothering people with recirculated air on their feet.

Example of installation of the plasma filter F800 + Ceiling R-Box

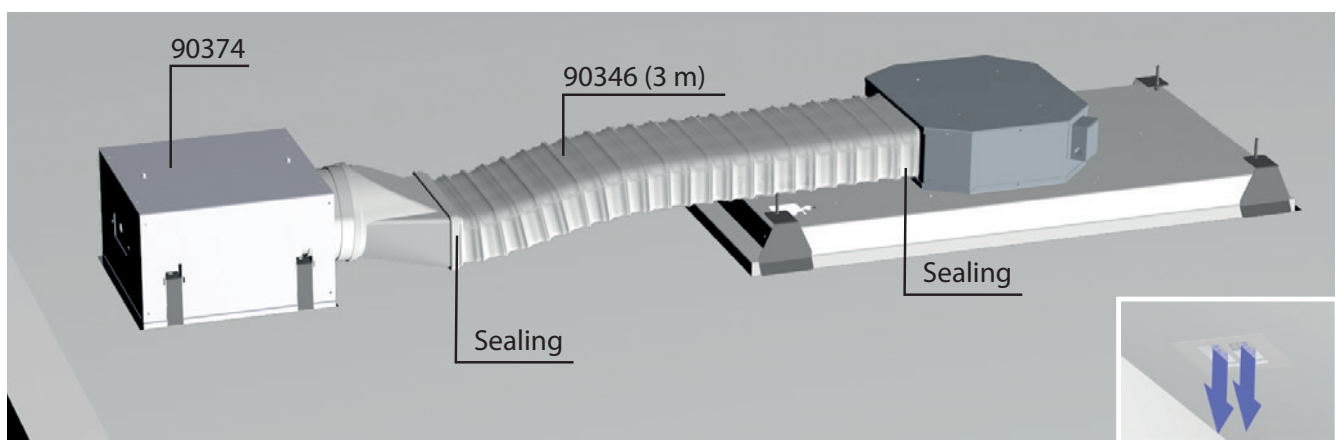


* Depending on the thickness of the false ceiling and the location of the grid, it might be necessary to use the F800 filter.
The use of a soft material that absorbs possible vibrations is recommended.



IMPORTANT: It is necessary to leave a hatch on the ceiling to access the filter and to avoid having to dismantle the hood in case of servicing.

Example of installation of the C600 + Box-R on a false ceiling.



General recommendations: For an optimal operation, it is advisable to place the filter as far as possible from the hood, without exceeding 3m. Thus, the air extracted by the hood reaches the filter at a lower speed increasing the filtration ratio considerably. For this same reason, it is recommended to use low extraction speeds when having a recirculation system: the more time the air stays inside the filter, the higher will be the filtering and purification ratio. In recirculation systems, more suction power does not imply greater air cleaning or purification, but on the contrary, it implies speeding up the number of cycles / renewals inefficiently. The intentional use of low speeds will ensure the best filtering standards. Operating at a second speed (on average 350-400m³/h) will bring the best results.

Box - R with ceramic cubes Helsa (Dissociated Recirculation)

Inspired by nature



The dissociated recirculation - Box R allocates 9 to 10 Helsa charcoal cubes creating a system that enables up to 4000 parallel flow channels, capturing grease and odours very effectively. By separating the air in multitude of channels, this system also acts like silencer reducing the noise of the air flow.

The Box R system is designed with a stainless steel grid lacquered in white RAL 9003. This grid is magnetized, allowing a flush-mounted installation. With the Box R, it is provided a handle to remove the grid and access the Helsa cubes.

- Low noise generation.
- Excellent odour reduction.
- Easy operating, easy to clean, low maintenance cost.
- Excellent energy efficiency.

The biggest advantage of coal cubes is the relationship between its filtering capacity, efficiency and low pressure drop. The result is a high-performance filter with low energy consumption, low noise production, long lifetime, etc.

Oven regeneration: Between 150-180°C for roughly 1 - 2 hours.

Durability of the filters: A small memory effect is detected with each regeneration. A maximum of 8 to 10 regeneration cycles are recommended. Then there will be a loss in the performance of the coal cubes.

Composition of the material:

Composite of activated carbon reinforced with ceramic.

Filtration performance for molecular contaminations like ...

- Volatile organic compounds (VOC).
- Smells.
- Ozone.
- Base and acid gases, etc ...

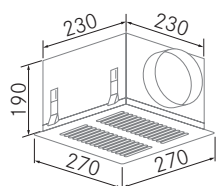
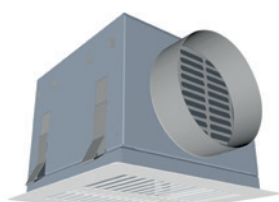
Special features:

- High cleaning performance.
- Long life capacity without maintenance.
- Low pressure drop / Low power consumption.
- Low noise levels while operational.
- Homogeneous air flow.
- Without adhesive.

The honeycomb moulds of fine cells are produced by extruding a formula containing activated carbon and minerals. Cellularity, length and selection of activated carbon gives birth to customized filters offering maximum result.

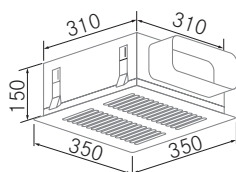
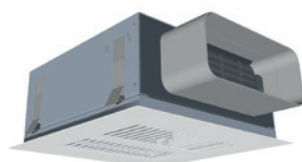
Box-R Round Duct (H1)

Reference: 90268
Lacquered White Ral 9003
9 Helsa cubes 3600 parallel flow channels
Cut Out dimensions: 245 x 245 mm
False ceiling 200 mm.



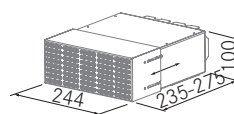
Box-R Flat Duct (H2)

Reference: 90269
Lacquered White Ral 9003
10 Helsa cubes 4000 parallel flow channels
Cut Out dimensions: 325 x 325 mm
False ceiling 160 mm.



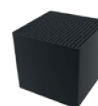
Box-R Socle (H3)

Reference: 90267
Stainless steel
10 Helsa cubes 4000 parallel flow channels



Helsa cube (spare)

Reference: 90354
Active carbon ceramic
400 parallel flow channels



The installation of the Box R has to be accessible in order to allow the extraction of the charcoal cubes for maintenance and cleaning purposes.

Charcoal Filters - Purified Kitchens

FRECAN

Long-lasting active carbon filters FC-Plus

The Frecan long-life filter FC-Plus has a lifespan of 3 years. Past this period, the filter can be regenerated up to a maximum of two times, expanding its further use for one more year after each regeneration.

The regeneration must be done by introducing the filter in the oven for 1 hour at a minimum temperature of 250°. This regeneration can also happen in pyrolysis if the oven has this option.

The FC-Plus filter carries up to 2,3 kg of activated mineral carbon in pellet format of 8x4mm. Inside the filter, the active carbon has a thickness of 20mm, being able to absorb up to 920gr of fats.

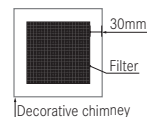
The filter can be installed directly on the motor outlet or inline.

* Laboratory Test comparing results of a Fine 90 VF700 hood at 3rd speed using a traditional 90133 carbon filter versus a Fine 90 VF700 hood at 3rd Speed + FC-Plus. (6 decibels less with FC-Plus recirculation).

3+2
YEARS
LIFETIME*

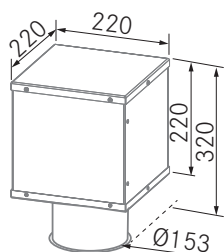
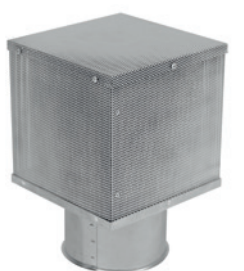
20*
%
NOISE
REDUCTION

The FC-Plus carbon filter extracts the air all around its perimeter, reducing friction and pressure. For this reason, it is recommended to leave a minimum space of 30 mm between the filter and the decorative chimney to guarantee the good filtration ratio.



Carbon filter FC-Plus

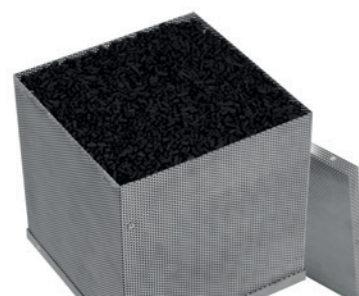
Reference: 90378 - P.V.R. 225 €



Carbon Refill

Reference: 90379 - P.V.R. 62 €

Quantity: 2,3 Kg.

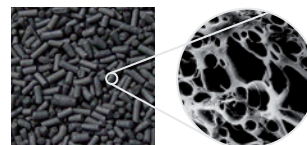


The FC-Plus filter is a sustainable and environmental-friendly product. When replacing the filters, the user will be able to acquire 2.3kg of active carbon pellets as a spare part and reuse the original container of the filter. Its replacement process is very simple: remove the top cover, discard the carbon inside the filter and replace it with the new one. Then you can enjoy 5 years of filtering again.

Charcoal Filters (recirculation)

Recirculating cooker hoods are provided with charcoal filters composed by active carbon particles that, due to its nanoporosity, remove grease and cooking odours and recycle air back into the kitchen.

We suggest changing carbon filters at last once a year, depending on how intensive the use of the hood is, to ensure proper operation.



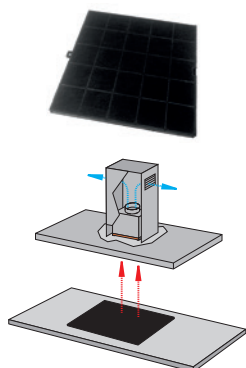
CHARCOAL FILTERS - MOTOR BOX

There are 3 types of carbon filters depending on the hood model:

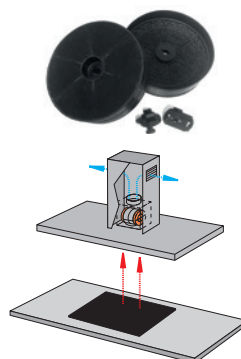
The first is installed on the motor box, on the smoke inlet before the motor.

The second type consists of two filters that are placed on the air inlets of the motor itself.

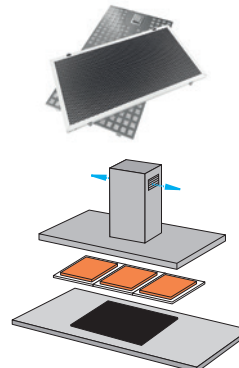
And the third one is placed directly on top of the fat filters using a kit.



CHARCOAL FILTERS ATTACHED TO THE MOTOR



CHARCOAL FILTERS TWIN



Essential requirement for a good performance. At least 10 minutes before cooking, switch on the hood to ensure the creation of the necessary air flow for recirculation and to help reduce possible moisture accumulated in the filter. After cooking, leave the hood working for 10 to 30 minutes at minimum speed. This will guarantee a total cleaning of odors in the kitchen.

Efficient recirculation



Walking towards a sustainable future

Products for Passivhaus

www.freca.es