

Solar Thermal Case Study

ARC Texas - Cinco Solar Incorporated



Location: San Antonio, TX

System Type: Direct Feed, Domestic Hot Water

Building Use: 180 Unit Apartment Building

Designed & Installed by Cinco Solar Incorporated



System Description: 178 AP-30 solar collectors were installed on the roof of the fourteen-story Army Residence Community (ARC). The system includes twelve thousand gallons of storage, six hundred feet of three inch copper piping, integrated with full PLC control, remote monitoring and data acquisition. The solar system feeds two existing 2.5 MBtu boilers which supply the rest of the facility.

Feedback: The ARC apartment building project was designed to turn a variable cost into a fixed cost that would exceed the expected rate of return in the market. It has met that objective and is currently saving the facility between \$2500 and \$3000 per month. At maximum output, the facility generates almost 1.5 MBtu's per hour.

"We'll be able to better control our costs compared with the natural gas that we were using. Solar puts us in the driver's seat." - Bruce Chittenden CFO - Army Residence Community

