



Pilot Grove, Missouri

ST. JOSEPH SCHOOL



CHALLENGE

Selecting a cooling and heating system with modern features for a 100-year-old school building

SOLUTION

Zoned Comfort Solutions® from Mitsubishi Electric

RESULT

An updated system offering immense cost savings and a comfortable learning environment

St. Joseph School (St. Joseph's), a small, private Catholic school in Pilot Grove, Missouri, has been in operation since 1902. Since its establishment, the school has been educating students between grades one through eight. After many years running on an outdated boiler system and noisy window units, the school needed to find a system that could efficiently cool and heat the 5,400-square-foot building year-round without disrupting day-to-day activities. The solution: Zoned Comfort Solutions® from Mitsubishi Electric.

The renovation started with a need for comfort. Nichole Watring, principal, said, "The boiler system that was in place previously didn't heat the rooms evenly. The building is a two-story building with a basement, and the upstairs rooms were always much warmer than the downstairs rooms. There wasn't a

way for the teachers to control the temperature in their rooms, and the window units for the a/c were very noisy. It was hard to hear when the units were running, but when they were turned off, the rooms warmed up quickly."

Donna Gerke, school manager, who works closely with managing the mechanical systems, said there was also a need to start saving on utility bills. "The air conditioners were taking up a lot of energy, and we were replacing them almost every three years. We also had the boiler worked on every year. It became a cost issue from the system's inefficiencies. We needed individual control within each room while looking to use less energy."

With these needs in mind, the school began its search for a new system and reached out to Jamie Callahan,



director of field operations, Air and Water Solutions, Columbia, Missouri, to assist in the process. Immediately, Callahan believed there was only one solution for St. Joseph's – zoned technology. He said, "With the previous system, there was an inconsistency of cooling capacity, and the window units rattled and teachers couldn't talk over it. They had air blowing in different directions but children should have a very climate-controlled environment. Ductwork also wasn't an option unless it was exposed. They needed units zoned for every room."

/// Our electric bill has gone down dramatically since we have installed the units. It has been a good experience overall and a great improvement for our school! ///

— Nichole Watring, principal,
St. Joseph School

The school agreed with Callahan's recommendation. Watring said, "We chose to get split-ductless technology so each room would have its own system that could be adjusted to meet the needs of the students." In terms of cost savings, Gerke added, "We didn't want to put in a new boiler and we couldn't do ductwork. As old as this building is, ductwork was not going to be a possibility."

With the technology selected, Callahan offered Zoned Comfort Solutions from Mitsubishi Electric as the brand for the school to install. He said, "The school didn't want to reuse the gas boiler, and with the energy efficiency of Mitsubishi Electric units, it was the only option."

Upon the school's agreement to use Mitsubishi Electric, the installation process began and proceeded smoothly according to the project team. The installation took two weeks during summer break to avoid any disruption to the students, faculty

and staff. Callahan also said that the distributor on the job, Crescent Parts and Equipment, St. Louis, was helpful to keep the installation on budget and on schedule.

Since installation, Callahan has received nothing but positive feedback from the school, specifically with the system's ability to offer cost savings. He said, "From what I've heard, the school went from paying thousand dollar electric bills to paying \$245 a month. That's nearly 25 percent of the original cost."

From a comfort perspective, both Watring and Gerke agreed that the experience has been great. Watring said, "We have not had any issues with the system and the teachers and students love that they can control the temperature of their rooms. It's much quieter and more efficient than the previous system. The students especially love the burst of cool air when they come in from recess on hot days."

Project Completed: July 2015 |

Gerke added, "From what I've heard from all of the teachers, they love it. The temperature level can be maintained and there's no maintenance or upkeep with them either. They just have to clean the filters."

The school was also pleased with the system's appearance. Gerke said, "We looked for a system that offered more cost savings and efficiency but aesthetics was an added bonus. It's given the school a whole new look on the inside. It looks fresher and cleaner." The system has also allowed the classrooms to be more functional. Gerke continued, "We took out all of the radiators and it gave each classroom more usable space. You could never have anything near them. The pipes are gone too, freeing up more space for learning."

With Mitsubishi Electric, St. Joseph's can now offer students and teachers a comfortable learning environment year-round. As Gerke puts it, the school "doesn't have to live in fear anymore."



PROJECT TEAM

HVAC Contractor:

Air and Water Solutions, Columbia, Missouri

Distributor:

Crescent Parts and Equipment, St. Louis, Missouri

EQUIPMENT

- ▶ (11) MUZ M-Series Outdoor Units
- ▶ (11) MSZ Wall-mounted Indoor Units
- ▶ (11) PAC Simple MA Remote Controllers