

AIR PURIFICATION FOR YOUR HVAC SYSTEM

Bipolar Ionization (BPI), has been used for decades to kill airborne bacteria, mold, viruses, reduce dust and odors. Research shows that bacteria and viruses can be killed with this application. It has already proven effective during the SARS, MERS and Norovirus outbreaks and is just as useful in the fight against the current global pandemic we are facing today.

Bipolar Ionization (BPI) has been experiencing an increase in popularity and interest with COVID-19 causing concern about air quality. When people sneeze or cough, they are sending droplets throughout the air which may be viral. Furthermore, if an infected person touches a surface, this action can contaminate the area, spread the virus and cause others to become infected. An active air cleaning process is necessary; this is where BPI comes into play.

During the BPI process, positive and negative ions are drawn to airborne pathogens and will kill all bacteria, mold, viruses such as the flu, coronavirus, and many others. Ions will capture the hydrogen bond of the virus, and since viruses cannot survive without a hydrogen bond, the virus becomes inactive.

Ions will stick to dust and released particles from the mouth, making them heavier and therefore drop out of the breathing zone, which allows them to be caught in the HVAC returns and captured by the filters. Air will continuously be disinfected. If UV light is also being used in conjunction with BPI, then the UV can vaporize the dead pathogens.

Another advantage is that Bipolar Ionization requires no re-engineering to your current HVAC system. With smaller units, BPI is maintenance free for 10- 15 years other than an occasional dusting of the small brushes. For tube units, the tubes need to be replaced every 18 to 24 months.

The global pandemic has put a new spotlight on ultraviolet sterilization: a technique that has also been around for decades. UVC lighting can kill over 99% of viruses and bacteria in an extremely short period of time. New sanitation protocols are becoming the normal and are essential as many businesses are beginning to reopen. UVC Lights have been used in hospitals and operating rooms for years; however, with COVID-19 being a global threat, there is now interest in

implementing this technique into places like restaurants, warehouses, schools, Doctors' offices, and office buildings.

Ultraviolet C (UVC) is one of the three types of rays given off from the sun. Its sanitizing effects have been tested and used with other viruses, including SARS, wherein only 15 minutes the UVC lights were able to kill and stop the virus from spreading.

There are numerous BPI and UVC Lighting applications on the market. Some of the country's largest hospitals and airports have already implemented the systems. For those looking to cover smaller areas and offices, there are standalone devices or additions to an HVAC.

We have multiple systems available that will work for your needs. If you would like more information, please contact us.

