



LEED for Homes Project Summary

This documentation package must be submitted to GBCI by the designated LEED for Homes Provider. The certification fee should be paid through LEED Online.

E-mail certification package to: homescertification@gbci.org

Certification Package

- Project Summary page
- Signed LEED for Homes Checklist
- Signed Accountability Forms
- Signed Durability Inspection Checklist
- Durability Evaluation Form
- Multi-home or Multi-building page (if appl.)
- Conflict of Interest Form (if appl.)

Project Information

Registration #:	#####	Reg Date:	10/26/16
Project name	The Urban 2100		
Project address(es)	2100 N Mayfair Rd		
City	Wauwatosa		
Metro. Area	Milwaukee		
State	WI		
Zip Code	53226		
Subdivision / Dev.			

Project Team Information

Team Leader	Amanda Braun
Company	e-3 GROUP LLC
Address	626 E. Wisconsin Ave., Suite 1020A
E-mail	abraun@e-3goup.com
Builder / Developer	Altius Building Company
Other project team members	Phil Vetterkind, SBS Tom Krawczyk, TJH

Verification Team Information

Provider QAD	Mike Holcomb	QAD Company	Green Home Institute
Green Rater	Tom Krawczyk	Rater Company	TJH Energy Consulting
Green Rater		Rater Company	
Energy Rater	Tom Krawczyk	Rater Company	TJH Energy Consulting

Project Information

Type of building:	Multi-family	# of stories	4
Type of builder / project:	Multi-family Developer	Avg. # of bedrooms:	1.2
Affordable project?	No	Gut-rehab?	No
		Avg. floor area (square feet):	828
# of bldgs in this submittal:	1	Avg. Home Size Adjustment:	calculate -5.5

of units in this submittal:

97

EA pathway?

Performance

IECC climate zone

6

HERS Index (if any)

62

EPA radon zone

2



for Homes

LEED for Homes Project Checklist

Builder Name:	Altius Building Company
Project Team Leader:	Amanda Braun, e-3 GROUP LLC
Home Address (Street/City/State):	2100 N Mayfair Rd, Wauwatosa, WI

Project Description

Building Type: **Multi-family**

Project type: **Multi-family Developer**

of Units: **97**

Avg. Home Size Adjustment: **-6**

Adjusted Certification Thresholds

Certified: **39.5**

Gold: **69.5**

Silver: **54.5**

Platinum: **84.5**

Project Point Total

Prelim: **82.5 + 0 maybe pts** Final: **82**

Final Credit Category Point Totals

ID: 9.5 SS: 16 EA: 15.5 EQ: 11

Certification Level

Prelim: **Gold** Final: **Gold**

LL: 9 WE: 7 MR: 12 AE: 2

Date Most Recently Updated: 7/23/18

Updated by: Phil Vetterkind, Tom Krawczyk, Dave Madsen

✖ Indicates that an Accountability Form is required.

Max Pts. Preliminary Rating
Available Y / Pts Maybe No

Project
Points

Innovation & Design Process (ID) (Minimum 0 ID Points Required) **Max: 11** **Y:10** **M:0** **Notes** **Final: 9.5**

1. Integrated Project Planning

1.1 Preliminary Rating	Prereq.	Y			Y
Target performance tier:			Certified		
1.2 Integrated Project Team (meet all of the following)	1	1	0		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	1	0	Jim Hunzinger LEED Homes AP	1
1.4 Design Charrette	1	1	0		1
1.5 Building Orientation for Solar Design (meet all of the following)	1	0	0		0
<input type="checkbox"/> a) Glazing area on north/south walls 50% greater than on east/west walls				<input checked="" type="checkbox"/> c) At least 450 sq. ft. of south-facing roof area, oriented for solar applications	
<input checked="" type="checkbox"/> b) East-west axis is within 15 degrees of due east-west				<input checked="" 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"/> c-v) Install drain and drain pans for clothes washers in/over living spaces; OR	
<input checked="" type="checkbox"/> b) Strategies developed to address durability issues				<input type="checkbox"/> no clothes washers in/over living spaces	
<input checked="" type="checkbox"/> c-i) Nonpaper-faced backer board in tub, shower, spa areas				<input checked="" type="checkbox"/> c-vi) Exhaust conventional clothes dryers directly to outdoors	
<input checked="" type="checkbox"/> c-ii) No carpet in kitchen, bathroom, laundry, and spa areas				<input checked="" type="checkbox"/> c-vii) Install drain and drain pan for condensing clothes dryers	
<input checked="" type="checkbox"/> c-iii) No carpet within 3 ft of each entryway				<input checked="" type="checkbox"/> d) Durability strategies incorporated into project documentation	
<input checked="" type="checkbox"/> c-iv) Install drain and drain pans in tank water heaters in/over living spaces; OR				<input checked="" type="checkbox"/> e) Durability measures listed in durability inspection checklist	
<input type="checkbox"/> no tank water heaters in/over living spaces					

2.2	Durability Management (<i>meet one of the following</i>)	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	3	
3. Innovative or Regional Design						
3.1	<input checked="" type="checkbox"/> Innovation 1 (ruling #): LLc5 Community Transit >250	1	1	0	250+ 1	
3.2	<input checked="" type="checkbox"/> Innovation 2 (ruling #): SSc5 Non Toxic Pest Control Exemp	1	1	0	0.5	
3.3	<input checked="" type="checkbox"/> Innovation 3 (ruling #): WEc2 Irrigation Exemp Perf	1	1	0	1/2 Point for each measure over 3pts 1	
3.4	<input checked="" type="checkbox"/> Innovation 4 (ruling #): IDpc28 Trades Training	1	1	0	Sign in Sheet 1	
Location & Linkages (LL) (Minimum 0 LL Points Required)		Max: 10	Y:9	M:0	Notes	Final: 9
1. LEED for Neighborhood Development						
1	LEED for Neighborhood Development	10	0	0	0	
2. Site Selection						
2	<input checked="" type="checkbox"/> Site Selection (<i>meet all of the following</i>)	2	2	0	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	0	
OR	3.2 Infill	2	2	0	2	
AND/OR	3.3 Previously Developed	1	1	0	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	0	
	<input checked="" type="checkbox"/> a) Within 1/4 mile of 4 basic community resources			<input checked="" type="checkbox"/> c) Within 1/2 mile of transit services providing 30 rides per weekday		
	<input checked="" 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	0	0	0	
	<input checked="" 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 checked="" 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	3	0	3	
	<input checked="" type="checkbox"/> a) Within 1/4 mile of 11 basic community resources			<input checked="" type="checkbox"/> c) Within 1/2 mile of transit services providing 125 rides per weekday		
	<input checked="" type="checkbox"/> b) Within 1/2 mile of 14 basic community resources					
6. Access to Open Space						
6	Access to Open Space	1	0	0	Can't find a park w/l walking .5 mile 0	

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

Max: 22 Y:16 M:0

Notes

Final: 16

1. Site Stewardship

1.1	Erosion Controls During Construction (<i>meet all of the following</i>)	Prereq.	Y			Y
	<input checked="" type="checkbox"/> a) Stockpile and protect disturbed topsoil from erosion. <input checked="" type="checkbox"/> b) Control the path and velocity of runoff with silt fencing or equivalent. <input checked="" type="checkbox"/> c) Protect sewer inlets, streams, and lakes with straw bales, silt fencing, etc.					
	<input checked="" type="checkbox"/> d) Provide swales to divert surface water from hillsides <input checked="" type="checkbox"/> e) Use tiers, erosion blankets, compost blankets, etc. on sloped areas.					
1.2	Minimize Disturbed Area of Site (<i>meet the appropriate requirements</i>)	1	1	0	See drawing C400 (97 units/1.41ac = 68.79 u/a)	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 type="checkbox"/> c) Develop tree / plant preservation plan with "no-disturbance" zones AND <input type="checkbox"/> Rehabilitate lot; undo soil compaction and remove invasive plants AND <input type="checkbox"/> Meet the requirements of SS 2.2					
	OR <input checked="" 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		Y
	2.2	☞ Basic Landscaping Design (<i>meet all of the following</i>)	2	2	0	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 tilled 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	2	0	2
		<input type="text" value="27%"/> Percentage of designed landscape softscape area that is turf				See calculations in SS Cr 2.3 folder
AND/OR	2.4	☞ Drought-Tolerant Plants	2	2	0	2
		<input type="text" value="100%"/> Percentage of installed plants that are drought-tolerant				See Landscaping Plant list on L-100
OR	2.5	☞ Reduce Overall Irrigation Demand by at Least 20%	6	0	0	0
		<input type="text" value="0%"/> Percentage reduction in estimated irrigation water demand		(calculate)		
3. Reduce Local Heat Island Effects						
	3	☞ Reduce Local Heat Island Effects (<i>meet one of the following</i>)	1	0	0	0
		<input checked="" 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 sidewalks, patios, and driveways		
4. Surface Water Management						
	4.1	☞ Permeable Lot	4	0	0	0
		<input type="text" value="46%"/> vegetative landscape				Calculations done 3-15-18
		<input type="text" value="3%"/> permeable paving				
		<input type="text" value="0%"/> impermeable surfaces directed to infiltration features				
		<input type="text" value="51%"/> other impermeable surfaces (areas not counted towards credit)				
	4.2	Permanent Erosion Controls (<i>meet one of the following</i>)	1	1	0	1
		<input checked="" type="checkbox"/> a) For portions of lot on steep slope, use terracing and retaining walls		<input checked="" type="checkbox"/> b) Plant trees, shrubs, or groundcover		Tom Verified at final inspection
	4.3	☞ Management of Runoff from Roof (<i>meet any, see Rating System for pts</i>)	2	2	0	2
		<input checked="" type="checkbox"/> a) Install permanent stormwater controls to manage runoff from the home		<input checked="" type="checkbox"/> c) Install vegetated roof to cover 100% of roof area		Green Roof Drawings
		<input checked="" type="checkbox"/> b) Install vegetated roof to cover 50% of roof area		<input checked="" type="checkbox"/> d) Have lot designed by professional to manage runoff from home on-site		

5. Nontoxic Pest Control

5 Pest Control Alternatives (*meet any of the following, 1/2 pt each*)

2

2

0

5 measures include 1/2 for innovation

2

- a) Keep all exterior wood at least 12" above soil
- b) Seal external cracks, joints, etc. with caulking and install pest-proof screens
- c) Include no wood-to-concrete connections, or separate connections with dividers
- d) Install landscaping so mature plants are 24" from home

e) In 'moderate' to 'very heavy' termite risk areas:

- i) Treat all cellulosic material with borate product to 3' above foundation
- ii) Install sand or diatomaceous earth barrier
- iii) Install steel mesh barrier termite control system
- iv) Install non-toxic termite bait system
- v) Use noncellulosic wall structure
- vi) Use solid concrete foundation walls or pest-proof masonry wall design

6. Compact Development

6.1	Moderate Density	2	0	0	C400	0
	<input type="text" value="97"/> # of total units on the lot	<input type="text" value="1.4"/> lot size (acres)	<input type="text" value="68.8"/> density (units/acre)			
OR	6.2 High Density	3	0	0		0
OR	6.3 Very High Density	4	4	0		4

Water Efficiency (WE) (Minimum 3 WE Points Required) **Max: 15 Y:7 M:0** **Notes** **Final: 7**

1. Water Reuse

1.1	Rainwater Harvesting System	4	0	0		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		0
OR	1.3 Use of Municipal Recycled Water System	3	0	0		0

2. Irrigation System

2.1	<input checked="" type="checkbox"/> High-Efficiency Irrigation System (<i>meet any of the following, 1 pt each</i>)	3	3	0	Verified on drawings and cut sheets	3
	<input checked="" 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 checked="" type="checkbox"/> e) Use drip irrigation for 50% of planting beds <input type="checkbox"/> f) Create separate zones for each type of bedding			<input checked="" type="checkbox"/> g) Install timer or controller for each watering zone <input checked="" 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) Install 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		0
OR	2.3 <input checked="" type="checkbox"/> Reduce Overall Irrigation Demand by at Least 45%	4	0	0		0
	<input type="text" value="0%"/> Percentage reduction in estimated irrigation water demand	(calculate)				

3. Indoor Water Use

3.1	High-Efficiency Fixtures and Fittings (<i>meet any of the following, 1 pt each</i>)	3	2	0		2
	<input type="checkbox"/> a) Average flow rate of lavatory faucets is ≤ 2.00 gpm <input checked="" type="checkbox"/> b) Average flow rate for all showers is ≤ 2.00 gpm per stall			<input checked="" type="checkbox"/> c) Average flow rate for all toilets is ≤ 1.30 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 (<i>meet any, 2 pts each</i>)	6	2	0		2
	<input checked="" type="checkbox"/> a) Average flow rate of lavatory faucets is ≤ 1.50 gpm; OR <input type="checkbox"/> Lavatory faucets meet the EPA Water Sense specification			<input type="checkbox"/> b) Average flow rate for all showers ≤ 1.75 gpm per stall <input checked="" type="checkbox"/> c) Average flow rate for all toilets is ≤ 1.10 gpf		

Energy & Atmosphere (EA) (Minimum 0 EA Points Required) **Max: 38 Y:15.5 M:0** **Notes** **Final: 15.5**

Important note: projects registered after October 1st, 2014 that use the performance path must achieve a HERS Index of 70 or lower.

1. Optimize Energy Performance

1.1	Performance of ENERGY STAR for Homes	Prereq.	Y			Y
1.2	Exceptional Energy Performance	34	14.5	0		14.5

6

IECC climate zone

62

HERS Index

7. Water Heating

7.1	<input checked="" type="checkbox"/> Efficient Hot Water Distribution System <i>(meet one of the following)</i>	2	0	0	Not available	0
	<input type="checkbox"/> a) Structured plumbing system					
	<input type="checkbox"/> b) Central manifold distribution system					
	<input type="checkbox"/> c) Compact design of conventional system					
7.2	Pipe Insulation	1	0	0		0

11. Residential Refrigerant Management

11.1	Refrigerant Charge Test	Prereq.	Y			Y
11.2	Appropriate HVAC Refrigerants <i>(meet one of the following)</i>	1	1	0	Confirmed R410A with submittal	1
	<input type="checkbox"/> a) Use no refrigerants					
	<input type="checkbox"/> b) Use non-HCFC refrigerants					
	<input checked="" type="checkbox"/> c) Use refrigerants that complies with global warming potential equation					

Materials & Resources (MR)

(Minimum 2 MR Points Required)

Max: 16 Y:12 M:0

Notes

Final: 12

1. Material-Efficient Framing

1.1	Framing Order Waste Factor	Prereq.	Y		Y
1.2	Detailed Framing Documents	1	0	0	0
AND/OR	1.3 Detailed Cut List and Lumber Order	1	0	0	0
	<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	0	0	0
	<input checked="" type="checkbox"/> Precut framing packages				<input checked="" type="checkbox"/> Stud spacing greater than 16" on center
	<input checked="" type="checkbox"/> Open-web floor trusses				<input checked="" type="checkbox"/> Ceiling joist spacing greater than 16" on center
	<input checked="" type="checkbox"/> Structural insulated panel walls				<input checked="" type="checkbox"/> Floor joist spacing greater than 16" on center
	<input checked="" type="checkbox"/> Structural insulated panel roof				<input checked="" type="checkbox"/> Roof rafter spacing greater than 16" on center
	<input checked="" type="checkbox"/> Structural insulated panel floors				<input checked="" 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	4	0	4
	<input checked="" type="checkbox"/> a) Panelized construction				<input checked="" type="checkbox"/> b) Modular, prefabricated construction

2. Environmentally Preferable Products

2.1	≥ FSC Certified Tropical Wood (meet all of the following)	Prereq.	Y		Y
	<input checked="" type="checkbox"/> a) Provide suppliers with a notice of preference for FSC products; AND Request country of manufacture for each wood product				<input checked="" type="checkbox"/> b) No tropical wood installed (exceptions for FSC-certified or reclaimed wood)
2.2	≥ Environmentally Preferable Products (meet any, 1/2 pt each)	8	5.5	0	5.5

Assembly : component	(a) EPP	(b) Low emission	(c) Local production
Exterior wall: framing	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
Exterior wall: siding or masonry	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
Floor: flooring	<input checked="" type="checkbox"/> (45%)	<input checked="" type="checkbox"/> 90% hard flooring	<input checked="" type="checkbox"/> (45%)
Floor: flooring	<input checked="" type="checkbox"/> (90%)	<input checked="" type="checkbox"/> SCS FloorScore	<input checked="" type="checkbox"/> (90%)
Floor: flooring	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> Green Label Plus	<input checked="" type="checkbox"/>
Floor: framing	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
Foundation: aggregate	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
Foundation: cement	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
Interior wall: framing	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
Interior wall, ceiling: gypsum board	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
Interior wall, ceiling: millwork: paint	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> type: Sherwin Williams Promar 200	<input checked="" type="checkbox"/>
Landscape: decking and patio	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
Other: cabinet	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
Other: counter	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
Other: door	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
Other : interior trim	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
Other : adhesive, sealant	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> type: low voc	<input checked="" type="checkbox"/>
Other : window frame	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
Roof: framing	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
Roof: roofing	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
Roof, floor, wall: cavity insulation	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Roof, floor, wall (2 of 3): sheathing	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
Other: water supply piping	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
Other: driveway	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>



3. Waste Management

3.1	Construction Waste Management Planning (<i>meet both of the following</i>)	Prereq.	Y			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	spreadsheet uploaded	2.5
	<input type="text"/> a) pounds waste / square foot					
	<input type="text"/> cubic yards waste / 1,000 square feet					
	<input type="text"/> 76% b) percentage of waste diverted					

Indoor Environmental Quality (EQ) (Minimum 6 EQ Points Required) Max: 21 Y:11 M:0 Notes Final: 11

1. ENERGY STAR with Indoor Air Package

1	ENERGY STAR with Indoor Air Package	13	0	0		0
---	-------------------------------------	----	---	---	--	---

2. Combustion Venting

2.1	Basic Combustion Venting Measures (<i>meet all of the following</i>)	Prereq.	Y			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 (of each unit, if applicable)			<input checked="" type="checkbox"/> space and water heating equipment has power-vented exhaust; OR		
	<input checked="" type="checkbox"/> c) no fireplace installed, OR			<input type="checkbox"/> space and water heating equipment located in detached or open-air facility; OR		
	<input type="checkbox"/> all fireplaces and woodstoves have doors			<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		2
	Type of Fireplace or stove					
	Better practice (1 pt)					
	Best practice (2 pts) <i>(must also meet Better Practice)</i>					
	None			<input checked="" type="checkbox"/> granted automatically		
	Masonry wood-burning fireplace	<input type="checkbox"/> masonry heater		<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 type="checkbox"/> listed by testing lab and meets EPA standards		<input type="checkbox"/> back-draft potential test		
	Natural gas, propane, or alcohol stove	<input type="checkbox"/> listed, power- or direct-vented, fixed doors		<input type="checkbox"/> electronic pilot		
	Pellet stove	<input type="checkbox"/> EPA certified or meets safety requirements		<input type="checkbox"/> power- or direct-venting		

3. Moisture Control

3	Moisture Load Control (<i>meet one of the following</i>)	1	0	0		0
	<input type="checkbox"/> a) Additional dehumidification system			<input 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>)	Prereq.	Y			Y
	<input type="checkbox"/> a) Qualifies under ASHRAE Std. 62.2-2007 climate exemption.			<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	0	0		0
	<input type="checkbox"/> a) Meets EQ 4.1 part (a), active ventilation system installed			<input type="checkbox"/> b) Install heat recovery system		
4.3	Third-Party Performance Testing	1	1	0		1

5. Local Exhaust						
5.1	<input checked="" type="checkbox"/> 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	1	0	1	
	<input type="checkbox"/> a) Occupancy sensor			<input type="checkbox"/> c) Automatic timer tied to switch to operate fan for 20+ minutes post-occupancy		
	<input type="checkbox"/> b) Automatic humidistat controller			<input type="checkbox"/> d) Continuously operating exhaust fan		
5.3	Third-Party Performance Testing	1	1	0	1	
6. Distribution of Space Heating and Cooling						
6.1	<input checked="" type="checkbox"/> Room-by-Room Load Calculations	Prereq.	Y		Y	
6.2	Return Air Flow / Room-by-Room Controls (meet one of the following)	1	0	0	no	0
	A. Forced-Air Systems					
	<input type="checkbox"/> a) Return air opening of 1 sq. inch per cfm of supply					
	<input type="checkbox"/> b) Limited pressure differential between closed room and adjacent spaces					
	B. Nonducted HVAC Systems					
	<input type="checkbox"/> Flow control valves on every radiator; OR					
	<input type="checkbox"/> Radiant floor system with thermostatic controls in every room					
6.3	Third-Party Performance Test / Multiple Zones (meet one of the following)	2	0	0	no	0
	A. Forced-Air Systems					
	<input type="checkbox"/> Have supply air flow rates in each room tested and confirmed					
	B. Nonducted HVAC Systems					
	<input type="checkbox"/> Install at least two distinct zones with independent thermostat control					
7. Air Filtering						
7.1	Good Filters	Prereq.	Y		Y	
7.2	Better Filters	1	1	0	MERV 10 photo verified	1
OR	7.3 Best Filters	2	0	0		0
8. Contaminant Control						
8.1	<input checked="" type="checkbox"/> Indoor Contaminant Control during Construction	1	1	0		1
8.2	Indoor Contaminant Control (meet any of the following, 1 pt each)	2	0	0		0
	<input type="checkbox"/> a) Design and install permanent walk-off mats at each entry					
	<input type="checkbox"/> b) Design shoe removal and storage space near primary entryway					
	<input type="checkbox"/> c) Install central vacuum system with exhaust to outdoors					
8.3	<input checked="" type="checkbox"/> Preoccupancy Flush	1	1	0		1
9. Radon Protection						
9.1	<input checked="" type="checkbox"/> Radon-Resistant Construction in High-Risk Areas	Prereq.	N/A			N/A
9.2	<input checked="" type="checkbox"/> Radon-Resistant Construction in Moderate-Risk Areas	1	0	0		0
10. Garage Pollutant Protection						
10.1	No HVAC in Garage	Prereq.	Y			Y
10.2	Minimize Pollutants from Garage (meet all of the following)	2	2	0		2
	a) In conditioned spaces above garage:					
	<input checked="" type="checkbox"/> Seal all penetrations and connecting floor and ceiling joist bays					
	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 (meet one of the following)	1	1	0	M210 and M212 (confirm sf calc)	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		0

Awareness & Education (AE) (Minimum 0 AE Points Required)	Max: 3	Y:2	M:0	Notes	Final: 2
1. Education of the Homeowner or Tenant					
1.1 <input type="checkbox"/> Basic Operations Training <i>(meet both of the following)</i>	Prereq.	Y		Owner sign off	Y

	<input checked="" type="checkbox"/> a) Operations and training manual		<input checked="" type="checkbox"/> b) One-hour walkthrough with occupant(s)		
1.2	<input checked="" type="checkbox"/> Enhanced Training	1	0	0	0
1.3	Public Awareness (<i>meet three of the following</i>)	1	1	0	https://www.altiusbuildingco.com/leedhome/ and https://w 1
	<input checked="" type="checkbox"/> a) Open house on at least four weekends		<input checked="" type="checkbox"/> c) Newspaper article on the project		
	<input checked="" type="checkbox"/> b) Website about features and benefits of LEED homes		<input checked="" type="checkbox"/> d) Display LEED signage on the exterior of the home		
2. Education of the Building Manager					
2	<input checked="" type="checkbox"/> Education of the Building Manager (<i>meet both of the following</i>)	1	1	0	1
	<input checked="" type="checkbox"/> a) Operations and training manual		<input checked="" type="checkbox"/> b) One-hour walkthrough with building manager		