Features that may be included in a Nebraska Certified Green Built[SM] Home

The lists below identifies common features that are used in many homes that incorporate Green Building Standards. For a complete list of the required and optional construction features of a Nebraska Certified Green Home[SM], contact a Nebraska Certified Green Builder[SM] http://www.neo.ne.gov/home_const/greenbuilthomes.htm

Lot and Siting

1. Outdoor structures, decking and landscape material made from recycled-content materials or borate-treated engineered lumber
2. A covered outdoor living area
3. Constructed, planted or natural wind breaks on west and north sides of the house
4. Deciduous shade trees/plants on the south and west sides of the house that block summer sun and admit winter sun

Waste Reduction and Recycling

1. A recycling center in or near the kitchen
2. A recycling holding area to store items before transferal to curbside or to a recycling center
3. Trees that are removed from site that are mulched, replanted or put to other uses
4. A composting system installed in yard
5. Recycled wood waste used for landscape mulch

Foundation

1. A poly vapor barrier is installed under floor slabs and caulked at walls
2. Locally produced coal fly ash concrete
3. Regionally produced block or brick
4. Water-based/non-toxic damp proofing
5. A frost protected shallow foundation
6. Aluminum foundation forms used to form the basement walls
7. Rigid insulation forms that provide permanent insulation to the foundation
8. Insulated foundation with rigid R-8 foam insulation to footer
9. Non-toxic termite protection such as termite shields used
10. Recycled-content foundation block

Insulation

1. CFC and HCFC free rigid foam or spray plastic foam insulation
2. Cellulose insulation with borates and UL-rated fire retardant
3. Formaldehyde-free insulation
4. Non-toxic spray foam insulation
5. Agricultural fiber insulation
6. Perlite insulation used
7. Non-toxic (even when burned) foam insulation
8. Fiberglass insulation with a minimum of 15% recycled content

Roof Materials & Construction

1. Recycled roof material
2. 30 year minimum roofing material including concrete, slate, clay, composition, metal or fiberglass
3. Combination cement-fiber roofing with recycled content
4. Light colored roofing
5. Radiant barrier in roof cavity with air space below
6. Vented roof cavity with continuous ridge and eave venting or insulation on underside of roof deck
7. Recyclable roofing materials

Building Envelope Design

1. An exterior air infiltration barrier installed to manufacturer specifications
2. An advanced sealing package that adds sealing at top and bottom plates, corners, between cavities at penetrations, band joists and cantilevered areas
3. Glazing area less than 15% of the livable floor area
4. Energy heels of 6” or more on trusses
5. Properly designed interior thermal mass to assist heating and cooling house
6. A daylighting design that allows natural light to enter house from two sides of rooms in at least 50% of total livable floor area

Exterior Walls

1. Reconstituted or recycled-content siding, fascia, soffit or trim
2. Regionally produced brick, block or stone veneer
3. Light colored walls
4. A properly drained Exterior Insulation Finish System installed on at least 30% of the exterior building surface area
5. Recycled content underlayment and/or sheathing or OSB
6. Natural stucco
7. Molded cementitious “stone”
8. An R-3.2 or better insulated exterior wall sheathing
9. Agricultural by-product sheathing
10. Straw/mud or rammed earth or straw bale walls
11. Engineered wood sub-fascia, soffit or trims

Windows

1. R-3.03 or better windows
2. Finger-jointed wood windows
3. Wood, vinyl or durable composite frames
4. No metal-framed windows
5. Operable windows in all living areas designed to allow cross-ventilation
6. Interior window treatments with light color and reflective properties and/or insulated treatments

Indoor Air Quality

1. EnergyStar® bath fans controlled with a timer switch
2. Heat recovery ventilator, air-to-air heat exchanger or exhaust fan ventilation
3. A sealed combustion or power vented domestic gas water heater
4. An exhaust fan in the garage controlled with a timer
5. A mechanical room that is air sealed from conditioned space
6. A furnace and/or duct-mounted electronic or electrostatic air cleaner or pleated air filters
7. A radon mitigation system and air tight sump pit installed
8. A carbon monoxide detector
9. A central vacuum system with exhaust to outside
10. A detached garage
11. An ultraviolet light air purifier

Structural Frame

1. Engineered wood “I” joists used for floor
2. Trusses or “I” joists used for roofs
3. Engineered wall framing material used in at least 80 percent of wall construction
4. Structural insulated panels used for walls or roofs
5. Reinforced cementitious structure using a minimum 15% fly ash concrete
6. Engineered lumber products for beams, joists or headers
7. Optimum value engineering framing 24" O.C. studs, 3 or less stud corners and reduced window framing
8. Engineered alternatives to wood framing
9. Borate-treated wood used instead of pressure-treated wood
10. Gypsum board made from recycled paper and recycled or synthetic fiber integrated into gypsum
11. Steel studs used in more than 90% of the interior walls of structure
12. Reinforced insulated masonry used for walls
13. Reinforced foam-formed concrete walls

Doors

1. Reconstituted or recycled-content interior doors
2. No Luan or tropical hardwood doors
3. Exterior doors that are insulated to R-5 or greater
4. Solid, domestically-grown or domestic hardwood interior panel doors
5. At least 50% recycled doors

Lighting

1. Fluorescent kitchen area lighting
2. A fluorescent fixture in each bathroom
3. Switches for the most efficient lighting fixture is located nearest each door
4. All exterior lighting is photocell control
5. Light interior colors
6. Light colored floor coverings
7. Compact fluorescent light fixtures for at least 50% of total number of fixtures
8. Low-voltage halogen down lighting
9. Solar-powered walkway or outdoor area lighting
10. Daylighting strategies that reduce the need for artificial lighting

Finish Floor

1. Recycled-content carpet pad
2. Recycled-content carpet (tacked not glued)
3. Natural linoleum with low toxic adhesive or backing
4. Ceramic tile installed with low toxic mastic and grout
5. Natural material carpeting and backing (such as domestic cotton or wool) untreated, tacked not glued
6. Recycled-content ceramic tile
7. Reused wood flooring
8. Locally quarried and processed stone (i.e. flagstone) or locally produced brick
9. Locally produced coal flyash concrete (slab foundation doubles as finished floor)
10. Domestic hardwood flooring with least toxic glues or backing
11. Recycled content floor tile
12. Cork flooring
13. Bamboo flooring

Mechanical Equipment & Design

1. Energy Star® rated mechanical equipment
2. A set-back, programmable thermostat
3. Ductwork joints sealed with low toxic mastic or gaskets
4. A sealed combustion gas fireplace or sealed wood-burning fireplace or stove with outside combustion air
5. A centrally located air handling unit
6. An active or passive solar heating system
7. An active solar system for cooling
8. Distribution ducts located entirely within the conditioned building envelope
9. Return air ducts or transfer grills in every enclosed livable room
10. Earth-sheltered design reducing heating and cooling needs
11. A thermal chimney to increase natural ventilation
12. Humidifiers
13. EnergyStar® rated ceiling fans

Cabinetry and Trim

1. Tropical hardwood trim or cabinets
2. Finger-jointed or recycled content trim
3. Cabinets made with formaldehyde-free particleboard or MDF
4. Domestic hardwood trim
5. Exposed particleboard that is painted with water-based sealer inside cabinets and on the underside of countertops
6. Urea formaldehyde-free products
7. Low VOC finish products use in on-site application for cabinet finishes
8. Solid domestic hardwood cabinets
9. Reconstituted or recycled-content cabinet materials
10. Recycled content countertops

Appliances

1. A built-in EnergyStar® rated dishwasher
2. An EnergyStar® rated refrigerator
3. A built-in microwave oven
4. A clothes dryer with humidity sensor
5. A gas rough-in is provided for appliances not included
6. An interior and/or exterior clothesline

Finishes and Adhesives

1. Interior paints and finishes that contain less than 150 grams/liter of VOCs
2. Low-toxic mastics, sealants and petroleum solvent-free or water based adhesives
3. Paints or finishes with recycled-content
4. Water-based urethane/lacquer finishes on wood floors and woodwork
5. Gypsum wallboard with least toxic joint compound
6. Locally produced brick for interior wall
7. Reconstituted, synthetic or recycled-content wall board
8. Concrete or gypsum plaster
9. Agricultural by-product paneling
10. Recycled gypsum plaster
11. Low-biocide paints
12. Plant/mineral based paints, sealers and finishes
13. Non-toxic interior clear wood sealers
14. Carpeting tacked throughout, not glued

Water and Water Heating Equipment

1. High efficiency water heaters
2. ½" insulation on all hot water lines
3. Toilets that use 1.6 gallons per flush (GPF) or less
4. Solar, photovoltaic or wind powered water heating
5. Centrally located water heater
6. An electric heat pump water heater
7. A sealed combustion or power vented domestic gas water heater
8. Permeable materials used for walkways, patios and driveways
9. Grass that uses less water such as blue gramma, buffalo or fescue in turf area
10. A valved water distribution system
11. Xeriscaping
12. A 2.0 gpm faucet in the kitchen
13. An Energy Star® rated clothes washer
14. A water conserving irrigation system such as rain-override timer or soil moisture sensor, drip irrigation, soaker hoses and bubblers; irrigation zoned for plants' needs with separate valving
15. A graywater irrigation system
16. Site grading that directs water away from foundation to harvesting areas that prevent runoff
17. No garbage disposal (garbage disposals encourage additional water use, by not including a disposal additional water use is avoided and composting encouraged)
18. A whole house water purification system using titanium/copper electrode-granulated activated carbon (GAC) filter or non-GAC system
19. An under sink water purification system using reverse osmosis or carbon filter
20. A gravity hot water recirculating system installed
21. Toilets that use 1.1 gallons per flush (GPF) or less