

# Q-Aire IAQ-BOX

With concerns over rising air pollution, Indoor Air Quality (IAQ) has quickly become a serious subject for the building industry. As such an Air Quality report must now be produced at planning stage making this issue one that cannot be ignored.

Nuaire's IAQ-BOX range offers solutions for urban areas where air pollutants such as NO<sub>2</sub>, Carbon Dioxide and other dangerous Particulate Matter need to be filtered before outdoor air enter the property. These specifiable products will refine traditional filtration and ensure that Air Quality planning obligations are met.

## Features & Benefits

- 99.5% NO<sub>2</sub> filtration- Highest on the market
- Lowest resistance, meaning MVHR systems are not affected
- Low profile design for flexible installation
- Unique single cell carbon filter
- Innovative Double size unit with multi-spigot option
- Choice of pre-filters for increased Particulate Matter filtration



The IAQ-V125 is Nuaire's unique carbon filter supply valve



IAQBOX-S



IAQBOX-D

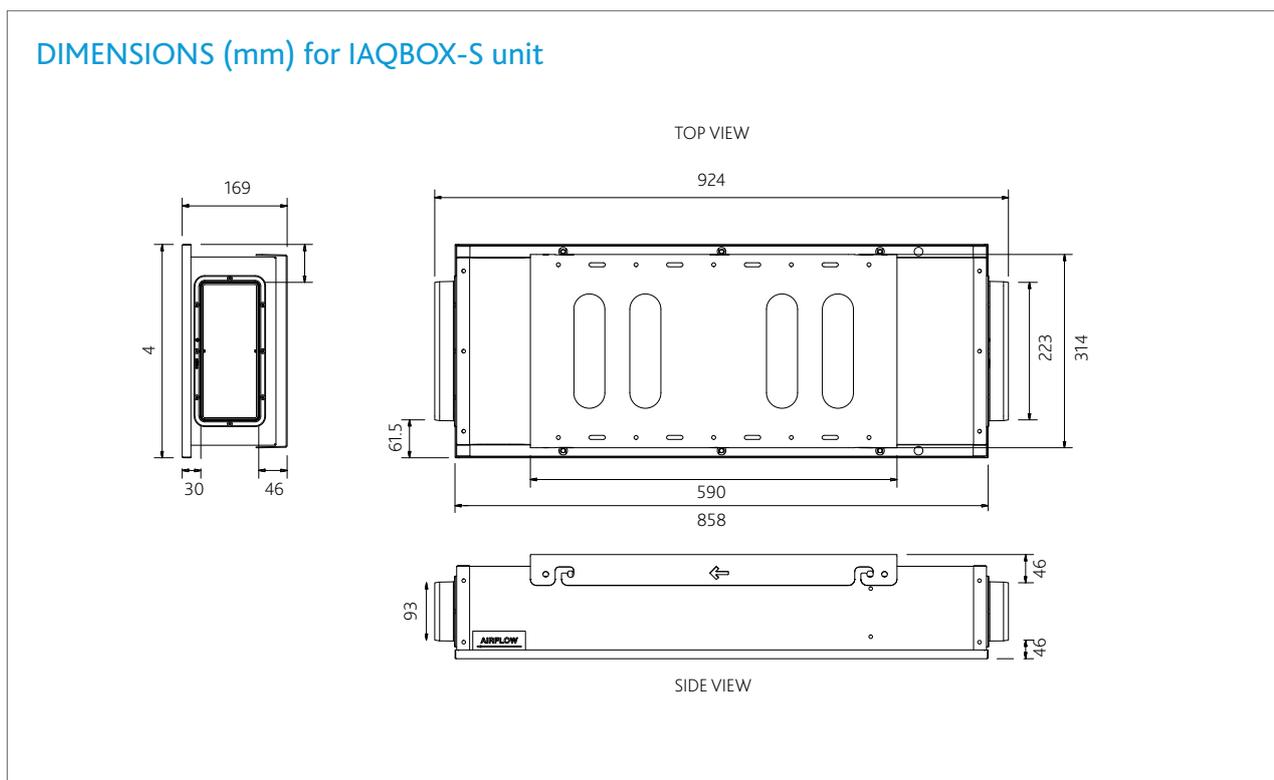
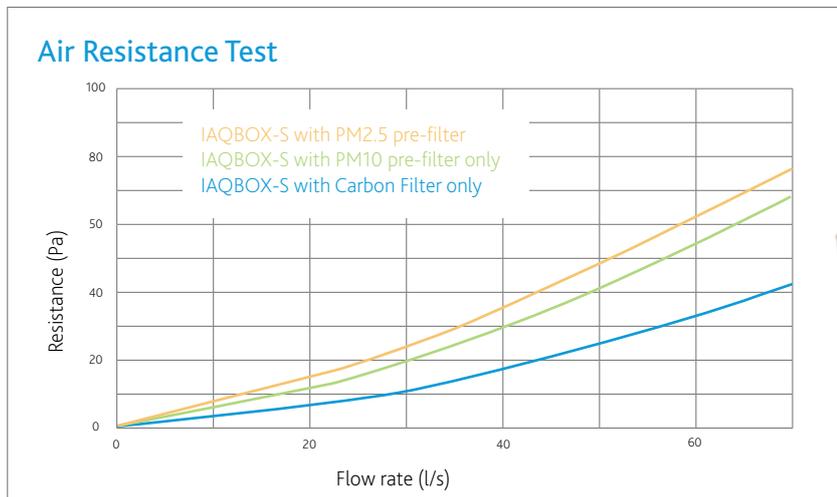
# IAQBOX-S

The IAQBOX-S offers a unique approach in carbon filtration by using a single cell carbon filter to refine polluted outdoor air that MVHR systems bring in to properties.

There is a choice of PM2.5 or PM10 pre-filters to further enhance the filtration of polluted, outdoor air when it enters the property. To specify the IAQBOX-S with fitted pre-filters please choose from the following codes.



	IAQBOX-S	IAQBOX-S-PM10	IAQBOX-S-PM2.5
NO PRE-FILTER			
PM10 PRE-FILTER			
PM2.5 PRE-FILTER			



# IAQBOX-D

The IAQBOX-D is Nuair's unique offering, showcasing a Double size unit which allows a larger volume of air flow to pass through the carbon filter resulting in some of the lowest resistances on the market. This unit also comes with the option of 2 outlet spigots, further reducing system pressure and resistance by decreasing the number of duct runs needed to feed to all supply rooms.

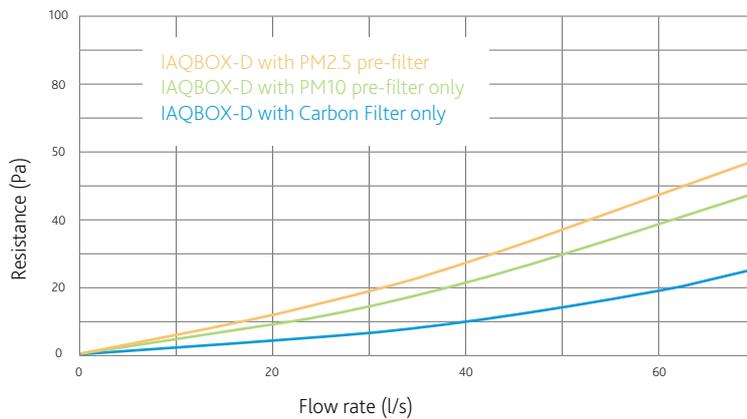
There is a choice of PM2.5 or PM10 pre-filters to further enhance the filtration of polluted, outdoor air when it enters the property. To specify this unique carbon filter with fitted pre-filters please choose from the following codes.



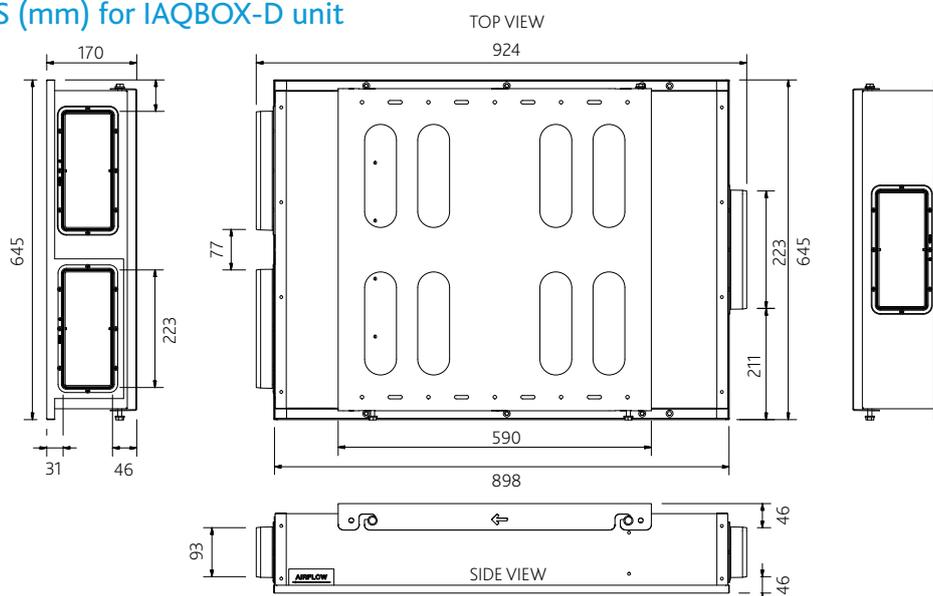
	IAQBOX-D	IAQBOX-D-PM10	IAQBOX-D-PM2.5
NO PRE-FILTER			
PM10 PRE-FILTER			
PM2.5 PRE-FILTER			



## Air Resistance Test



## DIMENSIONS (mm) for IAQBOX-D unit



# Consultants Specification

## UNIT SPECIFICATION

The IAQBOX-S and IAQBOX-D (plus pre-filter variant codes) comprise the Q-Aire IAQBOX range and shall be manufactured in galvanised sheet metal, with an integral foam lining to reduce noise & provide internal sealing. Each inline filter shall have the ability to have an optional PM10 or PM2.5 pre-filter inserted into the filter box to be capable of additional particulate filtration; particularly from diesel vehicle fumes.

The IAQBOX shall come complete with a removable mounting bracket.

The double size IAQBOX-D range of units have the option to be configured using a single or double spigot on the outlet. Double spigot on the outlet shall provide lower air resistance and further ducting options.

The IAQBOX shall come complete with a single of plastic construction, containing two 30mm (approx.) beds of activated carbon pellets providing a large surface to filter the airflow. The filters shall be easily removed and replaced when required. The filter shall have a minimum efficiency of between 96% and 99.5% effectiveness in the removal of Nitrogen Oxides/Dioxides.

The unit efficiency shall be confirmed and independently verified by a BRE (Building Research Establishment) test method and the information shall be provided by the filter manufacturer for approval.

The activated carbon shall have at least the following minimum qualities:

Bulk density	kg/m <sup>3</sup>	480 (+/-5%)
Nominal diameter of cylindrical pellets	mm	4.0
Nominal length of cylindrical pellets	mm	8.0
Moisture content (approx.)	%	3
Crush strength (minimum)	kg	2
Removal capacity for Cl <sub>2</sub> of own weight	%	10
Minimum design efficiency	%	99.5
Typical air velocity	m/s	0.3 - 2.5
Suitable for relative air humidities	%	10 - 95
Temperature range	°C	-20 - +51

The unit shall be suitable for 220x90mm ducting.

The unit shall be installed in conjunction with the manufacturer's installation and maintenance guidelines.

The unit shall be offered with a 5 year warranty; 1 year parts and labour, remaining years parts only. This warranty is void if the equipment is modified without authorisation, is incorrectly applied, misused, disassembled or not installed, commissioned and maintained in accordance with the details contained in the I&M manual and general good practice.