



SUSTAINABLE NORTH PARK REDEVELOPMENT AREA  
SUSTAINABLE DEVELOPMENT QUALIFICATION PROGRAM  
North Park Redevelopment PAC Green Initiative Sub committee

June 6, 2010

PLATT/WHITELAW  
ARCHITECTS, INC.

A SUMMARY

In evaluating projects that apply for redevelopment funds, the North Park Redevelopment Area Project Area Committee wishes to create a program that prioritizes projects that exhibit significant sustainable characteristics (Program).

In July 2009, a subcommittee appointed by the PAC, established a list of Goals and Objectives upon which to base this Program, see attachment A North Park Redevelopment Area PAC Green Initiatives Subcommittee: Goals and Objectives.

The subcommittee, with Redevelopment Division project manager, Michael Lengyel, has worked with consultant Platt/Whitelaw Architects to develop a Program that identifies appropriate sustainable development characteristics that can be used to qualify projects under this Program. The subcommittee, the project manager and the consultant (Team) identified the following issues regarding the program.

- 1 In order for such a Program to be tailored to North Park, a set of sustainability indicators for success, based on the subcommittee's Goals and Objectives was established; these indicators can be used to check a project's overall benefit to the sustainable goals of North Park. See Attachment B Sustainable North Park Redevelopment Area Indicators for Success.
- 2 In order for such a program to be clear, fair and consistent, verifiable measures of sustainability criteria need to be established. Projects come before the PAC for consideration at an early stage in the design. At that time, the PAC can determine qualifying levels of sustainability based upon stated design intent, but verification that a project meets its intended sustainability goals will be required as the project progresses.

The Team has examined options for the establishment of sustainable project criteria that may be used to qualify projects within the North Park Redevelopment Area. In order to assure a predictable method of verification, it has concluded that the final Program should align with the Sustainable Incentive program that is currently under development by the City of San Diego under which projects will be verified through the plan check and inspection process. However, implementation of the City's program is not expected to occur until next year, therefore the Team recommends that an interim Program for the North Park Redevelopment Area be implemented until that time. The City's program under development appears to be using the CALGreen Code as the basis for qualification. The CALGreen Code, to be adopted in January 2011, contains mandatory measures and two tiers of optional measures that mark higher levels of sustainability and will probably be used as the City's qualification threshold for projects to receive various incentives.

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## B FINAL PROGRAM (DRAFT)

To qualify for redevelopment funds, a project will demonstrate serious contributions toward the Sustainable North Park Redevelopment Area Sustainability Indicators by exceeding the CALGreen Code and meeting one of the voluntary tiers indicated below. In the case where projects are competing for funding, projects demonstrating a higher level (tier) of compliance will be given preference. A summary of requirements for meeting CALGreen Tier One and Tier Two is provided in Attachment C

### Qualifying Levels

#### 1 CALGreen Tier One

##### Residential

Meet mandatory provisions of the CALGreen Code Division 4 and comply with the provisions of Tier One Prerequisite and Elective Measures, identified in A4.601.4.2 and further defined in Division A4.1 through A4.5.

##### Non Residential

Meet mandatory provisions of the CALGreen Code Division 5 and comply with the provisions of Tier One Prerequisite and Elective Measures, identified in A5.601.2 and further defined in Division A5.1 through A5.5.

#### 2 CALGreen Tier Two

##### Residential

Meet mandatory provisions of the CALGreen Code Division 4 and comply with the provisions of Tier Two Prerequisite and Elective Measures, identified in A4.601.5.2 and further defined in Division A4.1 through A4.5.

##### Non Residential

Meet mandatory provisions of the CALGreen Code Division 5 and comply with the provisions of Tier Two Prerequisite and Elective Measures, identified in A5.601.3 and further defined in Division A5.1 through A5.5.

#### 3 Alternate Compliance

Projects that attain LEED certification will be considered equivalent to Tier One CALGreen projects

Projects that attain Silver LEED certification will be considered equivalent to Tier Two CALGreen projects

Projects that attain Gold or Platinum LEED certification will be considered higher priority than CALGreen Tier Two projects

For projects that meet either CALGreen Tier One or Tier Two or their alternate compliance equivalents, applicants may submit documentation demonstrating additional innovative strategies that go beyond the CALGreen or LEED categories but meet the intent of the

Sustainable North Park Redevelopment Area Sustainability Indicators. The Project Area Committee will consider this documentation on a case by case basis to determine the priority of these projects.

Other comprehensive certification programs for sustainable buildings such as Green Point Rated for homes may be considered on a case by case basis.

## C INTERIM PROGRAM.

### Projects applying for funding in excess of \$100,000:

Until such time as the City's program is in place, the Team has determined that projects that apply for and obtain LEED Silver certification will be qualified under the Sustainable North Park Redevelopment Area Program.

The preliminary application will include a completed LEED Checklist with an accompanying narrative describing how each claimed prerequisite and credit will be met. Applicants will select the most appropriate LEED rating system for their projects (the LEED checklists for New Construction and Major Renovations, for Commercial Interiors, and for Homes, are all included as Attachment D, for reference).

Projects will receive higher priority when LEED Regional Credits and/or LEED Innovation & Design Credits that meet the intent of the Sustainable North Park Redevelopment Area Indicators for Success (Attachment B) are achieved. The accompanying narrative will include statements showing how each claimed indicator will be met through these credits.

Other comprehensive certification programs for sustainable buildings such as Green Point Rated for homes may be considered on a case by case basis.

### Projects applying for funding up to \$100,000:

For smaller projects, LEED Silver certification is not a prerequisite. However, preference will be given to applicants who incorporate elements that meet the Sustainable North Park Redevelopment Area Indicators for Success (Attachment B). The preliminary application will include an accompanying narrative describing how each claimed indicator will be met.

ATTACHMENT A  
North Park Redevelopment Area PAC Green Initiatives Subcommittee Goals & Objectives

**North Park Redevelopment PAC Green Initiative Subcommittee Goals and Objectives**

- 1) Maintain Cultural/ Historical Integrity**
  - a. New development to support existing cultural
  - b. Integrate with community plan update
- 2) Conservation/Reuse/ Resource Efficiency**
  - a. Reduction of carbon output/ use of energy generated by fossil fuels
  - b. Increase energy efficiency
  - c. Maximize renewable energy
  - d. Reduction of imported water use
  - e. Tree Planting
  - f. Decrease material entering landfill
  - g. Eliminate toxins/pollution
  - h. Storm water recycling
- 3) Public Facilities & Parks**
  - a. Create parks/ gathering spaces
- 4) Promote a Sustainable Green Economy**
  - a. Hire and train locally (social justice issues)
  - b. Community program for reuse/recycling/composting
- 5) Transportation**
  - a. Promote alternative vehicles
  - b. Increase use of transit
  - c. Increase bike-ability
  - d. Increase walk-ability
- 6) Housing**
  - a. Rehab or restoration of existing housing stock
    - 1) Single family**
    - 2) Multi-Family (1-4 units)**
    - 3) Commercial residential**

## ATTACHMENT B

### Sustainable North Park Redevelopment Area Indicators for success

#### Promote Livable Healthy Community

- Maintain/promote the cultural/historical Integrity of the community
- Create public open space/gathering spaces (*SF of open space*)
- Promote walk-ability & bike-ability
- Promote urban forestry (*Number of trees*)
- Reduce pollutants & toxins

#### Reduce GHG Emissions

- Promote energy efficiency (*kBTU/sf or kWh/sf*)
- Promote use of renewable energy (*annual kWh*)
- Reduce gasoline powered transportation
- Reduce heat island effect

#### Water Conservation

- Reduce quantity & pollution of urban storm water run off
- Reduce use of imported water (*Gallons*)

#### Resource Conservation

- Decrease material entering landfill
- Promote use of recycled, rapidly renewable materials
- Promote rehabilitation and restoration of existing building stock

#### Promote Sustainable Local Economy

- Promote job training & growth (*Number of jobs*)
- Promote green businesses
- Create neighborhood services

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## ATTACHMENT C Summary Of Calgreen Tier 1 And 2 Measures

### CALGreen Tier One

#### Residential

Meet mandatory provisions of the CALGreen Code Division 4 and comply with the provisions of Tier One Prerequisite and Elective Measures, identified in A4.601.4.2 and further defined in Division A4.1 through A4.5. A summary of these measures is as follows.

##### Division A4.1 Planning & Design

- Topsoil protection: Stockpile, protect and reuse displaced topsoil
- Permeable Paving: Not less than 20% of total parking, walking & patio surface shall be permeable
- Cool roof (exception for green roofs): Meet Aged Solar reflectance & thermal emittance, or Solar Reflectance Index required for Tier One
- Comply with at least 2 elective measures from Division A4.1 Planning & Design

##### Division A4.2 Energy Efficiency

- Exceed 2008 State Energy Efficiency Standards by 15%
- Comply with at least 4 elective measures from Division A4.2

##### Division A4.3 Water Efficiency & Conservation

- Reduced flow rate for kitchen faucets
- Potable water use reduction for landscape irrigation per Tier One requirements
- Comply with at least 1 elective measure from Division A4.3

##### Division A4.4 Material Conservation & Resource Efficiency

- Reduce cement by 20% in foundation mix design
- Use materials with not less than 10% (by value) preconsumer or post consumer recycled content
- Reduce construction waste by not less than 65%
- Comply with at least 2 elective measures from Division A4.4

##### Division A4.5 Environmental Quality

- 80% of total resilient flooring area to comply with VOC emission limits
- Thermal insulation to comply with VOC emission limits per Tier One requirements
- Comply with at least 1 elective measure from Division A4.5

#### Non Residential

Meet mandatory provisions of the CALGreen Code Division 5 and comply with the provisions of Tier One Prerequisite and Elective Measures, identified in A5.601.2 and further defined in Division A5.1 through A5.5. A summary of these measures is as follows.

##### A5.601.2.3 Energy Performance:

- Exceed 2008 State Energy Efficiency Standards by 15%

Division A5.1 Site Planning & Design:

- Parking: Designate 10% of parking for fuel efficient vehicles
- Cool roof: Meet Aged Solar reflectance & thermal emittance, or Solar Reflectance Index required for Tier One
- Comply with at least 1 elective measure from Division A5.1

Division A5.3 Water Efficiency & Conservation

- Reduce Indoor Potable Water Use by 30%
- Reduce Outdoor Potable Water Use per A5.304.4.1
- Comply with at least 1 elective measure from Division A5.3

Division A5.4 Material Conservation & Resource Efficiency

- Use materials with not less than 10% (by value) preconsumer or post consumer recycled content
- Reduce construction waste by not less than 65%
- Comply with at least 1 elective measure from Division A5.4

Division A5.5 Environmental Quality

- 80% of total resilient flooring area to comply with VOC emission limits
- Thermal insulation to comply with VOC emission limits
- Comply with at least 1 elective measure from Division A5.5

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## CALGreen Tier Two

### Residential

Meet mandatory provisions of the CALGreen Code Division 4 and comply with the provisions of Tier Two Prerequisite and Elective Measures, identified in A4.601.5.2 and further defined in Division A4.1 through A4.5. A summary of these measures is as follows.

#### Division A4.1 Planning & Design

- Topsoil protection: Stockpile, protect and reuse displaced topsoil per Tier One & Tier Two requirements
- Permeable Paving: Not less than 30% of total parking, walking & patio surface shall be permeable
- Cool roof (exception for green roofs): Meet Aged Solar reflectance & thermal emittance, or Solar Reflectance Index required for Tier Two
- Comply with at least 4 elective measures from Division A4.1 Planning & Design

#### Division A4.2 Energy Efficiency

- Exceed 2008 State Energy Efficiency Standards by 30%
- Comply with at least 6 elective measures from Division A4.2

#### Division A4.3 Water Efficiency & Conservation

- Reduced flow rate for kitchen faucets per Tier One requirements
- EnergyStar qualified and reduced water flow for dishwashers
- Potable water use reduction for landscape irrigation per Tier Two requirements
- Comply with at least 2 elective measure from Division A4.3

#### Division A4.4 Material Conservation & Resource Efficiency

- Reduce cement by 25% in foundation mix design
- Use materials with not less than 15% (by value) preconsumer or post consumer recycled content
- Reduce construction waste by not less than 75%
- Comply with at least 4 elective measures from Division A4.4

#### Division A4.5 Environmental Quality

- 90% of total resilient flooring area to comply with VOC emission limits
- Thermal insulation to comply with VOC emission limits per Tier 2 requirements
- Comply with at least 1 elective measure from Division A4.5

### Non Residential

Meet mandatory provisions of the CALGreen Code Division 5 and comply with the provisions of Tier Two Prerequisite and Elective Measures, identified in A5.601.3 and further defined in Division A5.1 through A5.5. A summary of these measures is as follows.

#### A5.601.2.3 Energy Performance:

- Exceed 2008 State Energy Efficiency Standards by 30%



Division A5.1 Site Planning & Design:

- Parking: Designate 12% of parking for fuel efficient vehicles
- Cool roof: Meet Aged Solar reflectance & thermal emittance, or Solar Reflectance Index required for Tier Two
- Comply with at least 3 elective measures from Division A5.1

Division A5.3 Water Efficiency & Conservation

- Reduce Indoor Potable Water Use by 35 (40%?)%
- Reduce Outdoor Potable Water Use per A5.304.4.2
- Comply with at least 3 elective measures from Division A5.3

Division A5.4 Material Conservation & Resource Efficiency

- Use materials with not less than 15% (by value) preconsumer or post consumer recycled content
- Reduce construction waste by not less than 80%
- Comply with at least 3 elective measures from Division A5.4


Division A5.5 Environmental Quality

- 90% of total resilient flooring area to comply with VOC emission limits
- Thermal insulation to comply with VOC emission limits & no added formaldehyde
- Comply with at least 3 elective measure from Division A5.5

Additional: Comply with at least 3 additional elective measures from any division.

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ATTACHMENT D  
 LEED Score Cards

 <b>LEED 2009 for New Construction and Major Renovation</b>									
<b>Project Checklist</b>									
Project Name									
Date									
<table border="1"> <tr> <td>0</td> <td>0</td> <td>0</td> </tr> <tr> <td>Y</td> <td>N</td> <td>?</td> </tr> </table>		0	0	0	Y	N	?	<b>Sustainable Sites</b>	<b>Possible Points: 26</b>
0	0	0							
Y	N	?							
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Prereq 1 Construction Activity Pollution Prevention						
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Credit 1 Site Selection	1					
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Credit 2 Development Density and Community Connectivity	5					
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Credit 3 Brownfield Redevelopment	1					
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Credit 4.1 Alternative Transportation—Public Transportation Access	6					
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Credit 4.2 Alternative Transportation—Bicycle Storage and Changing Rooms	1					
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Credit 4.3 Alternative Transportation—Low-Emitting and Fuel-Efficient Vehicles	3					
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Credit 4.4 Alternative Transportation—Parking Capacity	2					
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Credit 5.1 Site Development—Protect or Restore Habitat	1					
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Credit 5.2 Site Development—Maximize Open Space	1					
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Credit 6.1 Stormwater Design—Quantity Control	1					
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Credit 6.2 Stormwater Design—Quality Control	1					
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Credit 7.1 Heat Island Effect—Non-roof	1					
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Credit 7.2 Heat Island Effect—Roof	1					
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Credit 8 Light Pollution Reduction	1					
<table border="1"> <tr> <td>0</td> <td>0</td> <td>0</td> </tr> </table>		0	0	0	<b>Water Efficiency</b>	<b>Possible Points: 10</b>			
0	0	0							
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Prereq 1 Water Use Reduction—20% Reduction						
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Credit 1 Water Efficient Landscaping	2 to 4					
		<input type="checkbox"/>	Reduce by 50%	2					
		<input type="checkbox"/>	No Potable Water Use or Irrigation	4					
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Credit 2 Innovative Wastewater Technologies	2					
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Credit 3 Water Use Reduction	2 to 4					
		<input type="checkbox"/>	Reduce by 30%	2					
		<input type="checkbox"/>	Reduce by 35%	3					
		<input type="checkbox"/>	Reduce by 40%	4					

**0 0 0 Energy and Atmosphere** **Possible Points: 35**

Y	Prereq 1	Fundamental Commissioning of Building Energy Systems	
Y	Prereq 2	Minimum Energy Performance	
Y	Prereq 3	Fundamental Refrigerant Management	
	Credit 1	Optimize Energy Performance	1 to 19
		<input type="checkbox"/> Improve by 12% for New Buildings or 8% for Existing Building Renovations	1
		<input type="checkbox"/> Improve by 14% for New Buildings or 10% for Existing Building Renovations	2
		<input type="checkbox"/> Improve by 16% for New Buildings or 12% for Existing Building Renovations	3
		<input type="checkbox"/> Improve by 18% for New Buildings or 14% for Existing Building Renovations	4
		<input type="checkbox"/> Improve by 20% for New Buildings or 16% for Existing Building Renovations	5
		<input type="checkbox"/> Improve by 22% for New Buildings or 18% for Existing Building Renovations	6
		<input type="checkbox"/> Improve by 24% for New Buildings or 20% for Existing Building Renovations	7
		<input type="checkbox"/> Improve by 26% for New Buildings or 22% for Existing Building Renovations	8
		<input type="checkbox"/> Improve by 28% for New Buildings or 24% for Existing Building Renovations	9
		<input type="checkbox"/> Improve by 30% for New Buildings or 26% for Existing Building Renovations	10
		<input type="checkbox"/> Improve by 32% for New Buildings or 28% for Existing Building Renovations	11
		<input type="checkbox"/> Improve by 34% for New Buildings or 30% for Existing Building Renovations	12
		<input type="checkbox"/> Improve by 36% for New Buildings or 32% for Existing Building Renovations	13
		<input type="checkbox"/> Improve by 38% for New Buildings or 34% for Existing Building Renovations	14
		<input type="checkbox"/> Improve by 40% for New Buildings or 36% for Existing Building Renovations	15
		<input type="checkbox"/> Improve by 42% for New Buildings or 38% for Existing Building Renovations	16
		<input type="checkbox"/> Improve by 44% for New Buildings or 40% for Existing Building Renovations	17
		<input type="checkbox"/> Improve by 46% for New Buildings or 42% for Existing Building Renovations	18
		<input type="checkbox"/> Improve by 48%+ for New Buildings or 44%+ for Existing Building Renovations	19
	Credit 2	On-Site Renewable Energy	1 to 7
		<input type="checkbox"/> 1% Renewable Energy	1
		<input type="checkbox"/> 3% Renewable Energy	2
		<input type="checkbox"/> 5% Renewable Energy	3
		<input type="checkbox"/> 7% Renewable Energy	4
		<input type="checkbox"/> 9% Renewable Energy	5
		<input type="checkbox"/> 11% Renewable Energy	6
		<input type="checkbox"/> 13% Renewable Energy	7
	Credit 3	Enhanced Commissioning	2
	Credit 4	Enhanced Refrigerant Management	2
	Credit 5	Measurement and Verification	3
	Credit 6	Green Power	2

0 0 0			<b>Materials and Resources</b>	Possible Points: 14
Y			Prereq 1 Storage and Collection of Recyclables	
			Credit 1.1 Building Reuse—Maintain Existing Walls, Floors, and Roof	1 to 3
			<input type="checkbox"/> Reuse 55%	1
			<input type="checkbox"/> Reuse 75%	2
			<input type="checkbox"/> Reuse 95%	3
			Credit 1.2 Building Reuse—Maintain 50% of Interior Non-Structural Elements	1
			Credit 2 Construction Waste Management	1 to 2
			<input type="checkbox"/> 50% Recycled or Salvaged	1
			<input type="checkbox"/> 75% Recycled or Salvaged	2
			Credit 3 Materials Reuse	1 to 2
			<input type="checkbox"/> Reuse 5%	1
			<input type="checkbox"/> Reuse 10%	2
			Credit 4 Recycled Content	1 to 2
			<input type="checkbox"/> 10% of Content	1
			<input type="checkbox"/> 20% of Content	2
			Credit 5 Regional Materials	1 to 2
			<input type="checkbox"/> 10% of Materials	1
			<input type="checkbox"/> 20% of Materials	2
			Credit 6 Rapidly Renewable Materials	1
			Credit 7 Certified Wood	1

0 0 0			<b>Indoor Environmental Quality</b>	Possible Points: 15
Y			Prereq 1 Minimum Indoor Air Quality Performance	
Y			Prereq 2 Environmental Tobacco Smoke (ETS) Control	
			Credit 1 Outdoor Air Delivery Monitoring	1
			Credit 2 Increased Ventilation	1
			Credit 3.1 Construction IAQ Management Plan—During Construction	1
			Credit 3.2 Construction IAQ Management Plan—Before Occupancy	1
			Credit 4.1 Low-Emitting Materials—Adhesives and Sealants	1
			Credit 4.2 Low-Emitting Materials—Paints and Coatings	1
			Credit 4.3 Low-Emitting Materials—Flooring Systems	1
			Credit 4.4 Low-Emitting Materials—Composite Wood and Agrifiber Products	1
			Credit 5 Indoor Chemical and Pollutant Source Control	1
			Credit 6.1 Controllability of Systems—Lighting	1
			Credit 6.2 Controllability of Systems—Thermal Comfort	1
			Credit 7.1 Thermal Comfort—Design	1
			Credit 7.2 Thermal Comfort—Verification	1
			Credit 8.1 Daylight and Views—Daylight	1
			Credit 8.2 Daylight and Views—Views	1

0	0	0	<b>Innovation and Design Process</b>	<b>Possible Points: 6</b>
			Credit 1.1 Innovation in Design: Specific Title	1
			Credit 1.2 Innovation in Design: Specific Title	1
			Credit 1.3 Innovation in Design: Specific Title	1
			Credit 1.4 Innovation in Design: Specific Title	1
			Credit 1.5 Innovation in Design: Specific Title	1
			Credit 2 LEED Accredited Professional	1
0	0	0	<b>Regional Priority Credits</b>	<b>Possible Points: 4</b>
			Credit 1.1 Regional Priority: Specific Credit	1
			Credit 1.2 Regional Priority: Specific Credit	1
			Credit 1.3 Regional Priority: Specific Credit	1
			Credit 1.4 Regional Priority: Specific Credit	1
0	0	0	<b>Total</b>	<b>Possible Points: 110</b>

Certified 40 to 49 points Silver 50 to 49 points Gold 60 to 79 points Platinum 80 to 110

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ATTACHMENT D: LEED Score Cards continued

LEED 2009 for Commercial Interiors				Project Name	
Project Checklist				Date	
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		<b>Sustainable Sites</b>	<b>Possible Points: 21</b>		
<input type="checkbox"/>	<input type="checkbox"/>	Credit 1 Site Selection	1 to 5	<input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Credit 2 Development Density and Community Connectivity	6	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Credit 3.1 Alternative Transportation—Public Transportation Access	6	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Credit 3.2 Alternative Transportation—Bicycle Storage and Changing Rooms	2	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Credit 3.3 Alternative Transportation—Parking Availability	2	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		<b>Water Efficiency</b>	<b>Possible Points: 11</b>		
<input type="checkbox"/>	<input type="checkbox"/>	Prereq 1 Water Use Reduction—20% Reduction		<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Credit 1 Water Use Reduction	6 to 11	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		<b>Energy and Atmosphere</b>	<b>Possible Points: 37</b>		
<input type="checkbox"/>	<input type="checkbox"/>	Prereq 1 Fundamental Commissioning of Building Energy Systems		<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Prereq 2 Minimum Energy Performance		<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Prereq 3 Fundamental Refrigerant Management		<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Credit 1.1 Optimize Energy Performance—Lighting Power	1 to 5	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Credit 1.2 Optimize Energy Performance—Lighting Controls	1 to 3	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Credit 1.3 Optimize Energy Performance—HVAC	5 to 10	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Credit 1.4 Optimize Energy Performance—Equipment and Appliances	1 to 4	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Credit 2 Enhanced Commissioning	5	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Credit 3 Measurement and Verification	2 to 5	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Credit 4 Green Power	5	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		<b>Materials and Resources</b>	<b>Possible Points: 14</b>		
<input type="checkbox"/>	<input type="checkbox"/>	Prereq 1 Storage and Collection of Recyclables		<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Credit 1.1 Tenant Space—Long-Term Commitment	1	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Credit 1.2 Building Reuse	1 to 2	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Credit 2 Construction Waste Management	1 to 2	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Credit 3.1 Materials Reuse	1 to 2	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Credit 3.2 Materials Reuse—Furniture and Furnishings	1	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Credit 4 Recycled Content	1 to 2	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Credit 5 Regional Materials	1 to 2	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Credit 6 Rapidly Renewable Materials	1	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Credit 7 Certified Wood	1	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		<b>Indoor Environmental Quality</b>	<b>Possible Points: 17</b>		
<input type="checkbox"/>	<input type="checkbox"/>	Prereq 1 Minimum IAQ Performance		<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Prereq 2 Environmental Tobacco Smoke (ETS) Control		<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Credit 1 Outdoor Air Delivery Monitoring	1	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Credit 2 Increased Ventilation	1	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Credit 3.1 Construction IAQ Management Plan—During Construction	1	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Credit 3.2 Construction IAQ Management Plan—Before Occupancy	1	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Credit 4.1 Low-Emitting Materials—Adhesives and Sealants	1	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Credit 4.2 Low-Emitting Materials—Paints and Coatings	1	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Credit 4.3 Low-Emitting Materials—Flooring Systems	1	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Credit 4.4 Low-Emitting Materials—Composite Wood and Agrifiber Products	1	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Credit 4.5 Low-Emitting Materials—Systems Furniture and Seating	1	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Credit 5 Indoor Chemical & Pollutant Source Control	1	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Credit 6.1 Controllability of Systems—Lighting	1	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Credit 6.2 Controllability of Systems—Thermal Comfort	1	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Credit 7.1 Thermal Comfort—Design	1	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Credit 7.2 Thermal Comfort—Verification	1	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Credit 8.1 Daylight and Views—Daylight	1 to 2	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Credit 8.2 Daylight and Views—Views for Seated Spaces	1	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		<b>Innovation and Design Process</b>	<b>Possible Points: 6</b>		
<input type="checkbox"/>	<input type="checkbox"/>	Credit 1.1 Innovation in Design: Specific Title	1	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Credit 1.2 Innovation in Design: Specific Title	1	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Credit 1.3 Innovation in Design: Specific Title	1	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Credit 1.4 Innovation in Design: Specific Title	1	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Credit 1.5 Innovation in Design: Specific Title	1	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Credit 2 LEED Accredited Professional	1	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		<b>Regional Priority Credits</b>	<b>Possible Points: 4</b>		
<input type="checkbox"/>	<input type="checkbox"/>	Credit 1.1 Regional Priority: Specific Credit	1	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Credit 1.2 Regional Priority: Specific Credit	1	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Credit 1.3 Regional Priority: Specific Credit	1	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Credit 1.4 Regional Priority: Specific Credit	1	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		<b>Total</b>	<b>Possible Points: 110</b>		
<small>Certified 40 to 49 points Silver 50 to 59 points Gold 60 to 79 points Platinum 80 to 110</small>					

ATTACHMENT D: LEED Score Cards continued



for Homes

LEED for Homes Project Checklist

Builder Name:	
Project Team Leader:	
Home Address (Street/City/State):	

Project Description		Adjusted Certification Thresholds			
Building Type:	Project type:	Certified:	45.0	Gold:	75.0
# of Bedrooms: 0	Floor Area: 0	Silver:	60.0	Platinum:	90.0

Project Point Total		Final Credit Category Point Totals			
Prelim: 0 + 0 maybe pts	Final: 0	ID: 0	SS: 0	EA: 0	EQ: 0
Certification Level		LL: 0	WE: 0	MR: 0	AE: 0
Prelim: Not Certified	Final: Not Certified	Min. Point Thresholds Not Met for Prelim. OR Final Rating			
Date Most Recently Updated:		Updated by:			

	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:0</b>	<b>M:0</b>		<b>Final: 0</b>
<b>1. Integrated Project Planning</b>					
1.1 Preliminary Rating					
Target performance tier: <input type="text"/>					
1.2 Integrated Project Team (meet all of the following)	1	0	0		0
<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	please see ID 01-06 for details	0
1.4 Design Charrette	1	0	0		0
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 30% 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)					
<input type="checkbox"/> a) Durability evaluation completed				<input type="checkbox"/> d) Durability strategies incorporated into project documentation	
<input type="checkbox"/> b) Strategies developed to address durability issues				<input type="checkbox"/> e) Durability measures listed in durability inspection checklist	
<input type="checkbox"/> c) Moisture control measures from Table 1 incorporated					
2.2 Durability Management (meet one of the following)					
<input type="checkbox"/> Builder has a quality management process in place				<input type="checkbox"/> Builder conducted inspection using durability inspection checklist	
2.3 Third-Party Durability Management Verification	3	0	0		0
<b>3. Innovative or Regional Design</b>					
3.1 Innovation 1 (ruling #): <input type="text"/>	1	0	0		0
3.2 Innovation 2 (ruling #): <input type="text"/>	1	0	0		0
3.3 Innovation 3 (ruling #): <input type="text"/>	1	0	0		0
3.4 Innovation 4 (ruling #): <input type="text"/>	1	0	0		0
<b>Location &amp; Linkages (LL)</b> (Minimum 0 LL Points Required)					
<b>1. LEED for Neighborhood Development</b>					
1 LEED for Neighborhood Development	10	0	0		0
<b>2. Site Selection</b>					
2 Site Selection (meet all of the following)	2	0	0		0
<input type="checkbox"/> a) Built above 100-year floodplain defined by FEMA				<input 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 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	0	0		0
AND/OR 3.3 Previously Developed	1	0	0		0
<b>4. Infrastructure</b>					
4 Existing Infrastructure	1	0	0		0
<b>5. Community Resources / Transit</b>					
5.1 Basic Community Resources / Transit (meet one of the following)	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 (meet one of the following)	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 (meet one of the following)	3	0	0		0
<input type="checkbox"/> a) Within 1/4 mile of 11 basic community resources				<input type="checkbox"/> c) Within 1/2 mile of transit services providing 125 rides per weekday	
<input type="checkbox"/> b) Within 1/2 mile of 14 basic community resources					
<b>6. Access to Open Space</b>					
6 Access to Open Space	1	0	0		0

Sustainable Sites (SS) (Minimum 5 SS Points Required)	Max: 22	Y:0	M:0	Notes	Final: 0
<b>1. Site Stewardship</b>					
1.1 Erosion Controls During Construction (meet all of the following)	Prereq.				
<input type="checkbox"/> a) Stockpile and protect disturbed topsoil from erosion.	<input type="checkbox"/> d) Provide swales to divert surface water from hillsides.				
<input type="checkbox"/> b) Control the path and velocity of runoff with silt fencing or equivalent.	<input type="checkbox"/> e) Use tiers, erosion blankets, compost blankets, etc. on sloped areas.				
<input type="checkbox"/> c) Protect sewer inlets, streams, and lakes with straw bales, silt fencing, etc.					
1.2 Minimize Disturbed Area of Site (meet the appropriate requirements)	1	0	0		0
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 bulkable lot area, not including area under roof, undisturbed					
OR Where the site is previously developed, meet all the following					
<input type="checkbox"/> c) Develop tree / plant preservation plan with "no-disturbance" zones AND					
<input type="checkbox"/> Rehabilitate lot, undo soil compaction and remove invasive plants AND					
<input type="checkbox"/> Meet the requirements of SS 2.2					
OR <input type="checkbox"/> d) Build on a lot of 1/7 acre or less, or 7 units per acre.					
<b>2. Landscaping</b>					
2.1 No Invasive Plants	Prereq.				
2.2 Basic Landscaping Design (meet all of the following)	2	0	0		0
<input type="checkbox"/> a) Any turf must be drought-tolerant.	<input type="checkbox"/> d) Add mulch or soil amendments as appropriate.				
<input type="checkbox"/> b) Do not use turf in densely shaded areas.	<input type="checkbox"/> e) All compacted soil must be tilled to at least 6 inches.				
<input type="checkbox"/> c) Do not use turf in areas with slope of 25%.					
AND/OR 2.3 Limit Conventional Turf	3	0	0		0
<input type="text"/> Percentage of designed landscape softscape area that is turf					
AND/OR 2.4 Drought-Tolerant Plants	2	0	0		0
<input type="text"/> Percentage of installed plants that are drought-tolerant					
OR 2.5 Reduce Overall Irrigation Demand by at Least 20%	6	0	0		0
<input type="text"/> Percentage reduction in estimated irrigation water demand (calculate)					
<b>3. Reduce Local Heat Island Effects</b>					
3 Reduce Local Heat Island Effects (meet one of the following)	1	0	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 hardscapes				
<b>4. Surface Water Management</b>					
4.1 Permeable Lot	4	0	0		0
<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)					
4.2 Permanent Erosion Controls (meet one of the following)	1	0	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 (meet any, see Rating System for pts)	2	0	0		0
<input type="checkbox"/> a) Install permanent stormwater controls to manage runoff from the home	<input type="checkbox"/> c) Install vegetated roof to cover 100% of roof area				
<input type="checkbox"/> b) Install vegetated roof to cover 50% 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>					
5 Pest Control Alternatives (meet any of the following, 1/2 pt each)	2	0	0		0
<input type="checkbox"/> a) Keep all exterior wood at least 12" above soil	<input type="checkbox"/> e) In 'moderate' to 'very heavy' termite risk areas:				
<input type="checkbox"/> b) Seal external cracks, joints, etc. with caulking and install pest-proof screens	<input type="checkbox"/> i) Treat all cellulose material with borate product to 3" above foundation				
<input type="checkbox"/> c) Include no wood-to-concrete connections, or separate connections with dividers	<input type="checkbox"/> ii) Install sand or diatomaceous earth barrier				
<input type="checkbox"/> d) Install landscaping so mature plants are 24" from home	<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>					
6.1 Moderate Density	2	0	0		0
<input type="text"/> # of total units on the lot <input type="text"/> lot size (acres) <input type="text"/> density (units/acre)					
OR 6.2 High Density	3	0	0		0
OR 6.3 Very High Density	4	0	0		0
<b>Water Efficiency (WE) (Minimum 3 WE Points Required)</b>					
Max: 15 Y:0 M:0 Notes Final: 0					
<b>1. Water Reuse</b>					
1.1 Rainwater Harvesting System	4	0	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		0
OR 1.3 Use of Municipal Recycled Water System	3	0	0		0
<b>2. Irrigation System</b>					
2.1 High-Efficiency Irrigation System (meet any of the following, 1 pt each)	3	0	0		0
<input type="checkbox"/> a) Irrigation system designed by EPA Water Sense certified professional	<input type="checkbox"/> g) Install timer or controller for each watering zone				
<input type="checkbox"/> b) Irrigation system with head-to-head coverage	<input type="checkbox"/> h) Install pressure-regulating devices				
<input 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 type="checkbox"/> e) Use drip irrigation for 50% of planting beds	<input type="checkbox"/> k) Install moisture sensor or rain delay controller				
<input type="checkbox"/> f) Create separate zones for each type of bedding					
AND/OR 2.2 Third-party Inspection	1	0	0		0
OR 2.3 Reduce Overall Irrigation Demand by at Least 45%	4	0	0		0
<input type="text"/> Percentage reduction in estimated irrigation water demand (calculate)					

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<b>3. Indoor Water Use</b>							
<b>3.1 High-Efficiency Fixtures and Fittings (meet any of the following, 1 pt each)</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	<b>3</b>	<b>0</b>	<b>0</b>		<b>0</b>		
<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 Very High-Efficiency Fixtures and Fittings (meet any, 2 pts each)</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	<b>6</b>	<b>0</b>	<b>0</b>		<b>0</b>		
<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) (Minimum 0 EA Points Required)</b>							
		<b>Max: 38</b>	<b>Y:0</b>	<b>M:0</b>	<b>Notes</b>	<b>Final: 0</b>	
<b>1 Optimize Energy Performance</b>							
<b>1.1 Performance of ENERGY STAR for Homes</b>		<i>Prereq.</i>					
<b>1.2 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 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 Pipe Insulation</b>		<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>		
<b>11 Residential Refrigerant Management</b>							
<b>11.1 Refrigerant Charge Test</b>		<i>Prereq.</i>					
<b>11.2 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							
<b>Materials &amp; Resources (MR) (Minimum 2 MR Points Required)</b>							
		<b>Max: 16</b>	<b>Y:0</b>	<b>M:0</b>	<b>Notes</b>	<b>Final: 0</b>	
<b>1 Material-Efficient Framing</b>							
<b>1.1 Framing Order Waste Factor</b>		<i>Prereq.</i>					
<b>1.2 Detailed Framing Documents</b>		<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>		
<b>AND/OR 1.3 Detailed Cut List and Lumber Order</b>		<b>1</b>	<b>0</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 1.4 Framing Efficiencies (meet any of the following: see Rating System for pts)</b>		<b>3</b>	<b>0</b>	<b>0</b>	<b>0</b>		
<input type="checkbox"/> Precut framing packages <input type="checkbox"/> Open-web floor trusses <input type="checkbox"/> Structural insulated panels/walls <input type="checkbox"/> Structural insulated panels/roof <input type="checkbox"/> Structural insulated panels/floors		<input type="checkbox"/> Stud spacing greater than 16" on center <input type="checkbox"/> Ceiling joist spacing greater than 16" on center <input type="checkbox"/> Floor joist spacing greater than 16" on center <input type="checkbox"/> Roof rafter spacing greater than 16" on center <input type="checkbox"/> Two of the following: Size headers for bays; ladder blocking; drywall clips; 2-stud corners					
<b>OR 1.5 Off-site Fabrication (meet one of the following)</b>		<b>4</b>	<b>0</b>	<b>0</b>	<b>0</b>		
<input type="checkbox"/> a) Panelized construction <input type="checkbox"/> b) Modular, prefabricated construction							
<b>2 Environmentally Preferable Products</b>							
<b>2.1 FSC Certified Tropical Wood (meet all of the following)</b>		<i>Prereq.</i>					
<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 Environmentally Preferable Products (meet any, 1/2 pt each)</b>		<b>8</b>	<b>0</b>	<b>0</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: _____					
Floor: flooring	<input type="checkbox"/>	(45%) type: _____		<input type="checkbox"/>	90% hard flooring	<input type="checkbox"/>	(45%)
Floor: flooring	<input type="checkbox"/>	(90%) type: _____		<input type="checkbox"/>	SCS FloorScore	<input type="checkbox"/>	(90%)
Floor: carpet	<input type="checkbox"/>	type: _____		<input type="checkbox"/>	Green Label Plus	<input type="checkbox"/>	
Floor: framing	<input type="checkbox"/>	type: _____					
Foundation: aggregate	<input type="checkbox"/>	type: _____					
Foundation: cement	<input type="checkbox"/>	type: _____					
Interior wall: framing	<input type="checkbox"/>	type: _____					
Interior wall, ceiling: gypsum board	<input type="checkbox"/>	type: _____					
Interior wall, ceiling, millwork: paint	<input type="checkbox"/>	type: _____		<input type="checkbox"/>	type: _____		
Landscape: decking and patio	<input type="checkbox"/>	type: _____					
Other cabinet	<input type="checkbox"/>	type: _____					
Other counter	<input type="checkbox"/>	type: _____					
Other door	<input type="checkbox"/>	type: _____					
Other : interior trim	<input type="checkbox"/>	type: _____					
Other : adhesive, sealant	<input type="checkbox"/>	type: _____		<input type="checkbox"/>	type: _____		
Other : window frame	<input type="checkbox"/>	type: _____					
Roof: framing	<input type="checkbox"/>	type: _____					
Roof: roofing	<input type="checkbox"/>	type: _____					
Roof, floor, wall: cavity insulation	<input type="checkbox"/>	type: _____		<input type="checkbox"/>	type: _____		
Roof, floor, wall (2 of 3): sheathing	<input type="checkbox"/>	type: _____					
Other water supply piping	<input type="checkbox"/>	type: _____					
Other driveway	<input type="checkbox"/>	type: _____					
<b>3 Waste Management</b>							
<b>3.1 Construction Waste Management Planning (meet both of the following)</b>		<i>Prereq.</i>					
<input type="checkbox"/> a) Investigate local options for waste diversion <input type="checkbox"/> b) Document diversion plan for construction waste							
<b>3.2 Construction Waste Reduction (use one of the following methods)</b>		<b>3</b>	<b>0</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"/> b) percentage of waste diverted							

Indoor Environmental Quality (EQ) (Minimum 6 EQ Points Required)		Max: 21	Y:0	M:0	Notes	Final: 0
<b>1. ENERGY STAR with Indoor Air Package</b>						
1	ENERGY STAR with Indoor Air Package	13	0	0		0
<b>2. Combustion Venting</b>						
2.1 Basic Combustion Venting Measures (meet all of the following)		Prereq.				
<input type="checkbox"/> a) no unvented combustion appliances <input type="checkbox"/> b) carbon monoxide monitors on each floor <input type="checkbox"/> c) no fireplace installed, OR <input type="checkbox"/> all fireplaces and woodstoves have doors		<input type="checkbox"/> d) space, water heating equipment designed with closed combustion; OR <input type="checkbox"/> space and water heating equipment has power-vented exhaust; OR <input type="checkbox"/> space and water heating equipment located in detached or open-air facility; OR <input type="checkbox"/> no space- or water-heating equipment with combustion				
2.2 Enhanced Combustion Venting Measures (meet one of the following)		2	0	0		0
Type of Fireplace or stove		Better practice (1 pt)		Best practice (2 pts) (must also meet Better Practice)		
None		<input type="checkbox"/> masonry heater <input type="checkbox"/> listed by testing lab and meets EPA standards <input type="checkbox"/> listed by testing lab and meets EPA standards		<input type="checkbox"/> granted automatically <input type="checkbox"/> back-draft potential test <input type="checkbox"/> back-draft potential test <input type="checkbox"/> back-draft potential test <input type="checkbox"/> electronic pilot <input type="checkbox"/> power- or direct-venting		
Masonry wood-burning fireplace		<input type="checkbox"/> masonry heater <input type="checkbox"/> listed by testing lab and meets EPA standards <input type="checkbox"/> listed by testing lab and meets EPA standards		<input type="checkbox"/> granted automatically <input type="checkbox"/> back-draft potential test <input type="checkbox"/> back-draft potential test <input type="checkbox"/> back-draft potential test <input type="checkbox"/> electronic pilot <input type="checkbox"/> power- or direct-venting		
Factory-built wood-burning fireplace		<input type="checkbox"/> masonry heater <input type="checkbox"/> listed by testing lab and meets EPA standards <input type="checkbox"/> listed by testing lab and meets EPA standards		<input type="checkbox"/> granted automatically <input type="checkbox"/> back-draft potential test <input type="checkbox"/> back-draft potential test <input type="checkbox"/> back-draft potential test <input type="checkbox"/> electronic pilot <input type="checkbox"/> power- or direct-venting		
Woodstove and fireplace insert		<input type="checkbox"/> masonry heater <input type="checkbox"/> listed by testing lab and meets EPA standards <input type="checkbox"/> listed by testing lab and meets EPA standards		<input type="checkbox"/> granted automatically <input type="checkbox"/> back-draft potential test <input type="checkbox"/> back-draft potential test <input type="checkbox"/> back-draft potential test <input type="checkbox"/> electronic pilot <input type="checkbox"/> power- or direct-venting		
Natural gas, propane, or alcohol stove		<input type="checkbox"/> masonry heater <input type="checkbox"/> listed by testing lab and meets EPA standards <input type="checkbox"/> listed by testing lab and meets EPA standards		<input type="checkbox"/> granted automatically <input type="checkbox"/> back-draft potential test <input type="checkbox"/> back-draft potential test <input type="checkbox"/> back-draft potential test <input type="checkbox"/> electronic pilot <input type="checkbox"/> power- or direct-venting		
Pellet stove		<input type="checkbox"/> masonry heater <input type="checkbox"/> listed by testing lab and meets EPA standards <input type="checkbox"/> listed by testing lab and meets EPA standards		<input type="checkbox"/> granted automatically <input type="checkbox"/> back-draft potential test <input type="checkbox"/> back-draft potential test <input type="checkbox"/> back-draft potential test <input type="checkbox"/> electronic pilot <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 type="checkbox"/> a) Qualifies under ASHRAE Std. 62.2 2007 climate exemption <input type="checkbox"/> b) Continuous ventilation		<input type="checkbox"/> c) Intermittent ventilation <input type="checkbox"/> d) Passive ventilation				
4.2 Enhanced Outdoor Air Ventilation (meet one of the following)		2	0	0		0
<input type="checkbox"/> a) In climates with ≤ 4,500 infiltration degree days, install active ventilation system <input type="checkbox"/> b) Install heat recovery system						
4.3 Third-Party Performance Testing		1	0	0		0
<b>5. Local Exhaust</b>						
5.1 Basic Local Exhaust (meet all of the following)		Prereq.				
<input type="checkbox"/> a) Bathroom and kitchen exhaust meets ASHRAE Std. 62.2 air flow requirement <input type="checkbox"/> b) Fans and ducts designed and installed to ASHRAE Std. 62.2		<input type="checkbox"/> c) Air exhausted to outdoors <input type="checkbox"/> d) ENERGY STAR labeled bathroom exhaust fans				
5.2 Enhanced Local Exhaust (meet one of the following)		1	0	0		0
<input type="checkbox"/> a) Occupancy sensor <input type="checkbox"/> b) Automatic humidistat control		<input type="checkbox"/> c) Automatic timer tied to switch <input type="checkbox"/> d) Continuous recirculating exhaust fan				
5.3 Third-Party Performance Testing		1	0	0		0
<b>6. Distribution of Space Heating and Cooling</b>						
6.1 Room-by-Room Load Calculations		Prereq.				
6.2 Return Air Flow / Room-by-Room Controls (meet one of the following)		1	0	0		0
A. Forced-Air Systems <input type="checkbox"/> a) Return air opening of 1-in <sup>2</sup> /inch per cfm of supply <input type="checkbox"/> b) Limited pressure differential between closed room and adjacent spaces		B. Nonducted HVAC Systems <input type="checkbox"/> c) Flow control valves on every radiator				
6.3 Third-Party Performance Test / Multiple Zones (meet one of the following)		2	0	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 type="checkbox"/> Install at least two distinct zones with independent thermostat control				
<b>7. Air Filtering</b>						
7.1 Good Filters		Prereq.				
7.2 Better Filters		1	0	0		0
OR	7.3 Best Filters	2	0	0		0
<b>8. Contaminant Control</b>						
8.1 Indoor Contaminant Control during Construction		1	0	0		0
8.2 Indoor Contaminant Control (meet any of the following, 1 pt each)		2	0	0		0
<input type="checkbox"/> a) Design and install permanent walk-off mats at each entry <input type="checkbox"/> b) Design shoe removal and storage space near primary entryway		<input type="checkbox"/> c) Install central vacuum system with exhaust to outdoors				
8.3 Preoccupancy Flush		1	0	0		0
<b>9. Radon Protection</b>						
9.1 Radon-Resistant Construction in High-Risk Areas		Prereq.				
9.2 Radon-Resistant Construction in Moderate-Risk Areas		1	0	0		0
<b>10. Garage Pollutant Protection</b>						
10.1 No HVAC in Garage		Prereq.				
10.2 Minimize Pollutants from Garage (meet all of the following)		2	0	0		0
<input type="checkbox"/> a) In conditioned spaces above garage: <input type="checkbox"/> Seal all penetrations and connecting floor and ceiling joint seals		<input type="checkbox"/> b) In conditioned spaces next to garage: <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				
AND/OR	10.3 Exhaust Fan in Garage (meet one of the following)	1	0	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		0
<b>Awareness &amp; Education (AE) (Minimum 0 AE Points Required)</b>						
		Max: 3	Y:0	M:0	Notes	Final: 0
<b>1. Education of the Homeowner or Tenant</b>						
1.1 Basic Operations Training (meet both of the following)		Prereq.				
<input type="checkbox"/> a) Operations and training manual <input type="checkbox"/> b) One-hour walkthrough with occupant(s)						
1.2 Enhanced Training		1	0	0		0
1.3 Public Awareness (meet three of the following)		1	0	0		0
<input type="checkbox"/> a) Open house on at least four weekends <input type="checkbox"/> b) Website about features and benefits of LEED homes		<input type="checkbox"/> c) Newspaper article on the project <input type="checkbox"/> d) Display LEED signage on the exterior of the home				
<b>2. Education of the Building Manager</b>						
2 Education of the Building Manager (meet both of the following)		1	0	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  Company   
 Signature  Date

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

Provider QAD  Company   
 Signature  Date

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

Green Rater  Company   
 Signature  Date

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

Green Rater  Company   
 Signature  Date

DRAFT

LEED for Homes Project Checklist  
Addendum: Prescriptive Approach for Energy and Atmosphere (EA) Credits

Points cannot be earned in both the Prescriptive (below) and the Performance paths of the EA section.		Max Pts. Available	Preliminary Rating			Notes	Project Points
		Max: 38	Y:0	M:0	No		Final: 0
<b>Energy &amp; Atmosphere (EA)</b> (Minimum 0 EA Points Required)							
<b>2. Insulation</b>							
2.1 Basic Insulation (meet both of the following) Prereq.							
<input type="checkbox"/> a) Insulation meets R-value requirements of IECC <input type="checkbox"/> b) Insulation meets HERS Grade II specifications for installation		2	0	0			0
2.2 Enhanced Insulation (meet both of the following)							
<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 Prereq.							
<input type="checkbox"/> Air leakage rate in ACH50							
3.2 Greatly Reduced Envelope Leakage		2	0	0			0
OR 3.3 Minimal Envelope Leakage		3	0	0			0
<b>4. Windows</b>							
4.1 Good Windows (meet all of the following) Prereq.							
<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			0
OR 4.3 Exceptional Windows		3	0	0			0
<b>5. Heating and Cooling Distribution System</b>							
5.1 Reduced Distribution Losses (meet all of the following, as appropriate) Prereq.							
<b>A. Forced-Air Systems</b> <input type="checkbox"/> a) Duct leakage of ≤ 4.0 CFM @ 25 Pascals per 100 sq.ft. <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							
<b>B. Nonducted HVAC Systems</b> <input type="checkbox"/> At least R-3 insulation around pipes in unconditioned spaces							
5.2 Greatly Reduced Distribution Losses (meet the following, as appropriate)		2	0	0			0
<b>A. Forced-Air Systems</b> <input type="checkbox"/> Duct leakage of ≤ 3.0 CFM @ 25 Pascals per 100 sq.ft.							
<b>B. Nonducted HVAC Systems</b> <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			0
<b>A. Forced-Air Systems</b> <input type="checkbox"/> a) Duct leakage of ≤ 1.0 CFM @ 25 Pascals per 100 sq.ft. <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 is within conditioned spaces (not in walls, etc.)							
<b>B. Nonducted HVAC Systems</b> <input type="checkbox"/> Outdoor reset control to set distribution temp., based on outdoor temp.							
<b>6. Space Heating and Cooling Equipment</b>							
6.1 Good HVAC Design and Installation (meet all of the following) Prereq.							
<input type="checkbox"/> a) Design and size HVAC equipment using ACCA Manual J or equivalent <input type="checkbox"/> b) Install efficient heating AND cooling equipment (see Table) Type of cooling system Cooling efficiency (SEER / EER)							
<input type="checkbox"/> c) Install ENERGY STAR programmable thermostat OR <input type="checkbox"/> Heat pump or hydronic installed and exempted from part (c) Type of heating system Heating Efficiency (AFUE / HSPF / COP)							
6.2 High-Efficiency HVAC		2	0	0			0
OR 6.3 Very High Efficiency HVAC		4	0	0			0
<b>7. Water Heating</b>							
7.1 Efficient Hot Water Distribution System (meet one of the following)		2	0	0			0
<input type="checkbox"/> a) Structured plumbing system <input type="checkbox"/> b) Central manifold distribution system <input type="checkbox"/> c) Compact design of conventional system							
7.2 Pipe Insulation		1	0	0			0
7.3 Efficient Domestic Hot Water Equipment		3	0	0			0
Type of DHW system Efficiency Solar: Percentage of annual DHW load							
<b>8. Lighting</b>							
8.1 ENERGY STAR Lights Prereq.							
8.2 Improved Lighting (meet one of the following, see Rating System for pts)		1.5	0	0			0
<input type="checkbox"/> a) Interior lighting - 3 additional ENERGY STAR lights in high-use rooms <input type="checkbox"/> b) Exterior lighting - motion sensor controls or integrated PV							
OR 8.3 Advanced Lighting Package (meet one of the following)		3	0	0			0
<input type="checkbox"/> a) 60% of fixtures are ENERGY STAR fixtures <input type="checkbox"/> b) 80% of lamps are ENERGY STAR CFLs							
<b>9. Appliances</b>							
9.1 High-Efficiency Appliances (meet any, see Rating System for pts)		2	0	0			0
<input type="checkbox"/> a) ENERGY STAR labeled refrigerator <input type="checkbox"/> b) ENERGY STAR labeled ceiling fans in living/family room and all bedrooms <input type="checkbox"/> c) ENERGY STAR labeled dishwasher using 6.0 gallons per cycle or less <input type="checkbox"/> d) ENERGY STAR clothes washer							
9.2 Water-Efficiency Clothes Washer		1	0	0			0
<b>10. Renewable Energy</b>							
10.1 Renewable Energy System		10	0	0			0.0
Reference electric load, kWh/yr (based on HERS model) Electricity supplied by renewable system, kWh/yr Percentage of annual reference electric load met by renewable system							
<b>11. Residential Refrigerant Management</b>							
11.1 Refrigerant Charge Test Prereq.							
11.2 Appropriate HVAC Refrigerants (meet one of the following)		1	0	0			0
<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							