

Green Design Checklist

The guidelines below offer concrete ways to work toward sustainability.

This checklist was significantly altered and adapted from a checklist originally published in Environmental Building News, September-October 1992, entitled "Checklist for Environmentally Responsible Design & Construction." The original was developed for new building construction and included siting, landscaping, etc.

DESIGN

- Rethink the menu, not just the recipe.**
Do we really need to use toxic fiberglass and synthetic carpeting in the children's museum industry? What if we served something else? What about materials that are sustainable and quickly replenished?
- Smaller is better.**
Optimize use of space through careful design. Don't overbuild to keep cost and material waste to a minimum.
- Optimize materials use.**
Simplify design to accommodate standard building material dimensions. Avoid over designing.
- Design for future reuse.**
Can it be adapted into something else? Can it be deliberately designed in the first place with a future reuse in mind? Choose components and materials that can be reused or recycled.
- Design to do more good, not simply "less bad."**
Create lists of materials to avoid, materials to use in moderation, and materials to use more plentifully. Strive to use the list of "best products" as much as possible. Try to eliminate the harmful materials altogether.
- Design to support creativity, innovation, fun, and reinvention.**
Does it support invention, ingenuity, and serendipity? Is it whimsical, and does it lend itself to reinvention?
- Design for deconstruction.**
Can it be dismantled quickly and easily? Can it be separated into pieces or parts that are reusable?

BUILD

- Stop using known culprits.**
Use materials that have no known dangerous toxins. Find an alternative solution that is safe for children.
- Use durable products and materials.**
Use products and materials that are "timeless" and known to last, or materials that can be easily refinished. Stay away from products that are not durable, that are difficult to refinish, or that quickly end up in a landfill.
- Choose materials with low embodied energy.**
Use products that have not been heavily processed or manufactured, which tend to require more energy. One estimate of the relative energy intensity of various materials (by weight) is as follows: Lumber=1, Brick=2, Cement=2, Glass=3, Fiberglass=7, Steel=8, Plastic=30, Aluminum=80.
- Buy locally produced building materials.**
Look for regionally based, local materials. Cut down on transportation costs while supporting the local economy.
- Use sustainable materials that are quickly replenished.**
Try using materials that grow quickly or sustainably, like bamboo, hemp, organic cotton, or certified hardwoods.
- Use building materials made from recycled materials.**
This helps cut down on solid waste problems. Look for percentage of recycled content on building materials.
- Use salvaged building materials when possible.**
Use salvaged lumber, bricks, components-all kinds of materials, rather than buying new. This helps cut down on landfill space, conserves resources, and often adds aesthetic appeal.
- Minimize use of pressure-treated lumber.**
Seek to discontinue use of pressure treated lumber. Look for alternative decking or plastic lumber, or find alternative ways to deal with moisture problems with soil and rot.
- Minimize packaging waste.**
To avoid, unnecessary waste, purchase materials from suppliers that don't over-package.
- Purchase materials in bulk.**
Buy in bulk whenever possible to avoid extra transportation, packaging, and labor costs.
- Minimize job site waste.**
Organize shop space to have room for sorting and reuse. Put a recycling program into place for metal, papers, batteries, computers, etc. Donate unused building materials to organizations like Habitat for Humanity Restore.

OPERATE

- Use nontoxic cleaning products that contribute to a healthy environment.**
Select cleaning supplies that are safe to eat. If they say "caution" anywhere on the label, or something even worse, DON'T USE THEM.