

Energy Usage Efficiency
for Domestic Applications



Flow-Tech was installed
at
Villa Serrano
apartments.



After four months, the heater
tubes remained clean and kept
their energy star ratings.



Old scale from the walls and
tubes of the heat exchanger fell
to the bottom, resulting in 4" of
powder that could be easily
flushed away.



Domestic Hot Water Case Study:
Apartment Heater Scale Prevention



System:	200,000/BTU Cyclone Water Heaters
Installation:	July 2016
Benefits:	Energy savings and longer equipment life

A comparison test was completed at an apartment complex in Anaheim, California managed by Advanced Management Company. They were struggling with scaling issues and shortened equipment life. Four pairs of cyclone heaters support the water requirements for the complex.



In July 2016, Flow-Tech was installed on one pair of water heaters; one heater was a new replacement and one was pre-existing. The pair of heaters support 26 apartments and a laundry facility.

After four months, the Flow-Tech treated heaters were compared to another pair of heaters at the complex. In the replacement heater, no scale formation was seen. In the pre-existing heater, about 4" of scale residue was seen at the bottom of the tank. The scale was dislodging from the previously scale-covered walls and becoming soft powder, allowing for a flush of the system to remove the minerals.

A series of untreated heaters were opened. Hard encrusted scale was found inside along their tubes and walls. An attempt to flush these systems did not remove the scale, leading to the need to manually removing the scale in 3" thick pieces.

Flow-Tech was able to solve the apartment complex's scale issues, extend the life of their equipment, and lower their energy costs.



The heaters not treated with Flow-Tech had typical hard scale that needed to be manually broken off.

Flow-Tech provides a rapid ROI due to improved heat transfer, a reduction in labor, and no need for ongoing expensive chemical treatments.