

By the Numbers

1.8 million Btus/hr

85,500 square feet

1 Viessmann KOB pellet boiler

44-ton pellet silo

150 tons of pellets/year

\$217/ton

1,500-gallon thermal storage

\$70,000 in fuel savings

\$550,000 project cost

\$350,000 in grants

John R. Briggs Elementary School

John R. Briggs Elementary School is part of the Ashburnham-Westminster Regional School District. JR Briggs is dedicated to developing lifelong learners and engaging the whole community in the process of developing students' knowledge base, mutual respect, and empowerment.

The Brigg School was built in 2012. A wood pellet boiler heats the 85,500-square foot building. The modern wood heat system is supplemented by a propane boiler to meet peak heating demand. The propane system generally runs in the shoulder seasons and the summer when the pellet system is offline.

The system is engineered to be low emission, employing a primary and secondary combustion chamber. Oxygen levels are continuously monitored and adjusted for the most efficient combustion. A 1,500-gallon thermal storage tank may also improve efficiency.

The pellet boiler is fueled by wood pellets manufactured by New England Wood Pellet and delivered by Sandri Energy Systems. In the 2015-2016 heating season, Briggs Elementary saved \$70,000 in fuel costs.

This project was supported by grants from the Massachusetts School Building Association and the Department of Energy Resources.

Overlook Middle School, also in the Ashburnham-Westminster Regional School District, recently installed a wood pellet heating system. Due to the success of the JR Briggs system, Overlook chose the exact same boiler model.

John Briggs Elementary School
96 Williams Rd
Ashburnham, MA 01430



Pellet Boiler



Pellet Silo