



**Help get staff back to the office and reduce workdays lost to illness with new class of air purifier - by Robert Diamond**

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The recent introduction of a new class of room air purifier can help get your staff back to the office. It also makes possible the reduction of workdays lost due to illnesses. That's because clean, healthier air can now be streamed directly to the breathing zones of office workspaces. The innovation behind this is the newfound ability to easily mount air purifiers in ceiling and wall locations.

Until now, it was generally not possible to do this because most room air purifiers were floor standing and their clean air streamed horizontally below the level where people speak. If the airstream cannot be directed to where it will be most effective, the air purifier may provide little, if any, protection within the breathing zone against airborne contaminants.

The driving force behind development of this new class of air purifiers was the discovery during the pandemic that aerosolized pathogens can float in the air for hours. This led to the belief that displacing potentially contaminated breathing zone air with continuously streaming clean air would result in less people becoming infected from pathogens such as infectious bacteria and viruses, including COVID-19 and flu.

Because the replacement of floor standing air purifiers with ceiling and wall units can play a significant role in reducing illness caused by airborne pathogens, this market segment is forecast to grow in a variety of business settings.

They include medical facilities and waiting rooms, companies located in office buildings, retail spaces, gyms and dental offices. It is expected that each air purifier would pay for itself many times over by reducing lost workdays due to illnesses, by providing healthier air to breathe in office workspaces and, in addition, by helping reduce "taking a cold home for the office".

The main reason earlier Air Purifiers were floor standing was that the designs were generally based upon the use of HEPA filters. Lower rated HEPA filters make possible the mass production of simple fan-filter air purifiers for dust, dander and pollen type applications where the initial cost is lower but frequent and more costly filter replacement is required for proper operation.

For these domestic uses, inexpensive floor standing units can be useful because the allergens are typically closer to the floor than to the breathing zone and protection against infectious bacteria and viruses in the home may be less of a concern.

For business, the situation is far different. With people conversing and interacting in close quarters throughout the workday, the most useful purpose of the air purifiers is to stream clean air directly into the breathing zone and displacing air which may have become contaminated.

The HEPA filters (High-Efficiency Particulate Air) used in air purifiers are made up of randomly arranged plastic (polypropylene) or fiberglass fibers with diameters ranging from 0.5 to 2.0 microns

bound together to form narrow irregular openings through which air can pass. They are rated according to their ability to trap particles contained within this airstream.

The ultraviolet light (UV-C) used in this new class of air purifiers is essentially the same as that which is radiated naturally to the Earth from the Sun. It can also be produced using generators at the specific wavelengths proven to kill or inactivate harmful pathogens, including infectious bacteria, COVID-19 and its variants.

The two 55 watt UV generators contained within each AirPuriX model A 24 provide more germ killing power than other air purifiers in its class.

The Airix 24W wall-mounted air purifier is specifically designed for rooms up to 500 s/f in area. For rooms greater than 500 s/f, ceiling mounted Airix 24C units, or a combination of both, is recommended.

As an added bonus, the ultraviolet energy also makes it possible to treat volatile organic compounds, called VOCs, that create the annoying odors and harmful gases, such as formaldehyde and benzyne, that can be present in indoor spaces. According to the EPA, VOCs can be emitted by products such as paints, office equipment, cleaning supplies, pesticides, and thousands more.

AirPuriX A 24 units also contain filtration to capture pet dander, a common cause of allergens and skin irritation.

HEPA filters trap, but do not inactivate viruses. Changing a fully used filter which may contain live and growing contaminants can be quite messy while changing the ultraviolet tube cartridge is simple and quick.

HEPA air cleaning is effective for certain filtering applications, especially in large areas but, for areas such as indoor offices, UV-C is the most effective solution because it makes possible ceiling and wall units that can stream clean, healthier air directly into the breathing zone to displace the air which may be contaminated. It's a great way to show your staff that you are taking steps to address any concerns they may have regarding healthier air in their workplace.

For more information please visit [www.airpurix.com](http://www.airpurix.com).

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