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Sustainable Design

also called environmental design, environmentally sustainable design, environmentally conscious design,



Principles Thecasesolutions.com

optimize site potential;
minimize non-renewable energy
consumption;
use environmentally preferable products;
protect and conserve water;
enhance indoor environmental quality; and
optimize operational and maintenance
practices.

Myths

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Survey of hundreds of architects and designers to understand the obstacles to going green. What emerged were six misperceptions about sustainable design.

Sustainability Equals Environmentalism: tree huggers

Yet, the original understanding of sustainability was that it integrates the "triple bottom line" of social, economic and environmental value — people, profit and planet.



A Plan for a Sustainable Future" was the title of the cover story of the November, 2009, issue of Scientific American. The subtitle? "How to get all energy from wind, water, and solar power by 2030." This reflects narrow thinking: The problem is global warming, the cause is emissions from outmoded energy mechanisms and the solution is smarter mechanisms

Sustainability is a choice of values, not a choice of tool

Sustainable Design Costs Too Much

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Perhaps the most common criticism about green building is that it's too expensive. In a 2008 survey of over 700 construction professionals, 80 percent cited "higher first costs" as the biggest obstacle to green building. Yet, even a dozen years ago the average surcharge for LEED projects was only two percent, and the additional investment typically yielded operational savings worth ten times that much, according to a widely cited report back then. By 2007, studies showed that LEED need not cost more at all. Now green building can actually cost less than conventional construction. By relying more on natural light and outdoor fresh air, the San Francisco Federal Building saved \$11 million in mechanical cooling with a total construction cost of 13.5 percent below the market average. RTKL's LEED Platinum 1225 Connecticut Avenue, in Washington, D.C., cost about five percent below market rate construction in 2009 and sold for the highest rate in the city that year. Lower cost, higher return

Sustainable Design Takes More Time

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Architects often complain that green building is too time-consuming. The additional research, analysis and hunt for alternative products simply cannot be done with limited schedules and fees. Yet, the process known as integrated design, which brings together a project's key stakeholders, designers, consultants and contractors early to get consensus on goals, actually can save time by ensuring more thorough coordination and avoiding costly changes later. When RTKL designed the Federal government's largest LEED Gold office building to date, the team completed the design nearly a year ahead of schedule, and construction finished four months more quickly than expected, saving millions in escalation costs. Sustainable design can lead to a better product faster