

MAKING BUILDINGS MORE ENVIRONMENTALLY FRIENDLY

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Incorporating environmentally sensitive building practices into a project is not difficult when considered from the very start as a principle or visible project feature. This checklist is adapted from materials provided by Rick Barnett, Green Builder, a consultant who facilitated and provided technical assistance to the Oregon Housing & Community Services Department "Green Building Task Force."

- Begin by retaining a professional development team (architects, engineers, landscape architects, contractors, and project managers) that is knowledgeable and eager to apply environmentally sensitive building principles and practices.
- When possible, choose to remodel and retrofit an existing building using appropriate environmentally sensitive building principles and practices.
- Design building orientation to maximize solar exposure in winter and shade building from summer sun. Design and dimension building overhangs to protect windows, doors, and people from sun and weather.
- Design building orientation to utilize natural ventilation. Use operable windows to provide natural ventilation. Provide mechanical air exchange systems as needed to assure ample fresh air for building occupants.
- Design building to fit the character of the topography and other natural characteristics of the site. Minimize disturbance of the site to avoid soil instability and erosion.
- Protect indigenous vegetation. Assure adequate protection and clearance between construction and the root system of any trees and plants to be preserved.
- Provide on-site drainage and water catchment capacity. Protect site from runoff erosion during construction.
- Designate area on the construction site to collect scrap materials for on-site reuse later in the project or to be marketed into the secondary materials market. Require recycling of non-reusable waste material. Provide adequate space for comprehensive recycling services for building occupants.
- Minimize the use of hazardous materials. When no alternate is available, provide properly designed separate storage.
- Accommodate alternate transportation modes (i.e., walking, bicycling), energy saving transportation (carpooling, carpooling parking areas), and mass transit.
- Minimize exposure of construction and building occupants to toxic materials. Use safe, biodegradable materials and alternatives to hazardous materials. Require and monitor safe handling and disposal of any hazardous materials.

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- ❑ Minimize or prohibit non-recyclable/non-reusable packaging both during construction and later in building operation.
- ❑ Avoid using materials that cannot be easily repaired if damaged.
- ❑ Consider using insulated concrete forms for many concrete construction applications.
- ❑ Design foundation to accommodate additional floors in the future.
- ❑ Avoid interior load bearing walls to easily accommodate changing needs and uses.
- ❑ Design office areas to be thermally separate from less energy consuming zones like entry, storage, mechanical, and utility areas.
- ❑ Use engineered or certified sustainably grown wood products, finger-jointed lumber, or otherwise resource-efficient building materials. Avoid the use of old-growth lumber, other than "recovered" or "reused" materials.
- ❑ Provide readily accessible main valve and branch lines for water service. Use copper plumbing pipe. Insulate hot water pipes. Use water-conserving plumbing fixtures. Incorporate solar water heating for hot water needs. Provide adequate exterior water to maintain healthy landscaping.
- ❑ Exceed code requirements for insulation; use formaldehyde-free or recycled content materials. Flash and seal all penetrations between interior spaces and outside. Provide infiltration barrier, taped at penetrations. Use formaldehyde free underlayment and other materials.
- ❑ Use energy efficient appliances. Use natural day lighting where possible and energy efficient lighting elsewhere.
- ❑ Use No-VOC or Low-VOC paints, sealants, and adhesives.
- ❑ Use drywall with recycled content (paper, gypsum), low-toxic joint compound.
- ❑ Use natural linoleum or other vinyl alternative. Use a finished concrete floor for the first story of multi-story buildings.
- ❑ Use finish materials with recycled or salvaged content (tile, drywall, manufactured trim materials, etc.).
- ❑ For cabinets and other finish woodwork, use certified sustainably grown wood and formaldehyde free composites.
- ❑ Provide thermal curtains for windows and skylights.
- ❑ Plant native and low maintenance plant materials for landscaping.