Bentley College, with one of the Top 50 undergraduate business programs in the nation according to the U.S. News & World Report, enrolls approximately 4,000 full-time undergraduate students each year. More than 80 percent of those students live in housing provided by the college. The college recently needed to add two additional dorms to its housing repertoire. When it came to heating and air-conditioning for the new dorms, A&E Mechanical of Salem, New Hampshire was awarded the contract.

“We were hired to install the heating and cooling system for the new facilities,” says Scott Campbell, of A&E Mechanical.

“In addition to installing the new boilers, we also piped and installed all the baseboard heating for the buildings.”

For the new construction, Bentley College had originally specified 2 million Btu boilers – one for each building. However, the design of these boilers was problematic as Campbell explains.

“We were concerned that the 2 million Btu boilers specified for the project would short cycle, and not really be what the college wanted in the long-run,” says Campbell. “So we contacted Sweeney Rogers, a rep firm based in Franklin, Mass., that we do lots of work with.”

After assessing the situation, Sweeney Rogers recommended two smaller 750,000 Btu modulating boilers for each dormitory – both RBI Futera III boilers. Working in full modulating mode, each boiler would operate at a peak efficiency of 88 percent – which would save Bentley a considerable amount of heating fuel. The boiler room would be set-up so that the boilers would run alternatively, ensuring that neither boiler would become overburdened.

“The Futera III is a finned copper tube boiler that operates in a full modulating mode with 3:1 turndown, supplying the precise amount of heat necessary to maintain the desired building temperature. The boiler has a very small footprint of less than 22-inches square, so two units would easily fit into the very small boiler room in each building.

There was a fair amount of pressure to get this building completed in time for the students’ August move-in date, which was another reason that the Futera III boilers were selected.

“The boilers were immediately available and very easy to install. It was really just a ‘plug and play’ installation without any jobsite boiler modifications or construction,” says Campbell. AE Mechanical installed two boilers in each building.

The system was then designed so that each boiler would fire on an alternate basis – one on, the other off. This would not only provide a regular cycle for the boilers, but it would also allow one boiler to be serviced without a heating loss to the facility if necessary. Not only was the project completed on time, but the boilers performed very well in their first semester away at college.

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