



CASE STUDY

Boland Headquarters

Gaithersburg, Maryland

CHALLENGE

If you have worked with Boland in the past, chances are you have toured our 95,000 square foot headquarters building in Gaithersburg, Maryland. Originally built in 2002, the building has undergone many HVAC system upgrades as business goals have evolved and new tenants have arrived.

In an effort to keep our associates, clients, occupants, and community safe, our team recently assessed our Indoor Environmental Quality (IEQ). The IEQ assessment evaluated four main pillars: lighting, acoustics, Indoor Air Quality (IAQ), and thermal comfort. The building's existing air system used traditional high efficiency passive filters, which are 46% effective against micro-biologicals. Our energy team set out to not only improve this IAQ metric, but to also support sustainability goals and lower operating expenses.

SOLUTION

After completing a building IEQ assessment and reviewing recommendations from the CDC and ASHRAE in response to the COVID-19 pandemic, our team of experts opted to install Dynamic Air 2" V-Bank Air Cleaners with Sterile Sweep UVC in each of the two Dedicated Outdoor Air Rooftop Units. This system upgrade is 90-99% effective against contaminant particles, gasses, and micro-biologicals. The upgraded HVAC system, with strategic use of UV lighting, air cleaning technology, and air filters, improved our building's IAQ, supported sustainability, and lowered our monthly expenses.

RESULTS

Replacing traditional filters with a low-pressure Dynamic Air Cleaning solution improved the IAQ within the building, reduced static pressure, enabled maintenance savings due to decreased filter changes, and contributed to company sustainability goals by reducing energy and decreasing waste going to the landfill.

The building is now showcasing:

- Increased IAQ with 90-99% effectiveness against contaminant particles, gasses, and micro-biologicals
- Reduced maintenance costs by 75%
- Increased energy savings totaling:
 - Annual kWh Savings: 135,036
 - Carbon Credits: 183,204
 - Annual Energy Savings: \$21,044.00

