

MINIMIZING ENERGY COSTS.
MAXIMIZING OCCUPANT COMFORT.





Letter From the President

"Building owners and managers aren't energy experts. So who's ensuring the design, installation and operation of their building systems is making those systems as efficient as possible?"

In 2011, I asked myself that question. I realized no one was advocating for those owners and managers. Engineering companies, control companies and contractors could claim to serve their clients' budget and bottom line. But those companies also need to make decisions that benefit their own best interests.

That's why I started Optimized Systems.

We serve building owners and managers. Period. Our job is to help you provide optimal comfort for your occupants, maximize your energy efficiency and extend the life of your equipment. We work for you and no one else.

Whether you're commissioning a new system, optimizing an existing system, or need ongoing support in your daily operations, we can help. We have a unique combination of highly skilled professionals with expertise in engineering, controls and facilities operation.

Our company started because I asked myself a question. Today, our business operates on that question: who's ensuring the design, installation and operation of your building systems is making those systems as efficient as possible?

If you don't have a good answer, get in touch. Let's see how we can dial in your occupant comfort and dial back on your energy costs.

Rick Kmiecik, PE, CBCP
President

WHO WE ARE



As an independent company, Optimized Systems only serves your best interests.

Our recommendations are based on what's best for you and your occupants. That's our only focus. We're not a subsidiary of a design or engineering firm. We have no relationships with equipment companies or specific contractors.



We can reduce costs beyond energy savings.

Energy efficiency is the goal, but our process reduces your operating costs and increases the lifespan of your equipment. We can also work with you to find rebates and specific financing vehicles for your projects that will benefit your organization's accounting.



Our goal is to maximize energy efficiency and occupant comfort.

Reducing energy costs doesn't need to come at the cost of comfort. We'll significantly increase your energy savings, while providing your occupants with an enjoyable environment.



Our unique team finds efficiencies throughout your system.

We have design engineers, but we're not in the business of design. We have control specialists and master programmers, but we don't sell controls. We have former facilities managers, so we understand your day-to-day operations. And we all work together to deliver a level of knowledge and understanding of system interdependencies you simply can't find anywhere else.



We make your team a highly effective part of our team.

Once we've commissioned or optimized your system, we train your staff on its successful operation. This isn't the case with many contractors and commissioning agents. For us, though, it's the crucial final step in the process. With a properly educated staff, your system will continue to operate efficiently for years to come.



We keep things simple.

Buildings are like fingerprints. There are many similarities, but it's the wide-ranging differences that make them unique. This means the most comfortable, energy efficient solution varies from building to building. Our job is to find that solution and implement it in the most cost-effective way possible. We never recommend anything newer or more advanced than what's necessary. We sell solutions, not equipment.

COMMISSIONING

Protecting new buildings from age-old problems.

As the commissioning authority, our job is to ensure the designs of your mechanical, electrical and building automation systems are correctly installed. The first step is to develop a commissioning scope that meets your needs and budget. Once the commissioning process begins, we confirm proper construction and startup. We then verify the performance of your system through extensive functional testing and measurement. Finally, we train your crew on the new system and how to maintain its optimal performance.

All projects are managed by a Certified Building Commissioning Professional (CBCP), and our web-based software provides a fully transparent commissioning process from start to finish.

TYPICAL COMMISSIONING DEFICIENCIES

- Equipment or lighting that remains on when unnecessary
- Systems simultaneously heating and cooling
- Belts and valves functioning improperly
- Thermostats and sensors out of calibration
- Short-cycling of HVAC equipment, which can lead to premature failure
- Insufficient indoor air quality
- Lack of training for building operators

The Optimized Systems Advantage

We're an experienced, unbiased partner. We're not invested in the design or installation of your system, so we remain objective. This gives you the peace of mind that any recommended solutions are in your best interest, not in the best interest of someone who may be responsible for an issue.

Just as importantly, our unique team allows us to approach commissioning unlike other companies. From design engineers and control specialists to master programmers and former building managers, we're able to understand the entire system and find potential problems that more singularly focused companies won't. Our integrated team also lets you avoid the gaps in coordination and communication that can arise when an objective third-party—like Optimized Systems—isn't involved.



CLIENT

Omaha Public Schools

SYSTEMS COMMISSIONED

Complete mechanical and controls systems commissioning at 27 schools and counting

OPTIMIZATION

Making your current system operate like new.

If comfort complaints or alarms are increasing, there's a good chance your system is operating inefficiently. There are a number of possibilities for this. Regardless of the reason, however, the result is the same: uncomfortable tenants and increased operating costs.

Because your mechanical system is typically a facility's largest controllable cost outside of salaries, optimizing it for maximum efficiency is often the best thing to do for your budget and your occupants' comfort. In fact, the efficiency gains can make the project itself cost-neutral, which can then evolve into overall savings.

The Optimization Process

Our turnkey optimization process always begins with a goal of increasing your system's efficiency by at least 25%, while also improving indoor air quality, occupant comfort and equipment life. We begin by reviewing your mechanical, electrical and control systems to identify opportunities for savings. We also inspect each piece of equipment to ensure it's mechanically sound. We modify the control sequences for enhanced operations, then modify your controls programming and graphics to make operating your system more user-friendly. In addition, we develop an alarming strategy to ensure you're receiving imperative alarms immediately and other alarms according to their priority. Finally, we train your personnel on proper operation of the optimized system moving forward.

The Optimized Systems Advantage

Equipment and control technologies are now so advanced that understanding a single part of the system is no longer enough. If someone doesn't understand the entire system, their "solution" can easily make things less efficient. Because of the unique universal expertise our team offers, we're able to address equipment mechanics, controls and the overall operational system in a way most companies can't.

PLANNING PHASE

1

- Set project objectives
- Review facility documentation
- Perform initial walk-thru

INVESTIGATION PHASE

2

- Inspect system equipment and components
- Identify cost-saving opportunities
- Develop optimization plan

IMPLEMENTATION PHASE

3

- Implement selected operational improvements
- Implement operational strategies
- Verify results

HAND-OFF PHASE

4

- Develop systems manual
- Provide training
- Ongoing building advocacy (optional)



CLIENT

Creighton University

BUILDINGS OPTIMIZED

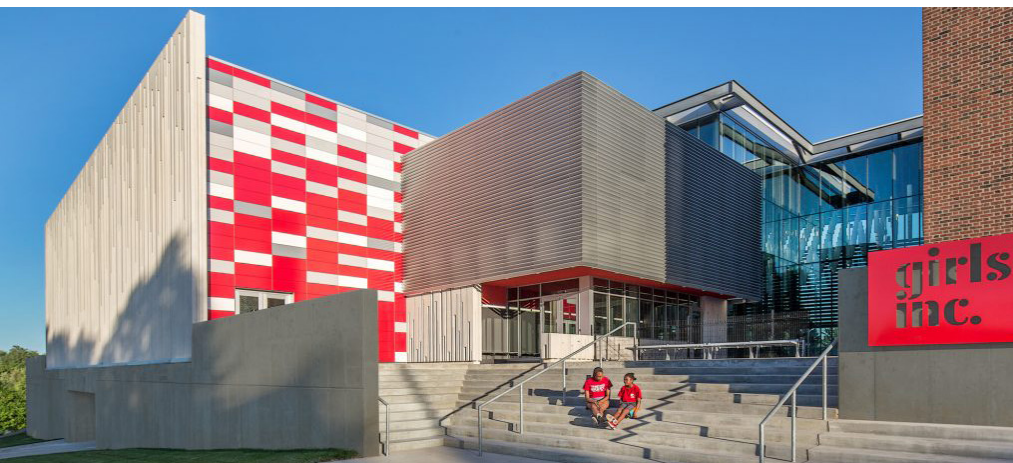
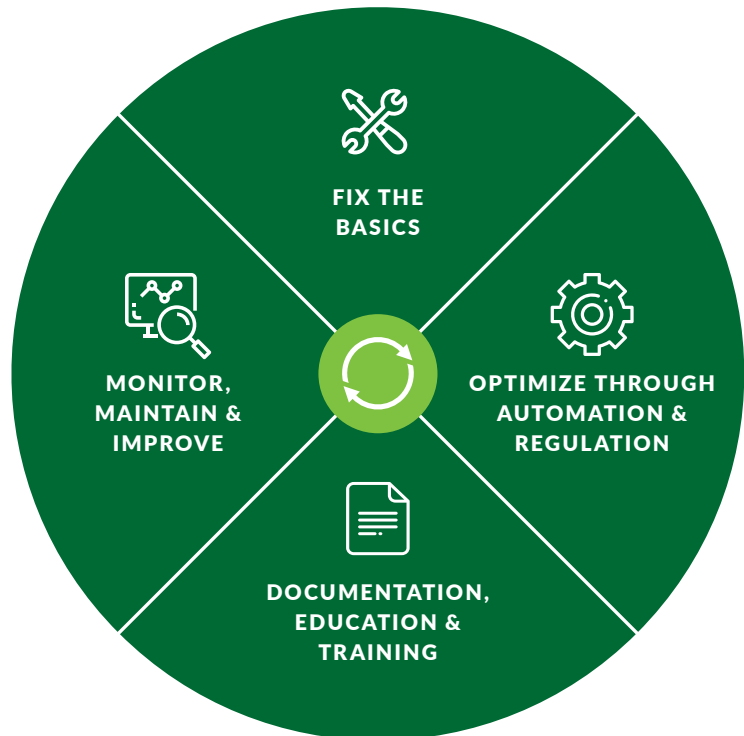
Complete mechanical and controls systems optimization at 12 buildings, with 11 additional buildings in process

BUILDING ADVOCATION

Keep your building's systems running like new.

For projects we've commissioned or buildings we've optimized, we offer building advocacy to provide operational assistance to those facilities moving forward. We work with you to develop an operations and maintenance plan, based on your specific needs. Services often include:

- Managing and maintaining mechanical equipment and control systems
- Regular facility walk-thrus
- Remote system monitoring
- Responding to and resolving comfort issues
- Evaluation of trends, alarms and issues
- Modifications and adjustments as necessary
- Service contract management
- Utility expense monitoring
- Training new staff
- Continuing education for all personnel



CLIENT

Girls, Inc.

COMMISSIONING AND ADVOCATION

Complete mechanical and controls systems commissioning and ongoing building advocacy

ADDITIONAL SERVICES

Master Planning

A detailed, mid- to long-term plan for a system, building or entire campus. It seeks to repair, replace or maintain a mechanical system based on its current condition and future needs, while projecting costs and timing.

Capital Plans

Often performed in conjunction with a system assessment, a capital plan focuses on specific capital improvements, such as equipment replacement. It could also include planning and budgeting for deferred maintenance costs.

Energy Audits

An assessment of a building's energy consumption to identify potential areas of energy savings and establish a benchmark for future savings.

System Assessments

An evaluation of equipment to determine its condition, remaining life and the repairs/replacement that may be necessary over time.

Design Review

A review of another company's systems designs that offers a second opinion from the perspective of a building owner or manager.

Energy Dashboard

Custom, real-time monitoring and reporting of energy consumption for a specific system, a building or an entire campus of buildings. Helps monitor, track and report energy conservation and sustainability goals. Also used to automate allocation of energy costs by building or department for billing purposes.

QUALIFICATIONS

Design & Energy

Our staff includes Professional Engineers (PE) in mechanical and architectural engineering with considerable mechanical design experience. Credentials also include Certified Building Commissioning Professional (CBCP), Certified Energy Manager (CEM), Green Building Engineer (GBE) and LEED accredited professional.

Facilities Operation

There is no substitute for real-life experience, and members of our team have more than 85 years of collective experience in facilities operations for all types of buildings and systems. It's a vital aspect of our professional capabilities and our understanding of client needs.

Controls & Controls Programing

Our building controls specialists are certified master programmers with extensive hands-on experience with all major controls systems. They know controls inside and out. Even better, they understand energy, equipment and how to enhance the controls programming to balance performance and energy efficiency in building systems.

Other Qualifications

For projects in the Omaha area that involve city funding, we're a certified Tier I Emerging Small Business (ESB) with the City of Omaha and an approved trade ally in OPPD's Energy Efficiency Partner program.

“In some of our buildings on campus, we were getting around 2,000 alarms every day. Once they optimized those buildings, we were down to only the most crucial, critical alarms that need our focus and attention.”

Wes Walling

DIRECTOR OF MEP OPERATIONS
CREIGHTON UNIVERSITY

“The knowledge base at Optimized Systems is unmatched. Everyone with them has experience in different areas—mechanical, controls, management. And their work is of a higher caliber than most design mechanical engineers. Those engineers may have a basic knowledge of how things go together—but commissioning is where you find the problems. It’s where you see what works and what doesn’t. And when they’re the commissioning agent and something doesn’t work, they have enough experience that 9 times out of 10 their first solution is correct.”

Adam Sawyer

LEED AP
CONSTRUCTION MANAGER
JACOBS, ON BEHALF OF OMAHA PUBLIC SCHOOLS

“Optimized Systems helped us better understand our system and keep it operating efficiently. In addition to caring about our energy bills and system maintenance, they also cared about our mission and the girls we serve. We truly value our continuing partnership with them.”

Roberta Wilhelm

EXECUTIVE DIRECTOR
GIRLS, INC.



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