Green Home INTERIOR

Using the right materials can improve indoor environmental quality and therefore improve health, safety and comfort.

Healthy Interiors

- ☐ Carbon monoxide (CO) detector is installed at the house/garage entry door and within each room where combustion appliances are used (not including sealed combustion appliances).
- ☐ Exhaust fans expel moisture and odors to the outside in bathrooms, kitchen and laundry areas (minimum 50 cubic feet/minute for bathrooms and minimum 100 cubic feet/minute for kitchens).
- ☐ Flooring is mostly a hard surface, such as concrete, tile, wood or cork.
- ☐ Carpeting and padding is certified under the Carpet and Rug Institute (CRI) "Green Label" program.
- ☐ Consider flooring made from rapidly renewable materials (bamboo, linoleum, cork, wool or other materials that regenerate within a 10-year cycle).
- ☐ Consider wood flooring from a sustainably-managed forest (protects regional biodiversity, soil erosion, water quality) that is certified by the Forest Stewardship Council (FSC) or Sustainable Forest Initiative (SFI).
- ☐ Exclude use of vinyl wallpaper that can trap moisture in walls.
- ☐ Paints, finishes and glues contain low or zero volatile organic compounds (VOCs) less than 250 grams per liter. VOC fumes can cause headaches, allergic reactions and other health effects.

Airtight Ducts

Most houses lose 25 percent of their conditioned air through leaks in the ductwork. This affects utility bills, air quality and health.

- ☐ Ducts should have a minimum R-4.2 insulation in conditioned spaces and minimum R-8 insulation in unconditioned spaces such as attics.
- ☐ Ask if the ducts have been pressure-tested for leaks by a qualified technician.

Efficient Heating and Cooling

- ☐ Properly sized heating and cooling system is installed in accordance with "Manual J" method of the Air Conditioning Contractors Association (a right-sized A/C runs longer than an oversized unit, but uses less energy and runs more efficiently).
- ☐ The air conditioner has a cooling efficiency of 13 SEER or higher.
- ☐ Return air ducts or transfer grills are in every enclosable habitable room (not including bathrooms, kitchens, closets, pantries, laundry rooms).
- ☐ A programmable thermostat is installed.
- ☐ Ceiling fans are installed in all major rooms, or pre-wired for future installation.

Air Filters

A good air filter improves the quality of the air you breathe and increases the life span of the heating and cooling equipment.

- ☐ Air filters have a minimum MERV (Minimum Efficiency Reporting Value) rating of eight.
- ☐ Filters are readily accessible and easy to change.

Efficient Lighting, Appliances, and Plumbing Fixtures

- ☐ Energy Star® labeled light fixtures are installed.
- ☐ Individually switched task lighting is in at least three areas such as bathroom vanity, kitchen counter and work areas.
- ☐ Energy Star labeled appliances are installed.
- ☐ High efficiency faucets/showerheads use less than 2.5 gallons/minute and toilets use 1.3 or less gallon/flush.
- ☐ Install a hot water demand-controlled recirculation pump when water heater is located more than 20 feet from the furthest fixture served. A manual control or occupant sensor switch should be installed to operate the pump with an automatic temperature sensor shut-off.

Sustainable Building in Washington State

How To Buy a Green Home

- ☐ Look for green building features in the sales literature of the homes you are considering.
- ☐ Review and/or investigate homes with this buyer's guide in hand.
- ☐ Remember that this brochure is a shortened list of features that a builder can include in your home. Ask your builder what's possible.
- ☐ Ask for a home that is green-certified.

A Green Home Can Be…

- ☑ Healthier for your family and the environment.
- ☑ More economical because it's energy and water-efficient.
- ☑ More environmentally responsible because of resource efficient and low impact materials.
- ☑ More comfortable and durable.
- ☑ Lower maintenance.

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Sustainability Foundation ▲

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Green Home BUYER'S GUIDE

Green Home LOCATION

The right location can improve your quality of life and make your home more comfortable, affordable and attractive.

Site

- ☐ Home is designed to minimize impacts on site topography and natural drainage.
- ☐ Home is designed with protected outdoor living areas (semi or fully covered patio, porch, trellis, shade trees, courtyard).
- ☐ Shade trees are planted on the east and west sides of house.
- ☐ Water-efficient or drought tolerant landscaping is installed.
- ☐ Plants, shrubs and trees selected for your region.
- ☐ Gutters and downspouts are located to direct water away from the house and to vegetated areas or to a rainwater collection cistern.
- ☐ Zoned irrigation system is designed with multiple control valves (to accommodate specific water needs of different types of plants), rain sensor shut-off and a timer with multiple start times.

Neighborhood

- ☐ Home is located in an existing community on previously developed land.
- ☐ Farmers' market is located in the area.
- ☐ A recycling program is available.
- ☐ Neighborhood is conducive to walking and biking.
- ☐ House is located in close proximity to services and activities. Consider the distance to work, school, shopping, entertainment, trails or parks.

Green Home DESIGN

Comfort and economy are possible when a house is designed for its site and climate.

Minimal Solar Heat Gain

- ☐ All exterior entrances are protected from direct summer sun by recessed or covered design elements.
- ☐ The longest walls of the house face north and south (not always possible due to lot/street orientation and topography).
- ☐ Most windows face north and south; few windows are located on east and west sides of house.
- ☐ Windows are shaded by overhangs, porches, awnings, trellises and/or trees (exterior shading devices are better than interior shading devices).
- ☐ The garage, storage, service areas, and/or infrequently used rooms are positioned on the west side as thermal buffer.

Maximum Natural Light and Ventilation

- ☐ Most rooms have windows on at least two sides for daylighting.
- ☐ Windows are operable and positioned for cross ventilation.
- ☐ High windows are operable for venting.

Green Home EXTERIOR

Choose the option of a green-built home that incorporates third-party energy performance inspection and testing.

A Cool Shell

- ☐ Light-colored surfaces for walls and roofing help reduce heat gain. Look for Energy Star or Cool Roof-labeled roofing.

Optimal Insulation

- ☐ The attic insulation is at least R-30 and is evenly distributed.
- ☐ Radiant barrier is used in attic to protect against radiant heat build-up (most effective in vented attics).
- ☐ The wall insulation is a type that fills every hole, crack, and void (minimum R-13 for 2X4 framed walls and R-19 for 2X6 framed walls).

High Performance Windows

- ☐ Windows are double pane with low-e coating or solar screen (except on the south side where warmth from the low winter sun is desired).
- ☐ Minimum use of skylights helps reduce heat gain (consider light tubes instead).

Durability

- ☐ Look for a roof with a minimum 35-year life warranty (shingle, tile or metal).
- ☐ High durability/low maintenance roofing materials include concrete, clay, metal, slate, fiber-cement.
- ☐ Roofing materials such as metal or concrete tile are reusable/recyclable.

Green Home LOCAL ECONOMY

Using local businesses and products keeps the local economy healthy, while reducing the effects of transportation on air quality.

- ☐ House is built using native and local/regional materials such as masonry, wood, paving stone, earthen walls and/or recycled content materials.
- ☐ Construction of the house uses local businesses, tradesmen, artists and artisans.
- ☐ Consider regional materials made within 500 miles (using regional materials supports the local economy and reduces transportation impacts and costs).
- ☐ Supporting other companies that offer green products and services perpetuates environmentally-friendly efforts in your region.