



St. Joseph School District

New Air-Conditioning and Heating

St. Joseph, Missouri

Background

The St. Joseph School District comprises 16 elementary schools, 4 middle schools, 3 high schools, and 4 specialized learning centers. The District had committed to taxpayers to use bond funds to air-condition two middle schools and three elementary schools prior to the start of the 2016-2017 school year. They used a competitive RFP process to select Energy Solutions Professionals (ESP) to implement the projects.

Challenge

The ESP team had two and a half months to implement what would typically be a six month project. The District selected highly efficient variable refrigerant flow (VRF) heating and cooling systems for two middle schools and one elementary, while the other two elementary schools received low-cost cooling due to limited funding. The selected systems and compressed time frame created additional challenges with the need to upgrade electric service at four buildings, work around summer programs, and ensure that there would be enough construction labor in the area to complete the work on time.

Solution

ESP solicited bids from multiple contractors and vendors in order to obtain the best overall price and value for the District for the various new air-conditioning systems. This gave the District options in selecting the brands and solutions they preferred. ESP also reached out to local contractors and selected multiple subcontractors to perform the installation so that there would be ample workers on-site—approximately 80 percent of the workforce was from the St. Joseph area. The team had to overcome delays in the installation of new transformers due to storms that were consuming the local utilities resources, and the closure of an old boiler fuel tank. The team met the goal of having air-conditioning up and running prior to the return of students in just 53 total workdays from project start to operation.

Benefits

Students, faculty and staff returned to a far more comfortable learning environment than they had in previous years. The District now has highly efficient systems in several buildings and cooling in areas where it didn't exist previously. Local labor was used where possible which meant jobs for the community, and the District demonstrated stewardship of taxpayer dollars and resources by accomplishing what they had committed to voters, while reallocating existing equipment to other buildings with needs.



Quick Facts

Completion: 2016

Total Square Feet: 265,700

Number of Buildings: 5

Total Project Cost: \$5,500,000

