

having to shut down the entire building. Further, technicians can service equipment without disrupting tenants.

### Thomas Jefferson Tower rejuvenated

The Thomas Jefferson Tower (previously Hotel Thomas Jefferson, then Cabana Hotel) is a 19-story building, formerly a 350-room hotel, completed in 1929 on the western side of downtown Birmingham, Alabama. Listed in the National Registry of Historic Places, it had sat empty for decades.

Developer and building owner Reed Realty Group faced many challenges in bringing this iconic structure back to life. In exchange for preserving the historic features of the building, the company received tax credits. However, this imposed many design and engineering limitations. So Reed Realty turned to Spire Inc., a natural gas utility serving customers across Missouri, Mississippi and Alabama.

"The switch to gas from electric would not have been possible without the support and expertise of our local gas utility," said Alex Dzyuba, principal and director of construction, Reed Realty. "Spire's creative approach enabled us to save money on the front end and helped us to reduce the electrical infrastructure throughout the building."

Spire devised an aesthetic and economical system for the 96-unit Thomas Jefferson Tower. Placing three natural gas tankless hot water heaters in the me-

Thanks to the installation of the Rinnai Tankless Rack System at the 94-apartment Thomas Jefferson Tower in Birmingham, Alabama, each of the units feature a gas stove.



PHOTO COURTESY OF REED REALTY GROUP

chanical room on each floor, serving six residential units and installing gas stoves in each apartment. This reduced electrical system needs by over 5,000 amps. The selection of three tankless Rinnai Corp. water heating units per floor served by a centralized hot water system further enhanced project objectives.

"The Rinnai Tankless Rack System drastically reduces your cost, space and maintenance requirements, yet it has redundancy built into the system," said Rachel Young, commercial business representative, Spire.

The State Historic Preservation Office allowed the water heaters to be vented with a single-point exhaust at each level of the tower. This enabled a building configuration whereby it required only one fuel line to run vertically through the mechanical rooms of each floor. These simple but effective design adjustments meant there was no need to

run gas lines to each unit, only water lines.

"The design enabled the developer to not have to run individual fuel lines and 200-volt electric lines to all 96 units, and eliminated two 220-volt lines per unit," Young said. "It also saved the developer \$225,000 due to the reduction in electrical cost and gas piping requirements."

Young's advice for developers is to expand mechanical rooms slightly on floors as this saves far more space in each unit via a centralized water heating system design. She also recommends that owners and developers seek advice from their local utilities before submitting floor plans.

In short, natural gas is an environmentally friendly, energy-efficient fuel that allows users to do things faster and for less money, giving them more time to spend and save cash for other activities. And with new products by top manufacturers designed with multifamily in mind, there has never been a better time to add natural gas service.

"Our tenants love the fact that they have instant and endless hot water and the availability of gas stoves," Dzyuba said. ▀

PHOTO COURTESY OF REED REALTY GROUP



The Rinnai Tankless Rack System, featuring three natural gas tankless water heaters, was installed in the 16-story Thomas Jefferson Tower. The installation drastically reduced electrical system needs by 5,000 amps as well as decreased cost, space and maintenance requirements in the historic building.

