

Authorized Dealer



INTEGRATED FACILITY SERVICES

Market segment
Places of worship

Location
Joplin, Missouri, United States

Total area
3,345 m² (36,000 ft²)

Project type
Retrofit

Protocol
BACnet

Installation type
HVAC

First Presbyterian Church of Joplin

Project Profile

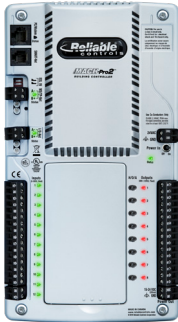
Located in downtown Joplin, Missouri, the [First Presbyterian Church of Joplin](#) is a place of worship that serves the community by providing a sacred space to gather for mass, fellowship, and Sunday services. Connected to the church is the First Presbyterian [KidStuff](#) Preschool, which offers a friendly and engaging atmosphere for children to develop their cognitive thinking skills through hands-on learning activities.

As a facility dedicated to serving its valued members, a comfortable and consistent environment is essential for occupant satisfaction and well-being. When the time came to address the inefficiencies in their building automation and air control systems, the church's facility managers sought out the skills of Authorized Dealer [Integrated Facility Services](#) (IFS) and their expert knowledge of [Reliable Controls](#) products.



Total system objects
500+

Installed equipment



5 MACH-Pro2™
controllers



1 MACH-ProCom™
controller



10 MACH-ProPoint™
expansion modules



50 SMART-Sensor™
devices

The First Presbyterian Church of Joplin needed to replace an outdated building automation system that was severely impacting operational efficiency. A key issue was that the facility's sequences of operation were poorly designed, leading to inconsistent control, inefficient energy use, and reduced occupant comfort.

IFS upgraded the automation system with a Reliable Controls solution, including [RC-WebView software](#) for browser-based access, [RC-Archive software](#) for data collection, a [MACH-ProCom controller](#), and five [MACH-Pro 2 controllers](#). The IFS team integrated these controllers with new variable frequency drives (VFDs) on the fan motors and with newly converted variable air volume and temperature units (VVTs) that replaced older multizone dampers.

To ensure consistent air temperature monitoring across the facility's offices, worship areas, and school, the IFS team installed over 40 wall-mounted [SMART-Sensor devices](#), which communicate directly with the new air-unit controllers to provide real-time temperature data.

The project was partially funded by an incentive from the church's local utility provider, which covered the addition of the VFDs, the conversion of multizone dampers to VVTs, and the addition of high-performing sequences of operation from ASHRAE Guideline 36.

Field Foreperson Ryan Goodman led a skilled team of controls technicians and apprentices on the job. Even while travelling out of town to work in Joplin, their dedication to teamwork and their natural comradery kept them enthusiastic and focused on meeting the client's needs.

Throughout the project, IFS maintained close communication with facility managers to ensure all work was completed with minimal disruption to church and preschool activities.



Installed software



RC-Archive® software



RC-GrafxSet® software



RC-WebView® software

The improvements were significant. The upgraded automation system, paired with the VFDs on the fan motors, provides better modulation of airflow, reducing energy consumption by running fans only at the necessary speed based on real-time demand. The conversion of the multizone dampers to VVTs enabled precise temperature control throughout the building, improving comfort and efficiency.

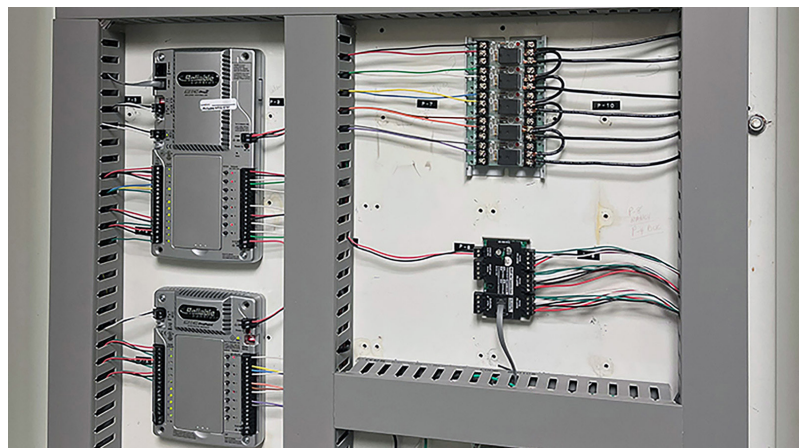
With a fully connected, [open protocol building automation solution](#) from Reliable Controls, IFS provided high-performing operational sequences that ensure the HVAC system is fully optimized, adapts to varying load conditions, and reduces energy waste.

The results of the retrofit include:

- A significant reduction in operational costs
- Improved energy savings
- More accessible networking protocols for service and maintenance
- Enhanced occupant comfort

By combining their dedication to people with exceptional technical expertise, the IFS team extended the Reliable Controls promise to everyone that gathers at the First Presbyterian Church of Joplin: We're the people and technology you can rely on.

[Learn more](#) about how Reliable Controls can improve and simplify your building automation system.



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