

RADIC 8 *IN3* air



EDUCATION

info@clean-air.ie

Summary



- The Risk
- The Solution
- Our Product Range & Technology
- Installation & Maintenance
- Contact Details



THE

RISK

COVID-19 has changed the general public's perception on airborne contaminants, which will heavily impact the hospitality industry.



Virus containing aerosols can linger in the air for hours and pose a serious **threat to customers and staff.**



MUST STAY PROTECTED



THE

RISK

The **COVID-19** pandemic represents an unprecedented global public health crisis. The hospitality sector is particularly at risk, due to cross contamination in places with high human concentration such as pubs.

The latest research shows that the transmission of Covid 19 is also spread in aerosols that can travel several meters and remain airborne for many hours.

Customers need to feel safe and relaxed when visiting a pub or restaurant.

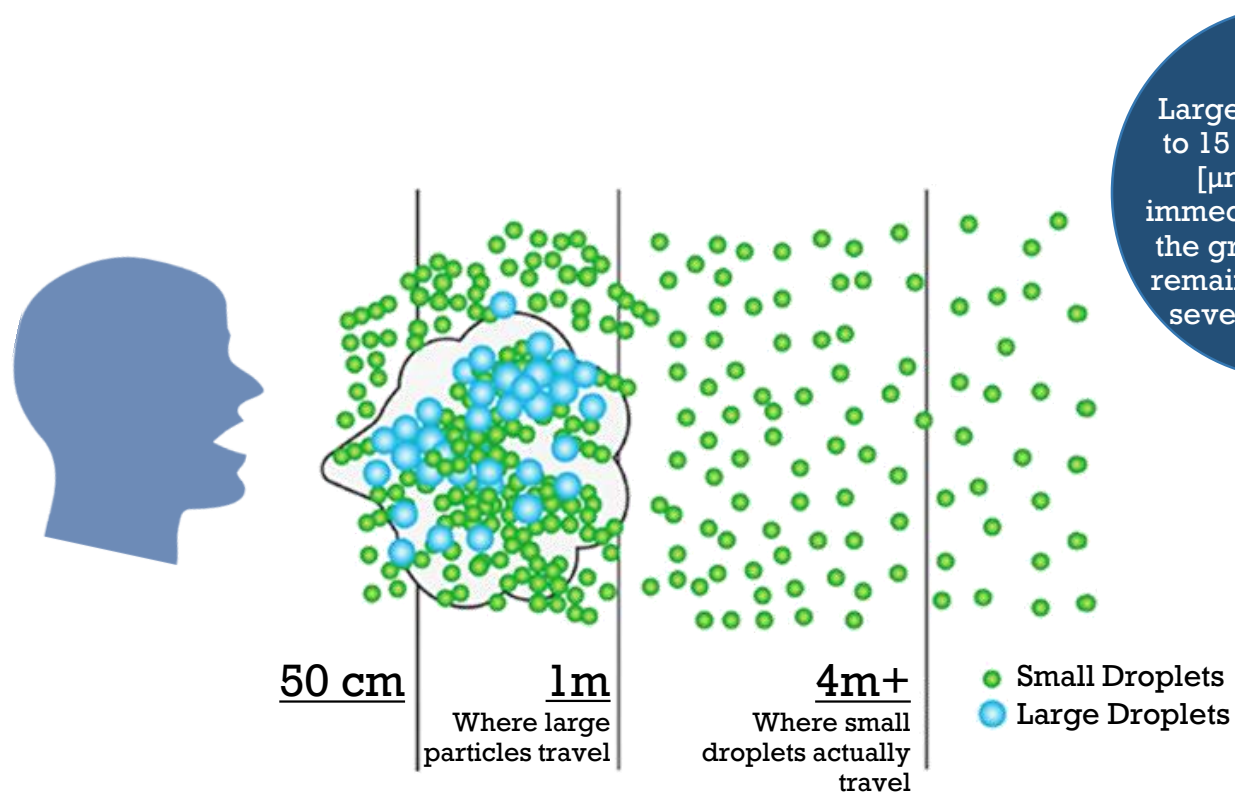
Washing hands and surfaces, masks, social distancing and The use of natural ventilation and outdoor space can be very effective in clearing contaminated air but is a less palatable option as winter approaches.

Publicans and restaurateurs need to regain customers' trust by implementing new technology for preventing cross contamination and keep customers and staff as safe as possible.



THE RISK

A single sneeze can release **40,000** virus-containing droplets^[1]



Larger particles (5 to 15 micrometers [μm]) will not immediately drop to the ground but will remain airborne for several minutes.

Smaller particles (less than 5 μm) will remain in the air for many minutes or even hours. (WHO)

Recent research studies^[2] confirm that COVID-19 can stay in the air for up to

3 HOURS!

As soon as cough/sneeze droplets hit the air, they dry out and become light enough to leave **suspended particles in the air**

Particles from an infected individual **can remain airborne for several hours.**

Uninfected people who enter the room **RISK OF INFECTION**

[1] Tang JW et al.: "Factors involved in the aerosol transmission of infection and control of ventilation in healthcare premises". Journal of Hospital Infection, 2006

[2] Van Doremalen, N. et al.: "Aerosol and surface stability of HCoV-19 (SARS-CoV-2) compared to SARS-CoV-1". Various research institutes, USA. 2020

[3] Bourouiba L et al.: "Violent expiratory events: on coughing and sneezing". Massachusetts Institute of Technology (MIT). Journal of Fluid Mechanics. Vol 745, Cambridge University Press. 2014

Small droplets can travel up to 8 meters at speeds of up to 320 km/h and be carried around by the air conditioning system^[3]

THE SOLUTION

INFECTION PREVENTION & CONTROL

There are 4 disease transmission routes



Direct contact



Indirect contact



Droplets



Airborne



Washing hands



Masks



Cleaning
surfaces



Sterilising
the air

Current infection prevention protocols do not properly address one of the most important disease transmission routes: **AIRBORNE**

Air purification and sterilisation devices are needed.

To tackle droplet and airborne disease transmission routes
(and reduce direct and indirect contact transmission routes)

THE SOLUTION

Install the highest certified clean air technology, which kills 99.9999% of all respiratory viruses in a **single air pass**.



CUSTOMERS CAN RELAX
KNOWING THAT THEY ARE IN A
SAFE ENVIRONMENT



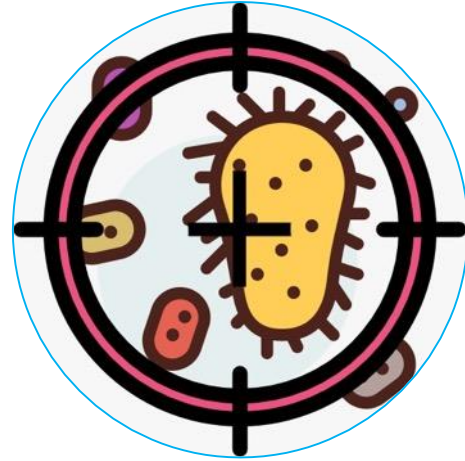
THINGS TO CONSIDER WHEN REVIEWING AIR CLEANING TECHNOLOGY



How extensively has it been tested?

It's important to know what pathogens the technology has been tested against. And, most importantly: Has it been tested against viruses?

Another aspect to consider, is if the testing laboratory is independent to the company and authorised/official.



Does it achieve a single air pass kill rate?

Some companies will advertise 99.9999% efficiency, without advertising the testing methods.

If they don't have single pass kill rates, their units may help to distribute viruses into the air, increasing cross contamination.



Can it properly control the airflow?

Our technology aims to take contaminated air out of the breathing zone as quickly as possible and get it through the unit where viruses get killed.

Then, it pushes sterilized air back into the breathing zone, where it matters most.

It manages a room air exchanges very quickly



How much has it been implemented?

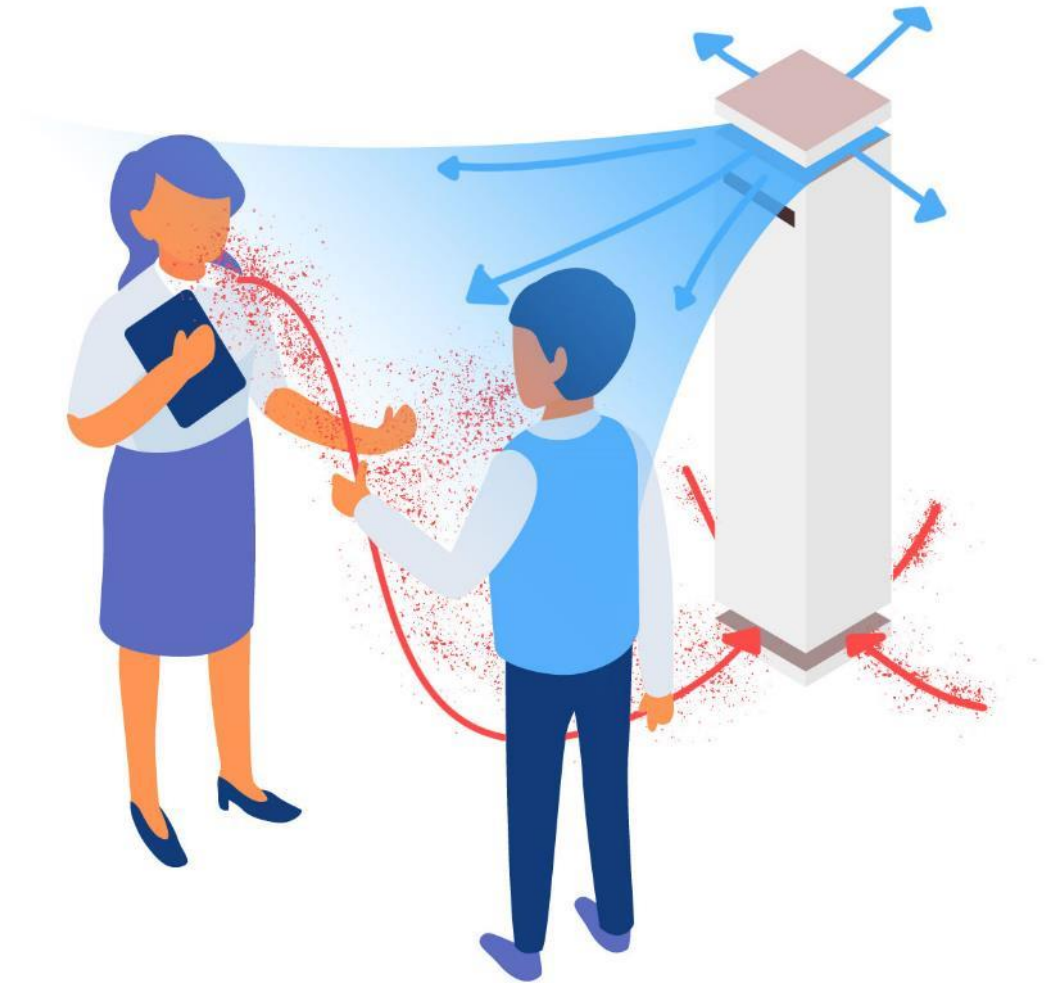
For the past 16 years, our technology has been focused on killing airborne viruses and has since been installed in over 80% of hospitals in South Korea, all lung examination rooms, most universities, and more.

WHAT IS AIRFLOW CONTROL?

If airflow is not controlled, droplets and aerosols can linger in the air for hours, even after people have left a room.

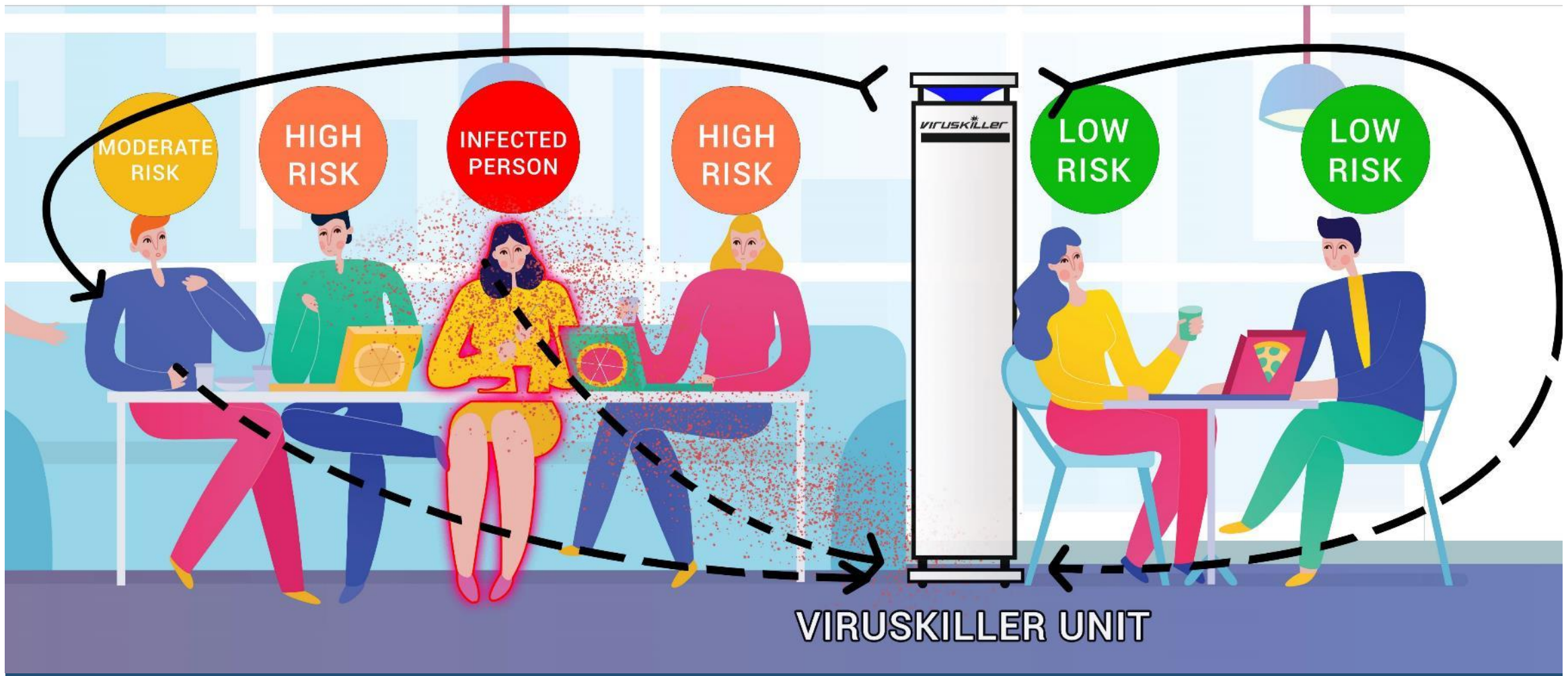
A Viruskiller™ unit constantly draws contaminated air down and away from the breathing zone, sterilizes it in a single air pass and releases virus-free air back into the breathing zone, pushing contaminated air and repeating the cycle.

The breathing zone, which is the most important, is continuously filled with sterilized air, while contaminated air is pulled down and away. This is proper airflow control.

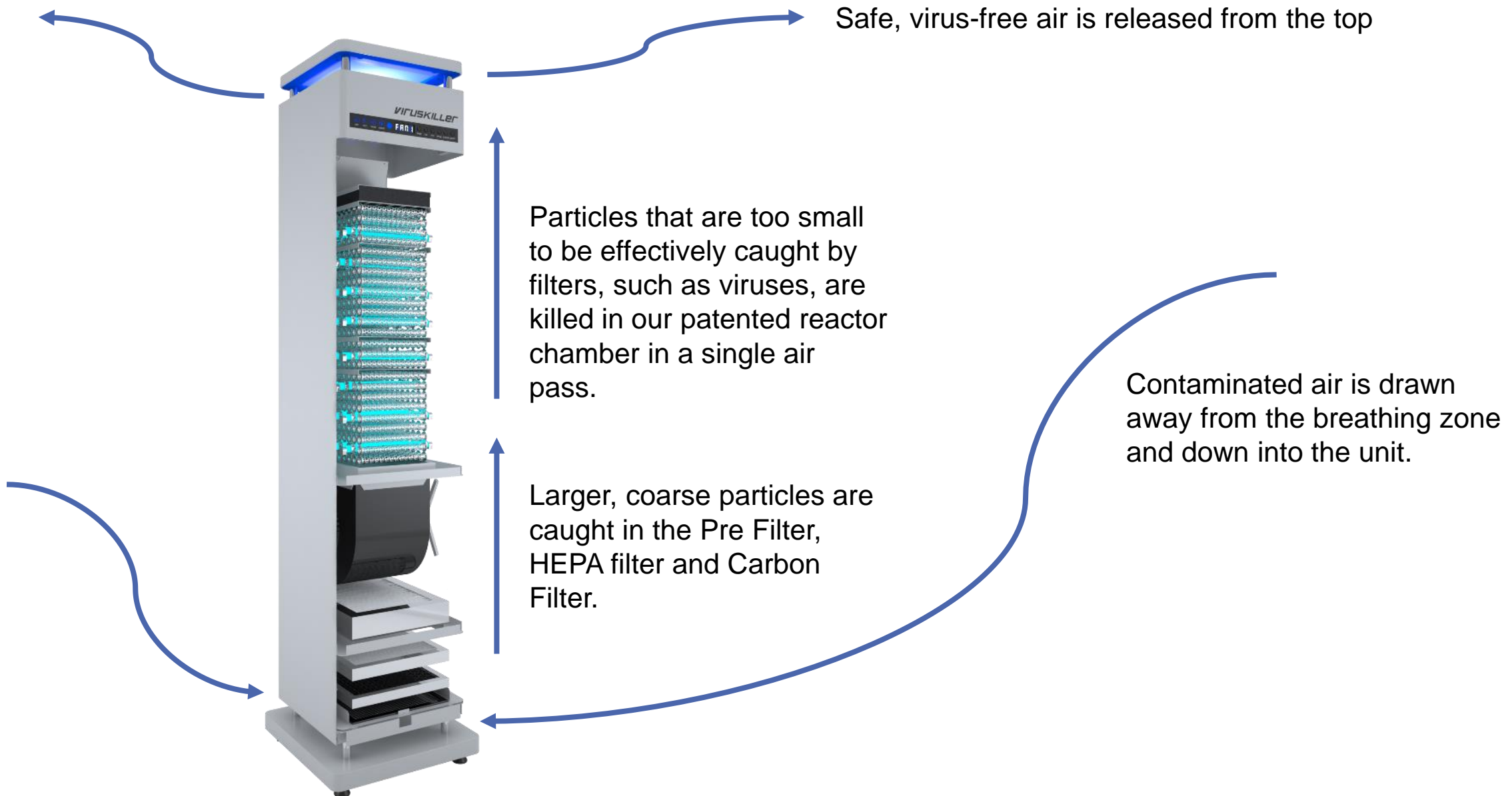


Reducing the risk of cross contamination in a restaurant by controlling the airflow.

A Viruskiller tower unit will draw all the contaminated droplets and aerosols away from the breathing zone and down into the unit. It will then sterilize it in one single air pass and release virus-free air back into the breathing zone in all directions.



HOW VIRUSKILLER™ WORKS





OUR CORE PRODUCT RANGE



VK 103

100

1570 x 320 x 320

42kg

Perfectly suited to open plan spaces large areas such reception areas, pubs, gyms and restaurants



VK 401

60

365 x 166 x 581

12.9 kg
With its large air exchange capacity, VK401 is ideal for offices, smaller pubs, bars and restaurants, hallways and larger bedrooms



Hextio

20

124 x 330 x 104

1,2 kg
Ideal for personal use in a small office, bedrooms or reception desks. The unit is portable and can be placed anywhere



IAQ Inline

100

315 x 300 x 450

12 kg

The IAQ Inline complements **existing ventilation systems** and can be installed wall-hung or ceiling mounted.

**Coverage
(m2)**

**Dimension
s (mm)**

Weight

Description



VIRUSKILLER VK 103

Powerful unit for large areas up to 100m² *

Low running costs
Simple installation and maintenance
Free standing

Specs

X 8 UVC lamps

≈ 70 chromed TiO₂ hexagon filters

Noise 40-49 dB

Airflow 200-358 CFM

Max Electricity 210 W

Double filtration: 2 filtration trays (back and floor)

Dimensions: 1570 x 320 x 320 mm

Weight: 42 kg

* With a maximum ceiling height of 2.4m



VIRUSKILLER

VIRUSKILLER VK 401

Powerful unit for medium areas up to 60m² *

* With a maximum ceiling height of 2.4m

Low running costs
Simple installation and maintenance
Wall-hung or Free standing

Compact, powerful and stylish

Specs

X 8 UVC lamps
≈ 40 chromed TiO₂ hexagon filters
Noise 38-44 dB
Airflow 70-141 CFM
Max Electricity 96 W

Dimensions: 365 x 166 x 581 mm

Weight: 12.9 kg

Choice of
white with
blue LED or
black with
amber LED



VIRUSKILLER

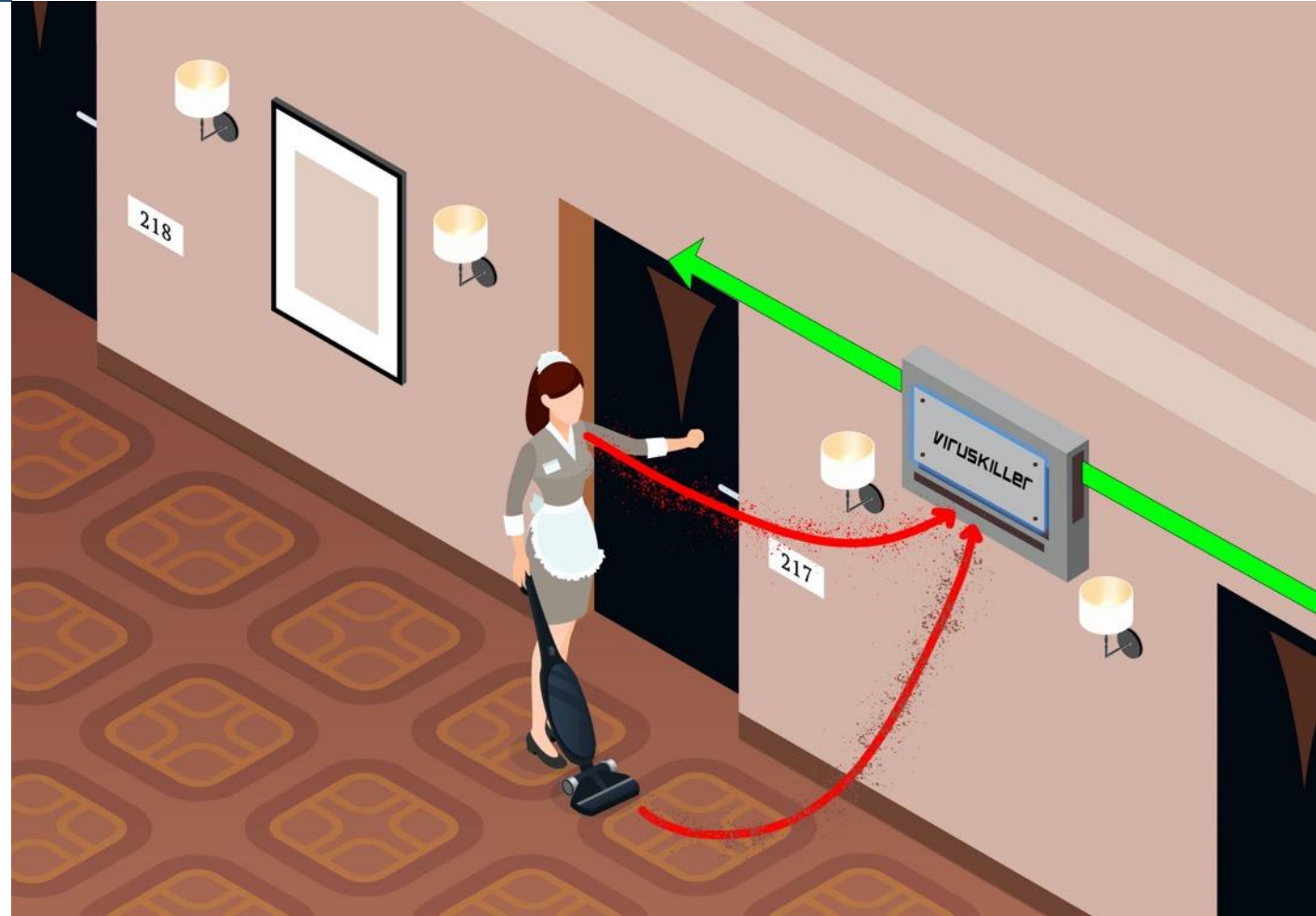
Radic8 technology can play a key role

VK 401

The VK 401 creates an airflow which **draws contaminated air away from the breathing zone** and towards the Viruskiller

Air is cleaned and viruses are killed

Sterilised air is flowed back to the guests' and staff's breathing space



Powerful unit for small areas up to 20m² *

Low running costs
Simple installation and maintenance
Compact, powerful and portable

Wall-hung or free standing

Specs

X 1 UVC lamp

X 10 chromed TiO₂ hexagon filters

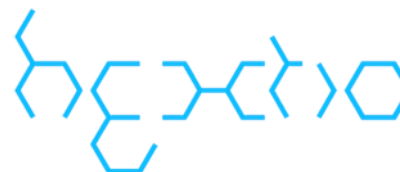
Noise 40-49 dB

Max Electricity 15 W

Dimensions: 124 x 330 x 104 mm

Weight: 1.2 kg

* With a maximum ceiling height of 2.4m



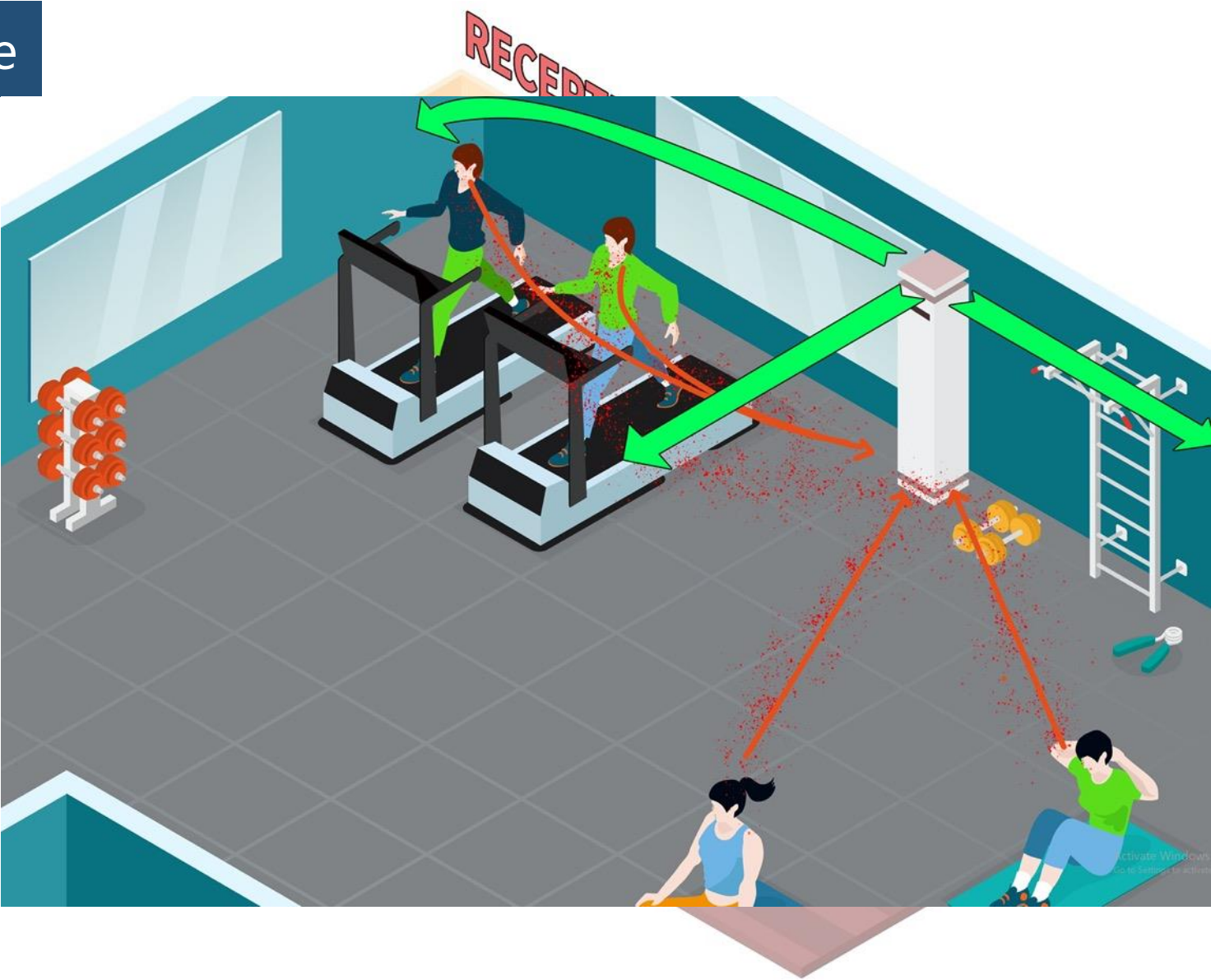
Radic8 technology can play a key role

VK 103

The VK 103 creates an airflow which **draws contaminated air away from the breathing zone** and towards the **Viruskiller**

Air is cleaned and viruses are killed

Sterilised air is flowed back to the guests' and staff's breathing space





IAQ Inline

Powerful unit for HVAC ducting

Low running costs

Simple installation and maintenance

Compact, powerful and portable

Wall-hung or free standing

Specs

X 8 UVC lamp

X 40 chromed TiO₂ hexagon filters with activated carbon

Recommended Airflow: up to 317 CFM

Filtration: Pre Filter, HEPA filter

Modular unit: multiple units can be stacked next to each other to cover more airflow. (4 units cover 4 x 317 CFM)



LIFESPAN OF OUR UNITS

Our units themselves have a 10-year life span and come with a 1-year warranty

VK 103

Reactor Cell
8000h

Lower tray
Washable pre-filter (5mm)
HEPA filter (35mm)
6000h
2 Activated Carbon filters
(20mm) 6000h

Back tray
Washable pre-filter (5mm)
HEPA filter (35mm)
6000h
2 Activated Carbon filters
(20mm)
6000h

VK 401

Reactor Cell
8000h

Front tray
Washable pre-filter (5mm)
HEPA filter (20mm)
2000h
2 Activated Carbon filters
(15mm)
6000h

Back tray (n/a)

HEXTIO

Reactor Cell
8000h

Upper tray
Washable pre-filter (n/a)
HEPA filter
4000h
Activated Carbon filter
4000h

Back tray (n/a)

IAQ INLINE

Reactor Cell
8000h

Washable pre-filter (5mm)
HEPA filter (25mm)
6000h
Activated Carbon filter (20mm)
6000h

Back tray (n/a)

If running 8h/day (all week)		
Hours	Months	Years
2000	8	-
4000	16	1 year 4 months
6000	25	2 years 1 month
8000	33	2 years 9 months

If running 24h/day	
Hours	Months
2000	3
4000	6
6000	8
8000	11

MAINTENANCE

EASY REPLACEMENT OF PARTS

1. PRE-FILTER

Wipe or vacuum the pre-filter on a weekly basis. The pre-filter only captures the big particles. Hazardous particles won't remain on it.

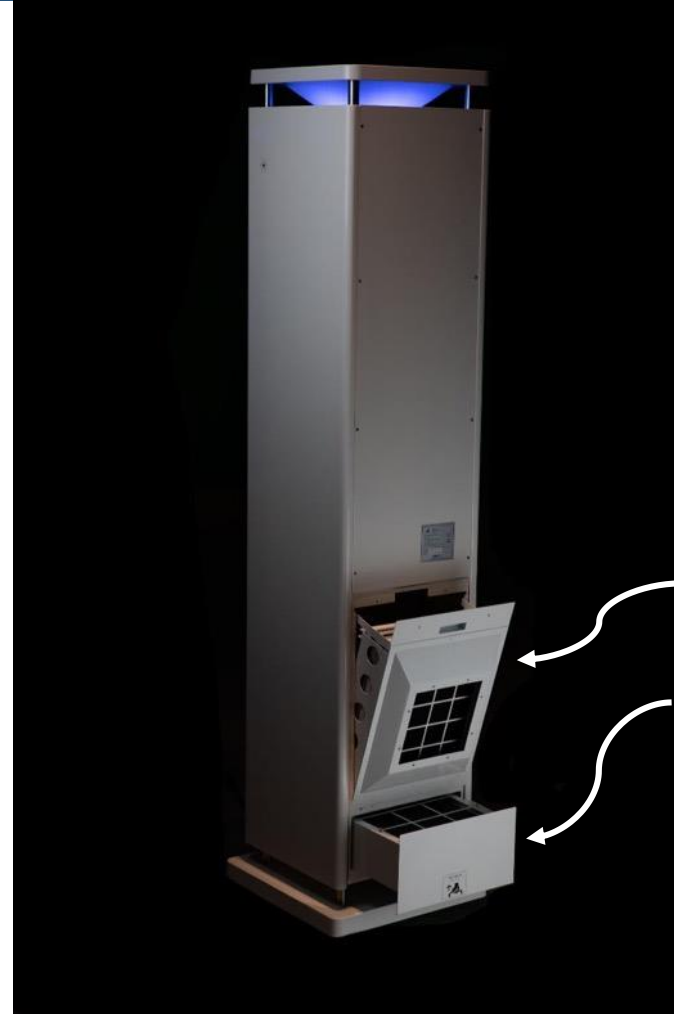
2. HEPA & CARBON FILTERS

These filters need to be changed every 6000 hours in a VK103, 2000 hours in a VK401 and every 6 months in a Hextio.

3. REACTOR CHAMBER

The reactor chamber can also be easily replaced without assistance of a technician.

When changing filters, they must be handled with gloves and placed into a bag for disposal.



Simply remove the filter trays and vacuum clean the pre filter. The pre filter is always at the bottom.

*All units are under a one year warranty

** Distributor will take care of the spare parts if they need replacement

Contact us



www.ecocool.ie
David@ecocool.ie
0879879943

*RADIC*8-**IN3air**



We Share
Clean Air