



Nadca Systems PCO Technology 2025

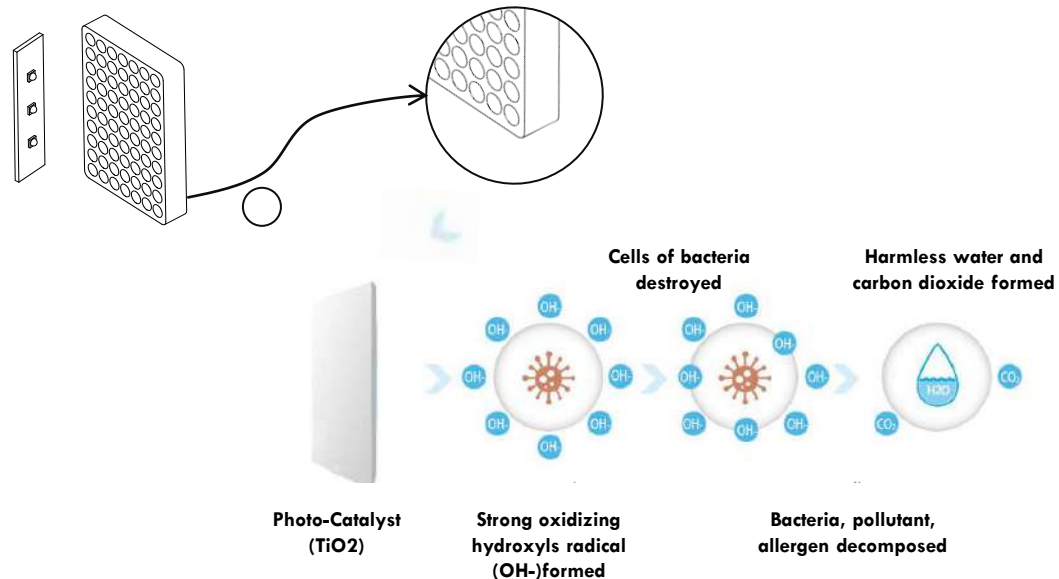
PCO PRODUCTS LINE UP

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What is PCO Technology?

OH radicals existing in the atmosphere have an oxidation rate that is 2000 times faster than ozone and 180 times faster than UV ray, but they are harmless to the human body due to its short half-life (10^{-9} seconds).

PCO products uses an innovative air cleaning system that breaks down various pollutants in the air into harmless water and carbon dioxide by generating OH radicals using environmentally friendly UV LEDs and photocatalysts.



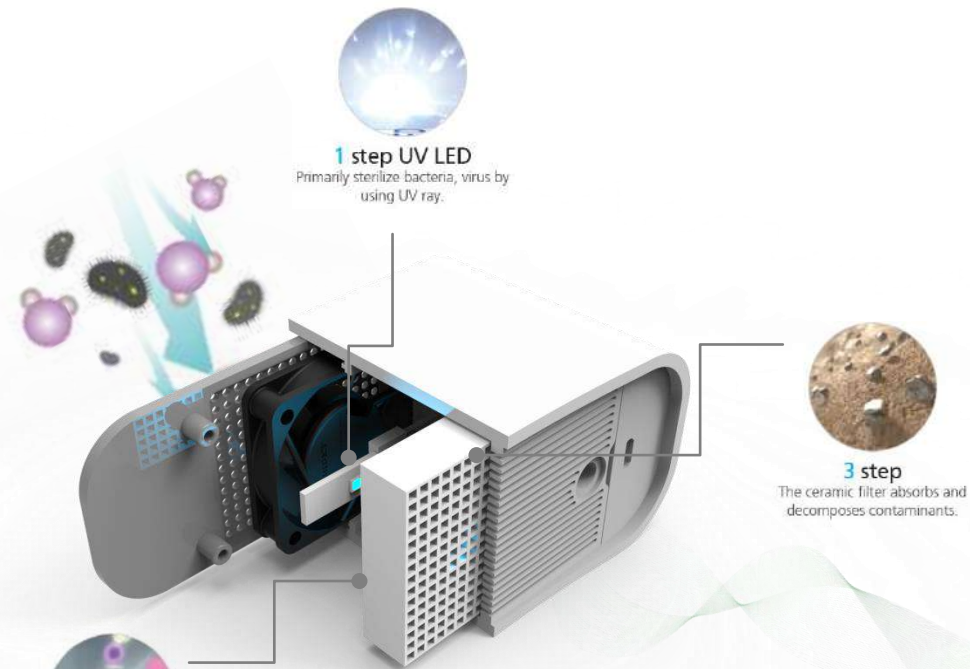
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Technology from
Earth's Self-Purification!



Why UV Led & PCO Filter Technology?



Filter maintenance

Photocatalyst filter; **every 6 months**



Soak it in boiling water for 20-30 minutes, Fully dry it out under sun/dryer or with a dryer before use

Technology Flexible Optimized Robust vs Old Complex	Heat generation Low vs High
Warm-up Time Zero vs Slow	Energy Consumption Low vs High
Form Factor Compact vs Bulky	Life Time Long vs Short
Emission Wavelength Single UV Band, Customizable vs Multiple Peaks	Environmental Friendliness NO Mercury vs USE Mercury

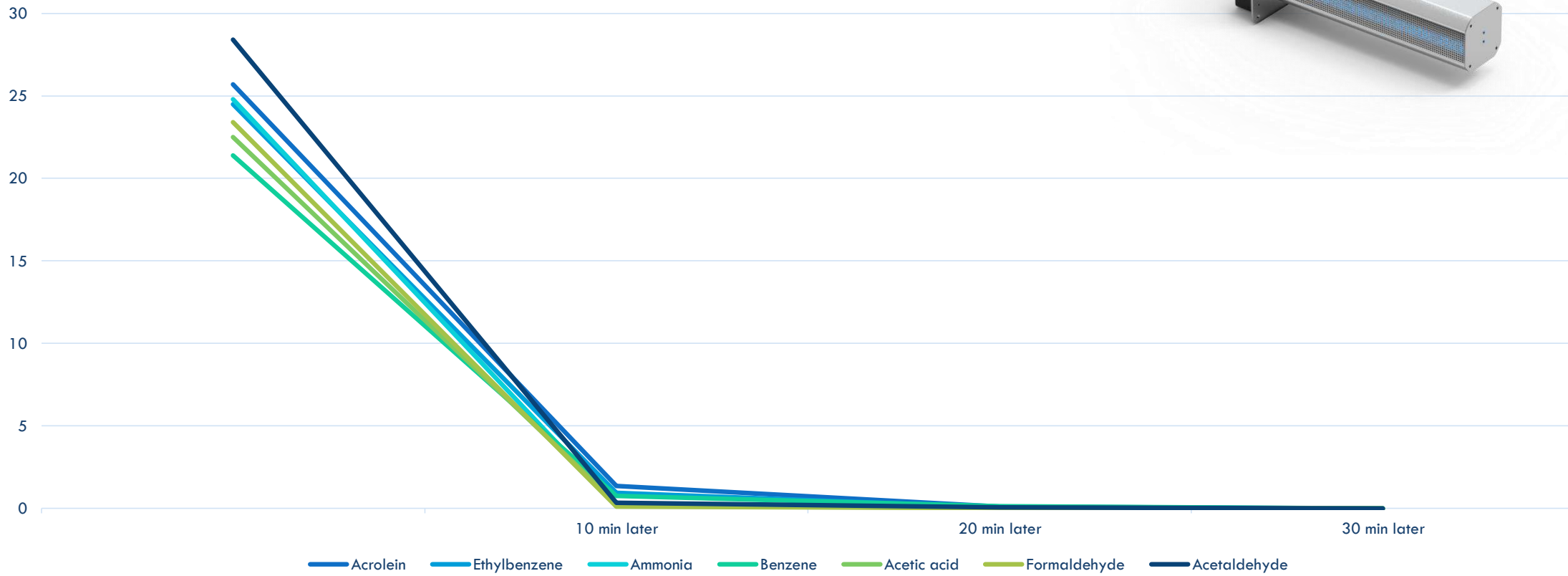
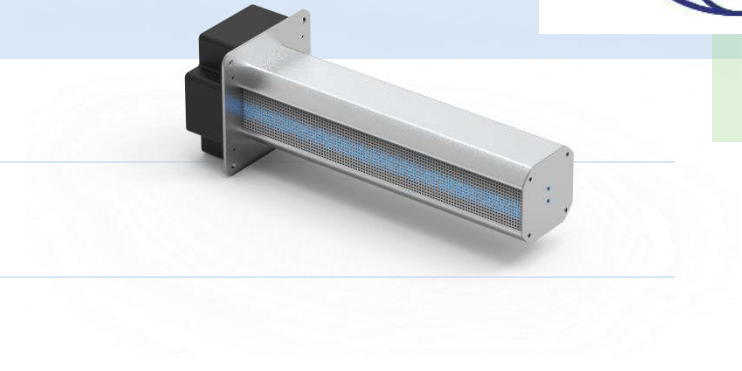
Unlike the conventional mercury lamp, UV LED, an eco-friendly light source without harmful substance is applied, it has a lifespan of more than 40,000 hours and can be used for up to 10 years when used for 10 hours a day.

UV LED	Division	Mercury UV lamp
New, Light, Simple, Compact	Technology	Old, Bulky, Heavy, Complex
min. 40,000 hours	Life Time	avg. 3,000 hours
Low	Energy Consumption	High
Zero	Warm-up time	Slow
No mercury, No Ozone	Environmental Friendliness	Mercury used, Ozone generation
Low	Heat generation	High
Single UV band, Customizable	Emission Wavelength	Multiple Peaks
None	heavy Metals	Mercury (20-200mg)



PCO Effective – Induct Air

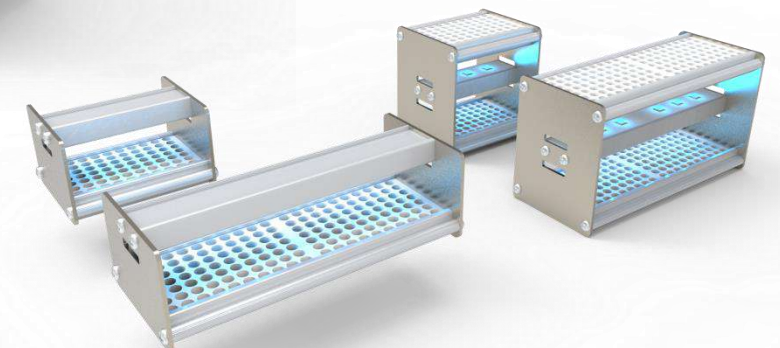
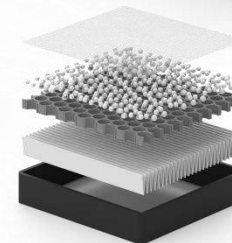
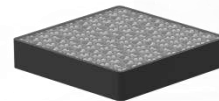
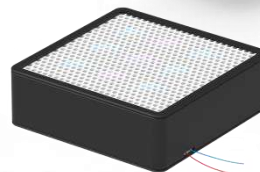
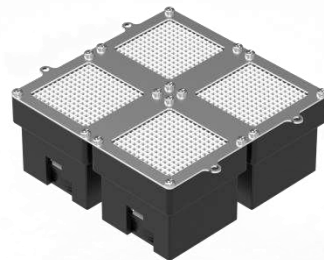
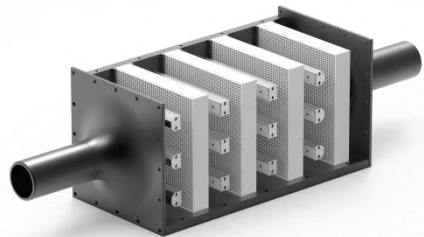
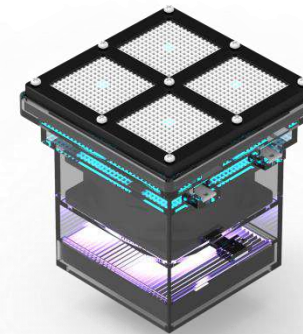
Test result - VOCs



*Approx. 27-30PPM in 1000L isolated space

Our strengths

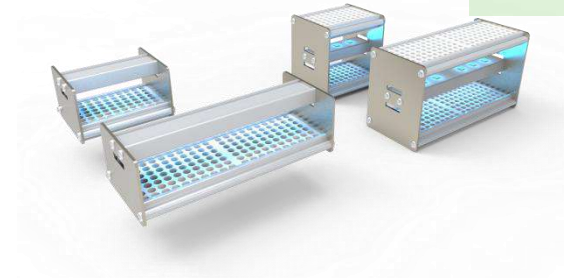
- New revolutionary APOT™ technology, long life and environment friendly
- New TiO₂ & hybrid catalyst Filter incorporating the industry's first washable ceramic catalyst
- Includes automatic self-cleaning (Hybrid) filter ionizers with UV LED to reduce particulates
- Long-life replaceable LED cell module with 3-4 x longer life than current mercury vapor UV lamp technologies
- First washable catalyst for high load environments (ie. cigar bars, smoking rooms)
- Reduces airborne and surface microbials, bacteria, viruses, and mold
- Reduction of smoke, odors, VOCs, allergens, dust, and particulate
- Mercury and ozone free



Introduction to Modular



- Could save a space & cost of housing.
- Could be flexible for any shapes
- Could be easily installed at any places.
- Could be easily extended.



Introduction to Induct Air



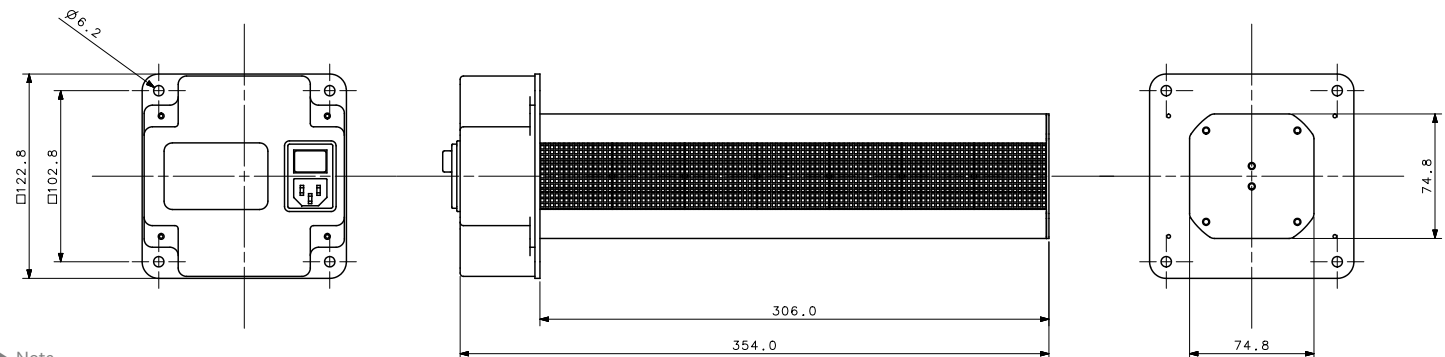
ACRO-APOT is ideal for air purification in duct field.

As we use the most strongest solution for ACRO-APOT, customers can get outstanding performance comparing any other similar solutions

The APOT™ series comes in three models, depending on the volume of the treatment space. The table below summarizes the treatment area range for each model. These guidelines should be adhered to for optimal performance and safety.

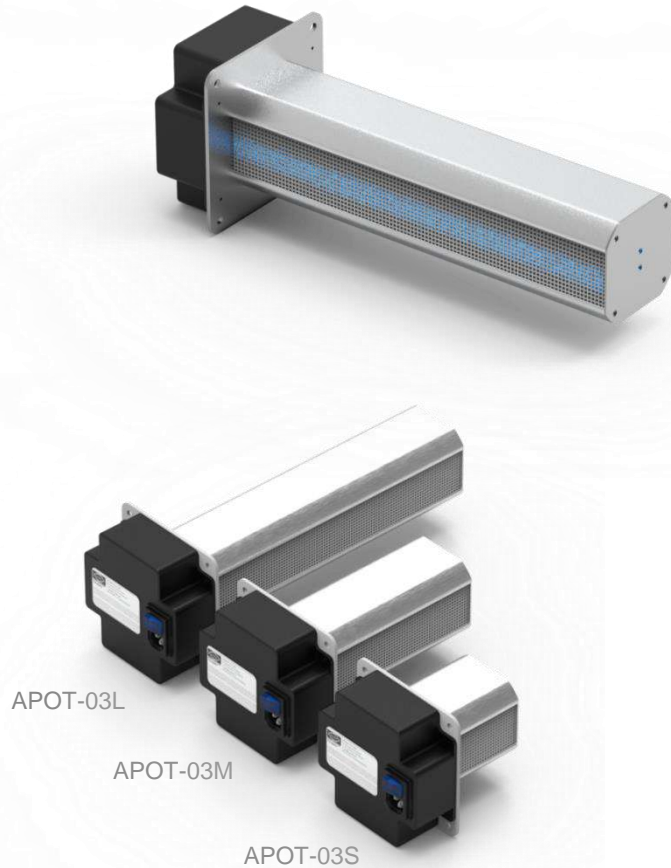
Model number	In put power	Vf	Power(W)	Dimension(mm)	Weight(kg)
APOT-03L	120-230V	12V DC	10.5	306	1.3
APOT-03M	120-230V	12V DC	8.5	175.5	0.8
APOT-03S	120-230V	12V DC	6	88.5	0.6

Dimension

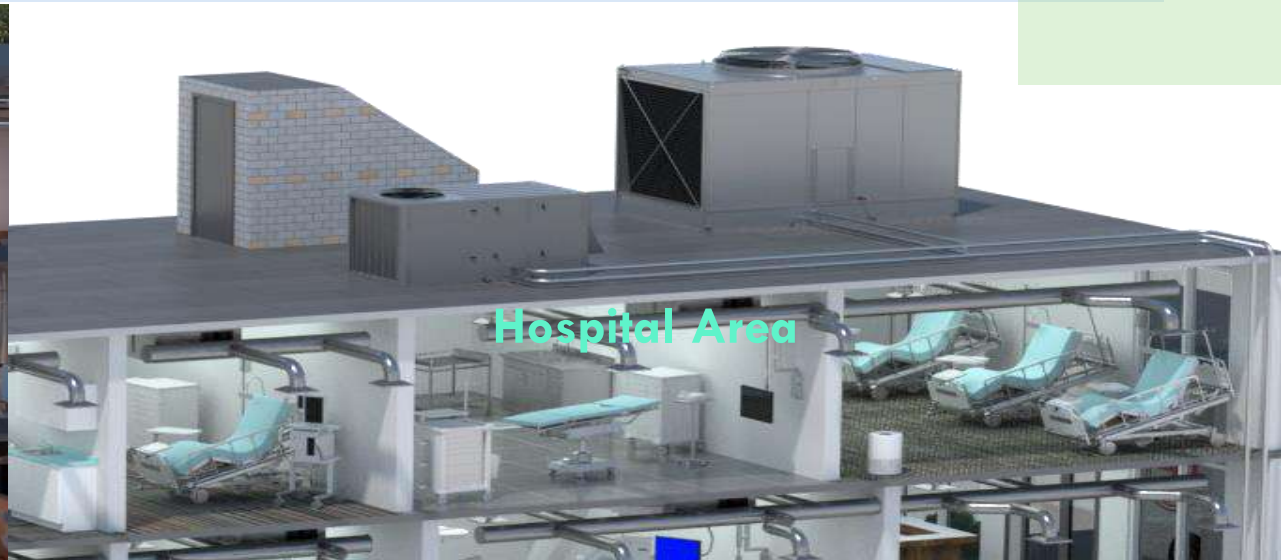


► Note

1. All dimensions are in millimeters. (Tolerance : ± 0.2)
2. Scale : None
3. #A L: 306 M: 175.5 S: 88.5

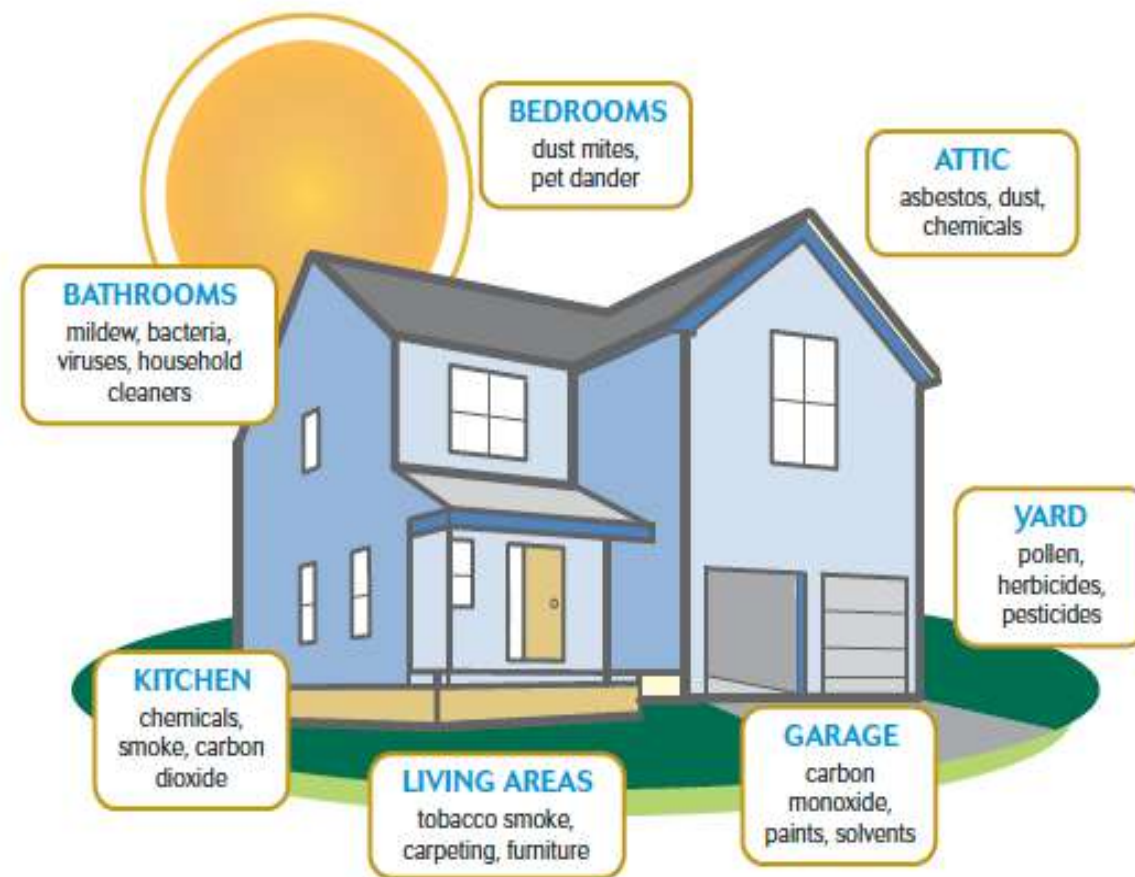
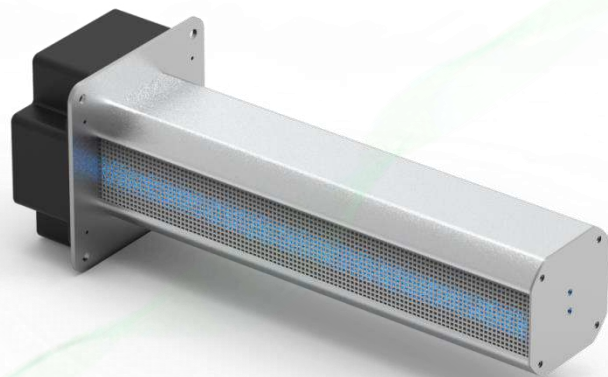


Where can it be applied?



Solve sick building syndromes

The term "Sick Building Syndrome" is used to describe a range of symptoms that pose a serious health risk to building occupants, which are caused by polluted air, containing chemicals used in construction materials or furniture, or combustion gases generated by equipment such as heating. Poor ventilation systems designed for energy-saving are believed to be a factor as well.





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