



Case in Point



Broward Convention Center Installs Highly Efficient Armor Water Heaters

In 2010, the facility management group at the Broward County Convention Center in Fort Lauderdale, FL was compelled to replace their existing water heating equipment which had become old and unreliable. The convention center was first built in 1991 and the original water heating equipment had seen better days.

Rather than put more money into aged equipment, the decision was made to replace the appliances with new equipment. In addition, emphasis was placed on new equipment with the highest efficiency rating for the best monetary return as part of Broward Convention Center's initiative to achieve USGBC LEED certification.

Sustainable Options, LLC, an Atlanta based consulting firm was chosen to help guide Broward County through LEED certification of the building, in general and to

choose the new water heating equipment, in particular. Julia Johnson from the Fort Lauderdale office of Sustainable Options, LLC was the key contact.

Julia reports that the Lochinvar brand was chosen for its high efficiency, its energy savings and instantaneous reaction to demand. With the nearly twenty year old water heating equipment, the cooking staff literally "had to wait for the water to heat up."

Two Armor® AWN285PM water heaters and two RJA120 Loch-Temp storage tanks were chosen to meet the demands of the food service system. The two heaters and two tanks travelled easily through the building to the mechanical room. Their small size passing through standard doorways, the new equipment combined to deliver 570,000 Btu/hr of water heating with 240 gallons of storage.

PROJECT:

BROWARD CONVENTION CENTER

LOCATION:

FORT LAUDERDALE, FL

LOCHINVAR PRODUCTS INSTALLED:

2 – ARMOR WATER HEATERS
2 – STORAGE TANKS

DESIGNER/CONTRACTOR:

Healey Plumbing
Fort Lauderdale, FL



The project manager to perform the installation was P.J. Healey with Healey Plumbing of Fort Lauderdale, FL. The equipment was supplied through Jeff Leidy at Action Supply, a local Lochinvar stocking distributor.



The old inefficient system needed replacement

“Lochinvar is a driving force in the plumbing industry; its focus on quality, innovation, together with its competitive pricing, knowledgeable sales representatives that go above and beyond assisting customers, educating engineers and promoting Lochinvar’s products. Healey Plumbing is proud to be a loyal Lochinvar customer and installer.”

- P.J. Healey, Vice President, Healey Plumbing, Inc.

The system design was prepared by David Flores and Will Hidalgo of Lochinvar Corporation. They chose a simple reverse-return pattern with the water heaters and the storage tanks connected



Two high efficiency Armor Water Heaters and two Lock-Temp Tanks.

together on a common manifold. With this pattern, built in redundancy will allow any one of the components to be taken off line while the remaining equipment could keep up with the demand.

Over the Mother’s Day weekend in 2010, Healey Plumbing removed the old water heaters and installed the new Armor system. The system was installed on the second floor adjacent to the main kitchen and the system supplies hot water to the kitchen and all the concession stands throughout the facility. CPVC pipe was used for the vent system. It was chosen over metal pipe for its lower cost and ease of installation.

A review of operational costs has produced excellent results. It was determined that the 98% thermal efficiency of the Armor water heaters would net an annual operational cost savings of \$4,773 over the at-best 78% efficiency of the original water heaters. Extending the calculation out five years, the Broward County Convention Center would reap a total operational cost savings of at least \$23,865. A value the convention center can celebrate.

For information about high-efficiency boilers and water heaters from Lochinvar, visit www.Lochinvar.com.

ABOUT LOCHINVAR

Lochinvar Corporation 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 and Phoenix, Lochinvar stocks all products in all locations.

