

# 15 Green Design & Construction Tips

## Residential & Small Commercial Buildings

All phases of buildings - from building design to construction, materials & operation - **consume more energy than any other part of the U.S. economy.** Building "green" means using materials & designs that are enviro-friendly, sustainable & long-lasting. Many green buildings cost no more to build than traditional methods, and result in **substantial savings** for the owners because they use less energy & utilities.

### For Energy and Water Efficiency

1. **Orientation** – situate widest expanse of wall or roof facing south. Keep overhangs deep.
2. **Envelope** (the roof and walls) – well sealed, plenty of insulation in wall, floors, attic, foundation. Light colored cool roofs.
3. **Properly sized heating and cooling equipment** – no bigger than needed. Include systems like geothermal and solar heaters. Use programmable thermostats.
4. **Efficient water heating** – solar water heating, on-demand water heating, or efficient standard water heaters.
5. **Energy efficient appliances and equipment** – Energy Star® certified appliances and computer. Energy saving equipment and fixtures
6. **Duct sealing** – ducts in sealed envelope
7. **Efficient windows** – operable to allow ventilation, low-e (allows light but not heat to pass), use insulated windows
8. **Lighting** – compact fluorescent, LED, and day lighting (using natural sunlight), motions sensors or timers. Use lighter colors to reflect light
9. **Building materials** - local building materials, recycled materials, and non-toxic materials. Local Mississippi products include: southern yellow pine lumber, concrete, brick, structural insulated panels (SIPs).
10. **Efficient water use** – water efficient faucets, shower heads, toilets, dishwasher, and washing machine

### For Superior Interior Environment

11. **Indoor air quality** – low- or no-VOC paints, finishes, adhesives. materials and cleaners
12. **Interior noise** –noise dampening ducts and isolation system
13. **Use Sustainable Resources** - Recycled/reused materials

### For Reduced Building Maintenance

14. **Landscaping** –native plants that don't require watering or mowing, shade trees, water absorbing plants that reduce the load on storm sewers, rainwater harvesting
15. **Parking lots/driveways** – design vegetation and shade areas, use permeable or recycled pavement options