



# LEED for Homes Project Summary

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

E-mail certification package to: [homescertification@usgbc.org](mailto:homescertification@usgbc.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:

Project name:

Project address(es):

City:

Metro. Area:

State:

Zip Code:

Subdivision / Dev.:

## Project Team Information

Team Leader:

Company:

Address:

E-mail:

Builder / Developer:

Other project team members:

## Verification Team Information

Provider QAD:  QAD Company:

Green Rater:  Rater Company:

Green Rater:  Rater Company:

Energy Rater:  Rater Company:

## Project Information

Type of building:  # of stories:

Type of builder / project:  Avg. # of bedrooms:

Affordable project?  Gut-rehab?  Avg. floor area (square feet):

# of bldgs in this submittal:  Avg. Home Size Adjustment:

# of units in this submittal:  EA pathway?

IECC climate zone:  HERS Index (if any):

EPA radon zone:



for Homes

## LEED for Homes Project Checklist

Builder Name:	Mike Mattice, Rockford Construction
Project Team Leader:	Kim DeStigter, DeStigter Architecture & Planning
Home Address (Street/City/State):	435 LaGrave Ave SE, Grand Rapids, Michigan

### Project Description

Building Type: **Multi-family**

# of Units: **24**

Project type: **Multi-family Developer**

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

### Adjusted Certification Thresholds

Certified: **39.0** Gold: **69.0**

Silver: **54.0** Platinum: **84.0**

<b>Project Point Total</b>		<b>Final Credit Category Point Totals</b>			
Prelim: <b>60.5 + 0 maybe pts</b>	Final: <b>72.5</b>	ID: <b>5</b>	SS: <b>10</b>	EA: <b>18</b>	EQ: <b>10</b>
<b>Certification Level</b>		LL: <b>10</b>	WE: <b>8</b>	MR: <b>9.5</b>	AE: <b>2</b>
Prelim: <b>Silver</b>	Final: <b>Gold</b>				
Date Most Recently Updated: <b>2.2.17</b>		Updated by: <b>Paul Miyamoto</b>			

*⚡* Indicates that an Accountability Form is required.

Innovation & Design Process (ID)	(Minimum 0 ID Points Required)	Max Pts. Available	Preliminary Rating	Project Points		
		Y / Pts	Maybe	No		
<b>Innovation &amp; Design Process (ID)</b>	(Minimum 0 ID Points Required)	<b>Max: 11</b>	<b>Y:2</b>	<b>M:0</b>	<b>Notes</b>	<b>Final: 5</b>
<b>1. Integrated Project Planning</b>						
1.1	Preliminary Rating	Prereq.	Y			Y
	Target performance tier:	<b>Silver</b>				
1.2	Integrated Project Team (meet all of the following)	1	1	0		1
	<input type="checkbox"/> a) Individuals or organizations with necessary capabilities					<input type="checkbox"/> c) Regular meetings held with project team
	<input type="checkbox"/> b) All team members involved in various project phases					
1.3	Professional Credentialed with Respect to LEED for Homes	1	0	0		0
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 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
<b>2. Quality Management for Durability</b>						
2.1	Durability Planning (meet all of the following)	Prereq.				Y

- a) Durability evaluation completed
- b) Strategies developed to address durability issues
- c-i) Nonpaper-faced backer board in tub, shower, spa areas
- c-ii) No carpet in kitchen, bathroom, laundry, and spa areas
- c-iii) No carpet within 3 ft of each entryway
- c-iv) Install drain and drain pans in tank water heaters in/over living spaces; OR
- no tank water heaters in/over living spaces

- c-v) Install drain and drain pans for clothes washers in/over living spaces; OR
- no clothes washers in/over living spaces
- c-vi) Exhaust conventional clothes dryers directly to outdoors
- c-vii) Install drain and drain pan for condensing clothes dryers
- d) Durability strategies incorporated into project documentation
- e) Durability measures listed in durability inspection checklist

2.2 Durability Management ( <i>meet one of the following</i> )		Prereq.	Y		Y	
<input 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	0	0	3	
<b>3. Innovative or Regional Design</b>						
3.1	<input checked="" type="checkbox"/> Innovation 1 (ruling #): <input type="text"/>	1	0	0	0	
3.2	<input checked="" type="checkbox"/> Innovation 2 (ruling #): <input type="text"/>	1	0	0	0	
3.3	<input checked="" type="checkbox"/> Innovation 3 (ruling #): <input type="text"/>	1	0	0	0	
3.4	<input checked="" type="checkbox"/> Innovation 4 (ruling #): <input type="text"/>	1	0	0	0	
<b>Location &amp; Linkages (LL)</b> (Minimum 0 LL Points Required)		<b>Max: 10</b>	<b>Y:9</b>	<b>M:0</b>	<b>Notes</b>	<b>Final: 10</b>
<b>1. LEED for Neighborhood Development</b>						
1	LEED for Neighborhood Development	10	0	0	0	
<b>2. Site Selection</b>						
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 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 type="checkbox"/> c) Not built within 100 ft of water, including wetlands						
<b>3. Preferred Locations</b>						
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	
<b>4. Infrastructure</b>						
4	Existing Infrastructure	1	0	0	1	
<b>5. Community Resources / Transit</b>						
5.1	Basic Community Resources / Transit ( <i>meet one of the following</i> )	1	0	0	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	0	0	0	
<input type="checkbox"/> a) Within 1/4 mile of 7 basic community resources		<input 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	3	0	3	
<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						
<b>6. Access to Open Space</b>						
6	Access to Open Space	1	1	0	Heatside park	1

Sustainable Sites (SS) (Minimum 5 SS Points Required)		Max: 22	Y:7	M:0	Notes	Final: 10
<b>1. Site Stewardship</b>						
1.1	Erosion Controls During Construction ( <i>meet all of the following</i> )	Prereq.				Y
	<input type="checkbox"/> a) Stockpile and protect disturbed topsoil from erosion. <input type="checkbox"/> b) Control the path and velocity of runoff with silt fencing or equivalent. <input type="checkbox"/> c) Protect sewer inlets, streams, and lakes with straw bales, silt fencing, etc.				<input 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		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					
	<b>OR</b> 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					
	<b>OR</b> <input type="checkbox"/> d) Build on a lot of 1/7 acre or less, or 7 units per acre.					
<b>2. Landscaping</b>						
2.1	<input checked="" type="checkbox"/> No Invasive Plants	Prereq.	Y			Y
2.2	<input checked="" type="checkbox"/> Basic Landscaping Design ( <i>meet all of the following</i> )	2	2	0		2
	<input type="checkbox"/> a) Any turf must be drought-tolerant. <input type="checkbox"/> b) Do not use turf in densely shaded areas. <input type="checkbox"/> c) Do not use turf in areas with slope of 25%					
	<input checked="" type="checkbox"/> d) Add mulch or soil amendments as appropriate. <input checked="" type="checkbox"/> e) All compacted soil must be tilled to at least 6 inches.					
<b>AND/OR</b>	2.3 <input checked="" type="checkbox"/> Limit Conventional Turf	3	0	0		0
	<input type="text"/> Percentage of designed landscape softscape area that is turf					
<b>AND/OR</b>	2.4 <input checked="" type="checkbox"/> Drought-Tolerant Plants	2	2	0		2
	<input type="text"/> Percentage of installed plants that are drought-tolerant					
	<input type="text"/> <b>100%</b> Percentage of installed plants that are drought-tolerant					
<b>OR</b>	2.5 <input checked="" type="checkbox"/> Reduce Overall Irrigation Demand by at Least 20%	6	0	0		0
	<input type="text"/> Percentage reduction in estimated irrigation water demand <i>(calculate)</i>					
<b>3. Reduce Local Heat Island Effects</b>						
3	<input checked="" type="checkbox"/> Reduce Local Heat Island Effects ( <i>meet one of the following</i> )	1	1	0		0
	<input type="checkbox"/> a) Locate trees / plantings to provide shade for 50% of hardscapes <input type="checkbox"/> b) Install light-colored, high-albedo materials for 50% of sidewalks, patios, and driveways					

<b>4. Surface Water Management</b>			
<b>4.1</b>	<input checked="" type="checkbox"/> Permeable Lot	<b>4</b>	<b>0 0 0</b>
	<input type="text"/> vegetative landscape		
	<input type="text"/> permeable paving		
	<input type="text"/> impermeable surfaces directed to infiltration features		
	<input type="text"/> other impermeable surfaces (areas not counted towards credit)		
<b>4.2</b>	Permanent Erosion Controls ( <i>meet one of the following</i> )	<b>1</b>	<b>0 0 0</b>
	<input type="checkbox"/> a) For portions of lot on steep slope, use terracing and retaining walls		
	<input type="checkbox"/> b) Plant trees, shrubs, or groundcover		
<b>4.3</b>	<input checked="" type="checkbox"/> Management of Runoff from Roof ( <i>meet any, see Rating System for pts</i> )	<b>2</b>	<b>0 0 0</b>
	<input 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		
<b>5. Nontoxic Pest Control</b>			
<b>5</b>	Pest Control Alternatives ( <i>meet any of the following, 1/2 pt each</i> )	<b>2</b>	<b>1 0 1</b>
	<input type="checkbox"/> a) Keep all exterior wood at least 12" above soil		
	<input type="checkbox"/> b) Seal external cracks, joints, etc. with caulking and install pest-proof screens		
	<input 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 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 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 type="checkbox"/> vi) Use solid concrete foundation walls or pest-proof masonry wall design		
<b>6. Compact Development</b>			
<b>6.1</b>	Moderate Density	<b>2</b>	<b>0 0 0</b>
	<input type="text" value="24"/> # of total units on the lot		
	<input type="text" value="0.4"/> lot size (acres)		
	<input type="text" value="56.6"/> density (units/acre)		
<b>OR</b>	<b>6.2</b> High Density	<b>3</b>	<b>0 0 0</b>
<b>OR</b>	<b>6.3</b> Very High Density	<b>4</b>	<b>0 0 4</b>
<b>Water Efficiency (WE)</b> (Minimum 3 WE Points Required)			
		<b>Max: 15</b>	<b>Y:9 M:0</b>
			<b>Notes</b>
			<b>Final: 8</b>
<b>1. Water Reuse</b>			
<b>1.1</b>	Rainwater Harvesting System	<b>4</b>	<b>0 0 0</b>
	<input type="text"/> Percentage of roof area used for harvesting		
	<input type="text"/> Application		
<b>AND/OR</b>	<b>1.2</b> Graywater Reuse System	<b>1</b>	<b>0 0 0</b>
<b>OR</b>	<b>1.3</b> Use of Municipal Recycled Water System	<b>3</b>	<b>0 0 0</b>

<b>2. Irrigation System</b>							
	<b>2.1</b>	<b>High-Efficiency Irrigation System (meet any of the following, 1 pt each)</b>	<b>3</b>	<b>3</b>	<b>0</b>	<b>3</b>	
		<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) Install check valves in heads <input type="checkbox"/> k) Install moisture sensor or rain delay controller		
<b>AND/OR</b>	<b>2.2</b>	<b>Third-party Inspection</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	
<b>OR</b>	<b>2.3</b>	<b>Reduce Overall Irrigation Demand by at Least 45%</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>0</b>	
		<input type="text"/> Percentage reduction in estimated irrigation water demand			<a href="#">(calculate)</a>		
<b>3. Indoor Water Use</b>							
	<b>3.1</b>	<b>High-Efficiency Fixtures and Fittings (meet any of the following, 1 pt each)</b>	<b>3</b>	<b>2</b>	<b>0</b>	<b>1</b>	
		<input type="checkbox"/> a) Average flow rate of lavatory faucets is ≤ 2.00 gpm <input type="checkbox"/> b) Average flow rate for all showers is ≤ 2.00 gpm per stall			<input 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		
	<b>3.2</b>	<b>Very High-Efficiency Fixtures and Fittings (meet any, 2 pts each)</b>	<b>6</b>	<b>4</b>	<b>0</b>	<b>4</b>	
		<input 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 type="checkbox"/> c) Average flow rate for all toilets is ≤ 1.10 gpf		
<b>Energy &amp; Atmosphere (EA)</b> (Minimum 0 EA Points Required)			<b>Max: 38</b>	<b>Y:15</b>	<b>M:0</b>	<b>Notes</b>	<b>Final: 18</b>
<b>Important note: projects registered after October 1st, 2014 that use the performance path must achieve a HERS Index of 70 or lower.</b>							
<b>1. Optimize Energy Performance</b>							
	<b>1.1</b>	<b>Performance of ENERGY STAR for Homes</b>	<i>Prereq.</i>			<b>Y</b>	
	<b>1.2</b>	<b>Exceptional Energy Performance</b>	<b>34</b>	<b>0</b>	<b>0</b>	<b>0</b>	
		<input type="text"/> IECC climate zone			<input type="text"/> HERS Index		
<b>7. Water Heating</b>							
	<b>7.1</b>	<b>Efficient Hot Water Distribution System (meet one of the following)</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	
		<input type="checkbox"/> a) Structured plumbing system <input type="checkbox"/> b) Central manifold distribution system			<input type="checkbox"/> c) Compact design of conventional system		
	<b>7.2</b>	<b>Pipe Insulation</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	
<b>11. Residential Refrigerant Management</b>							
	<b>11.1</b>	<b>Refrigerant Charge Test</b>	<i>Prereq.</i>	<b>Y</b>			
	<b>11.2</b>	<b>Appropriate HVAC Refrigerants (meet one of the following)</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	
		<input type="checkbox"/> a) Use no refrigerants <input type="checkbox"/> b) Use non-HCFC refrigerants			<input type="checkbox"/> c) Use refrigerants that complies with global warming potential equation		

**Materials & Resources (MR)** (Minimum 2 MR Points Required)

**Max: 16 Y:6.5 M:0**

**Notes**

**Final: 9.5**

**1. Material-Efficient Framing**

<b>1.1</b>	Framing Order Waste Factor	<i>Prereq.</i>	<b>Y</b>	<b>Y</b>
<b>1.2</b>	Detailed Framing Documents	<b>1</b>	<b>0</b>	<b>0</b>
<b>AND/OR</b>	<b>1.3</b> Detailed Cut List and Lumber Order	<b>1</b>	<b>0</b>	<b>0</b>
	<input type="checkbox"/> Requirements of MR 1.2 have been met			<input type="checkbox"/> Detailed cut list and lumber order corresponding to framing plans or scopes
<b>AND/OR</b>	<b>1.4</b> Framing Efficiencies ( <i>meet any of the following, see Rating System for pts</i> )	<b>3</b>	<b>0</b>	<b>0</b>
	<input type="checkbox"/> Precut framing packages			<input type="checkbox"/> Stud spacing greater than 16" on center
	<input type="checkbox"/> Open-web floor trusses			<input 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 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
<b>OR</b>	<b>1.5</b> Off-site Fabrication ( <i>meet one of the following</i> )	<b>4</b>	<b>4</b>	<b>0</b>
	<input type="checkbox"/> a) Panelized construction			<input type="checkbox"/> b) Modular, prefabricated construction

**2. Environmentally Preferable Products**

<b>2.1</b>	<input checked="" type="checkbox"/> FSC Certified Tropical Wood ( <i>meet all of the following</i> )	<i>Prereq.</i>	<b>Y</b>	<b>Y</b>
	<input type="checkbox"/> a) Provide suppliers with a notice of preference for FSC products; AND <input type="checkbox"/> Request country of manufacture for each wood product			<input type="checkbox"/> b) No tropical wood installed (exceptions for FSC-certified or reclaimed wood)
<b>2.2</b>	<input checked="" type="checkbox"/> Environmentally Preferable Products ( <i>meet any, 1/2 pt each</i> )	<b>8</b>	<b>2.5</b>	<b>0</b>

<b>Assembly : component</b>	<b>(a) EPP</b>	<b>(b) Low emission</b>	<b>(c) Local production</b>
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: flooring	<input type="checkbox"/> type: _____	<input type="checkbox"/> Green Label Plus	
Floor: framing	<input type="checkbox"/> type: _____		<input type="checkbox"/>
Foundation: aggregate	<input type="checkbox"/> type: _____		<input type="checkbox"/>
Foundation: cement	<input type="checkbox"/> type: _____		<input type="checkbox"/>
Interior wall: framing	<input type="checkbox"/> type: _____		<input type="checkbox"/>
Interior wall, ceiling: gypsum board	<input type="checkbox"/> type: _____		<input type="checkbox"/>
Interior wall, ceiling, millwork: paint	<input type="checkbox"/> type: _____	<input type="checkbox"/> type: <u>Low VOC</u>	
Landscape: decking and patio	<input type="checkbox"/> type: _____		<input type="checkbox"/>
Other: cabinet	<input type="checkbox"/> type: _____		<input type="checkbox"/>
Other: counter	<input type="checkbox"/> type: _____		<input type="checkbox"/>
Other: door	<input type="checkbox"/> type: _____		<input type="checkbox"/>
Other : interior trim	<input type="checkbox"/> type: _____		<input type="checkbox"/>
Other : adhesive, sealant	<input type="checkbox"/> type: _____	<input type="checkbox"/> type: <u>Low VOC</u>	
Other : window frame	<input type="checkbox"/> type: _____		<input type="checkbox"/>
Roof: framing	<input type="checkbox"/> type: _____		<input type="checkbox"/>
Roof: roofing	<input type="checkbox"/> type: _____		<input type="checkbox"/>
Roof, floor, wall: cavity insulation	<input type="checkbox"/> type: _____	<input type="checkbox"/> type: _____	<input type="checkbox"/>
Roof, floor, wall (2 of 3): sheathing	<input type="checkbox"/> type: _____		<input type="checkbox"/>
Other: water supply piping	<input checked="" type="checkbox"/> type: PEX		



Other: driveway



type: \_\_\_\_\_

<b>3. Waste Management</b>						
<b>3.1</b>	Construction Waste Management Planning ( <i>meet both of the following</i> )	<i>Prereq.</i>	<b>Y</b>	<b>Y</b>		
	<input checked="" type="checkbox"/> a) Investigate local options for waste diversion			<input type="checkbox"/> b) Document diversion rate for construction waste		
<b>3.2</b>	Construction Waste Reduction ( <i>use one of the following methods</i> )	<b>3</b>	<b>0</b>	<b>0</b>		
	<input type="text"/> a) pounds waste / square foot					
	<input type="text"/> cubic yards waste / 1,000 square feet					
	<input type="text" value="75%"/> b) percentage of waste diverted					
<b>Indoor Environmental Quality (EQ)</b> (Minimum 6 EQ Points Required)		<b>Max: 21</b>	<b>Y:10</b>	<b>M:0</b>	<b>Notes</b>	<b>Final: 10</b>
<b>1. ENERGY STAR with Indoor Air Package</b>						
<b>1</b>	ENERGY STAR with Indoor Air Package	<b>13</b>	<b>0</b>	<b>0</b>		<b>0</b>
<b>2. Combustion Venting</b>						
<b>2.1</b>	Basic Combustion Venting Measures ( <i>meet all of the following</i> )	<i>Prereq.</i>	<b>Y</b>			<b>Y</b>
	<input type="checkbox"/> a) no unvented combustion appliances				<input type="checkbox"/> d) space, water heating equipment designed with closed combustion; OR	
	<input type="checkbox"/> b) carbon monoxide monitors on each floor (of each unit, if applicable)				<input type="checkbox"/> space and water heating equipment has power-vented exhaust; OR	
	<input 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	
<b>2.2</b>	Enhanced Combustion Venting Measures ( <i>meet one of the following</i> )	<b>2</b>	<b>2</b>	<b>0</b>		<b>2</b>
	<b>Type of Fireplace or stove</b>	<b>Better practice (1 pt)</b>	<b>Best practice (2 pts)</b> <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			
<b>3. Moisture Control</b>						
<b>3</b>	Moisture Load Control ( <i>meet one of the following</i> )	<b>1</b>	<b>0</b>	<b>0</b>		<b>0</b>
	<input type="checkbox"/> a) Additional dehumidification system				<input type="checkbox"/> b) Central HVAC system equipped with additional dehumidification mode	
<b>4. Outdoor Air Ventilation</b>						
<b>4.1</b>	Basic Outdoor Air Ventilation ( <i>meet one of the following</i> )	<i>Prereq.</i>	<b>Y</b>			<b>Y</b>
	<input type="checkbox"/> a) Qualifies under ASHRAE Std. 62.2-2007 climate exemption.				<input type="checkbox"/> c) Intermittent ventilation	
	<input type="checkbox"/> b) Continuous ventilation				<input type="checkbox"/> d) Passive ventilation	
<b>4.2</b>	Enhanced Outdoor Air Ventilation ( <i>meet one of the following</i> )	<b>2</b>	<b>0</b>	<b>0</b>		<b>2</b>
	<input type="checkbox"/> a) Meets EQ 4.1 part (a), active ventilation system installed				<input type="checkbox"/> b) Install heat recovery system	
<b>4.3</b>	Third-Party Performance Testing	<b>1</b>	<b>0</b>	<b>0</b>		<b>0</b>

<b>5. Local Exhaust</b>					
5.1	<input checked="" type="checkbox"/> Basic Local Exhaust (meet all of the following)	Prereq.	Y		Y
	<input type="checkbox"/> a) Bathroom and kitchen exhaust meets ASHRAE Std. 62.2 air flow requirement			<input type="checkbox"/> c) Air exhausted to outdoors	
	<input type="checkbox"/> b) Fans and ducts designed and installed to ASHRAE Std. 62.2			<input type="checkbox"/> d) ENERGY STAR labeled bathroom exhaust fans	
5.2	Enhanced Local Exhaust ( <i>meet one of the following</i> )	1	0	0	0
	<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	0	0	0
<b>6. Distribution of Space Heating and Cooling</b>					
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	0
	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; OR	
	<input type="checkbox"/> b) Limited pressure differential between closed room and adjacent spaces			<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	2	0	0
	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	
<b>7. Air Filtering</b>					
7.1	Good Filters	Prereq.			Y
7.2	Better Filters	1	1	0	1
				MERV 10	
OR	7.3	Best Filters	2	0	0
<b>8. Contaminant Control</b>					
8.1	<input checked="" type="checkbox"/> Indoor Contaminant Control during Construction	1	1	0	1
8.2	Indoor Contaminant Control ( <i>meet any of the following, 1 pt each</i> )	2	1	0	1
	<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 type="checkbox"/> b) Design shoe removal and storage space near primary entryway				
8.3	<input checked="" type="checkbox"/> Preoccupancy Flush	1	0	0	0
<b>9. Radon Protection</b>					
9.1	<input checked="" type="checkbox"/> Radon-Resistant Construction in High-Risk Areas	Prereq.			Y
9.2	<input checked="" type="checkbox"/> Radon-Resistant Construction in Moderate-Risk Areas	1	0	0	0

<b>10. Garage Pollutant Protection</b>					
	<b>10.1</b> No HVAC in Garage	<i>Prereq.</i>			<b>Y</b>
	<b>10.2</b> Minimize Pollutants from Garage (meet all of the following)	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>
	a) In conditioned spaces above garage:				b) In conditioned spaces next to garage
	<input type="checkbox"/> Seal all penetrations and connecting floor and ceiling joist bays				<input type="checkbox"/> Weather-strip all doors
					<input type="checkbox"/> Carbon monoxide detectors in rooms that share a door with garage
					<input type="checkbox"/> Seal all penetrations and cracks at the base of walls
<b>AND/OR</b>	<b>10.3</b> Exhaust Fan in Garage (meet one of the following)	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>
	<input type="checkbox"/> a) Fan runs continuously				<input type="checkbox"/> b) Fan designed with automatic timer control
<b>OR</b>	<b>10.4</b> Detached Garage or No Garage	<b>3</b>	<b>3</b>	<b>0</b>	<b>3</b>
<b>Awareness &amp; Education (AE)</b> (Minimum 0 AE Points Required)		<b>Max: 3</b>	<b>Y:2</b>	<b>M:0</b>	<b>Notes</b>
<b>1. Education of the Homeowner or Tenant</b>					<b>Final: 2</b>
	<b>1.1</b> <input checked="" type="checkbox"/> Basic Operations Training ( <i>meet both of the following</i> )	<i>Prereq.</i>	<b>Y</b>		<b>Y</b>
	<input checked="" type="checkbox"/> a) Operations and training manual				<input checked="" type="checkbox"/> b) One-hour walkthrough with occupant(s)
	<b>1.2</b> <input checked="" type="checkbox"/> Enhanced Training	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>
	<b>1.3</b> Public Awareness ( <i>meet three of the following</i> )	<b>1</b>	<b>1</b>	<b>0</b>	<b>1</b>
	<input type="checkbox"/> a) Open house on at least four weekends				<input type="checkbox"/> c) Newspaper article on the project
	<input type="checkbox"/> b) Website about features and benefits of LEED homes				<input type="checkbox"/> d) Display LEED signage on the exterior of the home
<b>2. Education of the Building Manager</b>					
	<b>2</b> <input checked="" type="checkbox"/> Education of the Building Manager ( <i>meet both of the following</i> )	<b>1</b>	<b>1</b>	<b>0</b>	<b>1</b>
	<input type="checkbox"/> a) Operations and training manual				<input type="checkbox"/> b) One-hour walkthrough with building manager

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USGBC makes no warranty with respect to any LEED certified project, including any warranty of habitability, merchantability, or fitness for a particular purpose. There are no warranties, express or implied, written or oral, statutory or otherwise, with respect to the certifications provided by USGBC. By way of example only, and without limiting the broad scope of the foregoing, it is understood that LEED certification, whether at the Certified level or any other level, does not mean that the project is structurally sound or safe, constructed in accordance with applicable laws, regulations or codes, free of mold or mildew, free of volatile organic compounds or allergens, or free of soil gases including radon.

**SIGNATURES BY RESPONSIBLE PARTIES**

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	<input type="text" value="Kim DeStigter"/>	Company	<input type="text" value="DeStigter Architecture &amp; Planning"/>
Signature	<input type="text"/>	Date	<input type="text"/>

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. I have evaluated this project's documentation package and conducted the necessary QA/QC procedures with the Green Rater, and I hereby declare and affirm to USGBC that the homes included in this submittal are ready to earn LEED for Homes certification, as per the attached checklist.

Provider QAD	<input type="text" value="Jason LaFleur"/>	Company	<input type="text" value="GreenHome Institute"/>
Signature	<input type="text"/>	Date	<input type="text"/>

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.

I also hereby confirm that all verification services were performed in accordance with the LEED for Homes [Verification & Submittal Guidelines and Addendum](#).

Green Rater	<input type="text" value="Mike Holcomb"/>	Company	<input type="text" value="Home Inspector General"/>
Signature	<input type="text"/>	Date	<input type="text"/>

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.

I also hereby confirm that all verification services were performed in accordance with the LEED for Homes [Verification & Submittal Guidelines and Addendum](#).

Green Rater	<input type="text"/>	Company	<input type="text"/>
Signature	<input type="text"/>	Date	<input type="text"/>

# 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.

	<b>Max Pts. Available</b>	<b>Preliminary Rating</b>			<b>Notes</b>	<b>Project Points</b>
		Y / Pts	Maybe	No		
<b>Energy &amp; Atmosphere (EA)</b> (Must earn points equal to HERS 70)	<b>Max: 38</b>	<b>Y:15</b>	<b>M:0</b>		<b>Notes</b>	<b>Final: 18</b>
<i>Important note: projects registered after October 1st, 2014 that use the prescriptive path must achieve at least the following: 13 points (projects in climate zone 1-5), or 9.5 points (projects in climate zone 6-8)</i>						
<b>2. Insulation</b>						
2.1 Basic Insulation (meet both of the following)		<i>Prereq.</i>	<b>Y</b>			<b>Y</b>
<input type="checkbox"/> a) Insulation meets R-value requirements of IECC		<input type="checkbox"/> b) Insulation meets HERS Grade II specifications for installation				
2.2 Enhanced Insulation (meet both of the following)	<b>2</b>	<b>0</b>	<b>0</b>			<b>0</b>
<input type="checkbox"/> a) Insulation exceeds R-value requirements of IECC by 5%		<input type="checkbox"/> b) Insulation meets HERS Grade I specifications for installation				
<b>3. Air Infiltration</b>						
3.1 Reduced Envelope Leakage		<i>Prereq.</i>	<b>Y</b>			<b>Y</b>
<div style="border: 1px solid black; display: inline-block; padding: 2px;">1.7</div> Air leakage rate in ACH50						
3.2 Greatly Reduced Envelope Leakage	<b>2</b>	<b>0</b>	<b>0</b>			<b>0</b>
<b>OR</b> 3.3 Minimal Envelope Leakage	<b>3</b>	<b>0</b>	<b>0</b>			<b>3</b>
<b>4. Windows</b>						
4.1 Good Windows (meet all of the following)		<i>Prereq.</i>	<b>Y</b>			<b>Y</b>
<input type="checkbox"/> a) Windows and glass doors meet ENERGY STAR BOP window specifications		<input type="checkbox"/> b) Skylight glazing area is ≤ 3% of floor area AND				
<input type="checkbox"/> c) Skylights meet ENERGY STAR requirements for skylights						
4.2 Enhanced Windows	<b>2</b>	<b>2</b>	<b>0</b>			<b>2</b>
<b>OR</b> 4.3 Exceptional Windows	<b>3</b>	<b>0</b>	<b>0</b>			<b>0</b>
<b>5. Heating and Cooling Distribution System</b>						
5.1 Reduced Distribution Losses (meet all of the following, as appropriate)		<i>Prereq.</i>	<b>Y</b>			<b>Y</b>
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 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)	<b>2</b>	<b>2</b>	<b>0</b>			<b>0</b>
A. Forced-Air Systems		B. Nonducted HVAC Systems				
<input 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				
<b>OR</b> 5.3 Minimal Distribution Losses (meet one of the following, as appropriate)	<b>3</b>	<b>0</b>	<b>0</b>			<b>3</b>

A. Forced-Air Systems

- a) Duct leakage of  $\leq 1.0$  CFM at 25 Pascals per 100 sq.ft.
- b) Air-handler and all ductwork is within conditioned envelope and EA 3.3 is met
- c) Air-handler and all ductwork visibly within conditioned spaces (not in walls, etc.)

B. Nonducted HVAC Systems

- Outdoor reset control to set distribution temp. based on outdoor temp.

<b>6. Space Heating and Cooling Equipment</b>					
<b>6.1</b>	<input checked="" type="checkbox"/> Good HVAC Design and Installation ( <i>meet all of the following</i> )	<b>Prereq.</b>	<b>Y</b>		<b>Y</b>
	<input type="checkbox"/> a) Design and size HVAC equipment using ACCA Manual J or equivalent			<input type="checkbox"/> c) Install ENERGY STAR programmable thermostat OR	
	<input 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="Central"/> Type of cooling system			<input type="text" value="Forced air furnace"/> Type of heating system	
	<input type="text" value="14.5"/> Cooling efficiency (SEER / EER)			<input type="text" value="95.0"/> Heating Efficiency (AFUE / HSPF / COP)	
<b>6.2</b>	High-Efficiency HVAC	<b>2</b>	<b>2</b>	<b>0</b>	<b>2</b>
<b>OR</b>	<b>6.3</b> Very High Efficiency HVAC	<b>4</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>7. Water Heating</b>					
<b>7.1</b>	<input checked="" type="checkbox"/> Efficient Hot Water Distribution System ( <i>meet one of the following</i> )	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>
	<input type="checkbox"/> a) Structured plumbing system			<input type="checkbox"/> c) Compact design of conventional system	
	<input type="checkbox"/> b) Central manifold distribution system				
<b>7.2</b>	Pipe Insulation	<b>1</b>	<b>1</b>	<b>0</b>	<b>0</b>
<b>7.3</b>	Efficient Domestic Hot Water Equipment	<b>3</b>	<b>1</b>	<b>0</b>	<b>2 - 100 gallon tanks</b> <b>1</b>
	<input type="text" value="Gas, storage, 80 gal."/> Type of DHW system				
	<input type="text"/> Efficiency			<input type="text"/> Solar: Percentage of annual DHW load	
<b>8. Lighting</b>					
<b>8.1</b>	ENERGY STAR Lights	<b>Prereq.</b>	<b>Y</b>		<b>Y</b>
<b>8.2</b>	Improved Lighting ( <i>meet one of the following, see Rating System for pts</i> )	<b>1.5</b>	<b>0</b>	<b>0</b>	<b>0</b>
	<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	
<b>OR</b>	<b>8.3</b> Advanced Lighting Package ( <i>meet one of the following</i> )	<b>3</b>	<b>3</b>	<b>0</b>	<b>LEDS mostly</b> <b>3</b>
	<input type="checkbox"/> a) 60% of fixtures are ENERGY STAR fixtures			<input type="checkbox"/> b) 80% of lamps are ENERGY STAR CFLs	
<b>9. Appliances</b>					
<b>9.1</b>	High-Efficiency Appliances ( <i>meet any, see Rating System for pts</i> )	<b>2</b>	<b>2</b>	<b>0</b>	<b>2</b>
	<input checked="" type="checkbox"/> a) ENERGY STAR labeled refrigerator			<input 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 type="checkbox"/> d) ENERGY STAR clothes washer	
<b>9.2</b>	Water-Efficiency Clothes Washer	<b>1</b>	<b>1</b>	<b>0</b>	<b>1</b>
<b>10. Renewable Energy</b>					
<b>10</b>	<input checked="" type="checkbox"/> Renewable Energy System	<b>10</b>	<b>0</b>	<b>0</b>	<b>0.0</b>
	<input type="text"/> Reference electric load, kWh/yr (based on HERS model)			<input type="text"/> Electricity supplied by renewable system, kWh/yr	
	<input type="text" value="0.0%"/> Percentage of annual reference electric load met by renewable system				
<b>11. Residential Refrigerant Management</b>					
<b>11.1</b>	Refrigerant Charge Test	<b>Prereq.</b>	<b>Y</b>		<b>Y</b>
<b>11.2</b>	Appropriate HVAC Refrigerants ( <i>meet one of the following</i> )	<b>1</b>	<b>1</b>	<b>0</b>	<b>1</b>
	<input type="checkbox"/> a) Use no refrigerants			<input type="checkbox"/> c) Use refrigerants that complies with global warming potential equation	
	<input type="checkbox"/> b) Use non-HCFC refrigerants				