Arminta Apartments | Sun Valley, CA

Introduction

Synthesis Construction removed an old flat-plate solar hot water system and installed a new Apricus evacuated-tube solar hot water system. This system involves 16 ETC-30 evacuated-tube collectors, a SolarHot pump station with built-in brazed-plate heat exchanger, and an 800 gallon Niles Steel storage tank.

Reverse-Return Piping Scheme

The piping configuration is “reverse-return,” meaning the first collectors fed with water are the last collectors to return the solar-heated water to the storage tank. In this way, each flow-path travels an equal distance through the collectors, guaranteeing equal flow through all of the collectors.

System Information

Location: Arminta St., Sun Valley, CA
Application: Domestic Hot Water
Rated Power Output: 49 kWth
Yearly Energy Output: 61,000 kWh
Yearly CO2 Reduction: 26,457 kg / 58,328 lbs
Solar Collectors: 16 x Apricus ETC-30s
System Format: Steam-back, closed-loop
Storage Capacity: 800 gal pressurized tank
Backup Heating: Gas boiler

Contact Information

Synthesis Construction | www.SynthesisConstruction.com
Apricus Solar Hot Water | www.Apricus.com
SolarHot Pump Stations | www.SolarHotUSA.com

www.seia.org/shc