CASE STUDY

WEST TEXAS A&M UNIVERSITY LIBRARY

DUCT SEALING YIELDS \$30,000 IN ANNUAL SAVINGS FOR WEST TEXAS A&M UNIVERSITY LIBRARY TARGETED FOR ENERGY UPGRADES

Advanced Sealing Process Provides ESCO With New Strategy For Guaranteed Savings

Ameresco, a leading energy efficiency solutions company, always recognized the potential savings that duct sealing represents. Until recently, however, accessing and sealing leaks was often a highly expensive, highly disruptive process. Additionally, for ESCOS, where guaranteed savings is part of their business model, measuring and verifying results was difficult to do. So, when the Ameresco learned about a new duct sealing process that made finding and sealing leaks easy – using a computer-controlled system that measured before and after results, they were intrigued. The next step was identifying a project where the new aeroseal technology could be put to the test.

That opportunity arose when A&M University approved a system-wide performance contracting project. Its goals were to save energy, reduce its environmental impact, and ultimately reduce its overall operating costs. As part of that project Ameresco began evaluating buildings on the University's West Texas A&M campus.

With duct sealing in mind, Ameresco invited Aeroseal LLC to visit the campus and 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 that would result. In the end, three of the library's five systems were earmarked for sealing.

Aeroseal and Ameresco worked together 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, equipment took post sealing measurements.

Upon completion, the computerized equipment generated verified results: a 92% reduction in leakage and annual energy savings of about \$30,000.

Use Aeroseal On Your Next Job For Faster, Guaranteed Results! CALL: 877-FIX-DUCT or VISIT: www.aeroseal.com



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PROJECT OVERVIEW

BUILDING Cornette Library

LOCATION West Texas A&M University, Canyon, TX

ESCO Ameresco Inc.

DUCT SEALING CONTRACTORS Aeroseal LLC

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.



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.

Marco Soto

Senior Project Development Engineer Ameresco Duct leakage has not been a measure we typically 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 our clients.

Brad Kondrach

Engineering Project Manager Ameresco

