CARBOAIR

THE NEW STANDARD
IN CARBON FILTERS

IMPROVING ENVIRONMENTS – IMPROVING YIELDS

We are the front runners in carbon filter technology, developing filters for over 30 years

G.A.S
Global Air Supplies UK
Partners of systemair

CARBOAIR

Quality, performance and purity are at the heart of every one of our handmade filters

Our filters have been developed in partnership with Wilco Industries, a trusted filter manufacturer on the border of Germany and Systemair, the world's best fan manufacturer.

Our mission was to find the world's best quality filters that worked in unison with Systemair's ventilation range. We approached many filter manufacturers looking for the perfect partnership between air filtration and air flow. Wilco ticked all the boxes.

The secret is in the corellation between the carbon size and mesh size. We tested multiple different filter bed sizes and carbon sizes and believe we have designed the perfect filter range. Our filters have been designed to meet the most demanding needs of our customers. The virgin activated carbon is pure enough that it is certified to be used in applications for human consumption meaning no heavy metals.

The filter mesh we chose means we don't need to use an internal nylon mesh that slows air flow, unlike our competitors.

- Removes even the strongest ODOURS
- 55.5% open mesh
- Handmade and sealed in the EU
- Pure virgin activated granular carbon
- Hanging brackets
- Laboratory tested
- 18 month guarantee

systemair

Being able to utilise Systemair laboratories for testing the CarboAir filters enables us to be confident that our filters deliver what we say. Unlike our competitors, we want our customers to know the air flow they will achieve combining our products with fans. We believe it is important that the customers have control over their grow environment and can trust us to deliver the products they need for success.

VIRGIN ACTIVATED GRANULAR CARBON

The carbon we use has been tailor-made for CarboAir to extract odour from air and work in unison with our fine zinc mesh body.

Our virgin carbon is activated at temperatures above 1000°C in a humid environment. The process opens the pores of the carbon to give it incredibly high absorption properties of organic particles and other airborne pollutants. The carbon is produced to very high standards in Europe, unlike Chinese filters which often contain cheaper blends and risk water contamination during shipping.

Being produced in the EU enables better quality control. Our carbon is produced to EN12915 which means it is pure enough to be used in food and drink applications. The size and depth of our filter has been specially designed to provide the correct contact between the contaminated air and carbon.

Our carbon is double sieved to remove any dust particles which would restrict air flow. We can guarantee every CarboAir filter for a minimum of 18 months because we can guarantee our carbon is pure.

We batch test all our carbon at source to make sure it passes our quality requirements.

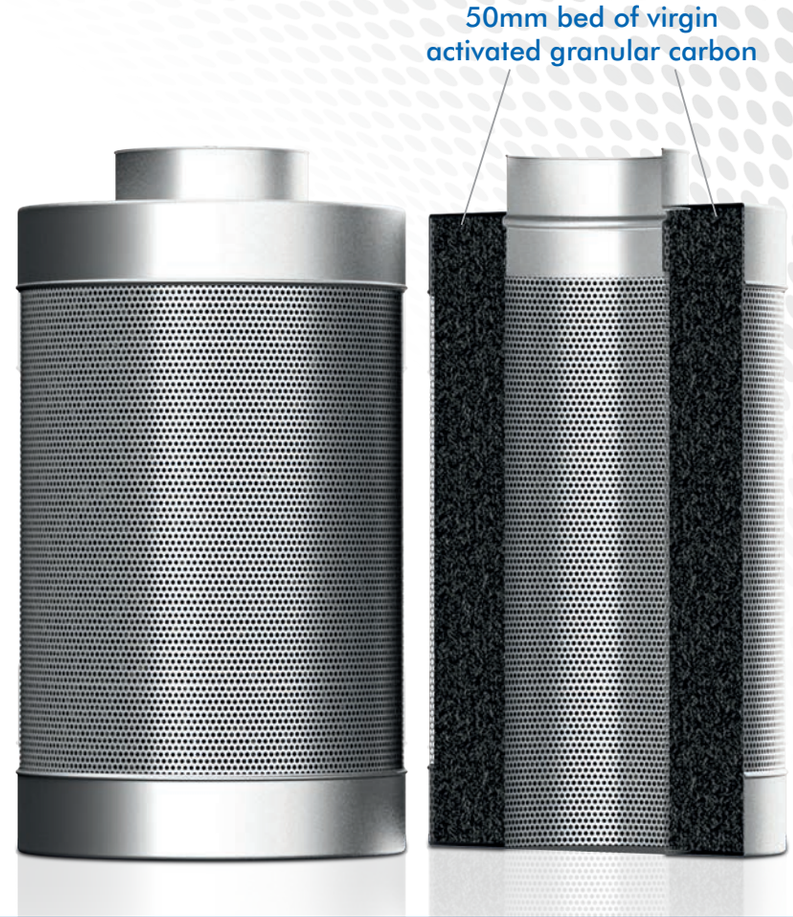
G.A.S
Global Air Supplies UK
Partners of systemair

CARBOAIR 50

CarboAir 50 has been developed to filter VOCs (Volatile Organic Compounds) from smaller grow room environments.

CarboAir 50 has a 50mm bed of virgin activated granular carbon. It is the best filter for normal use in smaller grow rooms. A 50mm bed of carbon is perfect for smaller grow rooms. It offers excellent filtration of air without compromising air flow.

- Handmade in Europe
- Comes with a machine washable pre-filter
- 18 month guarantee



Technical Data

	CA50-100-330	CA50-125-330	CA50-150-330	CA50-200-500	CA50-250-500	CA50-315-500
Flange (mm)	100	125	150	200	250	315
Length (mm)	330	330	330	500	500	500
Carbon Bed (mm)	50	50	50	50	50	50
Max Air Flow (m^3/h)	410	480	600	1000	1200	1500
Recommended RVK	RVK 100 A1	RVK 125 A1/L1	RVK 150 A1	RVK 200 A1	RVK 250 A1	RVK 315 A1
Recommended K Series	K 100 M/XL	K 125 M/XL	K 150 M	K 200 M	K250 M	K315 M

Systemair have tested CarboAir 50 with a range of fans taking the guess work out of picking the best fan and filter combo.
Never run filters at their maximum cubic capacity. If using a fan not specified in the table, please contact GAS for technical information.

OUR FILTER HOUSING

We are very proud of our industrial galvanised steel filter casing. Using the highest quality materials enabled us to produce the finest mesh.

The filter mesh is 55.5% open for the best air flow through the filter. Our filters have better flow rates, enabling us to utilise a thicker carbon bed compared to our competitors. The top flange and bottom flange are preformed and made of the same strong galvanised steel.

The carbon is machine packed as tightly as possible into the housing without crushing the carbon granules. The carbon is placed into the casing and put on tremor plates that have precise frequency to vibrate the carbon into a tightly packed uniform filter.

A high density foam collar is placed onto the carbon bed before a top plate is added on top of the foam collar. This is then machine compressed, reducing the foam collar to less than 5mm thick.

This unique process ensures the carbon will not move or settle. A top flange is fitted, this compresses the carbon further. The whole process is carried out by hand and visually inspected during each stage. The carbon filters are then packed directly into bags and boxed in the factory ready for shipping guaranteeing you receive the best quality filter every time.

G.A.S
Global Air Supplies UK
Partners of systemair

60mm bed of virgin activated granular carbon

CARBOAIR 60

CarboAir 60 has been developed as we have found higher concentrations of VOCs in the exhaust air from medium and larger grow environments with stronger strains.

CarboAir 60 has a deeper carbon bed of 60mm and a longer body. This provides a longer contact time between the air and carbon, removing higher concentrations of VOCs. The 60mm carbon bed of virgin activated granular carbon has been developed to last under harsher conditions. Our filters have been designed to perform for a minimum of 18 months. With stronger strains you are safe with CarboAir 60.

- Handmade in Europe
- Comes with a machine washable pre-filter
- 18 month guarantee

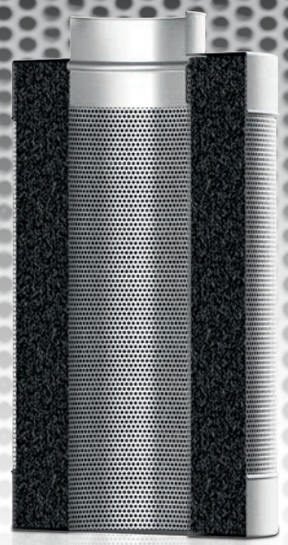
Technical Data

	CA60-150-660	CA60-200-660	CA60-250-660	CA60-250-1000	CA60-315-660	CA60-315-1000
Flange (mm)	150	200	250	250	315	315
Length (mm)	660	660	660	1000	660	1000
Carbon Bed (mm)	60	60	60	60	60	60
Max Air Flow (m^3/h)	1350	1700	2000	3100	2450	3600
Recommended RVK	RVK 150 L1	RVK 200 L1	RVK 250 L1	–	RVK 315 A1	–
Recommended K Series	K 150 XL	K 200 L	K 250 L	–	K315 M	–
Recommended Revolution	150 Stratos / 150 Vector	200 Stratos / 200 Vector	–	250 Stratos / 250 Vector/L	–	–

Systemair have tested CarboAir 60 with a range of fans taking the guess work out of picking the best fan and filter combo.
Never run filters at their maximum cubic capacity. If using a fan not specified in the table, please contact GAS for technical information.

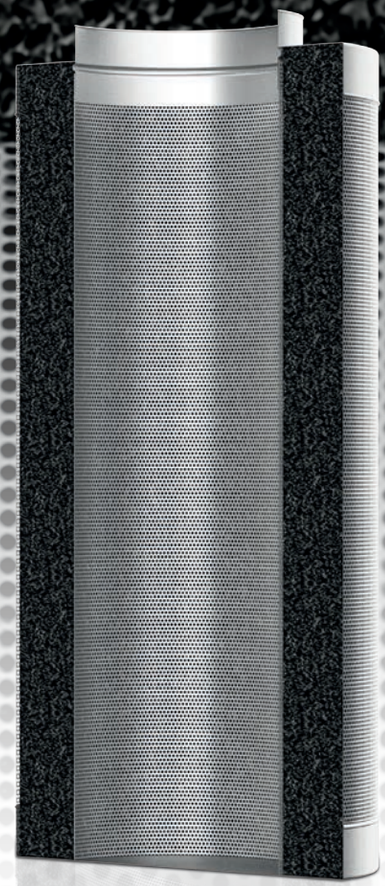
THE NEW STANDARD IN CARBON FILTERS

G.A.S
Global Air Supplies UK
Partners of systemair



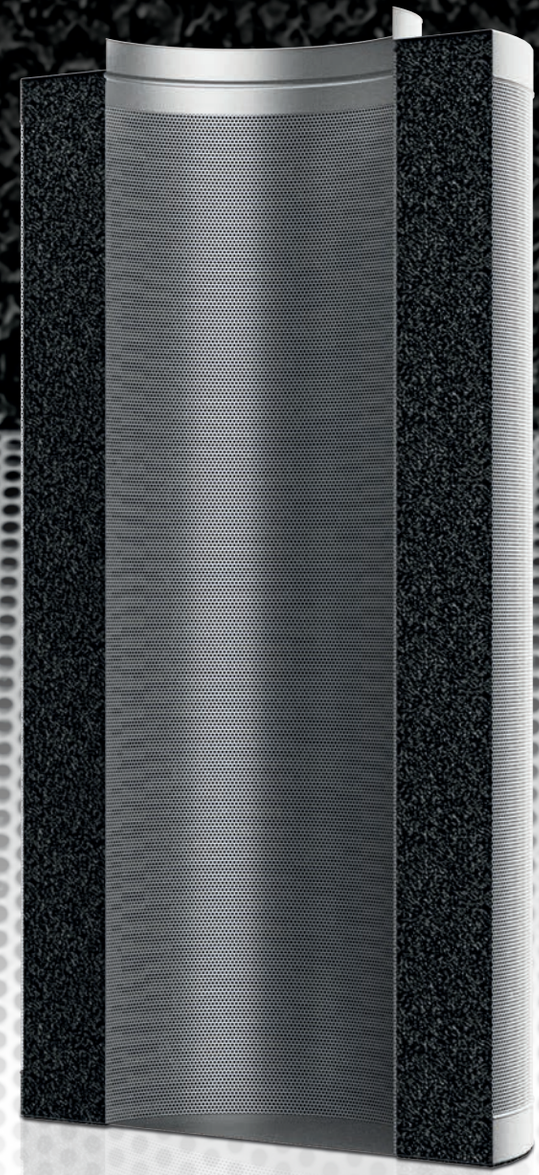
50mm Bed

Designed for normal concentrations of ODOUR



60mm Bed

Designed for stronger strains with higher concentrations of ODOUR



100mm Bed

Designed for larger grow rooms with very high concentrations of ODOUR

CARBOAIR 100

CarboAir 100 has been developed to filter very high concentrations of VOCs from larger grow rooms.

CarboAir 100 has a huge 100mm bed of virgin activated carbon and a 1 metre body. This, coupled to our industry leading steel mesh is the most effective filter in our industry. These filters are monsters, designed for the most demanding environments. If you need to clean very large volumes of air or large amounts of unwanted smells, this is the filter for you.

- Handmade in Europe
- Comes with a machine washable pre-filter
- 18 month guarantee

Technical Data

	CA100-250-1000	CA100-315-1000
Flange (mm)	250	315
Length (mm)	1000	1000
Carbon Bed (mm)	100	100
Max Air Flow (m^3/h)	5800	6900

Systemair have tested CarboAir 100 with a range of fans taking the guess work out of picking the best fan and filter combo.
Never run filters at their maximum cubic capacity. If using a fan not specified in the table, please contact GAS for technical information.

HOW TO CHOOSE A VENTILATION SYSTEM

Choosing the right ventilation system is probably the most important decision you will make when creating a grow room. You can add lights, use the best nutrients, but your plants need the right ventilation to thrive.

All carbon filters reduce the maximum air flow through a fan. We provide accurate information to show you the air our fans can move when connected to our filters. This can be found in the technical data provided online and in stores.

Your ventilation system should remove all the air in your grow room roughly every minute, depending on the size of your room and the amount of lights used. This is for three reasons:

- You need fresh CO_2 for your plants to thrive
- The ventilation system needs to remove heat created by the lights
- You need to be able to maintain a small negative pressure to stop odours escaping.

G.A.S
Global Air Supplies UK
Partners of systemair

HOW TO CHOOSE A FILTER

First, calculate the amount of air you need to remove in m^3/h.

Then match that volume with our filter and fan graphs to find the correct combination.

Speak to your store owner who will calculate this for you using our technical brochure.

We have provided three options of CarboAir filters

- 50mm carbon bed for smaller grow rooms
- 60mm carbon bed for medium grow rooms and stronger strains
- 100mm carbon bed for the most challenging large grow environments.

Every filter has been tested at Systemair, and has been partnered with a Systemair fan which will give you the best performance.

WHAT IS PRESSURE DROP?

Pressure drop is the restriction of air flow through a ventilation system. All good extraction fans will show you a pressure curve of the fan on a graph.

If you know the pressure drop of your filter you can find the volume of air that the fan can move. A filter restricts the air flow that travels through it because the air hits the carbon before it can travel through to the fan. This restriction is called pressure drop and measured in Pa. Pa is short for pascals, which is a measure of pressure.

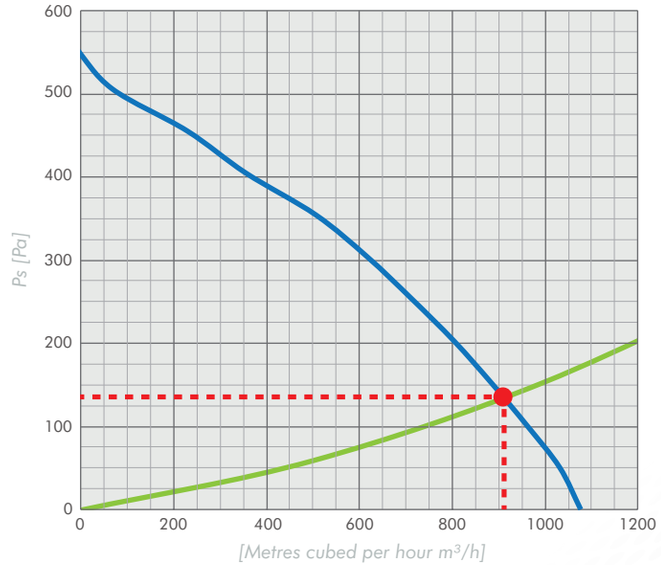
For example if a fan is capable of moving 1080 metres cubed per hour unrestricted and then you restrict the air flow by adding a carbon filter the fan would only move 910 metres cubed per hour.

This information lets you design a system for a specific size of grow room.

G.A.S
Global Air Supplies UK
Partners of systemair

HOW TO READ A FAN PRESSURE GRAPH

Below is a graph showing an example of an RVK 250 L1 with a CarboAir 60-250-660.



KEY FOR GRAPH LINES

Pressure drop that the filter causes the fan.

Fan pressure curve. Maximum 1080 m³/h.

Fan maximum air flow is 910 m³/h, when connected to our filter.

- RVK 250 L1 running at full speed gives you, 1080 m³/h.
- When the RVK 250 L1 is connected to our filter the maximum air flow is 910m³/h.
- The CarboAir 60-250-660 gives 130Pa Pressure against the fan.

Official Dealer

systemair

Distributed in the UK by:

Global Air Supplies UK Ltd
www.globalairsupplies.co.uk