

MCD

MEDICAL CONSTRUCTION & DESIGN®

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~ focus ~
POPULATION
HEALTH

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FLOORING



Foodservice
& Dining:
Catering to All

RAISING THE BAR

Prefab & Lean
Deliver Sarah
Cannon Cancer
Hospital



Sustainable Design & Clean Air

The right Rx for indoor air quality, energy savings



Department of Veterans Affairs
Lee County Healthcare Center
Bay Pines VA Healthcare System

IAQ

The Lee County Veterans

Administration Healthcare Center is a specialty care and outpatient clinic serving more than 200,000 veterans living in Southwest Florida and employing approximately 420 medical and administrative professionals.

Since opening in 2012, the healthcare facility has been recognized as a model for sustainable practices. The

air filtration as specified. As such, project stakeholders turned to Dynamic Air Quality Solutions to review options.

Dynamic AQS manufactures and distributes high-performance indoor air quality products, including polarized media air cleaners, UV-C germicidal systems and condensate pan treatments for residential and commercial applications. The

The Lee County VA Healthcare Center in Cape Coral, Florida. Left: The facility chose Dynamic V8 Air Cleaners to provide state-of-the-art air filtration, while reducing HVAC fan energy costs by 2/3 and extending filter change-out intervals to almost seven years.

recovery ventilators on all air-handling units to recover energy from the exhaust air.

Dynamic V8 Air Cleaning Systems offer MERV 15 performance with a low-static pressure resistance compared to conventional MERV 14 passive filters. This allowed the facility to reduce fan energy and energy costs. The air cleaner manufacturer recommends replacing media pads based on static pressure, (clean SP x 2) rather than scheduling change-outs based on a prescribed time interval.

Maintenance costs and filter change-outs were also reduced significantly. Dynamic V8 Air Cleaning System filter media pads only require replacement every several years, unlike conventional MERV 14 filters. That meant no quarterly pre-filter change-outs and nine-month final filter replacements, which freed up time for maintenance personnel to concentrate on other things. Fewer media

change-outs also translated to less material usage, lower disposal costs and a smaller environmental footprint for the building.

At the Lee County VA Healthcare Center, the air cleaner media pads in two west-facing air handlers were replaced in 2015 due to a higher than normal concentration of sand from prevailing winds on the Gulf Coast. The media pads in the other units were replaced in 2019, which represented a service life of just under seven years.

Eight years after opening, the facility continues to be pleased with the air cleaning systems, which delivered results as promised with respect to both air quality and lifecycle costs.

“System performance was very important to the facility personnel,” according to Jeff Watcke, region manager for Dynamic Air Quality Solutions. “They have enjoyed the low maintenance and low-static pressures, which was very important given the presence of high airborne particulate concentrations in this part of Florida.”

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facility incorporates many sustainable features, including natural lighting and automated building management systems. The \$53.1-million project was designed primarily as an outpatient healthcare center to replace an existing outpatient healthcare facility, while addressing the needs of a growing veteran population.

Designers sought to reduce energy consumption and maintenance costs, in addition to providing high-efficiency

company's products are used in applications that range from hospitals and schools to restaurants and casinos.

Ultimately, over 100 Dynamic V8 Air Cleaning System modules were installed in 17 custom air handlers serving the facility. Additionally, the project included installation of three 350 ton water-cooled chillers, one 35 ton air-cooled chiller, one 70 ton heat recovery chiller, along with energy