

Case Study | First Responders Industrial Applications

Zachary Fire Department



OVERVIEW

The Zachary Fire Department in Baton Rouge, Louisiana, faced a growing problem - **extreme heat and humidity in their 5-bay station garage** made it difficult for firefighters to operate efficiently and safely. Without proper airflow, the bays were stifling, the equipment wasn't drying properly, and the environment was becoming increasingly more unbearable. Firefighters would sweat the minute they walked into their garage. With no effective ventilation system in place, firefighters felt sweaty, fatigued, and unable to work comfortably in the station garage.

THE CHALLENGES

- Lack of airflow throughout the 5-bay garage
- High heat and humidity making it uncomfortable for firefighters to work in the bays
- Expensive HVAC is not an option
- Equipment and gear are slow to dry
- Limited natural ventilation, despite open bay doors

THE SOLUTION

- The department turned to MacroAir HVLS fans to transform their working environment.
- HVLS fans were strategically installed to promote consistent airflow & ventilation around the 5-bay station.
- Improved air circulation, especially in areas previously stagnant and overheated.
- Allowed for cross ventilation by working in conjunction with open bay doors.
- Fans effectively dried equipment and gear between uses.

RESULTS



Noticeable drop in perceived temperature and humidity in the bays.



Gear dries quickly, reducing odors.



Firefighters are cooler, more comfortable, and able to work efficiently.



Cross ventilation with fans and open bay doors creates a powerful cooling system.

"They definitely cool down the bay...When it's stagnant outside, we open up all the bay doors and the air moves through here. They help us cool off for sure!"

- Wyatt R., Zachary Fire Dept.