



# HOK Sustainable Design

Planning, design, and delivery strategies

WWW.HOKSUSTAINABLEDESIGN.COM/NEWS

HOK is committed to building a better world.

DECEMBER 2001

## Ten Simple Things You Can Do

Think it's too hard to bring sustainable design ideas to a project? Think again. Here are ten simple things you can do without sacrificing budget, schedule, or program considerations.

### **1. Select and develop sites to promote livable communities.**

Consider regional land-use patterns and impacts to the watershed and wildlife habitat. Look for opportunities to redevelop existing sites. Develop links to public transit and create strategies for pedestrian-friendly, mixed-use communities. Provide dedicated open space, greenways, and flyways.

### **2. Develop flexible designs to enhance building longevity.**

Design for flexibility to accommodate future changes. Use modular planning and flexible building infrastructures for HVAC, power, and communications.

### **3. Use natural strategies to protect and restore water resources.**

Limit disruption to existing vegetated areas. To purify runoff and promote groundwater recharge, use natural stormwater treatment systems such as bioretention, bioswales, pervious paving, and vegetated rooftops.

### **4. Improve energy efficiency while ensuring thermal comfort.**

Optimize the building envelope and develop passive solar strategies. Design energy-efficient HVAC systems. Use energy analysis to refine the design. Perform full systems building commissioning to ensure that systems perform as designed. Coordinate daylighting with high-efficiency electric lighting and smart controls.

### **5. Reduce environmental impacts related to energy use.**

Investigate opportunities to reduce reliance on fossil fuels and to use cleaner power sources. Consider cogeneration, fuel cells, photovoltaics, solar hot water, and other renewable energy sources. Explore the potential to use green power. Consider overall source energy use when evaluating system options.

### **6. Promote occupant health and well-being in the indoor environment.**

Provide a connection to nature and daylight, optimal lighting and acoustics, and good indoor air quality. Develop systems and detailing to ensure thermal comfort and to prevent microbial contamination. Use natural ventilation and HVAC systems that promote effective ventilation; consider occupant-controlled systems.

### **7. Conserve water and consider water reuse systems.**

Use low-flow plumbing fixtures and water-efficient appliances and HVAC equipment. Consider collection of rainwater, reuse of gray water for non-potable uses, and constructed wetlands for natural wastewater treatment.

### **8. Use environmentally preferable building materials.**

Evaluate the life cycle environmental impacts, resource efficiency, and performance of building materials. Seek out nontoxic materials from local, renewable, and sustainably acquired resources that minimize waste and pollution from manufacturing, installation, and maintenance. Use wood products from independently certified, sustainably managed sources.



# HOK Sustainable Design

Planning, design, and delivery strategies

[WWW.HOKSUSTAINABLEDESIGN.COM/NEWS](http://WWW.HOKSUSTAINABLEDESIGN.COM/NEWS)

HOK is committed to building a better world.

DECEMBER 2001

## Ten Simple Things You Can Do - continued

### **9. Use appropriate plant material.**

Reduce maintenance and irrigation requirements by giving preference to native plant species. Explore opportunities to provide habitat for wildlife and to restore degraded site areas.

### **10. Plan for recycling during construction, demolition, and occupancy.**

Provide collection bins for recyclable materials on each floor and a staging area for materials collection at the loading dock. Consider vertical chutes to make collection easier. Prior to construction, require contractors to develop a construction waste management plan that identifies companies licensed to recycle materials.