



GREEN MOUNTAIN TECHNOLOGY & CAREER CENTER  
HARDWICK, VT

BLACK RIVER DESIGN  
7,000 SQUARE FEET

The Green Mountain Technology and Career Center in Hardwick, VT is a 7,000 square foot classroom building for students with an interest in forestry and related areas. It contains a large forestry lab, a maple products lab, and two large classrooms, as well as administrative space and tool rooms. The building is extremely well insulated with 6.5" structural foam panel walls and foam panel roofing with low-e fiberglass windows. Heating is provided by a Garn wood fired storage boiler with an oil/biodiesel fired backup boiler. The Garn boiler consists of a high efficiency firebrick lined combustion chamber surrounded by 1500 gallons of water storage. The boiler is fired with a batch of wood and heat is exchanged from the flue gasses into the water storage. After the batch of wood is burned the fire goes out and the stored heat is used to heat the building. The result is a clean burn of the wood without the need to constantly tend the fire and the ability to heat from storage overnight in most conditions.

