CR II Module's Minimum Installation Height Resolves OT's Conventional Design

CASE STUDY - HOSPITAL

Customer Profile

- Location: Tirupati, India
- Leading Medical Centre of Tirupati
- Government Medical College and Hospital exclusively for women

Filtration Situation

As a part of the expansion plan, the hospital wanted to have an additional 15 numbers of Operation Theatres (OT). They typically used conventional deep-pleat HEPA filters in the plenum above these theatres. The deep pleat HEPA Plenum is typically with a side throw design. It comes equipped with deep pleat filters needing more height. However, in a few of the theatres, they lack enough vertical space for these deep-pleat style filters due to the height of the civil slab.

The new facility was designed based on an old design from their earlier facility where they did not consider the height for the filtration system. Once the facility was constructed, the height of the OT ceiling was a concern for implementing a filtration system. The college personnel needed an effective solution that made economical use of space.

AAF International Solutions

This facility posed a unique design challenge due to design constraints. Their engineering team approached AAF International for suitable recommendations to solve this challenge. The team visited the site, evaluated the conditions, and made a detailed presentation of possible solutions.

After discussing their options, the engineering team selected the high-performance filter module - CR II module with mini-pleat filters as their ideal solution.

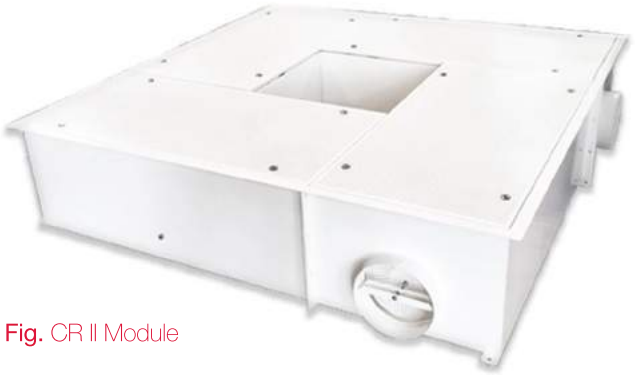

Fig. CR II Module

It has minimum installation height and designed for use in operating theatres, associated preparation rooms, and intensive care wards. Their choice reduced the plenum height from 700 mm to approximately 300 mm. The hospital's engineering team submitted the product drawings supplied by the AAF International team, which were verified as compatible by the design consultant.

Results

AAF International received the order after an intensive analysis of the site conditions and evaluating the situation. AAF provided filtration solution for their new operating theatres (15) in different configurations for various surgical needs.

AAF's customized space-saving solution resolved a tricky problem for the hospital's engineers, and the HEPA mini-pleat filters provided clean air to meet the demands of the healthcare facility. AAF successfully implemented customized air filtration solution meeting the most functional design and efficiency requirements.

AAF India Pvt Ltd, 117&118, Bommasandra Jigani Link Road, Anekal Taluk, Bangalore 560 105 marketing@aafindia.net I +91 80 2 7839903

AAF INTERNATIONAL®
Bringing clean air to life.

AAF has a policy of continuous product research and improvement and reserves the right to change designs and specifications without notice.

© 2018 AAF I nternational and its affiliate companies