

Benefits of the ActivePure® Technology "Beyond Guardian Air"

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Why are we recommending this device?

Dr Kim started looking into devices like the ActivePure® BGA some time ago because of new emerging data about "Actinomyces" and CIRS.

Actinomyces are a genus of bacteria that thrive in environments where mold is growing.

According to this new data, these actinomyces play a more significant role in causing CIRS than originally thought. Being bacteria, actinomyces are destroyed by the Active Pure® BGA.



While the BGA has not been shown to denature mycotoxins per se (it might help, but it was never studied for that purpose so we don't know one way or another), it still, however, could be a major tool to help patients with CIRS because it accomplishes three important things.

- 1) It kills Actinomyces,
- 2) It kills all airborne pathogens (including virus, bacteria, flu virus, etc.) in the air and on surfaces,
- 3) It kills live mold.

The ActivePure® Technology has been integrated into a number of different devices, one of which has been granted the classification of Medical Device by the FDA.

Dr. Kim has been reviewing these devices and selected one that is called "Beyond Guardian Air" or "ActivePure® BGA." It is a residential version using the same technology as the medical device model.

She has been in discussions with the company and was able to negotiate a discount for her patients.

If this kills mold, is there a need to perform mold remediation?

The answer is yes, for several reasons.

If a building is experiencing mold growth, it means that a source of water intrusion is present. This needs to be identified and repaired even if several BGA devices were running because moisture will still damage the building over time.

Secondly, devices such as BGA only covers a certain square footage (past which the concentration of hydroxyl molecules because insufficient to be effective). It might not be sufficient to reach some hidden areas such as some remote wall cavities for instance.

Also, even after the mold colonies are dead, the mycotoxins still remain.

The appropriate protocol when dealing with a moldy residence remains the same:

- Inspect,
- Remediate and repair (eliminate the source of water intrusion),
- Remove mycotoxins.

The change is:

- We now also recommend installing BGA device(s) (based on the square footage).

What are the benefits?

Running the BGA device after remediation will provide an "insurance policy," in a way, in case there were a new water spill or if not all live mold were destroyed during remediation.

It is an additional line of defense to avoid future issues (in addition to all the other benefits explained above).

If you live in a multi-unit building, you are in a way at the mercy of other tenants. If mold is growing in their unit, active spores will make their way into yours. The BGA device will kill these mold spores which would otherwise contaminate your place and cross-contaminate your belongings.

Lastly, as an added benefit, the BGA device will ensure that your residence remains "germ-free," meaning that even if someone infected with a cold, the flu or even Covid-19 comes into your house, you are practically guaranteed not to contract the infection (while you're in your house).

There is also anecdotal evidence of the benefits described above based on the number of people reporting improvement in their symptoms when running ActivePure® devices in their residence after remediation.

Why this particular device?

There are several companies making devices that disinfect the air in a room. Many doctor or dentist offices have one or more installed.

There are two categories of devices: "passive" and "active." ActivePure® BGA falls into the "active" category.

- Passive devices kill pathogens as the air is processed through the device.
- Active devices expel molecules that fill up the room and kill the pathogens.

Passive devices have limitations because it is not possible in practice to process all the air of a room due to recirculation. Some of the air that has gone through the machine is sucked right back in, while some of the air in the room never make its way into it.

Active devices on the other hand are superior because they release charged oxygen-based molecules that fill-up the room via diffusion, reaching every area and covering all surfaces.

These molecules bind with organic contaminants, causing reactions that inactivates them at the molecular level. Basically, it destroys pathogens in the air as well as on surfaces (this is called disinfection).

Among the pollutants destroyed are volatile organic compounds (VOC), other harmful or odor-causing chemicals, as well as pathogens such as mold spores, bacteria, and viruses (including Covid-19 and its mutations).

Where does this technology come from?

When the US Congress created NASA, it mandated the agency disseminate its innovations as widely as possible. For this purpose, the NASA Technology Transfer Program was created in 1964.

Through this technology transfer program, one of these innovations (called photocatalytic oxidation) was studied and further developed by various private companies. One of them has evolved into a technology called ActivePure® Technology.

Further reading:

NASA technology transfer program:

<https://spinoff.nasa.gov/spinoff>

ActivePure® Technology:

<https://spinoff.nasa.gov/clean-air-tech>

https://spinoff.nasa.gov/Spinoff2018/cg_2.html