

Eco friendly structures

[Education](#), [Sustainability](#)



Major elements of green building design which are: Sustainable Site Design

Key Principles: Minimize urban sprawl and needless destruction of valuable land, habitat and green space, which results from inefficient low-density development. Encourage higher density urban development, urban re-development and urban renewal, and brownfield development as a means to preserve valuable green space. Preserve key environmental assets through careful examination of each site.

Engage in a design and construction process that minimizes site disturbance and which values, preserves and actually restores or regenerates valuable habitat, green space and associated eco-systems that are vital to sustaining life. Water Quality and Conservation Key Principles: Preserve the existing natural water cycle and design site and building improvements such that they closely emulate the site's natural " pre-development" hydrological systems. Emphasis should be placed on retention of storm water and on-site infiltration and ground water recharge using methods that closely emulate natural systems.

Minimize the unnecessary and inefficient use of potable water on the site while maximizing the recycling and reuse of water, including harvested rainwater, storm water, and gray water. Energy and Environment Key Principles: Minimize adverse impacts on the environment (air, water, land, natural resources) through optimized building siting, optimized building design, material selection, and aggressive use of energy conservation measures. Resulting building performance should exceed minimum International Energy Code (IEC) compliance level by 30 to 40% or more. Maximize the use of renewable energy and other low impact energy sources.

<https://assignbuster.com/eco-friendly-structures/>

Indoor Environmental Quality Key Principles: Provide a healthy, comfortable and productive indoor environment for building occupants and visitors.

Provide a building design, which affords the best possible conditions in terms of indoor air quality, ventilation, thermal comfort, access to natural ventilation and daylighting, and effective control of the acoustical environment. Materials and Resources Key Principles: Minimize the use of non-renewable construction materials and other resources such as energy and water through efficient engineering, design, planning and construction and effective recycling of construction debris.

Maximize the use of recycled content materials, modern resource efficient engineered materials, and resource efficient composite type structural systems wherever possible. Maximize the use of re-usable, renewable, sustainably managed, bio-based materials. Remember that human creativity and our abundant labor force is perhaps our most valuable renewable resource. The best solution is not necessarily the one that requires the least amount of physical work.