

Phase I McDonald Co. R-I School District Anderson, Missouri



Project Results



“The CTS Team provided an energy audit on our buildings. They explained to our Board the performance contract concept and how we could use our money to provide a better learning environment for our students. CTS and performance contracting gave us the opportunity to renovate our aged facilities and allowed us to bring these buildings up to standards. The CTS Team provided energy savings in our HVAC, windows and roofs. The project was a big success. It is important that the company “you are working with” has the students’ best interest at heart. CTS is here to help us provide a great learning environment for our community. The Board was so pleased they extended the contract into another phase. I strongly recommend that all schools should allow the CTS Team to become a part of their educational program.”

Randy Smith, Superintendent

Customer Concerns

The McDonald County School District is located in a high growth area. Available funds had been used to address growth such as extra classrooms and modular units, and their bond issues had focused on buildings that addressed growth. They did not feel they could financially address the energy saving needs they faced with leaky windows, inefficient HVAC and roofs that were in dire need of replacement.



Project Overview

After a detailed analysis of the facilities, CTS was able to show the district that there were numerous areas in which retrofit of the outdated and wasteful systems would result in substantial energy savings. CTS then worked with the district to develop a performance contract that could be funded with the savings generated from both energy and operational cost savings from the improvements being made. The project included retrofits at seven buildings within the district.

- Roofing on four of the buildings had reached and surpassed their useful life. These have been replaced with new energy efficient systems with leak-free guarantees.
- Single pane, aluminum clad windows were replaced with energy efficient insulated windows with low E-glass. This now helps reduce utility consumption as well as providing a more comfortable learning environment.
- Noisy, inadequate and inefficient HVAC conditions were replaced with new energy efficient units with full economizers for proper ventilation.
- The existing HVAC systems had no means of scheduling runtimes or troubleshooting problems. CTS installed a building automation system providing direct digital control of the facilities’ mechanical systems. The system includes an intelligent workstation with a full suite of tools to view and control subsystems, access and analyze data, manage equipment operations and reports directly from the desktop. The system communicates via the district’s LAN to provide energy management including equipment scheduling, monitoring, alarm handling and trending.