

# FABER TECHNOLOGY



ON AIR. SINCE 1955



INDEX

# TECHNOLOGY









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TECHNOLOGY

SILENCE

Noise reduction is a source of constant research at Faber: to guarantee a silent cooker hood, our methods range from the use of special materials to advanced fluid dynamics studies and the creation of advanced sound-proofing systems that reduce noise by 7 to 13 decibels.

PASSIVE

ACTIVE

-7DB

-13DB

Silk  
the Silence Key

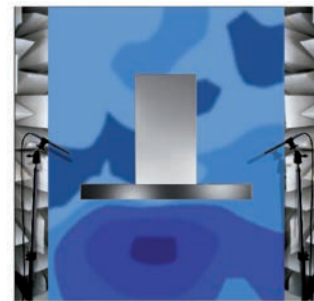
Silk  
the Silence Key  
powered by  
Silentium  
Silence in a Chip



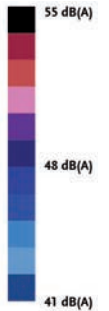
Standard hood



Hood with Silk SM



Hood with Silk ACT



## SILK-SM, PASSIVE NOISE REDUCTION



Sil-K SM is a passive soundproofing system able to reduce noise by 7 dB(A). The system has a duct in front of the diffuser that is soundproofed using sound-absorbing material able to absorb the noise generated. The melamine sound-absorbing material does not absorb water or oil and can be easily removed for regular cleaning. Extraction performance remains unchanged compared to a traditional hood. Hoods featuring the Sil-K system must only be installed in ducted mode.



*Non-turbulent laminated air flow*

*Thanks to the unique shape of the sound absorbent wedges, noise is significantly reduced without any reduction in extraction efficiency*

**GUARANTEES A REDUCTION OF NOISE OF 7 DB(A) AND CAN BE FITTED INSIDE OF CHIMNEY WITH STANDARD DIMENSIONS.**

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SILENCE

## SILK-ACT, ACTIVE NOISE REDUCTION



FABER is the first company in the sector to implement active noise reduction on its appliances, developing a system capable of recording the noise generated and consequently creating a complementary wave form that cancels out the original wave, thereby eliminating noise.

The system comprises a microphone that detects the noise, an electronic system capable of generating the inverse wave and a loudspeaker that emits the inverse wave.

This technology obtains an excellent and two-fold result: a 13 dB(A) noise reduction coupled with a change in the sound frequency towards lower tones that makes the perceived noise less disturbing.

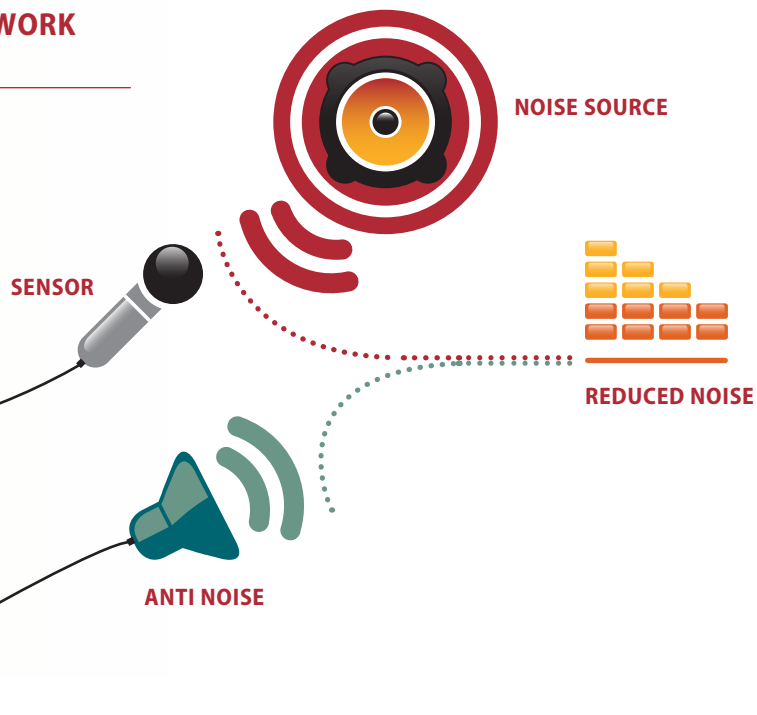
### ACTIVE NOISE TECHNOLOGY: HOW DOES IT WORK

#### INPUT

NOISE SIGNAL FROM  
THE NOISE SOURCE

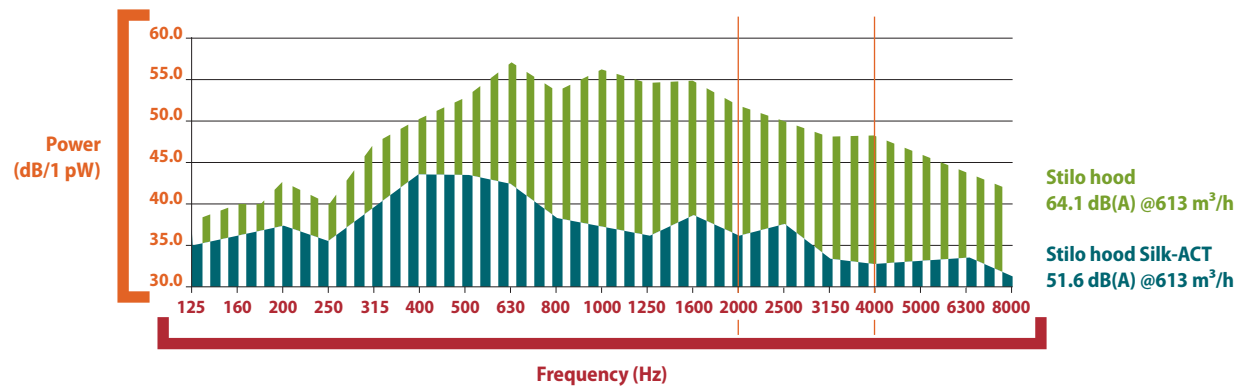
#### OUTPUT

ANTI NOISE SIGNAL  
IN OPPOSITION PHASE

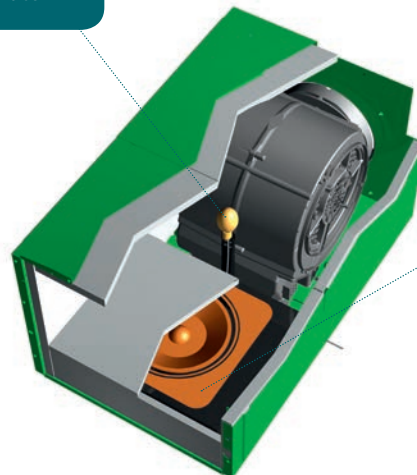


## SILK-ACT - TOP PERFORMANCE

Sil-K ACT reduces the noise level particularly between 2000 and 4000 Hz, which is the most audible frequency band to the human ear.



Microphone: it detects the noise



Loudspeaker: it emits the inverse wave



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## FILTERING

Due to its location, it is not always possible to install a hood using the ducting method. In addition to this, we are increasingly seeing low ecological impact homes requiring a balanced flow of incoming and outgoing air: in these homes, the use of filter hoods is compulsory, preventing the escape of warm air from the property during cold seasons.

To meet these requirements FABER has developed high performance filtering systems that are able to satisfy the needs of the most demanding installations and consumers.

## PASSIVE FILTERING

## FOCUS ON: DESIGN

“Passive” filtering systems use active carbon filters. FABER has optimised this “traditional” system, developing it both in dimensions and performance, thereby avoiding restraints in terms of hood shape and leaving room for aesthetic innovation, whilst all the time ensuring excellent performance at a reasonable price.

## ACTIVE FILTERING

## FOCUS ON: TECHNIQUE

Plasma is an “active” type of filtering, where an electrical field breaks up fat and odour molecules. This innovative system can be installed inside hoods with a suitably sized chimney. Performance is better than that of passive systems and maintenance is infrequent (7 years).



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## TECHNOLOGY

## FILTERING

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**HFH is a highly effective, exclusive Faber active carbon filtering system. When compared to traditional “flat”-shaped filters, the cylindrical filter provides a large surface area, thus enhancing the air flow obstruction: in this way, the odour particles remain in contact with the active carbon particles for longer and are captured more efficiently. The filtering material itself is manufactured in a unique way, comprising two panels with differing porosity and active carbon concentration.**

**The first layer processes the larger particles and facilitates the task of the second panel, which then captures the smaller particles.**

**HFH filter maintenance is very straightforward: the cylindrical shape allows for easy removal of the filter which can then be washed in the dishwasher.**

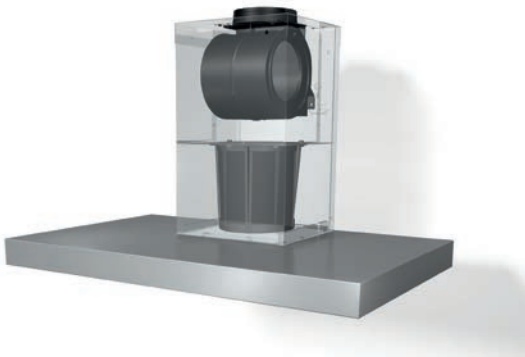
**HFH guarantees a noise reduction of around 3 dB(A) compared to traditional active carbon filters.**

TECHNOLOGY

FILTERING

HFH

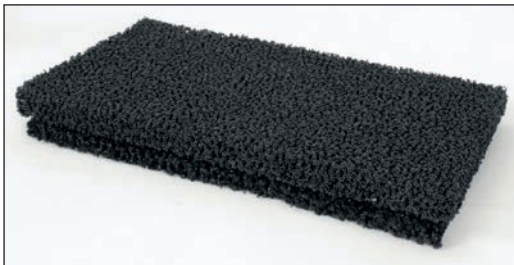
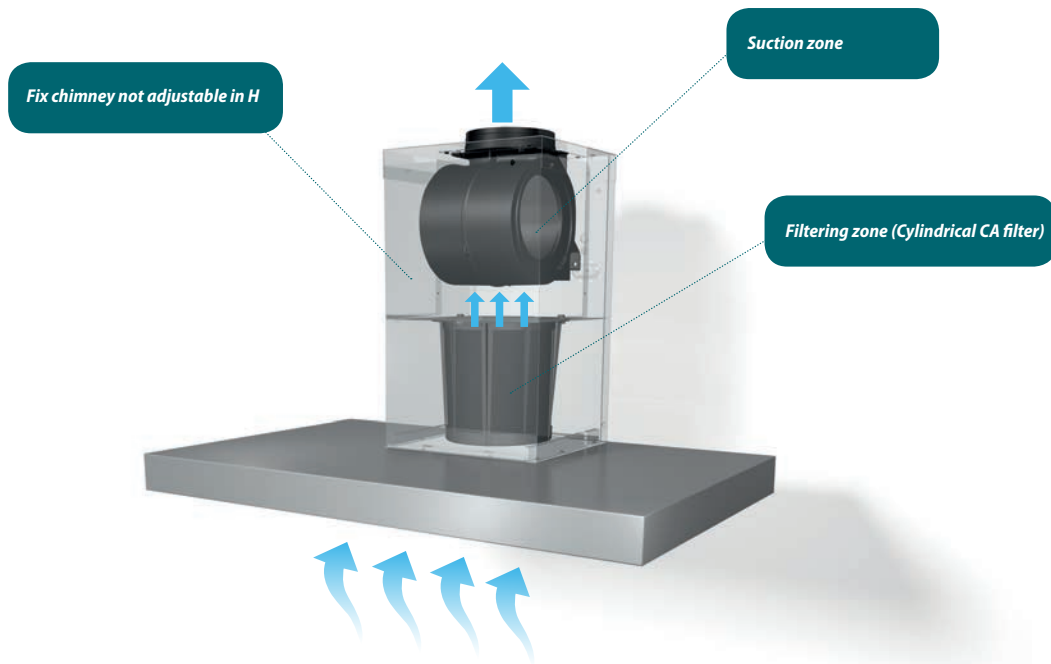
- Major advantages:
- High filtering efficiency: 95%.
  - High long-term performance: the filter's saturation time is long, thanks to the high amount of active carbon present.
  - Filter washable by up to 5 times, with limited loss of performance.
  - Straightforward maintenance, in merely three steps.



Maintenance is highly straightforward: the cylindrical shape allows for easily removing the filtering material which can then be washed in the dishwasher.

PASSIVE FILTERS	EFFICIENCY	USAGE PERIOD (MONTHS)	WASHABLE
LONG LASTING	65%	3-4	YES
HIGH PERFORMANCE	80%	6	NO
HFH	95%	3-4	YES

## HFH



**The cylindrical mat maximises the surface area.**  
**Inside, there are two layers of “nanosorb” filter material:**

- 1 x 1 cm layer of polyurethane foam loaded with active carbon granules.
- 1 x 6 mm layer of polyurethane foam loaded with active carbon flakes.

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FILTERING

## PLASMA

### What is plasma:

Alongside the solid, liquid and gaseous states, in nature we find a fourth state of matter known as plasma. It basically consists of gas particles ionised through electric fields.

Whereas on earth plasma is relatively rare (if we exclude lightning and aurora borealis), it constitutes around 99% of the of known matter in the universe: the sun, stars and nebulae are all made of plasma.

### How does it work:

Domaplasma®\* generates an electric field capable of activating an oxidation process of all the organic particles contained in cooking fumes, including any micro-organisms. The molecules are broken down into their components, and the same occurs to the odour molecules. The final product of this process is oxygen, carbon dioxide and water, namely clean air.

## PLASMA: PLUS

### - High filtering efficiency.

In active carbon filters, the odour particles are withheld and, consequently, the filter becomes saturated, whereas in Domaplasma the molecules are destroyed.

### - It is an active filter that functions constantly: it only requires regular maintenance every 7 years.

### - Stable performance over time.

### - Plasma is currently the reference technology for air filtering.

Practical tests have yielded excellent results with regard to odour elimination.

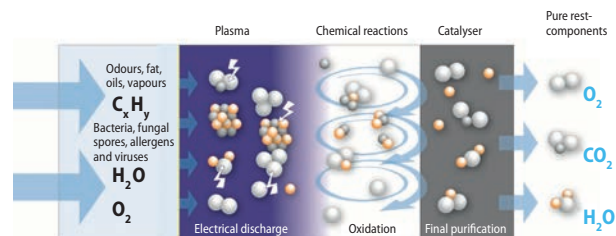
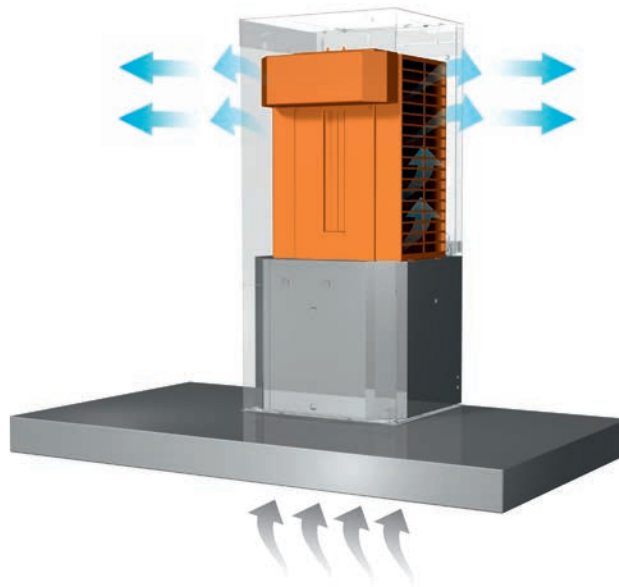
\* Domaplasma® is the optimization of the Plasma air purification technology.

It uses ceramic electrodes technology that enhances the Plasma effect for higher odor removal performance.



## PLASMA

The organic odour molecules become electrically charged as they pass over an electric field and are broken down into oxygen (pure air), carbon dioxide and water.



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**TECHNOLOGY****EFFECTIVENESS**

A cooker hood must be beautiful but, above all, effective: our motors and illumination systems guarantee maximum performance at all times.



The brushless motor guarantees considerable energy saving coupled with high extraction efficacy. It is the most silent motor on the market and its performance remains stable in any usage condition.



PRO extraction unit - Aspirates up to 1000 m3/h and is extremely quiet at normal speeds.



Energy Diffuser - Reduces noise up to 3dB(A) and higher hood efficiency by 30% even in the presence of a long air outlet.



Velo LEDlight - Guarantees pleasant and diffused lighting with just 3W of energy consumption.



LEDlight - Guarantees pleasant and diffused lighting with just 3W of energy consumption.

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**TECHNOLOGY**

**EFFECTIVENESS**

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The brushless motor guarantees considerable energy saving coupled with high extraction efficacy: -85% power consumption (kW/h) at medium-low speeds and -35% consumption (kW/h) at high speeds. It is the most silent motor on the market and its performance remains stable at all speeds and conditions.

## BENEFITS:

### ENERGY SAVING

Up to 80% less consumption VS Std motors

### HIGH PERFORMANCE

1.000 m<sup>3</sup>/h free blowing

### LOW NOISE

Less noisy motor available in the market

### STABLE PERFORMANCE

Independent from power supply

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EFFECTIVENESS

LED LIGHT

Regulations for cookerhoods light are more strict than the ones for ambient lights.  
Since the conditions under a hood are tougher than normal ambient lamps, mainly because of the heat and vapours generated by cooking, the quality of cooker hoods LEDs is by far higher than the standard ambient lights.

- Very low energy consumption.
- Great light diffusion and heat dissipation.
- Different shapes to better adapt to all the hood typologies.
- Longer lifespan.
- Cold to the touch.

Parameter	Cookerhood LED	Lighting LED
Max temperature enviroment	80°C	50°C
Humidity proof	Required	Not required
Plastic material requirement	High quality (V0)	Not required
EMC regulation compliance (power supply)	Specific requirements for hood application	Requirement for power supply (only)
IEC compliance (normative 60335 / home appliances)	Required	Not required

## LED - COLOUR AND QUALITY

Why Faber is using 4000K LED?: 4000K provides the best combination of efficiency and light quality.

Faber LED	Commercial LED
4000K	3000K
110 Lm/W	80 Lm/W



3000K



4000K

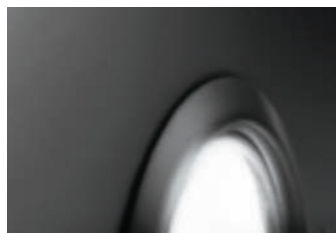


5000K

## LED: product range



VELO LED



LED



LED BAR



LED PERIMETER PANEL



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ENERGY SAVING

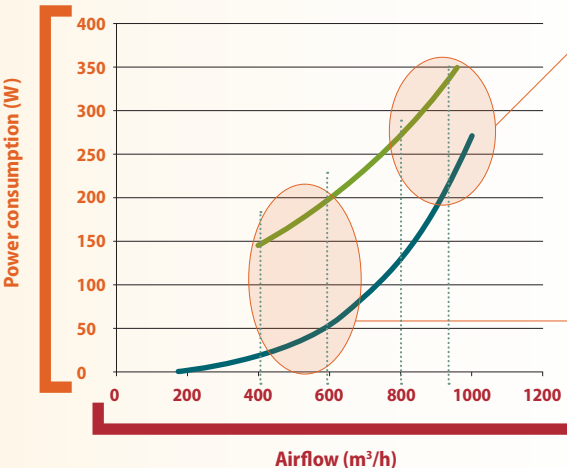
Reducing energy consumption is also highly crucial:  
we tackle this issue by offering integrated solutions aimed at achieving tangible results.



The brushless motor guarantees considerable energy saving coupled with high extraction efficacy: -85% power consumption (kW/h) at medium-low speeds and -35% consumption (kW/h) at high speeds. It is the most silent motor on the market and its performance remains stable at all speeds and conditions.

BRUSHLESS vs ENERGY MOTOR

LOWER POWER CONSUMPTION VS STANDARD MOTOR



-35%

Energy saving (W)  
in "Intensive" zone

-85%

Energy saving (W)  
in "Hi-use" zone

AIRFLOW (m³/h)	BRUSHLESS	STANDARD
400	20 W	150 W
600	50 W	200 W
800	125 W	275 W
950	220 W	340 W

Brushless  
Energy



Comfort and convenience are always a priority.  
Faber utilises LED technology as the LEDlight creates powerful, cutting-edge lighting by combining excellent light distribution in the cooking area with a pleasant and relaxing intensity (4100 °K), with a low level of energy consumption, just 3W.

Buying a “green hood” (brushless + led) instead of a “standard” one (standard motor + halogen) will avoid the emission of 288 kg of CO<sub>2</sub> per year, which is equal to driving 1.747 km. less every year!

ONE YEAR USAGE OF ONE BLACK TIE HOOD IN ITALY				gr. di CO <sub>2</sub> per kWh	gr. di CO <sub>2</sub> /km
	Standard hood	Green hood (Black Tie)	Saving (kWh)	Kg of CO <sub>2</sub> saved	Km Auto
Motor	803,00	381,43	421,58	189,71	1.149,75
Lamps	292,00	73,00	219,00	98,55	597,27
Total consumption	1.095,00	454,43	640,58	288,26	1.747,02



discover our latest technologies



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