



Case in Point

Massachusetts Apartment Complexes Cut Heating Costs by 33% with CREST® Boiler



After five years of battling an inadequate hot water supply in two of its apartment complexes, The Carabetta Companies - a Massachusetts management group - invested in a high-efficiency upgrade for each building's mechanical system that not only meets the hot water demands for residents across the 260 units but has also cut operating costs by 33 percent.

iron boilers along with five 120-gallon indirect water heaters. This existing design required a mixing valve to protect the cast iron boilers from thermal shock while sending a low temperature to the Whalen Units. In addition, these boilers were maintaining temperature throughout the summer to heat the system's tankless coils and indirect fired water heaters, which was an inefficient and expensive setup.



In an effort to deliver ample hot water to residents, while also keeping energy usage to a minimum, The Carabetta Companies worked with GEM Mechanical Services Inc. to find the ideal replacement equipment for the buildings' design and application.

Greg Cosgro of GEM Mechanical Services Inc. recommended Lochinvar's CREST Condensing Boiler

The two complexes, Malden Gardens and Pleasant Plaza, were previously heated by two 3 million Btu/hr cast

and ARMOR® Water Heater for the job. "We've installed CREST Boilers

PROJECT:

APARTMENT COMPLEX
EFFICIENCY UPGRADE



LOCATION: MALDEN, MA

LOCHINVAR PRODUCTS INSTALLED:

3 – FBN 2000 CREST CONDENSING
BOILERS

2 – AWN 400 ARMOR WATER
HEATERS

DESIGN ENGINEERING:

GEM MECHANICAL SERVICES, INC
LINCOLN, RI



*3 FBN-2000 Crest Condensing Boilers
replace the 2 million Btu/hr cast iron boilers*



with ARMOR Water Heaters in numerous commercial applications in this area and they've proven to be a highly efficient and low-maintenance combination," said Cosgro. "Our customers have seen record low fuel bills for heating and domestic hot water, even in the coldest Northeast winters."

The team selected three 2 million Btu/hr CREST Boilers, which deliver up to 99 percent thermal efficiency and up to 25:1 modulation turndown, for each building. The boilers' built-in SMART TOUCH™ control modulates the firing rates of the three CREST units, allowing them to share the load requirement equally and further reduce operating costs.

Coupled with two 400,000 Btu/hr ARMOR Water Heaters, which combine stainless steel heat exchanger technology with modulating/condensing combustion to deliver thermal efficiencies as high as 96 percent, and three 200-gallon Lochinvar storage tanks, the advanced system now features a dedicated condensing hot water system.

With the new condensing system, the Carabetta management team can allow the boilers to constantly condense and achieve maximum efficiency while providing the proper temperature to the building. In addition, the boilers no longer need to provide hot water to the heat exchangers for domestic hot water, which saves a significant amount of energy and money throughout the summer months.

Since the installation of the new Lochinvar equipment, The Carabetta Companies have seen a 33 percent reduction in gas consumption.

"We are very pleased with the new system and the results we've seen at both Malden Gardens and Pleasant Plaza," said Gary Carabetta, Jr., administrator for The Carabetta Companies. "From simplified maintenance to the new efficiencies we've achieved and the increased satisfaction of our residents, the Lochinvar equipment has exceeded our expectations on all levels."

For more information about the CREST Boiler, ARMOR Water Heater or other Lochinvar equipment, visit www.Lochinvar.com.

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.

