



REMODELER

Self-Certification Checklist

Check items you will be including in this project to qualify for a BUILT GREEN™ star rating.

Requirements to Qualify at 1-Star Level
(All H items plus orientation)

- Program Orientation (one time only)
- Section 1: Build to “Green” Codes & Regulations
- Earn 15 points from Sections 2 through 6, any items
- Prepare/post a jobsite recycling plan (Action Item 5-20)
- Provide an Operations & Maintenance Kit (Action Item 6-1)

Requirements to Qualify at 2-Star Level (60 points minimum for addition/remodel; 45 points for small remodel)

- Meet 1-Star requirements
- Earn 45 additional points from Sections 2 through 6 (30 additional points for small remodel), with at least 3 points from each Section
- Attend a BUILT GREEN™ approved workshop within past 12 months prior to certification

Requirements to Qualify at 3-Star Level (130 points minimum for addition; 100 points for remodel)

- Meet 2-Star requirements plus 70 additional points

Section One: Build to Green Codes/Regulations

- (H) 1-1. Meet Washington State Water Use Efficiency Standards
- (H) 1-2. Meet Applicable Stormwater/Site Development Standards
- (H) 1-3. Meet Washington State Energy Code
- (H) 1-4. Meet Washington State Ventilation/IAQ Code

Section Two: Site and Water

SITE PROTECTION

Protect Site's Natural Features

- (3) 2-1. Limit heavy equipment use zone to limit soil compaction
- (3) 2-2. Preserve existing native vegetation as landscaping

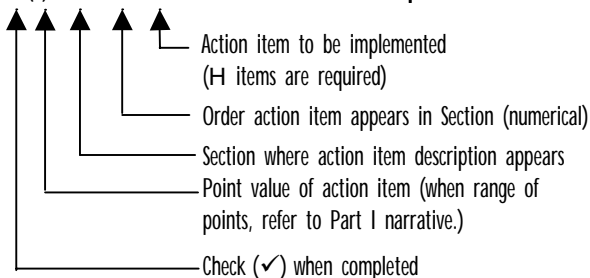
- (3) 2-3. Take extra precautions to protect trees during construction
- (3) 2-4. Preserve and protect wetlands, shorelines, bluffs, and other critical areas during construction

Protect Natural Processes On-Site

- (1) 2-5. Install temporary erosion control devices and optimally maintain them
- (1) 2-6. Use compost to stabilize disturbed slopes
- (1) 2-7. Protect topsoil with mulch or plastic
- (3) 2-8. Balance cut and fill, while maintaining original topography
- (3) 2-9. Limit grading to 20 ft outside building footprint
- (4) 2-10. Amend disturbed soil to a depth of 8 to 10 inches to restore soil environmental functions
- (5) 2-11. Replant or donate removed vegetation for immediate reuse
- (5) 2-12. Use a water management system that allows groundwater to recharge
- (5) 2-13. Design to reduce effective impervious surface
- (5) 2-14. Use pervious materials for any new driveways, walkways, patios
- (5) 2-15. No increase to the building footprint
- (10-15) 2-16. Bonus Points: Install vegetated roof system (e.g. eco-roof) to reduce impervious surface
- (3) 2-17. Bonus Points: Construct no additional impervious surfaces outside house footprint

HOW TO USE THE CHECKLIST

(5) 2—35 **Bonus Points: Provide a front porch**



Eliminate Water Pollutants

- (1) 2-18. Take extra care to establish and maintain a single stabilized construction entrance (quarry spall or crushed rock)
- (1) 2-19. Take extra precautions to install and maintain sediment traps
- (1) 2-20. Take extra precautions to not dispose of topsoil in lowlands or wetlands
- (1) 2-21. Wash out concrete trucks in slab or pavement subbase areas
- (1) 2-22. Prohibit burying construction waste
- (1) 2-23. When construction is complete, leave no part of the disturbed site uncovered or unstabilized
- (1) 2-24. Recycle antifreeze, oil, and oil filters at appropriate outlets
- (1) 2-25. Dispose of non-recyclable hazardous waste at legally permitted facilities
- (1) 2-26. Establish and post clean up procedures for spills to prevent illegal discharges
- (2) 2-27. Reduce hazardous waste through good jobsite housekeeping
- (2) 2-28. Provide an infiltration system for rooftop runoff
- (2) 2-29. Use slow-release organic fertilizers to establish vegetation
- (2) 2-30. Use less toxic form releasers
- (3) 2-31. Use non-toxic or low-toxic outdoor lumber for landscaping (e.g. plastic, least-toxic treated wood)
- (5) 2-32. No clearing or grading during winter months
- (5) 2-33. No zinc galvanized ridge caps, copper flashing or copper wires for moss prevention

DESIGN ALTERNATIVES

- (5) 2-34. Bonus Points: Provide an accessory dwelling unit or accessory living quarters
- (5) 2-35. Bonus Points: Provide a front porch
- (5) 2-36. Bonus Points: If adding a garage, position garage so it is not in front of house
- (2-5) 2-37. Bonus Points: If adding a garage, minimize garage size

_____ Subtotal for Section Two

Section Three: Energy Efficiency

ENVELOPE

Thermal Performance

- (10-40) 3-1. Improve overall energy efficiency of entire building, including addition, and document envelope improvements of addition beyond code (component performance approach)

Air Sealing

- (1) 3-2. Inspect and install weatherstripping
- (1) 3-3. Addition wrapped with an exterior air infiltration barrier to manufacturer's specifications

- (2) 3-4. Airtight Drywall Approach for framing in addition/remodel structures
- (2) 3-5. Use airtight building method, such as SIP or ICF, in addition/remodel structures
- (2) 3-6. Blower door test

Reduce Thermal Bridging

- (1) 3-7. Add wall, ceiling, and/or floor insulation
- (1) 3-8. Use insulated headers in addition/remodel structures
- (1) 3-9. Fully insulate corners (requires 2-stud instead of 3-stud corners) in addition/remodel structures
- (1) 3-10. Fully insulate at interior/exterior wall intersection in addition/remodel structures
- (1) 3-11. Use energy heels of 6 in. or more on trusses to allow added insulation over top plate in addition/remodel structures
- (2) 3-12. Use structural insulated panels in addition/remodel structures
- (2) 3-13. Use insulated exterior sheathing in addition/remodel structures
- (2) 3-14. Use blown-in insulation
- (3) 3-15. Use advanced wall framing—24-in OC, w/double top plate in addition/remodel structures
- (3) 3-16. Use NFRC certified windows with a U-factor of 0.35 or better for new or replaced windows (0.45 or below for new or replaced skylights)

Solar Design Features

- (2) 3-17. For south-facing addition/remodel, provide south shading—install properly sized overhangs on south facing glazing
- (2) 3-18. For addition/remodel, orient windows to make the best use of passive solar
- (2) 3-19. Provide east and west shading in addition/remodel—use glazing with solar heat gain coefficient less than 0.40 or provide natural shading with landscaping
- (1-4) 3-20. Demonstrate an overall reduction in space conditioning energy using approved energy modeling software

HEATING/COOLING

Distribution

- (1) 3-2. Centrally locate heating / cooling system to reduce the size of the distribution system
- (1) 3-22. One or more properly supported ceiling fan pre-wires in addition/remodel
- (2) 3-23. If existing duct insulation is less than R-6, insulate ducts to R-11
- (3) 3-24. Seal ducts using low toxic mastic
- (3) 3-25. Performance test duct for air leakage meets third-party review and certification
- (5) 3-26. Locate heating / cooling equipment and the distribution system inside the heated space
- (5) 3-27. Comprehensive crawl space improvement

Controls

- (1) 3-28. Install thermostat with on-switch for furnace fan to circulate air
- (1) 3-29. Install 60-minute timers or humidistat for bathroom and laundry room fans
- (2) 3-30. Install programmable thermostats with nighttime setback

Heat Recovery

- (2) 3-31. Install a heat recovery ventilator

WATER HEATING**Distribution**

- (1) 3-32. Locate water heater within 20 pipe feet of highest use
- (1) 3-33. Insulate hot and cold water pipes within 3 feet of the hot water heater

Drainwater Heat Recovery

- (3) 3-34. Drainwater heat recovery system (DHR)

LIGHTING**Natural Light**

- (1) 3-35. Light-colored interior finishes in addition/remodel
- (2) 3-36. Use clerestory for natural lighting in addition/remodel
- (2) 3-37. Use light tubes for natural lighting and to reduce electric lighting in addition/remodel

Solar Powered Lighting

- (1) 3-38. Replace electric outdoor lighting with solar-powered walkway or outdoor area lighting

EFFICIENT DESIGN

- (3) 3-39. For addition/remodel, use building and landscaping plans that reduce heating/cooling loads naturally

ALTERNATIVE SYSTEMS (BONUS POINTS)

- (5) 3-40. Bonus Points: Add solar water heating system
- (10) 3-41. Bonus Points: Install photovoltaic system so that more than 2% of house powered by PV

_____ Subtotal for Section Three

Section Four: Health and Indoor Air Quality
OVERALL

- (5) 4-1. Assist homeowners with chemical sensitivities to identify preferred IAQ measures and finishes
- (5) 4-2. Bonus Points: Builder certified to have taken American Lung Association (ALA) of Washington "Healthy House Professional Training" course

JOB-SITE OPERATIONS

- (1) 4-3. Use less-toxic cleaners

- (1) 4-4. Require workers to use VOC-safe masks
- (1) 4-5. Isolate construction from non-construction spaces
- (2) 4-6. Take measures during construction operations to avoid moisture problems later
- (2) 4-7. Take measures to avoid problems due to construction dust
- (2) 4-8. Protect exterior building components from water or moisture damage; address existing problems
- (3) 4-9. Ventilate with fans after each new finish is applied
- (3) 4-10. No use of unvented heaters during construction
- (3) 4-11. Clean duct and furnace thoroughly at job completion
- (4) 4-12. Involve subs in implementing a healthy building job-site plan for the project

LAYOUT AND MATERIAL SELECTION

- (1) 4-13. If using carpet, specify CRI IAQ label
- (1) 4-14. Install low pile or less allergen-attracting carpet and pad
- (3) 4-15. No carpet in addition/remodel
- (3) 4-16. Optimize air quality in family bedrooms
- (3) 4-17. If using carpet, install by tacking (no glue)
- (3) 4-18. If garage is attached, air-seal it from house and install automatic exhaust fan
- (3) 4-19. Use formaldehyde-free fiberglass insulation
- (3) 4-20. Use low-VOC, low-toxic, water-based, solvent-free sealers, grouts, mortars, caulks and adhesives inside the house
- (3) 4-21. Use plywood and composites of exterior grade or formaldehyde-free (for interior use in addition/remodel)
- (3) 4-22. If replacing or installing cabinets, use cabinets made with formaldehyde-free board or exterior grade plywood and low toxic finish
- (3) 4-23. Use ceramic tile for flooring in addition/remodel
- (3) 4-24. Use polyethylene piping for plumbing (no PVC)
- (3) 4-25. If installing and/or replacing carpeting, install natural fiber carpet (e.g. jute, sisal, wool)
- (5) 4-26. Use low-VOC /low-toxic interior paints and finishes for large surface areas
- (10) 4-27. Bonus Points: No carpet in home

MOISTURE CONTROL

- (1) 4-28. Provide cleanable doormat and shoe racks at entry(ies) to home
- (1) 4-29. Grade to drain away from home
- (1) 4-30. Seal at doors, windows, plumbing and electrical penetrations against moisture and air leaks
- (1) 4-31. If slab is used for addition, install poly barrier properly; if no slab, bottom of floor is sufficient height above backfilled dirt with vapor barrier properly installed
- (1) 4-32. Add vents to increase attic venting over code requirements to reduce moisture buildup
- (1) 4-33. Use roof gutters to drain out onto splash blocks or approved system to drain water away from building

- (1) 4-34. New roofs are pitched and flashed properly
- (1) 4-35. For new/disturbed exterior walls, design wall system to allow water to drain out in the event of possible water penetration

AIR DISTRIBUTION AND FILTRATION

- (1) 4-36. Prohibit use of electronic filter
- (1) 4-37. Install return-air ducts in new bedroom(s)
- (1) 4-38. Install ducting/damper for fresh air intake
- (3) 4-39. "Tune up" air distribution system
- (3) 4-40. Test the performance of ventilation systems
- (3) 4-41. Upgrade filters to medium-efficiency pleated filter or better
- (3) 4-42. Balance airflow system based on filter being used
- (3) 4-43. Install furnace and/or duct-mounted air cleaner or high efficiency air filter (non-electronic)
- (3) 4-44. Install central vacuum, exhausted to outside
- (3) 4-45. Provide for cross ventilation using operable windows in addition/remodel
- (3) 4-46. Install CO detector(s)
- (3) 4-47. Re-work existing windows that have been painted shut

HVAC EQUIPMENT

- (1) 4-48. Install and test bath, laundry, pool, hot tub, and kitchen exhaust fans (if range top and/or oven are gas fired), vented to outside
- (1) 4-49. Install crank timer switches for bath exhaust fans
- (1) 4-50. Install bath fan with smooth ducting, minimum 4-in. diameter (new baths)
- (2) 4-51. Install exhaust fans in rooms where office equipment is used
- (2) 4-52. Install sealed combustion heating and hot water equipment
- (2) 4-53. Install power venting for combustion furnaces and water heating equipment
- (2) 4-54. Install exhaust fan in attached garage on timer or wired to door opener
- (2) 4-55. Size new or replaced space heating and/or cooling equipment to no greater than 150% of design heating and cooling loads
- (3) 4-56. Replace existing vent fans with higher efficiency units, which are quiet and rated to 1.5 sones or less
- (4) 4-57. Install whole house fan
- (5) 4-58. Bonus Points: Provide balanced or slightly positive indoor pressure using controlled ventilation
- (5) 4-59. Where appropriate, install furnace fan motor with an electrically commutated (ECM) motor
- (10) 4-60. Bonus Points: Seal the forced air heating system with mastic OR install a ductless heating system
- (10) 4-61. For pre-1991 homes, upgrade to a whole house ventilation system

_____ Subtotal for Section Four

Section Five: Materials Efficiency

OVERALL

- (5) 5-1. Enroll project in King County *ConstructionWorks* program at "Regular" level OR in Snohomish County, meets equivalent criteria
- (10) 5-2. Enroll project in King County *ConstructionWorks* Program at "Distinguished" level OR in Snohomish County, meets equivalent criteria
- (5-25) 5-3. Limit project size for additions

JOBSITE OPERATIONS

Reduce

- (1) 5-4. Use suppliers who offer reusable or recyclable packaging
- (1) 5-5. Provide weather protection for stored materials
- (2) 5-6. Create detailed take-off and provide as cut list to framer
- (2) 5-7. Use central cutting area or cut packs
- (3) 5-8. Require subcontractors to participate in waste reduction efforts

Reuse

- (1) 5-9. Reuse building materials
- (1) 5-10. Reuse, sell, or give away non-code windows for unheated spaces
- (1) 5-11. Reuse dimensional lumber
- (1) 5-12. Use reusable supplies for operations, such as construction fences, tarps, refillable propane tanks
- (1) 5-13. Move leftover materials to next job or provide to owner
- (1) 5-14. Reuse spent solvent for cleaning
- (1) 5-15. Sell or give away wood scraps
- (1) 5-16. Sell or donate reusable items
- (2) 5-17. Use reusable forms
- (2) 5-18. Purchase used building materials for your job
- (2) 5-19. Save and reuse site topsoil

Recycle

- (H) 5-20. Prepare jobsite recycling plan and post on site
- (3) 5-21. Require subcontractors to participate in recycling efforts
- (1) 5-22. Recycle cardboard
- (2) 5-23. Recycle metal scraps
- (3) 5-24. Recycle wood scrap and broken pallets
- (3) 5-25. Recycle packaging
- (3) 5-26. Recycle drywall
- (3) 5-27. Recycle concrete/asphalt rubble, rock, and brick
- (3) 5-28. Recycle paint
- (4) 5-29. Recycle asphalt roofing
- (5) 5-30. Recycle carpet/carpet padding and upholstery foam
- (5) 5-31. Recycle fluorescent lights and ballasts
- (5) 5-32. Recycle landclearing and yard waste, soil and sod

Hazardous Waste

- (2) 5-33. Follow “best practices” for removal/disposal of asbestos-containing materials
- (2) 5-34. Follow “best practices” for removal/disposal of lead-containing materials

DESIGN AND MATERIAL SELECTION**Overall**

- (1) 5-35. Use standard dimensions in design of addition/remodel
- (1) 5-36. Install materials with longer life cycles
- (2) 5-37. Install locally produced materials
- (3) 5-38. Use re-milled salvaged lumber
- (3) 5-39. Use wood products certified by FSC or other recognized agency as “sustainable”

Framing

- (1) 5-40. Use stacked floor plans
- (1) 5-41. Use engineered structural products
- (2) 5-42. Use structural insulated panels
- (3) 5-43. Use cementitious foam-formed walls with flyash concrete
- (3) 5-44. Use finger-jointed framing material (e.g. plates and studs)
- (3) 5-45. Use (R-19) 2x6 intermediate framing
- (6) 5-46. At least 50% of dimensional lumber is certified sustainable wood (FSC or equal)
- (10) 5-47. At least 90% of dimensional lumber and 50% of sheathing is certified sustainable wood (FSC or equal)

Foundation

- (1) 5-48. Use regionally produced block for new foundation
- (1) 5-49. Use flyash in concrete for new foundation
- (2) 5-50. Use recycled concrete, asphalt, or glass cullet for base or fill for new foundation

Sub-Floor

- (1) 5-51. Use recycled-content underlayment for new sub-floor

Doors

- (1) 5-52. Use reconstituted or recycled-content doors
- (2) 5-53. No luan doors in addition/remodel
- (2) 5-54. Use domestically grown wood interior doors

Finish Floor

- (1) 5-55. If installing new or replacing existing vinyl flooring, use product with recycled content
- (1) 5-56. If installing new or replacing existing carpet, use recycled-content carpet pad
- (3) 5-57. If installing new or replacing existing carpet, use recycled-content or renewed carpet
- (3) 5-58. Reuse existing wood flooring
- (5) 5-59. If installing new tile, use recycled-content ceramic tile
- (5) 5-60. If installing new or replacing existing flooring, use linoleum, cork, salvaged wood, or bamboo flooring

Interior Walls

- (1) 5-61. Use drywall with recycled-content gypsum

- (1) 5-62. Use recycled or “reworked” paint and finishes in addition and for any re-painted surfaces

Exterior Walls

- (1) 5-63. Use recycled-content sheathing where new sheathing is used
- (1) 5-64. Use siding with reclaimed or recycled material for new or replaced siding
- (2) 5-65. Use 50-year siding product for new or replaced siding
- (2) 5-66. Use salvaged masonry brick or block for new or replaced exterior
- (2) 5-67. Use locally produced stone or brick for new or replaced exterior

Windows

- (1) 5-68. Use wood/composite windows for new or replaced windows
- (1) 5-69. Use finger-jointed wood windows for new or replaced windows

Cabinetry and Trim

- (2) 5-70. If using hardwood trim, use domestic products for new or replaced cabinetry and trim
- (2) 5-71. Use finger-jointed trim for new or replaced cabinetry and trim
- (3) 5-72. For new or replaced cabinetry / trim, use domestic hardwood trim that is FSC certified or equal
- (5) 5-73. For new or replaced cabinetry / trim, use tropical hardwood trim or cabinets only if FSC certified or equal as “sustainable”

Roof

- (2) 5-74. Use recycled-content roofing material for new/replaced roofing
- (2) 5-75. Use 30-year roofing material for new/replaced roofing
- (3) 5-76. Use 40-year roof material for new/replaced roofing

Insulation

- (1) 5-77. Use recycled-content insulation
- (4) 5-78. Use environmentally friendly foam building products (formaldehyde-free, CFC-free, HCFC-free)

Other Exterior

- (2) 5-79. Use reclaimed or salvaged material for landscaping walls
- (3) 5-80. Use recycled-content plastic or wood polymer lumber for decks and porches
- (5) 5-81. Bonus points: Use least toxic pressure treatment for pressure-treated wood (no CCA)

_____ Subtotal for Section Five

Section Six: Promote Environmentally Friendly HO O&M

HOMEOWNER'S KIT

- 6-1. Provide owner with operations & maintenance kit

WATER PROTECTION

Outdoor Conservation

- 6-2. Mulch landscape beds with 2 in. organic mulch
6-3. Use grass type requiring less irrigation and minimal maintenance
6-4. Use compost soil amendments to establish turf and other vegetation with less irrigation
6-5. Limit use of turf grass to 25% of landscaped area
6-6. Landscape with plants appropriate for site topography and soil types, emphasizing use of plants with low watering requirements
6-7. Plumb for greywater irrigation
6-8. Install rainwater collection system (cistern) for reuse
6-9. Bonus Points: Install irrigation system using recycled water
6-10. Bonus points: No turf grass

Indoor Conservation

- 6-11. For new/replaced bathroom faucets, select fixtures with GPM less than code
6-12. For new/replaced kitchen faucets, select fixtures with GPM less than code
6-13. For new/replaced toilets, select fixtures that meet code, work with the first flush
6-14. Install (tankless) instant hot water systems (where appropriate)
6-15. Bonus points: Stub-in plumbing to use greywater water for toilet flushing
6-16. Bonus points: Use greywater water for toilet flushing
6-17. Bonus points: Install composting toilets

Eliminate Water Pollutants

- 6-18. Educate homeowners about fish-friendly moss control
6-19. Provide food waste chutes and compost or worm bins instead of a food garbage disposal

ENERGY

Heating/Cooling

- 6-20. Select ENERGY STAR heating / cooling equipment
6-21. No gas fireplaces, use direct vent gas or propane hearth product (AFUE rating)
6-22. No fireplaces or only high efficiency units (Rumsford or Russian fireplace, masonry heater)
6-23. No air conditioner

Water Heating

- 6-24. Passive or on-demand hot water delivery system installed at farthest location from water heater

- 6-25. Upgrade electric water heater efficiency from EF of .88 to .93
6-26. Upgrade gas or propane water heater efficiency from EF of .55 to .60
6-27. Install the water heater inside the heated space (electric, direct vent, or sealed venting only)
6-28. Upgrade electric water heater to exhaust air heat pump water heater or de-superheater: EF 1.9
6-29. Upgrade gas or propane water heater from EF of .55 to .83

Appliances

- 6-30. Provide an outdoor clothesline
6-31. Install gas clothes dryer
6-32. Install a horizontal-axis or ENERGY STAR washing machine
6-33. Install an extra-efficient dishwasher (ENERGY STAR)
6-34. Install ENERGY STAR refrigerator

Efficient Lighting

- 6-35. Furnish four compact fluorescent light bulbs to owners (req'd if installing screw-in compacts, See Action Item 6-38)
6-36. Halogen lighting substituted for incandescent down-lights
6-37. Install lighting dimmer, timers, and/or motion detectors
6-38. Use compact fluorescent bulbs, ballast, or fixtures in three high-use locations (kitchen, porch/outdoors, and one other location)

Health and Indoor Air Quality

- 6-39. Build a lockable storage closet for hazardous cleaning & maintenance products, separate from occupied space
6-40. If installing water filter at sink, select one with biodegradable carbon filter
6-41. Install showerhead filter

Recycling

- 6-42. Provide garage sorting bins for recyclable materials
6-43. Provide built-in kitchen or utility room recycling ctr

Subtotal for Section Six

Total Points for Project
Program Level Obtained:
O 1-Star H O 2-Star HH O 3-Star HHH
By my signature, I certify that I have performed all Action Items checked above:
(Remodeler Signature and Date)

