

Enpowered Solutions was the Commissioning Authority for the Tanimura & Antle Family Memorial Library. A state-of-the-art under floor air distribution system highlights the mechanical design of this facility. Commissioning of the under floor system required an emphasis on construction observations to minimize air distribution leaks. Among the systems commissioned for this effort were the air handlers, computer room ACs, fan powered boxes, air and water distribution systems, central plant equipment, building energy management & control system, domestic hot water systems, electrical metering, lighting controls and irrigation systems. The University is pursuing a LEED Silver® rating for this building through the U.S. Green Building Council's LEED® green building program.



BUILDING/PROJECT SUMMARY

- Three Stories
- Underfloor Air Distribution system
- Central Plant including (2) 250 ton chillers
- Interconnection to central campus heating hot water loop
- Chilled water distribution system
- Hot water distribution system
- Domestic hot water systems
- Daylighting controls

Commissioning Accomplishments:

- » Identified substantial improvements to the design including significant changes to the chilled water distribution system
- » Significantly improved the sequences of operation to improve energy efficiency, space temperature control and equipment operation
- » Identified over 200 issues during construction to improve system operation including:
 - Correction of incorrectly installed pumps
 - Overly-compressed vibration isolation springs
 - Improperly sealed air highways
 - Improper control of fan powered boxes
 - Facilitated correction of chiller surging issue due to improper control and operations
 - Automatic faucet controls working improperly
 - Domestic hot water skid not operating correctly
 - Incorrect labeling
 - Water feed to the cooling tower not operating correctly
 - Airside economizers not sequenced properly

Project
Size

160,000 sqft

Construction
Cost

\$54 million

About Enpowered

Enpowered 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.