Case Study
Cornette Library

West Texas A&M University Library Saves $30,000 Annually With Duct Sealing

Ameresco, a leading energy service company (ESCO), always recognized the potential savings that duct sealing represents. For ESCOS, where guaranteed savings is part of their business model, measuring and verifying results was difficult to do manual duct sealing.

So, when Ameresco learned about Aeroseal's system they were intrigued. The next step was identifying a project where the innovative technology could be put to the test.

That opportunity arose when A&M University approved a system-wide performance contracting project. The project's goals were to:

- Save energy
- Reduce its environmental impact
- Reduce its overall operating costs

Ameresco began evaluating buildings on the University's West Texas A&M campus, with duct sealing in mind working with Aeroseal, LLC to identify buildings most likely to benefit from its duct sealing process.

After a visual inspection, the two teams decided on the University's Cornette Library as one of two initial targets for sealing.

The Aeroseal team evaluated the horsepower, airflow, and other factors of the library's five HVAC systems to generate an estimated energy savings and ROI. In the end, three of the library's five systems were earmarked for sealing.

Aeroseal and Ameresco worked with the University to develop plans and coordinate work. The actual sealing was performed over a period of three nights when the library was closed. Prep work included inserting foam plugs into the ductwork to protect VAV equipment and block the sealant from escaping through vents.

Tubing was then used to connect the sealing equipment to the duct system. The computer-controlled sealing system measured pre-sealing leakage rates. Sealant was then blown into the inside of the ductwork and, under pressure, driven to all the various leaks.

At the end of the process, the Aeroseal equipment took post sealing measurements. Aeroseal reduced leakage on the project by 98%, this is an annual energy savings of about $30,000. This helped Ameresco reach its project goals.

PROJECT OVERVIEW

Cornette Library

LOCATION
Texas A&M University, Canyon, TX

AEROSEAL CONTRACTORS
Aeroseal, LLC

ESCO
Ameresco, Inc.

GOAL
Reduce energy use; Guarantee savings

BEFORE AEROSEAL
17,413 CFM* of leakage

AFTER AEROSEAL
1,271 CFM (92.7% reduction)

RESULTS
Provided University with $30,000 in annual energy savings

*Cubic feet per minute

aeroseal | 225 Byers Road, Suite 1 | Miamisburg, OH 45342

Use Aeroseal On Your Next Job For Faster, Guaranteed Results!

aeroseal.com

Case Study
Cornette Library

Verifiable, Guaranteed Results

> *Aeroseal is a complete turnkey process. It does the pre-measurement, the sealing, and then the post measurement. That's one thing that is perfect for performance contracting. This solution elevates duct sealing as a primary strategy for our business.*
>
> ***Adrian M. Wallace***
> *Energy Engineers Solutions Managers*
> Johnson Controls

> *Duct leakage was not a measure we looked at in the past. We have a guarantee component of our business model and until now, verification has been a problem and the benefits of duct sealing were difficult to prove. Aeroseal technology changes all that. We now have another measure we can put into our projects that will save substantial energy for clients.*
>
> ***Marco Soto** - Senior Development Engineer*
> Ameresco

Aeroseal has four different models to calculate duct leakage and inform energy savings models on your project.

Reduce Energy and Consumption Cost

Duct sealing addresses multiple sources of energy waste. For example, by reducing leaks 15%, fan requirements drop by 40% or more. This saves thousands of dollars every month.

Aeroseal increases HVAC fan efficiency and eliminates excess ventilation load to reduce energy costs. It is a verifiable and guaranteed way to offer energy savings with typical payback in three to five years.

Improve Indoor Air Quality

Leaks in the return duct allow dust and other contaminants to be sucked into the duct system and spread throughout the facility. And exhaust fans can't remove contaminated air from the building if there are leaks in the ventilation shaft.

Improve Building Ventilation

Leaky ductwork is the primary cause of ineffective building exhaust. In addition to causing problems with uneven and uncomfortable temperatures, this can lead to higher energy costs, and added maintenance costs.

Meet Code and Spec

As duct leakage specifications get tighter and tighter, Aeroseal is specified as a routine component of commercial projects. Our consistent results will take you from hoping to knowing that you'll meet code requirements – the first time.

aeroseal | 225 Byers Road, Suite 1 | Miamisburg, OH 45342

Use Aeroseal On Your Next Job For Faster, Guaranteed Results!

aeroseal.com