

63-Unit Multi-Family Building

Solar Thermal Case Study: Domestic Hot Water System



System At A Glance	
Location	San Francisco, Calif.
Building	63-unit multi-family
Collectors	40 Schuco Performance
Total Collector Area	1,158 square feet
Solar Pump Station	Schuco PS 2.1
Solar Storage Capacity	1,200 gallons
Hot Water Load	2,394 gallons/day
Therms Offset (1 Year)	3,706 therms
Carbon Offset (1 Year)	3.6 cars off the road
CSI-T Rebate Value	US\$42,627

Project Overview

The Chinatown Community Development Center (CDC) hired SunWater Solar to design and install a solar hot water system to provide domestic hot water for a 63-unit building in San Francisco.

Client Overview

Chinatown CDC is a community development organization that enhances San Francisco residents' quality of life by serving as neighborhood advocates, organizers, planners, and affordable housing developers and managers. Chinatown CDC chose solar thermal as a way to reduce utility bills by heating domestic water with solar energy rather than with natural gas.

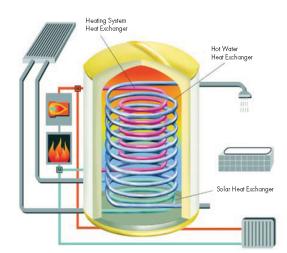
Client Perspective

"After carefully reviewing the costs and financial benefits of solar thermal technology, Chinatown CDC determined it to be an excellent long-term investment. Aside from reducing the building's carbon footprint, the system will also cut Chinatown CDC's natural gas bills for decades to come."

- Karen Gansen, Chinatown CDC Chief Financial Officer

Points of Interest

This system includes a 1,000-gallon Haase solar storage tank. Haase tanks are custom made of fiberglass, shipped in pieces and assembled in the mechanical room.



Haase tank schematic



Commissioning the solar thermal system

About SunWater Solar

SunWater Solar is a solar thermal integrator that manages the design and installation of commercial solar thermal systems, which lower utility bills, reduce greenhouse gas emissions and help clients meet sustainability requirements. With extensive project management experience in domestic hot water heating, process heating and solar cooling, SunWater Solar staff are among the solar thermal industry's top professionals. Founded in 2007 and based in Richmond, California, SunWater Solar serves clients in a variety of industries and focuses exclusively on solar thermal technology.

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