

💻 CASE STUDY 💻

PILOT PROJECT AT LA UNIFIED SCHOOL DISTRICT EARNS AEROSEAL A TOP GRADE FOR ACHIEVING COMPLIANCE & SAVINGS

After Initial Success At Elementary School, Administrators See Potential for Aeroseal To Easily Save The District Hundreds of Thousands Each Year In Reduced Energy Costs

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 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: rip out and replace existing ductwork or see if aeroseal could seal the leaks while imposing minimal disruption to the current building structure.

In Brief

Building: 93rd St. Elementary School – LA Unified Location: Los Angeles, California General Contractor: Internal – LA Unified Aeroseal Contractors: Penn Air Group Goal: Duct code compliance / energy savings Before Aeroseal: 2,766 CFM of leakage (total/3 ducts) After Aeroseal: 207 CFM of leakage Results: Reduced leakage by approximately 92%



The duct maintenance experts at Penn Air Group 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 in the supply duct quickly plummet from 1,340 CFM down to 73.2 CFM. Aerosealing the return duct showed similar results.

The second day, Penn Air completed this initial project when they quickly sealed a third section of the building's ductwork – the return duct leading to the kindergarten rooms. No demolition. No intensive time and labor costs. Aeroseal fixed the problems.

With the Aeroseal Certificate of Completion verifying the starting and ending 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 District.

"We witnessed several clear advantages to using aeroseal over traditional methods. It lasts longer and requires minimal disruption to the existing building structure. Since the technology itself seeks out and seals the leaks, it's a more comprehensive, more effective approach as well."

Adrian Tylim, Sustainability Specialist, LA Unified School District

"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 – The Technology

- Developed at Lawrence Berkeley National Laboratory in 1994.
- Research for aeroseal technology was partially funded by the U.S. Department of Energy.
- Aeroseal is the only duct sealant technology that is applied from the inside of the duct system. It is delivered as a non-toxic aerosol mist that seeks out and plugs leaks.
- Aeroseal has proven to be 95% effective at sealing air duct leaks.

For more information on this sealing project or about Aeroseal in general, contact Aeroseal at (937) 428-9300. You can also visit the Aeroseal website at <u>www.aeroseal.com</u>.