

# Green Building Checklist

Check the items that you require in your new construction or renovation:

## I. Lot, Land Use and Landscaping:

- 1. Topsoil saved and reused
- 2. East and south areas of home designated for outdoor use
- 3. Home's long dimension faces within 30 degrees of south
- 4. Non-CCA (chromated copper arsenate) dimensional lumber for outdoor usage
- 5. Recycled materials for outdoor usage
- 6. 3<sup>rd</sup> party certified sustainably harvested lumber for outdoor usage
- 7. Permeable materials used in 40% of all areas (walkways, patios and driveways)
- 8. Rainwater recovery from roof for watering
- 9. Grass that uses less water (eg., blue gramma or fescue in turf areas)
- 10. Xeriscape with native drought resistant plants
- 11. Xeriscape > 60% non-paved area
- 12. List of native drought-resistant plants provided

## II. Foundation:

- 1. Precast wall systems with damp proofing and rigid foam insulation
- 2. Damp proofing non-asphalt based
- 3. Insulated with rigid R-10 foam insulation to footer
- 4. Materials regionally produced

## II. Structural Framing:

- 1. Large dimensional solid lumber (2x10 or >) avoided in floors and roofs when possible
- 2. Dimensional lumber from 3<sup>rd</sup> party certified sustainably harvested sources
- 3. Oriented strand board (OSB) made from fast growth material
- 4. Subfloor and underlayment area formaldehyde-free
- 5. Underlayment recycled-content
- 6. Structural insulated panel walls or roofs
- 7. "I" joists floors engineered wood
- 8. Beams, joists or headers engineered wood
- 9. Plates and studs finger-jointed
- 10. Reduced framing package (24" o.c. non-bearing stud walls and 3-stud corners)
- 11. Wall sheathing recycled-content (minimum 50%) or oriented strand board (OSB)
- 12. Roof trusses or "I" joists
- 13. Trusses with "energy heels" of 6" or >
- 14. Overhangs 24", 1-2 feet above south-facing windows
- 15. Adhesives low toxicity, low solvent throughout

## III. Exterior Finishes:

- 1. Roofing materials recycled content
- 2. Roofing materials 30-year or >
- 3. Brick regionally produced
- 4. Prefabricated cementitious stone
- 5. Indigenous stone
- 6. Stucco and/or synthetic plaster
- 7. Cementitious siding
- 8. Fascia, soffit or trim reconstituted or recycled-content (minimum 50%)

## IV. Exterior Doors and Windows:

- 1. Exterior doors insulated to R-5 or >
- 2. South-facing glass area is 5-7% of total finished floor area
- 3. Windows double glazed with 1/2" airspace
- 4. Low-E windows NFRC rated at u=0.37 or <
- 5. Wood windows finger-jointed
- 6. No metal-frame windows, including basements

**V. Heating and Air Conditioning Systems:**

- \_\_\_\_\_ 1. Furnace centrally located
- \_\_\_\_\_ 2. Furnace 90% or > energy efficiency
- \_\_\_\_\_ 3. Ductwork not in outside walls or attics unless ducts have minimum R-13 value
- \_\_\_\_\_ 4. Ductwork joints sealed with low toxic mastic
- \_\_\_\_\_ 5. Return air ducts in all bedrooms
- \_\_\_\_\_ 6. Thermostat programmable
- \_\_\_\_\_ 7. Two or > thermostats controlling separate heating/cooling zones
- \_\_\_\_\_ 8. Thermostat with switch for furnace fan to circulate air
- \_\_\_\_\_ 9. Ceiling fan(s)
- \_\_\_\_\_ 10. Whole house fan
- \_\_\_\_\_ 11. Sealed-combustion gas fireplace or sealed wood-burning fireplace or stove with outside combustion air
- \_\_\_\_\_ 12. Geothermal heating, cooling and water heating system

**VI. Indoor Air Quality:**

- \_\_\_\_\_ 1. Mechanical room enclosed and insulated to R-11
- \_\_\_\_\_ 2. Sealed-combustion furnace or boiler
- \_\_\_\_\_ 3. Furnace and/or duct-mounted electronic air cleaner or HEPA filter
- \_\_\_\_\_ 4. Sealed-combustion domestic water heater
- \_\_\_\_\_ 5. Heat recovery ventilator or air-to-air heat exchanger
- \_\_\_\_\_ 6. Garage exhaust fan on timer or wired to door opener
- \_\_\_\_\_ 7. Vent pipe in basement slab for radon retrofit

**VII. Plumbing Systems:**

- \_\_\_\_\_ 1. Water heater within 20 pipe feet of dishwasher and clothes washer
- \_\_\_\_\_ 2. Passive / on-demand hot water delivery system in farthest location from water heater
- \_\_\_\_\_ 3. Hot and cold water lines insulated 3 feet from hot water heater
- \_\_\_\_\_ 4. Hot water lines insulated to R-6 in unconditioned spaces
- \_\_\_\_\_ 5. Hot water lines insulated to R-6 in all areas
- \_\_\_\_\_ 6. Faucets in bathrooms 1.5 gal/min
- \_\_\_\_\_ 7. Faucets in kitchen 2.0 gal/min
- \_\_\_\_\_ 8. Gas water heater with energy factor of 0.60 or greater
- \_\_\_\_\_ 9. Gas water heater with insulating blanket installed to manufacturer's specifications

**XIII. Insulation:**

- \_\_\_\_\_ 1. Exterior wall sheathing R-3.5 or >
- \_\_\_\_\_ 2. Home wrapped with exterior air infiltration barrier
- \_\_\_\_\_ 3. Wall insulation wet blown (eg., cellulose or fiberglass)
- \_\_\_\_\_ 4. Cellulose insulation with UL-rated fire retardant
- \_\_\_\_\_ 5. Insulation recycled-content (minimum 25%)
- \_\_\_\_\_ 6. Insulation formaldehyde-free
- \_\_\_\_\_ 7. Insulation HCFC-free rigid foam
- \_\_\_\_\_ 8. Insulation non-toxic spray foam
- \_\_\_\_\_ 9. Air infiltration package

**XIV. Interior Doors, Trim and Cabinetry:**

- \_\_\_\_\_ 1. Doors solid, domestically grown interior wood panel
- \_\_\_\_\_ 2. Doors reconstituted or recycled-content (hardboard) with least toxic binders
- \_\_\_\_\_ 3. Trim MDF (medium. density fiberboard).
- \_\_\_\_\_ 4. Trim finger-jointed
- \_\_\_\_\_ 5. Trim domestic hardwood
- \_\_\_\_\_ 6. Cabinets formaldehyde-free particleboard or MDF (medium. density fiberboard)
- \_\_\_\_\_ 7. Recycling center built in, with 2 or more bins

**X. Lighting:**

- \_\_\_\_\_ 1. Halogen lighting substituted for incandescent down-lights
- \_\_\_\_\_ 2. Incandescent bulbs extended-life greater than 2000 hours (eg., traffic bulbs)
- \_\_\_\_\_ 3. Recessed can lights Insulation Contact-Rated (IC Rated) in insulated ceilings
- \_\_\_\_\_ 4. Recessed can lights air-tight in insulated ceilings
- \_\_\_\_\_ 5. Interior walls, ceilings and carpet light-colored

**XI. Flooring:**

- 1. Carpet natural material (domestic cotton, wool) tacked, not glued
- 2. Carpet recycled-content tacked, not glued
- 3. Carpet pad recycled-content
- 4. Ceramic tile installed with low toxic mastic and grout
- 5. Ceramic tile recycled-content
- 6. Wood flooring from 3<sup>rd</sup> party certified sustainably harvested domestic sources

**XII. Paints and Finishes:**

- 1. Paints, finishes have minimal VOC content
- 2. Paints, finishes recycled-content
- 3. Water-based lacquer finishes on woodwork
- 4. Water-based urethane finishes on wood floors

**XIII. Appliances:**

- 1. Refrigerator < \$66 estimated annual electric cost per year
- 2. Dishwasher with energy saving cycle
- 3. Clothes washer front loading, horizontal axis
- 4. Gas clothes dryer, range, cooktop and/or oven with electronic ignition