



# LEED for Homes

## Durability Evaluation Form

(for prerequisite ID 2.1)

|                                   |  |
|-----------------------------------|--|
| Builder Name:                     | <i>Jim Gramata (Owner/GC)</i>              |
| Project Team Leader:              | <i>Lisa Elkins, 2 Point Perspective</i>    |
| Home Address (Street/City/State): | <i>2056 N. Bissell Street, Chicago, IL</i> |

### Home

|                                       |                           |                   |
|---------------------------------------|---------------------------|-------------------|
| Building type: <b>Single attached</b> | Floor area: <b>2455</b>   | Structure type:   |
| Project type: <b>Custom</b>           | # of bedrooms: <b>3</b>   | Exterior roofing: |
| Number of stories: <b>3</b>           | Number of full bathrooms: | Garage:           |

### Site

|  |   |
|--|---|
| EPA Radon Zone: <b>2</b>                             | Type of soil: <b>infill</b>                     |
| Terrain / topography: <i>flat, urban</i>             | Depth of soil to bedrock: <b>50'</b>            |
| Predominant landscaping: <i>side yard, plantings</i> | Depth of ground water below structure: <b>?</b> |
| Common regional pests: <i>rodents</i>                | Proximity to bodies of water? <b>&gt;100'</b>   |
| Other significant features:                          | <b>Above FEMA 100-year floodplain? yes</b>      |
| Additional comments:                                 |   |

### Climate

|   |  |
|---|--|
| IECC 2004 Climate Zone: <b>5</b>  | Annual rainfall (inches/yr): <b>35.8</b>                         |
| Heating degree days (HDD): <b>6630</b>  | Max annual wind speed (mph): <b>10.4</b>                         |
| Cooling degree days (CDD): <b>702</b>   | Avg annual solar radiation (kWh/m <sup>2</sup> /day): <b>3.5</b> |
| Natural disaster risks: <input type="checkbox"/> hurricanes <input type="checkbox"/> earthquakes <input type="checkbox"/> wildfires   |  |
| <input checked="" type="checkbox"/> tornados <input checked="" type="checkbox"/> floods <input checked="" type="checkbox"/> blizzards |  |

### Issues

| Issue Type         | Risk Level    | Issue Type             | Risk Level    |
|--------------------|---------------|------------------------|---------------|
| Exterior water:    | <b>medium</b> | Pests:                 | <b>medium</b> |
| Interior moisture: | <b>medium</b> | Heat loss:             | <b>medium</b> |
| Air infiltration:  | <b>high</b>   | Ultraviolet radiation: | <b>low</b>    |

# Durability Inspection Checklist Template

(for prerequisite ID 2.1 & 2.2 and credit ID 2.3)

|                             |  |
|-----------------------------|--|
| <b>Builder Name:</b>        | <i>Jim Gramata (Owner/GC)</i>              |
| <b>Project Team Leader:</b> | <i>Lisa Elkins, 2 Point Perspective</i>    |
| <b>Home Address:</b>        | <i>2056 N. Bissell Street, Chicago, IL</i> |

For each section below, list durability strategies used to help mitigate the durability risks. Where necessary, add additional rows or remove strategies that are not relevant. Refer to the Example Durability Strategies page for sample strategies that may be applicable.

The project team must indicate where the strategy is included in the drawings, specification, or scopes of work, and the responsible project team member must sign-off that the durability strategies were incorporated into the home.

For ID 2.3, the Green Rater must initial that the strategies were verified in the home. A minimum of 18 total strategies, not including those already included as LEED for Homes prerequisites, must be included and verified for the credit to be awarded. These strategies should be focused on medium or high-risk areas.

| Durability Strategies by Issue Type   | Location in Drawings, Specs, and/or Scopes of Work | Sign-off by Responsible Party (initial below) |                             |
|---|--|---|-----------------------------|
|   |  | Prerequisite ID 2.2 (Builder/trade)           | Credit ID 2.3 (Green Rater) |
| <b>Exterior Water / Moisture</b>  |  |   |                             |
| Provide drainage away from walls and foundations (perimeter footing drains and sump pump)                                   | A300, P100   |   |                             |
| Exterior surface of below grade walls damp-proofed or water-proofed   | A300   |   |                             |
| Vapor retarder (poly or rigid insulation) directly under slab   | A100, A300   |   |                             |
| Fully flash all window and door openings  | A600   |   |                             |
| <b>Interior Water / Moisture</b>  |  |   |                             |
| <i>LEED for Homes Prerequisites (remove if not applicable)</i>  |  |   |                             |
| Nonpaper-faced backer board used in all tubs, showers, and spa areas. (see ID 2.1)  | A100, A601   |   |                             |
| Water-resistant flooring in the kitchen, bathroom, laundry rooms, and spa areas. (see ID 2.1)                               | A100, A101, A601                                   |   |                             |
| Water-resistant flooring within 3 feet of all exterior doors. (see ID 2.1)  | A100, A101, A601                                   |   |                             |
| Drain and drain pan installed for any tank water heaters in or over living spaces. (see ID 2.1)                             | P001, P100   |   |                             |
| Drain and drain pan OR single-throw supply valve installed for any clothes washers in or over living spaces. (see ID 2.1)   | P001, P101   |   |                             |
| Conventional clothes dryers exhausted directly to outdoors; Condensing clothes dryer has drain and drain pan. (see ID 2.1)  | M001, M101, P001, P101                             |   |                             |
| Whole house ventilation and local kitchen and bathroom exhaust systems that comply with ASHRAE Std. 62.2 (see EQ 4.1 / 5.1) | M001, M100, M101                                   |   |                             |
| Install drains and drain pans to capture leaks under water heaters  | P001, P100   |   |                             |
| Properly design and install washer and water heater drain pans  | P001, P100, P101                                   |   |                             |
| Install no carpet in kitchens, bathrooms, or within 3' of exterior door (walk-off-mat is exception)                         | A100, A101, A601                                   |   |                             |
| Tile sloped 1/8" per 1'-0" in all wet areas   | A601   |   |                             |

# Durability Inspection Checklist Template

(for prerequisite ID 2.1 & 2.2 and credit ID 2.3)

|                      |                                     |
|----------------------|-------------------------------------|
| Builder Name:        | Jim Gramata (Owner/GC)              |
| Project Team Leader: | Lisa Elkins, 2 Point Perspective    |
| Home Address:        | 2056 N. Bissell Street, Chicago, IL |

|  |                        |  |  |
|--|------------------------|--|--|
| <b>Air Infiltration</b>  |                        |  |  |
| <i>LEED for Homes Prerequisites (remove if not applicable)</i>                       |                        |  |  |
| Thermal bypass inspection checklist passed (see EA 1.1 / 2.1)                        | G002                   |  |  |
| Air sealing throughout (windows, doors, furring, penetrations, etc.)                 | A600, M001, P001       |  |  |
| IC Airtight rated recessed lights in insulated ceilings                              | A130, A131             |  |  |
| Complete air barrier between attic and conditioned space and all penetrations sealed | A100, A300             |  |  |
| <b>Interstitial Condensation</b>   |                        |  |  |
| <i>LEED for Homes Prerequisites (remove if not applicable)</i>                       |                        |  |  |
| All local exhaust systems vented directly to the outdoors. (see EQ 5.1)              | M001, M100, M101       |  |  |
| Interstitial spaces are never used to supply or return forced air. (see EA 5.1)      | M001, M100, M101       |  |  |
| Duct leakage to the outdoors limited to 6 cfm / 100 sq.ft. (see EA 1.1 / 5.1)        | M001                   |  |  |
| Clothes dryers vented outdoors   | M001, M101             |  |  |
| Insulate all cold (and hot) water pipes and avoid plumbing in exterior walls         | P001, P100, P101       |  |  |
| Air filter housings must be airtight to prevent bypass or leakage                    | M001                   |  |  |
| Do not install impermeable vapor barrier on interior side of wall                    | A300                   |  |  |
| <b>Pests</b>   |                        |  |  |
| Rodent & corrosion proof screens   | G002                   |  |  |
| <b>Heat Loss</b>   |                        |  |  |
| <i>LEED for Homes Prerequisites (remove if not applicable)</i>                       |                        |  |  |
| Climate zone 4-8: Exposed concrete slab edge insulated. (see EA 1.1 / 2.1)           | A300                   |  |  |
| Insulate exterior walls per IECC 2012  | G001, G002, A100, A300 |  |  |
| Insulation break at foundation wall intersection and R-10 slab edge insulation       | A300                   |  |  |
| <b>Ultraviolet Radiation</b>   |                        |  |  |
|  |                        |  |  |
|  |                        |  |  |
|  |                        |  |  |

# Durability Inspection Checklist Template

(for prerequisite ID 2.1 & 2.2 and credit ID 2.3)

|                             |  |
|-----------------------------|--|
| <b>Builder Name:</b>        | <i>Jim Gramata (Owner/GC)</i>              |
| <b>Project Team Leader:</b> | <i>Lisa Elkins, 2 Point Perspective</i>    |
| <b>Home Address:</b>        | <i>2056 N. Bissell Street, Chicago, IL</i> |

| Natural Disasters |  |  |  |
|-------------------|--|--|--|
|                   |  |  |  |
|                   |  |  |  |

| Other  |      |  |  |
|--|------|--|--|
| <i>LEED for Homes Prerequisites (remove if not applicable)</i> |      |  |  |
| Refrigerant charge test conducted. (see EA 11.1)               | M001 |  |  |
|  |      |  |  |
|  |      |  |  |

| Builder Declaration for ID prerequisite 2.1 & 2.2  |   |
|--|---|
| <p>I hereby declare and affirm to USGBC that I have evaluated this project's durability risks, completed the Durability Risk Evaluation Form, and incorporated appropriate durability measures into the design to adequately address the moderate and high risks. The construction drawings and/or specifications have been updated accordingly, and the the measures were verified to be completed appropriately.</p> | <p><b>Name:</b> _____</p> <p><b>Title:</b> _____</p> <p><b>Signature:</b> _____</p> <p><b>Date:</b> _____</p> |

| Green Rater Declaration for ID credit 2.3  |   |
|--|---|
| <p>I hereby declare and affirm to USGBC that all of the above durability measures were verified as having been installed and/or incorporated into the home and home site. This signature is not an endorsement of the choice of durability measures or strategies installed, nor is it a validation of the quality or workmanship of the construction or installation.</p> | <p><b>Name:</b> _____</p> <p><b>Title:</b> _____</p> <p><b>Signature:</b> _____</p> <p><b>Date:</b> _____</p> |



for Homes

## LEED for Homes Project Checklist

|                                   |                                     |
|-----------------------------------|-------------------------------------|
| Builder Name:                     | Jim Gramata (Owner/GC)              |
| Project Team Leader:              | Lisa Elkins, 2 Point Perspective    |
| Home Address (Street/City/State): | 2056 N. Bissell Street, Chicago, IL |

### Project Description

Building Type: **Single attached**  
 # of Bedrooms: **3**

Project type: **Custom**  
 Floor Area: **2,455**

### Adjusted Certification Thresholds

Certified: **51.5**      Gold: **81.5**  
 Silver: **66.5**      Platinum: **96.5**

|                             |                 |   |                 |        |        |
|-----------------------------|-----------------|---|-----------------|--------|--------|
| <b>Project Point Total</b>  |                 | <b>Final Credit Category Point Totals</b> |                 |        |        |
| Prelim: 82 + 25 maybe pts   | Final: 97.5     | ID: 9                                     | SS: 14.5        | EA: 29 | EQ: 15 |
| <b>Certification Level</b>  |                 | LL: 10                                    | WE: 8           | MR: 11 | AE: 1  |
| Prelim: Gold                | Final: Platinum |   |                 |        |        |
| Date Most Recently Updated: | 01.04.2016      | Updated by:                               | Emily Tjeerdsma |        |        |

*☞ Indicates that an Accountability Form is required.*

| Max Pts. Available | Preliminary Rating |       |    | Project Points |
|--------------------|--------------------|-------|----|----------------|
|                    | Y / Pts            | Maybe | No |                |

| Innovation & Design Process (ID)  | (Minimum 0 ID Points Required) | Max: 11 | Y:9 | M:0 | Notes   | Final: 9 |
|---|--------------------------------|---------|-----|-----|---|----------|
| <b>1. Integrated Project Planning</b>   |                                |         |     |     |   |          |
| 1.1 Preliminary Rating  |                                | Prereq. | Y   |     |   | Y        |
| Target performance tier:  | <b>Gold</b>                    |         |     |     |   |          |
| 1.2 Integrated Project Team (meet all of the following)   |                                | 1       | 1   | 0   |   | 1        |
| <input type="checkbox"/> a) Individuals or organizations with necessary capabilities              |                                |         |     |     | <input checked="" 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   | N   | 0        |
| 1.4 Design Charrette  |                                | 1       | 1   | 0   | 10/15/2013  | 1        |
| 1.5 Building Orientation for Solar Design (meet all of the following)                             |                                | 1       | 0   | 0   | N not many N/S windows  | 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        |

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

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

|  |   |                |             |  |                                      |  |
|--|---|----------------|-------------|--|--------------------------------------|--|
| <b>2.2</b>   | Durability Management ( <i>meet one of the following</i> )                                | <i>Prereq.</i> | <b>Y</b>    |  | <b>Y</b>                             |  |
|  | <input type="checkbox"/> Builder has a quality management process in place                |                |             | <input type="checkbox"/> Builder conducted inspection using durability inspection checklist                  |                                      |  |
| <b>2.3</b>   | Third-Party Durability Management Verification  | <b>3</b>       | <b>3</b>    | <b>0</b>   | <b>3</b>                             |  |
| <b>3. Innovative or Regional Design</b>                            |   |                |             |  |                                      |  |
| <b>3.1</b>   | ≧ Innovation 1 (ruling #): <b>MR 2.2 Exemplary Performance</b>                            | <b>1</b>       | <b>1</b>    | <b>0</b>   | <b>1</b>                             |  |
| <b>3.2</b>   | ≧ Innovation 2 (ruling #): <b>EA 8.3 Exemplary</b>  | <b>1</b>       | <b>1</b>    | <b>0</b>   | <b>1</b> 90% CFL or LED              |  |
| <b>3.3</b>   | ≧ Innovation 3 (ruling #): <b>LL5 Exemplary</b>   | <b>1</b>       | <b>1</b>    | <b>0</b>   | <b>1</b> 250+ transit rides per day  |  |
| <b>3.4</b>   | ≧ Innovation 4 (ruling #): <b>Pilot Credit 9 Street Grid Density</b>                      | <b>1</b>       | <b>1</b>    | <b>0</b>   | <b>1</b> 122 intersections per sq mi |  |
| <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>                        |   |                |             |  |                                      |  |
| <b>1</b>   | LEED for Neighborhood Development   | <b>10</b>      | <b>0</b>    | <b>0</b>   | <b>N</b>                             | <b>0</b>                                 |
| <b>2. Site Selection</b>   |   |                |             |  |                                      |  |
| <b>2</b>   | ≧ Site Selection ( <i>meet all of the following</i> )                                     | <b>2</b>       | <b>2</b>    | <b>0</b>   | <b>2</b>                             |  |
|  | <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>                                      |   |                |             |  |                                      |  |
| <b>3.1</b>   | Edge Development  | <b>1</b>       | <b>0</b>    | <b>0</b>   | <b>N</b>                             | <b>0</b>                                 |
| <b>OR</b>  | <b>3.2</b> Infill   | <b>2</b>       | <b>2</b>    | <b>0</b>   |                                      | <b>2</b>                                 |
| <b>AND/OR</b>  | <b>3.3</b> Previously Developed   | <b>1</b>       | <b>1</b>    | <b>0</b>   |                                      | <b>1</b>                                 |
| <b>4. Infrastructure</b>   |   |                |             |  |                                      |  |
| <b>4</b>   | Existing Infrastructure   | <b>1</b>       | <b>1</b>    | <b>0</b>   |                                      | <b>1</b>                                 |
| <b>5. Community Resources / Transit</b>                            |   |                |             |  |                                      |  |
| <b>5.1</b>   | Basic Community Resources / Transit ( <i>meet one of the following</i> )                  | <b>1</b>       | <b>0</b>    | <b>0</b>   | <b>N</b>                             | <b>0</b>                                 |
|  | <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                |                |             |  |                                      |  |
| <b>OR</b>  | <b>5.2</b> Extensive Community Resources / Transit ( <i>meet one of the following</i> )   | <b>2</b>       | <b>0</b>    | <b>0</b>   | <b>N</b>                             | <b>0</b>                                 |
|  | <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               |                |             |  |                                      |  |
| <b>OR</b>  | <b>5.3</b> Outstanding Community Resources / Transit ( <i>meet one of the following</i> ) | <b>3</b>       | <b>3</b>    | <b>0</b>   |                                      | <b>3</b> CTA red line, brown line, buses |
|  | <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>                                     |   |                |             |  |                                      |  |
| <b>6</b>   | Access to Open Space  | <b>1</b>       | <b>1</b>    | <b>0</b>   |                                      | <b>1</b> Frank Oz Park                   |

| Sustainable Sites (SS) (Minimum 5 SS Points Required) |  | Max: 22 Y:14.5 M:0 |   |   |                                  | Notes | Final: 14.5 |
|---|--|--------------------|---|---|----------------------------------|-------|-------------|
| <b>1. Site Stewardship</b>                            |  |                    |   |   |                                  |       |             |
| 1.1   | Erosion Controls During Construction ( <i>meet all of the following</i> )  | Prereq.            | Y |   |                                  |       | Y           |
|   | <input type="checkbox"/> a) Stockpile and protect disturbed topsoil from erosion.                                    |                    |   |   |                                  |       |             |
|   | <input type="checkbox"/> b) Control the path and velocity of runoff with silt fencing or equivalent.                 |                    |   |   |                                  |       |             |
|   | <input type="checkbox"/> c) Protect sewer inlets, streams, and lakes with straw bales, silt fencing, etc.            |                    |   |   |                                  |       |             |
|   | <input type="checkbox"/> d) Provide swales to divert surface water from hillsides                                    |                    |   |   |                                  |       |             |
|   | <input type="checkbox"/> e) Use tiers, erosion blankets, compost blankets, etc. on sloped areas.                     |                    |   |   |                                  |       |             |
| 1.2   | Minimize Disturbed Area of Site ( <i>meet the appropriate requirements</i> )   | 1                  | 1 | 0 | lot area is 2561 sf = 0.059 acre |       | 1           |
|   | Where the site is not previously developed, meet all the following:  |                    |   |   |                                  |       |             |
|   | <input type="checkbox"/> a) Develop tree / plant preservation plan with "no-disturbance" zones                       |                    |   |   |                                  |       |             |
|   | <input type="checkbox"/> b) Leave 40% of buildable lot area, not including area under roof, undisturbed              |                    |   |   |                                  |       |             |
|   | <b>OR</b> Where the site is previously developed, meet all the following:  |                    |   |   |                                  |       |             |
|   | <input type="checkbox"/> c) Develop tree / plant preservation plan with "no-disturbance" zones AND                   |                    |   |   |                                  |       |             |
|   | <input type="checkbox"/> Rehabilitate lot; undo soil compaction and remove invasive plants AND                       |                    |   |   |                                  |       |             |
|   | <input type="checkbox"/> Meet the requirements of SS 2.2   |                    |   |   |                                  |       |             |
|   | <b>OR</b> <input type="checkbox"/> d) Build on a lot of 1/7 acre or less, or 7 units per acre.                       |                    |   |   |                                  |       |             |
| <b>2. Landscaping</b>                                 |  |                    |   |   |                                  |       |             |
| 2.1   | <input checked="" type="checkbox"/> No Invasive Plants   | Prereq.            | Y |   |                                  |       | Y           |
| 2.2   | <input checked="" type="checkbox"/> Basic Landscaping Design ( <i>meet all of the following</i> )                    | 2                  | 2 | 0 |                                  |       | 2           |
|   | <input type="checkbox"/> a) Any turf must be drought-tolerant.   |                    |   |   |                                  |       |             |
|   | <input type="checkbox"/> b) Do not use turf in densely shaded areas.   |                    |   |   |                                  |       |             |
|   | <input type="checkbox"/> c) Do not use turf in areas with slope of 25%   |                    |   |   |                                  |       |             |
|   | <input type="checkbox"/> d) Add mulch or soil amendments as appropriate.   |                    |   |   |                                  |       |             |
|   | <input type="checkbox"/> e) All compacted soil must be tilled to at least 6 inches.                                  |                    |   |   |                                  |       |             |
| AND/OR  | 2.3 <input checked="" type="checkbox"/> Limit Conventional Turf  | 3                  | 1 | 0 |                                  |       | 1           |
|   | <input type="text" value="53%"/> Percentage of designed landscape softscape area that is turf                        |                    |   |   |                                  |       |             |
| AND/OR  | 2.4 <input checked="" type="checkbox"/> Drought-Tolerant Plants  | 2                  | 1 | 0 |                                  |       | 1           |
|   | <input type="text" value="58%"/> Percentage of installed plants that are drought-tolerant                            |                    |   |   |                                  |       |             |
| OR  | 2.5 <input checked="" type="checkbox"/> Reduce Overall Irrigation Demand by at Least 20%                             | 6                  | 0 | 0 | N                                |       | 0           |
|   | <input type="text" value="0%"/> Percentage reduction in estimated irrigation water demand                            |                    |   |   | (calculate)                      |       |             |
| <b>3. Reduce Local Heat Island Effects</b>            |  |                    |   |   |                                  |       |             |
| 3   | <input checked="" type="checkbox"/> Reduce Local Heat Island Effects ( <i>meet one of the following</i> )            | 1                  | 0 | 0 | N                                |       | 0           |
|   | <input type="checkbox"/> a) Locate trees / plantings to provide shade for 50% of hardscapes                          |                    |   |   |                                  |       |             |
|   | <input type="checkbox"/> b) Install light-colored, high-albedo materials for 50% of sidewalks, patios, and driveways |                    |   |   |                                  |       |             |



| 4. Surface Water Management                          |  |         |     |     |   |                           |
|--|--|---------|-----|-----|---|---------------------------|
| 4.1  | ≥ Permeable Lot  | 4       | 3   | 0   | Permeable reclaimed patio; infiltration swale | 3                         |
|  | <input type="text" value="63%"/> vegetative landscape  |         |     |     |   |                           |
|  | <input type="text" value="21%"/> permeable paving  |         |     |     |   |                           |
|  | <input type="text" value="6%"/> impermeable surfaces directed to infiltration features                                 |         |     |     |   |                           |
|  | <input type="text" value="10%"/> other impermeable surfaces (areas not counted towards credit)                         |         |     |     |   |                           |
| 4.2  | Permanent Erosion Controls ( <i>meet one of the following</i> )  | 1       | 1   | 0   | N   | 1                         |
|  | <input type="checkbox"/> a) For portions of lot on steep slope, use terracing and retaining walls                      |         |     |     |   |                           |
|  | <input checked="" type="checkbox"/> b) Plant trees, shrubs, or groundcover   |         |     |     |   |                           |
| 4.3  | ≥ Management of Runoff from Roof ( <i>meet any, see Rating System for pts</i> )  | 2       | 0   | 0   | N   | 0                         |
|  | <input type="checkbox"/> a) Install permanent stormwater controls to manage runoff from the home                       |         |     |     |   |                           |
|  | <input type="checkbox"/> b) Install vegetated roof to cover 50% of roof area   |         |     |     |   |                           |
|  | <input type="checkbox"/> c) Install vegetated roof to cover 100% of roof area  |         |     |     |   |                           |
|  | <input type="checkbox"/> d) Have lot designed by professional to manage runoff from home on-site                       |         |     |     |   |                           |
| 5. Nontoxic Pest Control                             |  |         |     |     |   |                           |
| 5  | Pest Control Alternatives ( <i>meet any of the following, 1/2 pt each</i> )  | 2       | 1.5 | 0   |   | 1.5                       |
|  | <input 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 type="checkbox"/> i) Treat all cellulosic material with borate product to 3' above foundation                   |         |     |     |   |                           |
|  | <input type="checkbox"/> ii) Install sand or diatomaceous earth barrier  |         |     |     |   |                           |
|  | <input type="checkbox"/> iii) Install steel mesh barrier termite control system  |         |     |     |   |                           |
|  | <input type="checkbox"/> iv) Install non-toxic termite bait system   |         |     |     |   |                           |
|  | <input type="checkbox"/> v) Use noncellulosic wall structure   |         |     |     |   |                           |
|  | <input type="checkbox"/> vi) Use solid concrete foundation walls or pest-proof masonry wall design                     |         |     |     |   |                           |
| 6. Compact Development                               |  |         |     |     |   |                           |
| 6.1  | Moderate Density   | 2       | 0   | 0   | N   | 0                         |
|  | <input type="text" value="1"/> # of total units on the lot   |         |     |     |   |                           |
|  | <input type="text" value="0.0"/> lot size (acres)  |         |     |     |   |                           |
|  | <input type="text" value="38.5"/> density (units/acre)   |         |     |     |   |                           |
| OR   | 6.2 High Density   | 3       | 0   | 0   | N   | 0                         |
| OR   | 6.3 Very High Density  | 4       | 4   | 0   | buildable area is 1117 sf = 0.026 acre        | 4                         |
| Water Efficiency (WE) (Minimum 3 WE Points Required) |  | Max: 15 | Y:9 | M:1 | Notes   | Final: 8                  |
| 1. Water Reuse                                       |  |         |     |     |   |                           |
| 1.1  | Rainwater Harvesting System  | 4       | 0   | 0   | N   | 248 gal of storage needed |
|  | <input type="text" value="0%"/> Percentage of roof area used for harvesting  |         |     |     |   |                           |
|  | <input type="text" value="Outdoor only"/> Application  |         |     |     |   |                           |
| AND/OR   | 1.2 Graywater Reuse System   | 1       | 0   | 0   | N   | 0                         |
| OR   | 1.3 Use of Municipal Recycled Water System   | 3       | 0   | 0   | N   | 0                         |

|  |  |                           |   |   |  |                  |
|--|--|---------------------------|---|---|--|------------------|
| <b>2. Irrigation System</b>  |  |                           |   |   |  |                  |
| 2.1  | ⚡ High-Efficiency Irrigation System (meet any of the following, 1 pt each)   | 3                         | 3 | 0 | Controls verified  | 3                |
|  | <input type="checkbox"/> a) Irrigation system designed by EPA Water Sense certified professional<br><input type="checkbox"/> b) Irrigation system with head-to-head coverage<br><input type="checkbox"/> c) Install central shut-off valve<br><input type="checkbox"/> d) Install submeter for the irrigation system<br><input checked="" type="checkbox"/> e) Use drip irrigation for 50% of planting beds<br><input checked="" type="checkbox"/> f) Create separate zones for each type of bedding |                           |   |   | <input checked="" type="checkbox"/> g) Install timer or controller for each watering zone<br><input type="checkbox"/> h) Install pressure-regulating devices<br><input checked="" type="checkbox"/> i) High-efficiency nozzles with distribution uniformity of at least 0.70.<br><input checked="" type="checkbox"/> j) Install check valves in heads<br><input checked="" type="checkbox"/> k) Install moisture sensor or rain delay controller |                  |
| AND/OR   | 2.2 Third-party Inspection   | 1                         | 0 | 1 | Green rater verified   | 1                |
| OR   | 2.3 ⚡ Reduce Overall Irrigation Demand by at Least 45%   | 4                         | 0 | 0 | N  | 0                |
|  | <input type="text" value="0%"/> Percentage reduction in estimated irrigation water demand  |                           |   |   | <a href="#">(calculate)</a>  |                  |
| <b>3. Indoor Water Use</b>   |  |                           |   |   |  |                  |
| 3.1  | High-Efficiency Fixtures and Fittings (meet any of the following, 1 pt each)   | 3                         | 3 | 0 | Toilet avg flush rate is 1.20 gpf for 1.6/1.0  | 2                |
|  | <input type="checkbox"/> a) Average flow rate of lavatory faucets is ≤ 2.00 gpm<br><input type="checkbox"/> b) Average flow rate for all showers is ≤ 2.00 gpm per stall   |                           |   |   | <input type="checkbox"/> c) Average flow rate for all toilets is ≤ 1.30 gpf; OR<br><input type="checkbox"/> Toilets are dual-flush; OR<br><input checked="" type="checkbox"/> Toilets meet the EPA Water Sense specification   |                  |
| 3.2  | Very High-Efficiency Fixtures and Fittings (meet any, 2 pts each)  | 6                         | 4 | 0 |  | 2                |
|  | <input type="checkbox"/> a) Average flow rate of lavatory faucets is ≤ 1.50 gpm; OR<br><input checked="" type="checkbox"/> Lavatory faucets meet the EPA Water Sense specification   |                           |   |   | <input type="checkbox"/> b) Average flow rate for all showers ≤ 1.75 gpm per stall<br><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 Y:13.5 M:5</b> |   |   | <b>Notes</b>   | <b>Final: 29</b> |
| <b>1. Optimize Energy Performance</b>                              |  |                           |   |   |  |                  |
| 1.1  | Performance of ENERGY STAR for Homes   | Prereq.                   | Y |   | .27 u values   |                  |
| 1.2  | Exceptional Energy Performance   | 34                        | 0 | 0 |  | 0                |
|  | <input type="text"/> IECC climate zone   |                           |   |   | <input type="text"/> HERS Index  |                  |
| <b>7. Water Heating</b>  |  |                           |   |   |  |                  |
| 7.1  | ⚡ Efficient Hot Water Distribution System (meet one of the following)  | 2                         | 0 | 2 | N  | 0                |
|  | <input type="checkbox"/> a) Structured plumbing system<br><input type="checkbox"/> b) Central manifold distribution system   |                           |   |   | <input type="checkbox"/> c) Compact design of conventional system  |                  |
| 7.2  | Pipe Insulation  | 1                         | 1 | 0 |  | 0                |
| <b>11. Residential Refrigerant Management</b>                      |  |                           |   |   |  |                  |
| 11.1   | Refrigerant Charge Test  | Prereq.                   | Y |   |  |                  |
| 11.2   | Appropriate HVAC Refrigerants (meet one of the following)  | 1                         | 1 | 0 | spec sheets uploaded to Box  | 0                |
|  | <input type="checkbox"/> a) Use no refrigerants<br><input type="checkbox"/> b) Use non-HCFC refrigerants   |                           |   |   | <input type="checkbox"/> c) Use refrigerants that complies with global warming potential equation  |                  |

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

**Max: 16 Y:11 M:4**

**Notes**

**Final: 11**

**1. Material-Efficient Framing**

|               |     |  |                |          |          |   |
|---------------|-----|--|----------------|----------|----------|---|
|               | 1.1 | Framing Order Waste Factor   | <i>Prereq.</i> | <b>Y</b> |          | <b>Y</b>  |
|               | 1.2 | Detailed Framing Documents   | <b>1</b>       | <b>0</b> | <b>1</b> | <b>0</b>  |
| <b>AND/OR</b> | 1.3 | Detailed Cut List and Lumber Order   | <b>1</b>       | <b>0</b> | <b>1</b> | <b>0</b>  |
|               |     | <input type="checkbox"/> Requirements of MR 1.2 have been met                        |                |          |          | <input type="checkbox"/> Detailed cut list and lumber order corresponding to framing plans or scopes                  |
| <b>AND/OR</b> | 1.4 | Framing Efficiencies ( <i>meet any of the following, see Rating System for pts</i> ) | <b>3</b>       | <b>0</b> | <b>1</b> | <b>0</b>  |
|               |     | <input type="checkbox"/> Precut framing packages                                     |                |          |          | <input type="checkbox"/> Stud spacing greater than 16" on center  |
|               |     | <input type="checkbox"/> Open-web floor trusses                                      |                |          |          | <input type="checkbox"/> Ceiling joist spacing greater than 16" on center   |
|               |     | <input type="checkbox"/> Structural insulated panel walls                            |                |          |          | <input type="checkbox"/> Floor joist spacing greater than 16" on center   |
|               |     | <input type="checkbox"/> Structural insulated panel roof                             |                |          |          | <input type="checkbox"/> Roof rafter spacing greater than 16" on center   |
|               |     | <input type="checkbox"/> Structural insulated panel floors                           |                |          |          | <input type="checkbox"/> Two of the following: Size headers for loads; ladder blocking; drywall clips; 2-stud corners |
| <b>OR</b>     | 1.5 | Off-site Fabrication ( <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 ( <i>meet all of the following</i> )                              | <i>Prereq.</i> | <b>Y</b> | <i>Deck ipe is FSC certified</i> | <b>Y</b>  |
|  |     | <input type="checkbox"/> a) Provide suppliers with a notice of preference for FSC products; AND |                |          |                                  | <input type="checkbox"/> b) No tropical wood installed (exceptions for FSC-certified or reclaimed wood) |
|  |     | <input checked="" type="checkbox"/> Request country of manufacture for each wood product        |                |          |                                  |   |
|  | 2.2 | ≠ Environmentally Preferable Products ( <i>meet any, 1/2 pt each</i> )                          | <b>8</b>       | <b>8</b> | <b>0</b>                         | <i>existing walls, roof, floors</i>   |

| <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 checked="" type="checkbox"/> type: <u>Exist Brick</u>      |   | <input checked="" type="checkbox"/>       |
| Floor: flooring                         | <input type="checkbox"/> (45%) type: <u>sealed conc+reclaimed</u> | <input type="checkbox"/> 90% hard flooring                    | <input checked="" 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 checked="" type="checkbox"/> type: <u>Reclaimed</u>        |   | <input type="checkbox"/>                  |
| Foundation: aggregate                   | <input checked="" type="checkbox"/> type: <u>Reclaimed</u>        |   | <input checked="" type="checkbox"/>       |
| Foundation: cement                      | <input checked="" type="checkbox"/> type: <u>Reclaimed</u>        |   | <input checked="" type="checkbox"/>       |
| Interior wall: framing                  | <input type="checkbox"/> type: _____                              |   | <input type="checkbox"/>                  |
| Interior wall, ceiling: gypsum board    | <input type="checkbox"/> type: _____                              |   | <input type="checkbox"/>                  |
| Interior wall, ceiling, millwork: paint | <input type="checkbox"/> type: _____                              | <input type="checkbox"/> type: <u>No VOC</u>                  |   |
| Landscape: decking and patio            | <input checked="" type="checkbox"/> type: <u>Reclaimed + FSC</u>  |   | <input type="checkbox"/>                  |
| Other: cabinet                          | <input checked="" type="checkbox"/> type: <u>FSC+NAUF</u>         |   | <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: <u>Low emitting</u> |   |
| Other : window frame                    | <input type="checkbox"/> type: _____                              |   | <input type="checkbox"/>                  |
| Roof: framing                           | <input checked="" type="checkbox"/> type: <u>Reclaimed</u>        |   | <input checked="" type="checkbox"/>       |
| Roof: roofing                           | <input type="checkbox"/> type: _____                              |   | <input type="checkbox"/>                  |
| Roof, floor, wall: cavity insulation    | <input type="checkbox"/> type: _____                              | <input type="checkbox"/> type: _____                          | <input type="checkbox"/>                  |
| Roof, floor, wall (2 of 3): sheathing   | <input checked="" type="checkbox"/> type: <u>Reclaimed</u>        |   | <input checked="" type="checkbox"/>       |
| Other: water supply piping              | <input type="checkbox"/> type: _____                              |   |   |
| Other: driveway                         | <input type="checkbox"/> type: _____                              |   |   |

| <b>3. Waste Management</b>  |   |  |             |   |   |                  |
|---|---|--|-------------|---|---|------------------|
| 3.1   | Construction Waste Management Planning ( <i>meet both of the following</i> )                                | Prereq.  | Y           |   |   | Y                |
|   | <input checked="" type="checkbox"/> a) Investigate local options for waste diversion                        |  |             | <input checked="" type="checkbox"/> b) Document diversion rate for construction waste                     |   |                  |
| 3.2   | Construction Waste Reduction ( <i>use one of the following methods</i> )                                    | 3  | 3           | 1   |   | 3                |
|   | <input type="text"/> a) pounds waste / square foot  |  |             |   |   |                  |
|   | <input type="text"/> cubic yards waste / 1,000 square feet  |  |             |   |   |                  |
|   | <input type="text" value="97%"/> b) percentage of waste diverted  |  |             |   |   |                  |
| <b>Indoor Environmental Quality (EQ)</b> (Minimum 6 EQ Points Required) |   | <b>Max: 21</b>   | <b>Y:13</b> | <b>M:15</b>   | <b>Notes</b>                                    | <b>Final: 15</b> |
| <b>1. ENERGY STAR with Indoor Air Package</b>                           |   |  |             |   |   |                  |
| 1   | ENERGY STAR with Indoor Air Package   | 13   | 0           | 13  |   | 0                |
| <b>2. Combustion Venting</b>  |   |  |             |   |   |                  |
| 2.1   | Basic Combustion Venting Measures ( <i>meet all of the following</i> )                                      | Prereq.  | Y           |   |   | Y                |
|   | <input checked="" type="checkbox"/> a) no unvented combustion appliances                                    |  |             | <input checked="" type="checkbox"/> d) space, water heating equipment designed with closed combustion; OR |   |                  |
|   | <input checked="" type="checkbox"/> b) carbon monoxide monitors on each floor (of each unit, if applicable) |  |             | <input checked="" type="checkbox"/> space and water heating equipment has power-vented exhaust; OR        |   |                  |
|   | <input 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 ( <i>meet one of the following</i> )                                   | 2  | 1           | 1   |   | 2                |
|   | <b>Type of Fireplace or stove</b>   | <b>Better practice (1 pt)</b>  |             | <b>Best practice (2 pts)<br/>(must also meet Better Practice)</b>   |   |                  |
|   | None  | <input type="checkbox"/> masonry heater  |             | <input type="checkbox"/> granted automatically  |   |                  |
|   | Masonry wood-burning fireplace  | <input type="checkbox"/> listed by testing lab and meets EPA standards           |             | <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  |   |                  |
|   | Pellet 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 ( <i>meet one of the following</i> )  | 1  | 1           | 1   | <i>Minisplits can run in dehum only</i>         | 1                |
|   | <input checked="" 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   | <input checked="" type="checkbox"/> Basic Outdoor Air Ventilation ( <i>meet one of the following</i> )      | Prereq.  | Y           |   | <i>WhisperComfort ERV + continuous bath fan</i> | Y                |
|   | <input type="checkbox"/> a) Qualifies under ASHRAE Std. 62.2-2007 climate exemption.                        |  |             | <input type="checkbox"/> c) Intermittent ventilation  |   |                  |
|   | <input checked="" type="checkbox"/> b) Continuous ventilation   |  |             | <input type="checkbox"/> d) Passive ventilation   |   |                  |
| 4.2   | <input checked="" type="checkbox"/> Enhanced Outdoor Air Ventilation ( <i>meet one of the following</i> )   | 2  | 2           | 0   | N   | 0                |
|   | <input type="checkbox"/> a) Meets EQ 4.1 part (a), active ventilation system installed                      |  |             | <input checked="" type="checkbox"/> b) Install heat recovery system                                       |   |                  |
| 4.3   | Third-Party Performance Testing   | 1  | 0           | 0   |   | 0                |

| 5. Local Exhaust                             |                                     |   |         |     |                                     |   |
|--|-------------------------------------|---|---------|-----|-------------------------------------|---|
| 5.1  | <input checked="" type="checkbox"/> | Basic Local Exhaust (meet all of the following)                             | Prereq. | Y   |                                     | Y   |
|  | <input type="checkbox"/>            | a) Bathroom and kitchen exhaust meets ASHRAE Std. 62.2 air flow requirement |         |     | <input type="checkbox"/>            | c) Air exhausted to outdoors  |
|  | <input type="checkbox"/>            | b) Fans and ducts designed and installed to ASHRAE Std. 62.2                |         |     | <input type="checkbox"/>            | d) ENERGY STAR labeled bathroom exhaust fans                                    |
| 5.2  |                                     | Enhanced Local Exhaust (meet one of the following)                          | 1       | 1   | 0                                   | 1   |
|  | <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                                   | 1   |
| 6. Distribution of Space Heating and Cooling |                                     |   |         |     |                                     |   |
| 6.1  | <input checked="" type="checkbox"/> | Room-by-Room Load Calculations  | Prereq. | Y   |                                     | Y   |
| 6.2  |                                     | Return Air Flow / Room-by-Room Controls (meet one of the following)         | 1       | 0   | 1                                   | 1   |
|  |                                     | A. Forced-Air Systems   |         |     |                                     | <i>nonducted forced air (minisplit); bsmt radiant</i>                           |
|  | <input type="checkbox"/>            | a) Return air opening of 1 sq. inch per cfm of supply                       |         |     | <input type="checkbox"/>            | B. Nonducted HVAC Systems   |
|  | <input type="checkbox"/>            | b) Limited pressure differential between closed room and adjacent spaces    |         |     | <input type="checkbox"/>            | Flow control valves on every radiator; OR                                       |
|  | <input checked="" type="checkbox"/> |   |         |     | <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       | 0   | 2                                   | 2   |
|  |                                     | A. Forced-Air Systems   |         |     |                                     | B. Nonducted HVAC Systems   |
|  | <input type="checkbox"/>            | Have supply air flow rates in each room tested and confirmed                |         |     | <input checked="" type="checkbox"/> | Install at least two distinct zones with independent thermostat control         |
| 7. Air Filtering                             |                                     |   |         |     |                                     |   |
| 7.1  |                                     | Good Filters  | Prereq. | Y   |                                     | <i>ERV exempt from filter requirements</i> Y                                    |
| 7.2  |                                     | Better Filters  | 1       | 0   | 1                                   | 0   |
| OR   | 7.3                                 | Best Filters  | 2       | 0   | 0                                   | 0   |
| 8. Contaminant Control                       |                                     |   |         |     |                                     |   |
| 8.1  | <input checked="" type="checkbox"/> | Indoor Contaminant Control during Construction                              | 1       | 1   | 0                                   | <i>exhausts protected</i> 1   |
| 8.2  |                                     | Indoor Contaminant Control (meet any of the following, 1 pt each)           | 2       | 2   | 1                                   | <i>central vac</i> 2  |
|  | <input type="checkbox"/>            | a) Design and install permanent walk-off mats at each entry                 |         |     | <input checked="" type="checkbox"/> | c) Install central vacuum system with exhaust to outdoors                       |
|  | <input checked="" type="checkbox"/> | b) Design shoe removal and storage space near primary entryway              |         |     |                                     |   |
| 8.3  | <input checked="" type="checkbox"/> | Preoccupancy Flush  | 1       | 0   | 1                                   | 0   |
| 9. Radon Protection                          |                                     |   |         |     |                                     |   |
| 9.1  | <input checked="" type="checkbox"/> | Radon-Resistant Construction in High-Risk Areas                             | Prereq. | N/A |                                     | N/A   |
| 9.2  | <input checked="" type="checkbox"/> | Radon-Resistant Construction in Moderate-Risk Areas                         | 1       | 1   | 0                                   | 1   |

| <b>10. Garage Pollutant Protection</b>                               |             |   |                |              |  |
|--|-------------|---|----------------|--------------|--|
|  | <b>10.1</b> | No HVAC in Garage   | <i>Prereq.</i> | <b>Y</b>     | <b>Y</b>                               |
|  | <b>10.2</b> | Minimize Pollutants from Garage (meet all of the following)   | <b>2</b>       | <b>2</b>     | <b>0</b>                               |
|  |             | 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 type="checkbox"/> Weather-strip all doors  |                |              |  |
|  |             | <input type="checkbox"/> Carbon monoxide detectors in rooms that share a door with garage                   |                |              |  |
|  |             | <input type="checkbox"/> Seal all penetrations and cracks at the base of walls                              |                |              |  |
| <b>AND/OR</b>  | <b>10.3</b> | Exhaust Fan in Garage (meet one of the following)   | <b>1</b>       | <b>1</b>     | <b>0</b>                               |
|  |             | <input type="checkbox"/> a) Fan runs continuously   |                |              | <i>110 cfm fan tied to timer</i>       |
|  |             | <input type="checkbox"/> b) Fan designed with automatic timer control                                       |                |              |  |
| <b>OR</b>  | <b>10.4</b> | Detached Garage or No Garage  | <b>3</b>       | <b>0</b>     | <b>0</b>                               |
|  |             |   | <b>N</b>       |              | <b>0</b>                               |
| <b>Awareness &amp; Education (AE)</b> (Minimum 0 AE Points Required) |             |   | <b>Max: 3</b>  | <b>Y:2</b>   | <b>M:0</b>                             |
|  |             |   |                | <b>Notes</b> | <b>Final: 1</b>                        |
| <b>1. Education of the Homeowner or Tenant</b>                       |             |   |                |              |  |
|  | <b>1.1</b>  | <input checked="" type="checkbox"/> Basic Operations Training ( <i>meet both of the following</i> )         | <i>Prereq.</i> | <b>Y</b>     | <b>Y</b>                               |
|  |             | <input type="checkbox"/> a) Operations and training manual  |                |              |  |
|  |             | <input checked="" type="checkbox"/> b) One-hour walkthrough with occupant(s)                                |                |              |  |
|  | <b>1.2</b>  | <input checked="" type="checkbox"/> Enhanced Training   | <b>1</b>       | <b>1</b>     | <b>0</b>                               |
|  |             |   |                |              | <i>Owner involved and served as GC</i> |
|  | <b>1.3</b>  | Public Awareness ( <i>meet three of the following</i> )   | <b>1</b>       | <b>1</b>     | <b>0</b>                               |
|  |             | <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>                          |             |   |                |              |  |
|  | <b>2</b>    | <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>                               |
|  |             | <input type="checkbox"/> a) Operations and training manual  |                |              |  |
|  |             | <input type="checkbox"/> b) One-hour walkthrough with building manager                                      |                |              |  |

## USGBC LEGAL DISCLAIMER

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

## SIGNATURES BY RESPONSIBLE PARTIES

By affixing my signature below, the undersigned does hereby declare and affirm to the USGBC that the LEED for Homes requirements, as specified in the LEED for Homes Rating System, have been met for the indicated credits and will, if audited, provide the necessary supporting documents.

|                     |  |         |  |
|---------------------|--|---------|--|
| Project Team Leader | <input type="text" value="Lisa Elkins"/> | Company | <input type="text" value="2 Point Perspective"/> |
| Signature           | <input type="text"/>                     | Date    | <input type="text"/>                             |

By affixing my signature below, the undersigned does hereby declare and affirm to the USGBC that the required inspections and performance testing for the LEED for Homes requirements, as specified in the LEED for Homes Rating System, have been completed. I have evaluated this project's documentation package and conducted the necessary QA/QC procedures with the Green Rater, and I hereby declare and affirm to USGBC that the homes included in this submittal are ready to earn LEED for Homes certification, as per the attached checklist.

|              |  |         |   |
|--------------|--|---------|---|
| Provider QAD | <input type="text" value="Michael Holcomb"/> | Company | <input type="text" value="Green Home Institute"/> |
| Signature    | <input type="text"/>                         | Date    | <input type="text"/>                              |

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

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

|             |  |         |  |
|-------------|--|---------|--|
| Green Rater | <input type="text" value="Jason LaFleur"/> | Company | <input type="text" value="Eco Achievers"/> |
| Signature   | <input type="text"/>                       | Date    | <input type="text"/>                       |

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

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

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

# LEED for Homes Project Checklist

## Addendum: Prescriptive Approach for Energy and Atmosphere (EA) Credits

Points cannot be earned in both the Prescriptive (below) and the Performance paths of the EA section.

**Max Pts. Available**    **Preliminary Rating**  
 Y / Pts    Maybe    No

Notes

**Project Points**

| Energy & Atmosphere (EA) (Minimum 0 EA Points Required)   | <b>Max: 38</b> | <b>Y:13.5</b> | <b>M:5</b> | <b>Notes</b>  | <b>Final: 29</b> |
|---|----------------|---------------|------------|---|------------------|
| <b>2. Insulation</b>  |                |               |            |   |                  |
| 2.1 Basic Insulation (meet both of the following)   | <i>Prereq.</i> |               |            |   | <b>Y</b>         |
| <input type="checkbox"/> a) Insulation meets R-value requirements of IECC                                       |                |               |            | <input checked="" type="checkbox"/> b) Insulation meets HERS Grade II specifications for installation   |                  |
| 2.2 Enhanced Insulation (meet both of the following)  | <b>2</b>       | <b>0</b>      | <b>0</b>   | <b>Mix of CC and OC SPF</b>   | <b>2</b>         |
| <input checked="" type="checkbox"/> a) Insulation exceeds R-value requirements of IECC by 5%                    |                |               |            | <input checked="" type="checkbox"/> b) Insulation meets HERS Grade I specifications for installation  |                  |
| <b>3. Air Infiltration</b>  |                |               |            |   |                  |
| 3.1 Reduced Envelope Leakage  | <i>Prereq.</i> |               |            |   | <b>Y</b>         |
| <div style="border: 1px solid black; display: inline-block; padding: 2px;">3.6</div> Air leakage rate in ACH50  |                |               |            |   |                  |
| 3.2 Greatly Reduced Envelope Leakage  | <b>2</b>       | <b>0</b>      | <b>0</b>   |   | <b>0</b>         |
| <b>OR</b> 3.3 Minimal Envelope Leakage  | <b>3</b>       | <b>0</b>      | <b>0</b>   |   | <b>0</b>         |
| <b>4. Windows</b>   |                |               |            |   |                  |
| 4.1 Good Windows (meet all of the following)  | <i>Prereq.</i> |               |            | <b>.27 u value</b>  | <b>Y</b>         |
| <input checked="" type="checkbox"/> a) Windows and glass doors meet ENERGY STAR BOP window specifications       |                |               |            | <input checked="" type="checkbox"/> b) Skylight glazing area is ≤ 3% of floor area AND<br><input checked="" type="checkbox"/> Skylights meet ENERGY STAR requirements for skylights |                  |
| 4.2 Enhanced Windows  | <b>2</b>       | <b>2</b>      | <b>0</b>   | <b>Advanced T &amp; T 4500 NFCR rated</b>   | <b>2</b>         |
| <b>OR</b> 4.3 Exceptional Windows   | <b>3</b>       | <b>0</b>      | <b>0</b>   |   | <b>0</b>         |
| <b>5. Heating and Cooling Distribution System</b>   |                |               |            |   |                  |
| 5.1 Reduced Distribution Losses (meet all of the following, as appropriate)                                     | <i>Prereq.</i> |               |            | <b>None are appropriate</b>   | <b>Y</b>         |
| A. Forced-Air Systems   |                |               |            | B. Nonducted HVAC Systems   |                  |
| <input type="checkbox"/> a) Duct leakage of ≤ 4.0 CFM at 25 Pascals per 100 sq.ft.                              |                |               |            | <input type="checkbox"/> At least R-3 insulation around pipes in unconditioned spaces   |                  |
| <input type="checkbox"/> b) No ducts in exterior walls unless extra insulation is added                         |                |               |            |   |                  |
| <input type="checkbox"/> c) At least R-6 insulation around ducts in unconditioned spaces                        |                |               |            |   |                  |
| 5.2 Greatly Reduced Distribution Losses (meet the following, as appropriate)                                    | <b>2</b>       | <b>0</b>      | <b>0</b>   |   | <b>0</b>         |
| A. Forced-Air Systems   |                |               |            | B. Nonducted HVAC Systems   |                  |
| <input type="checkbox"/> Duct leakage of ≤ 3.0 CFM at 25 Pascals per 100 sq.ft.                                 |                |               |            | <input type="checkbox"/> Keep the boiler and pipes entirely within conditioned envelope   |                  |
| <b>OR</b> 5.3 Minimal Distribution Losses (meet one of the following, as appropriate)                           | <b>3</b>       | <b>3</b>      | <b>0</b>   |   | <b>3</b>         |
| A. Forced-Air Systems   |                |               |            | B. Nonducted HVAC Systems   |                  |
| <input type="checkbox"/> a) Duct leakage of ≤ 1.0 CFM at 25 Pascals per 100 sq.ft.                              |                |               |            | <input checked="" type="checkbox"/> Outdoor reset control to set distribution temp. based on outdoor temp.  |                  |
| <input type="checkbox"/> b) Air-handler and all ductwork is within conditioned envelope and EA 3.3 is met       |                |               |            |   |                  |
| <input type="checkbox"/> c) Air-handler and all ductwork visibly within conditioned spaces (not in walls, etc.) |                |               |            |   |                  |



| 6. Space Heating and Cooling Equipment |  |   |                                      |   |   |
|--|--|---|--------------------------------------|---|---|
| 6.1                                    | <input checked="" type="checkbox"/> Good HVAC Design and Installation ( <i>meet all of the following</i> )       | <i>Prereq.</i>  |                                      |   | Y                                       |
|  | <input checked="" type="checkbox"/> a) Design and size HVAC equipment using ACCA Manual J or equivalent          | <input type="checkbox"/> c) Install ENERGY STAR programmable thermostat OR                          |                                      |   |   |
|  | <input checked="" type="checkbox"/> b) Install efficient heating AND cooling equipment (see Table)               | <input checked="" type="checkbox"/> Heat pump or hydronic installed and exempted from part (c)      |                                      |   |   |
|  | <input type="text" value="Mini-split MSZ-FE09NA &amp; MSZ-FE12N"/> Type of cooling system                        | <input type="text" value="Mini-split MSZ-FE09NA &amp; MSZ-FE12N"/> Type of heating system           |                                      |   |   |
|  | <input type="text" value="26.0 Btu/h/W &amp; 23.0 Btu/h/W"/> Cooling efficiency (SEER / EER)                     | <input type="text" value="10.6 Btu/h/W &amp; 10.0 Btu/h/W"/> Heating Efficiency (AFUE / HSPF / COP) |                                      |   |   |
| 6.2                                    | High-Efficiency HVAC   | 2   | 0                                    | 0 | 0                                       |
| OR                                     | 6.3 Very High Efficiency HVAC  | 4   | 3                                    | 0 | 4                                       |
| 7. Water Heating                       |  |   |                                      |   |   |
| 7.1                                    | <input checked="" type="checkbox"/> Efficient Hot Water Distribution System ( <i>meet one of the following</i> ) | 2   | 0                                    | 0 | 0                                       |
|  | <input type="checkbox"/> a) Structured plumbing system   | <input type="checkbox"/> c) Compact design of conventional system                                   |                                      |   |   |
|  | <input type="checkbox"/> b) Central manifold distribution system   |   |                                      |   |   |
| 7.2                                    | Pipe Insulation  | 1   | 0                                    | 1 | <b>R4 confirmed</b> 1                   |
| 7.3                                    | Efficient Domestic Hot Water Equipment   | 3   | 0                                    | 3 | 3                                       |
|  | <input type="text" value="Heat pump water heater"/> Type of DHW system   |   |                                      |   |   |
|  | <input type="text" value="2.4"/> Efficiency  | <input type="text" value=""/>   | Solar: Percentage of annual DHW load |   |   |
| 8. Lighting                            |  |   |                                      |   |   |
| 8.1                                    | ENERGY STAR Lights   | <i>Prereq.</i>  |                                      |   | Y                                       |
| 8.2                                    | Improved Lighting ( <i>meet one of the following, see Rating System for pts</i> )                                | 1.5   | 0                                    | 0 | 0                                       |
|  | <input type="checkbox"/> a) Indoor lighting - 3 additional ENERGY STAR lights in high-use rooms                  | <input type="checkbox"/> b) Exterior lighting - motion sensor controls or integrated PV             |                                      |   |   |
| OR                                     | 8.3 Advanced Lighting Package ( <i>meet one of the following</i> )   | 3   | 3                                    | 0 | <b>only one lamp is not ES</b> 3        |
|  | <input type="checkbox"/> a) 60% of fixtures are ENERGY STAR fixtures   | <input type="checkbox"/> b) 80% of lamps are ENERGY STAR CFLs                                       |                                      |   |   |
| 9. Appliances                          |  |   |                                      |   |   |
| 9.1                                    | High-Efficiency Appliances ( <i>meet any, see Rating System for pts</i> )  | 2   | 1.5                                  | 0 | 1                                       |
|  | <input type="checkbox"/> a) ENERGY STAR labeled refrigerator   | <input type="checkbox"/> c) ENERGY STAR labeled dishwasher using 6.0 gallons per cycle or less      |                                      |   |   |
|  | <input type="checkbox"/> b) ENERGY STAR labeled ceiling fans in living/family room and all bedrooms              | <input type="checkbox"/> d) ENERGY STAR clothes washer  |                                      |   |   |
| 9.2                                    | Water-Efficiency Clothes Washer  | 1   | 0                                    | 1 | <b>Whirlpool Duet MEF 3.2, WF 3.0</b> 1 |
| 10. Renewable Energy                   |  |   |                                      |   |   |
| 10                                     | <input checked="" type="checkbox"/> Renewable Energy System  | 10  | 0                                    | 0 | 8.0                                     |
|  | <input type="text" value="12,654"/> Reference electric load, kWh/yr (based on HERS model)                        | <input type="text" value="3,037"/> Electricity supplied by renewable system, kWh/yr                 |                                      |   |   |
|  | <input type="text" value="24.0%"/> Percentage of annual reference electric load met by renewable system          |   |                                      |   |   |
| 11. Residential Refrigerant Management |  |   |                                      |   |   |
| 11.1                                   | Refrigerant Charge Test  | <i>Prereq.</i>  |                                      |   | Y                                       |
| 11.2                                   | Appropriate HVAC Refrigerants ( <i>meet one of the following</i> )   | 1   | 1                                    | 0 | 1                                       |
|  | <input type="checkbox"/> a) Use no refrigerants  | <input type="checkbox"/> c) Use refrigerants that complies with global warming potential equation   |                                      |   |   |
|  | <input checked="" type="checkbox"/> b) Use non-HCFC refrigerants   |   |                                      |   |   |

## LEED for Homes Project Checklist, Project Notes

This section was created to give project teams additional space to make internal notes on the progress of the project. It does not need to be used and it **should not** be submitted to USGBC. This section is unlocked, so project teams are welcome to make changes to the format as necessary. Any comments or directions provided below have not been created or endorsed by the US Green Building Council.

Date project began:

|  |
|--|
|  |
|  |

Initiated by:

*Credits*                      *Responsible Party*                      *Last Updated*                      *Additional Notes*

| <b>ID 1. Integrated Project Planning</b> |                              |            |   |
|--|------------------------------|------------|---|
| 1.1                                      | Jason LaFleur                |            |   |
| 1.2                                      | Emily Tjeerdsma              | 10/22/2013 | [2013-10-22] Uploaded meeting agendas to Box.net  |
| 1.3                                      | N/A                          |            |   |
| 1.4                                      | Team                         | 10/15/2013 | [2013-10-15] Held LEED-Homes charrette at 2 Point Perspective office  |
| 1.5                                      | N/A                          |            |   |
| <b>ID 2. Quality Mgmt for Durability</b> |                              |            |   |
| 2.1                                      | Emily Tjeerdsma, Jim Gramata | 2/25/2014  | [2014-02-25] Durability evaluation has been completed and strategies outlined. The strategies have been noted/indicated on the permit/construction drawings. Contractor |

shall implement durability strategies.

|     |               |  |  |
|-----|---------------|--|--|
| 2.2 | Jim Gramata   |  |  |
| 2.3 | Jason LaFleur |  |  |

**3. Innovative or Regional Design**

|     |                 |  |   |
|-----|-----------------|--|---|
| 3.1 |                 |  |   |
| 3.2 | Jim Gramata     |  |   |
| 3.3 | Emily Tjeerdsma |  | <a href="http://www.walkscore.com/report/2056-n-bissell-st-chicago-il-60614">http://www.walkscore.com/report/2056-n-bissell-st-chicago-il-60614</a> |
| 3.4 | Emily Tjeerdsma |  | <a href="http://www.walkscore.com/report/2056-n-bissell-st-chicago-il-60614">http://www.walkscore.com/report/2056-n-bissell-st-chicago-il-60614</a> |

**Credits**      **Responsible Party**      **Last Updated**      **Additional Notes**

**LL 1. LEED for Neighborhood Development**

|   |     |  |  |
|---|-----|--|--|
| 1 | N/A |  |  |
|---|-----|--|--|

**LL 2. Site Selection**

|   |                 |  |   |
|---|-----------------|--|---|
| 2 | Emily Tjeerdsma |  | [2014-02-25] Existing building site complies with all aspects of this credit. |
|---|-----------------|--|---|

**LL 3. Preferred Locations**

|     |                 |  |  |
|-----|-----------------|--|--|
| 3.1 | N/A             |  |  |
| 3.2 | Emily Tjeerdsma |  | [2014-02-25] 100% of the perimeter borders previously developed land with development 5+ years old.  |
| 3.3 | Emily Tjeerdsma |  | [2014-02-25] The building lot was previously developed, and the existing building is to remain - all utilities, plumbing service, etc. are existing. |

**LL 4. Infrastructure**

|   |                 |  |  |
|---|-----------------|--|--|
| 4 | Emily Tjeerdsma |  | [2014-02-25] All utilities, plumbing service, sewer, etc. for the building are existing and therefore within 1/2 mile from the property. |
|---|-----------------|--|--|

**LL 5. Community Resources**

|     |                 |  |  |
|-----|-----------------|--|--|
| 5.1 | N/A             |  |  |
| 5.2 | N/A             |  |  |
| 5.3 | Emily Tjeerdsma |  | [2014-02-25] Walk Score Report has been uploaded to Box.net and can be found here: <a href="http://www.walkscore.com/score/2056-n-bissell-st-chicago-il-60614">http://www.walkscore.com/score/2056-n-bissell-st-chicago-il-60614</a> |

**LL 6. Access to Open Space**

|   |                 |  |  |
|---|-----------------|--|--|
| 6 | Emily Tjeerdsma |  | [2014-02-25] Oz Park is 13.32 acres and is located within 1/2 mile from the property along with several other smaller parks. |
|---|-----------------|--|--|

Credits

Responsible Party

Last Updated

Additional Notes

| SS 1. Site Stewardship                 |                 |  |  |
|--|-----------------|--|--|
| 1.1                                    | Jim Gramata     |  | [2014-02-25] Erosion Controls are noted on permit/construction drawing set.  |
| 1.2                                    | Emily Tjeerdsma |  | [2014-02-25] Lot area is 2561 sf = 0.059 acre.   |
| SS 2. Landscaping                      |                 |  |  |
| 2.1                                    | Stephen Prassas |  | [2016-01-04] We have not used any species on this project that are invasive to the Chicago area. A list of Chicago Region Invasive Species and the Rules and Regulations have been uploaded to Box.net. Please note that <i>Euonymus fortunei</i> is indicated on the Chicago Botanic Garden list as an "E" for Evaluate species. In my 20+ years of   |
| 2.2                                    | Stephen Prassas |  | [2016-01-04] The turf for this project is specified as a drought tolerant sod that is a blend of three Tall Fescue varieties, <i>Festuca arundinacea</i> (Dakota, Montana, and Dorado). Flend may include up to 10% of Kentucky Bluegrass, <i>Poa pratensis</i> and/or 10% of Perennial Ryegrass, <i>Lolium perenne</i> . Brand Name: Black Beauty. There are no densely shaded turf areas on this site. There are no slopes on the site with a slope of 25% or greater. The specifications call for all beds to be amended with a soil amendment blend of compost, rice hulls, composted pine bark, enzymes, mycorrhizae, and trace mineral supplement. All beds are specified to be covered with premium hardwood bark mulch. All compacted soil is specified to be removed or tilled to a depth of 2". I did not specify the soil be tilled to a depth of 6" because there are a lot of existing tree roots in the area that we did not want to disturb. Also, the level of construction compaction was minimal for this site since the building was existing and most of the construction was in the interior; no construction vehicles were driven on-site. |
| 2.3                                    | Stephen Prassas |  | [2016-01-04] We have limited the amount of turf for this project to 53% of the total landscape area. Calculations have been uploaded to Box.net.   |
| 2.4                                    | Stephen Prassas |  | [2016-01-04] The quantity of plants that are drought-tolerant is 58%. I calculated 265 plants out of a total of 458. This is a very conservative number because there is no drought-tolerant plant list for the Chicago or Northern Illinois region; I believe the quantity of plants on this list that are actually drought-tolerant to be much higher. In addition to my 20+ years of professional experience, I referenced the plant list with <i>The Manual of Woody Landscape Plants</i> by Michael Dirr, <i>Perennials for Illinois</i> by William Aldrich and Don Williamson and the <i>Midwest Groundcovers LLC Trade List</i> . See the uploaded plant list.  |
| 2.5                                    | Stephen Prassas |  | [2016-01-04] We chose the prescriptive based path because the irrigation system was not designed by a Water Sense professional. Because we have chosen this route, we cannot earn points for SS25. or WE2.3.   |
| SS 3. Reduce Local Heat Island Effects |                 |  |  |
| 3                                      | N/A             |  |  |

**SS 4. Surface Water Management**

|     |                 |  |  |
|-----|-----------------|--|--|
| 4.1 | Stephen Prassas |  | [2016-01-04] This project is designed so 91% of the built environment will infiltrate into the site. This is achieved through a mostly vegetative landscape and several different types of permeable paving. It is also achieved through the collection of the rainwater that falls on the second floor deck into the fountain and fountain cistern which overflows into infiltration stream/rain garden. The Landscape Plan and Calculations have been uploaded to Box.net. |
| 4.2 | Stephen Prassas |  | [2016-01-04] We have provided 2 trees, 7 shrubs, and over 193 sf of native groundcover for this project. Although each of these plant types individually is below the requirements, collectively they exceed the requirements by almost 50%. The Landscape Plan, Calculations, and the Plant List have been uploaded to Box.net.   |
| 4.3 | N/A             |  |  |

**SS 5. Nontoxic Pest Control**

|   |             |  |  |
|---|-------------|--|--|
| 5 | Jim Gramata |  |  |
|---|-------------|--|--|

**SS 6. Compact Development**

|     |                 |  |  |
|-----|-----------------|--|--|
| 6.1 | N/A             |  |  |
| 6.2 | N/A             |  |  |
| 6.3 | Emily Tjeerdsma |  | [2014-02-25] Buildable area is 11176 sf = 0.026 acre |

**Credits**      **Responsible Party**      **Last Updated**      **Additional Notes**

**WE 1. Water Reuse**

|     |     |  |  |
|-----|-----|--|--|
| 1.1 | N/A |  |  |
| 1.2 | N/A |  |  |
| 1.3 | N/A |  |  |

| <b>WE 2. Irrigation System</b> |                 |  |  |
|--------------------------------|-----------------|--|--|
| 2.1                            | Jim Gramata     |  |  |
| 2.2                            | Jason LaFleur   |  |  |
| 2.3                            | Stephen Prassas |  | [2016-01-04] We chose the prescriptive based path because the irrigation system was not designed by a Water Sense professional. Because we have chosen this route, we cannot earn points for SS25. or WE2.3. |

| <b>WE 3. Indoor Water Use</b> |             |  |  |
|-------------------------------|-------------|--|--|
| 3.1                           | Jim Gramata |  |  |
| 3.2                           | Jim Gramata |  |  |

**Credits**      **Responsible Party**      **Last Updated**      **Additional Notes**

| <b>EA 1. Optimize Energy Performance</b> |                            |  |  |
|--|----------------------------|--|--|
| 1.1                                      | Jim Gramata, Jason LaFleur |  |  |
| 1.2                                      | Jim Gramata, Jason LaFleur |  |  |

| <b>EA 7. Water Heating</b> |             |  |  |
|----------------------------|-------------|--|--|
| 7.1                        |             |  |  |
| 7.2                        | Jim Gramata |  | [2016-01-04] R-4 (min.) pipe insulation noted on sheets G002 and P001. |

| <b>EA 11. Residential Refrigerant Management</b> |             |  |   |
|--|-------------|--|---|
| 11.1   | Jim Gramata |  |   |
| 11.2   | Jim Gramata |  | [2016-01-04] Noted on sheets G002 and M001. |

| <b>MR 1. Material-Efficient Framing</b>          |                              |  |  |
|--|------------------------------|--|--|
| 1.1  | Jim Gramata                  |  |  |
| 1.2  | Jim Gramata                  |  |  |
| 1.3  | Jim Gramata                  |  |  |
| 1.4  | Jim Gramata                  |  |  |
| 1.5  | N/A                          |  |  |
| <b>MR 2. Environmentally Preferable Products</b> |                              |  |  |
| 2.1  | Emily Tjeerdsma, Jim Gramata |  | [2014-02-25] Notice was listed on permit/construction drawings. A copy has been uploaded to Box.net.   |
| 2.2  | Emily Tjeerdsma, Jim Gramata |  | [2014-02-25] Finish schedule has been uploaded to Box.net. Contractor to supply spec sheets for the construction materials (e.g. gypsum board, adhesives, sealants, paint, reclaimed framing, etc.). |



| <b>MR 3. Waste Management</b> |             |  |                 |
|-------------------------------|-------------|--|-----------------|
| 3.1                           | Jim Gramata |  |                 |
| 3.2                           | Jim Gramata |  | uploaded to Box |

*Credits      Responsible Party      Last Updated      Additional Notes*

| <b>EQ 1. ENERGY STAR w/ IAP</b> |  |  |  |
|---------------------------------|--|--|--|
| 1                               |  |  |  |

| <b>EQ 2. Combustion Venting</b> |                              |  |  |
|---------------------------------|------------------------------|--|--|
| 2.1                             | Emily Tjeerdsma, Jim Gramata |  | [02-25-2014] Sheets M001 and M100 have been uploaded to Box.net. |
| 2.2                             | Jim Gramata                  |  |  |

| <b>EQ 3. Moisture Control</b> |                             |  |  |
|-------------------------------|-----------------------------|--|--|
| 3                             | Jim Gramata, mechanical sub |  |  |

| <b>EQ 4. Outdoor Air Ventilation</b> |                             |  |  |
|--------------------------------------|-----------------------------|--|--|
| 4.1                                  | Jim Gramata, mechanical sub |  | [02-25-2014] Mechanical sheets were uploaded to Box.net. |
| 4.2                                  |                             |  |  |
| 4.3                                  |                             |  |  |

**EQ 5. Local Exhaust**

|     |                             |  |  |
|-----|-----------------------------|--|--|
| 5.1 | Jim Gramata, mechanical sub |  |  |
| 5.2 | Jim Gramata, mechanical sub |  |  |
| 5.3 | Jason LaFleur               |  |  |

**EQ 6. Distribution of Space Heating and Cooling**

|     |                             |  |  |
|-----|-----------------------------|--|--|
| 6.1 | Jim Gramata, mechanical sub |  |  |
| 6.2 | Jim Gramata, mechanical sub |  |  |
| 6.3 | Jason LaFleur               |  |  |

**EQ 7. Air Filtering**

|     |                             |  |  |
|-----|-----------------------------|--|--|
| 7.1 |                             |  |  |
| 7.2 |                             |  |  |
| 7.3 | Jim Gramata, mechanical sub |  |  |

**EQ 8. Contaminant Control**

|     |                              |  |  |
|-----|------------------------------|--|--|
| 8.1 | Jim Gramata                  |  |  |
| 8.2 | Emily Tjeerdsma, Jim Gramata |  |  |
| 8.3 |                              |  |  |

**EQ 9. Radon Protection**

|     |             |  |  |
|-----|-------------|--|--|
| 9.1 | N/A         |  |  |
| 9.2 | Jim Gramata |  |  |

| <b>EQ 10. Garage Pollutant Protection</b> |                          |                     |  |
|---|--------------------------|---------------------|--|
| <b>Credits</b>                            | <b>Responsible Party</b> | <b>Last Updated</b> | <b>Additional Notes</b>                                  |
| 10.1                                      | Emily Tjeerdsma          |                     | [02-25-2014] Mechanical sheets were uploaded to Box.net. |
| 10.2                                      | Jim Gramata              |                     |  |
| 10.3                                      | Jim Gramata              |                     | [02-25-2014] Mechanical sheets were uploaded to Box.net. |
| 10.4                                      |                          |                     |  |

| <b>AE 1. Education of Home Owner / Tenant</b> |                          |                     |                         |
|---|--------------------------|---------------------|-------------------------|
| <b>Credits</b>                                | <b>Responsible Party</b> | <b>Last Updated</b> | <b>Additional Notes</b> |
| 1.1   | Jim Gramata              |                     |                         |
| 1.2   | Jim Gramata              |                     |                         |
| 1.3   | Jim Gramata              |                     |                         |

| <b>AE 2. Education of the Building Manager</b> |                          |                     |                         |
|--|--------------------------|---------------------|-------------------------|
| <b>Credits</b>                                 | <b>Responsible Party</b> | <b>Last Updated</b> | <b>Additional Notes</b> |
| 2  |                          |                     |                         |



| <i>Credits</i>                                | <i>Responsible Party</i> | <i>Last Updated</i> | <i>Additional Notes</i> |
|---|--------------------------|---------------------|-------------------------|
| <b>EA 2. Insulation</b>                       |                          |                     |                         |
|   | 2.1                      |                     |                         |
|   | 2.2                      |                     |                         |
| <b>EA 3. Air Infiltration</b>                 |                          |                     |                         |
|   | 3.1                      |                     |                         |
|   | 3.2                      |                     |                         |
| <b>OR</b>                                     | 3.3                      |                     |                         |
| <b>EA 4. Windows</b>                          |                          |                     |                         |
|   | 4.1                      |                     |                         |
|   | 4.2                      |                     |                         |
| <b>OR</b>                                     | 4.3                      |                     |                         |
| <b>EA 5. Heating and Cooling Distribution</b> |                          |                     |                         |
|   | 5.1                      |                     |                         |
|   | 5.2                      |                     |                         |
| <b>OR</b>                                     | 5.3                      |                     |                         |

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