3.0 Documentation Requirements

HOW THIS INFORMATION WILL BE USED

AUDIT PROCESS

This packet was compiled to provide a complete documentation requirements reference guide for teams pursuing project certification under Living Building Challenge version 3.0.

As the owner of the Living Building Challenge Program, the International Living Future Institute (ILFI) will request specific information from various members of a project team (Team) to determine compliance with the Living Building Challenge Imperatives. This data will be shared in a limited capacity with the project’s assigned Auditor, a third party who is responsible for performing document review and onsite verification once the twelve-month occupancy phase is complete. When on site, the Auditor may look for additional complementary information to support the project’s claims in the written documentation. Therefore, additional records may be required if further proof of compliance is needed.

ILFI and the Auditor will treat with confidentiality any/all project drawings, project manuals, and construction documents submitted by members of a Team. Twelve months following a project’s certification, these project drawings, project manuals, and construction documents may no longer be stored and any existing printed copies may be destroyed.

PUBLIC EDUCATION

The Institute may use and retain other non-sensitive project documentation as deemed necessary to further the educational mission of the organization, and may share information contained within the documentation with members of the Living Building Challenge Community (Community) or the general public. ILFI retains the right to use and/or publish essays written by the Team, and will attribute the content to the members of the Team as directed.

By submitting photographs and/or 3D renderings of the project, the Team grants ILFI royalty-free use of these image(s) in promotional material, such as web-based, printed, and other presentation formats, to support the Living Building Challenge or one of its auxiliary programs. ILFI will use the image(s) in a manner consistent with a Creative Commons “Attribution-No Derivative Works 3.0 United States” license.

Project teams are required to share documentation information about the project’s performance on the publically accessible ILFI website Case Study Database once the project is in its operational phase. This information must be updated with verified data after the project is certified, and additional feedback may be added to the project’s case study subsequently as desired by the project team.
3.0 Documentation Requirements

HOW TO USE THIS DOCUMENT

TWO-PART CERTIFICATION
Two-Part Certification is available for projects that wish to have a preliminary ruling issued on the Imperatives that are not reliant on performance data for certification. A Preliminary Audit may take place any time after construction is complete.

The table to the right identifies Imperatives eligible for preliminary audit and those requiring audit after the twelve-month performance period is complete.

DOCUMENTATION PROCESS
Project teams should refer to this document periodically throughout every phase of their project, from pre-design through the end of the Performance Period, in order to prepare for the Audit.

Project teams are responsible for collecting and maintaining their documentation until they are ready to submit for review. Documentation should be organized, by Petal and Imperative, according to the structure shown in this document.

ILFI has an ongoing goal to reduce the documentation needed to demonstrate compliance with the Living Building Challenge while publishing robust case studies. Over time, items may be modified to reflect this effort. Teams may elect to submit information using the current guidelines at the time of project registration or later releases.

BASIC DOCUMENTATION
All projects require all Basic Documentation, unless noted otherwise.

EXCEPTION DOCUMENTATION
Projects that use Exceptions or compliance paths that are not standard for all projects require additional documentation.

<table>
<thead>
<tr>
<th>IMPERATIVE</th>
<th>Preliminary Audit</th>
<th>Final Audit</th>
</tr>
</thead>
<tbody>
<tr>
<td>01 Limits to Growth</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>02 Urban Agriculture</td>
<td></td>
<td></td>
</tr>
<tr>
<td>03 Habitat Exchange</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>04 Human Powered Living</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>05 Net Positive Water</td>
<td></td>
<td></td>
</tr>
<tr>
<td>06 Net Positive Energy</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>07 Civilized Environment</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>08 Healthy Interior Environment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>09 Biophilic Environment</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>10 Red List</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>11 Embodied Carbon Footprint</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12 Responsible Industry</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>13 Living Economy Sourcing</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>14 Net Positive Waste</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15 Human Scale + Humane Places</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16 Universal Access to Nature and Place</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>17 Equitable Investment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18 JUST Organizations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>19 Beauty + Spirit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20 Inspiration + Education</td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>
3.0 Documentation Requirements

GENERAL REQUIREMENTS

G-01 General Project Information Summary
The Team should provide one document that includes all of the information below:

• Project Typology (Renovation, Landscape + Infrastructure, Building)
• Living Transect (L1-L6)
• Project Area (in square feet)
• Gross Building Area (in square feet)
• Building Footprint (in square feet)
• Project Floor Area Ratio (FAR)
• Construction documents start date
• Construction start date
• Occupancy date
• Twelve-month Performance Period start date

G-02 General Project Documentation
In addition, the following general documentation should be submitted:

• Site Plan with Project Area clearly noted
• Construction Drawings
• Project Manual (specifications)
• Records of significant changes during construction, e.g.
  □ Architect’s Supplemental Instructions; Construction Change Directives; Change Orders; or General Contractor’s Requests for Information that are the sole record for significant product or equipment modifications during the construction process as needed to demonstrate compliance with the Materials Petal.
• At least ten color 3D renderings or photographs of the project that can be used at the Institute’s discretion to publicize the project and the program.
• Project Team Roster, including the name of each organization or individual participant on the Team, role, office location, and proximity to the project (in kilometers).

CASE STUDY QUESTIONNAIRE

Project Teams must complete the I20-1 Case Study Questionnaire for each Imperative submitted for Audit. Documentation that is likely to be used as supplemental case study content is noted in that questionnaire.
3.0 Documentation Requirements

PLACE PETAL

I01 LIMITS TO GROWTH

BASIC DOCUMENTATION

I01-1 “Previously Developed” Documentation
Pre-December 31, 2007 aerial photos and/or other documents that show the following:

- The site and its adjacent properties to a minimum distance of 1000 feet beyond the project property line
- The land use on all sides of property
- “Previously developed” status
- All sensitive ecological habitats on or by the Project Area
- Third party evidence of the project development date such as county records (written descriptions and images), dated historic photos, newspaper articles, tax records, or permit documents.

Existing Buildings
Projects in existing buildings operational prior to December 31, 2007 must provide a photo showing that the project building was complete and operational prior to December 31, 2007.

I01-2 Flood Map
A FEMA-issued flood map documenting the project’s location relative to any nearby flood zones. For projects outside the United States or in instances where a FEMA-issued flood map does not exist, a zoning diagram or letter from the jurisdictional authority may be submitted.

I01-3 Landscape Plan
A detailed landscape plan that lists all plants and demonstrates compliance with Imperative requirements, specifically regarding native and/or naturalized plant species.

I01-4 Landscape Narrative
A one- to three-page narrative that includes an analysis of pre-development landscape conditions and strategies used to comply with Imperative requirements, such as ongoing landscape maturation and evolution.
## Exception Documentation Summary Table

<table>
<thead>
<tr>
<th>EXCEPTION</th>
<th>Conservation Docs</th>
<th>Technical Docs</th>
<th>Context Docs</th>
<th>Calculations</th>
</tr>
</thead>
<tbody>
<tr>
<td>I01-E1</td>
<td>Greenfields Protecting Virgin Land</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I01-E2</td>
<td>Greenfields Developed Before December 31, 2007</td>
<td></td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>I01-E3</td>
<td>Greenfields Surrounded by Development</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>I01-E4</td>
<td>Abandoned Brownfields</td>
<td>x</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>I01-E5 - E8</td>
<td>Various sensitive ecological habitats</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I01-E9 - E10</td>
<td>Working farms, ports or docks</td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>I01-E11 - E12</td>
<td>Floodplain Exceptions</td>
<td></td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>I01-E13</td>
<td>Educational Landscapes</td>
<td></td>
<td></td>
<td>x</td>
</tr>
</tbody>
</table>

### 101-a Conservation Documentation
Official documents, from the organization responsible for the protection or interpretation of the sensitive ecological habitat, that demonstrate the project’s compliance with Exception requirements.

### 101-b Technical Documentation
Legal, economic or contract documents that verify Exception requirements have been met, such as:
- Official documents such as current business licenses or registrations
- Contracts or receipts showing transactions related to Exception requirements.

### 101-c Context Documentation
Dated maps and/or photos demonstrating the project site meets Exception requirements.

### 101-d Calculations
Calculations showing that Exception requirements have been met.
3.0 Documentation Requirements

I02 URBAN AGRICULTURE

BASIC DOCUMENTATION

I02-1 Agricultural Narrative
A one- to three-page narrative written by the landscape architect or other appropriate consultant describing the methods of agriculture used to meet the Imperative (crops planted, livestock raised, etc.), their intended use, and a long-term support and harvest plan. The narrative should document:

• Why the selected strategies were chosen
• That the surrounding climate is supportive of the proposed species as a harvestable resource
• Occupants’ access to the infrastructure necessary for harvest & use of agriculture
• A clear plan of use for the harvest.

Single-family residential projects must also address the requirement for food storage capacity in their narrative.

I02-2 Photographs or Graphic Depictions
Representative photographs and/or diagrams showing predicted and/or actual agricultural use patterns throughout the year.

I02-3 Annotated Site Plan and Area Calculation
Annotated and dimensioned site plan, keyed to I02-1 Narrative, showing agricultural locations, and including a calculation of the agricultural area used to fulfill the Imperative.

EXCEPTION DOCUMENTATION

I-02 Exception Documentation Summary Table

<table>
<thead>
<tr>
<th>EXCEPTION</th>
<th>I02-2 Narrative</th>
<th>I02-2-b Non-edible Plant List</th>
</tr>
</thead>
<tbody>
<tr>
<td>I02-E1  Sensitive Ecological Habitats</td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>I02-E2  Non-edibles</td>
<td></td>
<td>x</td>
</tr>
</tbody>
</table>

I02-a Exception Narrative
A brief narrative explaining the project’s eligibility for, and compliance with, Exception requirements.

I02-b Non-edible Plant List
An annotated list of plants describing how selected plants and allotted areas comply with Exception requirements.
3.0 Documentation Requirements

103 HABITAT EXCHANGE

BASIC DOCUMENTATION

103-1 Receipt
Receipt for the Habitat Exchange donation from either the Living Future Exchange program or the selected Approved Land Trust reflecting the required offset amount.

103-2 Legal Documents (if following the Approved Land Trust path)
An official letter or document from the Land Trust stating the terms of the offset and confirming that the selected Land Trust is approved.

EXCEPTION DOCUMENTATION

<table>
<thead>
<tr>
<th>EXCEPTION</th>
<th>103-a Technical Documentation</th>
<th>103-b Volunteer Hour Records</th>
<th>103-c Summary Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>I03-E1 Conservation and Parks Organizations</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I03-E2 Single-Family Residences</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I03-E3 Local Land Trusts</td>
<td>x</td>
<td></td>
<td>x</td>
</tr>
</tbody>
</table>

103-a Technical Documentation
Contracts, maps, legal or economic documents, usually from the Land Trust organization, that show Exception requirements have been met.

103-b Volunteer Hour Records
Official records documenting volunteer hours spent, including the volunteer’s name, and the dates and hours worked in one of the following formats:

- Volunteer log books
- Board rosters, meeting minutes or other printed/digital matter that verifies time period of participation
- A signed letter from Land Trust staff.

103-c Summary Analysis
A comparison of Approved Land Trust requirements and proposed land trust qualifications demonstrating Exception requirements have been met.
3.0 Documentation Requirements

I04 HUMAN POWERED LIVING

BASIC DOCUMENTATION

I04-1 Calculations
Calculations that show the Project Area FAR before and after the project, or images that clearly show that the project has increased the density from the original condition.

I04-2 Mobility Plan
A document that outlines and demonstrates how all Imperative requirements have been met. The Mobility Plan must make a clear case for the amount of bike storage provided and describe how the project has supported, and will continue to support, human-powered living within the building and in the surrounding community.

I04-3 Advocacy Letter
Evidence of advocacy to promote a human-powered community. This may take the form of testimony to elected officials or a letter to the appropriate local jurisdictional authority requesting that they improve services that facilitate human-powered living.

EXCEPTION DOCUMENTATION
None time of issue.

WATER PETAL

I05 NET POSITIVE WATER

BASIC DOCUMENTATION

I05-1 Water Narrative
A narrative shall be provided, fully describing water system design and compliance with the Imperative. The narrative, written by the water engineer or designer, shall include the following:

• A summary of the site hydrology and project systems.
• A description of the pre and post development hydrology of the site, and how the project works in harmony with natural water flows.
• A detailed description of how 100% of project water needs are being met from on-site sources, including contributing system(s) and major components, their function and location, and the water treatment method(s).
• A detailed description of the stormwater, grey water and black water treatment and management system(s), their major components, and their function and location.
3.0 Documentation Requirements

105-2 **Annual Water Balance Diagram**
An annual water balance diagram showing general water flow and balance of project and site.
3.0 Documentation Requirements

**105-3 Water Supply and Use Table**
Total actual water use from monthly readings throughout the 12-month occupancy period from meter(s) or other on-site tracking systems that clearly record the amount of water used from each applicable supply source.

<table>
<thead>
<tr>
<th>Performance Period</th>
<th>Actual Month &amp; Year (fill in name/year)</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
<th>Annual Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Harvested Rainwater</td>
<td>Domestics (total)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Ground/Surface Water</td>
<td>Process water (total)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Reclaimed Greywater</td>
<td>Irrigation (including irrigation东京)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Municipal Potable Water</td>
<td>Other (describe)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Total Actual Water Supply</td>
<td>Other (total)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Water Use</td>
<td>Domestic water (total)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Process water (total)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Irrigation (including irrigation东京)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Other (describe)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Total Actual Water Use</td>
<td>Other (total)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Modelled</td>
<td>Modelled water supply</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Modelled water use</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Predicted delta</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

* Break out & list by uses if known. If not, fill in as “other (total)”.
** For urban agriculture areas

**105-4 Stormwater Calculations**
Stormwater calculations by the project engineer demonstrating imperative requirements for working in harmony with natural water flows, based on a minimum of a 10-year storm event.

**105-5 Statement of Non-Connection to Utility (or 105-E1 Documentation)**
A signed statement, written by the owner, stating that the project is not connected to a municipal potable water supply or sanitary sewer.

**105-6 Biosolids Disposal Documentation**
Evidence of appropriate use of bio-solids and liquids within 100-mile radius of project.

**105-7 Photographs**
Photographs of the systems, particularly portions that will be hidden from view at time of audit due to completion of construction.
3.0 Documentation Requirements

**EXCEPTION DOCUMENTATION**

<table>
<thead>
<tr>
<th>EXCEPTION</th>
<th>105-a Narrative Statement</th>
<th>105-b Meter Data &amp; Calculations</th>
<th>105-c Design Docs</th>
<th>105-d Appeal Docs</th>
</tr>
</thead>
<tbody>
<tr>
<td>I05-E1 Municipal Potable Water Supply</td>
<td></td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>I05-E2 Municipal Water for Fire Protection</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I05-E3 Chlorine Disinfection</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I05-E4 L5 &amp; L6 - Municipal Stormwater Connection</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I05-E5 Municipal Sewer Overflow Connection</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**105-a Narrative Statement**
Signed narrative statement making a clear case that the project is eligible for the Exception and how it has met requirements.

**105-b Meter Data & Calculations**
Meter data and/or calculations as needed to show compliance with Exception requirements.

**105-c Design Documentation**
Design documents, such as project manual excerpts, drawings or cutsheets, showing how the project meets Exception requirements.

**105-d Appeals Documentation**
Documentation of the team’s effort to comply with requirements despite regulatory barriers, including:

- The regulatory statute or code that hinders project compliance
- Summary of all potential appeals and outcomes
- Written appeal documents and response showing the decision(s) from regulatory authority.
3.0 Documentation Requirements

ENERGY PETAL

I06 NET POSITIVE ENERGY

BASIC DOCUMENTATION

I06-1 Energy Narrative
A two to three page narrative that is written by the energy designers or engineers, that describes the energy system, including:

• Anticipated building’s needs and operational issues
• Design strategy
• All subsystems of the energy-using and energy-producing systems, including all areas listed in the I06-4 Energy Table
• The energy storage system

I06-2 Energy System Schematic
A schematic drawing of the energy system that correlates to the information in the I06-1 Energy Narrative.

I06-3 Photographs
Photographs of the systems, particularly portions that will be hidden from view at time of audit due to completion of construction.

I06-4 Energy Bills
Utility bills for a continuous 12-month period, beginning with the designated start date of the performance period.

If the project is not connected to a utility, or is sub-metered from a utility meter serving a larger area, and therefore has no energy bills, the energy or mechanical engineer must provide a letter, stamped with her or his professional seal and signed by both the engineer and the owner, substantiating that this is the case.
3.0 Documentation Requirements

**106-5**

**Energy Production and Demand Table**

Completed Energy Usage Table with monthly data from the 12-month performance period, from meter(s), other on-site tracking systems or web-link to an online mechanism that clearly records energy produced and consumed (e.g., total energy generated; total energy use by subsystem including simulated/designed demand if available).

---

<table>
<thead>
<tr>
<th>Performance Period</th>
<th>Performance Month</th>
<th>Project Name:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actual Month &amp; Year</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>(Fill in name/year)</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5</td>
<td></td>
</tr>
<tr>
<td></td>
<td>6</td>
<td></td>
</tr>
<tr>
<td></td>
<td>7</td>
<td></td>
</tr>
<tr>
<td></td>
<td>8</td>
<td></td>
</tr>
<tr>
<td></td>
<td>9</td>
<td></td>
</tr>
<tr>
<td></td>
<td>10</td>
<td></td>
</tr>
<tr>
<td></td>
<td>11</td>
<td></td>
</tr>
<tr>
<td></td>
<td>12</td>
<td></td>
</tr>
</tbody>
</table>

**Energy Production and Demand Table (kBTU/ft\(^2\)/yr  kJ/m\(^2\)/yr)**

- **Energy Production**
  - Photovoltaics (location 1)
  - Photovoltaics (location 2)
  - Micro-hydro-turbines
  - Wind power
  - Municipal Power (if grid tied)
  - Other (describe)

**Total Energy Production**

- Heating
- Cooling
- Hot Water
- Lighting
- Ventilation
- Computer Services
- Pumps
- Vertical Transportation
- Plug Loads/Equipment
- Other (List)

**Total Energy Demand**

**Project Energy Use Intensity (EUI)**

**Modelled (optional)**

- Modelled energy production
- Modelled energy demand
- Predicted delta

---

**106-6**

**Resilient Energy Storage Documentation**

Calculations showing the required amount of storage, supported by:

- A brief summary of the predicted lighting demand methodology
- Refrigeration manufacturer’s energy use information.
### 3.0 Documentation Requirements

#### EXCEPTION DOCUMENTATION

**I-06 Exception Documentation Summary Table**

<table>
<thead>
<tr>
<th>EXCEPTION</th>
<th>I06-a Narratives</th>
<th>I06-b Metering Data</th>
<th>I06-c Technical Docs</th>
<th>I06-d Photographs</th>
</tr>
</thead>
<tbody>
<tr>
<td>I06-E1</td>
<td></td>
<td>x</td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>I06-E2</td>
<td></td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I06-E3</td>
<td></td>
<td></td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>I06-E4</td>
<td></td>
<td></td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>I06-E5</td>
<td></td>
<td></td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>I06-E6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I06-E7</td>
<td></td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I06-E8</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I06-SJ1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I06-SJ2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I06-SJ3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I06-SJ4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

**I06-a Additional Narrative**

A narrative describing the project’s need for the exception, the approach to and implementation of the alternative solution, and compliance with Exception requirements.

**I06-b Metering Documentation**

Metering documentation or data showing compliance with exception requirements.

**I06-c Technical Documents**

Legal, financial or contract documents showing compliance with exception requirements.

**I06-d Photographs**

Photographs showing compliance with exception requirements, including images of all components that will be changed from an existing state, or hidden by the completion of the performance period.
3.0 Documentation Requirements

HEALTH & HAPPINESS PETAL

I07 CIVILIZED ENVIRONMENT

BASIC DOCUMENTATION

I07-1 Dimensioned Drawings
Dimensioned drawings, including plans, diagrams, window schedules and/or exterior elevations, documenting compliance. If using construction drawings to satisfy this requirement, include only relevant pages.

EXCEPTION DOCUMENTATION
None at time of issue.

I08 HEALTHY INTERIOR ENVIRONMENT

BASIC DOCUMENTATION

I08-1 Healthy Indoor Environment Plan
A document that outlines and demonstrates how all Imperative requirements have been met, including:

• Cleaning Product List: A list of the project’s cleaning products that comply with the EPA Design for the Environment standard or international equivalent.

• HVAC Documentation: A statement confirming compliance with ASHRAE 62 or international equivalent and the dedicated exhaust systems requirement, as well as any copies of relevant HVAC Drawings.

• I08-3 CDPH v1.1-2010 Documents: A list of all interior building products that have the potential to emit Volatile Organic Compounds (VOCs) and supporting documentation demonstrating each product’s compliance with CDPH v1.1-2010 or equivalent standard.

• IAQ Testing Results: Results and any steps taken to remedy deficiencies identified by the testing authority.

• Systems Report: Verification of performance for permanently installed equipment used to monitor levels of carbon dioxide (CO$_2$), temperature and humidity, including photographs of any hidden systems.

EXCEPTION DOCUMENTATION
None at time of issue.
3.0 Documentation Requirements

**I09 BIOPHILIC ENVIRONMENT**

**BASIC DOCUMENTATION**

I09-1 Biophilic Charter and Plan
A substantial illustrated plan that describes how all of the requirements have been met including:

- Any relevant ecological studies
- The agenda, attendee list, meeting minutes, action items and resulting framework from the Biophilic exploration day
- Demonstration of the implementation of the Biophilic framework in the built project.

**EXCEPTION DOCUMENTATION**
None at time of issue.

**MATERIALS PETAL**

**I10 RED LIST**

**BASIC DOCUMENTATION**

I10-1 Materials Tracking Table
The Materials Tracking Table must be completed and provided in sortable Excel format. A template is available to registered projects on the project team resources page. See Resources.

I10-2 Supporting Data
Supporting data is required for each product. Acceptable documentation must include one of the following, confirming no Red List chemicals are present (see Acceptable Documentation under Clarifications):

- Living Building Challenge Compliant or Red List Free Declare ID number
- Health Product Declarations with Full Disclosure of all Intentional Added Ingredients
- Complete Material Safety Data Sheet (MSDS)
- Complete Globally Harmonized System Safety Data Sheet (GHS SDS),
- Complete manufacturer-supplied ingredient list
3.0 Documentation Requirements

**I10-3**  
\[\text{Wet-Applied Product VOC data}\]
Manufacturer-supplied VOC content data:
- Declare Label with VOC disclosure
- Health Product Declaration (HPD) with VOC disclosure
- MSDS or GHS SDS with VOC data
- Image of VOC content on product label
- Signed statement of compliance and VOC content disclosure from manufacturer

**EXCEPTION DOCUMENTATION**

<table>
<thead>
<tr>
<th>EXCEPTION</th>
<th>I10-a Due Diligence Documentation</th>
<th>I10-b Technical Docs</th>
<th>I10-c Advocacy Letter</th>
<th>I10-d Manufacturer Letter</th>
</tr>
</thead>
<tbody>
<tr>
<td>I10-E1</td>
<td>x</td>
<td></td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>I10-E2-E3</td>
<td>Various Small Components</td>
<td></td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>I10-E4</td>
<td>Proprietary Ingredients</td>
<td></td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>I10-E5</td>
<td>Red List and Code</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>I10-E6-E13</td>
<td>Various</td>
<td></td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>I10-E14</td>
<td>HCFCs in TIs</td>
<td></td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>I10-E15</td>
<td>PVC Wire in Residential</td>
<td></td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>I10-E16</td>
<td>HFRs in Non-PVC Wiring</td>
<td></td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>I10-E17-E18</td>
<td>Various</td>
<td></td>
<td></td>
<td>x</td>
</tr>
</tbody>
</table>

**I10-a**  
**Due Diligence Documentation**
Documents demonstrating genuine effort to exclude Red List products.

Communications must include requests to the parties supplying, and/or requiring the non-compliant material, as well as the response from those parties.

**I10-b**  
**Technical Documentation**
Legal, economic or contract documents that verify Exception requirements have been met, including:
- Official documents such as current business licenses, registrations, or permit documents
- Contracts or receipts showing transactions related to Exception requirements
3.0 Documentation Requirements

Advocacy Letter
A letter to the entity that provides or requires Red List products advocating for the elimination of Red List materials.

Advocacy is required for all non-compliant products that are part of a Living Building Challenge project, including those addressed in Specific Exceptions. There are two types of advocacy letters:

• Letters to the AHJ that requires Red List products be used, requesting the policy be changed
• Letters to the manufacturer providing the code-required but non-compliant material, requesting a Red List-compliant alternative

Only one type of letter is required for any given Exception, unless noted otherwise. Sample letter templates are posted on the project team resource page. See Resources, Materials Petal Handbook.

Manufacturer Letter
A letter from a manufacturer confirming information that is not otherwise available, such as a letter confirming there are no Red List materials in proprietary ingredients.

I11 EMBODIED CARBON FOOTPRINT

BASIC DOCUMENTATION

Carbon Calculations
The input to and results from the selected carbon calculator showing TCO\textsuperscript{2}e for the project or an in-depth report outlining the methodologies, scope and findings of the professional analysis of embodied carbon life cycle.

Carbon Offset Receipts
Receipt from the Living Future Carbon Exchange or other carbon offset program as proof of purchase.

Optional Carbon Reduction Narrative
A one- to two-page narrative addressing:

• The process and findings from the initial carbon analysis
• The specific strategies employed by the project team to reduce embodied carbon.
3.0 Documentation Requirements

EXCEPTION DOCUMENTATION

I-11 Exception Documentation Summary Table

<table>
<thead>
<tr>
<th>EXCEPTION</th>
<th>Narrative</th>
</tr>
</thead>
<tbody>
<tr>
<td>I11-E1</td>
<td>Renovation Offset Reduction</td>
</tr>
</tbody>
</table>

I11-a Exception Narrative
Description of the calculation methodology and carbon reduction percentage based upon calculator used and extent of work for the project.

I12 RESPONSIBLE INDUSTRY

BASIC DOCUMENTATION

I12-1 Wood Documentation
Documents correlating wood in the project with FSC, salvaged or intentionally harvested sources, including:

• Receipts referencing FSC-certified wood acquisition and final chain of custody numbers
• Receipts from the seller/broker of all salvaged wood procurements
• An illustrated narrative documenting both why tree removal was required for construction or as part of a reforestation/restoration program, and the milling process to create finished goods.

I12-2 Advocacy Letters
Copies of letters written to the National Trade Associations and/or ASTM International requesting third-party standards for the metal, stone and rock industries.
### 3.0 Documentation Requirements

#### EXCEPTION DOCUMENTATION

**I-12 Exception Documentation Summary Table**

<table>
<thead>
<tr>
<th>EXCEPTION</th>
<th>I12-a Explanatory Narrative</th>
<th>I12-b Technical Documentation</th>
<th>I12-c Advocacy Letter</th>
<th>I12-d Photographs</th>
</tr>
</thead>
<tbody>
<tr>
<td>I12-E1 Intentional Harvest</td>
<td>x</td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>I12-E2 Pending FSC Certification</td>
<td></td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>I12-E3 Invasive Species</td>
<td>x</td>
<td>x</td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>I12-E4 Underwater Salvaged Wood</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td></td>
</tr>
</tbody>
</table>

#### I12-a Additional Narrative
Narrative with photos as necessary to show compliance with Exception requirements.

#### I12-b Technical Documentation
Legal, economic or contract documents that verify Exception requirements have been met, such as:
- Official documents such as current business licenses or registrations
- Contracts or receipts showing transactions related to Exception requirements

#### I12-c Advocacy Letter
Letter written to non-certified party advocating certification by the organization listed in Exception requirements.

#### I12-d Photographs
Photographs or other graphic documentation verifying that Exception requirements were met.

### I13 LIVING ECONOMY SOURCING

#### BASIC DOCUMENTATION

**Materials Tracking Table**
A Materials Tracking Table* that includes cost information must be completed and provided in sortable Excel format. See I10-1 Materials Tracking Table.

*Cost information will be added to the Materials Tracking Table format in 2014. Project teams may be required to provide backup documentation of listed costs.
3.0 Documentation Requirements

I13-1 Distance Map
A map showing 500 km, 1000 km, 2,500 km and 5000 km radii from the site.

I13-2 Project Team Roster
Roster of each organization or individual participant on the Team, including name, role, office location, and proximity to the project site (in kilometers).

I13-3 Supporting Documentation
Documents stating manufacturer location information for each tracked product. Acceptable options include:

- Declare ID
- Manufacturer documentation (cutsheet, letter or other document that states the manufacturer location information).

EXCEPTION DOCUMENTATION
None at time of issue.

I14 NET POSITIVE WASTE

BASIC DOCUMENTATION

I14-1 Materials Conservation Management Plan
Completed Conservation Management Plan explaining how the project team optimized materials in design, construction, and operations phases, and how they planned for reduced waste at the project’s end of life. Projects on sites with existing infrastructure also need to include the required Pre-building Audit Report.

I14-2 Diversion Table
Completed construction waste diversion table, in Excel format, showing percentages of waste diverted (by weight) in each category (metals; paper + cardboard; soil + biomass; rigid foam, carpet + insulation; and all others). The calculations must be based on tangible data that correlates to receipts provided.

I14-3 Diversion Documentation
Copies of receipts, recycling percentage reports and provider names for all tipping fees, recyclers, and building materials salvage services.

I14-4 Salvaged Materials Documentation
Noted architectural drawings showing location of salvaged items.

I14-5 Photographs
Photographs of specific designated on-site areas for separated or commingled construction waste.
3.0 Documentation Requirements

**EXCEPTION DOCUMENTATION**

<table>
<thead>
<tr>
<th>EXCEPTION</th>
<th>I14-a Exception Narrative</th>
<th>I14-b Technical Documentation</th>
<th>I14-c Advocacy Letters</th>
<th>I14-d Photographs</th>
</tr>
</thead>
<tbody>
<tr>
<td>I14-E1 Hazardous Materials</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I14-E2 Municipal Limitations</td>
<td></td>
<td></td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>I14-E3 Surplus to Project Team</td>
<td>x</td>
<td></td>
<td></td>
<td>x</td>
</tr>
</tbody>
</table>

**I14-a Exception Narrative**

Narrative explaining the relevant information for the Exception in question.

**I14-b Technical Documentation**

Legal, economic or contract documents that verify Exception requirements have been met, such as:

- Official documents such as current business licenses or registrations
- Contracts or receipts showing transactions related to Exception requirements.

**I14-c Advocacy Letters**

Letters to advocate for better waste reduction options.

**I14-d Photographs**

Photographs
3.0 Documentation Requirements

EQUITY PETAL

I15 HUMAN SCALE + HUMANE PLACES

BASIC DOCUMENTATION

I16-1 Human Scale Narrative
One-page illustrative narrative describing how the project has addressed the human scale and promotes culture and interaction among people and the community.

I16-2 Drawings and photos
Drawings or photos showing location and dimensions (when applicable) of required Human Scale elements.

I16-3 Calculations
Calculations showing total surface parking does not exceed maximum allowed percentages of project area.

EXCEPTION DOCUMENTATION
None at time of issue.

I16 UNIVERSAL ACCESS TO NATURE & PLACE

BASIC DOCUMENTATION

I16-2 ADA, Emissions and Waterway Access Statement
Signed statement affirming compliance of the project with ADA or ABA requirements by the Architect, that noxious emissions are not present and that all waterways have public access.

I16-3 Sun Shading Calculations
Diagrams demonstrating compliance with maximum shading allowances of adjacent properties, measured on the Winter Solstice at the solar noon.

I16-5 Waterway Access
Site plan showing access to and compliance with the requirements for all waterways.

EXCEPTION DOCUMENTATION
None at time of issue.
3.0 Documentation Requirements

I17 EQUITABLE INVESTMENT

BASIC DOCUMENTATION

I17-1 Project Costs
A summary of project costs, including soft costs, hard costs and land costs. Hard costs should include a line item for materials (should be consistent with total material costs in I-13 Living Economy Sourcing) as well as furnishings, fixtures, and equipment.

I17-2 Nonprofit Information
If not utilizing the Equity Living Future Exchange: Location of non-profit(s) and evidence of legal or registered status as a charity.

I17-3 Offset Receipt
If not utilizing the Equity Living Future Exchange: Evidence of payment for donation or offset (receipt, letter, etc.) of .5% of project cost.

EXCEPTION DOCUMENTATION
None at time of issue.

I18: JUST ORGANIZATIONS

BASIC DOCUMENTATION

I18-1 JUST Label
JUST label for project owner/developer, architect, MEP engineer, structural engineer, or landscape architect.

I18-2 Letters to Project Team
Copies of at least ten letters to additional project team members advocating for their participation in JUST.

EXCEPTION DOCUMENTATION
None at time of issue.
3.0 Documentation Requirements

**BEAUTY & INSPIRATION PETAL**

### I19 BEAUTY + SPIRIT

#### BASIC DOCUMENTATION

**I19-1 Beauty Narrative**
A two- to four-page narrative written by the project designer or owner that describes how the project meets the intent of the Imperative. The narrative must be accompanied by photographs, diagrams and drawings that illustrate major ideas.

**I19-2 Survey + Results**
Survey and results from project occupants/users. Survey must state the Imperative, and inquire of respondents whether they think the project has succeeded, and include additional questions related to the beauty of the project based on the designer’s narrative. Survey respondents must represent a randomized sampling of 10% of project occupants. Surveys may be administered online or in person. For single-family residences, testimonies from the home’s occupants, visitors or family members may be used.

### I20 INSPIRATION + EDUCATION

#### BASIC DOCUMENTATION

**I20-1 Case Study Questionnaire**
All projects: A complete ILFI Case Study Questionnaire, to be used as content for the public case study of the project on the Institute website.

**I20-2 Open House**
Non-residential and multifamily residential projects: At least one annual “open day” to educate the public about the project and its achievements. This “open day” shall be publicized to the community at large.

**Single Family Residential Projects**
At least one “open house” to educate the public about the project and its achievements. This “open house” shall be publicized to the community at large. Subsequent events are encouraged, but not required.

**I20-3 Website**
All projects: Educational web site (URL to be provided at submission) that shares information about the design, construction, and operation of the house. Performance metrics are encouraged to be included.
3.0 Documentation Requirements

I20-4  Owner's Manual

Single Family Residential Projects
A simplified Owner’s Manual (2-3 pages) that explains any non-typical systems associated with achieving ILFI certification and other unique features of the home, to assist future owners/occupants. No interpretive signage or detailed O&M manual is necessary.

I20-5  Brochure
Non-residential and multifamily residential projects only: A simple brochure describing the design, environmental features, and how occupants can help maintain and operate the project.

I20-6  Signage
Non-residential and multifamily residential projects only: Interpretive signage that teaches visitors and occupants about the project. Signage shall describe the performance goals of the building and major systems and concepts used to achieve ILFI certification.

I20-7  Optional Video
An educational video describing the project’s environmental features.

EXCEPTION DOCUMENTATION
None at time of issue.