

MEDICAL PLAZA I 9715 MEDICAL CENTER DRIVE ROCKVILLE, MD

KEY PARAMETERS

- Type of Facility – Existing Building
- Function – Medical Offices
- Area – 5-Story 67,029 sq. ft.
- Project Completed – January 2021

Challenges: Meet sustainability goals while optimizing air quality during the COVID-19 pandemic. As part of an energy savings performance contracting project, Recurrent Innovative Solutions was responsible for refurbishing a 15,000cfm air handling unit serving a medical suites office building attached to Shady Grove Hospital in Montgomery County Maryland. In addition to reducing energy and operating costs, owners wanted to be proactive in adopting advanced air quality measures in a medical environment.

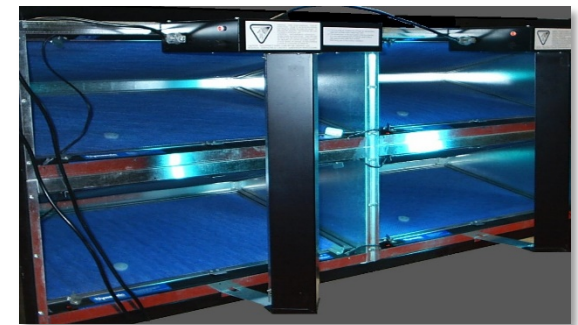


Solution: Recurrent Innovative Solutions teamed up with engineers at Boland Trane who were brought in to determine how best to



increase air quality measures while minimizing pressure drops as filters load. Dynamic Super V-Bank Air Cleaners and Sterile Sweep® Germicidal UVC Systems were selected to provide a *catch, hold & kill* design. The key for UVC to be effective is contact time and proximity. The V-Bank Air Cleaners use charged filter media that allows for increased air filtration while minimizing the pressure drops as the filters load up compared to a

standard filter. As the V-Banks catch ultrafine particles and biological contaminants, the Sterile Sweep's scanning parabolic reflector focuses a sterilizing beam of UVC across the media to inactivate pathogens. The Dynamic V-Banks can hold higher amounts of dust while maintaining lower loaded pressure drops compared to conventional filters which leads to lower filter maintenance for service personnel and reduced fan energy.



Results: The air filtration system adheres to guidance issued by the ASHRAE Epidemic Task Force for reducing airborne infectious aerosol exposure. The system provides improved indoor air quality with reduced operating costs and longer maintenance service intervals.

TEAM

- Owner – Promark Partners
- Energy Performance Contracting – Recurrent Innovative Solutions
- IAQ Engineering - Boland

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