



for Homes

LEED for Homes Project Checklist

Builder Name:	Alex Dean
Project Team Leader:	Alex Dean, The Alexander Group
Home Address (Street/City/State):	Private Residence, , Maryland

Project Description

Building Type: **Single detached**

of Bedrooms: **7**

Project type: **Gut-Rehab**

Floor Area: **4,045**

Adjusted Certification Thresholds

Certified: **50.0** Gold: **80.0**

Silver: **65.0** Platinum: **95.0**

Project Point Total	Final Credit Category Point Totals			
Prelim: 87 + 0 maybe pts Final: 87	ID: 6	SS: 14	EA: 24.5	EQ: 16
Certification Level	LL: 9	WE: 5	MR: 10.5	AE: 2
Prelim: Gold Final: Gold				

date last updated : **3/12/2009**

last updated by : **KD**

Max Pts. Preliminary Rating

Available

Y / Pts

Maybe

No

Notes

Project

Points

Innovation & Design Process (ID) (Minimum 0 ID Points Required)	Max: 11	Y:6	M:0	Notes	Final: 6
1. Integrated Project Planning					
1.1 Preliminary Rating	Prereq.	Y		1/28/2008	Y
Target performance tier:	Silver				
1.2 Integrated Project Team (meet all of the following)	1	1	0	Filed, monthly or biweekly (team: arch/G	1
<input checked="" type="checkbox"/> a) Individuals or organizations with necessary capabilities	<input checked="" type="checkbox"/> c) Regular meetings held with project team				
<input checked="" type="checkbox"/> b) All team members involved in various project phases					
1.3 Professional Credentialed with Respect to LEED for Homes	1	0	0	unavailable until further notice	0
1.4 Design Charrette	1	0	0	N	0
1.5 Building Orientation for Solar Design (meet all of the following)	1	0	0	N	0
<input type="checkbox"/> a) Glazing area on north/south walls 50% greater than on east/west walls	<input type="checkbox"/> c) At least 450 sq. ft. of south-facing roof area, oriented for solar applications				
<input type="checkbox"/> b) East-west axis is within 15 degrees of due east-west	<input type="checkbox"/> d) 90% of south-facing glazing is shaded in summer, unshaded in winter				
2. Quality Management for Durability					
2.1 Durability Planning (meet all of the following)	Prereq.	Y			Y
<input checked="" type="checkbox"/> a) Durability evaluation completed	<input checked="" type="checkbox"/> d) Durability strategies incorporated into project documentation				
<input checked="" type="checkbox"/> b) Strategies developed to address durability issues	<input checked="" type="checkbox"/> e) Durability measures listed in durability inspection checklist				
<input checked="" type="checkbox"/> c) Moisture control measures from Table 1 incorporated					
2.2 Durability Management (meet one of the following)	Prereq.	Y			Y
<input checked="" type="checkbox"/> Builder has a quality management process in place	<input checked="" type="checkbox"/> Builder conducted inspection using durability inspection checklist				
2.3 Third-Party Durability Management Verification	3	3	0	JM site inspection	3

3. Innovative or Regional Design						
3.1	Innovation 1 (ruling #):	SS 05-04	1	1	0	non toxic pest control 6 measures 1
3.2	Innovation 2 (ruling #):	EA 09-04	1	1	0	MEF2.47, WF3.82 Whirlpool 9600T 1
3.3	Innovation 3 (ruling #):		1	0	0	0
3.4	Innovation 4 (ruling #):		1	0	0	0
Location & Linkages (LL) (Minimum 0 LL Points Required)			Max: 10	Y:9	M:0	Final: 9
1. LEED for Neighborhood Development						
1	LEED for Neighborhood Development		10	0	0	N 0
2. Site Selection						
2	Site Selection (<i>meet all of the following</i>)		2	2	0	FEMA & maps filed, pre-ex house 2
	<input checked="" type="checkbox"/> a) Built above 100-year floodplain defined by FEMA					<input checked="" type="checkbox"/> d) Not built on land that was public parkland prior to acquisition
	<input checked="" type="checkbox"/> b) Not built on habitat for threatened or endangered species					<input checked="" type="checkbox"/> e) Not built on land with prime soils, unique soils, or soils of state significance
	<input checked="" type="checkbox"/> c) Not built within 100 ft of water, including wetlands					
3. Preferred Locations						
3.1	Edge Development		1	0	0	N 0
OR	3.2	Infill	2	2	0	map filed 2
AND/OR	3.3	Previously Developed	1	1	0	gut rehab plan filed 1
4. Infrastructure						
4	Existing Infrastructure		1	1	0	1
5. Community Resources / Transit						
5.1	Basic Community Resources / Transit (<i>meet one of the following</i>)		1	0	0	N 0
	<input type="checkbox"/> a) Within 1/4 mile of 4 basic community resources					<input type="checkbox"/> c) Within 1/2 mile of transit services providing 30 rides per weekday
	<input type="checkbox"/> b) Within 1/2 mile of 7 basic community resources					
OR	5.2	Extensive Community Resources / Transit (<i>meet one of the following</i>)	2	2	0	102 rides total, sched filed: Owens & WI 2
	<input type="checkbox"/> a) Within 1/4 mile of 7 basic community resources					<input checked="" type="checkbox"/> c) Within 1/2 mile of transit services providing 60 rides per weekday
	<input type="checkbox"/> b) Within 1/2 mile of 11 basic community resources					
OR	5.3	Outstanding Community Resources / Transit (<i>meet one of the following</i>)	3	0	0	0
	<input type="checkbox"/> a) Within 1/4 mile of 11 basic community resources					<input type="checkbox"/> c) Within 1/2 mile of transit services providing 125 rides per weekday
	<input type="checkbox"/> b) Within 1/2 mile of 14 basic community resources					
6. Access to Open Space						
6	Access to Open Space		1	1	0	Azalea Acres (map filed) 1

Sustainable Sites (SS) (Minimum 5 SS Points Required)

Max: 22 Y:14 M:0

Final: 14

1. Site Stewardship

1.1	Erosion Controls During Construction (<i>meet all of the following</i>)	Prereq.	Y	there was no topsoil from gut rehab, top	Y
	<input type="checkbox"/> a) Stockpile and protect disturbed topsoil from erosion.			<input checked="" type="checkbox"/> d) Provide swales to divert surface water from hillsides	
	<input checked="" type="checkbox"/> b) Control the path and velocity of runoff with silt fencing or equivalent.			<input checked="" type="checkbox"/> e) Use tiers, erosion blankets, compost blankets, etc. on sloped areas.	
	<input checked="" type="checkbox"/> c) Protect sewer inlets, streams, and lakes with straw bales, silt fencing, etc.				
1.2	Minimize Disturbed Area of Site (<i>meet the appropriate requirements</i>)	1	1	0	plan filed 1
	Where the site is not previously developed, meet all the following:				
	<input type="checkbox"/> a) Develop tree / plant preservation plan with "no-disturbance" zones				
	<input type="checkbox"/> b) Leave 40% of buildable lot area, not including area under roof, undisturbed				
	OR Where the site is previously developed, meet all the following:				
	<input checked="" type="checkbox"/> c) Develop tree / plant preservation plan with "no-disturbance" zones AND				
	<input checked="" type="checkbox"/> Rehabilitate lot; undo soil compaction and remove invasive plants AND				
	<input checked="" type="checkbox"/> Meet the requirements of SS 2.2				
	OR <input type="checkbox"/> d) Build on a lot of 1/7 acre or less, or 7 units per acre.				

2. Landscaping

2.1	No Invasive Plants	Prereq.	Y	invasivespecies.gov, planting plan filed	Y
2.2	Basic Landscaping Design (<i>meet all of the following</i>)	2	2	0	turf is non-invasive, tall fescue drought 2
	<input checked="" type="checkbox"/> a) Any turf must be drought-tolerant.			<input checked="" type="checkbox"/> d) Add mulch or soil amendments as appropriate.	
	<input checked="" type="checkbox"/> b) Do not use turf in densely shaded areas.			<input checked="" type="checkbox"/> e) All compacted soil must be filled to at least 6 inches.	
	<input checked="" type="checkbox"/> c) Do not use turf in areas with slope of 25%				
AND/OR	2.3 Limit Conventional Turf	3	1	0	plan filed 1
	<input type="text" value="59%"/> Percentage of designed landscape softscape area that is turf				
AND/OR	2.4 Drought-Tolerant Plants	2	2	0	plant plan filed w/ individual resources 2
	<input type="text" value="90%"/> Percentage of installed plants that are drought-tolerant				
OR	2.5 Reduce Overall Irrigation Demand by at Least 20%	6	0	0	N 2.3 full points not anticipated 0
	<input type="text" value="0%"/> Percentage reduction in estimated irrigation water demand				

3. Reduce Local Heat Island Effects

3	Reduce Local Heat Island Effects (<i>meet one of the following</i>)	1	1	0	JM confirmed white concrete handicap 1
	<input type="checkbox"/> a) Locate trees / plantings to provide shade for 50% of hardscapes				<input checked="" type="checkbox"/> b) Install light-colored, high-albedo materials for 50% of hardscapes

4. Surface Water Management						
4.1	Permeable Lot	4	3	0	<i>plan filed</i>	3
	<input type="text" value="75%"/> vegetative landscape					
	<input type="text" value="0%"/> permeable paving					
	<input type="text" value="23%"/> impermeable surfaces directed to infiltration features					
	<input type="text" value="2%"/> other impermeable surfaces					
4.2	Permanent Erosion Controls (<i>meet one of the following</i>)	1	1	0	<i>JM verified, retaining walls</i>	1
	<input checked="" type="checkbox"/> a) For portions of lot on steep slope, use terracing and retaining walls					
	<input type="checkbox"/> b) Plant trees, shrubs, or groundcover					
4.3	Management of Runoff from Roof (<i>meet any, see Rating System for pts</i>)	2	1	0	<i>engineered plan filed</i>	1
	<input checked="" type="checkbox"/> a) Install permanent stormwater controls to manage runoff from the home					
	<input type="checkbox"/> b) Install vegetated roof to cover 50% of roof area					
	<input type="checkbox"/> c) Install vegetated roof to cover 100% of roof area					
	<input type="checkbox"/> d) Have lot designed by professional to manage runoff from home on-site					
5. Nontoxic Pest Control						
5	Pest Control Alternatives (<i>meet any of the following, 1/2 pt each</i>)	2	2	0	<i>JM inspected, borate photo & barrier filk</i>	2
	<input checked="" type="checkbox"/> a) Keep all wood at least 12" above soil					
	<input checked="" type="checkbox"/> b) Seal external cracks, joints, etc. with caulking and install pest-proof screens					
	<input checked="" type="checkbox"/> c) Include no wood-to-concrete connections, or separate connections with dividers					
	<input type="checkbox"/> d) Install landscaping so mature plants are 24" from home					
	e) In 'moderate' to 'very heavy' termite risk areas:					
	<input checked="" type="checkbox"/> i) Treat all cellulosic material with borate product to 3' above foundation					
	<input type="checkbox"/> ii) Install sand or diatomaceous earth barrier					
	<input checked="" type="checkbox"/> iii) Install steel mesh barrier termite control system					
	<input type="checkbox"/> iv) Install non-toxic termite bait system					
	<input type="checkbox"/> v) Use noncellulosic wall structure					
	<input checked="" type="checkbox"/> vi) Use solid concrete foundation walls or pest-proof masonry wall design					
6. Compact Development						
6.1	Moderate Density	2	0	0	<i>N 10,045 sf 4 units per acre</i>	0
OR	6.2 High Density	3	0	0		0
OR	6.3 Very High Density	4	0	0		0
Water Efficiency (WE) (Minimum 3 WE Points Required)		Max: 15	Y:5	M:0		Final: 5
1. Water Reuse						
1.1	Rainwater Harvesting System	4	0	0	<i>N</i>	0
	<input type="text" value="0%"/> Percentage of roof area used for harvesting					
	<input type="text" value="Outdoor only"/> Application					
AND/OR	1.2 Graywater Reuse System	1	0	0	<i>N</i>	0
OR	1.3 Use of Municipal Recycled Water System	3	0	0	<i>N</i>	0

2. Irrigation System						
2.1	High-Efficiency Irrigation System (meet any of the following, 1 pt each)	3	0	0	N	0
<input type="checkbox"/> a) Irrigation system designed by EPA Water Sense certified professional <input type="checkbox"/> b) Irrigation system with head-to-head coverage <input type="checkbox"/> c) Install central shut-off valve <input type="checkbox"/> d) Install submeter for the irrigation system <input type="checkbox"/> e) Use drip irrigation for 50% of planting beds <input type="checkbox"/> f) Create separate zones for each type of bedding		<input type="checkbox"/> g) Install timer or controller for each watering zone <input type="checkbox"/> h) Install pressure-regulating devices <input type="checkbox"/> i) High-efficiency nozzles with distribution uniformity of at least 0.70. <input type="checkbox"/> j) Check valves in heads <input type="checkbox"/> k) Install moisture sensor or rain delay controller				
AND/OR	2.2 Third-party Inspection	1	0	0	N	0
	2.3 Reduce Overall Irrigation Demand by at Least 45%	4	0	0	N	full points in SS 2.3 not anticipated 0
<input type="checkbox"/> Full points earned in SS 2.3 <input type="text" value="0%"/> Percentage reduction in estimated irrigation water demand						
3. Indoor Water Use						
3.1	High-Efficiency Fixtures and Fittings (meet any of the following, 1 pt each)	3	1	0		specs & flows filed 1
<input type="checkbox"/> a) Average flow rate of lavatory faucets is ≤ 2 gpm <input type="checkbox"/> b) Average flow rate for all showers is ≤ 2.0 gpm per stall		<input checked="" type="checkbox"/> c) Average flow rate for all toilets is ≤ 1.3 gpf; OR <input type="checkbox"/> Toilets are dual-flush; OR <input type="checkbox"/> Toilets meet the EPA Water Sense specification				
3.2	Very High-Efficiency Fixtures and Fittings (meet any, 2 pts each)	6	4	0		1.6 showers, 1.28 toilets, 1.5 lavs 4
<input checked="" type="checkbox"/> a) Average flow rate of lavatory faucets is ≤ 1.5 gpm; OR <input type="checkbox"/> Lavatory faucets meet the EPA Water Sense specification		<input checked="" type="checkbox"/> b) Average flow rate for all showers ≤ 1.75 gpm per stall <input type="checkbox"/> c) Average flow rate for all toilets is ≤ 1.1 gpf				
Energy & Atmosphere (EA) (Minimum 0 EA Points Required)		Max: 38 Y:24.5 M:0			Final: 24.5	
1. Optimize Energy Performance						
1.1	Performance of ENERGY STAR for Homes	Prereq.	Y			HERS rater: Valerie Shelton, Green Pow Y
1.2	Exceptional Energy Performance	34	20.5	0		HERS TBP, bldg report, Cert filed 20.5
<input type="text" value="4"/> IECC climate zone <input type="text" value="55"/> HERS Index						
7. Water Heating						
7.1	Efficient Hot Water Distribution System (meet one of the following)	2	2	0		plumbing plan & spec filed (JM site veri) 2
<input type="checkbox"/> a) Structured plumbing system <input checked="" type="checkbox"/> b) Central manifold distribution system		<input type="checkbox"/> c) Compact design of conventional system				
7.2	Pipe Insulation	1	1	0		photo filed 1
11. Residential Refrigerant Management						
11.1	Refrigerant Charge Test	Prereq.	Y			according to manuf specs; lines vacuun Y
11.2	Appropriate HVAC Refrigerants (meet one of the following)	1	1	0		Puron spec filed 1
<input type="checkbox"/> a) Use no refrigerants <input checked="" type="checkbox"/> b) Use non-HCFC refrigerants		<input type="checkbox"/> c) Use refrigerants that complies with global warming potential equation				

1. Material-Efficient Framing

1.1	Framing Order Waste Factor	Prereq.	Y		framing order w/ <10% waste filed	Y
1.2	Detailed Framing Documents	1	1	0	plans filed	1
1.3	Detailed Cut List and Lumber Order	1	1	0	cut list filed	1
	<input checked="" type="checkbox"/> Requirements of MR 1.2 have been met				<input checked="" type="checkbox"/> Detailed cut list and lumber order corresponding to framing plans or scopes	
AND/OR 1.4	Framing Efficiencies (meet any of the following, see Rating System for pts)	3	1	0	truss photo filed	1
	<input type="checkbox"/> Precut framing packages				<input type="checkbox"/> Stud spacing greater than 16" on center	
	<input type="checkbox"/> Open-web floor trusses				<input checked="" type="checkbox"/> Ceiling joist spacing greater than 16" on center	
	<input type="checkbox"/> Structural insulated panel walls				<input type="checkbox"/> Floor joist spacing greater than 16" on center	
	<input type="checkbox"/> Structural insulated panel roof				<input checked="" type="checkbox"/> Roof rafter spacing greater than 16" on center	
	<input type="checkbox"/> Structural insulated panel floors				<input type="checkbox"/> Two of the following: Size headers for loads; ladder blocking; drywall clips; 2-stud corners	
OR 1.5	Off-site Fabrication (meet one of the following)	4	0	0	N	0
	<input type="checkbox"/> a) Panelized construction				<input type="checkbox"/> b) Modular, prefabricated construction	

2. Environmentally Preferable Products

2.1	FSC Certified Tropical Wood (meet both of the following)	Prereq.	Y		letter filed	Y
	<input checked="" type="checkbox"/> a) Provide wood suppliers with a notice of preference for FSC-certified products				<input checked="" type="checkbox"/> b) Only use tropical wood that is FSC-certified	
2.2	Environmentally Preferable Products (meet any, 1/2 pt each)	8	5		all specs filed, see notes----->	5
	Assembly : component					
		(a) EPP		(b) Low emission		(c) Local production
	Exterior wall: framing	<input type="checkbox"/>	type: _____			<input type="checkbox"/>
	Exterior wall: siding or masonry	<input type="checkbox"/>	type: _____			<input type="checkbox"/>
	Floor: flooring	<input type="checkbox"/> (45%)	type: _____	<input type="checkbox"/>	90% hard flooring	<input type="checkbox"/> (45%)
	Floor: flooring	<input type="checkbox"/> (90%)	type: _____	<input type="checkbox"/>	SCS FloorScore	<input type="checkbox"/> (90%)
	Floor: carpet		type: SHAW carpet in home	<input checked="" type="checkbox"/>	Green Label Plus	<input type="checkbox"/>
	Floor: framing	<input type="checkbox"/>	type: _____	<input type="checkbox"/>		<input type="checkbox"/>
	Foundation: aggregate					<input checked="" type="checkbox"/>
	Foundation: cement	<input type="checkbox"/>				<input type="checkbox"/>
	Interior wall: framing	<input type="checkbox"/>	type: _____			<input type="checkbox"/>
	Interior wall, ceiling: gypsum board					<input type="checkbox"/>
	Interior wall, ceiling, millwork: paint	<input type="checkbox"/>		<input checked="" type="checkbox"/>		
	Landscape: decking or patio	<input checked="" type="checkbox"/>	type: 60% piwrc			<input type="checkbox"/>
	Other: cabinet	<input checked="" type="checkbox"/>	type: FSC-cert filed			<input type="checkbox"/>
	Other: counter	<input checked="" type="checkbox"/>	type: pcwrc Silestone			<input type="checkbox"/>
	Other: door	<input type="checkbox"/>	type: _____			<input type="checkbox"/>
	Other : trim	<input type="checkbox"/>	type: _____			<input type="checkbox"/>
	Other : adhesive, sealant			<input checked="" type="checkbox"/>		
	Other : window frame	<input type="checkbox"/>	type: _____			<input type="checkbox"/>
	Roof: framing	<input type="checkbox"/>				<input type="checkbox"/>
	Roof: roofing	<input checked="" type="checkbox"/>				<input type="checkbox"/>
	Roof, floor, wall: insulation	<input type="checkbox"/>		<input checked="" type="checkbox"/>		<input type="checkbox"/>
	Roof, floor, wall (2 of 3): sheathing	<input checked="" type="checkbox"/>	type: FSC cert filed			<input type="checkbox"/>

3. Waste Management						
3.1	Construction Waste Management Planning (<i>meet both of the following</i>)	<i>Prereq.</i>	Y		Environmental Alternatives Waste Haul	Y
	<input checked="" type="checkbox"/> a) Investigate local options for waste diversion					
						<input checked="" type="checkbox"/> b) Document diversion rate for construction waste
3.2	Construction Waste Reduction (<i>use one of the following methods</i>)	3	2.5	0	receipts & calcs filed	2.5
	<input type="text" value="4.0"/> a) pounds waste / square foot					
	<input type="text" value="25.5"/> cubic yards waste / 1,000 square feet					
	<input type="text" value="86%"/> b) percentage of waste diverted					
Indoor Environmental Quality (EQ) (Minimum 6 EQ Points Required) Max: 21 Y:16 M:0 Final: 16						
1. ENERGY STAR with Indoor Air Package						
1	ENERGY STAR with Indoor Air Package	13	0	0	N	0
2. Combustion Venting						
2.1	Basic Combustion Venting Measures (<i>meet all of the following</i>)	<i>Prereq.</i>	Y		JM verified	Y
	<input checked="" type="checkbox"/> a) no unvented combustion appliances					<input checked="" type="checkbox"/> d) space, water heating equipment designed with closed combustion; OR
	<input checked="" type="checkbox"/> b) carbon monoxide monitors on each floor					<input type="checkbox"/> space and water heating equipment has power-vented exhaust; OR
	<input checked="" type="checkbox"/> c) all fireplaces and woodstoves have doors					<input type="checkbox"/> space and water heating equipment located in detached or open-air facility; OR
						<input type="checkbox"/> no space- or water-heating equipment with combustion
2.2	Enhanced Combustion Venting Measures (<i>meet one of the following</i>)	2	2	0	photo filed, JM verified	2
	Type of Fireplace or stove				Better practice (1 pt)	Best practice (2 pts) (must also meet Better Practice)
	None				<input type="checkbox"/> masonry heater	<input type="checkbox"/> granted automatically
	Masonry wood-burning fireplace				<input type="checkbox"/> listed by testing lab and meets EPA standards	<input type="checkbox"/> back-draft potential test
	Factory-built wood-burning fireplace				<input type="checkbox"/> listed by testing lab and meets EPA standards	<input type="checkbox"/> back-draft potential test
	Woodstove and fireplace insert				<input checked="" type="checkbox"/> listed, power- or direct-vented, fixed doors	<input checked="" type="checkbox"/> electronic pilot
	Natural gas, propane, or alcohol stove				<input type="checkbox"/> EPA certified or meets safety requirements	<input type="checkbox"/> power- or direct-venting
	Pelle stove					
3. Moisture Control						
3	Moisture Load Control (<i>meet one of the following</i>)	1	1	0	Carrier Ideal Humidity control spec filed	1
	<input type="checkbox"/> a) Additional dehumidification system					<input checked="" type="checkbox"/> b) Central HVAC system equipped with additional dehumidification mode
4. Outdoor Air Ventilation						
4.1	Basic Outdoor Air Ventilation (<i>meet one of the following</i>)	<i>Prereq.</i>	Y		100CFM (ASHRAE requ. 95 CFM)	Y
	<input type="checkbox"/> a) Located in a climate with $\leq 4,500$ infiltration degree days					<input type="checkbox"/> c) Intermittent ventilation
	<input checked="" type="checkbox"/> b) Continuous ventilation					<input type="checkbox"/> d) Passive ventilation
4.2	Enhanced Outdoor Air Ventilation (<i>meet one of the following</i>)	2	2	0	Carrier ERV spec filed	2
	<input type="checkbox"/> a) In climates with $\leq 4,500$ infiltration degree days, install active ventilation system					<input checked="" type="checkbox"/> b) Install heat recovery system
4.3	Third-Party Performance Testing	1	1	0	100CFM Valerie Shelton (HERS rater) te:	1

5. Local Exhaust					
5.1	Basic Local Exhaust (meet all of the following)	Prereq.	Y		Y
	<input checked="" type="checkbox"/> a) Bathroom and kitchen exhaust meets ASHRAE Std. 62.2 air flow requirement			<input checked="" type="checkbox"/> c) Air exhausted to outdoors	
	<input checked="" type="checkbox"/> b) Fans and ducts designed and installed to ASHRAE Std. 62.2			<input checked="" type="checkbox"/> d) ENERGY STAR labeled bathroom exhaust fans	
5.2	Enhanced Local Exhaust (meet one of the following)	1	0	0	N
	<input type="checkbox"/> a) Occupancy sensor			<input type="checkbox"/> c) Automatic timer tied to switch	
	<input type="checkbox"/> b) Automatic humidistat controller			<input type="checkbox"/> d) Continuously operating exhaust fan	
5.3	Third-Party Performance Testing	1	1	0	CFM, bsmnt bath 78, MB 50, Powd rm
6. Distribution of Space Heating and Cooling					
6.1	Room-by-Room Load Calculations	Prereq.	Y	Manuals J & D filed	Y
6.2	Return Air Flow / Room-by-Room Controls (meet one of the following)	1	0	0	N
	A. Forced-Air Systems			B. Nonducted HVAC Systems	
	<input type="checkbox"/> a) Return air opening of 1 sq. inch per cfm of supply			<input type="checkbox"/> Flow control valves on every radiator	
	<input type="checkbox"/> b) Limited pressure differential between closed room and adjacent spaces				
6.3	Third-Party Performance Test / Multiple Zones (meet one of the following)	2	0	0	N
	A. Forced-Air Systems			B. Nonducted HVAC Systems	
	<input type="checkbox"/> Have supply air flow rates in each room tested and confirmed			<input type="checkbox"/> Install at least two distinct zones with independent thermostat control	
7. Air Filtering					
7.1	Good Filters	Prereq.			Y
7.2	Better Filters	1	0	0	0
OR	7.3 Best Filters	2	2	0	Carrier GAPAA MERV 15
8. Contaminant Control					
8.1	Indoor Contaminant Control during Construction	1	1	0	plastic film secured w/ metal cover, pho
8.2	Indoor Contaminant Control (meet any of the following, 1 pt each)	2	1	0	plan filed, JM verified
	<input type="checkbox"/> a) Design and install permanent walk-off mats at each entry			<input type="checkbox"/> c) Install central vacuum system with exhaust to outdoors	
	<input checked="" type="checkbox"/> b) Design shoe removal and storage space near primary entryway				
8.3	Preoccupancy Flush	1	1	0	Nov.7th-28th letter filed
9. Radon Protection					
9.1	Radon-Resistant Construction in High-Risk Areas	Prereq.	N/A	zone 2	N/A
9.2	Radon-Resistant Construction in Moderate-Risk Areas	1	1	0	photo of pipe filed

10. Garage Pollutant Protection					
10.1	No HVAC in Garage	<i>Prereq.</i>	Y		Y
10.2	Minimize Pollutants from Garage (<i>meet all of the following</i>)	2	2	0	2
	a) In conditioned spaces above garage:				
	<input checked="" type="checkbox"/> Seal all penetrations and connecting floor and ceiling joist bays				
	<input checked="" type="checkbox"/> Paint walls and ceilings of shared walls, including garage				
	b) In conditioned spaces next to garage				
	<input checked="" type="checkbox"/> Weather-strip all doors				
	<input checked="" type="checkbox"/> carbon monoxide detectors in rooms that share a door with garage				
	<input checked="" type="checkbox"/> Seal all penetrations and cracks at the base of walls				
AND/OR	10.3 Exhaust Fan in Garage (<i>meet one of the following</i>)	1	1	0	spec sheet filed 1
	<input type="checkbox"/> a) Fan runs continuously				
	<input checked="" type="checkbox"/> b) Fan designed with automatic timer control				
OR	10.4 Detached Garage or No Garage	3	0	0	N 0

Awareness & Education (AE) (Minimum 0 AE Points Required) **Max: 3 Y:2 M:0** **Final: 2**

1. Education of the Homeowner or Tenant					
1.1	Basic Operations Training (<i>meet both of the following</i>)	<i>Prereq.</i>	Y	photo filed, warranties & manuals in "b	Y
	<input checked="" type="checkbox"/> a) Operations and training manual				
	<input checked="" type="checkbox"/> b) One-hour walkthrough with occupant(s)				
1.2	Enhanced Training	1	1	0	each sub & arch/builder w/ homeowner 1
1.3	Public Awareness (<i>meet three of the following</i>)	1	1	0	www.alexandergoup.net, article written 1
	<input type="checkbox"/> a) Open house on at least four weekends				
	<input checked="" type="checkbox"/> b) Website about features and benefits of LEED homes				
	<input checked="" type="checkbox"/> c) Newspaper article on the project				
	<input checked="" type="checkbox"/> d) Display LEED signage on the exterior of the home				

2. Education of the Building Manager					
2	Education of the Building Manager (<i>meet both of the following</i>)	1	0	0	N Multi Family only 0
	<input type="checkbox"/> a) Operations and training manual				
	<input type="checkbox"/> b) One-hour walkthrough with building manager				

By affixing my signature below, the undersigned does hereby declare and affirm to the USGBC that the LEED for Homes requirements, as specified in the LEED for Homes Rating System, have been met for the indicated credits and will, if audited, provide the necessary supporting documents.

Project Team Leader Company
 Signature Date

By affixing my signature below, the undersigned does hereby declare and affirm to the USGBC that the required inspections and performance testing for the LEED for Homes requirements, as specified in the LEED for Homes Rating System, have been completed, and will provide the project documentation file, if requested.

Green Rater Company
 Signature Date

By affixing my signature below, the undersigned does hereby declare and affirm to the USGBC that the required inspections and performance testing for the LEED for Homes requirements, as specified in the LEED for Homes Rating System, have been completed, and will provide the project documentation file, if requested.

Provider's Certifier Company
 Signature Date



for Homes

LEED for Homes Project Checklist

Addendum: Prescriptive Approach for Energy and Atmosphere (EA) Credits

Points cannot be earned in both the Prescriptive (below) and the Performance paths of the EA section.

	Max Pts. Available	Preliminary Rating			Notes	Project Points
		Y/Pts	Maybe	No		
Energy & Atmosphere (EA) (Minimum 0 EA Points Required)	Max: 38	Y:24.5	M:0			Final: 24.5
2. Insulation						
2.1 Basic Insulation (meet both of the following)	<i>Prereq.</i>	Y		spray foam		Y
<input checked="" type="checkbox"/> a) Insulation meets R-value requirements of IECC				<input checked="" type="checkbox"/> b) Insulation meets HERS Grade II specifications for installation		
2.2 Enhanced Insulation (meet both of the following)	2	0	0			0
<input checked="" type="checkbox"/> a) Insulation exceeds R-value requirements of IECC by 5%				<input checked="" type="checkbox"/> b) Insulation meets HERS Grade I specifications for installation		
3. Air Infiltration						
3.1 Reduced Envelope Leakage	<i>Prereq.</i>	Y		1518 CFM 50		Y
<input type="checkbox"/> 2.4 Air leakage rate in ACH50						
3.2 Greatly Reduced Envelope Leakage	2	0	0			0
OR 3.3 Minimal Envelope Leakage	3	0	0			3
4. Windows						
4.1 Good Windows (meet all of the following)	<i>Prereq.</i>	Y		North Central		Y
<input checked="" type="checkbox"/> a) Windows and glass doors meet ENERGY STAR BOP window specifications				<input checked="" type="checkbox"/> b) Skylight glazing area is ≤ 3% of floor area AND		
				<input checked="" type="checkbox"/> Skylights meet ENERGY STAR requirements for skylights		
4.2 Enhanced Windows	2	0	0			0
OR 4.3 Exceptional Windows	3	0	0	U 0.34 SHGC 0,31		0
5. Heating and Cooling Distribution System						
5.1 Reduced Distribution Losses (meet all of the following, as appropriate)	<i>Prereq.</i>	Y		total leakage to outside 75CFM at 25		Y
A. Forced-Air Systems				B. Nonducted HVAC Systems		
<input type="checkbox"/> a) Duct leakage of ≤ 4.0 CFM at 25 Pascals per 100 sq.ft.				<input type="checkbox"/> At least R-3 insulation around pipes in unconditioned spaces		
<input checked="" type="checkbox"/> b) No ducts in exterior walls unless extra insulation is added						
<input type="checkbox"/> c) At least R-6 insulation around ducts in unconditioned spaces						
5.2 Greatly Reduced Distribution Losses (meet the following, as appropriate)	2	0	0			0
A. Forced-Air Systems				B. Nonducted HVAC Systems		
<input checked="" type="checkbox"/> Duct leakage of ≤ 3.0 CFM at 25 Pascals per 100 sq.ft.				<input type="checkbox"/> Keep the boiler and pipes entirely within conditioned envelope		
OR 5.3 Minimal Distribution Losses (meet one of the following, as appropriate)	3	0	0	1.8CFM at 25 per 100sf		0
A. Forced-Air Systems				B. Nonducted HVAC Systems		
<input type="checkbox"/> a) Duct leakage of ≤ 1.0 CFM at 25 Pascals per 100 sq.ft.				<input type="checkbox"/> Outdoor reset control to set distribution temp. based on outdoor temp.		
<input type="checkbox"/> b) Air-handler and all ductwork is within conditioned envelope and EA 3.3 is met						
<input checked="" type="checkbox"/> c) Air-handler and all ductwork visibly within conditioned spaces (not in walls, etc.)						

6. Space Heating and Cooling Equipment					
6.1	Good HVAC Design and Installation (<i>meet all of the following</i>)	Prereq.	Y	Manual J filed	Y
	<input checked="" type="checkbox"/> a) Design and size HVAC equipment using ACCA Manual J or equivalent			<input checked="" type="checkbox"/> c) Install ENERGY STAR programmable thermostat OR	
	<input checked="" type="checkbox"/> b) Install efficient heating and cooling equipment (see Table)			<input type="checkbox"/> Heat pump or hydronic installed and exempted from part (c)	
	<input type="text" value=""/> Heat Pumps	Type of HVAC			
	<input type="text" value="16 & 19"/> Cooling efficiency (SEER / EER)	<input type="text" value="8.4-9.2"/> Heating Efficiency (AFUE / HSPF / COP)			
6.2	High-Efficiency HVAC	2	0	0	Carrier Infinity specs filed 0
OR	6.3 Very High Efficiency HVAC	3	0	0	16 SEER 8.4 HSPF: 19 SEER 9.2 HSPF 0
7. Water Heating					
7.1	Efficient Hot Water Distribution System (<i>meet one of the following</i>)	2	0	0	plumbing plan & spec filed (JM site veri) 0
	<input type="checkbox"/> a) Structured plumbing system			<input type="checkbox"/> c) Compact design of conventional system	
	<input checked="" type="checkbox"/> b) Central manifold distribution system				
7.2	Pipe Insulation	1	0	0	Photo filed 0
7.3	Efficient Domestic Hot Water Equipment	3	0	0	.54 EF .76 recovery 74 gal propane 0
	<input type="text" value=""/> 74 Gal Propane	Type of DHW system			
	<input type="text" value="0.5"/> Efficiency	<input type="text" value=""/> Solar: Percentage of annual DHW load			
8. Lighting					
8.1	ENERGY STAR Lights	Prereq.	Y		Y
8.2	Improved Lighting (<i>meet one of the following, see Rating System for pts</i>)	1.5	0	0	85%CFL, 5%pin based 0
	<input type="checkbox"/> a) Indoor lighting - 3 additional ENERGY STAR lights in high-use rooms			<input type="checkbox"/> b) Exterior lighting - motion sensor controls or integrated PV	
OR	8.3 Advanced Lighting Package (<i>meet one of the following</i>)	3	0	0	0
	<input type="checkbox"/> a) 60% of fixtures are ENERGY STAR fixtures			<input type="checkbox"/> b) 80% of lamps are ENERGY STAR CFLs	
9. Appliances					
9.1	High-Efficiency Appliances (<i>meet any, see Rating System for pts</i>)	2	0	0	RF 480Kwh, .83EF dw 0
	<input checked="" type="checkbox"/> a) ENERGY STAR labeled refrigerator			<input checked="" type="checkbox"/> c) ENERGY STAR labeled dishwasher using 6.0 gallons per cycle or less	
	<input type="checkbox"/> b) ENERGY STAR labeled ceiling fans in living/family room and all bedrooms			<input checked="" type="checkbox"/> d) ENERGY STAR clothes washer	
9.2	Water-Efficiency Clothes Washer	1	0	0	Whirlpool 9600T MEF2.47, WF 3.82 0
10. Renewable Energy					
10	Renewable Energy System	10	0	0	N Not anticipated 0.0
	<input type="text" value="0"/> Reference electric load, kWh/yr (based on HERS model)	<input type="text" value="0"/> Electricity supplied by renewable system, kWh/yr			
	<input type="text" value="0.0%"/> Percentage of annual reference electric load met by renewable system				
11. Residential Refrigerant Management					
11.1	Refrigerant Charge Test	Prereq.		according to manuf specs; lines vacuum	Y
11.2	Appropriate HVAC Refrigerants (<i>meet one of the following</i>)	1	0	0	Puron spec filed 0
	<input type="checkbox"/> a) Use no refrigerants			<input type="checkbox"/> c) Use refrigerants that complies with global warming potential equation	
	<input checked="" type="checkbox"/> b) Use non-HCFC refrigerants				

LEED for Homes Project Checklist, Project Notes

This section was created to give project teams additional space to make internal notes on the progress of the project. It does not need to be used and it **should not** be submitted to USGBC. This section is unlocked, so project teams are welcome to make changes to the format as necessary. Any comments or directions provided below have not been created or endorsed by the US Green Building Council.

Date project began:

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Initiated by:

Alex Dean

	<i>Credits</i>	<i>Responsible Party</i>	<i>Last Updated</i>	<i>Additional Notes</i>
ID 1. Integrated Project Planning				
	1.1	LEED-H Provider		DOC: none
	1.2			
	1.3	TBD		DOC: credentials
	1.4	LEED-H Provider		DOC: Mtg minutes if requested
	1.5	Architect		DOC: Calculations/Simulation results
ID 2. Quality Mgmt for Durability				
	2.1	Architect / GC		ID 2.1 - DOC: Complete Durability Eval pre-construction & Durability Checklist at finish
	2.2	Architect / GC		ID 2.2 - DOC: Durability Checklist or other QA plan
	2.3	Subs / GC / LEED-H Provider		DOC: Photos of strategies as requested

3. Innovative or Regional Design			
<i>Credits</i>	<i>Responsible Party</i>	<i>Last Updated</i>	<i>Additional Notes</i>
3.1	TBD		DOC: Accountability Form
3.2	TBD		DOC: Accountability Form
3.3	TBD		DOC: Accountability Form
3.4	TBD		DOC: Accountability Form

LL 1. LEED for Neighborhood Development			
<i>Credits</i>	<i>Responsible Party</i>	<i>Last Updated</i>	<i>Additional Notes</i>
1	LEED-H Provider		
LL 2. Site Selection			
2	Developer		DOC: Accountability Form, site info if requested
LL 3. Preferred Locations			
3.1	Developer		DOC: none
3.2	Developer		DOC: none
3.3	Developer		DOC: none
LL 4. Infrastructure			
4	Developer		DOC: none
LL 5. Community Resources			
5.1	Developer		DOC: none
5.2	Developer		DOC: none
5.3	Developer		DOC: none
LL 6. Access to Open Space			
6	Developer		DOC: Maps if requested

<i>Credits</i>	<i>Responsible Party</i>	<i>Last Updated</i>	<i>Additional Notes</i>
SS 1. Site Stewardship			
1.1	Architect		DOC: Erosion control plan & photos if requested
1.2	Architect		DOC: none
SS 2. Landscaping			
2.1	Landscape Designer		DOC: List of species used, list of local invasive species, & Accountability Form
2.2	Landscape Designer		DOC: Accountability Form
2.3	Landscape Designer		DOC: Landscape area calcs & Accountability Form
2.4	Landscape Designer		DOC: List of species used, list of local drought-tolerant plants, & Accountability Form
2.5	Landscape Designer		DOC: List of species used, water budget calcs & Accountability Form
SS 3. Reduce Local Heat Island Effects			
3	Landscape Designer		DOC: Site calcs & Accountability Form

SS 4. Surface Water Management			
	4.1	Landscape Designer	DOC: Site area calcs, water management plan & Accountability Form
		Civil Engineer	DOC: Site area calcs & tree/plant tally
	4.2	Civil Engineer	DOC: Water management plan & Accountability Form
	4.3		
SS 5. Nontoxic Pest Control			
	5	Developer	DOC: Pictures if requested
SS 6. Compact Development			
	6.1	Developer	DOC: none
	6.2	Developer	DOC: none
	6.3		

Credits

Responsible Party

Last Updated

Additional Notes

WE 1. Water Reuse			
	1.1	Civil Engineer	DOC: Water re-use calcs
	1.2	Architect / MEP / GC	DOC: Water re-use calcs
	1.3	Architect	DOC: Water re-use calcs

WE 2. Irrigation System			
2.1	Landscape Designer		DOC: Accountability Form
2.2	TBD		DOC: none
2.3	Landscape Designer		DOC: List of species used, water budget clacs & Accountability Form

WE 3. Indoor Water Use			
3.1	Architect / MEP		DOC: none
3.2	Architect / MEP		DOC: none

Credits *Responsible Party* *Last Updated* *Additional Notes*

EA 1. Optimize Energy Performance			
1.1	Green Rater		DOC: Energy Model report
1.2	Green Rater		DOC: Energy Model report

EA 7. Water Heating			
7.1	MEP		DOC: Accountability Form
7.2	MEP		DOC: none

EA 11. Residential Refrigerant Management			
11.1	MEP / HVAC Contractor		DOC: none
11.2	MEP / HVAC Contractor		DOC: none

Credits

Responsible Party

Last Updated

Additional Notes

MR 1. Material-Efficient Framing			
1.1	Architect / GC		DOC: Calc showing waster factor for framing order
1.2	Architect / GC		DOC: Framing plans
1.3	Architect / GC		
1.4	Architect / GC		DOC: none
1.5	Architect / GC		
MR 2. Environmentally Preferable Products			
2.1	Architect / GC		DOC: Copt of notice to suppliers & Accountability Form
2.2	Architect / GC		DOC: Proof of compliance, proof of purchase & Accountability Form see Environmentally Preferrable Products Tracking Form Exterior wall: framing - Exterior wall: siding or masonry: Floor: flooring (45%) -LOW VOC finish hardwood Floor: flooring (90%) - Floor: carpet - filed Floor: framing - Foundation: aggregate - supplies vary from DC area to Georgia, w/in 500 miles of MD Foundation: cement - Interior wall: framing - Interior wall, ceiling: gypsum board - Interior wall, ceiling, millwork: paint -Benjamin Moore Aura Landscape: decking or patio - 60% post industrial waste recycled content, spec filed Other: cabinet - filed Other: counter - filed Other: door - Other: trim - Other: adhesive, sealant - filed Other: window frame - Roof: framing - Roof: roofing - filed Roof, floor, wall: insulation - spec filed Roof, floor wall (2 of 3): filed

MR 3. Waste Management			
3.1	Architect / GC		DOC: List of recycling options
3.2	General Contractor (GC)		DOC: Tipping/recycling receipts

Credits *Responsible Party* *Last Updated* *Additional Notes*

EQ 1. ENERGY STAR w/ IAP			
1	Green Rater		

EQ 2. Combustion Venting			
2.1	Architect / MEP		DOC: none
2.2	MEP		

EQ 3. Moisture Control			
3	MEP		

EQ 4. Outdoor Air Ventilation			
4.1	MEP		DOC: Design calcs & Accountability Form
4.2	MEP		DOC: Accountability Form
4.3	Green Rater		

EQ 5. Local Exhaust			
5.1	MEP		DOC: Fan ratings & Accountability Form
5.2	MEP		DOC: Product info if requested
5.3	Green Rater		DOC: none
EQ 6. Distribution of Space Heating and Cooling			
6.1	MEP		DOC: Copy of Manual J + D calcs & Accountability Form
6.2	MEP		DOC: None
6.3	Green Rater		DOC: testing results
EQ 7. Air Filtering			
7.1	MEP		DOC: Product info if requested
7.2	MEP		DOC: Product info if requested
7.3	MEP		DOC: Product info if requested
EQ 8. Contaminant Control			
8.1	Developer		DOC: Photos & Accountability Form
8.2	Architect		DOC: None
8.3	Developer		DOC: Accountability Form
EQ 9. Radon Protection			
9.1	Architect / Developer		DOC: Accountability Form
9.2	Architect / Developer		DOC: Accountability Form

EQ 10. Garage Pollutant Protection			
10.1	MEP		
10.2	Architect		
10.3	MEP		
10.4	Architect		DOC: None

Credits Responsible Party Last Updated Additional Notes

AE 1. Education of Home Owner / Tenant			
1.1	Developer		DOC: Copy of Homeowner Manual, outline of training plan & Accountability Form
1.2	Developer		DOC: Training description & Accountability Form
1.3	Developer		DOC: Copies of materials

AE 2. Education of the Building Manager			
2	Developer		DOC: Copy of Operator Manual, outline of training plan & Accountability Form

<i>Credits</i>	<i>Responsible Party</i>	<i>Last Updated</i>	<i>Additional Notes</i>	
EA 2. Insulation				
	2.1	Builder/Energy Star Rater		DOC: Thermal Bypass Checklist
	2.2	Architect/Builder		DOC: Blower Door Test Results
EA 3. Air Infiltration				
	3.1	Builder/Energy Star Rater		
	3.2	Builder/Energy Star Rater		
OR	3.3	Builder/Energy Star Rater		
EA 4. Windows				
	4.1	Architect/Builder		DOC: compliance, specification sheet
	4.2	Architect/Builder		
OR	4.3	Architect/Builder		
EA 5. Heating and Cooling Distribution				
	5.1	MEP/Architect/HVAC Installer		DOC: compliance, specification sheet(s)
	5.2	MEP/Architect/HVAC Installer		DOC: compliance, specification sheet(s)
OR	5.3	MEP/Architect/HVAC Installer		DOC: compliance, specification sheet(s)

EA 6. Space Heating and Cooling Equipment			
OR	6.1	MEP/Architect/HVAC Installer	DOC: copy of ACCA Manual J; photo(s) and/or support documentation as nec.; accountability form
	6.2	MEP/Architect/HVAC Installer	
	6.3	MEP/Architect/HVAC Installer	
EA 7. Water Heating			
	7.1	MEP/HVAC Installer	DOC: support documentation and calculations; accountability form
	7.2	MEP/HVAC Installer	
	7.3	MEP/HVAC Installer	
EA 8. Lighting			
OR	8.1	Architect/Builder	DOC: photo, specification sheet(s)
	8.2	Architect/Builder	
	8.3	Architect/Builder	
EA 9. Appliances			
	9.1	Architect/Builder	DW, Refrigerator, Clothes Washer (highly effic.)
	9.2	Architect/Builder	
EA 10. Renewable Energy			
	10	Architect/Builder	
EA 11. Residential Refrigerant Management			
	11.1	MEP/HVAC Installer	DOC: copy of refrigerant charge test
	11.2	MEP/HVAC Installer	DOC: specification sheet