



BACKGROUND

Maryvale Preparatory School, a Catholic independent girls' school serving grades 6 through 12 in Brooklandville, Maryland, contacted Fidelity Mechanical Services to complete upgrades to their gymnasium and exercise room. Having an existing maintenance contract with the school, a familiarity with Maryvale's facilities, and a close relationship with their Director of Facilities, Fidelity Mechanical Services was the perfect partner to complete the necessary upgrades to their gymnasium and exercise room to make the areas more comfortable for students.

OBJECTIVES

Recognizing that the lack of air conditioning could be a deterrent to potential enrollees, the school sought to upgrade its facilities to remain competitive. The primary objective of this project was to enhance the school's gymnasium and equipment room by installing an HVAC system to create a comfortable and modern environment that could effectively meet the heating and cooling needs of these spaces. This upgrade aimed to not only improve the existing infrastructure but also demonstrate the school's commitment to providing high-quality amenities for its students. The project was designed to be both cost-effective and efficient, ensuring that existing equipment was utilized to minimize expenses while maximizing the impact of the new installations.

PROJECT DETAILS

Operating Companies
Fidelity Mechanical Services

Client
Maryvale Preparatory School

Industry
Education

Category
HVAC & Equipment Replacement



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SOLUTION

Working closely with the Director of Facilities at Maryvale, Fidelity Mechanical Services developed a comprehensive design-build solution.

Next, the existing air handling units were removed to make way for more efficient systems. For the gymnasium, two cooling split systems with hot water coils were installed, and another cooling split system with a hot water coil was installed in the exercise room. These new systems were connected to the existing hot water piping.

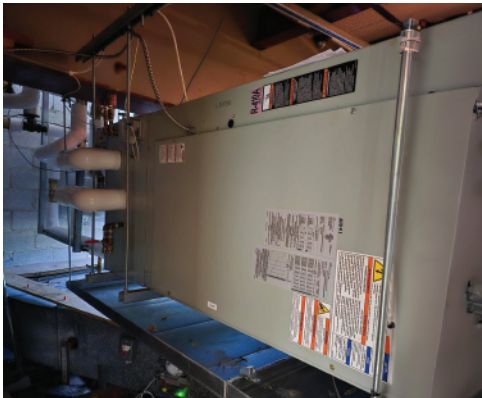
Cost optimization was a key consideration throughout the project. To this end, all existing gymnasium ductwork was reused, and the new air handlers were installed in the same locations as the old ones. This approach ensured compatibility with the current supply and return duct systems, thereby reducing the need for extensive modifications.

In the exercise room, additional installations included spiral duct and air devices to enhance airflow. The air handler in this area was horizontally mounted on an existing platform, allowing for easy maintenance access. Stand-alone controls were installed for precise climate management, and engineered drawings were provided to guide the construction process. ***Solutions Continued >>***

EQUIPMENT

Gymnasium
(2) 15-ton Trane DX
Cooling Split Systems

Exercise Room
(1) 10-ton Trane DX
Cooling Split System
with a Hot Water Coil



Solutions Continued» Prior to placing the new condensing units on the roof, Fidelity Mechanical Services had to complete structural upgrades to ensure the roof could support the weight of the new equipment. Post-installation, a thorough Test, Adjust, and Balance (TAB) process was conducted to confirm optimal performance. The project concluded with a startup and operational check, confirming that the system was functioning as intended.

OVERCOMING OBSTACLES

As a private school, there was a condensed window of time to complete this project, necessitating precise planning. The gymnasium's cooling system needed to be ready for volleyball tryouts at the end of August, leaving little room for delays.

Additionally, the physical location for installing the new air handler units presented a unique challenge. The units were to be placed in two small closets within the exercise room, creating a tight and constrained environment for the installation team. Navigating these confined spaces required attention to detail and innovative problem-solving to ensure that the new systems were installed correctly.

RESULTS

The driving force of this project was to create a comfortable environment for the students at Maryvale. With the new air handling units, the facility now has the equipment necessary to ensure efficient cooling operations. The success of this project highlights the productive partnership between Fidelity Mechanical Services and the staff at Maryvale.

David Schroeder, former Director of Facilities at Maryvale, shared his experience working with Fidelity Mechanical Services. "As the Director of Plant Operations at Maryvale Preparatory School, our primary concern in making physical plant updates to our campus is the overall safety and comfort of our students and community," he explained.

Schroeder emphasized the critical need for HVAC upgrades to the gym. "When we decided to add much-needed HVAC upgrades to the Rector Gym last summer, we trusted Fidelity Mechanical Services to handle the task. They are a special company to work with because of their unwavering commitment to their clients' best interests."

Fidelity Mechanical Services' comprehensive approach to addressing Maryvale's needs stood out to Schroeder. "From day one, they listened to our needs and provided multiple solutions to meet our goals within our financial and logistical constraints. Their attention to detail and dedication to their clients trickles down from leadership to the technicians installing and doing the work."

During the initial on-campus meeting, Schroeder noted the impressive presence of the Fidelity Mechanical Services team. "They demonstrated this commitment by bringing no less than ten support Team Members, including our site superintendent, the COO, field Team Members, engineers, the service manager, and the site manager for our specific job. This team collaborated with us, addressing our concerns and needs to ensure the project was completed on time, within budget, and met the safety standards required by our Board and my staff."

Schroeder concluded by praising Fidelity Mechanical Services' partnership and dedication. "Fidelity is the consummate partner, working together to achieve goals, listen, and react. Their attention to detail and dedication to their clients are evident at every level of their organization. We couldn't have asked for a better partner to ensure the safety and comfort of our community."

The collaboration between Fidelity Mechanical Services and Maryvale Preparatory School resulted in a successful project that not only met but exceeded the expectations for efficiency, safety, and comfort, ensuring a better environment for the students and staff.