RESTORATION PROJECT PROFILE

COPLEY HIGH SCHOOL

Copley, OH

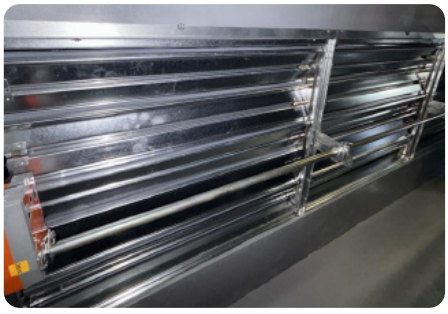
Summary:

Copley High School faced a critical infrastructure challenge when the air handling unit (AHU-5) serving their high school auditorium failed. Facing a potential replacement cost of $650,000, the district opted for a specialized restoration approach. By utilizing the HVAC New Life restoration system and leveraging the AEPA Co-Op through the Ohio Schools Council, the district fully restored the unit for $297,000 within a week. This strategy achieved capital savings of $353,000 while delivering a quieter, more efficient system with built-in redundancy.

Before preexisting insulation

After

Preexisting dampers



New dampers mounted & connected

Tremco Representative:
Kevin Butler & Team, Mitch Dorfman

Commission:
General Services

Building Type:
School

Project Size:
Air Handler Restoration

Services Used:
HVAC New Life Restoration

Restoration Cost:
$297,000

Capital Savings:
$353,000

The Challenge:

For any educational facility, the auditorium is a central hub for student gatherings, performances and community events. At Copley High School in Copley, Ohio, the air handling unit serving this vital space (AHU-5) had become a liability.

The unit relied on an aging belt-driven blower motor that was plagued with performance issues. It generated excessive operational noise—a major disruption for a performance space—and eventually failed completely, forcing the school to take the unit offline. The district needed a solution that would not only restore climate control but also eliminate the noise distractions, all while adhering to a strict budget.

A full replacement of the unit was estimated at $650,000, a significant capital expenditure that would strain district resources.

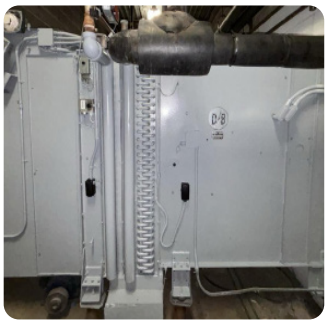
Replace Existing VFD with QPAC Control Panel

After

Install fan array before

Install fan array after

AHU exterior prior to restoration



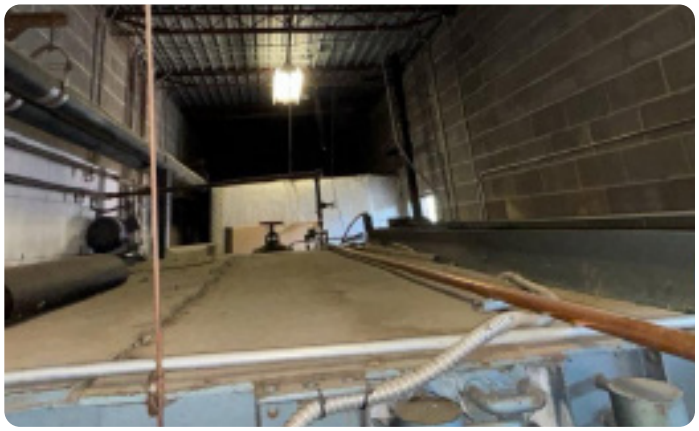
AHU finish coat exterior

The Solution:

To address these issues, the district utilized WTI's Pure Air New Life service to fully restore the unit rather than replace it. The core of the solution involved a fan array retrofit, replacing the noisy belt-driven motor with a high-efficiency fan system designed for quiet operation. This upgrade introduced built-in redundancy, ensuring that the client never has to worry about losing airflow to the auditorium, a critical area for the school.

The restoration was comprehensive, utilizing HVAC hygenic cleaning for decontamination and installing a zero-porosity HVAC insulation system to improve thermal efficiency. Additionally, Multicoat Siloxane Interior and Exterior coatings were applied to extend the cabinet's lifespan. This approach saved the district over $353,000 while delivering a modernized system that operates more quietly and reliably than the original unit. Beyond the immediate financial savings, the restoration delivered long-term benefits to Copley High School.

The high-efficiency fan system and upgraded insulation components contribute to reduce energy consumption and lower utility costs. Enhanced indoor air quality was achieved with thorough cleaning and the installation of advanced materials, creating a healthier environment for students and staff. The improved system reliability and modernized features also mean fewer maintenance issues and less downtime, supporting both day-to-day operations and special events in the auditorium.



Before Multicoat Siloxane Coating

After Multicoat Siloxane Coating

About WTI/Pure Air

Part of Weatherproofing Technologies Inc. (WTI), Pure Air is a specialized mechanical contracting service focused on the restoration of Air Handling Units (AHUs) in critical environments. Pure Air delivers sustainable and innovative solutions to maintain the operational integrity of HVAC systems across the U.S. and Canada.

Contact

To get started, scan this QR code to find your local representative or call us at 800.852.6013.