



Case in Point

Lochinvar Packaged Systems Take the Court at Louisville's KFC Yum! Center



The KFC Yum! Center, a multi-purpose arena located in the heart of downtown Louisville, KY, opened its doors in October 2010. Home to the University of Louisville Men's and Women's Basketball programs, the 721,762 square foot facility seats 22,000 guests and is the fifth largest college basketball arena in the nation.

In addition to basketball, the Center is designed to accommodate a variety of other sporting and entertainment events – from NCAA wrestling, swimming and volleyball to concerts, boxing matches and ice shows. The state-of-the-art arena features an integrated scoring and video display system, which includes large LED video displays within the seating bowl, professional grade LCD screens and a powerful control system.

Within the \$239 million facility are multiple locker rooms, club lounges and suites, a team store, additional retail space, a restaurant, sports bar, meeting rooms, an immediate care center and administrative offices, along with KFC Yum! Brand and Papa John's concessions.

Behind the Scenes

The KFC Yum! Center was constructed with advanced equipment and modern amenities that extend beyond the public eye as well. Unique energy conservation approaches were incorporated into the HVAC systems including enthalpy wheels for energy recovery and a high-tech building automation system for customizable control. The facility's top-of-the-line plumbing and mechanical systems are designed to offer superior performance and high-efficiency operation, ensuring consistent comfort for guests through sustainable design.

Smith Seckman Reid (SSR) handled the engineering design for the KFC Yum! Center, while Hussung Mechanical Contractors, Inc. (HMC) installed the plumbing and mechanical systems. The components of these systems included three water heater packaged systems with combined inputs of nearly 4.9 million Btu/hr, 90 fans, three chillers totaling 2,850 tons of cooling, 25 air handling units, three boilers totaling 20,400,000 Btu/hr and more than 1,000 plumbing fixtures.

PROJECTS:

KFC Yum! CENTER

LOCATION:

LOUISVILLE, KY

LOCHINVAR PRODUCTS INSTALLED:

ARMOR WATER HEATERS
POWER-FIN WATER HEATERS
LOCK-TEMP STORAGE TANKS
LOCHINVAR FACTORY PACKAGED

DESIGNER/ENGINEER:

Smith Seckman Reid (SSR)

DESIGNER/CONTRACTOR:

Hussung Mechanical Contractors (HMC)

The Lochinvar Line-Up



Based on previous experience, SSR recommended two Power-Fin Water Heater packaged systems and one ARMOR Water Heater packaged system from Lochinvar

to satisfy all of the Center's hot water requirements. Developed as part of Lochinvar's unique "engineered systems" approach to water heating, these packaged systems are designed to offer the ultimate in flexibility since the heating unit(s) can be paired with the exact size and capacity storage tank needed for any given application. Each package system can also be custom-configured to the precise specification and available space of each job, arriving pre-piped and skid mounted from the factory for immediate installation.

With one Power-Fin unit offering inputs of 1,500,000 Btu/hr, two Power-Fins with 1,300,000 Btu/hr each and two ARMOR units offering 399,000 Btu/hr each, the three package systems combined provide total inputs of nearly 4.9 million Btu/hr. Total storage capacity exceeds 3500 gallons.

The Power-Fin line has set the industry standard for quality since its introduction in 1986. Known for bringing reliable performance to commercial applications of all sizes, Power-Fin features a fully modulating burner with 5:1 turndown and a gasketless copper-fin tube heat exchanger that delivers up to 87 percent thermal efficiency. The ARMOR Commercial Water Heater features a stainless steel heat exchanger that offers thermal efficiencies up to 98 percent and 5:1 modulating turndown.

Both Power-Fin and ARMOR feature the advanced SMART SYSTEM control, which makes installation, system sequencing, set-up and troubleshooting easy. SMART SYSTEM also includes a built-in cascading sequencer for installations using up to eight water heaters, to maximize hot water delivery.

With the packaged systems, each high-efficiency water heater is paired with the appropriate sized Lock-Temp Storage Tank, which features a baffle chamber design that ensures a constant outlet temperature.

A Crowd-Pleasing Performance

Since the specified Lochinvar systems were pre-packaged and pre-piped before arriving at the jobsite, the installation was a smooth process. SSR provided the HMC team with exact drawings to ensure proper placement of the equipment.

Mark Sironen of HMC, who was the project manager for the job, led the charge on the installation of the plumbing and mechanical systems. *"Installing the Lochinvar equipment was a simple, straightforward process. The units fit perfectly in the mechanical room, setup was quick and easy with the SMART SYSTEM controls and they worked great from day one. At this point in our role, no news is good news since that means things must still be going well,"* said Sironen.



Ted Milby, director of operations at the KFC Yum! Center, reported that the equipment has in fact been performing optimally since the arena was constructed. *"When opening a facility of this size, there is always a concern about how new equipment will function and what kind of energy efficiency we can expect. So far, we've been 100 percent satisfied with the performance of the Lochinvar units,"* stated Milby. *"From the very first time I checked out the mechanical rooms, I was really impressed with the layout of the space and how compact and user-friendly the equipment is. We have conducted several tours with other facility managers, and I think they were very impressed with the Lochinvar equipment, plumbing and mechanical systems we have here at the KFC Yum! Center."*

For information about high-efficiency boilers, water heaters, pool heaters and solar thermal heating system 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.

