

Sustainability & Green Building Techniques - Residential

The design and construction of houses requires the use of our natural resources. How and where we build are two of the most important factors that influence our future and the sustainability of our natural environment.

Simple “green” design and building techniques can be applied to both reduce the potential negative impacts of construction and enhance the human and natural environments in which we live.

Green Building Principles Include:

Building Design

- Orient building appropriately for topography and daylighting
- Use efficient space planning where possible
- Design for renewable energy use where practical

Site Design

- Protect trees and topsoil during sitework
- Filter storm water on site
- Employ sediment and erosion control techniques
- Incorporate permeable surfaces
- Use native plants and existing landscape where possible

Building Envelope

- Use optimum insulation values
- Install high performance windows
- Use air sealing construction techniques

Energy Efficiency

- Use high efficiency mechanical equipment
- Install high efficiency lights and appliances
- Provide appropriate overhangs and sun-shading devices

Materials and Resources

- Use local and regional sources where possible
- Incorporate durable, low maintenance materials
- Select low embodied energy materials such as stone and wood
- Minimize construction waste
- Use certified or reclaimed wood
- Use recycled and recyclable materials where available

Water Management

- Use water efficient fixtures and appliances
- Incorporate rain water collection
- Reuse graywater for irrigating landscaping

Indoor Environment

- Create a healthy indoor air quality
- Provide ventilation and fresh air supply
- Use least-toxic finishes and materials
- Incorporate natural light throughout the building