

≡ **CASE STUDY** ≡

**SCHOOL DISTRICT SAVES \$45,000 ANNUALLY ON ENERGY BILL  
AFTER HAVING FIRST OF SEVERAL SCHOOLS AEROSEALED**

**U.S. Department of Energy Ranks New Duct Sealing Process Top Strategy For  
Reducing Energy Costs: Potential To Save U.S. Building Owners Billions Each Year**

The new superintendent at Ohio's Licking Heights school district thought the cost for heating and cooling all 5 of its school buildings was high, but one 7-year-old elementary school in particular stood out. Its energy bills were double that of a similar school just down the road. It was also plagued by uneven heating. To keep warm, students and teachers in the far wing of the building often wore hats and coats during class.

**In Brief**

**Building:** West Elementary School (K-2)

**Location:** Blacklick, Ohio

**Commissioning Firm:** Heapy Engineering

**HVAC Solutions Provider:** Bruner Corporation

**Goal:** Reduce energy costs / fix uneven heating

**Before AeroSeal:** Losing 55% of treated air

**After AeroSeal:** Delivering 98% of treated air

**Results:** Reduced duct leakage by 27,350+ CFM

Reduced energy bill by \$45,000/year

Eliminated uneven heating issues



An energy audit revealed that, like most U.S. buildings today, each school in the district was losing about 30% or more of treated air through leaks in the ductwork. West Elementary School was particularly problematic – losing more than 50% of treated air through duct leaks. Several options for fixing the problem were considered but in the end, due to several factors including lower cost, limited disruption and a strong guarantee, it was decided to use AeroSeal, an innovative aerosol-based duct sealing technology developed by the U.S. Department of Energy.

The entire project was conducted over the winter holiday recess. Teachers and students came back to a very different situation. For the first time, all of the classrooms were warm and comfortable. Thermostats were turned down. Fan power was reduced.

With the ductwork effectively sealed, the school district estimates that it will save about \$45,000 each year on its utility costs. The school also received a cash rebate of more than \$27,000 through an energy savings program offered by AEP Ohio, the local utility company. The district is now looking at having its 4 other schools aroesealed as well.

## Quotes

“I am always skeptical about claims that sound too good to be true, so when I first heard about Aeroseal, it was originally, in my mind, the least appealing option. But after doing some research and learning about its use at other education facilities including an Ohio State University dormitory, it quickly became the solution of choice. In the end, this was one of the smoothest projects we’ve ever had done at this school. It came in within budget and on time. The results met every expectation and then some.”

Dr. Philip Wagner  
Superintendent  
Licking Heights School District

“It certainly helped that the aeroseal solution would cost less and take a lot less longer to do than the other options on the table. But a strong guarantee and testimonials from other customers really sealed the deal. Once they saw the tremendous difference it made to both energy savings and system performance, we knew this was just a door opener. We are now looking at doing similar work for the other buildings in this school district, and as word gets out about the tremendous savings Licking Heights achieved, we are finding similar interest from other area school districts as well.”

Tony Furst  
Solutions Engineer  
Bruner Corporation

## Aeroseal – The Technology

- Developed at Lawrence Berkeley National Laboratory in 1994.
- Research for Aeroseal 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 the Licking Heights Elementary School sealing project or about Aeroseal in general, contact Aeroseal at (937) 428-9300. You can also visit the Aeroseal website at [www.aeroseal.com](http://www.aeroseal.com).

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