



Proactive IAQ

Dynamic Air Quality Solutions helps optimize air quality & sustainability at Maryland medical plaza

IAQ

Promark Partners, a privately

owned, full-service real estate company, enjoys a broad real estate portfolio, including several medical office buildings in the Washington, D.C. area. Located in the 300-acre MoCo Life Sciences Center and centered between Johns Hopkins University, Adventist Healthcare Rehabilitation Center, University of Maryland at Shady Grove and a multitude of medical specialty practices, Medical Plaza I is a five-story medical suites office building with more than 20 tenants. The building is attached to Shady Grove Adventist Hospital and tenants are dedicated to serving the surrounding medical community, especially given the building's proximity to so many prominent medical facilities.

The property was targeted for a deep energy retrofit project in 2017. Recurrent Innovative Solutions, LLC was brought on board to handle the performance contracting. The project involved

upgrading the existing chiller, boilers and lighting to high-efficiency products. The project qualified for a \$175,000 Maryland State energy-efficiency grant, as well as \$68,297 in additional utility rebates for the energy-efficiency upgrades.

But after the onset of the SARS-CoV-2 pandemic, owners also sought to improve air quality measures, including high-efficiency air filtration to combat the presence of the airborne viruses. Recurrent Innovative Solutions teamed up with engineers at Boland Trane to determine how best to increase air quality measures without increasing energy costs or operating costs.

The team chose Dynamic Super V-Bank Air Cleaners and Sterile Sweep Germicidal UVC Systems for a catch, hold and kill solution. The approach includes MERV13 or better air filtration and ultraviolet germicidal irradiation, which follows guidance from the ASHRAE Epidemic Task Force for reducing airborne infectious aerosol exposure.

Dynamic 2" Super V-Bank Air Cleaners offer a high-efficiency and cost-effective alternative to traditional bag and cartridge filters, for improved filtration, odor reduction, lower energy costs and less maintenance. The electrically enhanced filter media in Dynamic V-Banks are less dense than traditional high-efficiency filters, which



Dynamic 2" Super V-Banks and Sterile Sweep UVC Systems provide state-of-the-art air filtration, while reducing HVAC fan energy costs and extending maintenance intervals.

Above: Medical Plaza I in Rockville, Maryland.

means lower static pressure. This reduces the fan energy required to push air through the system without losing the ability to capture sub-micron particles and airborne viruses. Higher MERV traditional filters not only use more energy than lower MERV filters, but are more expensive and require changing much more frequently.

As the Dynamic V-Banks catch ultrafine particles and biological contaminants, the Sterile Sweep UVC Systems use parabolic reflectors to focus UVC light across the air cleaners to inactivate viruses and pathogens before they can reach building occupants.

Rob Eisinger, principal at Promark Partners, said managing indoor air quality at Medical Plaza I has always been a top priority. With an enclosed attachment to Shady Grove Adventist Hospital, he explained, it's commonplace for tenants and visitors to travel from the building to the hospital.

"With the advent of the COVID-19 pandemic, we researched the different available technology to improve indoor air quality. When we learned of Dynamic's Sterile Sweep Solution, we enlisted the HVAC team at Recurrent Innovative Solutions to orchestrate the installation of the product. We're thrilled with the results and the peace of mind it brings to everyone at the property," added Eisinger.

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