Case Study
LA Unified School District

Carlifornia Elementary School Renovation Meets Duct Sealind Codes Using Aeroseal

LA Unified School District aministrators turn to Aeroseal for HVAC system compliance and energy efficiency.

With 14,000 building structures under their domain, the LA Unified School District is always on the lookout for new energy-saving strategies.

The district's sustainability specialist had heard about Aeroseal duct sealing earlier, but it took time to evaluate the technology and to ensure it was safe and effective enough for its proposed use.

It also required the right pilot project for initial evaluation. That ideal pilot project came around when renovation work on one of its elementary school buildings revealed substantial leakage in a portion of the ductwork.

To meet building code requirements, school engineers had a choice: duct replacement or Aeroseal. The duct maintenance experts at Penn Air Group (PAG) had quite a crowd of observers witnessing the initial application of Aeroseal at the 93rd Street Elementary School building.

M&O personnel, inspectors, and district engineers were all there asking questions, watching the process, and judging the outcome. After the initial setup, it took less than an hour for Penn Air to seal the supply and return ductwork serving the administrative offices.

Everyone watched the computer screen with anticipation as the results of the sealing process was being monitored. A live graph showed the leakage rate decrease from 2,766 CFM to 207 CFM (92% reduction).

On the second day, the PAG crew completed the initial pilot project as they quickly sealed a third section of the building's ductwork (the return duct leading to the kindergarten rooms). Unlike hand sealing, there is no demolition needed for Aeroseal, and overall labor costs for duct sealing are reduced when Aeroseal is used.

With the Aeroseal Certificate of Completion verifying the pre-seal and post-seal leakage, school engineers knew right away they had succeeded in meeting code requirements. They also quickly realized that Aeroseal duct sealing could reduce energy costs throughout the school district.

PROJECT OVERVIEW

LA Unified School District

BUILDING
93rd St. Elementary School

LOCATION
Los Angeles, California

AEROSEAL CONTRACTORS
Penn Air Group

CONTRACT ENGINEER
Internal, LA Unified SD

GOAL
Meet duct sealing codes for school renovation project; Improve energy efficiency throughout school district facilities

BEFORE AEROSEAL
2,766 CFM* of leakage

AFTER AEROSEAL
207 CFM of leakage

RESULTS
Sealed ductwork in elementary school to approximately 92% leakage reduction annually

*Cubic feet per minute

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

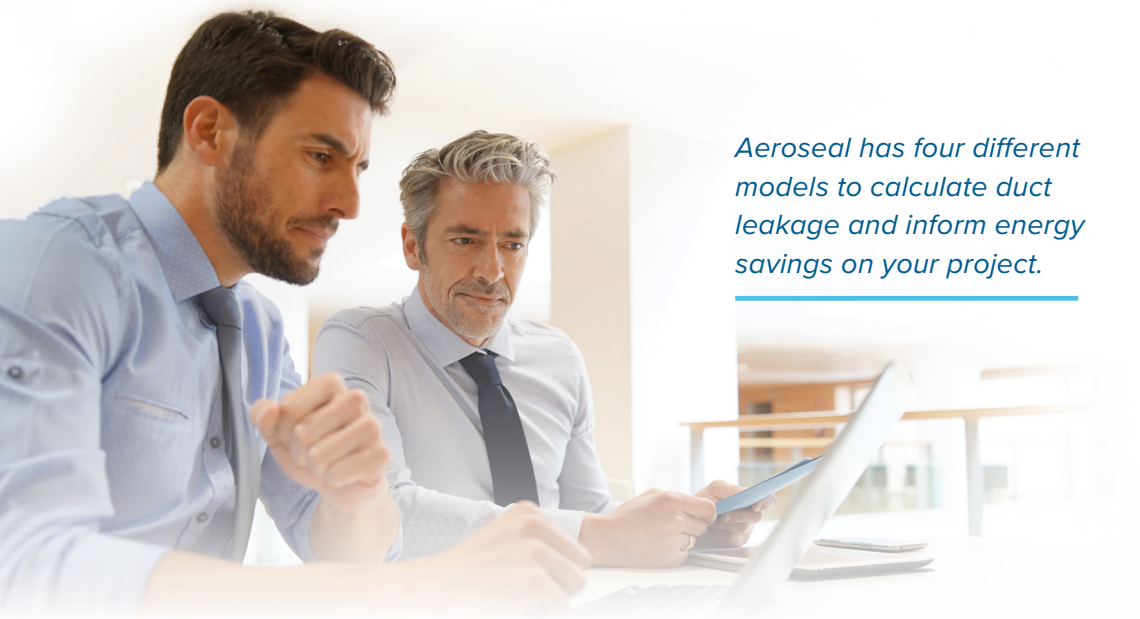
Case Study

LA Unified School District

Verifiable, Guaranteed Results

> *Aeroseal really proved its value. The sealing was done without disrupting the classrooms and the overall impact on the school was nil. The biggest concern I heard from all those gathered to watch was that it may reduce the workload for several contractors. We have quite a bit of HVAC projects on the horizon and this new approach to duct sealing really changes the scope of that work if we don't have to tear out old systems and pull out the old ductwork.*

***Charles Orndorff** - Project Execution Leader*
LA Unified School District



Aeroseal has four different models to calculate duct leakage and inform energy savings 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