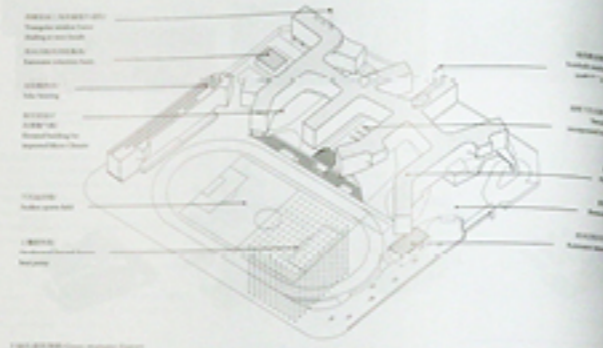




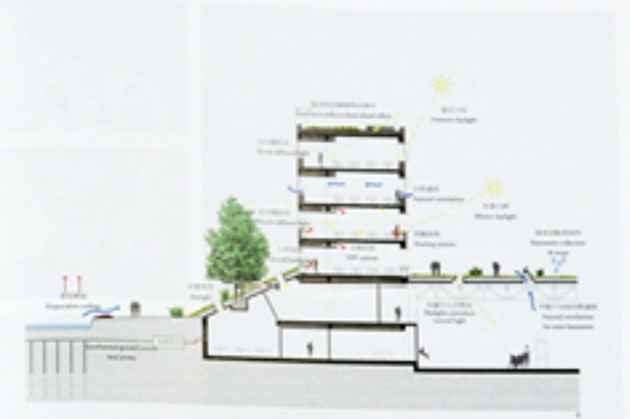
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100% Green Building Project  
 © 2010 GreenSource



**Sustainable Design Intent and Innovation**  
 The design of the Green Building at U.S. 100 is a model of sustainable design. The building is designed to exceed LEED Gold, the highest rating for green buildings. The building is designed to be a net-zero energy building, meaning it produces as much energy as it consumes. The building is designed to be a net-zero water building, meaning it produces as much water as it consumes. The building is designed to be a net-zero carbon building, meaning it produces as much carbon as it consumes.

of the building is made into an urban farm with 50 plots for the 30 classes of students, not only reduce the heat gain and loss of the space down below, but also provides students opportunities to learn biology.

The secondary hot water is supplied by solar panels installed on the roof. Almost all lighting fixtures in the school building are energy saving type using LED technology.

Passive solar strategies are adapted throughout the building. The building's spatial arrangement is optimized with 100% renewable tools. Average wind velocity six times during the summer months 3 days effectively improves the microclimate. Classrooms are arranged in single loaded slab building footprints, all south facing with projecting window frames. The depth of the projecting window frame overhang is calculated to effectively cut down direct summer light and excessive glare.

These large underground water retention basins collect rain water from the athletic field for irrigation of the lawn and gardens. Most of the ground parking is permeable to reduce the surface runoff.

Throughout the project, simple, natural, durable, economic and environmental friendly materials are used, also exemplified.

Outdoor permeable ground covers are made from compressed bark, decomposed wood and recycled concrete aggregates.

Bamboo plywood is used throughout the school. Bamboo is a fast regenerating grass, easily available.

Student lockers are made by strandboard which is entirely made of straw, an agricultural waste abundantly available. Strandboards are 100% recyclable and biodegradable and do not incorporate any harmful substances.