

## Case Study: Center for Coastal Studies

### PROJECT PROFILE:

**Type:**

Gut Renovation

**Location:**

Provincetown, MA

**Filtered Fume Hoods:**

(1) Labconco Protector®  
Airo featuring ErLab's  
GreenFumeHood Filtration  
Technology

**Statistics:**

Completion Date - April, 2017

Square Footage - 13,000

**Architect:**

Springer Architects

**Lab Planners:**

LabSpaceUSA

**MEP Engineers:**

Building Engineering  
Resources

**Fume Hood Dealer:**

Wilkem Scientific

### THE SCOPE

The Center for Coastal Studies in Provincetown, MA, located at the outermost tip of Cape Cod, performs many critical environmental and animal studies including water quality testing, whale disentanglements, sediment testing, and population biology studies in a sensitive and fragile natural environment. Consolidation of these and many other programs into

one location, while maintaining its leadership and commitment to environmental awareness, has long been a goal for the Center. With a grant from the NSF, donations from local businesses and support from the Board of Directors, the Center is renovating a 1965 high school annex building to accomplish this goal.



Photo by Wilkem Scientific

### THE CHALLENGE

Commercial buildings are neither designed nor built for housing chemical laboratories. The new Ecology/Biology lab needed a chemical fume hood for dilutions and prep work with acids, solvents and bases. Adding a traditional ducted chemical fume hood would also require a hazardous exhaust system on the roof where solar panels, which provide enough energy for all of the building's electrical needs, were already in place. Additionally, with their focus on improving the local environment, simply dumping chemicals into the atmosphere hardly seemed the proper solution.

### THE SOLUTION

Utilizing a Protector Airo filtered fume hood from Labconco, the biology and water chemistry labs can safely handle chemicals while returning clean filtered air back into the lab. Additional costly make-up air is not required, there is no hazardous hood exhaust system on the roof, and the full array of solar panels is not compromised.

### THE RESULT

CCS provides leadership to the scientific community in employing cutting-edge environmental practices that greatly reduce carbon footprint

- Filtered fume hood captures and retains chemicals at the point of use.
- Less total first cost and less operating cost than a ducted solution.
- Photovoltaic solar panels could remain in place
- No additional ductwork penetrations through the office spaces above
- CCS maintains its leadership role as a concerned partner to the Provincetown community



Erlab's state of the art Research & Development Laboratory relies exclusively on filtration

## About Erlab

### We provide safety, we protect your health

Erlab invented the ductless fume hood in 1968. With more than 50 years of experience in the field of chemical filtration and protection of laboratory personnel; we know the formula for safety. With Erlab, you will never have to wonder or worry if our products are safe. We build each one of the following 7 ingredients into our products, and without all of them, your health and safety will be compromised.

#### 1 Erlab R&D Laboratory

The engineers and chemists in our state-of-the-art R&D laboratory understand molecular filtration. We are committed to designing products that are safe and of the highest quality, strive to improve our products, and continuously develop new products that provide greater protection in the laboratory.

#### 2 Strict Safety Standards

We hold ourselves to the highest standard and adhere to the strict AFNOR NF X 15-211: 2009 filtration safety standard as endorsed by ANSI Z9.5-2012.

#### 3 A Published Chemical Listing

It all begins here. Without this listing, we are not compliant with AFNOR NFX 15-211. Our in-house laboratory tests, as well as independent testing, to verify the retention capacity of over 700 chemicals for our filters.

#### 4 Independent Testing

Erlab filters have been independently tested multiple times at various concentrations guaranteeing that our safety solutions all adhere to the strict performance criteria of the AFNOR NF X 15-211:2009 standard assuring that the emission concentration at the filter exhaust will always be lower than 1% of the TLV.

#### 5 Application Questionnaire (Valiquet)

Our laboratory specialists will recommend the appropriate filtration fume hood, type of filter, and personalized advice.

#### 6 Certificate of Validation for the chemicals used in the hood

A certified PhD chemist issues a Certificate of Validation with a list of the chemicals approved for use in the hood.

#### 7 Our Safety Program

We back up our products 100%. This program includes your specialized chemical evaluation, validation of your hood upon installation, and a filtration safety specialist at your service to ensure that your hood is operating to its full potential.

#### North America

+1 800-964-4434 | [captairsales@erlab.com](mailto:captairsales@erlab.com)

#### China

+86 (0) 512 5781 4085 | [sales.china@erlab.com.cn](mailto:sales.china@erlab.com.cn)

#### France

+33 (0) 2 32 09 55 80 | [ventes@erlab.net](mailto:ventes@erlab.net)

#### Germany

0800 330 47 31 | [verkauf@erlab.net](mailto:verkauf@erlab.net)

#### Italy

+39 (0) 2 89 00 771 | [vendite@erlab.net](mailto:vendite@erlab.net)

#### Malaysia

+60 (0) 7 3 555 724 | [erlab@tm.net.my](mailto:erlab@tm.net.my)

#### Spain

+34 93 673 24 74 | [ventas@erlab.net](mailto:ventas@erlab.net)

#### United Kingdom

+44 (0) 1722 341 940 | [salesuk@erlab.net](mailto:salesuk@erlab.net)

[www.erlab.com](http://www.erlab.com)



2018 Celebrating 50 years  
of innovation in filtration



Erlab above