

# INTEGRATED DESIGN: HIGH PERFORMANCE SCHOOLS

DESIGNED TO PROMOTE ENERGY EFFICIENCY AND  
RENEWABLE ENERGY IN SCHOOLS

The characteristics of a High Performance School reflect a mix of environmental, economic, and social objectives. The design process used to achieve high performance schools is fundamentally different from conventional practice. To be most effective, this process requires a significant commitment on the part of design professionals to:

- Meet energy and environmental performance criteria.
- Maintain a view of the building and site as a seamless whole within the context of its community.
- Work with the understanding that the building exists within the context of a natural ecosystem even when the setting is urban.
- Incorporate interdisciplinary collaboration throughout the design and construction process.
- Maximize student performance by keeping standards high for air quality and increasing the use of day lighting.
- Integrate all significant building design decisions and strategies – beginning no later than the programming phase.
- Optimize design choices through simulations, models, or other design tools.
- Employ life-cycle cost analysis in all decision making.
- Design all systems to be easy to maintain and operate.
- Commission all building equipment and systems to assure continued optimum performance.
- Document high performance materials and techniques in the building so that maintenance and repairs can be made in accordance with the original design intent.
- Encourage resource-efficient construction operations and building maintenance.
- Provide clear guidance, documentation, and training for operations and maintenance staff.

The sooner high performance goals are considered in the design process, the easier and less costly they are to incorporate. The goals are best expressed in terms of performance.

Ask your architect about integrated design.

Source: *National Best Practices Manual for Building High Performance Schools*



**U.S. Department of Energy**  
**Energy Efficiency and Renewable Energy**

