

Virginia Commonwealth University Medical Center

Richmond, Virginia



CLEANSUITE[®] ceiling system at the VCU Cardiac Catheterization Laboratories.



Virginia Commonwealth University (VCU) Medical Center provides state-of-the-art care for pulmonaries diseases in both outpatient and hospital settings. The VCU state-of-the-art cardiac catheterization laboratory is equipped to perform vasodilatory challenge tests, fluid challenges and exercise challenges.

Equipment Profile

- The CLEANSUITE[®] fully-integrated modular ceiling system delivers laminar airflow over the operating table, which contributes to significantly reduced airborne contaminants within the surgical room environment.
 - Exceeds ASHRAE Standard 170.
- This application also incorporated integral mounting systems for efficient installation of equipment, as well as an array of accessories were added to this custom design.
 - Structural boom and rail mounts.
 - Medical gas connection manifold.
 - HEPA filters (99.99% efficiency at 0.3 microns).
 - Flush LED dimmable lighting throughout.
 - Custom sound system with wall dock.
 - Antimicrobial powdercoat.

Key Benefits

- The modular, all-inclusive system centralizes the design and installation of all services and components in the ceiling system.
- Installs up to 80% faster than conventional stick-built ceiling systems, providing a fast-track to optimizing operating room utilization.
- Provides full visibility to connection points for all services prior to installation, resulting in less risk for errors when comparing to the coordination of multiple trades.

Project Background

The addition of four new cardiac catheterization lab procedure rooms included the CLEANSUITE system from Huntair[®]. The Air Handling Unit which delivers air to the ceiling systems was supplied by Temtrol[®] and included FANWALL TECHNOLOGY[®] to provide the redundancy of four fans with dedicated VFDs for air delivery to the operating rooms, even in the event of a fan/motor failure. Nortek Air Solutions, the parent company of Huntair and Temtrol, provides custom air solutions for the Healthcare industry. Sole source responsibility allows for the project to be delivered on time and in budget.

Project Team

Building Owner: VCU Health System

Engineer: CCRD

General Contractor: WM Jordan Co.

Mechanical Contractor: EMC Mechanical

Nortek Air Solutions Sales Rep: ACES, Inc., Richmond, Virginia office.

Equipment: Huntair CLEANSUITE operating room system; Temtrol *RAPID* Knock-Down air handling unit with FANWALL[®] system.