

GREEN BUILT HOME REMODELING CHECKLIST



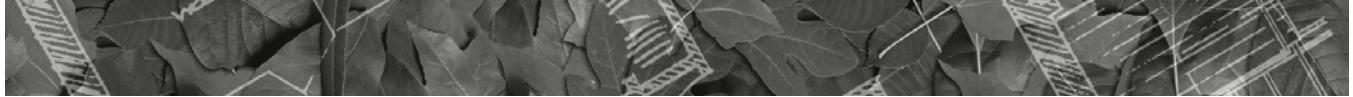
Green Built Home™ is a national award-winning green building initiative that reviews and certifies new homes and remodeling projects that meet sustainable building and energy standards.



WISCONSIN
ENVIRONMENTAL
INITIATIVE

Green Built Home is implemented in partnership with the Madison Area Builders Association in cooperation with other participating builders associations, leading utilities and organizations that promote green building.

www.greenbulthome.org



Green Built Home Remodeling Project Registration

Company Name _____

Address _____

City _____ State _____ Zip _____

Contact _____ Phone _____ Fax _____

Email _____ Web site _____

Submittal Requirements per Project

Project Address: _____ City: _____

Project title (i.e. kitchen remodel): _____

Project start date: _____ Project Completion Date: _____

Has a Green Built Home Remodeling project been certified at this same address before? ☐ YES ☐ NO

☐ **Architectural Floor Plans (if applicable to project):**

- ☐ Floor plans drawn to scale and fully dimensioned.
- ☐ Provide dimensions of roof eaves and overhangs.

☐ **Architectural Elevations (if applicable to project):**

- ☐ All elevations drawn to scale.
- ☐ Elevations shall show proposed finished elevation of floor and roofs on all levels.

☐ **Architectural Cross Sections (if applicable to project):**

- ☐ Show cross section to provide internal detail to evaluate construction technique and materials used.

☐ **Product/Materials Information:**

- ☐ Provide a list of materials used for this project (e.g. paints, solvents, adhesives, etc.)

☐ **Copies of Home Performance with ENERGY STAR evaluation reports (if conducted)**

Fee Schedule

Please circle one

Project Registration Fee

NARI or HBA member

\$50 per project

Non-member

\$75 per project

TOTAL FEE:

\$ _____

\$ _____

Please mail form, submittals, and payment to:

Green Built Home

16 N. Carroll Street, Suite 840

Madison, WI 53703

P.608-280-0360 F.608-280-0361

WWW.GreenBuiltHome.org

Here's how Green Built Remodeled Home works...

Each contractor must register annually as a participating Green Built Home Remodeler. If you have not already registered, complete and submit the Remodeler Enrollment Form. Homeowners completing the work themselves (DIY) are not required to submit the Remodeler Enrollment Form. However, for each project, the contractor or homeowner must complete and submit the Green Built Home Remodeling Checklist.

For more information or to download forms, please see our website at www.greenbulthome.org or call 608-280-0360.

Quality Control:

Green Built Home and/or its partners will review completed Checklists, plans, and other submittals as well as work with participants to verify that all Basic Requirements are met for every project entered into the program. **Contractors or homeowners whose projects do not initially meet program standards will be expected to take corrective action before these projects are certified.**

Green Built Home and/or its partners will randomly verify at least 10% of registered projects to maintain quality control and program credibility. Verification may include testing and may also require that the contractors or homeowners provide information such as: rating certificates, spec sheets, invoices, labels, product literature, and material safety data sheets (MSDS) as documentation. **Contractors and homeowners will also have the opportunity to request a site visit of their registered home at any time.**

PLEASE NOTE, Green Built Home is only certifying individual remodeling projects, not the entire home. No claims are being made other than the remodeling project named on the Project Registration Form meets the requirements outlined in this Checklist. Homes that incorporate certified Green Built Home Remodeling projects may contain other elements that are not considered green.

Contractor Responsibilities

Contractors will certify to the homeowner that each registered project meets the minimum standards as set forth by the Checklist by providing: 1) a signed copy of the completed Checklist or 2) a fact sheet or Green Built Specifications document that establishes that all the Basic Requirements and features earning the minimum number of points required for certification have been incorporated into the home.

Valuable Green Built Home Resources:

Want to learn more about "green" building practices? Have a question about a Checklist item? Looking for a particular "green" building product? Browse the **Green Built Home Interactive Checklist** located at www.greenbulthome.org for technical details, explanations, and more information.

The Green Built Home **Buyer's Guide** is also a valuable resource. It provides a priority ranking of measures to reduce the environmental impact of home building and lets you know where you might get the best environmental result for the money.

The Green Built Home **Project Guide** outlines environmentally responsible solutions for nine common building and remodeling scenarios such as: **building a new home or addition, installing flooring, installing a new roof, painting a room, installing insulation, replacing windows, re-siding your house, remodeling a kitchen or bath, and landscaping with native plants.**

Interested in learning more about green new home building? Green Built Home features information and resources for **homeowners and builders of new homes** at www.greenbulthome.org.

Qualifications:

To qualify as a certified Green Built Home Remodeling Project, each project must earn the minimum number of points outlined in the table below.

Replacements	Projects limited to the replacement of existing elements such as flooring, windows, siding, roofing, mechanical equipment, fixtures, cabinetry, etc.	10 points required
Remodels	Projects that may involve the replacement of existing elements but which also involve the alteration or reconfiguration of existing spaces without adding a new foundation or footings.	30 points required
Additions	New living space is added on a new foundation or footings.	60 points required

Existing Conditions:

Points cannot be earned for existing conditions, products, materials or systems in Replacement Projects. However, points can be claimed for existing conditions, products, materials or systems in Remodels and Additions. Please contact the program office for clarification.

GreenGuide Label:

A GreenGuide label will be provided for each project certified by the Green Built Home program. This label, similar to the yellow Energy Guide labels found on appliances, will provide the homeowner with information on the number of points earned from the Checklist.

Please enter the point totals for each criteria selected on the line provided and enter the subtotals as directed.

GreenGuide

ADDRESS:

BUILDER:

PROJECT TITLE:



CONVENTIONAL HOME



Replacements

Projects limited to the replacement of existing elements such as flooring, windows, siding, roofing, mechanical equipment, fixtures, cabinetry, etc.

**10 points
required**

Remodels

Projects that may involve the replacement of existing elements but which also involve the alteration or reconfiguration of existing spaces without adding a new foundation or footings.

**30 points
required**

Additions

New living space is added on a new foundation or footings.

**60 points
required**

www.greenbulthome.org

Basic Requirements (no points)

1. ENERGY STAR® APPLIANCES

All new appliances (clothes washer, dishwasher and refrigerator) added or replaced are ENERGY STAR qualified or each appliance performs in the top 50% of its Energy Guide rating. If appliances are not included a list of ENERGY STAR-qualified appliances is provided. For lists of ENERGY STAR rated appliances see www.energystar.gov.

2. EROSION CONTROL:

Contractor or homeowner must submit the erosion control plan required for building permits by the local municipality, or no site disturbance must occur.

3. RECYCLING:

Contractor or homeowner **must recycle cardboard and other materials as required by state law.**

4. TROPICAL HARDWOODS:

No Luan or other tropical hardwoods (plywood, doors, flooring, etc.) are allowed to be added unless certified by Forest Stewardship Council, Smart Wood or approved "third party" organization.

5. PRESENT "GREEN BUILT HOMEOWNER HANDBOOK" TO HOMEOWNER:

This handbook will be prepared by the GBH program and provided to the contractor or homeowner as part of the home project process.

6. PROVIDE CERTIFICATION PLAQUE AND GREEN GUIDE LABEL:

This wood plaque and label will be prepared by the GBH program and provided to the contractor or homeowner as part of the project registration process.

7. MERCURY THERMOSTATS:

No permanently installed mercury thermostats are allowed. Existing mercury thermostats must be removed and disposed of properly. All thermostats must be programmable set-back models with an "on" switch for furnace fan to circulate air.

BASIC REQUIREMENTS Subtotal ____ N/A ____

- ☐ If the project is a **REPLACEMENT**, it must include a minimum of **10 points** from the categories listed below (no points allowed for existing conditions).
- ☐ If the project is a **REMODEL**, it must include a minimum of **30 additional points** from the categories listed below (points are allowed for existing conditions).
- ☐ If the project is an **ADDITION**, it must include a minimum of **60 additional points** from the categories listed below (points are allowed for existing conditions).

Each item is valued at **(1), (2), (3), (4), or (5)** points. Please check all that apply and note the point totals on the lines provided.

SECTION A: SITING AND LAND USE

- ☐ 1. **(1)** Home located within 0.5 miles of a bus stop, bike route, or transit stop.
- ☐ 2. **(1)** Home located within 0.5 miles of shopping/offices/retail.
- ☐ 3. **(1)** Home located within 0.5 miles of a school.
- ☐ 4. **(1)** Patio, porch or deck located on south side of house to create sunny, wind sheltered outdoor space.
- ☐ 5. **(1)** Screened porch is provided to create an unconditioned, sheltered outdoor space.
- ☐ 6. **(1-5)** Utilize an approach not listed that meets the goals of this section.

SECTION A Subtotal _____

SECTION B: LANDSCAPE CONSERVATION AND STORMWATER MANAGEMENT

- ☐ 1. **(1)** Use of redundant straw bale and silt fencing in areas with steep slopes (greater than 12% grade) or areas of concentrated runoff flow if site disturbance occurs.
- ☐ 2. **(1)** Protect on-site storm sewer inlets with straw bales, silt fencing or equivalent measures if site disturbance occurs.
- ☐ 3. **(1)** Save and reuse all site topsoil if site disturbance occurs.
- ☐ 4. **(1)** Trees and natural features on site protected during construction if site disturbance occurs.
- ☐ 5. **(1)** Placement of addition saves east and south lot areas for outdoor use.
- ☐ 6. **(1)** Chip and reuse site-cleared wood and brush as mulch.
- ☐ 7. **(1)** Wash out concrete trucks in slab or pavement sub-base areas.
List location _____

- ☐ 8. **(1)** Balance cut and fill to eliminate earth removal from site if site disturbance occurs.
- ☐ 9. **(2)** Replant or donate live trees from the site.
- ☐ 10. **(2)** Site disturbance limited to within 20 feet of structures and paved areas.
- ☐ 11. **(1)** Permeable materials such as brick pavers, flagstones, porous paving or limestone fines for 40% of all walkways, patios and driveways.
- ☐ 12. **(1)** Grass that uses less water such as blue gamma, fescue, or 'no-mow' min. 75% of turf areas.
List type/supplier _____
- ☐ 13. **(1)** Native landscape plantings min. 20% of non-paved areas.
List landscape contractor _____
- ☐ 14. **(2)** Native landscape plantings min. 40% of non-paved areas.
List landscape contractor _____
- ☐ 15. **(3)** Native landscape planting min. 60% of non-paved areas.
List landscape contractor _____
- ☐ 16. **(1)** Rainwater recovery from roof for watering, min. 50 gal. storage capacity.
- ☐ 17. **(3)** Infiltration system for rooftop run off (e.g. rain gardens, drain tile, bioswales, ponds, etc.).
- ☐ 18. **(1)** Edible landscape planting/food garden.
- ☐ 19. **(1)** Provide a list of native, non-invasive plants to homeowners.
- ☐ 20. **(1)** Limit turf grass other than 'no mow' mixes or prairies to 25% of landscaped area.
- ☐ 21. **(2)** No turf grass other than 'no mow' mixes or prairies.
- ☐ 22. **(1)** Provide information to homeowners on how to minimize fertilizer and pesticide use.
- ☐ 23. **(1)** Installed irrigation system includes a soil moisture or rain sensor or is a drip type system.
- ☐ 24. **(1)** Installed irrigation system is zoned separately for turf and bedding areas.
- ☐ 25. **(2)** Restore damaged ecosystem such as existing prairies or wetlands.
- ☐ 26. **(1)** Participate in a wildlife conservation program.
- ☐ 27. **(4)** Vegetated or "green" roof system, min. 100 sq. ft.
- ☐ 28. **(1)** Provide onsite supervision and coordination during site clearing, grading, trenching, paving, and installation of utilities to ensure that green building measures are implemented.
- ☐ 29. **(1)** Use of recycled materials in lieu of silt fencing.
- ☐ 30. **(1-5)** Utilize an approach not listed that meets the goals of this section.
List approach _____

SECTION B Subtotal _____

SECTION C: ENERGY EFFICIENCY

HOME PERFORMANCE WITH ENERGY STAR

- ☐ 1. **(4)** A Home Performance with ENERGY STAR in-home evaluation was conducted prior to work being done.
- ☐ 2. **(2)** A post-performance evaluation and inspection was conducted after construction.

SITE DESIGN

- ☐ 3. **(2)** Addition and/or home oriented with long dimension facing within 15 degrees of south.
- ☐ 4. **(1)** Massing of addition and/or home respects solar access of adjacent properties.
- ☐ 5. **(1)** Garage sited between house and prevailing winter winds to act as a buffer (garage to the north or west of house).
- ☐ 6. **(1)** Deciduous tree(s) provided on south side or evergreens on west side of house such that when mature they will shade the house. Native species, min. 2.5" caliper, 3'-0" high.
- ☐ 7. **(1-5)** Utilize an approach not listed that meets the goals of this section.
List approach _____

INSULATION AND AIR SEALING

- ☐ 8. **(1)** Energy heels of 7" or more on trusses.
- ☐ 9. **(1)** Advanced sealing package in addition to basic sealing practices (sealing at top and bottom plates, corners and between cavities at penetrations).
- ☐ 10. **(2)** Blower door test indicating air leakage reduction of at least 20%.
- ☐ 11. **(3)** Blower door test indicating air leakage reduction of at least 30%.
- ☐ 12. **(4)** Blower door test indicating air leakage reduction of at least 40%.
- ☐ 13. **(1)** Sill plate sealed with caulk (sill plate to foundation and rim to sill plate).
- ☐ 14. **(1)** Gaps between can light housings and drywall caulked.
- ☐ 15. **(1)** Gaps between exhaust fan housings and drywall caulked.
- ☐ 16. **(1)** All penetrations to the exterior are sealed both inside and outside.
- ☐ 17. **(2)** Can lights in insulated ceilings are sealed and insulated.
- ☐ 18. **(3)** Temporarily remove attic insulation and seal top plates.
- ☐ 19. **(2)** Insulate existing attic to code.
- ☐ 20. **(3)** Insulate new or existing attic to min. R-50.

- ☐ 21. **(4)** Fill existing sidewalls to capacity with insulation.
- ☐ 22. **(1)** Insulate attic knee walls in existing structures.
- ☐ 23. **(1)** Insulate floors over basements or crawlspaces in existing structures.
- ☐ 24. **(1)** Insulate rim joists in existing structures.
- ☐ 25. **(1)** Insulate attic pull-down or scuttle to min.R-19.
- ☐ 26. **(1-5)** Utilize an approach not listed that meets the goals of this section.
List approach _____

GLAZING

- ☐ 27. **(1)** Windows are ENERGY STAR qualified or have a U value ≤ 0.35 (NFRC label).
List manufacturer _____
- ☐ 28. **(2)** Windows have a U value ≤ 0.26 (NFRC label).
List manufacturer _____
- ☐ 29. **(1)** Windows have an air leakage rating ≤ 0.06 cfm/ft.
List manufacturer _____
- ☐ 30. **(1)** 25% of windows fitted with insulated window coverings.
- ☐ 31. **(1)** No metal frame windows in house, including basements, unless thermally broken.
- ☐ 32. **(1)** East facing glass NFRC label solar heat gain coefficient (SHGC) less than 0.40.
List manufacturer _____
- ☐ 33. **(1)** West facing glass NFRC label solar heat gain coefficient (SHGC) less than 0.40.
List manufacturer _____
- ☐ 34. **(2)** South glass shaded by exterior shading in May, June and July at 12 noon.
- ☐ 35. **(1)** Use clerestory windows for natural lighting in addition or remodeled spaces.
- ☐ 36. **(1-5)** Utilize an approach not listed that meets the goals of this section.
List approach _____

MECHANICAL SYSTEMS

- ☐ 37. **(1)** 90%-94% efficiency furnace (ENERGY STAR label encouraged).
List manufacturer & model # _____
- ☐ 38. **(2)** 95% or higher efficiency furnace (ENERGY STAR label encouraged).
List manufacturer & model # _____
- ☐ 39. **(2)** Furnace is equipped with an electronically commutated motor (ECMs) - (variable speed motor).
List manufacturer & model # _____

- ☐ 40. **(1)** Furnace located to minimize total length of duct runs.
- ☐ 41. **(1)** Install a 92% or higher efficiency condensing boiler.
- ☐ 42. **(1)** High efficiency air conditioner or heat pump (ENERGY STAR qualified, SEER 14+, or COP 4.5+) if A/C provided.
List manufacturer & model # _____
- ☐ 43. **(2)** No newly added ductwork located in unconditioned space or exterior walls.
- ☐ 44. **(1)** Ductwork in unconditioned space or exterior walls insulated (R-13 min.).
- ☐ 45. **(1)** Duct design complies with Manual D or equivalent.
- ☐ 46. **(2)** New HVAC supplies and returns are fully ducted (no use of building cavities).
- ☐ 47. **(2)** Existing ductwork removed from building cavities.
- ☐ 48. **(1)** All ductwork joints sealed with mastic or aluminum tape
- ☐ 49. **(2)** Airflow for each duct run measured and balanced to within 15 cfm of design value.
- ☐ 50. **(1)** High efficiency whole house fan installed with R-38 min. insulated cover.
- ☐ 51. **(1)** Two properly supported ceiling fans installed (ENERGY STAR label encouraged). Ceiling fan pre-wires provided in habitable rooms (min. 2 prewires not including bedrooms).
- ☐ 52. **(2)** Heat Recovery Ventilator (HRV) installed.
List manufacturer _____
- ☐ 53. **(3)** Energy Recovery Ventilator (ERV) installed.
List manufacturer _____
- ☐ 54. **(3)** Geothermal heat pump installed. (ENERGY STAR labeled encouraged).
List contractor _____
- ☐ 55. **(1-5)** Zoned HVAC system (1 point per additional zone).
- ☐ 56. **(4)** No air conditioning.
- ☐ 57. **(1)** Whole house electricity monitoring system installed.
- ☐ 58. **(1)** Document proper sizing of HVAC system using Manual J or equivalent.
- ☐ 59. **(1)** High-efficiency fireplace such as direct vent gas, Rumford, or masonry heater or no fireplace installed.
List approach _____
- ☐ 60. **(1-5)** Utilize an approach not listed that meets the goals of this section.
List approach _____

APPLIANCES

- ☐ 61. **(1)** Appliances performing in top 10% of the Energy Guide rating (score one point for each appliance).
____ dishwasher
____ refrigerator
____ washing machine
____ microwave
____ Other:
list _____
- ☐ 62. **(1)** Provide exterior clothesline.
- ☐ 63. **(1-5)** Utilize an approach not listed that meets the goals of this section.
List approach _____

LIGHTING AND ELECTRICAL SYSTEMS

- ☐ 64. **(1)** Light-colored interior walls, ceiling and soffit. Mid tone to light color flooring/carpet (min. 75%).
- ☐ 65. **(1)** Install ENERGY STAR qualified light fixtures (min 4 fixtures).
- ☐ 66. **(1)** Furnish five compact fluorescent light bulbs to homeowner. (ENERGY STAR labeled encouraged).
- ☐ 67. **(1)** Compact or linear fluorescent lighting in place of incandescent down-lights.
- ☐ 68. **(1)** Install lighting dimmers, timers, or motion detectors (min. 4 fixtures).
- ☐ 69. **(1)** Motion detector activators or photocells/ timers on all exterior lighting.
- ☐ 70. **(1)** Solar powered walkway or outdoor area lighting (min. 6 fixtures).
- ☐ 71. **(1)** Solar tube(s) for interior daylighting.
- ☐ 72. **(5)** Solar electric (photovoltaic) system installed (5 pts per kW of generation capacity).
- ☐ 73. **(2)** Provide at least 400 sq.ft. of roof area that is within 15 degrees of south and tilting between 20 and 70 degrees from the horizontal for a future solar electric system. The roof area should be less than 5% shaded over an annual basis. Also install a conduit from the attic to the utility panel that is clearly labeled "future solar electric system wiring" for easy identification at a later date.
- ☐ 74. **(3)** No can lights added in insulated ceiling.
- ☐ 75. **(3)** Home has an ENERGY STAR Advanced Lighting Package (ALP).
- ☐ 76. **(2)** LEDs used in lieu of CFLs or incandescents for general, task or accent lighting
- ☐ 77. **(5)** Fuel cell installed for electricity generation (5 pts per 5 kW of generation capacity).
- ☐ 78. **(1-5)** Utilize an approach not listed that meets the goals of this section.
List approach _____

INTEGRATED CLIMATIC DESIGN

- ☐ 79. **(4)** Passive solar heating design package (includes orientation, south glazing/ floor area ratio, orientation specific low-e tuning, summer shading, and thermal mass design).
- ☐ 80. **(4)** Passive cooling design package (includes orientation, summer shading, thermal mass, attic ventilation, additional ceiling fans, heat recovery ventilation and natural ventilation design).
- ☐ 81. **(1-5)** Utilize an approach not listed that meets the goals of this section.
List approach _____

SECTION C Subtotal _____

SECTION D: MATERIALS SELECTION

EXTERIOR

- ☐ 1. **(1)** Design added house features to reduce materials consumption (e.g. patios in place of decks).
- ☐ 2. **(1)** Masonry and stone salvaged or reused.
List source _____
- ☐ 3. **(1)** New masonry and stone regionally produced (within 500 miles).
List supplier _____
- ☐ 4. **(1)** Decks, site furnishings and/or other outdoor structures constructed with sustainable, low-toxicity materials: reused wood, certified sustainable yield wood, or recycled plastic/ wood fiber composites.
- ☐ 5. **(1-5)** Utilize an approach not listed that meets the goals of this section.
List approach _____

BELOW GRADE

- ☐ 6. **(1)** Recycled fly ash concrete (min.15% flyash content).
List contractor _____
- ☐ 7. **(2)** Cast-in-place insulating concrete form.
- ☐ 8. **(3)** Insulated pre-cast concrete foundation systems.
- ☐ 9. **(2)** Cast in place footing form with integral drainage features.
List product _____
- ☐ 10. **(1)** Reusable foundation forms used to reduce waste (e.g. metal rather than site built wood forms).
- ☐ 11. **(1)** Low toxicity form release agents used on concrete form work.
List product _____
- ☐ 12. **(1)** Non-asphalt based damp proofing.
List product _____

- ☐ 13. **(1)** Water based waterproofing system.
List product _____
- ☐ 14. **(2)** Frost protected shallow foundation.
- ☐ 15. **(1)** Reusable foundation bracing not constructed of framing lumber used.
- ☐ 16. **(1)** House or addition built on 3'9" foundation walls (90% of foundation walls).
- ☐ 17. **(1-5)** Utilize an approach not listed that meets the goals of this section.
List approach _____

STRUCTURAL FRAME

- ☐ 18. **(1)** Provide weather protection for stored materials.
- ☐ 19. **(1)** No use of 2x10 or greater dimension solid lumber in floor or roof systems.
- ☐ 20. **(1)** Use prefabricated insulated headers.
- ☐ 21. **(1)** Engineered wood "I" joists or truss joists used for floors.
- ☐ 22. **(1)** Trusses or "I" joists used for roofs.
- ☐ 23. **(1)** Engineered lumber products used for beams, joists or headers.
- ☐ 24. **(1)** Finger-jointed studs, engineered stud material, or plate materials used.
- ☐ 25. **(4 points possible)** Optimum Value Engineering (O.V.E) advanced framing package (e.g. 24" O.C. studs, 3 stud corners, etc.) as developed by the NAHB.
For every three strategies selected receive **1 pt**:
 _____ frame greater than 16" centers,
 _____ single top plate,
 _____ optimized header sizes,
 _____ 2'-0" framing module,
 _____ centralized cutting areas,
 _____ detailed job-site framing plans,
 _____ two stud corners,
 _____ ladder backing/ drywall clips,
 _____ header hangers,
 _____ reduced cripples/ jacks,
 _____ optimized sheathing,
 _____ reduced waste factor
- ☐ 26. **(3)** Use of reused timber or framing lumber (min. 25% lumber of lumber used).
- ☐ 27. **(2)** Use of energy efficient 2x4 exterior wall system.
- ☐ 28. **(2)** Use of panelized construction.
- ☐ 29. **(4)** Use of alternative building systems with significant environmental performance features such as SIPs, ICFs, Fasswall, Autoclaved Aerated Concrete.
List system _____
- ☐ 30. **(5)** Other climate appropriate natural building system such as strawbale.
List system _____

- ☐ 31. **(2)** Structural wood that is regionally grown, milled, and produced (at least 50% of wood used).
- ☐ 32. **(3)** Structural wood from (FSC, Smart Wood or equivalent) certified sustainably managed forests (at least 50% of wood used).
- ☐ 33. **(1)** Advanced rim joist insulation (prefabricated insulated rim joist, spray foam insulation, or other similar technique).
- ☐ 34. **(1-5)** Utilize an approach not listed that meets the goals of this section.
List approach _____

ENVELOPE, WALLS AND CEILINGS

- ☐ 35. **(1)** Large roof overhangs to extend life of siding finishes: 24" horizontal projection min.
- ☐ 36. **(1)** Use of non-sealed insulating glazing or sash designs that allow for insulated glazing unit replacement without requiring sash replacement.
- ☐ 37. **(1)** Fiber-cement or wood composite siding installed (min. 50% of siding used).
- ☐ 38. **(2)** Recycled content sheathing (min. 50% pre- or post-consumer recycled content).
List product _____
- ☐ 39. **(1)** Recycled content siding used (min. 50% pre-consumer).
List product _____
- ☐ 40. **(2)** Recycled content siding used (min. 50% post-consumer).
List product _____
- ☐ 41. **(1)** Recycled content fascia, soffit, or trim (min. 50% pre-consumer).
List product _____
- ☐ 42. **(2)** Recycled content fascia, soffit, or trim (min. 50% post-consumer).
List product _____
- ☐ 43. **(1)** Metal siding with long-life factory finish (min. 25% of siding used).
- ☐ 44. **(1)** Natural cementitious stucco.
- ☐ 45. **(1)** Continuous drainage plane installed behind siding.
- ☐ 46. **(3)** Vented rain screen behind siding.
- ☐ 47. **(2)** Drywall with 90+% recycled-content gypsum.
List product _____
- ☐ 48. **(1)** High strength 1/2-inch drywall substituted for 5/8 drywall on ceilings.
- ☐ 49. **(3)** Plywood or other sheathing from (FSC, Smart Wood or equivalent) certified sustainably managed forests (at least 50% of sheathing used).
- ☐ 50. **(2)** No vinyl siding, soffit, fascia, trim, or windows.

- ☐ 51. **(1)** Factory finished wood, fiber cement, or composite siding.
- ☐ 52. **(1)** Siding and exterior trim primed on all sides.
- ☐ 53. **(1)** Brick or stone siding on 75% or more of the home's exterior.
- ☐ 54. **(1)** Flexible, self adhering rubber flashing installed around all windows and integrated with drainage plane.
- ☐ 55. **(1)** Insulated sheathing used.
- ☐ 56. **(1-5)** Utilize an approach not listed that meets the goals of this section.
List approach _____

INSULATION

- ☐ 57. **(1)** Recycled content insulation (min. 25% recycled content and min. 50% of insulation used).
List product _____
- ☐ 58. **(2)** Blown/sprayed-in insulation used at walls.
- ☐ 59. **(3)** Natural insulation (cotton, bio-based foam, etc) used (min. 50% of insulation).
- ☐ 60. **(1)** Below slab insulation installed.
- ☐ 61. **(1)** Exterior foundation walls insulated with min. 1" of foam insulation.
- ☐ 62. **(2)** Exterior foundation walls insulated with min. 2" of foam insulation.
- ☐ 63. **(1)** Variable permeance or "smart" vapor retarder installed.
- ☐ 64. **(1-5)** Utilize an approach not listed that meets the goals of this section.
List approach _____

ROOF

- ☐ 65. **(1)** Recycled content roofing material (min. 25% recycled content).
List product _____
- ☐ 66. **(2)** Minimum 40 year roofing material.
- ☐ 67. **(3)** Minimum 50 year roofing material including asphalt, concrete, slate, clay, composition, metal, rubber or fiberglass.
- ☐ 68. **(3)** Plywood, OSB, or other roof decking from (FSC, Smartwood or equivalent) certified sustainably managed forests (at least 50% of decking used).
- ☐ 69. **(1-5)** Utilize an approach not listed that meets the goals of this section.
List approach _____

SUB-FLOOR

- ☐ 70. **(1)** Recycled content underlayment (100% of underlayment used).
List product _____
- ☐ 71. **(3)** Plywood or other subfloor from (FSC, Smart Wood or equivalent) certified sustainably managed forests.
- ☐ 72. **(1-5)** Utilize an approach not listed that meets the goals of this section.
List approach _____

FINISH FLOOR

- ☐ 73. **(1)** Bamboo flooring installed (min. 75sq.ft).
- ☐ 74. **(1)** Cork flooring installed (min. 75sq. ft.).
- ☐ 75. **(2)** Flooring made from reclaimed (recycled) wood (min. 50% of wood flooring).
- ☐ 76. **(2)** Recycled content ceramic tile - (min. 50% of tile used).
- ☐ 77. **(2)** Salvaged stone or masonry flooring.
- ☐ 78. **(1)** Recycled content carpet pad (100% of pad used).
- ☐ 79. **(1)** Recycled content carpet - tacked not glued (min. 50% of carpet used).
- ☐ 80. **(3)** Flooring from (FSC, Smart Wood or equivalent) certified sustainably managed forests (min. 50% of wood flooring).
- ☐ 81. **(2)** No vinyl flooring or base trim.
- ☐ 82. **(2)** Reuse existing flooring materials (min. 50% of flooring in areas affected by remodeling).
- ☐ 83. **(1-5)** Utilize an approach not listed that meets the goals of this section.
List approach _____

DOORS, CABINETRY AND TRIM

- ☐ 84. **(1)** Recycled content doors or MDF.
List manufacturer _____
- ☐ 85. **(1)** Domestically grown interior wood panel doors.
- ☐ 86. **(1)** Finger jointed trim or MDF (min. 75% of trim stock).
- ☐ 87. **(1)** Domestic hardwood trim (min. 75% of trim stock).
- ☐ 88. **(1)** Recycled content countertops (e.g. Environ, Richlite, Avonite).
- ☐ 89. **(1)** Concrete, regionally produced, or regionally quarried countertops.
- ☐ 90. **(2)** Use of reused hardwood trim, cabinets, and/or doors (min. 25% of stock).
- ☐ 91. **(3)** Trim from (FSC, Smart Wood or equivalent) certified sustainably managed forests (min. 50% of wood trim).

- ☐ 92. **(3)** Finish grade plywood from (FSC, Smart Wood or equivalent) certified sustainably managed forests.
- ☐ 93. **(2)** Wheat or strawboard materials used in place of particleboard (min. 50% of finish plywood).
- ☐ 94. **(1-5)** Utilize an approach not listed that meets the goals of this section.
List approach _____

SECTION D Subtotal _____

SECTION E: INDOOR AIR QUALITY

- ☐ 1. **(1)** Take measures to avoid air pollution or IAQ problems due to construction dust.
- ☐ 2. **(1)** Isolate construction from non-construction spaces.
- ☐ 3. **(2)** Garage physically separated from house.
- ☐ 4. **(1)** Measures taken to reduce carbon monoxide infiltration using one of the following four methods (maximum of one point).
 _____ continuous air barrier separation
 _____ weather-sealed door
 _____ exhaust fan in garage on timer or wired to door opener
 _____ garage ventilated to neutral pressure
- ☐ 5. **(1)** Foundation drainage system tied to sealed sump pit for potential radon mitigation.
- ☐ 6. **(1)** Locked, vented chemical storage cabinet provided outside of living space.
- ☐ 7. **(1)** Operable windows on two walls for rooms with two exterior wall surfaces.
- ☐ 8. **(1)** High-efficiency media air cleaner such as April Aire 2200/2250/2400.
- ☐ 9. **(1)** Furnace and /or duct mounted electronic air cleaner such as April Aire 5000.
- ☐ 10. **(1)** Furnace and /or duct mounted HEPA filter.
- ☐ 11. **(2)** All ductwork joints sealed with water based, low V.O.C. mastic (< 30g/l) or metalized tape.
- ☐ 12. **(2)** Hydronic heating system (serving min. 50% of conditioned space).
- ☐ 13. **(2)** Central vacuum system vented to the exterior (excludes garage).
- ☐ 14. **(1)** ENERGY STAR qualified residential ventilating (bath) fans..
List manufacturer & model # _____
- ☐ 15. **(4)** House meets American Lung Association Health House standards.
- ☐ 16. **(1)** Automatic tub/shower room fan controls such as timers or humidistats.

- ☐ 17. **(1)** Bath fans installed with smooth ducting with short, straight runs.
- ☐ 18. **(1)** Spring loaded, weather stripped fan dampers installed.
- ☐ 19. **(2)** Whole house dehumidification system installed.
- ☐ 20. **(1)** Free-standing, high efficiency, high capacity dehumidifier with built-in heater.
- ☐ 21. **(1)** Use non-toxic cleaners.
- ☐ 22. **(1)** Ventilate the home after each new finish is applied.
- ☐ 23. **(1)** Clean ducts and furnace thoroughly after construction.
- ☐ 24. **(1)** Install CO detector(s).
- ☐ 25. **(1)** Conduct radon or lead testing.
- ☐ 26. **(1)** Washed stone installed under basement slab for potential radon mitigation.
- ☐ 27. **(1)** Rough-in venting provided for potential radon mitigation.
- ☐ 28. **(1)** UV light in supply duct.
- ☐ 29. **(1-5)** Utilize an approach not listed that meets the goals of this section.
List approach _____

IAQ MATERIALS

- ☐ 30. **(2)** Formaldehyde-free insulation.
- ☐ 31. **(1)** GreenGuard or equivalent certified low formaldehyde insulation.
- ☐ 32. **(1)** Batt insulation that is encapsulated or otherwise non-irritating.
- ☐ 33. **(2)** Non-toxic spray foam insulation.
- ☐ 34. **(1)** Urea formaldehyde-free sub-floor and underlayment material.
List product _____
- ☐ 35. **(2)** Use of hard surface floors such as wood, concrete, tile or linoleum (min. 50% of floor area).
- ☐ 36. **(3)** Use of hard surface floors such as wood, concrete, tile or linoleum (min. 90% of floor area).
- ☐ 37. **(2)** Natural linoleum with low toxic adhesives and backing in place of vinyl flooring.
- ☐ 38. **(2)** Natural material carpet (wool, sisal, etc) - tacked not glued (100% of carpet used).
- ☐ 39. **(1)** Natural material carpet padding (natural rubber, wool, 100% of padding used).
- ☐ 40. **(1)** Carpet and Rug Institute Green Label IAQ label on all carpet used.
- ☐ 41. **(1)** Carpet and Rug Institute Green Label +Plus IAQ label on all carpet used.

- ☐ 42. **(1)** Hardboard content doors with MDI or non-toxic binders.
List supplier/product _____
- ☐ 43. **(1)** All cabinets, shelves, and countertops made with formaldehyde free materials: solid wood, formaldehyde free particleboard or MDF (medium density fiberboard), metal with natural or baked enamel factory finish.
List supplier /product _____
- ☐ 44. **(1)** All exposed particleboard containing formaldehyde sealed with non-toxic sealer.
- ☐ 45. **(1-5)** Utilize an approach not listed that meets the goals of this section.
List approach _____

IAQ FINISHES AND ADHESIVES

- ☐ 46. **(1)** Low V.O.C paints (<150 g/l) used throughout. One point each:
 ___ interior primer,
 ___ interior finish,
 ___ exterior primer,
 ___ exterior finish
 List supplier /product _____
- ☐ 47. **(2)** Non-Toxic zero V.O.C. Paints used throughout (AFM Safecoat or equivalent). Two points each:
 ___ interior primer,
 ___ interior finish,
 ___ exterior primer,
 ___ exterior finish
 List supplier /product _____
- ☐ 48. **(1)** Water based, "low V.O.C." adhesives used throughout. One point each:
 ___ construction adhesive,
 ___ cove base adhesive,
 ___ PVC adhesive,
 ___ thinset mortar,
 ___ other
 List supplier /product _____
- ☐ 49. **(1)** Water-based urethane finishes on wood floors.
- ☐ 50. **(1)** Water-based finishes on woodwork.
- ☐ 51. **(1)** Supply workers with V.O.C. safe masks, if using high V.O.C. materials.
- ☐ 52. **(1-5)** Utilize an approach not listed that meets the goals of this section.
List approach _____

SECTION E Subtotal _____

SECTION F: PLUMBING AND WATER CONSERVATION

- ☐ 1. **(1)** Front loading, horizontal axis clothes washer.
- ☐ 2. **(1)** Select bathroom faucets with GPM less than code or install low flow aerators.
- ☐ 3. **(1)** Select kitchen faucets with GPM less than code or install low flow aerators.
- ☐ 4. **(1)** Select showerheads with GPM less than code.
- ☐ 5. **(1)** Manifold plumbing system with PEX tubing.
- ☐ 6. **(2)** Composting toilet.
- ☐ 7. **(2)** Rough-in for future greywater recovery system for domestic use.
- ☐ 8. **(3)** Greywater recovery system installed.
- ☐ 9. **(1)** No garbage disposal.
- ☐ 10. **(2)** No PVC piping for drains, wastes and vents.
- ☐ 11. **(1)** All showers are equipped with only one showerhead.
- ☐ 12. **(1)** Dual flush or ultra low flow toilet with GPF less than code.
- ☐ 13. **(1)** Passive or loop hot water delivery system installed at farthest location from water heater (lines must be insulated).

WATER HEATING

- ☐ 14. **(1)** Gas water heater with energy factor of more than .62 for direct vented.
List manufacturer & model # _____
- ☐ 15. **(1)** Water heater located within 20 pipe feet of dishwasher and clothes washer.
- ☐ 16. **(1)** All other fixtures within 20 pipe feet of water heater or provide heat trap.
- ☐ 17. **(2)** Insulate all hot water lines to minimum R-4.
- ☐ 18. **(1)** Insulate hot and cold water pipes 3 feet from the hot water heater.
- ☐ 19. **(1)** Passive or loop hot water delivery system installed at farthest location from water heater.
- ☐ 20. **(2)** On-demand (tankless) hot water delivery system.
List manufacturer _____
- ☐ 21. **(1)** Water heater heat pump.
List manufacturer _____
- ☐ 22. **(3)** Drain water heat recovery unit installed.
- ☐ 23. **(2)** Combined high efficiency domestic hot water/ space heating system.

- ☐ 24. **(2)** Provide south roof area for future solar domestic hot water heating system (min. 30 sq. ft. within 15 degrees of south with the panels 20-60 degrees from the horizontal) and plumbing rough-in for solar water heating system (separate cold water supply plumbed to roof and hot water return plumbed to water heater).
- ☐ 25. **(4)** Active solar domestic hot water heating system installed (min. 50% of water heating load).
- ☐ 26. **(1)** Water heater timer installed.
- ☐ 27. **(1-5)** Utilize an approach not listed that meets the goals of this section.
- ☐ 28. **(1-5)** Utilize an approach not listed that meets the goals of this section.
List approach _____

SECTION F Subtotal _____

SECTION G: WASTE REDUCTION, RECYCLING AND DISPOSAL

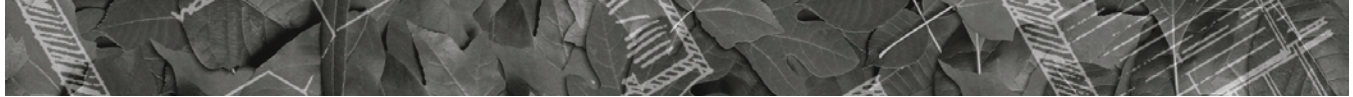
- ☐ 1. **(1)** Posted job site recycling plan.
- ☐ 2. **(1)** Recycle or reuse job site waste, 1 point for each material category:
 - glass, aluminum cans and plastic bottles **(required by state law, no point)**
 - cardboard **(required by state law, no point)**
 - ___ asphalt roofing (75% landfill diversion)
 - ___ wood scraps (75% landfill diversion)
 - ___ pallets (75% landfill diversion)
 - ___ metal (75% landfill diversion)
 - ___ gypsum wall board (75% landfill diversion)
 - ___ brick and block (75% landfill diversion)
 - ___ other
 list: _____
- ☐ 3. **(1)** Salvage or reuse old building materials (on or off site), 1 point for each material category:
 - ___ appliances (75% reuse)
 - ___ cabinets, millwork, or trim (75% reuse)
 - ___ wood floors (75% reuse)
 - ___ doors (75% reuse)
 - ___ bathtubs or sinks (75% reuse)
 - ___ other (75% reuse)
 list: _____
- ☐ 4. **(1)** Obtain products from suppliers that use recyclable or reusable packaging or arrange to take back their packaging.
List supplier(s): _____
- ☐ 5. **(1)** Reuse or recycle asphalt or concrete rubble.
- ☐ 6. **(2)** Require subcontractors (contract language) to participate in waste reduction and recycling efforts.

- ☐ 7. **(1)** Dispose of non-recyclable hazardous wastes at legally permitted facility.
List waste: _____
- ☐ 8. **(1)** Install garage recycling center for homeowner use.
- ☐ 9. **(1)** Built-in kitchen recycling center to include two or more bins.
- ☐ 10. **(1)** Provide kitchen scrap compost bin.
- ☐ 11. **(2)** Track and prominently post waste reduction results on site.
- ☐ 12. **(1)** On site grinding of wood construction debris.
- ☐ 13. **(1)** Document substantial design strategies to reduce waste from construction/demolition.
- ☐ 14. **(2)** Design for disassembly, reuse, and recyclability.
- ☐ 15. **(1)** Donate excess or salvaged materials to a non-profit organization or charity.
- ☐ 16. **(5)** Disassemble existing buildings and reuse or recycle the building materials (deconstruction) instead of demolishing (at least 75% landfill diversion).
- ☐ 17. **(1-5)** Utilize an approach not listed that meets the goals of this section.
List approach _____

SECTION G Subtotal _____

SECTION H: BUILDER OPERATIONS

- ☐ 1. **(1)** At least 80% of projects built to Green Built Home standards annually.
- ☐ 2. **(1)** At least one recent action taken to visibly market Green Built Home program.
List action, location, and date _____
- ☐ 3. **(1)** Conduct homeowner orientation during final walk-through (point out Green Built features, how to maintain them, operate them, etc).
- ☐ 4. **(1)** At least one recent training event conducted for subcontractors or staff.
- ☐ 5. **(3)** Provide homeowner with guaranteed energy bills at least 25% below the average of that for a typical home of the same square footage and features.
- ☐ 6. **(1)** Builder attendance at one recent green building related educational event.
List event, sponsor, and date: _____
- ☐ 7. **(1-3)** Builders own idea for innovation, education, and encouraging homeowners to take care of their home in an environmentally friendly way (Ex. Provide homeowners with environmentally friendly cleaning products).



List idea: _____

- ☐ 8. **(1)** Establish a "Green Team." Identify employees and/or subcontractors, their roles and how they relate to various phases of green development and building.
- ☐ 9. **(1)** Provide homeowner with information and enrollment materials for the local utility's renewable energy program.
- ☐ 10. **(2)** Provide the homeowner with the first year enrollment costs of 100% of electricity provided by the local utility's renewable energy program.
- ☐ 11. **(1-5)** Use suppliers whose operations and business practices include environmental management system concepts (the product, plant, or company must be ISO 14001 or equivalent certified). 1 point per supplier, min, 50% of purchased material coming from each supplier.
List supplier(s): _____
- ☐ 12. **(3)** Use products that are Cradle to Cradle Certified. 3 point per product.
- ☐ 13. **(3)** Builder's own operations and business practices include environmental management system concepts (the builder must be Green Tier, ISO 14001 or equivalent certified).
- ☐ 14. **(5)** Perform and review a life cycle assessment (LCA) to compare the environmental effects of building materials and home designs.
- ☐ 15. **(1)** Homeowner provided with an operations and maintenance manual.
- ☐ 16. **(1-5)** Utilize an approach not listed that meets the goals of this section.
List approach _____

SECTION H Subtotal _____

SECTION I: EFFICIENT USE OF SPACE

- ☐ 1. **(1)** Above Grade finished and conditioned space 2000-1750 sq.ft.
- ☐ 2. **(2)** Above Grade finished and conditioned space 1749-1500 sq.ft.
- ☐ 3. **(3)** Above Grade finished and conditioned space 1499-1250 sq.ft.
- ☐ 4. **(4)** Above Grade finished and conditioned space 1249-1000 sq.ft.
- ☐ 5. **(5)** Above Grade finished and conditioned space <1000 sq.ft.
- ☐ 6. **(1)** Lot size less than 7,500 sq.ft.
- ☐ 7. **(1)** Provide an accessory dwelling unit (garage apartment, granny flat, etc.)
- ☐ 8. **(2)** Home designed for flexibility to allow for changing uses in the future (rough-ins for future bathrooms, finish flooring runs under partitions, reconfigurable spaces, etc.)
- ☐ 9. **(2)** Home utilizes incremental design techniques with documented provisions to expand to meet future growing needs (roof trusses designed for additions, room layouts configured for additions, etc.)
- ☐ 10. **(1)** Living space provided in a finished basement.
- ☐ 11. **(1)** Living space provided in a finished attic.
- ☐ 12. **(1)** Bonus room provided over garage.
- ☐ 13. **(1)** Home is a unit in a co-housing development.
- ☐ 14. **(1)** Home is a unit in a multifamily housing development.
- ☐ 15. **(1)** Indoor spaces are provided that are common to multiple units.
- ☐ 16. **(1)** Home shares a common driveway with at least one other building.
- ☐ 17. **(1-5)** Utilize an approach not listed that meets the goals of this section.
List approach _____

SECTION I Subtotal _____

BASIC REQUIREMENTS Subtotal	<u> N/A </u>
SECTION A Subtotal	<u> </u>
SECTION B Subtotal	<u> </u>
SECTION C Subtotal	<u> </u>
SECTION D Subtotal	<u> </u>
SECTION E Subtotal	<u> </u>
SECTION F Subtotal	<u> </u>
SECTION G Subtotal	<u> </u>
SECTION H Subtotal	<u> </u>
SECTION I Subtotal	<u> </u>
TOTAL	<u> </u>

I certify that the preceding information is complete and accurate and that all requirements for a certified Green Built Home Remodeling Project have been met or exceeded.

X _____
 Builder's Signature

 Date



**WISCONSIN
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Green Built Home was founded in 1999 by Wisconsin Environmental Initiative
in partnership with the Madison Area Builders Association.
Green Built Home is administered throughout the state of Wisconsin
and reaches thousands of homebuyers and builders through our collaborations with
Builders Associations and other affiliated organizations.

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