



Energy Use Intensity (EUI) = 112 kBtu/sf/yr
 Percent CO₂ reduction = 22%
 ENERGY STAR design rating = 75
 Energy savings = 16,093,839 kBtu
 CO₂ savings = 2,882,600 lbs CO₂
 450,000 square foot high school

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1 Variable-Primary Pumping. Chilled water and hot water pump operation is varied to match building loads.

2 Carbon Dioxide Sensors. Carbon dioxide sensors in classrooms and offices are used for ventilation control to reduce energy consumption.

3 High-Efficiency Condensing Boilers can operate at much higher efficiency than conventional boilers by capturing the heat available in the exhaust flue that would otherwise be exhausted.

4 Best Efficiency Control Sequences. The chilled water plant and hot water plant were designed with a control system that operates each plant at its most energy efficient point.

5 Variable-Speed Cooling Tower Fans. By matching the fan speed to the actual load, energy is conserved compared to the traditional constant speed fan operation. They are also equipped with quiet fans to reduce noise pollution.

6 Temperature sensors will compare rooftop temperatures on vegetated green roof, white TPO roof, and black roof test area.

7 Variable air volume air handling units include enthalpy wheels to reduce equipment loads.

8 Demonstration photovoltaic array.

9 EnergyStar and high emissivity roof surface.

10 Structured parking saves land and reduces the urban heat island effect.

11 Buried cistern to store stormwater for non-potable uses will save over 5 million gallons of potable water/year.

12 Low-E glazing to reduce unwanted heat gain.

13 Building performance data will be made available to students in real time.

14 More than 70% of the regularly occupied interior spaces have a direct line of sight outdoors.

15 All classrooms include energy efficient, direct-indirect lighting using T5HO lamps.

