

CASE STUDY

Kinard Junior High School Fort Collins, Colorado

Making buildings work. **Better.**



EMC has exceeded our client's expectations once again! This new, state-of-the-art, 117,000 SF educational facility incorporates:

- ◆ advanced thermal insulating systems;
- ◆ ample daylighting features;
- ◆ precise lighting level controls;
- ◆ renewable geothermal geexchange heat pump technology;
- ◆ exhaust air heat recovery ventilation systems;
- ◆ an advanced automated building control system.

The resulting comfortable, productive, and healthy learning environment provides educational enrichment for its students and teachers at a significantly lower life cycle cost than a traditional educational facility.

Aggressive sustainable goals of Poudre Schools District (PSD) were incorporated from the start and every consideration in the design was made to make this school one of the most efficient, healthy, and modern schools possible. The building incorporates efficient, renewable, and sustainable systems in a very cost effective way.

The entire design team solved PSD's challenges using advanced and proven technology, logical solutions, and a team approach focused at the District's Sustainability Guidelines and energy goals.

This school is unique! PSD is very sensitive to total lifetime cost impacts of the design, construction, operation, and maintenance requirements, keeping in mind the total life cycle costs rather than focusing primarily on the lowest first costs. They are also strongly committed to a green, sustainable, and environmentally responsible mission for their facilities.

Mission accomplished!

Owner:

Poudre School District

Contact:

Mr. Stu Reeve,
Energy Manager

Phone: (970) 490-3502

Architect:

RB+B Architects

Contractor:

FCI Constructors, Inc.

Schedule:

2 years, 7/2006

Budget:

\$17,446,950
construction



E M C Engineers, Inc.
143 Union Blvd., Suite 350
Lakewood, CO 80228
Phone (303) 974-1200
Fax (303) 974-1239
www.emcengineers.com

Engineering Excellence Since 1976!

Company Overview

Making buildings work. **Better.**



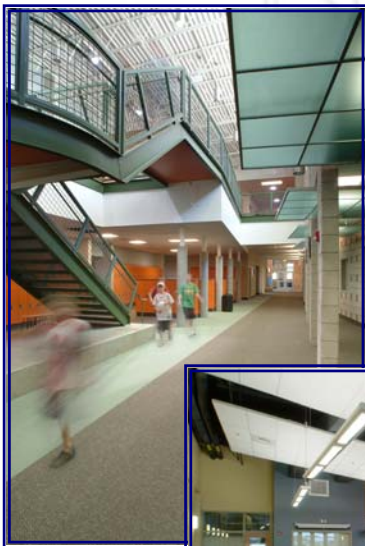
EMC is dedicated to creating sustainable facilities by optimizing performance through energy modeling and analysis, building automation systems application, advanced mechanical and electrical design, construction management, and building commissioning to achieve lower energy costs, improved comfort, and increased productivity.

Experience

Since 1976, EMC has been a leader in delivering high performance building solutions. As a multidiscipline firm, we have strong credentials in mechanical, electrical, and control systems retrofit and modernization and energy engineering and commissioning.

Where do EMC's experts work?

You'll find us in schools, colleges, hospitals, government facilities, healthcare, and all types of private sector structures from supermarkets to office towers. In fact, EMC's engineers and technicians go wherever new facilities are under construction or existing structures or systems are operating at less than peak performance.



Services

BUILDING COMMISSIONING/RETRO-COMMISSIONING

The commissioning process for new buildings and major renovations, provides facility owners with assurance the facility is functioning to meet their project requirements. Commissioning is the only process that assures a quality outcome. Whether you manage a new or existing facility, it's really difficult to know unless an independent commissioning expert has evaluated your systems. EMC's retro-commissioning services provide low cost, high return operating improvements that reduce operating costs. Think of it as a building "tune-up".

SUSTAINABLE DESIGN

More organizations are considering Green building systems and renovations. But to go Green--affordably--you need integrated sustainable design. EMC provides energy simulation modeling, daylighting, and high performance systems concepts to meet LEED requirements. We're ready to advise and coordinate and show you how to make the wise choices that deliver real environmental and economic benefit.

ENERGY ENGINEERING

Energy and how it's used affects quality-of-life and the global environment. Our core business is creating energy systems that optimize energy use. Our energy-engineering services ensure that you meet today's needs while planning for tomorrow's growth. This includes audits, assessments and implementation of energy improvement projects.

FACILITY DESIGN

Integrated systems design is crucial to facility renovation and modernization, particularly in high performance facilities. EMC understands how to take cutting edge mechanical, electrical, and building automation system technology and integrate it into real world solutions. And we can do it while your facilities stay in operation.

DESIGN/BUILD

Identifying your facility's energy issues is just half the battle. You then need a retrofit strategy that maintains the building environment and minimizes system downtime through every phases of construction. EMC is skilled at engineer-led, design/build projects, including efforts funded through Energy Savings Performance Contracting.

TRAINING

Today's building systems are complex. But EMC believes any operations and maintenance team is up to the challenge--if properly trained. We offer an extensive program of live and videotaped training classes and seminars--onsite and hands-on.

Whether you need a retrofit or a modernization or a new high performance building, you can rely on EMC to bring engineering excellence to your project.

Imagine reducing operating costs, improving comfort, increasing productivity, and getting your building's problems fixed quickly. EMC's services are the key!

OFFICE LOCATIONS

Denver, CO * Atlanta, GA * Salt Lake City, UT * Irvine, CA * Raleigh, NC * West Palm Beach, FL

WWW.EMCENGINEERS.COM