

# Case in Point

# OUTDOOR ARMOR WATER HEATERS DELIVER 31% UTILITY SAVINGS

The YMCA at 1111 College Avenue in Santa Rosa, California has been serving the Sonoma County community since 1954. Recently, the YMCA management decided its inefficient water heating system was due for replacement. The old system was installed outdoors and featured one atmospheric copper tube water heater and three sheet metal-jacketed storage tanks. The atmospheric copper tube water heater was operating at low thermal efficiencies and the sheet metal-jacketed tanks were not rated for outdoor installation.

The Sonoma County YMCA contacted Domenic Simeone with Simeone Plumbing to inquire about updating with more energy efficient equipment. Domenic Simeone contacted his local wholesaler, Yvonne Burch with Pace Supply. Pace Supply is a leading wholesaler in Northern California and a distributor of Lochinvar high efficiency products. Burch, with the help of her local Lochinvar Representative, Bill Schwartz (Osborne Company) recommended the new Outdoor Armor water heater and Insulated Outdoor Lock-Temp Storage Tanks.

The Outdoor Armor Water Heater has a 96% thermal efficiency, modulates from a 20% to 100% rate of fire, 5 Year 316L stainless steel heat exchanger warranty and uses the Smart System® control which includes a built-In sequencer, night setback, digital diagnostics and much more. Additionally, the Outdoor Armor is perfect for the California market because it is SCAQMD Rule 1146.2 low NOx approved, CSA low lead approved and California Energy Commission approved.

The Insulated Outdoor Lock-Temp Storage Tank was selected because of its UV protective polyurethane foam spray, anode rods and its 3 year non-prorated warranty. Schwartz also recommended redundancy

on the water heaters and storage tanks. This way, the YMCA facility would always have hot water if one heater or storage tank should be out of service.

The recommendation was to use two Outdoor Armor 199,999 Btu/hr input water heaters which can recover 336 GPH at a 70 degree rise. (x 2 unit = 672 GPH at 70 rise). Due to the ultra-high efficiency, the water heaters could be downsized to 400,000 Btu/hr input from the 500,000 Btu/hr input of the original atmospheric water heater. In addition to the redundant heaters, Schwartz recommended two 184 gallon Insulated Outdoor Lock-Temp Storage Tanks



(x 2units = 368 Gallons). With the heaters and storage tanks, the YMCA will get a 582 GPH recovery at the  $80^{\circ}$ F temperature rise typical to Santa Rosa.

In just two days at the beginning of August 2012, Simeone Plumbing removed the old equipment and installed the new Lochinvar system. The YMCA saw an immediate reduction in gas utility costs. Comparing the July 2012 gas bill to the August 2012 gas bill, the YMCA saw a 31% reduction in utility costs. Based on the dollar value of the July 2012 to August 2012 savings, the YMCA will payback the equipment cost plus the installation costs in less than 2 years.



# **PROIECT:**

SONOMA COUNTY, CA - YMCA



**LOCATION: SANTA ROSA, CA** 

### LOCHINVAR PRODUCTS INSTALLED:

2 – OUTDOOR ARMOR (OAN200) 2 – INSULATED OUTDOOR LOCK-TEMP TANKS (184 GALLONS EACH)

# **INSTALLER:**

SIMEONE PLUMBING SANTA ROSA, CA

# **ABOUT LOCHINVAR**

Lochinvar, LLC is a leading manufacturer of high-efficiency water heaters, boilers, pool heaters and storage tanks. Based in Lebanon, TN, with facilities in Detroit, Orlando, Tampa, Pompano Beach, Dallas, Phoenix and Chicago, Lochinvar stocks all products in all locations.