

Dedicated Outdoor Air System

Dedicated outdoor air system (DOAS) is a mechanical system that brings fresh outdoor air indoors to improve air quality. Often that is deployed to handle specific kinds of air pollution such as fine dust **PM2.5 in outdoor** or carbon dioxide **CO2 generated indoor**.

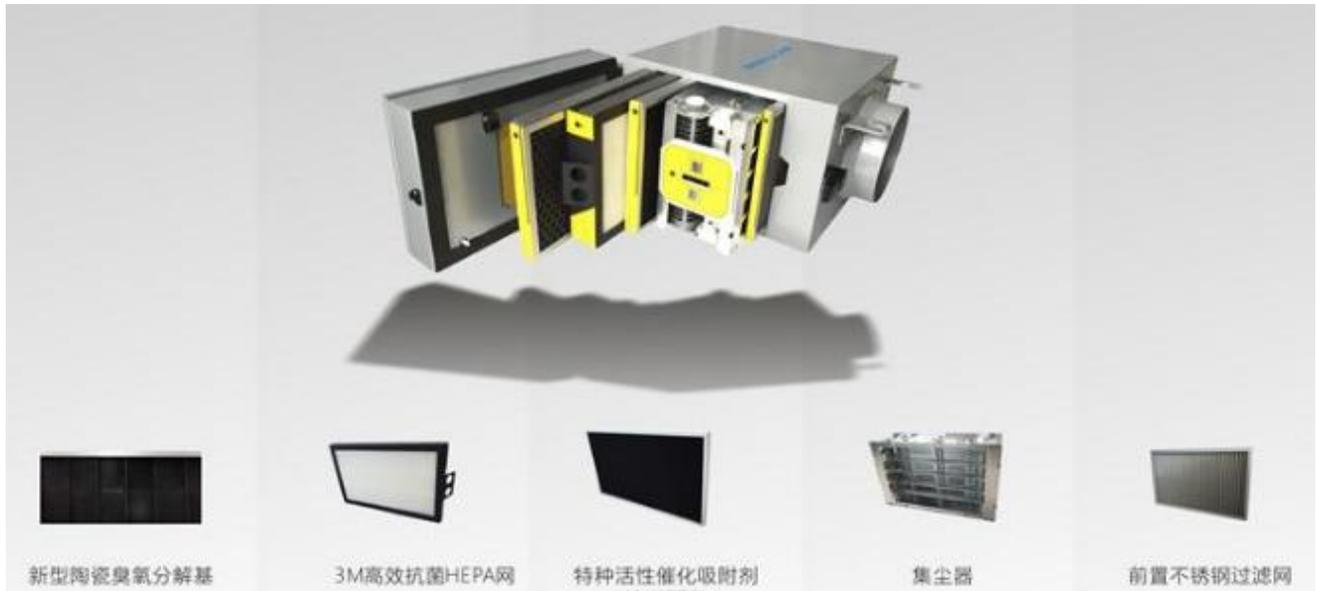


Breathe Cleaner Air

DOAS can be used in a variety of built environment such as schools, offices, retail stores and multi-family housing. DOAS is supplementing the function of centralized air conditioning system like a simplified and downsized version of primary air handling unit.



Conventional indoor air purifier can only remove dust AFTER they get in, while **DOAS** filters dust **BEFORE** they get in.



Efficient Air Treatment Arrangement

Carbon dioxide concentration too high can only be resolved by letting in more outdoor air, DOAS makes sure the new air is fresh and clean, instead of being another source of air contaminants.

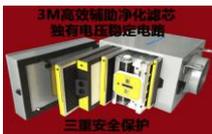


Smart Air Quality Wireless Monitoring & Control



Equipment List

Every DOAS project has different configuration and composition of equipment. WOOFAA has the expertise to configure and to select the best fit items optimizing cost, energy consumption and air treatment performance. The following table serves as an example of what a DOAS consist of some or all of the items, suitable for sub-tropic climate region including Hong Kong.

Item	Description	Image
Active Type Outdoor Air Filter	Has washable electrostatic filter as the key component. Compact size for larger space. Higher initial cost and lowest operating cost	
Passive Type Outdoor Air Filter	Has HEPA filter as the key component, which needs to be replaced yearly. Lower initial cost and higher operating cost.	
Dehumidifier	Removing 20-50 liter moisture a day in form of drained water. Good for water side premises with a year-round high humidity.	
In-line Type Fan	Typically on two-speed control.	
Smart IAQ Monitor	7-in-1 indoor air quality monitor, working standalone on rechargeable battery or network to cloud server, offering automated DOAS control.	
Multi-channel Air Chamber	Combining or dividing air flow paths to reduce number of mechanical fan required. Typically lined for noise reduction.	
Round Type Air Duct	Typically 100-200 mm diameter uPVC pipes are used	
Flat Type Air Duct	Typically of 30 mm thickness. Save space but more expensive and nosier than round duct type.	
Air Damper	Ducting accessories for air balancing and flow control.	
Air Diffuser	Air outlet or inlet with local open/close switch.	

About WOOFAA

WOOFAA provides specialist indoor air quality management solutions and products for both household, educational, communal and commercial applications. We are well-versed in latest air purification and smart Internet-of-Things technologies, giving you an effective and energy efficient solution to any of your indoor air quality problem.

Our team graduated from the Hong Kong Science Park Incubation program in 2015, and be a health building accredited professional of the WELL Building Standard from the US Green Building Council. Contact us today to get yourself and your family a better breathing environment.



WELL BUILDING STANDARD® FEATURES MATRIX

COMPLIANCE CERTIFICATION	PRECONDITION	OPTIMIZATION	Core & Shell	Tenant Improvement	New Construction
Air					
01	Air quality standards	P	P	P	P
02	Smoking ban	P	P	P	P
03	Ventilation effectiveness	P	P	P	P
04	VOC reduction	P	P	P	P
05	Air filtration	P	P	P	P
06	Microbe and mold control	P	P	P	P
07	Construction pollution management	P	P	P	P
08	Healthy entrance	P	O	P	P
09	Cleaning protocol		P	P	P
10	Pesticide management	P		P	P
11	Fundamental material safety	P	P	P	P
12	Moisture management	P	O	P	P
13	Air flush		O	O	O
14	Air infiltration management	O	O	O	O
15	Increased ventilation	O	O	O	O
16	Humidity control		O	O	O
17	Direct source ventilation		O	O	O
18	Air quality monitoring and feedback		O	O	O
19	Operable windows	O	O	O	O
20	Outdoor air systems		O	O	O
21	Displacement ventilation		O	O	O
22	Pest control		O	O	O
23	Advanced air purification	O	O	O	O
24	Combustion minimization	O	O	O	O
25	Toxic material reduction		O	O	O
26	Enhanced material safety		O	O	O
27	Antimicrobial surfaces		O	O	O
28	Cleanable environment		O	O	O
29	Cleaning equipment		O	O	O