



for Homes

## LEED for Homes Project Checklist for California

Builder Name:	Tresor Construction
Project Team Leader:	Chris Meddock, HORSTarchitects
Home Address (Street/City/State):	1105 Canyon View Drive, Laguna Beach, Ca

**Project Description**

Building Type: **Single detached**  
# of Bedrooms: 5

Project type: **Custom**  
Floor Area: **3,167**

**Adjusted Certification Thresholds**

Certified: **47.5**      Gold: **77.5**  
Silver: **62.5**      Platinum: **92.5**

<p><b>Project Point Total</b> Prelim: <b>96 + 8 maybe pts</b>      Final: <b>47</b></p> <p><b>Certification Level</b> Prelim: <b>Platinum</b>      Final: <b>Not Certified</b></p> <p>Date Most Recently Updated: _____ Updated by: _____</p>	<p><b>Final Credit Category Point Totals</b></p> <table style="width: 100%; border: none;"> <tr> <td style="width: 25%;">ID: 4</td> <td style="width: 25%;">SS: 5</td> <td style="width: 25%;">EA: 28</td> <td style="width: 25%;">EQ: 0</td> </tr> <tr> <td>LL: 10</td> <td>WE: 0</td> <td>MR: 0</td> <td>AE: 0</td> </tr> </table> <p style="color: red; font-size: small;">Minimum Point Thresholds Not Met for Final Rating</p>	ID: 4	SS: 5	EA: 28	EQ: 0	LL: 10	WE: 0	MR: 0	AE: 0
ID: 4	SS: 5	EA: 28	EQ: 0						
LL: 10	WE: 0	MR: 0	AE: 0						

*Indicates that an Accountability Form is required.*

	<b>Max Pts.</b>	<b>Preliminary Rating</b>		<b>Project</b>
	<b>Available</b>	Y / Pts	Maybe	<b>Points</b>
		No		

Innovation & Design Process (ID) (Minimum 0 ID Points Required)	Max: 11	Y:8	M:0	Notes	Final: 4
<b>1. Integrated Project Planning</b>					
1.1 Preliminary Rating	Prereq.	Y			Y
Target performance tier: <input type="text" value="Platinum"/>					
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	0	0	N	0
please see ID 01-06 for details					
1.4 Design Charrette	1	0	0	N	0
1.5 Building Orientation for Solar Design (meet all of the following)	1	0	0	N	0
<input type="checkbox"/> a) Glazing area on north/south walls 50% greater than on east/west walls				<input type="checkbox"/> c) At least 450 sq. ft. of south-facing roof area, oriented for solar applications	
<input type="checkbox"/> b) East-west axis is within 15 degrees of due east-west				<input type="checkbox"/> d) 90% of south-facing glazing is shaded in summer, unshaded in winter	
<b>2. Quality Management for Durability</b>					
2.1 Durability Planning (meet all of the following)	Prereq.	Y			Y
<input checked="" type="checkbox"/> a) Durability evaluation completed				<input checked="" type="checkbox"/> d) Durability strategies incorporated into project documentation	
<input checked="" type="checkbox"/> b) Strategies developed to address durability issues				<input checked="" type="checkbox"/> e) Durability measures listed in durability inspection checklist	
<input checked="" type="checkbox"/> c) Moisture control measures from Table 1 incorporated					
2.2 Durability Management (meet one of the following)	Prereq.	Y			
<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		
<b>3. Innovative or Regional Design</b>					

3.1	≅ Innovation 1 (ruling #):	<b>WE 2.1</b>	1	2	0	2	
3.2	≅ Innovation 2 (ruling #):	<b>EA 10</b>	1	1	0	0	
3.3	≅ Innovation 3 (ruling #):	<b>SS 5</b>	1	1	0	1	
3.4	≅ Innovation 4 (ruling #):		1	0	0	0	
<b>Location &amp; Linkages (LL)</b> (Minimum 0 LL Points Required)			<b>Max: 10</b>	<b>Y:10</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	N	0
<b>2. Site Selection</b>							
2	≅ 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					
<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	1	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 checked="" 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		1

**1. Site Stewardship**

<b>1.1</b>	<b>Erosion Controls During Construction (meet all of the following)</b>	<b>Prereq.</b>	<b>Y</b>		
	<input checked="" type="checkbox"/> a) Stockpile and protect disturbed topsoil from erosion.			<input checked="" type="checkbox"/> d) Provide swales to divert surface water from hillsides	
	<input checked="" type="checkbox"/> b) Control the path and velocity of runoff with silt fencing or equivalent.			<input checked="" type="checkbox"/> e) Use tiers, erosion blankets, compost blankets, etc. on sloped areas.	
	<input checked="" type="checkbox"/> c) Protect sewer inlets, streams, and lakes with straw bales, silt fencing, etc.				
<b>1.2</b>	<b>Minimize Disturbed Area of Site (meet the appropriate requirements)</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>1</b>
	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 checked="" type="checkbox"/> d) Build on a lot of 1/7 acre or less, or 7 units per acre.				

**2. Landscaping**

<b>2.1</b>	<b>≧ No Invasive Plants</b>	<b>Prereq.</b>	<b>Y</b>		<b>Y</b>
<b>2.2</b>	<b>≧ Basic Landscaping Design (meet all of the following)</b>	<b>2</b>	<b>2</b>	<b>0</b>	<b>0</b>
	<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%				
<b>AND/OR</b>	<b>2.3 ≧ Limit Conventional Turf</b>	<b>3</b>	<b>3</b>	<b>0</b>	<b>0</b>
	<input type="text" value="0%"/> Percentage of designed landscape softscape area that is turf				
<b>AND/OR</b>	<b>2.4 ≧ Drought-Tolerant Plants</b>	<b>2</b>	<b>2</b>	<b>0</b>	<b>0</b>
	<input type="text" value="92%"/> Percentage of installed plants that are drought-tolerant				
<b>OR</b>	<b>2.5 ≧ Reduce Overall Irrigation Demand by at Least 20%</b>	<b>6</b>	<b>0</b>	<b>0</b>	<b>0</b>
	<input type="text"/> Percentage reduction in estimated irrigation water demand			<a href="#">(calculate)</a>	

**3. Reduce Local Heat Island Effects**

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

4. Surface Water Management						
4.1	≥ Permeable Lot	4	2	0	2	
	<input type="text" value="62%"/> vegetative landscape					
	<input type="text" value="0%"/> permeable paving					
	<input type="text" value="25%"/> impermeable surfaces directed to infiltration features					
	<input type="text" value="13%"/> other impermeable surfaces (areas not counted towards credit)					
4.2	Permanent Erosion Controls ( <i>meet one of the following</i> )	1	1	0	0	
	<input checked="" type="checkbox"/> a) For portions of lot on steep slope, use terracing and retaining walls					
	<input type="checkbox"/> b) Plant trees, shrubs, or groundcover					
4.3	≥ Management of Runoff from Roof ( <i>meet any, see Rating System for pts</i> )	2	1	0	0	
	<input checked="" type="checkbox"/> a) Install permanent stormwater controls to manage runoff from the home					
	<input type="checkbox"/> b) Install vegetated roof to cover 50% of roof area					
	<input type="checkbox"/> c) Install vegetated roof to cover 100% of roof area					
	<input type="checkbox"/> d) Have lot designed by professional to manage runoff from home on-site					
5. Nontoxic Pest Control						
5	Pest Control Alternatives ( <i>meet any of the following, 1/2 pt each</i> )	2	2	0	0	
	<input checked="" type="checkbox"/> a) Keep all exterior wood at least 12" above soil					
	<input checked="" type="checkbox"/> b) Seal external cracks, joints, etc. with caulking and install pest-proof screens					
	<input checked="" type="checkbox"/> c) Include no wood-to-concrete connections, or separate connections with dividers					
	<input type="checkbox"/> d) Install landscaping so mature plants are 24" from home					
	e) In 'moderate' to 'very heavy' termite risk areas:					
	<input checked="" type="checkbox"/> i) Treat all cellulosic material with borate product to 3' above foundation					
	<input type="checkbox"/> ii) Install sand or diatomaceous earth barrier					
	<input type="checkbox"/> iii) Install steel mesh barrier termite control system					
	<input checked="" 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	2	0	2	
	<input type="text" value="1"/> # of total units on the lot					
	<input type="text" value="0.1"/> lot size (acres)					
	<input type="text" value="8.3"/> density (units/acre)					
OR	6.2 High Density	3	0	0	N	
OR	6.3 Very High Density	4	0	0	N	
Water Efficiency (WE) (Minimum 3 WE Points Required)		Max: 15	Y:4	M:0	Notes	Final: 0
1. Water Reuse						
1.1	Rainwater Harvesting System	4	0	0	N	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	N	0
OR	1.3 Use of Municipal Recycled Water System	3	0	0	N	0

<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 0 0</b>
<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 checked="" 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) Install check valves in heads
<input checked="" type="checkbox"/>	e) Use drip irrigation for 50% of planting beds	<input checked="" type="checkbox"/>	k) Install moisture sensor or rain delay controller
<input checked="" type="checkbox"/>	f) Create separate zones for each type of bedding		
<b>AND/OR</b>	<b>2.2 Third-party Inspection</b>	<b>1</b>	<b>1 0 0</b>
<b>OR</b>	<b>2.3 ≥ Reduce Overall Irrigation Demand by at Least 45%</b>	<b>4</b>	<b>0 0 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>0 0 0</b>
<input type="checkbox"/>	a) Average flow rate of lavatory faucets is ≤ 2.00 gpm	<input type="checkbox"/>	c) Average flow rate for all toilets is ≤ 1.30 gpf; OR
<input type="checkbox"/>	b) Average flow rate for all showers is ≤ 2.00 gpm per stall	<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>0 0 0</b>
<input type="checkbox"/>	a) Average flow rate of lavatory faucets is ≤ 1.50 gpm; OR	<input 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 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:34 M:2</b>
			<b>Notes</b>
			<b>Final: 28</b>
<b>1. Optimize Energy Performance in California</b>			
<b>1.1</b>	<b>Performance of ENERGY STAR for Homes</b>	<b>Prereq.</b>	<b>Y</b>
<b>1.2</b>	<b>Exceptional Energy Performance</b>	<b>19</b>	<b>17.0 0 17.0</b>
	<input type="text"/> IECC climate zone	<input type="text"/> 50.9	Percent above Title-24
		<input type="checkbox"/>	Modeling performed by current CEA or CEPE
<b>7. Water Heating in California</b>			
<b>7</b>	<b>≥ Efficient Hot Water Distribution System (meet one of the following)</b>	<b>2</b>	<b>0 2 0</b>
<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		
<b>8. Lighting</b>			
<b>8.1</b>	<b>Title-24 Lighting</b>	<b>Prereq.</b>	
<b>8.2</b>	<b>Improved Lighting (meet one of the following, see Rating System for pts)</b>	<b>1</b>	<b>0 0 0</b>
<input type="checkbox"/>	a) Indoor lighting - three ENERGY STAR lights	<input type="checkbox"/>	b) Exterior lighting - four PV-integrated lights
<b>OR</b>	<b>8.3 Advanced Lighting Package (meet one of the following)</b>	<b>3</b>	<b>3 0 0</b>
<input type="checkbox"/>	a) all lighting is high-efficacy	<input type="checkbox"/>	c) At least 90% of all lamps are ENERGY STAR labeled
<input checked="" type="checkbox"/>	b) At least 60% of fixtures are ENERGY STAR labeled		

<b>9. Appliances</b>					
<b>9.1</b>	<b>High-Efficiency Appliances</b> ( <i>meet any, see Rating System for pts</i> )	<b>2</b>	<b>2</b>	<b>0</b>	<b>0</b>
<input checked="" type="checkbox"/>	a) ENERGY STAR labeled refrigerator	<input checked="" type="checkbox"/>	c) ENERGY STAR labeled dishwasher using 6.0 gallons per cycle or less		
<input type="checkbox"/>	b) ENERGY STAR labeled ceiling fans in living/family room and all bedrooms	<input checked="" type="checkbox"/>	d) ENERGY STAR clothes washer		
<b>9.2</b>	<b>Water-Efficiency Clothes Washer</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>0</b>
<b>10. Renewable Energy in California</b>					
<b>10</b>	<b>Renewable Energy System</b>	<b>10</b>	<b>10</b>	<b>0</b>	<b>10.0</b>
	<input type="text" value="25,160"/> Annual reference electric load, kWh/yr		<input type="text" value="9,238"/>	Electricity supplied by renewable system, kWh/yr	
	<input type="text" value="36.7%"/> Percentage of annual reference electric load supplied by renewable system				
<b>11. Residential Refrigerant Management</b>					
<b>11.1</b>	<b>Refrigerant Charge Test</b>	<i>Prereq.</i>			
<b>11.2</b>	<b>Appropriate HVAC Refrigerants</b> ( <i>meet one of the following</i> )	<b>1</b>	<b>1</b>	<b>0</b>	<b>1</b>
<input checked="" 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				
<b>Materials &amp; Resources (MR)</b> (Minimum 2 MR Points Required)		<b>Max: 16</b>	<b>Y:9</b>	<b>M:2</b>	<b>Notes</b>
<b>Final: 0</b>					
<b>1. Material-Efficient Framing</b>					
<b>1.1</b>	<b>Framing Order Waste Factor</b>	<i>Prereq.</i>		<b>Y</b>	
<b>1.2</b>	<b>Detailed Framing Documents</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>0</b>
<b>AND/OR</b>	<b>1.3 Detailed Cut List and Lumber Order</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>0</b>
	<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			
<b>AND/OR</b>	<b>1.4 Framing Efficiencies</b> ( <i>meet any of the following, see Rating System for pts</i> )	<b>3</b>	<b>1.5</b>	<b>0</b>	<b>0</b>
	<input checked="" 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 checked="" type="checkbox"/> Two of the following: Size headers for loads; ladder blocking; drywall clips; 2-stud corners			
<b>OR</b>	<b>1.5 Off-site Fabrication</b> ( <i>meet one of the following</i> )	<b>4</b>	<b>0</b>	<b>0</b>	<b>N</b>
	<input type="checkbox"/> a) Panelized construction	<input type="checkbox"/> b) Modular, prefabricated construction			

## 2. Environmentally Preferable Products

2.1  FSC Certified Tropical Wood (meet all of the following) Prereq. Y

a) Provide suppliers with a notice of preference for FSC products; AND

b) No tropical wood installed (exceptions for FSC-certified or reclaimed wood)

Request country of manufacture for each wood product

2.2  Environmentally Preferable Products (meet any, 1/2 pt each)

8

5.5

0

0

**Assembly : component**

**(a) EPP**

**(b) Low emission**

**(c) Local production**

Exterior wall: framing	<input type="checkbox"/>	type: _____	<input type="checkbox"/>		<input type="checkbox"/>
Exterior wall: siding or masonry	<input type="checkbox"/>	type: _____			<input type="checkbox"/>
Floor: flooring	<input checked="" type="checkbox"/>	(45%) type: FSC wood/ travertine	<input checked="" 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"/>	Green Label Plus	
Floor: framing	<input type="checkbox"/>	type: _____			<input type="checkbox"/>
Foundation: aggregate	<input type="checkbox"/>	type: _____			<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 type="checkbox"/>	type: Pabco			<input checked="" type="checkbox"/>
Interior wall, ceiling, millwork: paint	<input type="checkbox"/>	type: _____	<input checked="" type="checkbox"/>	type: DE Spartawall/ Valspar Zenith	
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 checked="" type="checkbox"/>	type: _____	
Other : window frame	<input type="checkbox"/>	type: _____			<input type="checkbox"/>
Roof: framing	<input type="checkbox"/>	type: _____			<input type="checkbox"/>
Roof: roofing	<input checked="" type="checkbox"/>	type: _____			<input type="checkbox"/>
Roof, floor, wall: cavity insulation	<input checked="" type="checkbox"/>	type: EcoTouch, EcoBatt	<input checked="" type="checkbox"/>	type: EcoTouch, EcoBatt	<input type="checkbox"/>
Roof, floor, wall (2 of 3): sheathing	<input checked="" type="checkbox"/>	type: FSC plywood			<input type="checkbox"/>
Other: water supply piping	<input type="checkbox"/>	type: _____			<input type="checkbox"/>
Other: driveway	<input type="checkbox"/>	type: _____			<input type="checkbox"/>

## 3. Waste Management

3.1 Construction Waste Management Planning (meet both of the following) Prereq.

a) Investigate local options for waste diversion

b) Document diversion rate for construction waste

3.2 Construction Waste Reduction (use one of the following methods)

3

0

2

0

a) pounds waste / square foot

cubic yards waste / 1,000 square feet

b) percentage of waste diverted

Indoor Environmental Quality (EQ) (Minimum 6 EQ Points Required)		Max: 21	Y:12	M:4	Notes	Final: 0
<b>1. ENERGY STAR with Indoor Air Package</b>						
1	ENERGY STAR with Indoor Air Package	13	0	0	N	0
<b>2. Combustion Venting</b>						
2.1	Basic Combustion Venting Measures (meet all of the following)	Prereq.	Y			
	<input checked="" type="checkbox"/> a) no unvented combustion appliances			<input checked="" type="checkbox"/> d) space, water heating equipment designed with closed combustion; OR		
	<input checked="" type="checkbox"/> b) carbon monoxide monitors on each floor			<input type="checkbox"/> space and water heating equipment has power-vented exhaust; OR		
	<input type="checkbox"/> c) no fireplace installed, OR			<input type="checkbox"/> space and water heating equipment located in detached or open-air facility; OR		
	<input checked="" 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 (meet one of the following)	2	2	0		0
	<b>Type of Fireplace or stove</b>	<b>Better practice (1 pt)</b>		<b>Best practice (2 pts) (must also meet Better Practice)</b>		
	None			<input 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 checked="" type="checkbox"/> listed, power- or direct-vented, fixed doors		<input checked="" type="checkbox"/> electronic pilot		
	Pelle stove	<input type="checkbox"/> EPA certified or meets safety requirements		<input type="checkbox"/> power- or direct-venting		
<b>3. Moisture Control</b>						
3	Moisture Load Control (meet one of the following)	1	0	0		0
	<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>						
4.1	Basic Outdoor Air Ventilation (meet one of the following)	Prereq.				
	<input checked="" 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		
4.2	Enhanced Outdoor Air Ventilation (meet one of the following)	2	0	2		0
	<input checked="" 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	0	1		0
<b>5. Local Exhaust</b>						
5.1	Basic Local Exhaust (meet all of the following)	Prereq.	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		0
	<input checked="" 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		0



6. Distribution of Space Heating and Cooling					
6.1	⚡ Room-by-Room Load Calculations	Prereq.	Y		Y
6.2	Return Air Flow / Room-by-Room Controls (meet one of the following)	1	1	0	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 checked="" type="checkbox"/> Flow control valves on every radiator				
	<input checked="" 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				
	<input type="checkbox"/> Have supply air flow rates in each room tested and confirmed				
	B. Nonducted HVAC Systems				
	<input checked="" type="checkbox"/> Install at least two distinct zones with independent thermostat control				
7. Air Filtering					
7.1	Good Filters	Prereq.			
7.2	Better Filters	1	0	0	N
OR	7.3 Best Filters	2	0	0	N
8. Contaminant Control					
8.1	⚡ Indoor Contaminant Control during Construction	1	1	0	0
8.2	Indoor Contaminant Control (meet any of the following, 1 pt each)	2	1	0	0
	<input type="checkbox"/> a) Design and install permanent walk-off mats at each entry				
	<input checked="" 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	⚡ Preoccupancy Flush	1	1	0	0
9. Radon Protection					
9.1	⚡ Radon-Resistant Construction in High-Risk Areas	Prereq.	N/A		
9.2	⚡ Radon-Resistant Construction in Moderate-Risk Areas	1	0	0	N
10. Garage Pollutant Protection					
10.1	No HVAC in Garage	Prereq.	Y		
10.2	Minimize Pollutants from Garage (meet all of the following)	2	2	0	0
	a) In conditioned spaces above garage:				
	<input 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	0	1	0
	<input type="checkbox"/> a) Fan runs continuously				
	<input checked="" type="checkbox"/> b) Fan designed with automatic timer control				
OR	10.4 Detached Garage or No Garage	3	0	0	N

<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>Final: 0</b>
<b>1. Education of the Homeowner or Tenant</b>						
1.1	<input checked="" type="checkbox"/> Basic Operations Training <i>(meet both of the following)</i>	<i>Prereq.</i>	<b>Y</b>			
	<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	<b>1</b>	<b>1</b>	<b>0</b>		<b>0</b>
1.3	Public Awareness <i>(meet three of the following)</i>	<b>1</b>	<b>1</b>	<b>0</b>		<b>0</b>
	<input 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		
<b>2. Education of the Building Manager</b>						
2	<input checked="" type="checkbox"/> Education of the Building Manager <i>(meet both of the following)</i>	<b>1</b>	<b>0</b>	<b>0</b>	<b>N</b>	<b>0</b>
	<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

**Chris Meddock**

Company

**HORSTarchitects**

Signature

Date

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

Provider QAD

**R. Zimmerman**

Company

**Sonoran**

Signature

Date

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

Green Rater

**R. Zimmerman**

Company

**Sonoran**

Signature

Date

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

Green Rater

Company

Signature

Date