

Santa Clara University

Solar Hot Water and Solar Cooling

Adroit installed a solar thermal system for the Benson Memorial Center cafeteria at Santa Clara University. Adroit also installed a solar cooling system for the Decathlon House. The system is the largest rooftop concentrating solar thermal installation in California and the largest solar thermal project yet completed under the California Solar Initiative-Thermal (CSI-T) program.

Adroit Energy, Inc., contracted with Chromasun to install 60 Micro-Concentrator collectors at Santa Clara University's (SCU) Benson Center. The system generates hot water for use in the Benson Center cafeteria, which serves up to 1,200 meals per day. The system will help SCU reach its goal of becoming climate neutral by the end of 2016.

In addition to the Benson Center system, Adroit also installed three MCT collectors for a solar cooling system at the SCU Solar Decathlon House. The Chromasun MCT module is a utility-scale solar thermal collector ideal for commercial-scale solar heating and cooling applications



Solar Thermal System Details	
Building	Benson Center
Collectors	60 Chromasun MCT
Total Collector Area	2,682 sqft
Solar Pump Station	Custom Built
Collector Loop Capacity	300 Gallons
Hot Water Load	2,880 GPD (peak)
Annual Therms Offset	6,727 (estimated)
Annual Carbon Offset	6.6 Cars off the road
CSI-T Rebate Value	\$86,240

“With its 25-year lifespan and six-year payback period, the Chromasun solar thermal system is an excellent capital investment. Energy security was another major driver of our decision to undertake this project. Per the terms of our ten-year leasing agreement, we will pay a fixed price for the energy the system produces, shielding the university from natural gas price volatility.”

-DJoe Sugg, Assistant Vice President of Operations at Santa Clara University

