



Equipment Requirements

Filtered Fume Hoods (49) Green Solution Hoods by Air Master Systems featuring Erlab's GreenFumeHood filtration technology.

Products Expectations

Overall Air Filtration and Filtering Fume Hood Applications for Educational Facilities

CASE STUDY

Framingham State University

Addition to Hemenway Hall



Project Background

To offer students enhanced curriculum, the 4-story addition to Hemenway Hall at Framingham State University includes (8) Organic, Inorganic, Analytical and Physical Chemistry teaching laboratories utilizing a total of (49) filtered fume hoods. LEED Silver certification is being pursued.

Challenges

The large and expensive mechanical systems required to support a 100% ducted hood design contributed to the project going over budget. State funding for this statewide STEM initiative had already been set and finding a solution to reducing construction costs was necessary.

Project Solutions

Incorporating Green Solution Hoods featuring Erlab's GreenFumeHood Filtration Technology into the design provides a safe working environment for the students, offers significant energy savings for the school, and helps to achieve LEED silver.

The chemistry involved is easily handled by GreenFumeHood Filtration Technology. The combinations of acids, bases and solvents used by the students will be fully adsorbed by the Neutrodine filters and last greater than 2 years as proven at other installations with similar chemical usage.

The architect designed a mix of mostly filtered and some ducted fume hoods which reduced the mechanical systems size by 25%, lowering their costs by over \$917,000 and providing a net savings of over \$330,000 on the project. With this savings, it was now possible to complete the entire 6th floor and avoid having unusable shell space.



The Resulting Benefits

Both construction and operational costs are reduced.

- \$330,000 net construction cost savings
- \$24,500 estimated annual operating cost savings
- Assisted the project in maintaining an aggressive construction schedule.
- Less operational noise when students are using the hoods.
- Outfit the entire 6th floor with the construction cost savings.