Three steel tube boilers had been in service since the 1960s at Dexter Manor, a 10-story low income housing complex located in downtown Providence, R.I. None of the existing boilers was up to the task of providing heat and hot water to nearly 300 apartments, managed by the Providence Housing Authority (PHA), in Providence, Rhode Island.

“Failure to provide our tenants with heat and hot water is simply not an option,” said Gary Sprague, HVAC manager at PHA. “We have many elderly and handicapped people living in Dexter Manor who rely on our ability to provide heat and hot water.” The Providence Housing Authority wanted new, high efficiency, gas-fired boilers that could be tied into the existing baseboard heating system in use throughout the building. Besides providing heat and hot water, the PHA wanted a system that would be economical to operate in the long run.

For the project, six RBI high efficiency boilers were selected and installed. Two RBI Futera II hot water supply boilers were installed to accommodate the domestic hot water needs, and four RBI Futera III heating boilers were installed for building heat.

The four Futera III boilers were each sized for 2 million BTU (2,000 MBH). The design called for three to operate on an ongoing basis, with the fourth boiler as a back-up unit in case of problems.

“We recommended the RBI Futera III series boilers for several reasons,” said Kevin Pickett of Aero Mechanical, the Johnston, R.I.-based contractor hired for the project. “First, they offer a very high efficiency rating of 88%. In addition, we feel that the RBI units are technically superior with respect to the air-fuel mixing system design. The system is also easy to service and offers a compact footprint to conserve valuable space.”

Futera boilers feature full modulation and 3:1 turndown, and are designed to supply the precise amount of heat necessary to maintain desired building temperature by matching heating demand without over-firing and wasting energy. A gasket-free heat exchanger with bronze headers and fittings prevents rust and corrosion for the life of the boiler. Finned tubes are industrial-grade copper with fins and tube walls formed as one for maximum heat transfer.

“...they [Futera III Boilers] offer a very high efficiency rating of 88%. We feel that the RBI units are technically superior with respect to the air-fuel mixing design.”

Kevin Pickett, Aero Mechanical

“The level of coordination by all parties was impressive”, said Peter Sweeney of Sweeney-Rogers, the New England representative for RBI. “Well before the project started a series of meetings was held to assure the synchronization of the boilers and jobsite requirements. Bringing the owner, mechanical engineer, mechanical contractor and boiler rep together before the job starts is always the best way to assure success.”

“We had not used RBI boilers in the past,” said Sprague of the Providence Housing Authority. “The project went very smoothly and everyone did an exceptional job during the installation. In addition, RBI has provided our maintenance staff with training for the new equipment. We are very pleased with the boiler performance.”

For more information about Futera III Boilers and the complete line of RBI boilers and water heaters for any domestic hot water or hydronic space heating application, call 413-568-9571, in Canada 905-670-5888 or visit: www.rbiwaterheaters.com