

■ CASE STUDY =

OHIO STATE UNIVERSITY FINDS AEROSEAL A PROJECT SAVER WHEN VENTILATION SHAFTS NEED SEALING

To Pass Fire Code and Meet LEED Silver Energy Requirements Building Contractors Had a Choice: Tear Down The Walls And Start Over OR Aeroseal

Nearing completion of a new 6-story dormitory complex, the building contractors at Ohio State University were dismayed to find that all 19 ventilation shafts failed pressure tests needed to pass fire code and receive LEED Silver certification. The only solution was to tear down the paint-ready walls, access the shafts and try to seal all the leaks by hand. The project delay was estimated at 6 months. The addition costs were estimated in the hundreds of thousands of dollars. Then, an engineer remembered hearing about a new duct and ventilation shaft sealing technology called Aeroseal. Three weeks later, the problem was solved. Aeroseal sealed the leaks without damaging walls or having to redesign the shafts.

In Brief

Property Owners: Ohio State University
Project Contractors: Smoot Construction
Property Name: William Hall Complex Expansion
Type: 6-story dormitory. 80+ living suites.
Goal: Eliminate leaks in 19 ventilation shafts; pass fire code specifications; receive LEED Silver certification.
Results: All shafts sealed in less than two weeks.



Construction of William Hall Complex Expansion on schedule and ready to open in Fall of 2012

The design of OSU's new dormitory building included 19 vertical ventilation shafts constructed of 3 layers of fire-rated drywall. While the shafts were rated to keep out fire for up to three hours, the leaks throughout the drywall seams did nothing to prevent smoke from spreading from room to room. The leaks would also have a substantial impact on driving up energy costs as well as the university's goal of having the complex LEED Silver certified.

Applied as an aerosol mist that is pumped throughout the interior of the ventilation shaft, Aeroseal was able to locate and seal 98% of the leaks. In less than two weeks, workers had each ventilation shaft sealed and operating to both fire code and stringent LEED Silver specification.

Quotes

"Finding the Aeroseal solution was a huge relief. By sealing the ventilation shafts with Aeroseal we were able to safeguard against smoke and fire risks, receive our LEED Silver energy conservation certification and ensure proper air ventilation throughout each of the dormitory suites."

Ruth Miller, senior project manager, Ohio State University

"Aeroseal easily solved one of the biggest challenges we had. Our only other option – tearing down the walls to access the shafts - would have set the grand opening back by months and added an astronomical cost to the project. Aeroseal worked."

Brian Miller, general contractor, Smoot Construction

Aeroseal – The Technology

- Developed at Lawrence Berkeley National Laboratory in 1994.
- Research for Aeroseal was partially funded by the EPA and the U.S. Department of Energy.
- Aeroseal is the only ventilation and duct sealant technology that is applied from the inside of the shaft. 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.

Aeroseal – The Company

- Aeroseal LLC is a subsidiary of JMD Corporation. The company is dedicated solely to the support of its dealers and the expansion of Aeroseal technology as a primary means of residential and commercial energy conservation.
- Aeroseal is the sole owner and licensee of Aeroseal technology.
- Aeroseal technology was bought by Carrier Corporation in the late 1990s. In 2010, Mark Modera, the inventor of Aeroseal, with the support of private equity investors, bought the technology back from carrier to realize its full potential and benefits. This lead to the launch of Aeroseal LLC in 2011.

For more information about the OSU William Hall Complex Expansion or about Aeroseal in general, contact Brad Brenner at (503) 736-0610 or email <u>brad@brennerassociates.com</u>. You can also visit the Aeroseal website at <u>www.aeroseal.com</u>.