

Please indicate:

- Preliminary checklist**
(for enrollment)
- Final checklist**
(for certification review)

Single-Family/Townhome New Construction Checklist

Builder	
Project Address	
# of Bedrooms	
Unit size in square feet	
House Size Multiplier	#N/A
Comments	#N/A

REQUIRED CREDITS

Category	Possible Points	Credit	Point Totals	Comments
ONE-STAR REQUIREMENTS (100 points minimum)				
	<i>required</i>	All ★ items	★	
	<i>required</i>	Conform to the House Size Matrix (Table 0-1)	★	
	<i>required</i>	Meet all applicable codes and regulations	★	
	<i>required</i>	Program Orientation (one time only)	★	
Site & Water	<i>required</i>	Prohibit burying of construction waste	★	
Energy	<i>required</i>	Achieve 5% improvement over Washington State Energy code (2015)	★	
Site & Water	<i>required</i>	Stabilize all construction entrances with quarry spall or crushed rock	★	
IAQ	<i>required</i>	Ensure proper drainage of crawl space	★	
IAQ	<i>required</i>	All spot fans under 110 CFM are 1.5 sones or less	★	
Materials	<i>required</i>	Post and implement a jobsite recycling plan	★	
	<i>required</i>	Provide a building owners manual in accordance with credit 6-1	★	
	<i>required</i>	Achieve a minimum of 15 points in each of sections 2-5	★	
TWO-STAR REQUIREMENTS (200 points minimum)				
	<i>required</i>	Meet all 1-Star requirements	★	
Energy	<i>required</i>	Achieve 10% improvement over Washington State Energy code (2015)	★	
	<i>required</i>	Achieve a minimum of 25 points in each of sections 2-5	★	
THREE-STAR REQUIREMENTS (300 points minimum)				
	<i>required</i>	Meet all 2-Star requirements	★	
Energy	<i>required</i>	10% energy use improvement over State Energy Code (2015)	★	
	<i>required</i>	Achieve a minimum of 40 points in each of sections 2-5	★	
FOUR-STAR REQUIREMENTS (400 points minimum)				
	<i>required</i>	Meet 3-Star requirements	★	
	<i>required</i>	3 rd party verification required (See reference)	★	
	<i>required</i>	Achieve a minimum of 60 points in each of sections 2-5	★	
Site & Water	<i>required</i>	No zinc galvanized ridge caps, copper flashing or copper wires for moss prevention	★	
Site & Water	<i>required</i>	Landscape with plants appropriate for site topography and soil types, emphasizing use of plants with low watering requirements [drought tolerant]	★	
Site & Water	<i>required</i>	Use the most efficient aerator available for kitchen faucets, lavatory faucets and showerheads	★	

Energy	required	Achieve 20% improvement over Washington State Energy code (2015)	★	
IAQ	required	Use low toxic/low VOC paint on all major surfaces	★	
IAQ	required	Ventilate with box fans in windows blowing out during drywall sanding and new wet finish applications	★	
IAQ		Use no products that contain added urea formaldehyde for any interior applications	★	
Materials	required	Practice waste prevention and recycling and buy recycled products (Section 5)	★	
Materials	required	Achieve a minimum recycling rate of 50% of waste by weight	★	

FIVE-STAR REQUIREMENTS (600 points minimum)

	required	Meet 4-Star requirements plus point minimum	★	
	required	Achieve a minimum of 100 points in each of sections 2-5	★	
Site & Water	required	Amend disturbed soil with compost to a depth of 10 to 12 inches to restore soil environmental functions (2-34)	★	
Site & Water	required	Use pervious materials for at least one-third of total area for driveways, walkways, and patios (See action item 2-44)	★	
Site & Water	required	Limit use of turf grass to 25% of landscaped area (2-61)	★	
Site & Water	required	Avoid soil compaction by limiting heavy equipment use to building footprint and construction entrance (2-19)	★	
Site & Water	required	Preserve existing native vegetation as landscaping (2-21)	★	
Site & Water	required	Retain 30% of the trees located on site at the start of construction or, alternatively, achieve a Green Factor score of .6 or higher (2-23)	★	
Energy	required	Pre-wire for future PV installation (3-93)	★	
Energy	required	Achieve 30% improvement over Washington State Energy code (2015)	★	
IAQ	required	Detached or no garage OR garage air sealed from house with automatic exhaust fan (4-27)	★	
Materials	required	Achieve a minimum recycling rate of 70% of waste by weight	★	
Materials	required	Use a minimum of 10 materials with recycled content	★	

Check items you will be including in this project to qualify for a BUILT GREEN star rating. **Version 2012**

QUALIFYING CREDITS

Item #	Possible Points	Credit	Comments
SECTION 1: BUILT GREEN TEAM			
1-1	1-10	Use Built Green® member subcontractors, vendors, service providers, and real estate agents	
1-2	5	A. Incorporate Built Green® early in the design by conducting an eco-charrette with the homeowner & team to determine Built Green® features to be included in the home. B. Identify team member roles and how they relate to various phases of green lot design, prep and development C. Create a mission statement that includes the projects goals and objectives	
1-3	1	Provide all documentation/copies to third party verifier electronically	
SECTION 1 TOTAL			0

SECTION 2: SITE & WATER

SITE PROTECTION			
Proximity			
2-1	5	Locate site within one of the Urban Growth Area (UGA) designated areas	
Subtotal			0
Overall			
2-2	5	Build on infill lot to take advantage of existing infrastructure, reduce development of virgin sites	
2-3	5	Build on a greyfield lot	
2-4	5	Build on an EPA-recognized brownfield lot	
2-5	5	An adaptive reuse lot is selected	
2-6	10	Build in a Built Green® development	
2-7	5	Use an alternative foundation system that minimizes volume of foundation material and disturbance to soil and/or to water flow, for at least 50% of the foundation	

2-8	5	Build in a low impact development		
2-9	4	Build in a rural cluster development (RCD)		
			Subtotal	0
Lot Design				
2-10	3	Self-conduct a site inventory and assessment		
2-11	5	Complete a natural resources inventory under the direction of qualified professional.		
2-12	5	Conduct a third party review of the site development plan for critical areas and habitat protection (e.g. botanist, arborist, landscape architect)		
2-13	6	Implement a plan to conserve the elements identified by the resource inventory as high priority resources. Create a protection and maintenance plan for priority natural resources/areas during construction		
2-14	2	All tree pruning on site is conducted by or supervised by a Certified Arborist		
2-15	3	Basic training in tree or other natural resource protection is provided for the on-site supervisor.		
			Subtotal	0
Slope Disturbance				
2-16	6	Long-term erosion effects are reduced through the design and implementation of terracing, retaining walls, landscaping, and restabilization techniques.		
Defensible Space Precautions				
2-17	1-3	Landscape fire buffer around house using native species that are fire resistant		
2-18	3	Reduce fire danger by removing underbrush and unhealthy vegetation on site (perform all measures listed in handbook)		
			Subtotal	0
Protect Site's Natural Features				
2-19	3	Avoid soil compaction by limiting heavy equipment use to building footprint and construction entrances		
2-20	4	Trenching, significant changes in grade, and compaction of soil and critical root zones in "tree save" areas are avoided		
2-21	3	Preserve existing native vegetation as landscaping		
2-22	3	Take extra precautions to protect trees during construction		
2-23	1-5	Retain trees on site (1 pt per 20% preserved)		
2-24	3	If building near wetlands, shorelines, bluffs, and other critical areas, preserve & protect beyond code or local requirements		
2-25	1-5	Set aside percentage of buildable site to be left undisturbed		
2-26	4	Measures are planned and implemented that will support wildlife habitat		
2-27	5	Previously compromised environmentally sensitive areas are mitigated or restored		
			Subtotal	0
Protect Natural Processes On-Site				
2-28	6	Natural water and drainage features are preserved and used		
2-29	2	Install and maintain temporary erosion control devices that significantly reduces sediment discharge from the site beyond code requirements		
2-30	1	Use compost to stabilize disturbed slopes		
2-31	3	Stabilize disturbed areas within 14 days that are complete or will be left unworked for greater than 21 days using methods as recommended by the EPA or in the approved storm water pollution prevention plan (SWPPP), where required		
2-32	3	Balance cut and fill, while maintaining original topography		
2-33	4	Limit grading to 15 feet around structures, septic, ground-source heat pump fields, except for driveway access		
2-34	4	Amend disturbed soil with compost or suitable soil amendments to a minimum depth of 10" to restore soil environmental functions		
2-35	2	Replant or donate removed vegetation for immediate reuse		
2-36	2	Use plants donated from another site		
2-37	3	Grind land clearing wood and stumps for reuse		
2-38	5-10	Use a water management system that allows groundwater to recharge on site (5 pts for 50%, 10 pts for 100%)		
			Subtotal	0
Landscape Plan				

2-39	5	Species and locations for tree planting are identified that will provide summer shading of the dwelling and parking areas to moderate temperatures		
2-40	4	Vegetative wind breaks or channels are designed as appropriate to local conditions		
2-41	1-5	Achieve a Green Factor Score for urban or infill under 1 acre http://www.seattle.gov/dpd/Permits/GreenFactor/		
2-42	3	Plant only trees that when full grown still allow for future solar install on south-side of property		
		Subtotal	0	
Impervious Surfaces				
2-43	1-10	Install vegetated roof system (e.g. green roof) to reduce impervious surface (1 pt per 10% of roof)		
2-44	2-6	Use pervious materials for driveways, parking areas, walkways, and patios (2 pts per 33% pervious achieved)		
		Subtotal	0	
Eliminate Water Pollutants during Construction				
2-45	2	When construction is complete, leave no disturbed areas uncovered or unstabilized		
2-46	1	Do not bury construction waste		
2-47	1	Establish and maintain a single stabilized construction entrance (quarry spall, crushed rock or concrete)		
2-48	3	Preserve and cover topsoil on site for reuse		
2-49	1	Wash out concrete trucks into storage containers, slab, or sub base areas.		
2-50	1	Establish and post clean up procedures for spills to prevent illegal discharges		
2-51	1	Reduce hazardous waste through good jobsite housekeeping		
2-52	3	Produce no hazardous waste		
2-53	3	Construct tire wash, establish and post clean up protocol for tire wash		
2-54	2	Use slow-release organic fertilizers to establish vegetation		
2-55	2	Use less toxic form releasers		
2-56	1	Use non-toxic outdoor materials for landscaping (plastic, non-treated wood)		
2-57	5	Do not clear or grade during wet weather periods		
2-58	2	Do not use zinc galvanized ridge caps, copper flashing, or copper wires for moss prevention		
		Subtotal	0	
Heat Island Mitigation				
2-59	2	Use light colored hardscaping: Horizontal hardscaping materials are installed with a Solar Reflectance Index of 29 or greater for min 50% surface area		
		Subtotal	0	
WATER PROTECTION				
Outdoor Conservation				
2-60	1	Mulch landscape beds with 2 inches of organic mulch		
2-61	3-12	Limit use of turf grass, or use no turf grass (3 pts per 25%)		
2-62	2	Use drought-tolerant grass type		
2-63	2	Landscape with plants appropriate for site topography and soil types, emphasizing use of native plants with low watering requirements (drought-tolerant)		
2-64	5	Plants with similar watering needs are grouped (hydrozoning).		
2-65	4	Pre-plumb for greywater reuse for irrigation		
2-66	5	Install greywater system for irrigation		
2-67	10	Install landscaping that requires no potable water for irrigation whatsoever after initial establishment period (approx. 1 yr), excluding food production		
2-68	1-10	Install rainwater collection system (cistern) for reuse		
2-69	3	Irrigation system is designed by a professional in accordance with EPA WaterSense requirements (or equivalent) and installed in accordance with EPA WaterSense Program or equivalent		
2-70	4	Evapotranspiration- (ET-) based irrigation controller with a rain sensor		
2-71	4	Soil moisture sensor based irrigation controller		
2-72	2	Install a leak detection system with excess water flow shutoff		
2-73	4	An integrated pest management plan to minimize chemical use of pesticides and fertilizers is established		
		Subtotal	0	

Indoor Conservation				
2-74	8	Plumbing system with all plumbing fixture fittings (faucets & showerheads) located such that the volume of the water contained in each pipe run between the water heater and fixture fitting is a maximum of 6 cups (1.42 liters) (86.63 cubic inches) (.38 gallons)		
2-75	2	For bathroom faucets, select fixtures with less than 1.5 GPM		
2-76	1-3	Self-closing valve, motion sensor, metering, or pedal-activated faucet is installed to enable intermittent on/off operation		
2-77	1	For showers, install showerheads with less than 2.0 GPM		
2-78	1	Install at least 1 kitchen faucet with less than 2.0 GPM		
2-79	1-4	Select high-performance low-flush or dual-flush toilets (1.28 gpm) from list in resources. (1 pt per toilet)		
2-80	10	Install composting toilets		
2-81	1-2	Install system to refill toilet with hand-wash water (1 pt per toilet)		
2-82	4	Stub-in plumbing to use greywater or rainwater for indoor reuse		
2-83	8	Install greywater or rainwater system for indoor reuse		
2-84	2	Install a recirculating pump for domestic hot water w/ timer or motion sensor		
2-85	2	Urinal is installed with a flush volume of 0.5 gallons or less		
		Subtotal	0	
Indoor Water Quality				
2-86	3	Provide compost or worm bins instead of a food garbage disposal		
2-87	2	Install a whole house water filter system		
2-88	2	Install water filtration system for consumptive use		
2-89	2	Install a chemical and salt free water softener system		
2-90	1	Separate outdoor water supply prior to filtration		
2-91	1-3	Provide spot water filtration using reverse osmosis or biodegradable carbon filter in kitchen and bathrooms. (1 pt per fixture)		
		Subtotal	0	
ENVIRONMENTAL DESIGN CONCEPTS				
2-92	10	Provide accessory dwelling unit or accessory living quarters		
2-93	2	Maintain clear area to south of house for passive and active solar access		
2-94	3	Provide a covered front porch		
2-95	3	Position garage so it is not in front of house, while minimizing impervious driveway area		
2-96	2-5	Minimize garage size		
2-97	3	Build within ¼ mile of a transit stop		
2-98	1-5	Design to promote and encourage pedestrian-friendly and safe neighborhoods		
2-99	2	Bury utility lines in common trenches		
2-100	5	Utilities are installed using one or more alternative means such as tunneling instead of trenching, use of smaller (low ground pressure) equipment, or geomats to spread the weight of construction equipment, shared utility trenches or easements, and placement of utilities under streets instead of yards.		
2-101	1	Use dark sky compliant fixtures to minimize night glare. (no point allowed if required by local codes)		
2-102	3	Build on a lot that is within 1/2 mile of at least six essential services, (e.g., grocery store, post office, place of worship, community center, daycare center, bank, school, restaurant, medical/dental office, laundromat/dry cleaner, etc)		
2-103	4	Driveways or parking are shared between multiple units		
2-104	3	Proximity to bike amenities within 1 mile		
		Subtotal	0	
Extra Credit for Site and Water				
2-105	1-10	Extra credit for innovation in Site and Water		
SECTION 2 TOTAL			0	

SECTION 3: ENERGY EFFICIENCY				
OVERALL				
3-1	1-50	Document a reduction in overall home energy use using approved energy modeling software (1 pt per % improvement over code)		
3-2	50	Build a zero net energy home that draws zero outside power or fuel on a net annual basis (based on modeling)		
ENVELOPE				

Thermal Performance				
3-3	1-40	Document envelope improvements beyond code (component performance approach) (1 pt per % improvement over code)		
3-4	1-40	Document envelope improvements beyond code (prescriptive approach)		
3-5	10	Home is ENERGY STAR® Homes Northwest certified		
3-6	1-2	Install no more than 1% of conditioned floor space of skylights (1 pt), or NO skylights (2 pts)		
3-7	5	Skylights maximum of U-0.20		
3-8	10	All windows w/ maximum of U-0.20		
3-9	3	Design with low window to floor ratio (<12%)		
3-10	5	Install full continuous rigid insulation beyond code beneath any slabs on grade		
3-11	5	Install dense packed cellulose (over 2.5 lbs/inch), or wet-blown cellulose, or blown-in foam or fiberglass BIBS or blown in fiberglass as insulation		
3-12	5	Install frost-protected shallow foundation, minimum R-10 insulation		
3-13	2	Skylight shafts insulated to R-38, covered with GWB, OSB or other rigid sheathing to prevent air movement through the insulation from degrading the insulation value		
3-14	2	Specify and use raised-heel trusses (>= 8in.) or SIPs roof, to allow full insulation over conditioned space		
		Subtotal	0	
Air Sealing				
3-15	3	Airtight drywall approach for framed structures using thermal enclosure checklist		
3-16	5-10	Blower door test results better than 3.5 ACH50 (5 points), 2.5 ACH50 (10 points)		
3-17	3	Use an air barrier on the exterior wall assembly installed per manufacturers guidelines		
		Subtotal	0	
Reduce Thermal Bridging				
3-18	1	Use insulated headers		
3-19	1	Where applicable, use 2-stud instead of 3-stud corners, and fully insulate corners		
3-20	1	Fully insulate at interior/exterior wall intersection by open cavity framing		
3-21	10	Use structural insulated panels (SIPs), insulated concrete forms (ICFs) or straw bale for exterior walls around conditioned space		
3-22	2	Use exterior rigid insulation beyond code		
3-23	3	Use advanced wall framing, 24-inch on-center, w/ double top plate		
3-24	4	Use advanced wall framing—24-in on-center framing, w/ single top plate		
3-25	1	Use drywall stops or clips for backing		
3-26	3	Innovative stick framing to reduce thermal bridging, by methods such as double wall framing and horizontal wall furring		
3-27	10	Free air movement in attic or on site framed roof systems exceeding code by 15%		
3-28	3	Install storm door system with magnetic seal		
		Subtotal	0	
Solar Design Features				
3-29	5	Orient home on site to optimize passive solar strategies		
3-30	5	Passive solar design, basic features installed		
3-31	1-12	Passive solar design, advanced features installed		
3-32	3	Model solar design features using approved modeling software		
3-33	5	Design and implement passive cooling system (no A/C; radiant cooling or passive cooling system)		
		Subtotal	0	
HEATING/COOLING SYSTEM				
Equipment & Distribution				
3-34	1	Centrally locate heating/cooling system to reduce the size of the distribution system		
3-35	1	Provide two properly supported ceiling fan pre-wires		
3-36	1-2	Install properly supported ENERGY STAR® ceiling fans, 1 pt per fan		
3-37	1	Use foil-covered external insulation on metal ducting		
3-38	1	Use advanced sealing of all duct joints using low-toxic mastic		
3-39	2	Third-party duct test results less than 4% loss of conditioned floor area (50 pascals)		

3-40	3	Place all ducts in conditioned space		
3-41	1	Insulate any ducts located in unconditioned space to at least R-11		
3-42	5	Locate heating/cooling equipment inside the conditioned space		
3-43	3	Air handling equipment or return ducts are not located in the garage, unless placed in isolated/air sealed mechanical rooms with an outside air source		
3-44	2	Design the distribution system using ACCA Manual D		
3-45	10	Use ductless distribution system (e.g. hydronic, radiant, ductless minisplits)		
3-46	3	Where appropriate, install furnace fan or pumps with an electrically commutated motor (ECM)		
3-47	1	Locate registers towards center of home rather than at outside walls minimizing ducting and loads on unit		
			Subtotal	0
Controls				
3-48	3	Select high efficiency heat pumps instead of electric heat ¹ (add, or heat pump with efficiency that exceeds code requirements)		
3-49	5	Install a heating system with zonal controls		
			Subtotal	0
Heat Recovery				
3-50	5	Install a heat recovery ventilator or energy recovery ventilator ¹		
			Subtotal	0
Heating / Cooling				
3-51	5	Select ENERGY STAR® heating/cooling equipment (not available if claiming under WSEC Table 406.2)		
3-52	2	Install high-efficiency auxiliary heating units, e.g. EPA-approved pellet stove, Russian fireplace, masonry radiant heater		
3-53	2	Properly size HVAC system using ACCA Manual J (do not oversize)		
3-54	2	Use direct vent gas or propane hearth products (AFUE rating)		
3-55	10	Install geothermal heat pumps ¹		
			Subtotal	0
WATER HEATING				
Distribution				
3-56	1	Locate water heater within 20 pipe feet of highest use		
3-57	1	Insulate all hot water pipes		
3-58	3	Design home with single plumbing wall		
3-59	2	Use 3/8" pipe (PEX) tubing		
3-60	1	Install an on demand hot water recirculation system		
			Subtotal	0
Drain water Heat Recovery				
3-61	3	Install drain water heat recovery system (DHR)		
			Subtotal	0
Water Heating				
3-62	2	Install tankless water heater ¹		
3-63	3	Install electric water heater efficiency to EF of .93 or higher (not available if claiming under WSEC Table 406.2)		
3-64	1-5	Upgrade gas or propane water heater efficiency to EF 0.62, 0.83, or 0.90 ¹		
3-65	2	Install water heater inside the heated space (electric, direct vent, or sealed venting only)		
3-66	6	Upgrade electric water heater to exhaust air heat pump water heater or de-superheater: EF 2.0 ¹		
3-67	2	Use indirect water heater for domestic hot water (DHW)		
			Subtotal	0
LIGHTING				
Natural Light				
3-68	1	Light-colored interior finishes		
3-69	2	Use clerestory for natural lighting		
3-70	2	Use light tubes for natural lighting and to reduce electric lighting		
3-71	1	Create more shared light with glass interior doors and windows		
			Subtotal	0
Efficient Lighting				

3-72	1	Solar-powered walkway or outdoor area lighting		
3-73	2	Use compact fluorescent bulbs, ballast, or fixtures in three high-use locations (kitchen, porch/outdoors, and one other location)		
3-74	1-5	Install fluorescent- or LED-lighting (1 pt for each 5% of lighting beyond the code required 75%)		
3-75	1-3	Install fluorescents or LED lights on dimmer (1 pt per installed dimmer)		
3-76	1-3	Use interior occupancy sensors, e.g. timers, motions detectors (1 pt per item)		
3-77	1	Install photo cells, timers, motion detectors (exterior)(beyond Energy Code requirements)		
3-78	1	Install LED lighting in high-use location		
3-79	2	Install switches for wall outlets (phantom load switches)		
3-80	5	Install no recessed can lights that penetrate the building's thermal envelope		
		Subtotal	0	
Appliances				
3-81	1	Provide an outdoor clothesline		
3-82	1	Install gas clothes dryer		
3-83	2	Install front loading or ENERGY STAR® washing machine		
3-84	1	Install an ENERGY STAR dishwasher		
3-85	1	Install ENERGY STAR refrigerator		
3-86	1	Install ENERGY STAR exhaust fan vented to outside		
3-87	2	Install induction range		
3-88	3	Install energy monitoring device in home		
		Subtotal	0	
ALTERNATIVE ENERGY				
3-89	2-3	Enroll the residence in the local utility's electricity program for renewable electricity sources		
3-90	2	Pre-pipe for solar water heater		
3-91	10	Solar water heating system sized to provide a minimum of 40% hot water designed energy use ¹		
3-92	1-25	Percentage or all of home powered by renewable energy source (5 pts per kW)		
3-93	4	Provide designated location on south roof area and rough-in conduit for wiring and controls for future solar thermal and photovoltaics		
		Subtotal	0	
Extra Credit for Energy Efficiency				
3-94	1-10	Extra credit for innovation in Energy Efficiency		
SECTION 3 TOTAL			0	
1 Not applicable if claiming under WSEC Table 406.2				

SECTION 4: HEALTH & INDOOR AIR QUALITY				
OVERALL				
4-1	4	Interact w/ homeowner early in design/construction process to identify chemical sensitivities and preferred IAQ measures and finishes		
4-2	5	Project team member to have taken American Lung Association (ALA) of Washington "Healthy House Professional Training" course or other IAQ class with 8 hours of curriculum minimum		
4-3	15	Certify the home to a third-party verified program emphasizing indoor air quality (e.g., EPA Indoor airPLUS®, American Lung Association Health House®)		
4-4	3	Design for soundproof area in home		
		Subtotal	0	
JOBSITE OPERATIONS				
4-5	1	Use less-toxic cleaners		
4-6	1	Require workers to use VOC-safe masks when applying VOC containing wet products, and N-95 dust masks when generating dust		
4-7	1-3	Take measures during construction operations to avoid moisture problems later, 1 pt per 4 measures		
4-8	2	Take measures to avoid problems due to construction dust (perform all measures listed in handbook)		
4-9	3	Implement comprehensive dust control plan as described in handbook		

4-10	2	Use moisture meter to ensure moisture levels are 19% or less in walls, 12% or less in floors before closing up, installing drywall, and finish floors		
4-11	3	Ventilate with box fans in windows blowing out during drywall sanding and new wet finish applications		
4-12	2	No use of unvented combustion-type heaters during construction		
4-13	2	Block all duct ports upon installation and no use of ducted HVAC		
4-14	3	Clean duct and furnace thoroughly just before owners/tenants move in		
4-15	2	No smoking inside of any building or within 25 ft. (or more) radius of exterior of any building		
4-16	4-8	Train subs in implementing a healthy building jobsite plan for the project (4 pts) and contractually require compliance (8 pts)		
4-17	2	Implement a "no-idle zone policy" for equipment and vehicles not in active use		
		Subtotal	0	
LAYOUT & MATERIAL SELECTION				
4-18	1	Use pre-finished flooring		
4-19	10	No carpet		
4-20	2	If using carpet, specify products certified by third-party for indoor air quality		
4-21	2	Install low pile or less allergen-attracting carpet and pad		
4-22	1	Install natural fiber carpet (e.g. jute, sisal, wool)		
4-23	3	Limit use of carpet to one-third of home's square footage		
4-24	1	If using carpet, install by dry method		
4-25	3-5	Optimize air quality in family bedrooms to basic (3 pts) or advanced level (5 pts) (see handbook)		
4-26	5	Garage air-sealed from house with automatic exhaust fan		
4-27	10	Detached or no garage		
4-28	2	Fully insulate attached garage to minimize condensation-based mold growth		
4-29	3	Use urea formaldehyde-free insulation or GreenGuard Certified product		
		Inside the house, use only low-VOC, low-toxic, water-based, solvent-free sealers, grouts, mortars, caulks, adhesives, stains, pigments, and additives for:		
4-30	2	Tile and grout		
4-31	2	Framing		
4-32	4	Flooring		
4-33	2	Plumbing		
4-34	2	HVAC		
4-35	2	Insulation		
4-36	2	Drywall		
4-37	2	Use materials without added urea-formaldehyde for finish work, including shelving, window and door trim, and base molding		
4-38	3	Use plywood and composites of exterior grade or with no added urea formaldehyde (for interior use)		
4-39	3	Install cabinets made w/ no-added urea formaldehyde board and low-toxic finish		
4-40	2	Use ceramic tile for 5% or more of flooring		
4-41	3	Use polyethylene piping for plumbing and electrical conduit. No PVC piping		
4-42	3-5	Use low- or non-VOC and non-toxic interior paints and finishes on large surface areas (3 pts) or all interior surfaces (5 pts); 150 flat, < 50 for non-flat		
		Subtotal	0	
MOISTURE CONTROL				
4-43	1	Slope crawlspace and foundation grade toward perimeter for drainage, supply drainage lines out to exterior footing drains, and install polyfilm vapor barrier sealed to stem walls		
4-44	1	Verify seal at doors, windows, and plumbing and electrical penetrations against moisture and air leaks		
4-45	3	Envelope inspection at pre-insulation by a qualified professional		
4-46	2	Slab on grade, upgrade under-slab moisture barrier beyond code to 10 mil minimum; minimum of 10 mil poly in crawl spaces with sealed seams and sealed perimeter		
4-47	1	Install approved ice and water shield membrane for roofs pitched under 4-in-12		
4-48	3	Roof overhangs are at least 24" inches		
4-49	2	Protect windows and doors on tall walls with additional overhang protection		

4-50	2	Use a nontoxic foundation, dampproofing treatment and perimeter drain to protect walls against moisture		
4-51	1	Install a drainable house wrap under exterior siding to promote wall drainage.		
4-52	5	Full exterior drainage plane integrated shingle-style with pan-flashed and face-flashed door and window openings, as designated in EEBA's "Water Management Guide", or equivalent		
4-53	5	Install a sloped sill pan with end dams and back dams for all windows, and back dams for all exterior doors exposed to the weather		
4-54	1	Install metal flashing at all windows and all door heads exposed to the weather		
4-55	3	Hose-test installed windows, before siding, to verify resistance to wind driven rain		
4-56	2	Where not required by code, install working radon type vent system to eliminate potential moisture, methane, and radon problems in crawl space or under slabs on grade		
4-57	1	Install a rigid perforated footing drain at foundation perimeter, not connected to roof drain system		
4-58	3	Show and build moisture management details for below grade walls beyond code, such as dimple drainage mat at exterior face and capillary breaks		
4-59	2	Perform calcium chloride moisture test on all slabs on grade prior to installing any finish flooring in conformance with product warranties		
4-60	3	Have crawl space, attic, and garage building performance tested for disconnection to the living space of house		
4-61	3	Use an unvented or mechanically-exhausted, conditioned crawl space (not appropriate where flood venting is required)		
4-62	4	No plumbing distribution lines in exterior walls		
4-63	4	Implement mold prevention measures such as antimicrobial treatment		
		Subtotal	0	
AIR DISTRIBUTION AND FILTRATION				
4-64	3	Verify performance of ventilation systems; measuring supply and exhaust airflow, checking control activation and damper operation		
4-65	3-5	Install return-air ducts (5 pts) or passive pressure (3 pts) relief strategy in all bedrooms		
4-66	1	Use medium-efficiency pleated filter, MERV 10		
4-67	5	Use high-efficiency pleated filter, MERV 12 or better, or HEPA		
4-68	2	Balance airflow system based on filter being used		
4-69	3	Install central vacuum, exhausted to outside		
4-70	2	Provide for cross ventilation using operable windows		
4-71	2	Install an operable skylight, clerestory or roof monitor (manual or automated) high up in the structure to aid natural ventilation. Use U-factor of 0.45 or below and solar gain co-efficient of 0.35 or below for skylight		
4-72	2	Use ultraviolet light or equivalent new technologies for air purification		
4-73	3	A carbon monoxide (CO) alarm is installed in a central location outside of each separate sleeping area in the immediate vicinity of the bedrooms. the alarm is hardwired with a battery back-up.		
		Subtotal	0	
HVAC EQUIPMENT				
4-74	1	Limit kitchen exhaust fan to 300 CFM maximum		
4-75	2-4	Install timers, humidistat controls, or occupancy sensors for bath and laundry exhaust fans, 2 pts per device		
4-76	1-3	Install quiet (<1.5 sone) bath fan with smooth ducting, minimum 4 inch or employ other quiet ventilation strategy or install ENERGY STAR, or equivalent fan operating =< 1 sone (3 pts)		
4-77	1	Install exhaust fans in rooms where office equipment is used		
4-78	3	Do not install naturally aspirated heating and hot water equipment		
4-79	1	No sound insulation or other fibrous materials installed inside ducting		
4-80	5	Provide balanced or slightly positive indoor pressure using controlled ventilation		
4-81	10	Install whole house radiant heating system (no ducted heating)		
4-82	3	If providing central heating and cooling, install whole house humidification and/or dehumidification		
		Subtotal	0	
INDOOR POLLUTANT CONTROL				

4-83	1	Build a lockable storage closet for hazardous cleaning and maintenance products, separate from occupied space		
4-84	1	Install showerhead filter		
4-85	1	Do not install gas-burning appliances inside house		
4-86	7	Fireplace, woodstoves, pellet stoves, or masonry heaters are not installed in the home		
4-87	2	Design a designated shoe-removal area and storage at primary entrance		
BUILDING ENTRANCE POLLUTANTS CONTROL				
4-88	1	Install exterior grilles or mats		
4-89	1	Install interior grilles or mats		
4-90	1-3	Install floor drain or catch basin with drain under washing machine and/or water heater		
4-91	1	Install moisture alarms under sinks and dishwasher		
			Subtotal	0
ELECTROMAGNETIC FIELDS				
4-92	2	Wire bedrooms so circuitry can be conveniently shut off at night to eliminate electric fields		
4-93	2	Design sleeping and sitting areas to be at least 12 feet from major appliances		
4-94	1	Use no CFLs		
			Subtotal	0
Extra Credit for Health and Indoor Air Quality				
4-95	1-10	Extra credit for innovation in health and indoor air quality		
			SECTION 4 TOTAL	0

SECTION 5: MATERIALS EFFICIENCY				
Overall Design				
5-1	5-9	Design and build for deconstruction concept		
5-2	2	Use stacked floor plan		
5-3	1	Use standard dimensions in design of structure		
5-4	2	Avoid waste from structural over-design		
			Subtotal	0
Reduce				
5-5	2	Create detailed take-off and provide as cut list to framer		
5-6	2	Use central cutting area or cut packs		
5-7	2	Use suppliers who offer reusable or recyclable packaging		
			Subtotal	0
Use Salvaged Materials				
5-8	2	Purchase used building materials for your job		
5-9	1-4	Use salvaged doors		
5-10	1-2	Use salvaged flooring		
5-11	1-2	Use salvaged windows		
5-12	1-2	Use salvaged appliances		
5-13	1-2	Use salvaged fixtures		
5-14	1-2	Use salvaged hardware		
5-15	2	Use salvaged cabinets		
5-16	2	Use salvaged siding		
5-17	2	Use salvaged decking		
5-18	2	Use salvaged trim		
5-19	2	Use salvaged framing lumber		
5-20	1	Reuse spent solvent for cleaning		
			Subtotal	0
Recycling				
Source-Separated Recycling				
5-21	5	Use deconstruction to dismantle and reuse existing building(s) on site		
5-22	1	Recycle cardboard by source separation, 85% minimum recycling rate		
5-23	3	Recycle metal scraps by source separation, 85% minimum recycling rate		
5-24	5	Recycle clean scrap wood and broken pallets by source separation, 85% minimum recycling rate		
5-25	2	Recycle package wrap and pallet wrap by source separation, 85% minimum recycling rate		
5-26	3	Recycle drywall by source separation, 85% minimum recycling rate		

5-27	2	Recycle concrete/asphalt rubble, masonry materials, or porcelain by source separation, 85% minimum recycling rate		
5-28	1	Recycle paint by source separation, 85% minimum recycling rate		
5-29	4	Recycle asphalt roofing by source separation, 85% minimum recycling rate		
5-30	2	Recycle carpet padding and upholstery foam by source separation, 85% minimum recycling rate		
5-31	1	Recycle glass by source separation, 85% minimum recycling rate		
5-32	3	Recycle land clearing and yard waste, soil, and sod by source separation, 85% minimum recycling rate		
5-33	4	Recycle fluorescent lights and ballasts		
5-34	1	Donate, give away, or sell reusable finish items		
5-35	1	Move leftover materials to next job or provide to owner		
			Subtotal	0
Commingle Recycling				
5-36	10	Send at least 90% of jobsite waste (by weight, excluding concrete, brick and asphalt) to a commingle recycling facility with a 50% recycling rate		
5-37	18	Send at least 90% of jobsite waste (by weight, excluding concrete) to a commingle recycling facility with a 75% recycling rate		
5-38	24	Send at least 90% of jobsite waste (by weight, excluding concrete) to a commingle recycling facility with a 90% recycling rate		
			Subtotal	0
DESIGN AND MATERIAL SELECTION				
Overall				
5-39	1-10	Install locally-produced materials (1 pt per item)		
5-40	1-8	Use building salvaged lumber, minimum 200 board feet		
5-41	2-3	Use urban or forest salvaged lumber, minimum 250 board feet		
5-42	3	Use rapidly renewable building materials and products made from plants harvested within a ten-year cycle or shorter in at least 2 substantial applications		
5-43	2	Use environmentally preferable products with third-party certification, such as SCS, GreenGuard, and Floor Score (not applicable to carpet)		
5-44	2	Use recycled-content plastic lumber		
			Subtotal	0
Framing				
5-45	7	Use dimensional lumber that is third-party certified sustainably harvested wood that meets the Tier 1 requirements outlined in the handbook, 50% minimum		
5-46	1	Use dimensional lumber that is third-party certified sustainably harvested wood that meets the Tier 2 requirements outlined in the handbook		
5-47	5	Use sheathing that is third-party certified sustainably harvested wood that meets the Tier 1 requirements outlined in the handbook, 50% minimum		
5-48	1	Use sheathing that is third-party certified sustainably harvested wood that meets the Tier 2 requirements outlined in the handbook		
5-49	5	Use beams that are third-party certified sustainably harvested wood that meets the Tier 1 requirements outlined in the handbook, 50% minimum		
5-50	1	Use beams that are third-party certified sustainably harvested wood that meets the Tier 2 requirements outlined in the handbook		
5-51	2	Use factory framed wall panels (panelized wall construction), including SIPs and ICFs		
5-52	3	Use truss roof system		
5-53	3	Use engineered structural products and use no dimensional 2xs larger than 2x8, and no 4xs larger than 4x8		
5-54	3	Use finger-jointed framing material (e.g. risers and studs) longitudinal compression loads only		
5-55	3	Use cementitious foam-formed walls with flyash concrete		
			Subtotal	0
Foundation				
5-56	1	Use regionally produced block		

5-57	3-6	Use flyash or blast furnace slag for 25% by weight of cementitious materials for all concrete (20% for flat work)		
5-58	2	Use recycled concrete, asphalt, or glass cullet for base or fill		
		Subtotal	0	
Doors				
5-59	1	Use doors that are recycled-content or certified as sustainably produced (FSC, CSA Intl., or American Tree Farms System)		
5-60	2	Use domestically-grown and manufactured wood interior doors		
		Subtotal	0	
Finish Floor				
5-61	4	Hardwood flooring from third-party certified, sustainably harvested sources, locally harvested or re-used lumber		
5-62	2	Use recycled-content underlayment products		
5-63	1	Use recycled-content vinyl flooring.		
5-64	4	No vinyl flooring		
5-65	3	On more than 250 square feet, use rapidly renewable flooring products with a ten-year harvest cycle or shorter (excluding carpet)		
5-66	1	Use recycled-content carpet pad		
5-67	3	If installing carpet, use recycled-content or renewed carpet		
5-68	1	Use replaceable carpet tile		
5-69	3	Use 40% recycled-content hard surface tile, 100 square feet minimum		
5-70	3	Use natural linoleum		
5-71	3	Use recycled-content glass, ceramic, or porcelain tile for 10% of total floor area		
5-72	5	Use flooring that is third-party certified sustainably harvested wood that meets the Tier 1 requirements outlined in the handbook, 50% minimum		
5-73	1	Use flooring that is third-party certified sustainably harvested wood that meets the Tier 2 requirements outlined in the handbook		
5-74	1	Use durable/spot repairable floor finish		
5-75	2	Use concrete slab or sub-floor as a finished floor in living space		
5-76	6	A minimum of 85 percent of installed hard-surface flooring is in accordance with the emission concentration limits of CDPH 01350 as certified by a third-party program, such as the Resilient Floor Covering Institute, or GREENGUARD		
		Subtotal	0	
Interior Walls				
5-77	1	Use drywall with at least 30% recycled-content gypsum		
5-78	2	Use recycled or "reworked" paint and finishes		
5-79	1	Use recycled newspaper or cork expansion joint filler		
5-80	2	Use natural wall finishes, e.g. lime paint, clay		
5-81	2	Reduce interior walls through open plan for kitchen, dining, and living areas		
		Subtotal	0	
Exterior Walls				
5-82	1	Use recycled-content sheathing		
5-83	1	Use siding with reclaimed or at least 15% recycled material on at least 75% of solid wall surface		
5-84	2	No vinyl siding or exterior trim		
5-85	6	Wood siding is 100% FSC-certified or locally harvested or milled		
5-86	2	Use 50-year warranted siding product		
5-87	5	Use wood siding that is third-party certified sustainably harvested wood that meets the Tier 1 requirements outlined in the handbook, on at least 20% of solid wall surface		
5-88	1	Use wood siding that is third-party certified sustainably harvested wood that meets the Tier 2 requirements outlined in the handbook, on at least 20% of solid wall surface		
5-89	2	Use salvaged masonry brick or block, 50% minimum		
5-90	2	Use regionally-produced stone or brick		
		Subtotal	0	
Windows				
5-91	5	Use wood / fiberglass / finger jointed / composite wood windows		
5-92	1	Use locally-produced windows		

5-93	5	Use wood windows that are third-party certified sustainably harvested wood that meets the Tier 1 requirements outlined in the handbook		
5-94	1	Use wood windows that are third-party certified sustainably harvested wood that meets the Tier 2 requirements outlined in the handbook		
			Subtotal	0
Cabinetry and Trim				
Trim:				
5-95	1	Use regional trim products, 50% minimum		
5-96	3	Use trim that is third-party certified sustainably harvested wood that meets the Tier 1 requirements outlined in the handbook, 50% minimum		
5-97	1	Use trim that is third-party certified sustainably harvested wood that meets the Tier 2 requirements outlined in the handbook, 50% minimum		
5-98	3	Use finger-jointed or MDF trim with no added urea formaldehyde, 90% minimum		
5-99	1	Use wood veneers that are third-party certified sustainably harvested wood that meets the Tier 1 requirements outlined in the handbook, 50% minimum		
Cabinets:				
5-100	2	Use cabinetry made of a rapidly renewable product		
5-101	2	Use regional products, 90% minimum		
5-102	3	Use wood that is third-party certified sustainably harvested wood that meets the Tier 1 requirements outlined in the handbook, 50% minimum		
5-103	1	Use wood that is third-party certified sustainably harvested wood that meets the Tier 2 requirements outlined in the handbook, 50% minimum		
5-104	3-7	Alternative materials used for cabinetry with low or no VOCs - recycled content stainless steel, solid wood, glass, etc (4 pts) or construction methods - pantry use, open shelves, etc.(3 pts)		
5-105	2-5	Use cabinet casework and shelving constructed of agricultural fiber with no-added urea formaldehyde		
Countertops:				
5-106	2	Use countertops that are third-party certified sustainably harvested wood that meets the Tier 1 requirements outlined in the handbook		
5-107	4	Counter tops of concrete, domestic stone, tile with recycled content, recycled paper products and cabinets and countertop underlayment of wheatboard or non-formaldehyde particle board		
			Subtotal	0
Roof				
5-108	2	Use recycled-content roofing material		
5-109	2	Use 40-year warranted roofing material		
5-110	3	Use 50-year warranted roofing material		
5-111	5	Use solar shingles		
5-112	8	Install a metal, concrete, slate, tile, or clay roof		
5-113	3	Install self-adhering underlayment on eaves, valleys & penetrations		
5-114	3	Install self-adhering underlayment on entire roof		
			Subtotal	0
Insulation				
5-115	2	All insulation to have a minimum of 40% recycled-content		
5-116	3	Use environmentally friendly foam building products (formaldehyde-free, CFC-free, HCFC-free)		
			Subtotal	0
Other Exterior				
5-117	2	Use reclaimed or salvaged material for landscaping walls		
5-118	3	Use lumber that is third-party certified sustainably harvested wood that meets the Tier 1 requirements outlined in the handbook for decking and porches		
5-119	3	Use 100% recycled-content plastic or wood polymer lumber for decks and porches, or third party certified wood products		
5-120	4	Use no-pressure treated lumber		
5-121	1	Use low-toxic pressure-treated wood		

5-122	5-8	B20 biodiesel or better equipment (5 pts for 100% excavation equipment on biodiesel, 1 pt for any additional vehicle frequently on-site)		
		Subtotal	0	
Recycling				
5-123	3	Provide built-in kitchen or utility room recycling center		
5-124	1	Provide garage sorting bins for recyclable materials		
		Subtotal	0	
Universal Design				
5-125	2	Stepless front entry		
5-126	1	Stepless other entry (rear or side door, door from garage)		
5-127	1	Hard-surface stepless grade changes at exterior to allow access to essential maintenance locations, like garbage cans, etc.		
5-128	1	Install exterior accessible hard-surface gathering area. (requires Item 5-127)		
5-129	2	Provide accessible guest bathroom on main floor of home (requires stepless access to house, either 5-127 or 5-128)		
5-130	3	Accessible bathroom with curbless shower, (grab-bar blocking required in all bathrooms)		
5-131	3-5	Locate closets or other spaces directly above each other on all floors that can be used for future elevator installation.		
5-132	3	Minimum door width 2'-10" for all rooms requiring entry (small closets excepted)		
5-133	1-3	Install smart technology (e.g. electronic blinds, programmed environmental controls, etc.) 1 pt per installed item		
5-134	1-3	Install cabinets with removable or slide-away lower doors for roll-up access to kitchen sink, upper cabinets that lower to counter top height for access, etc. 1 pt per feature		
5-135	1-3	Special work and forethought, innovative universal design features, see Homebuilder Guide for more information.		
		Subtotal	0	
Extra Credit for Materials Efficiency				
5-136	1-10	Extra credit for innovation in Materials Efficiency		
SECTION 5 TOTAL			0	

SECTION 6: OPERATION, MAINTENANCE & HOMEOWNER EDUCATION

6-1	3-5	A building owners manual is provided that includes at least 4 of the following: (all 8 items = 5 pts)		
		Information on local recycling programs		
		Information about available local utility programs that purchase a portion of energy from renewable energy providers		
		Explanation of the benefits of using energy efficient lighting systems (e.g., compact fluorescent light bulbs, light emitting diode (LED) in high usage areas		
		A list of practices to conserve water and energy		
		Local public transportation options		
		List of common hazardous materials often used around the building and instructions for proper handling and disposal of these materials		
		Information about organic pest control, fertilizers, de-icers, and cleaning products		
		Information about native landscape materials and/or those that have low-water requirements		
6-2	6	Building owners/occupants are familiarized with the green building goals and strategies implemented and the impacts of the occupants' practices on the costs of operating the building. Training is provided on the equipment operation and control systems		
6-3	0.5	A diagram showing the location of safety valves and controls for major building systems		
6-4	0.5	Where frost protected shallow foundations are used, notify owner of precautions, including instructions not to remove or damage insulation when modifying landscaping, to provide heat to the home as required by the irc/ibc, and to keep base materials beneath and around the home free from moisture due to broken water pipes or other water sources		
6-5	0.5	A list of local service providers that offer regularly scheduled service and maintenance contracts to assure proper performance of equipment and the structure (e.g., HVAC, water heating equipment, sealants, caulks, gutter and downspout system, shower/tub surrounds, irrigation system.)		

6-6	0.5	a photo record of framing with utilities installed. photos taken prior to installing insulation, clearly labeled, and included as part of the homeowner's binder		
6-7	0.5	Maintenance checklist		
6-8	0.5	Information about methods of maintaining the building's relative humidity in the rate of 30-60%		
6-9	0.5	Instructions for maintaining gutters, downspouts, rain gardens and other infiltration devices and importance of diverting water at least five feet away from foundation		
6-10	0.5	Instructions for inspecting the building for termite infestation		
6-11	0.5	A narrative detailing the importance of maintenance and operation retaining the attributes of a Built Green® home		
6-12	1	Educate owners/tenants about fish-friendly moss control		
SECTION 6 TOTAL			0	

SECTION 7 BUILT GREEN BRAND PROMOTION				
7-1	1-10	Extra credit for innovation in marketing for Built Green brand		
SECTION 7 TOTAL			0	

SECTION 1: BUILT GREEN TEAM	0
SECTION 2: SITE & WATER	0
SECTION 3: ENERGY EFFICIENCY	0
SECTION 4: HEATH & INDOOR AIR QUALITY	0
SECTION 5: MATERIALS EFFICIENCY	0
SECTION 6: OPERATION, MAINTENANCE & HOMEOWNER EDUCATI	0
SECTION 7: BUILT GREEN BRAND PROMOTION	0
SUBTOTAL	0
<i>House Size Multiplier</i>	<i>#N/A</i>
GRAND TOTAL	#N/A

Total Points for Project

Program Level Obtained

1-Star ★
 2-Star ★★
 3-Star ★★★
 4-Star ★★★★
 5-Star ★★★★★

By my signature, I certify that I have performed all Action Items checked above.

X _____
(Home Builder Signature and Date)

Built Green House Size Matrix

Smaller houses use a multiplier for their overall points based on SF size.
Larger houses are required to earn a minimum of points in the energy and materials section. (Points listed are for each section)
Project size to include all conditioned space of house except for an Additional Dwelling Unit (ADU)

Table o-1 House Size Matrix

Bedrooms						Multiplier	min. points req in energy section**	min. points req in materials section**
1	2	3	4	5	6			
<500	<700	<900	<1300	<1900	<2400	1.20	N/A	N/A
501-800	701-1000	901-1200	1301-1750	1901-2350	2401-2700	1.15	N/A	N/A
801-1200	1001-1400	1201-1800	1751-2250	2351-2850	2701-3600	1.10	N/A	N/A

2005 avg. size
(in WA State)

SF	1201-1600	1401-1800	1801-2400	2351-3000	2951-3600	3501-4300	1.05	N/A	N/A
		1600	1800	2400	3000	3600	4300	1.00	0
	1601-1800	1801-2000	2401-2700	3001-3400	3601-4000	4301-4700	1.00	25*	25
	1801-2000	2001-2200	2701-3000	3401-3800	4001-4400	4701-5100	1.00	35*+	35+
	2001-2200	2201-2400	3001-3300	3801-4200	4401-4800	5101-5500	1.00	45*+	45+
	>2200	>2400	>3300	>4200	>4800	>5500	1.00	55*+	55+

* Energy Star Certification can be substituted for the required point minimum