



## RUNDLETT MIDDLE SCHOOL



**Owner:** City of Concord

**Scope of Work:** HVAC Renovations

**Location:** Concord, New Hampshire

Rundlett Middle School was originally constructed in the 1950s, with an oil-fired steam heating system and unit ventilators in the classrooms. Additions and renovations over the years have incorporated steam to hot water converters and additional hot water boiler capacity. However, the majority of the school relies on 50+ year old heating and piping systems.

Turner Building Science & Design, LLC designed new heating and ventilation systems for the facility. The first step in this process was a study of alternatives to supply the building with heating. A detailed analysis of heating needs in the school was coupled with a study of various sources of heat. The study has included natural gas-fired equipment, steam generated off-site, biomass, and geothermal systems. Initial costs, operating costs, and life cycle analysis of the options were prepared to assist the School District with decisions regarding future heating systems in the building. The final HVAC design was steam generated off site with active energy recovery from exhaust using a magnetic bearing chiller.

The estimated budget for the work was \$3.68 Million. The final bids came in at \$3.34 Million.

