

Sustainable Building

Why Build Sustainably?

Building resources are not endlessly renewable. Nationally, 245,000 residential units are taken down each year. 72% of the nation's lumber is used by homebuilders.

Water and fossil fuels are both depletable resources. Using these resources for carrying waste, for transporting building materials and for constructing buildings is unnecessary because local building materials can be used and waste can be composted.

Building materials should not jeopardize the health of its users. Both the actual materials and the emissions from conventional materials such as carpet adhesives and paints can be harmful. There are documented cases of "sick building syndrome", a condition in which inhabitants experience respiratory and dermatological problems caused by allergic reactions to building materials.

A building's relationship to its surroundings affects the building's users. There are many ways in which to build at a site while retaining and respecting the feel of the environment. By taking into account agricultural, geographical, topographical and climatic environmental features, a building can interact well with its surroundings and create a pleasant atmosphere for the building's users.

What are Sustainable Buildings?

Recycled Materials: Reuses materials such as framing lumber, bricks, hardwood flooring, stair units and treads, windows, bathtubs, toilets, sinks, doors, shelving and cabinets. Also recycled polystyrene can be fashioned into building material blocks.

Nonpolluting Materials: Uses stains, finishes, paints, carpets and carpet adhesives produced with non-toxic methods and materials.

Renewable Materials: Uses materials such as straw or earth to build structures. These materials are often locally available as well, reducing pollution and costs from transportation.

Energy and Water Efficiency: Conserves resources by using other methods of producing electricity and dealing with waste.

Sensitive Design: Creates buildings that are sensitive to surrounding factors such as earthquakes, extreme cold or hot weather, outstanding plants or topography, cultural context and other such elements.

Sources:

Malin, Nadav. "Carpeting, Indoor Air Quality, and the Environment." *Environmental Building News*. 3:6.

Malin, Nadav. "Structure as Finish: The Pros and Cons of Leaving off Layers." *Environmental Building News*. 9:3.

"Newsbriefs." *Environmental Building News*. 9:3.

Wilson, Alex and Yost, Peter. "Building and the Environment: The Numbers." *Environmental Building News*. 10:5.