WESTIN 360 RECIRCULATION TECHNOLOGY

# GUIDE


Westin's revolutionary 360 recirculation technology combines four filtering systems within one device, each one of which plays a vital role in providing purified, beautifully clean air back into the kitchen, regardless of the ability to duct out.

Westin 360 technology is available as part of the Westin Bespoke offering, and is also present in the new Stratus 360 ceiling hood within the standard hood collection, with the Prime 360 built in hood planned for a summer 2024 release.

# HOW IT WORKS

THE FOUR POINT AIR FILTRATION PROCESS

1. GREASE FILTER

2. ACTIVATED CARBON FILTER

3. HEPA FILTER

4. UV FILTER

# 1. GREASE FILTER

The first filtration level of any cooker hood is the grease filter, which plays a vital role in maintaining the cleanliness and efficiency of both the hood itself, and the wider kitchen environment. It is designed to trap grease, smoke, and other airborne particles that are released during cooking.

Westin use two main types of grease filter, aluminium mesh, and stainless steel baffle.

Mesh filters are made of multiple layers of aluminium mesh and are the most common, and effective type of grease filter. They work by trapping grease and other particles in the tiny holes in the mesh.

A baffle grease filter is designed to capture grease particles, smoke, and other impurities from the air by forcing the air to change direction multiple times as it passes through the filter. This change in direction causes the grease particles to stick to the filter's metal baffles, which are designed to trap the impurities.

Both mesh and grease filters can be cleaned by either hand washing in a non-abrasive, non bleach based detergent, or in a dishwasher.

# 2.
# ACTIVATED CARBON FILTER

The second filter in the 360 system is the activated carbon filter. This is a filtration method that  targets chemical vapours, and odour molecules. Activated carbon filters are used in air purifiers to absorb pollutants like volatile organic compounds (VOCs) and smoke particles.

Activated carbon filters are made up of small pieces of carbon that have been processed to be extremely porous. In fact, activated carbon is so permeable that 1 gram of this substance can have a total surface area of 500 m2 (5,400 sq. ft.) or more.

Westin activated carbon filters include Zeolite, which is a naturally-occuring hydrated aluminosilicate mineral that contains alkali and alkaline-earth metals. Zeolite actively breaks down harmful  chemicals produced during cooking

# 3.

# HEPA FILTER

The third filtration level is the HEPA filter. HEPA stands for High-Efficiency Particulate Air, and these filters are designed to capture particles as small as 0.3 microns with a 99.97% efficiency rate. This makes them ideal for capturing allergens, dust, and other airborne particles that can cause health problems.

HEPA filters work by using a dense layer of fine mesh to trap particles as they pass through the filter. The mesh is made up of randomly arranged fibres that create a maze-like structure that particles must pass through. As they do, they become trapped in the fibres, preventing them from escaping back into the air.

HEPA filters are commonly used in air purifiers, vacuum cleaners, and other devices that require high levels of air filtration. They are especially useful for people with allergies or respiratory issues, as they can help improve indoor air quality and reduce symptoms.

HEPA filters are also used in hospitals, laboratories, and other settings where air quality is critical. They can capture small particles such as bacteria and viruses, helping to prevent the spread of airborne illnesses.

The HEPA filter sits directly behind the activated carbon filter in the 360 system.

# 4. UV FILTER

Using Ultra Violet and photo catalytic oxidation technology, this filter provides a concentrated source of hydroxyls and super oxidants which actively destroy odours, bacteria, pollutants, viruses and allergens in the air, by mimicking, and accelerating a natural process.

These safe, highly effective and naturally occurring super oxidants are the means by which the earth's atmosphere cleanses pollution and harmful pathogens from the air that we breathe.

One of the main advantages of the UV technology is efficiency. Unlike traditional air filters, which simply trap particles in a mesh or fibrous material, UV filters actively destroy harmful microorganisms. This means that they can effectively eliminate bacteria and viruses that may be present in the air, helping to keep the environment clean and healthy.

As the fourth filter in the 360 system, the UV filter disperses super oxidants and hydroxyls into the kitchen environment to actively target any residual odour or pollutants that may not have been picked up by the hood's air intake, this filter is perfect for eliminating odours that are not normally picked up, such as those from wall ovens, or air fryers.

In addition to their efficiency, UV air filters are also low maintenance. They do not require regular replacement, as traditional air filters do, and are easy to clean and maintain.

UV air filters are not harmful to humans or pets, as the ultraviolet light is contained within the filter and does not emit into the surrounding environment.


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