

# LARGE MIDWEST MEDICAL CENTER - NEW CONSTRUCTION PROJECT A UNIVERSITY TURNED TO CAMFIL FOR THE WIDE VARIETY OF FILTRATION PRODUCTS REQUIRED IN THE LARGEST CONSTRUCTION PROJECT EVER ON THEIR CAMPUS; AN 800+ BED INPATIENT HOSPITAL

### **COMPANY PROFILE**

A medical complex within one of the most recognizable midwestern university campuses, contains over half a dozen separate hospitals. The staff of 20,000 handled over two million outpatient visits, a hundred thousand ER visits, and admitted over 60,000 patients last year.

## THE SITUATION

As part of a long-range strategic plan, the university envisioned the largest facility on an already impressive campus: an inpatient hospital. With over 800 beds, the goal was to provide world-class patient care, leading-edge research and expanded teaching capabilities.

For a hospital of this size to be built and function as designed, it would require engineering firms and suppliers to exceed expectations. The building's ventilation system for example needed to reliably and economically deliver healthy air to all the patient rooms while likewise having the capability to protect the most critical research areas. Air filters, frames and housings for multi-stage air handling units were required along with high-efficiency final filters, carbon and HEPA filters. Eight containment style bag-in/bag out housings were also needed.

The out-of-state MEP firm (mechanical, electrical and plumbing) had the task of finding suppliers capable of achieving and exceeding the high demands placed on this project

### THE ACTION

When the new construction specialist for the local Camfil representative first saw the specifications for the project, it was immediately recognized that:

- Only Camfil could supply all the filtration products required for this project.
- Each product from Camfil would meet and exceed expectations.

A closer analysis revealed the filtration products could be broken down into three categories.

- Custom manufactured bag-in/bag-out containment housings with certified HEPA filters.
- The entire range of air filters prefilters, secondary filters, final filters including HEPA filters designed specifically for air handling units.
- Activated carbon cylinder filters for controlling gases and VOCs.

The new construction specialist for Camfil organized meetings with the principals involved to fully understand the specific goals for each system. As a data-driven company, Camfil's Riverdale, NJ and Washington, NC R&D and manufacturing facilities were able to provide documentation as the basis for a comprehensive proposal outlining performance in filtration efficiency, energy savings and long service life.





"My experience with other projects convinced me Camfil had both the products and technical support needed to contribute to a building where everyone who was involved will be proud to drive by for years to come," Camfil foremarket specialist.



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### THE RESULTS

- The popular Camfil FastFrame® was recommended for as the filter holding frames in 50 air handling units. The FastFrame's unique design ensures a tight seal in the frame, but without the need for clips and fasteners.
- For prefiltration, the Camfil 30/30 MERV 8/8A pleated panel filter was the obvious choice. The filter comes with guarantees to maintain its particle capture efficiency (MERV value) and to remain in service longer than any other comparable filter. Guaranteed to 2.0" of w.g.
- For final filters, the Durafil ES<sup>2</sup> also comes with guarantees to maintain its rated MERV value and to maintain the lowest average pressure drop for its entire service life. The Durafil ES<sup>2</sup> is the longest-lasting filter with maintained efficiency at the lowest average pressure drop in the industry today.
- In AHUs that required HEPA filtration, the Absolute VG was selected. Rated at 99.99% efficient on 0.3 micron particles, the filter has exceptionally low-pressure drops. The frame design is lightweight for easy handling and installation. Each filter is shipped with a Certificate of Conformance noting the exact efficiency at rated and tested airflow.
- In areas where gaseous contaminants must be controlled, the CamCarb CG molecular cylinders were suggested. The cylinders are low-pressure drop units that can be loaded with a specific molecular media to control a wide range of chemicals and VOCs.



Bag-in/Bag-out containment housing

 The gel-sealed Camfil Filtra 2000 installed in the containment units are HEPA filters designed for critical applications where a filtration efficiency up to 99.999% on 0.3 micron particles is required. These filters are available in airflow capacities up to 2,400 CFM with an initial pressure drop as low as 0.80" w.g.

CASE **STUDY** 

Healthcare

 Bag-in/bag-out containment housings can be produced by very few companies. Camfil has a long history of providing the housings for critical applications such as hospitals with airborne infection isolation rooms or where research is being conducted where workers need assurance of air quality.

#### THE PROOF

After a careful review of all proposals, once the owners determined the following about Camfil's capabilities and expertise:

- Broad offering of high performance general ventilation air filters guaranteed to perform as stated
- The ability to provide activated carbon cylinders
- Individually tested and certified HEPA filters each with a Certificate of Conformance
- Custom manufactured bag-in/bag-out containment housings
- Access to national and even global research and development labs
- Experienced local presence in the community provided by a single company with a global reputation for excellence

Upon review, it was clear Camfil was the only logical choice.







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