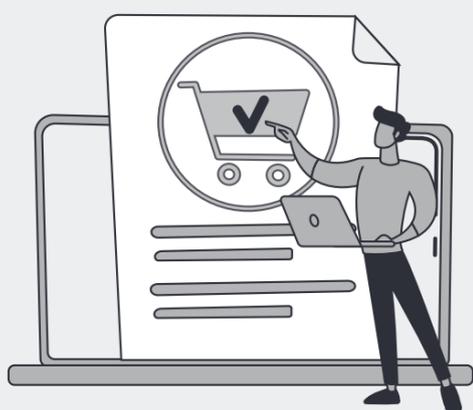


5 top tips when buying an air purifier for your business



The pandemic has highlighted the importance of indoor air quality. However, many buildings struggle to achieve the World Health Organization's recommended air change rate of 10 liters per second per person. That's where air purification comes in, either working in isolation (single or multiple units) or to supplement an in-built Heating, Ventilation and Air Conditioning (HVAC) system.

But with so many products on the market, how do you choose the right one for your needs?

1 TECHNOLOGY

It's critical to choose the right technology for the job.

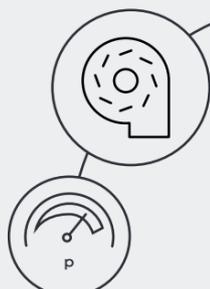
In its June 2021 update, the Centers for Disease Control and Prevention (CDC) recommends **High Efficiency Particulate Air (HEPA)** filtration systems to capture COVID-19 particles, with **germicidal ultraviolet light (UVC)** as a supplemental treatment to inactivate the virus. HEPA is even proven by NASA to trap a minimum of 99.97% of fine particulate matter.



2 STRONG AIRFLOW

The CDC also stipulates a powered fan system.

This creates high static air pressure, which is necessary to allow sufficient air to flow through the HEPA filter and to boost air cleaning performance throughout an entire space, rather than just the air around the purifier machine itself. Residential air purifiers using HEPA will not serve as a substitute for a hospital grade device containing a powerful fan.



3 HARMFUL SIDE EFFECTS

These are associated with the kind of air purifiers sometimes referred to as using 'additive' technologies (based on indirect chemical reaction) as opposed to 'subtractive' (filtering and direct inactivation).

The US EPA and UK SAGE committee recommend to avoid UVA/UVB, ionisation, plasma, electrostatic precipitation and oxidation methods. These have limited evidence of efficacy against the virus and/or significant concerns over toxicological risks during application.



4 REPUTATION AND INDEPENDENT TESTING

Be aware that the big brands generally make small devices for residential use only, not fit for purpose in an office or commercial environment.

Marketing claims can be exaggerated and unsubstantiated. The key is to look for independent scientific testing carried out in real life environments from respected laboratories and institutions to validate any claims. Look for case studies in your sector and contact a couple of quoted customers to obtain a first hand account of their experience. Check the manufacturer's sustainability credentials, especially the potential to recycle both the product itself and the consumables.



5 COST

When it comes to capital cost, compare like with like. You get what you pay for.

Compare the cost against that of installing a new integrated HVAC system. Also think about ongoing costs. Air purification units consume the equivalent of a fridge freezer and cost just a few cents a day to run. Further substantial savings can be made on energy (and associated carbon emissions) from not having to heat or cool fresh air intake. The ongoing savings can quickly offset the initial capital cost of the air purifiers.



CONCLUSION

The CDC and UK SAGE committee encourage buyers of air purifiers to exercise caution and do their homework. For a relatively small investment, and low ongoing costs, your business can achieve a high standard of indoor air quality.

Choose wisely and the right air purifier can serve as a long term 24x7 bodyguard to protect and enhance the lives of employees, customers, patients, students and visitors alike.