

ABOUT MELINE ENGINEERING CORPORATION

Meline Engineering was founded in 1995, in Sacramento, California. We provide energy efficient mechanical system designs for government, commercial and residential buildings. Mechanical engineering services are provided to facility managers, building owners, developers, contractors, architects and homeowners for new construction, renovations, and tenant improvements.

In addition to completing projects within budget and on time, Meline Engineering uses an internal quality assurance plan to ensure our final product is considered an industry standard. Our growing repeat clientele reflects our dedication to customer service and ability to turn projects quickly. Industry leaders have recognized our ability to remain current in the latest applicable geothermal heat pump technologies (Geoexchange), practices, and regulations. Their recognition has led our team to speak at recent regional and international conferences.

MELINE ENGINEERING'S PLEDGE TO OUR CUSTOMERS IS TO:

- Be responsive to every phone call and e-mail within one business day.
- Promote well-integrated design with other team members (civil, electrical, architectural and specialty contractors) through open communication and coordination of documents.
- Provide engineered solutions to problems to assist project teams with results.
- Promote efficient and innovative design and strive to work on projects incorporating those ideals.
- Right-size our engineering services so we can provide the right services to fit the project scope and budget.

CONTACT INFORMATION:

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POINT OF CONTACT:

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CERTIFICATIONS

The following is a list of our credentials and certifications:

- Licensed Professional Engineers in CA, CO, UT and NV
- LEED Accredited Professional (Leadership in Energy & Environmental Design)
- Certified Geoexchange Designer
- IGSHPA Certified Installer (International Ground Source Heat Pump Assoc.)
- California Department of General Services Certified Small Business (SB)
- City of Sacramento Emerging & Small Business Enterprise
- Public Utilities Commission (DBE)

SPECIALIZATION

As mechanical engineers, we consider ourselves the West coast industry leader in designing Georexchange and related applications. Georexchange uses the relatively constant temperature of the earth or a body of water to improve mechanical equipment efficiency. When compared to conventional system designs, georexchange systems offer several benefits to the consumer such as operational cost savings, reduced maintenance, and more. Georexchange is a mature technology with equipment available from many manufacturers.

MECHANICAL ENGINEERING SERVICES

- Geothermal systems design, consulting and construction support
- Energy-efficient HVAC systems designs including
 - Net Zero Energy
 - Passive House
 - LEED
- Plumbing systems design
- Narrative / Project Feasibility
- Third party design reviews and installed system evaluations
- Expert witness

ENERGY-EFFICIENT HVAC SYSTEMS DESIGN

Although our “product” is construction drawings, our real product is our ability to design highly efficient mechanical solutions. Ideally, architects and contractors involve us early in a project, preferably in the conceptual stage. We provide valuable input on the mechanical systems and make recommendations on materials, methods, and constructability. When making recommendations, we always consider budget and schedule as well as energy efficiency.

Our team can provide as little or as much design assistance as needed. In some cases, we provide project management to guide the architect or general contractor in the integration of the mechanical and plumbing systems. For instance, for a large custom home we might coordinate the design and integration of the radiant floor distribution, domestic hot water, duct distribution and other peripheral systems such as pool/spa heating or wine storage. We can also integrate solar-thermal and heat recovery systems into domestic hot water designs. Design assistance may also include working with the project team to meet requirements for Passive House designs, Net Zero Energy Building Certification and LEED certifications.

PLUMBING AND PIPING SYSTEMS DESIGN

Our plumbing design services include domestic cold and hot water, sewer, vent, and natural gas / propane distribution systems. Designs include plumbing plans, isometrics, installation notes, and schedules. While design-build contractors can provide their own drawings for permit, our experience has shown that our plumbing design format and knowledge of the plumbing code expedites both the permit process and the installation. We also provide hydronic piping designs. This service is covered under our HVAC system designs and usually consists of a piping plan, system schematic, and sequence of operation.

THIRD PARTY DESIGN REVIEWS AND INSTALLED SYSTEM EVALUATIONS

In addition to third party plan and peer reviews, we offer consulting services to clients who already have a system installed that is not meeting their expectations. These services may be as simple as troubleshooting or as extensive as a full on-site system evaluation. We review building loads, construction documents, and control sequences, making site visits as needed to observe the systems in operation. We then provide the client with a written explanation as to why their system is or is not performing as anticipated making recommendations for improvements or changes.

NARRATIVE / PROJECT FEASIBILITY

If an owner is unsure about the type of HVAC system to install, or if they are unsure if their project is feasible, we can provide a narrative or project feasibility summary. Meline Engineering will conduct a preliminary engineering on your project to prepare a narrative / project feasibility summary to determine if your project is feasible, and may also compare several different HVAC system types to determine what works best for the client's needs and desires. Considerations include location of project, cost of power, construction budget, project schedule, maintenance and building usage. In preparing the summary, we can also research the availability of utility rebates or tax incentives that might lower the cost of the installation.

Information requested to provide a detailed narrative include:

- Owner's project requirements
- Site and Building Plans
- Preferred list of HVAC systems to be discussed
- For existing buildings, history of maintenance costs (if available)
- Cost of energy or one year of power bills for an existing building
- Any special considerations different from standard operating conditions

OUR RECENT SATISFIED CUSTOMERS INCLUDE:

Government/Public:

California State Lottery
Consolidated Area Housing Authority of Sutter
County
County of Sacramento
National Park Service
Sacramento Habitat for Humanity
Sacramento Mutual Housing Authority
Sonoma County Water Agency
U.S. Army Corps of Engineers
U.S. Dept. of Justice, Federal Bureau of Prisons
U.S. Forest Service

Educational:

City College of San Francisco
Elk Grove Unified School District
Ohlone Community College District
Stevenson School
Truckee-Tahoe Unified School District
University California Davis Design and
Construction Management

Construction:

ACCO Engineered Systems
Air Connection, Inc.
Bergquam Energy Systems
Brower Mechanical
Harrison Construction
Redhorse Constructors, Inc.
Rusher Air Conditioning
Pike Heating and Air Conditioning

Architectural Firms:

AECOM
Arkin Tilt Architects
Betty Woo, AIA, Architect
Blackbird Associates
Cynthia Easton Architects
James Zanetto, Architect & Planner
Sharp Architecture
Turnbull Griffin Haesloop
WSP Global

References will be provide upon request.

MELINE ENGINEERING IS PROUD TO BE AFFILIATED WITH:

