

Mediated Learning Center (LEED® Platinum) & Physical Science & Engineering Center (LEED® Silver) Completed 2013 - Cupertino, CA

Empowered acted as Commissioning Authority for the new Mediated Learning Center (MLC) at De Anza College and the new Physical Sciences and Engineering Center (PSEC) at Foothill College, both members of the Foothill De Anza Community College District. From the early stages of design, Empowered provided design review services, controls logic integration services, submittal reviews, construction site verification, functional performance testing, review of operating & maintenance manuals, and prepared all LEED® Commissioning submittals.

The MLC is an innovative facility designed to maintain comfortable conditions nearly year-round through the use of a one-of-a-kind buoyancy-driven ventilation system. The facility was recently certified LEED® Platinum and is on the cutting edge in the application of sustainable building technologies, including a large solar hot-water generating system with thermal energy storage. Empowered performed complex trend data analysis to ensure that adequate airflow rates were maintained by the buoyancy-driven air intake shafts, providing a comfortable, open teaching space for thousands of students.

PSEC, a teaching center for the physical sciences, comprises a total of 65,800 square feet, and consists of three buildings. In addition to classroom and office spaces, the largest building houses five chemistry labs, two physics labs, a materials and nanoscience lab, and a multipurpose lab. The project is expected to be complete in late 2012 and is targeting a LEED® Silver Rating from the US Green Building Council.



The PSEC project has benefitted from a complex building information model (BIM), which enabled the design and construction team to minimize integration issues with a very complicated supply and exhaust ductwork system supplying the laboratory spaces. Empowered's review of the fume hood control sequence integration with the overall building-level control sequences helped avoid construction delays with the controls integration later in the project.

The commissioning process for this project was executed seamlessly with the General Contractor's master project schedule. Our CxA formed a partnership with the General Contractor's Commissioning Coordinator to integrate commissioning activities into the master schedule, as well as to develop a detailed start-up and commissioning schedule for all MEP equipment. Regular meetings were held with project managers from all contracted trades, to keep the entire team informed of the start-up and commissioning process, from the very beginning of the Construction Phase.

About Empowered

Empowered Solutions is a leading consultative energy solutions company founded and comprised of expert energy engineers, commissioning agents, controls system designers, and project managers. We help our customers capture their performance advantage through a unique blend of controls innovation, commissioning, and energy engineering expertise.