



Aeroseal Seals Weis Store to Combat Cost of Food Waste

197 locations throughout Pennsylvania, Maryland, Delaware, New Jersey, New York, West Virginia, and Virginia. One of Weis Markets' locations was faced with a costly problem.

They were experiencing high humidity in the store. This was beginning to cause food to perish fast, leading to the worst nightmare of any grocery store: food waste.

Problem

The most significant source of energy consumption in grocery stores is tied to the energy generated by ventilation and HVAC cooling.

These systems experience energy loss through small leaks that are at times present from the installation period or develop as ductwork ages over time. In commercial HVAC systems that experience leakage, up to 40% of conditioned air is at risk of escaping.

This can cause performance problems – including inconsistent temperatures and increased humidity levels, which can be particularly troublesome for grocery stores relying on consistency on both these fronts for the stable shelf life of fresh produce.

“Weis Markets was seeking to lower in-store humidity on the sales floor,” said Dustin Herner, Energy and Sustainability Manager at Weis Markets. “High humidity levels can cause produce to spoil faster, which is a big expense.”

Solution

Weis turned to Sona Energy Solutions for suggestions on new energy conservation measures that would meet their energy and budgetary needs while minimizing business disruption and implementation costs.

The store selected Aeroseal, a technology that targets leaks by automatically seeking out and sealing them, for their purposes. Aeroseal was able to work with the existing system without interruption or delay of store operations.

The immediate results were increased airflow efficiency, which led to a decreased fan speed in addition to reduced electricity use (kWh) and fuel consumption. This efficiency gain meant that conditioned air was going where it was supposed to, which lowered humidity levels on the sales floor to enable therm savings and reduce food waste.



PROJECT OVERVIEW

Weis Markets, Inc.

LOCATION

Store #36
Sunbury, Pennsylvania

ESCO CONTRACTOR

Sona Energy Solutions

GOAL

Lower high humidity levels and decrease energy costs

RESULTS

Leakage reduction of 20.5%; energy cost cut by \$5,000 yearly



Case Study

Sona Energy Solutions

Verifiable,
Guaranteed Results

Final Results

As described by Dan Cohen, Principal of Sona Energy Solutions, "With Weis having one of the most forward-thinking energy teams of our big box grocer customers, they understood the value of Aeroseal.

Together we were able to achieve big energy savings, and more importantly for our customers, Weis was able to implement this ECM that they didn't know was present with existing HVAC equipment and, more importantly, without disrupting store operations."

After finishing the job, the leakage reduction was discovered to be 20.5% with an energy cost reduction of \$5,000 yearly. Weis cut their maintenance costs while restoring the air quality of the indoor environment to ensure a safe and comfortable shopping experience for everyone.

Because of its success, Weis plans to implement Aeroseal's advanced duct sealing solution in several additional stores in the near future.



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Dan Cohen - Principal
Sona Energy Solutions

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.



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Use Aeroseal On Your Next Job For Faster, Guaranteed Results!

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