



for Homes

Project

Building type: **Single detached**

of Bedrooms: **3**

LEED for Homes Project Checklist

Builder Name:	Habitat for Humanity Central Arizona
Project Team Leader:	James Ball, Habitat for Humanity Central Arizona
Home Address (Street/City/State):	20 N 27th Dr, Phoenix, AZ

	Adjusted Certification Thresholds		
Project type: Affordable	Certified: 36.0	Gold: 66.0	
Floor Area: 1,340	Silver: 51.0	Platinum: 81.0	

Project Point Total	Final Credit Category Point Totals		
Prelim: <i>102.5 + 0 maybe pt.</i> Final: 45	ID: 0	SS: 9	EA: 34
Certification Level	LL: 0	WE: 0	MR: 2
Prelim: <i>Platinum</i> Final: <i>Not Certified</i>	<i>Minimum Point Thresholds Not Met for Final Rating</i>		
Date Most Recently Updated:	Updated by:		

	Max Pts. Available	Preliminary Rating Y / Pts	Maybe	No
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⚡ Indicates that an Accountability Form is required.

Innovation & Design Process (ID) (Minimum 0 ID Points Required)	Max: 11	Y:7	M:0	Notes
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1. Integrated Project Planning

1.1 Preliminary Rating	<i>Prereq.</i>		
Target performance tier: Platinum			
1.2 Integrated Project Team (meet all of the following)	1	1	0
<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
1.4 Design Charrette	1	0	0
1.5 Building Orientation for Solar Design (meet all of the following)	1	1	0
<input checked="" 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)	<i>Prereq.</i>		
<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)	<i>Prereq.</i>		
<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. Innovative or Regional Design							
3.1	≤ Innovation 1 (ruling #):	<input type="text"/>		1	1	0	WE 2.1 - Exemplary Performance
3.2	≤ Innovation 2 (ruling #):	<input type="text"/>		1	0	0	
3.3	≤ Innovation 3 (ruling #):	<input type="text"/>		1	0	0	
3.4	≤ Innovation 4 (ruling #):	<input type="text"/>		1	0	0	
Location & Linkages (LL) (Minimum 0 LL Points Required)				Max: 10	Y:9	M:0	Notes
1. LEED for Neighborhood Development							
1	LEED for Neighborhood Development			10	0	0	
2. Site Selection							
2	≤ Site Selection (<i>meet all of the following</i>)			2	2	0	
	<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	
OR	3.2	Infill			2	2	0
AND/OR	3.3	Previously Developed			1	1	0
4. Infrastructure							
4	Existing Infrastructure			1	1	0	
5. Community Resources / Transit							
5.1	Basic Community Resources / Transit (<i>meet one of the following</i>)			1	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
	<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
	<input 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 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	

1. Site Stewardship

1.1 Erosion Controls During Construction (meet all of the following) Prereq.

- a) Stockpile and protect disturbed topsoil from erosion.
- b) Control the path and velocity of runoff with silt fencing or equivalent.
- c) Protect sewer inlets, streams, and lakes with straw bales, silt fencing, etc.
- d) Provide swales to divert surface water from hillsides
- e) Use tiers, erosion blankets, compost blankets, etc. on sloped areas.

1.2 Minimize Disturbed Area of Site (meet the appropriate requirements) 1 1 0

Where the site is not previously developed, meet all the following:

- a) Develop tree / plant preservation plan with "no-disturbance" zones
- b) Leave 40% of buildable lot area, not including area under roof, undisturbed

OR Where the site is previously developed, meet all the following:

- c) Develop tree / plant preservation plan with "no-disturbance" zones AND
- Rehabilitate lot; undo soil compaction and remove invasive plants AND
- Meet the requirements of SS 2.2

OR d) Build on a lot of 1/7 acre or less, or 7 units per acre.

2. Landscaping

2.1 ~~2~~ No Invasive Plants Prereq.

2.2 ~~2~~ Basic Landscaping Design (meet all of the following) 2 2 0

- a) Any turf must be drought-tolerant.
- b) Do not use turf in densely shaded areas.
- c) Do not use turf in areas with slope of 25%
- d) Add mulch or soil amendments as appropriate.
- e) All compacted soil must be tilled to at least 6 inches.

AND/OR 2.3 ~~3~~ Limit Conventional Turf 3 3 0

Percentage of designed landscape softscape area that is turf

AND/OR 2.4 ~~2~~ Drought-Tolerant Plants 2 2 0

Percentage of installed plants that are drought-tolerant

OR 2.5 ~~6~~ Reduce Overall Irrigation Demand by at Least 20% 6 0 0

Percentage reduction in estimated irrigation water demand [\(calculate\)](#)

3. Reduce Local Heat Island Effects

3 ~~3~~ Reduce Local Heat Island Effects (meet one of the following) 1 1 0

- a) Locate trees / plantings to provide shade for 50% of hardscapes
- b) Install light-colored, high-albedo materials for 50% of hardscapes

4. Surface Water Management

4.1	Permeable Lot	4	4	0
	<input type="text" value="94%"/> vegetative landscape			
	<input type="text" value="6%"/> permeable paving			
	<input type="text"/> impermeable surfaces directed to infiltration features			
	<input type="text" value="0%"/> other impermeable surfaces (areas not counted towards credit)			
4.2	Permanent Erosion Controls (<i>meet one of the following</i>)	1	0	0
	<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			
4.3	Management of Runoff from Roof (<i>meet any, see Rating System for pts</i>)	2	0	0
	<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			

5. Nontoxic Pest Control

5	Pest Control Alternatives (<i>meet any of the following, 1/2 pt each</i>)	2	2	0
	<input 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 checked="" 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 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
	<input type="text"/> # of total units on the lot <input type="text"/> lot size (acres)	<input type="text" value="N/A"/>	density (units/acre)	
OR	6.2 High Density	3	0	0
OR	6.3 Very High Density	4	0	0

Water Efficiency (WE) (Minimum 3 WE Points Required) Max: 15 Y:10 M:0 Notes

1. Water Reuse				
1.1	Rainwater Harvesting System	4	0	0
	<input type="text"/> Percentage of roof area used for harvesting			
	<input type="text"/> Application			
AND/OR	1.2 Graywater Reuse System	1	0	0
OR	1.3 Use of Municipal Recycled Water System	3	0	0

2. Irrigation System

2.1	High-Efficiency Irrigation System (meet any of the following, 1 pt each)	3	3	0
<input type="checkbox"/>	a) Irrigation system designed by EPA Water Sense certified professional	<input checked="" type="checkbox"/>	g) Install timer or controller for each watering zone	
<input type="checkbox"/>	b) Irrigation system with head-to-head coverage	<input checked="" type="checkbox"/>	h) Install pressure-regulating devices	
<input checked="" type="checkbox"/>	c) Install central shut-off valve	<input type="checkbox"/>	i) High-efficiency nozzles with distribution uniformity of at least 0.70.	
<input type="checkbox"/>	d) Install submeter for the irrigation system	<input type="checkbox"/>	j) Check valves in heads	
<input checked="" type="checkbox"/>	e) Use drip irrigation for 50% of planting beds	<input type="checkbox"/>	k) Install moisture sensor or rain delay controller	
<input checked="" type="checkbox"/>	f) Create separate zones for each type of bedding			

AND/OR	2.2	Third-party Inspection	1	1	0
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OR	2.3	Reduce Overall Irrigation Demand by at Least 45%	4	0	0
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Percentage reduction in estimated irrigation water demand [\(calculate\)](#)

3. Indoor Water Use

3.1	High-Efficiency Fixtures and Fittings (meet any of the following, 1 pt each)	3	0	0
<input type="checkbox"/>	a) Average flow rate of lavatory faucets is ≤ 2 gpm	<input type="checkbox"/>	c) Average flow rate for all toilets is ≤ 1.3 gpf; OR	
<input type="checkbox"/>	b) Average flow rate for all showers is ≤ 2.0 gpm per stall	<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	6	0
<input checked="" type="checkbox"/>	a) Average flow rate of lavatory faucets is ≤ 1.5 gpm; OR	<input checked="" type="checkbox"/>	b) Average flow rate for all showers ≤ 1.75 gpm per stall	
<input type="checkbox"/>	Lavatory faucets meet the EPA Water Sense specification	<input checked="" type="checkbox"/>	c) Average flow rate for all toilets is ≤ 1.1 gpf	

Energy & Atmosphere (EA) (Minimum 0 EA Points Required) **Max: 38 Y:37 M:0** **Notes**

1. Optimize Energy Performance

1.1	Performance of ENERGY STAR for Homes	<i>Prereq.</i>		
1.2	Exceptional Energy Performance	34	34	0
<input type="text"/>	IECC climate zone	<input type="text"/>	HERS Index	

7. Water Heating

7.1	Efficient Hot Water Distribution System (meet one of the following)	2	2	0
<input type="checkbox"/>	a) Structured plumbing system	<input checked="" type="checkbox"/>	c) Compact design of conventional system	
<input type="checkbox"/>	b) Central manifold distribution system			
7.2	Pipe Insulation	1	0	0

11. Residential Refrigerant Management

11.1	Refrigerant Charge Test	<i>Prereq.</i>		
11.2	Appropriate HVAC Refrigerants (meet one of the following)	1	1	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			

1. Material-Efficient Framing

1.1	Framing Order Waste Factor	<i>Prereq.</i>			
1.2	Detailed Framing Documents		1	0	0
1.3	Detailed Cut List and Lumber Order		1	0	0
	<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
AND/OR	1.4 Framing Efficiencies (<i>meet any of the following, see Rating System for pts</i>)		3	3	0
	<input type="checkbox"/> Precut framing packages				<input checked="" 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 checked="" 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 checked="" type="checkbox"/> Two of the following: Size headers for loads; ladder blocking; drywall clips; 2-
OR	1.5 Off-site Fabrication (<i>meet one of the following</i>)		4	0	0
	<input type="checkbox"/> a) Panelized construction				<input type="checkbox"/> b) Modular, prefabricated construction

2. Environmentally Preferable Products

2.1	≠ FSC Certified Tropical Wood (<i>meet all of the following</i>)		<i>Prereq.</i>		
	<input checked="" type="checkbox"/> a) Provide suppliers with a notice of preference for FSC products; AND				<input checked="" type="checkbox"/> b) All purchased wood is either not tropical, FSC-certified, or reclaimed
	<input checked="" type="checkbox"/> Request country of manufacture for each wood product				
2.2	≠ Environmentally Preferable Products (<i>meet any, 1/2 pt each</i>)		8	4.5	0
	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 checked="" type="checkbox"/> (90%) type: <u>concrete</u>	<input type="checkbox"/>	SCS FloorScore	<input type="checkbox"/> (90%)
	Floor: carpet		<input type="checkbox"/>	Green Label Plus	<input type="checkbox"/>
	Floor: framing	<input type="checkbox"/> type: _____			<input type="checkbox"/>
	Foundation: aggregate				<input checked="" type="checkbox"/>
	Foundation: cement	<input type="checkbox"/> type: _____			<input checked="" type="checkbox"/>
	Interior wall: framing	<input type="checkbox"/> type: _____			<input type="checkbox"/>
	Interior wall, ceiling: gypsum board				<input checked="" type="checkbox"/>
	Interior wall, ceiling, millwork: paint	<input type="checkbox"/> type: _____	<input checked="" type="checkbox"/>	type: _____	<input type="checkbox"/>
	Landscape: decking or patio	<input checked="" 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 : trim	<input type="checkbox"/> type: _____			<input type="checkbox"/>
	Other : adhesive, sealant		<input checked="" type="checkbox"/>	type: _____	<input type="checkbox"/>
	Other : window frame	<input checked="" 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: insulation	<input type="checkbox"/> type: _____	<input type="checkbox"/>	type: _____	<input checked="" type="checkbox"/>
	Roof, floor, wall (2 of 3): sheathing	<input type="checkbox"/> type: _____			<input type="checkbox"/>

3. Waste Management

3.1	Construction Waste Management Planning (<i>meet both of the following</i>)	Prereq.			
	<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	0	
	<input type="text"/> a) pounds waste / square foot				
	<input type="text"/> cubic yards waste / 1,000 square feet				
	<input type="text"/> 74% b) percentage of waste diverted				

Indoor Environmental Quality (EQ) (Minimum 6 EQ Points Required) Max: 21 Y:13 M:0 Notes

1. ENERGY STAR with Indoor Air Package

1	ENERGY STAR with Indoor Air Package	13	0	0	
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2. Combustion Venting

2.1	Basic Combustion Venting Measures (<i>meet all of the following</i>)	Prereq.			
	<input checked="" type="checkbox"/> a) no unvented combustion appliances		<input 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) no fireplace installed, OR		<input type="checkbox"/> space and water heating equipment located in detached or open-air facility		
	<input type="checkbox"/> all fireplaces and woodstoves have doors		<input checked="" 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	
	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	
	<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.			
	<input checked="" type="checkbox"/> a) Located in a climate with $\leq 4,500$ infiltration degree days		<input type="checkbox"/> c) Intermittent ventilation		
	<input type="checkbox"/> b) Continuous ventilation		<input checked="" type="checkbox"/> d) Passive ventilation		
4.2	Enhanced Outdoor Air Ventilation (<i>meet one of the following</i>)	2	0	0	
	<input type="checkbox"/> a) In climates with $\leq 4,500$ infiltration degree days, install active ventilation system		<input type="checkbox"/> b) Install heat recovery system		
4.3	Third-Party Performance Testing	1	1	0	

5. Local Exhaust			
5.1	✗ Basic Local Exhaust (<i>meet all of the following</i>)	<i>Prereq.</i>	
	<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 (<i>meet one of the following</i>)	1	1 0
	<input type="checkbox"/> a) Occupancy sensor	<input checked="" 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
6. Distribution of Space Heating and Cooling			
6.1	✗ Room-by-Room Load Calculations	<i>Prereq.</i>	
6.2	Return Air Flow / Room-by-Room Controls (<i>meet one of the following</i>)	1	1 0
	A. Forced-Air Systems	B. Nonducted HVAC Systems	
	<input checked="" type="checkbox"/> a) Return air opening of 1 sq. inch per cfm of supply	<input type="checkbox"/> Flow control valves on every radiator	
	<input checked="" type="checkbox"/> b) Limited pressure differential between closed room and adjacent spaces		
6.3	Third-Party Performance Test / Multiple Zones (<i>meet one of the following</i>)	2	2 0
	A. Forced-Air Systems	B. Nonducted HVAC Systems	
	<input checked="" 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	<i>Prereq.</i>	
7.2	Better Filters	1	0 0
OR	7.3 Best Filters	2	0 0
8. Contaminant Control			
8.1	✗ Indoor Contaminant Control during Construction	1	1 0
8.2	Indoor Contaminant Control (<i>meet any of the following, 1 pt each</i>)	2	1 0
	<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
9. Radon Protection			
9.1	✗ Radon-Resistant Construction in High-Risk Areas	<i>Prereq.</i>	
9.2	✗ Radon-Resistant Construction in Moderate-Risk Areas	1	0 0

10. Garage Pollutant Protection				
	10.1 No HVAC in Garage	<i>Prereq.</i>		
	10.2 Minimize Pollutants from Garage (<i>meet all of the following</i>)	2	2 0	
	a) In conditioned spaces above garage:	b) In conditioned spaces next to garage		
	<input checked="" type="checkbox"/> Seal all penetrations and connecting floor and ceiling joist bays	<input checked="" type="checkbox"/> Weather-strip all doors		
	<input checked="" type="checkbox"/> Paint walls and ceilings of shared walls, including garage	<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	0 0	
	<input type="checkbox"/> a) Fan runs continuously	<input type="checkbox"/> b) Fan designed with automatic timer control		
OR	10.4 Detached Garage or No Garage	3	0 0	
Awareness & Education (AE) (Minimum 0 AE Points Required)		Max: 3	Y:2 M:0	Notes
1. Education of the Homeowner or Tenant				
	1.1 1 Basic Operations Training (<i>meet both of the following</i>)	<i>Prereq.</i>		
	<input checked="" type="checkbox"/> a) Operations and training manual	<input checked="" type="checkbox"/> b) One-hour walkthrough with occupant(s)		
	1.2 1 Enhanced Training	1	1 0	
	1.3 Public Awareness (<i>meet three of the following</i>)	1	1 0	
	<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 1 Education of the Building Manager (<i>meet both of the following</i>)	1	0 0	
	<input type="checkbox"/> a) Operations and training manual	<input type="checkbox"/> b) One-hour walkthrough with building manager		

USGBC LEGAL DISCLAIMER

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="James Ball"/>	Company	<input type="text" value="Habitat for Humanity Central Arizona"/>
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, and will provide the project documentation file, if requested.

Provider QAD	<input type="text" value="John Gillett"/>	Company	<input type="text" value="Energy Inspectors"/>
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, and will provide the project documentation file, if requested.

Green Rater	<input type="text" value="Judd Jensen"/>	Company	<input type="text" value="Energy Inspectors"/>
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, and will provide the project documentation file, if requested.

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.

	Max Pts. Available	Preliminary Rating			Notes
		Y / Pts	Maybe	No	
Energy & Atmosphere (EA) (Minimum 0 EA Points Required)	Max: 38	Y:37	M:0		Notes
2. Insulation					
2.1 Basic Insulation (meet both of the following)	<i>Prereq.</i>				
<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)	2	0	0		
<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				
3. Air Infiltration					
3.1 Reduced Envelope Leakage	<i>Prereq.</i>				
<input style="width: 50px;" type="text"/> Air leakage rate in ACH50					
3.2 Greatly Reduced Envelope Leakage	2	0	0		
OR 3.3 Minimal Envelope Leakage	3	0	0		
4. Windows					
4.1 Good Windows (meet all of the following)	<i>Prereq.</i>				
<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"/> Skylights meet ENERGY STAR requirements for skylights				
4.2 Enhanced Windows	2	0	0		
OR 4.3 Exceptional Windows	3	0	0		
5. Heating and Cooling Distribution System					
5.1 Reduced Distribution Losses (meet all of the following, as appropriate)	<i>Prereq.</i>				
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)	2	0	0		
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				
OR 5.3 Minimal Distribution Losses (meet one of the following, as appropriate)	3	0	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 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 (meet all of the following)

Prereq.

- a) Design and size HVAC equipment using ACCA Manual J or equivalent
 b) Install efficient heating AND cooling equipment (see Table)

- c) Install ENERGY STAR programmable thermostat OR
 Heat pump or hydronic installed and exempted from part (c)

Type of cooling system

Type of heating system

Cooling efficiency (SEER / EER)

Heating Efficiency (AFUE / HSPF / COF)

6.2 High-Efficiency HVAC

2 0 0

OR 6.3 Very High Efficiency HVAC

4 0 0

7. Water Heating

7.1 Efficient Hot Water Distribution System (meet one of the following)

2 0 0

- a) Structured plumbing system
 b) Central manifold distribution system

- c) Compact design of conventional system

7.2 Pipe Insulation

1 0 0

7.3 Efficient Domestic Hot Water Equipment

3 0 0

Type of DHW system

Efficiency Solar: Percentage of annual DHW load

8. Lighting

8.1 ENERGY STAR Lights

Prereq.

8.2 Improved Lighting (meet one of the following, see Rating System for pts)

1.5 0 0

- a) Indoor lighting - 3 additional ENERGY STAR lights in high-use rooms

- b) Exterior lighting - motion sensor controls or integrated PV

OR 8.3 Advanced Lighting Package (meet one of the following)

3 0 0

- a) 60% of fixtures are ENERGY STAR fixtures

- b) 80% of lamps are ENERGY STAR CFLs

9. Appliances

9.1 High-Efficiency Appliances (meet any, see Rating System for pts)

2 0 0

- a) ENERGY STAR labeled refrigerator
 b) ENERGY STAR labeled ceiling fans in living/family room and all bedrooms

- c) ENERGY STAR labeled dishwasher using 6.0 gallons per cycle or less
 d) ENERGY STAR clothes washer

9.2 Water-Efficiency Clothes Washer

1 0 0

10. Renewable Energy

10 Renewable Energy System

10 0 0

Reference electric load, kWh/yr (based on HERS model)

Electricity supplied by renewable system, kWh/yr

0.0% Percentage of annual reference electric load met by renewable system

11. Residential Refrigerant Management

11.1 Refrigerant Charge Test

Prereq.

11.2 Appropriate HVAC Refrigerants (meet one of the following)

1 0 0

- a) Use no refrigerants
 b) Use non-HCFC refrigerants

- c) Use refrigerants that complies with global warming potential equation

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.

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EA 2. Insulation			
	2.1		
	2.2		
EA 3. Air Infiltration			
	3.1		
	3.2		
<i>OR</i>	3.3		
EA 4. Windows			
	4.1		
	4.2		
<i>OR</i>	4.3		
EA 5. Heating and Cooling Distribution			
	5.1		
	5.2		
<i>OR</i>	5.3		

EA 6. Space Heating and Cooling Equipment			
OR	6.1		
	6.2		
	6.3		
EA 7. Water Heating			
	7.1		
	7.2		
	7.3		
EA 8. Lighting			
OR	8.1		
	8.2		
	8.3		
EA 9. Appliances			
	9.1		
	9.2		
EA 10. Renewable Energy			
	10		
EA 11. Residential Refrigerant Management			
	11.1		
	11.2		