

FGBC



FLORIDA GREEN
BUILDING COALITION

Setting the Standards for Green Building in Florida

Florida Green Commercial Building Designation Standard



STANDARDS & POLICIES

Green Commercial Building Designation Standard of the Florida Green Building Coalition, Inc.

Version 1.0
June 2004

1. GENERAL PROVISIONS

- 1.1 **Purpose.** The provisions of this document are intended to establish a voluntary, statewide standard for Green Commercial Building Designation. This enhances the goal of achieving uniform and meaningful Green Commercial Building Designations for Florida.
- 1.2 **Scope.** These standards apply to Green Commercial Building Designations located in Florida. The commercial building could be comprised of any commercial occupancy listed in the current Florida Building Code.

2. OPERATING PRINCIPLES

- 2.1 Qualification shall not circumvent any local or other jurisdictional laws, unless so allowed by the jurisdictional body as an incentive for complying with this standard.
- 2.2 Credit points are gained through measures that benefit the environment. The basis for the weighting of points shall be environmental benefit; however, it is understood that in some cases the weighting, by necessity, is subjective due to the various types of environmental benefit incurred (water vs. air pollution; tree protection; etc.).
- 2.3 A Checklist of qualifying improvement features and their respective Credit Points (Schedule A) shall be maintained by the Florida Green Building Coalition such that the Credit Point list is open to new features through a regular, technical and public review and acceptance process that is defined by this Standard.
- 2.4 The Checklist (Schedule A) shall be organized into general categories, such as building efficiency features, water conservation features, site preservation features, occupant health features, material preservation features, disaster mitigation features, etc., such that each feature category has a Minimum Credit Point requirement and a maximum number of allowable Credit Points.
 - 2.4.1 Qualification shall be achieved by achieving at least 50 Credit Points out of the maximum of 100 Credit Points and by achieving the minimum Credit Points required in each category and by achieving all Prerequisites (no credit point value) listed in each category.
 - 2.4.2 To allow maximum user flexibility, the sum of the minimum point requirements for all categories shall not exceed 21.
 - 2.4.3 To ensure that the credit point system is stable and cannot be devalued through inflation by features that are added over time, the sum of the maximum allowable credit points for all categories shall be 100.

- 2.5 For each commercial building that qualifies for the Green Commercial Building Designation, written certification, fully disclosing all the features that qualify the Commercial Building, shall be provided to any purchasers or local officials upon request. Failure of a building owner to disclose this information will be grounds for removal of the designation.
- 2.6 Wherever possible, this Standard will promote the market value of improvements through economic analysis (e.g. there is economic benefit to be gained through improvements which reduce energy use beyond minimum code requirements).

3. DEFINITIONS AND ACRONYMS

Credit Points - Qualification points assigned to features that improve the environmental, ecological and sustainability impacts of a building.

Florida Green Building Coalition, Inc. (FGBC) - A Florida non-profit corporation with open membership whose primary mission is to develop and maintain Green Designation Standards for Florida and to promote cost-effective, sustainable improvements in the built environment.

Green Commercial Building - A commercial building that incorporates multiple environmental, ecological and sustainability features throughout its life cycle that reduce the *environmental* degradation considerably more than a commercial building that just minimally meets state and local regulations.

Designated Professional – An individual who is: LEED Accredited (by the US Green Building Council); an integral part of the project design team; and is authorized by the project Owner to collect, organize, review, and submit all documents required by the Standard in order to achieve certification.

Project Evaluator - An individual assigned by the Florida Green Building Coalition, Inc. to evaluate a commercial building with respect to the criteria contained in this Standard for the *purposes* of certifying that the qualifications for a Florida Green Commercial Building Designation have been achieved.

4. CERTIFICATION PROCESS

- 4.1 An application for green designation (provided in Schedule A and the Reference Guide) shall be completed by both the building design team and the Designated Professional. The full fee shall be paid at the time of application, or alternatively, a non-refundable deposit and pre-submittal form can be submitted with the balance of documentation and fee paid later.

- 4.2 A Project Evaluator shall be assigned by FGBC after receiving an application and fee.
- 4.3 The Project Evaluator will answer questions regarding necessary submittal documents and verify that all necessary materials, as specified in Schedule A and the Reference Guide for the applied for points, have been received. The Project Evaluator is to simply be the evaluator for FGBC, and a reference regarding any interpretation of the standards, not a consultant for the design team.
- 4.4 The Project Evaluator shall verify the correct points earned based on information received and any other verification. Verification may require a trip to the building site.
- 4.5 The Project Evaluator shall forward the verified Schedule A and any calculations and documentation to FGBC for archiving.
- 4.6 The Florida Green Building Coalition, Inc. shall uphold the Standard including, if need be, denying certification of applicants for failure to meet the minimum requirements of the Standard. Failure to comply with the Standard shall not be grounds for any refund of the application fee to the applicant.
- 4.7 Certification of a Florida Green Commercial Building Designation shall be provided in writing and accomplished in accordance with the provisions of this Standard.
- 4.8 Each Florida Green Commercial Building Designation Certificate shall include the following:
 - 4.8.1 The seal of the Florida Green Building Coalition, Inc.;
 - 4.8.2 The name of the commercial building and the building owner;
 - 4.8.3 The full address where the commercial building is located;
 - 4.8.4 The signature and typed or printed name of the Project Evaluator;
 - 4.8.5 The date the certification was completed; and
 - 4.8.6 The statement: “This certification is provided by the Florida Green Building Coalition, Inc. Any questions, comments, or complaints regarding the green designation of this Commercial Building may be directed to the Florida Green Building Coalition, Inc.”
- 4.9 Each Florida Green Commercial Building Designation certification shall include a disclosure stating that the Project Evaluator had no financial interest in the project or current contracts/obligations with the owner or any member or organization of the building design team (engineers, architects, etc.).

5. SELECTION OF FGBC PROJECT EVALUATOR

- 5.1 Any organization or individual wishing to serve as a Project Evaluator may request to do so by submitting the required information to FGBC.

- 5.2 At a minimum, the following information shall be required of and kept on file for each applicant for acceptance as a FGBC Project Evaluator:
- 5.2.1 Full name of applicant
 - 5.2.2 Social security or (for corporations) federal ID number of applicant
 - 5.2.3 Permanent mailing address, phone number and, if applicable, e-mail and web page address(es) of applicant
 - 5.2.4 Occupation (primary source of income) of applicant
 - 5.2.5 Employer and length of employment of applicant
 - 5.2.6 LEED accreditation by the US Green Building Council
 - 5.2.7 Statement of applicant's qualifications for reviewing the breadth of criteria given in Schedule A and the Reference Guide.
 - 5.2.8 Agreement to report each certified Green Commercial Building to the Florida Green Building Coalition and to uphold the provisions of this Standard including the no-financial interest agreement (section 4.9 above).
- 5.3 Any Project Evaluator must be an FGBC member in good standing (membership fees up to date) or an employee of an organization that is an FGBC member in good standing.
- 5.4 The executive committee of the FGBC shall contract or assign an organization or person to receive applications. That organization or individual will then assign an appropriate Project Evaluator from the available list of Project Evaluators.
- 5.5 The fee paid to the Project Evaluator for evaluation services rendered on a particular project shall be 60% of the Fee collected by FGBC for that project.
- 5.6 FGBC reserves the right to have their own staff, staff working for FGBC under contract, or qualified volunteers assigned as Project Evaluators and has the right to select the evaluator of their choice for any given project.

6. BASIS FOR QUALIFICATION

- 6.1 Each commercial building shall qualify as described in Schedule A and the Reference Guide and each item receiving credit shall be verified by the Project Evaluator.
- 6.2 Appropriate Standard.
Applicants may comply with the Standard in effect when they applied, or if the Standard has been revised prior to certification, they may comply with the new Standard (see Section 8 below).

7. STANDARDS DOCUMENTS

- 7.1 The following documents are part of this Standard and shall be made available on a public web site:

- 7.2 Schedule A (also referred to as the Green Commercial Building Designation Standard Checklist):
 - 7.2.1 Schedule A shall include a list of credit features and the maximum points that may be possible for a commercial building to achieve for that feature.
 - 7.2.2 Schedule A shall include a location for an applicant to indicate the number of points they believe they have achieved for any credit feature.
 - 7.2.3 Schedule A shall include a location for the applicant to total the estimated achieved points.
 - 7.2.4 Schedule A shall include a certification Application Form. At a minimum the applicant must include:
 - 7.2.4.1 The name of the commercial building
 - 7.2.4.2 The full address of the commercial building
 - 7.2.4.3 The building owner(s) name, address and contact information
 - 7.2.4.4 The name, address, contact information, and signature of the Designated Professional
 - 7.2.4.5 The pertinent commercial building design team members (engineers, planners, etc.) name, address and contact information
 - 7.2.4.6 The legal description of the commercial building property
 - 7.2.5 Schedule A must include the Application Fee and indicate accepted channels for payment.

- 7.3 Reference Guide
 - 7.3.1 The Reference Guide shall serve the purpose of providing details as to how to earn points as well as provide informative information as to how to develop using environmentally friendly methods.
 - 7.3.2 The Reference Guide shall at a minimum include each possible credit item and a description as to how to earn points.
 - 7.3.3 Every attempt shall be made to describe how the points will be earned such that they can be objectively evaluated.
 - 7.3.4 The Reference Guide will include what, if any, submittal documentation is required to earn points for a given item.
 - 7.3.5 The Reference Guide shall make every attempt to include the intent, requirements, and potential technologies and strategies available for each item or category of credit items.

- 7.4 Modification Form
 - 7.4.1 A form used for revision of this standard shall include the following fields:
 - 7.4.1.1 Name, address, contact information and affiliation of proponent
 - 7.4.1.2 Full description of change requested
 - 7.4.1.3 Specific language desired
 - 7.4.1.4 Technical basis or justification for change
 - 7.4.1.5 Recommended number of credit points for any credit point changes or additions
 - 7.4.1.6 Justification for recommended number of credit points

8. REVISION PROCEDURES FOR THE GREEN COMMERCIAL BUILDING STANDARD

- 8.1 Suggested revisions shall be submitted to the Florida Green Building Coalition, Inc. using a form available at the FloridaGreenBuilding.org web site as described in Section 7.4.
- 8.1.1 Applications shall be compiled and circulated to the Florida Green Building Coalition Green Commercial Buildings Committee, past Designated Professionals, and Project Evaluators for comments. The comment period shall be at least thirty days.
 - 8.1.2 Following the public comment period, each application and its public comments shall be reviewed by the Florida Green Building Coalition Green Commercial Buildings Committee, which will make written consensus recommendations to the Board of Directors for suggested revisions to the Standard along with the original applications.
 - 8.1.3 The Board of Directors of the Florida Green Building Coalition, Inc. shall adopt, adopt with modification, or reject each application for change.
- 8.2 Revision Cycle for the Green Commercial Building Designation Standard:
- 8.2.1 Periodic review. At least triennially, the provisions set forth in these Green Commercial Building Designation Standards shall be reviewed by the Standards Committee of the Florida Green Building Coalition, Inc. in collaboration with other stakeholders. At a minimum, this review shall include consideration and evaluation of changes in the law, technological innovations, and comments and requests received from interested parties.
 - 8.2.2 All applications for revision shall be disposed of on an annual cycle such that applications received prior to the last working day of June 15 are included in the application review cycle that concludes no later than September 15.
 - 8.2.3 The Board shall approve any changes to the Standard by the last day of October in any year in which it is to be revised.
 - 8.2.4 Any new Standard shall be in placed on the web site (along with the current standard) no later than November 15.
 - 8.2.5 The effective date of any new Green Commercial Building Designation Standard shall be January 1. Only those proposals to change this Green Commercial Building Designation Standard that are received on or prior to June 15 shall be considered for the revisions to this Green Commercial Building Designation Standard that may become effective on January 1 of the following year.
 - 8.2.6 The Reference Guide text, graphics and examples may be updated at anytime by FGBC; so long as they are of a clarifying nature.

9. SUSPENSION OR REVOCATION OF FGBC GREEN DESIGNATION

The Florida Green Building Coalition, Inc. may suspend or revoke the green designation from a commercial building, requesting all reference to being so designated be removed from all marketing and educational materials and/or other suspension/revoking actions.

9.1 For Failure to Correct Deficiencies.

If the Florida Green Building Coalition, Inc. determines at any time that a FGBC certified green commercial building has failed to adhere to the procedures and activities listed in the standard for those items whereby they earned credit points, the FGBC will notify the building owner of the specified deficiencies and shall require that specific corrective action, set forth in the notification, be taken not later than 30 calendar days after the date set forth in such notification.

9.1.1 In the event that the deficiencies have not been remedied, the Florida Green Building Coalition, Inc. shall have the authority to immediately begin the process of revoking the certification by issuance of a Notice of Suspension Proceedings. The notice may be appealed in accordance with procedures set forth herein.

9.1.2 In the event that the specified deficiencies are not corrected within the application period set forth in the Notice of Suspension, a Notice of Revocation Proceeding shall be issued by the Florida Green Building Coalition. Such Revocation Proceeding shall follow the due process procedures contained herein. The Notice of Revocation may be appealed in accordance with the procedures set forth herein.

9.2 For Cause.

Any FGBC green commercial building certified by the Florida Green Building Coalition, Inc. may have their accreditation revoked in any of the following circumstances:

9.2.1 Upon determination by the Florida Green Building Coalition, Inc. that a FGBC certified building owner has acted in such a manner as to impair the objectivity or integrity of the accrediting program or harm the reputation of the Florida Green Building Coalition, Inc. including, but not limited to submission of false information to the Florida Green Building Coalition, Inc. or failure to submit to the Florida Green Building Coalition, Inc. any material information required to be submitted in connection with obtaining or maintaining accreditation; knowingly or negligently issuing certifications that fail to meet all of the certification criteria; or misrepresentation by the building owner in advertising or promotional materials of its accreditation status in general or with respect to any service provided by the building owner.

9.3 Suspension/Revocation Due Process

The Florida Green Building Coalition, Inc. shall comply with the following due process procedures in considering any suspension or revocation actions against a building owner.

9.3.1 Notice

The Florida Green Building Coalition, Inc. may, at its discretion, initiate a proposed suspension or revocation action against a building owner by providing the building owner written notice of the proposed action sent by certified mail, return receipt requested, to the last known address of the building owner. Such notice shall inform the FGBC building owner of the entire basis and justification for the proposed action.

9.3.2 Contest of Proposed Suspension/Revocation

A respondent may contest a proposed suspension/revocation by filing a response with the Florida Green Building Coalition, Inc. within 30 days of receipt of the

notice. The response shall contain all pertinent and substantive information and argument that is in contradiction to the proposed suspension/revocation, including identification of all disputed materials and facts. If the respondent fails to file said response within the allotted time, the Florida Green Building Coalition, Inc. may, at its discretion, suspend/revoke the accreditation of the respondent effective immediately upon written notification to the respondent.

9.3.3 Hearing

If the respondent files a timely response contesting the proposed suspension/revocation and requests a hearing, the Florida Green Building Coalition, Inc. will appoint an independent, unbiased, and qualified hearing officer and issue a decision on the proposed suspension/revocation. The hearing officer will review the notice of suspension/revocation and the respondent's contest. If the hearing officer finds that the respondent's contest has raised substantiated and valid factual argument to the contrary of the proposed suspension/revocation, the respondent shall be afforded an opportunity to participate in an open and public hearing, and to submit additional documentary evidence, and rebuttal argument to any material contained in the original notice of suspension/revocation or developed during the course of the hearing officer's investigation. The notice shall be provided to the respondent by written notice by certified mail, return receipt requested, to the last known address of the respondent at a minimum of 120 days before the scheduled hearing.

9.3.4 Hearing Officer's Decision

The hearing officer shall issue a written decision on the proposed suspension/revocation that is based on all the information contained in the hearing record including statements of the factual and legal basis of the decision. If the hearing officer decides to impose suspension or revocation, the decision must include findings regarding all disputed materials, and justification for all findings. A suspension/revocation decision by the hearing officer shall take effect upon the issuance of the hearing officer's decision and the written notification of such decision to the respondent.

9.3.5 No Ex Parte Communication

No ex parte communication between the parties and the hearing officer shall be allowed.

10. APPEALS PROCEDURES FOR SUSPENSION OR REVOCATION

10.1 Notification

The Florida Green Building Coalition, Inc. shall notify the building owner and the Florida Green Building Coalition, Inc. Board of any and all disciplinary actions. Additionally, the Florida Green Building Coalition, Inc. shall clearly notify the building owner of all procedures and rights to remedy.

10.2 Appeal

10.2.1 In the event that an accreditation application was not approved or the accreditation has been suspended, the building owner shall have the right, for a period of 30

calendar days after the date of notice, to appeal to the Florida Green Building Coalition, Inc..

- 10.2.2 In the event that a FGBC green commercial building accreditation is suspended following the expiration of the period to appeal a suspension, in the absence of an appeal having been taken, the building owner shall have the right, at its election, for a period of 30 calendar days after the date of issue of a Notice of Suspension, to appeal to the Florida Green Building Coalition, Inc..
- 10.2.3 An appeal shall be in writing and sent by certified mail or other method that provides evidence of delivery to the Chairperson of the Florida Green Building Coalition, Inc. and shall specify the basis for the appeal.
- 10.2.4 The appellant building owner may, at the time of noticing its appeal, request in writing, a hearing. In such an event, the Florida Green Building Coalition, Inc. shall, not later than 7 calendar days after the filing of the notice of appeal, appoint a hearing officer and notify the appellant building owner of the date of the hearing, which shall be held as expeditiously as possible, but not later than 30 calendar days after the receipt of the notice of appeal.



FLORIDA GREEN
BUILDING COALITION

Setting the Standards for Green Building in Florida

Florida Green Commercial Building Certification Standard



REFERENCE GUIDE

OVERVIEW

The intent of this Standard is to encourage Owners of smaller sized Commercial Projects to adopt green and sustainable strategies during the design and construction of their project and to receive recognition for their efforts.

This Commercial Building Designation Standard covers all commercial occupancies listed in the current Florida Building Code.

To use this Standard, the project design team reviews the Checklist (Schedule A) along with this Reference Guide. The team determines which Credit Points will be pursued (or targeted). The Owner authorizes one of the design team members to be the Designated Professional. The Designated Professional compiles the appropriate documentation for each achieved Credit Point as the design process evolves. Once all documentation has been collected, organized, and reviewed, the Designated Professional completes the Application Form and the remainder of the Checklist (Schedule A), attaches all supporting letters and documentation, and submits it (with a check for the appropriate fee) to FGBC for processing.

The FGBC appoints a Project Evaluator who reviews the submittal and determines its compliance with the Standard and issues the Certification. A Certificate is delivered to the Designated Professional for use by the Owner. The project is listed on the FGBC website as a certified Florida Green Commercial Building.

In the event that the Project Evaluator finds the submittal not in compliance with the Standard, the Designated Professional will be notified and informed of the specific deficiencies in the submittal. The Designated Professional will consult with the project team and then correct the deficiencies and resubmit the required revisions to the FGBC. If the re-submittal fails to comply with the Standard, then the process for each subsequent re-submittal is repeated with the additional requirement of payment of a re-submittal fee equal to 20% of the original fee (this fee is paid for each subsequent re-submittal).

TABLE OF CONTENTS

| | |
|---------------------------------|----|
| Category 1: ENERGY | 1 |
| Category 2: WATERS | 10 |
| Category 3: SITE | 16 |
| Category 4: HEALTH | 31 |
| Category 5: MATERIALS | 49 |
| Category 6: DISASTER MITIGATION | 65 |
| Category 7: GENERAL | 70 |

Category 1: ENERGY

Prerequisite 1

Required

Fundamental Building Systems Commissioning

Intent

Verify and ensure that fundamental building elements and systems are designed, installed and calibrated to operate as intended.

Requirements

Implement or have a contract in place to implement all of the following fundamental best practice commissioning procedures.

- Engage a commissioning authority.
- Develop owner's performance requirements for energy, water and IEQ and review the basis of design to verify performance requirements have been met.
- Incorporate commissioning requirements into the construction documents.
- Develop and utilize a commissioning plan.
- Verify installation, functional performance, training and operation and maintenance documentation.
- Complete a commissioning report.

Technologies & Strategies:

Engage a commissioning authority and adopt a commissioning plan. Include commissioning requirements in bid documents and task the commissioning agent to produce a commissioning report once commissioning activities are completed.

Submittals

- Provide the completed Letter Template, signed by the commissioning authority, certifying that the fundamental commissioning procedures as listed in the credit requirements have been successfully executed and the design intent of the building has been achieved.

OR

- Provide the completed Letter Template, signed by the owner or responsible party, affirming that commissioning services will be provided under contract. Include a copy of the signed contract.

Category 1: ENERGY

Prerequisite 2

Required

Minimum Energy Performance, 10% more efficient than Code

Intent

Establish the minimum level of energy efficiency for the base building and systems.

Requirements

Design the building to comply with the local energy code and provide the owner with a 10% improvement in efficiency.

Technologies & Strategies:

Design the building envelope and systems to maximize energy performance. Use a computer simulation model to assess the energy performance and identify the most cost effective energy measures. Quantify energy performance compared to the baseline building.

The software program used to show compliance with the Florida Energy Code is “Energy Gauge FlaCom”. This program can also be used to show compliance with this credit.

Submittals

- ❑ Provide the completed Letter Template, signed by the mechanical engineer or architect, stating that the building complies with local energy codes. Provide a copy of the Energy Gauge FlaCom printouts and energy calculations that demonstrate that the building achieved a 10% more efficient design.

OR

- ❑ For Existing buildings being renovated, Design should bring building up to current code requirements.

Category 1: ENERGY

Prerequisite 3

Required

CFC Reduction in HVAC&R Equipment

Intent

Reduce ozone depletion.

Requirements

Zero use of CFC-based refrigerants in new base building HVAC&R systems. When reusing existing base building HVAC equipment, complete a comprehensive 5-year CFC phase-out conversion.

Technologies & Strategies:

When reusing existing HVAC systems, conduct an inventory to identify equipment that uses CFC refrigerants and adopt a 5-year replacement schedule for these refrigerants. For new buildings, specify new HVAC equipment that uses no CFC refrigerants.

Submittals

- ❑ Provide the completed Letter Template, signed by the mechanical engineer or architect, declaring that the building's new HVAC&R systems do not use CFC-based refrigerants and that the existing HVAC&R systems will be phased out in 5 years.

Category 1: ENERGY

Credit 1.1 – 1.12

1 - 12 Points

Energy Performance, 15% New / 5% Existing – 70% New / 60% Existing

Intent

Achieve increasing levels of energy performance above the prerequisite standard to reduce environmental impacts associated with excessive energy use.

Requirements

Reduce design energy consumption compared to the energy budget for energy systems regulated by the Florida Energy Code. Use the table below to determine the applicable points for the reduced energy performance level achieved by the design building compared to the base building.

| <u>Credit</u> | <u>New Bldgs.</u> | <u>Existing Bldgs.</u> | <u>Points*</u> |
|---------------|-------------------|------------------------|----------------|
| Credit 1.1 | 15% | 5% | 1 |
| Credit 1.2 | 20% | 10% | 2 |
| Credit 1.3 | 25% | 15% | 3 |
| Credit 1.4 | 30% | 20% | 4 |
| Credit 1.5 | 35% | 25% | 5 |
| Credit 1.6 | 40% | 30% | 6 |
| Credit 1.7 | 45% | 35% | 7 |
| Credit 1.8 | 50% | 40% | 8 |
| Credit 1.9 | 55% | 45% | 9 |
| Credit 1.10 | 60% | 50% | 10 |
| Credit 1.11 | 65% | 55% | 11 |
| Credit 1.12 | 70% | 60% | 12 |

* Points are cumulative. Find level achieved and use points shown as total for this Credit group.

Regulated energy systems include HVAC (heating, cooling, fans, and pumps), service hot water, and interior lighting. Non-regulated systems include plug loads, exterior lighting, garage ventilation and elevators (vertical transportation). Two methods may be used to separate energy consumption for regulated systems. The energy consumption for each fuel may be prorated according to the fraction of energy used by regulated and non-regulated energy. Alternatively, separate meters (accounting) may be created in the energy simulation program for regulated and non-regulated energy uses.

Technologies & Strategies

Design the building envelope and building systems to maximize energy performance. Use a computer simulation model to assess the energy performance and identify the most cost-effective energy efficiency measures. Quantify energy performance as compared to a baseline building.

The software program used to show compliance with the Florida Energy Code is “Energy Gauge FlaCom”. This program can also be used to show compliance with this credit.

Submittals

- Provide the completed Letter Template, signed by the mechanical engineer or architect, incorporating a quantitative summary table showing the energy saving strategies incorporated in the building design. Provide a copy of the Energy Gauge FlaCom printouts and energy calculations that demonstrate that the building achieved the more efficient design performance level applied for under this credit.

Category 1: ENERGY

Credit 2.1 – 2.4

1 - 4 Points

Renewable Energy, 5% - 20%

Intent

Encourage and recognize increasing levels of self-supply through renewable technologies to reduce environmental impacts associated with fossil fuel energy use.

Requirements

Supply a fraction of the building's total energy use (as expressed as a fraction of annual energy cost) through the use of on-site renewable energy systems.

| <u>Credit</u> | <u>Contribution</u> | <u>Points*</u> |
|---------------|---------------------|----------------|
| Credit 2.1 | 5% | 1 |
| Credit 2.1 | 10% | 2 |
| Credit 2.3 | 15% | 3 |
| Credit 2.4 | 20% | 4 |

* Points are cumulative. Find level achieved and use points shown as total for this Credit group.

Technologies & Strategies

Assess the project for renewable energy potential including solar, wind, geothermal, low-impact hydro, biomass and bio-gas strategies. When applying these strategies, take advantage of net metering with the local utility.

Submittals

- Provide the completed Letter Template, signed by the architect, owner or responsible party, declaring the percentage of the building's energy is provided by on-site renewable energy. Include a narrative describing on-site renewable energy systems installed in the building and calculations demonstrating that the required percentage of total energy costs are supplied by the renewable energy system(s).

Category 1: ENERGY

Credit 3

1 Point

Additional Commissioning

Intent

Verify and ensure that the entire building is designed, constructed and calibrated to operate as intended.

Requirements

In addition to the Fundamental Building Commissioning prerequisite, implement or have a contract in place to implement the following additional commissioning tasks:

1. A commissioning authority independent of the design team shall conduct a focused review of the design prior to the construction documents phase.
2. The independent commissioning authority shall conduct a focused review of the construction documents near completion of the construction document development and prior to issuing the contract documents for construction.
3. The independent commissioning authority shall review the contractor submittals relative to systems being commissioned.
4. Provide information to the owner in a single document (manual) that is required for re-commissioning building systems.
5. Have a contract in place to review building operation with O&M staff, including a plan for resolution of outstanding commissioning-related issues within one year after construction completion date.

Technologies & Strategies

Engage the commissioning authority early in the design phases.

Submittals

- Provide the completed Letter Template, signed by the independent commissioning agent(s), confirming that Tasks 1-5 of the credit requirements have been successfully executed.

OR

- Provide the completed Letter Template, signed by the owner, affirming that these services will be provided under contract(s) together with a signed copy of the contract(s) stating that Tasks 1-5 of the credit requirements will be implemented within one year from completion of the project.

Category 1: ENERGY

Credit 4

1 Point

Ozone Depletion, HCFC Free HVAC&R Equipment

Intent

Reduce ozone depletion and support early compliance with the Montreal Protocol.

Requirements

Install base building level HVAC and refrigeration equipment and fire suppression systems that do not contain HCFCs or Halons.

Technologies & Strategies

When reusing buildings, inventory existing building systems using refrigerants and fire suppression chemicals and replace those that contain HCFCs or Halons. For new buildings, specify refrigeration and fire suppression systems that use no HCFCs or Halons.

Submittals

- ❑ Provide the completed Letter Template, signed by the mechanical engineer or architect, stating that all HVAC&R systems are free of HCFCs and Halons.

Category 1: ENERGY

Credit 5

2 Points

Measurement & Verification

Intent:

Provide for the ongoing accountability and optimization of building energy and water consumption performance over time.

Requirement:

Install continuous metering equipment for the following end-uses:

- Lighting systems and controls
- Constant and variable motor loads
- Variable frequency drive (VFD) operation
- Chiller efficiency at variable loads (kW/ton)
- Cooling load
- Air and water economizer and heat recovery cycles
- Air distribution static pressures and ventilation air volumes
- Boiler efficiencies
- Building-related process energy systems and equipment
- Indoor water risers and outdoor irrigation systems

Develop a Measurement and Verification plan that incorporates the monitoring information from the above end-uses and is consistent with Option B, C or D of the 2001 *International Performance Measurement & Verification Protocol (IPMVP) Volume I: Concepts and Options for Determining Energy and Water Savings*.

Technologies & Strategies

Model the energy and water systems to predict savings. Design the building with equipment to measure energy and water performance. Draft a Measurement & Verification Plan to apply during building operation that compares predicted savings to those actually achieved in the field.

Submittals

- ❑ Provide the completed Letter Template, signed by the mechanical engineer or other responsible party, describing the metering equipment installed for each end-use and declaring the option to be followed under IPMVP version 2001.
- ❑ Provide a copy of the M&V plan following IPMVP, version 2001, including an executive summary.

Category 1: ENERGY

Credit 6.1 – 6.3

1 - 3 Points

Green Power, 25% - 75%

Intent

Encourage the development and use of grid-source, renewable energy technologies on a net zero pollution basis.

Requirements

Provide a percentage of the building's electricity from renewable sources by engaging in at least a one-year renewable energy contract.

| <u>Credit</u> | <u>%</u> | <u>Points*</u> |
|---------------|----------|----------------|
| Credit 6.1 | 25% | 1 |
| Credit 6.2 | 50% | 2 |
| Credit 6.3 | 75% | 3 |

* Points are cumulative. Find level achieved and use points shown as total for this Credit group.

Renewable sources are as defined by the Center for Resource Solutions (CRS) Green-e products certification requirements. Green power may be procured from a Green-e certified power marketer, a Green-e accredited utility program, or through Green-e certified Tradable Renewable Certificates.

Technologies & Strategies

Estimate the energy needs of the building and investigate opportunities to engage in a green power contract with the local utility. Green power is derived from solar, wind, geothermal, biomass or low-impact hydro sources. Visit www.green-e.org for details about the Green-e program.

Submittals

- ❑ Provide the completed Letter Template, signed by the owner or other responsible party, documenting that the supplied renewable power is equal to 25%, 50%, 75% of the project's energy consumption and the sources meet the Green-e definition of renewable energy. Provide a copy of the one-year electric utility purchase contract for power generated from renewable sources.

Category 2: WATER

Prerequisite 1

Required

Drought Tolerant Landscape, 25%

Intent

Utilize drought tolerant landscapes due to the strain that Florida's water resources are under.

Requirements

Design Landscaping utilizing a minimum of 25% of all plants from Florida drought tolerant species.

Technologies & Strategies

Utilize the Waterwise Florida Landscapes publication available from Florida's various Water Management Districts.

Submittals

- ❑ Provide the completed Letter Template, signed by the landscape architect or responsible party, including a detailed plant list with all drought tolerant species identified. Also provide a calculation that illustrates the minimum 25% of species.

Category 2: WATER

Credit 1.1 – 1.3

1 – 3 Points

Drought Tolerant Landscape, 50% - 100%

Intent

Utilize drought tolerant landscapes due to the strain that Florida’s water resources are under.

Requirements

Design Landscaping utilizing a minimum of 50% and a maximum of 100% of all plants from Florida drought tolerant species.

| <u>Credit</u> | <u>Utilization</u> | <u>Points*</u> |
|---------------|--------------------|----------------|
| Credit 1.1 | 50% | 1 |
| Credit 1.2 | 75% | 2 |
| Credit 1.3 | 100% | 3 |

* Points are cumulative. Find level achieved and use points shown as total for this Credit group.

Technologies & Strategies

Utilize the Waterwise Florida Landscapes publication available from Florida’s various Water Management Districts.

Submittals

- Provide the completed Letter Template, signed by the landscape architect or responsible party, including a detailed plant list with all drought tolerant species identified and quantified. Also provide a calculation that illustrates the percentage of drought tolerant species relative to all species.

Category 2: WATER

Credit 2.1 – 2.2

1 – 2 Points

Water Efficient Irrigation, Reduce Potable Water Use for 50% - 75% of area

Intent

Limit or eliminate the use of potable water for landscape irrigation.

Requirements

Use high-efficiency (micro or drip) irrigation technology OR use captured rain or recycled site water to reduce potable water consumption for irrigation on 50% - 75% of the irrigated area.

| <u>Credit</u> | <u>Area Achieved</u> | <u>Points*</u> |
|---------------|----------------------|----------------|
| Credit 2.1 | 50% | 1 |
| Credit 2.2 | 75% | 2 |

* Points are cumulative. Find level achieved and use points shown as total for this Credit group.

Technologies & Strategies

Perform a soil/climate analysis to determine appropriate landscape types and design the landscape with indigenous plants to reduce or eliminate irrigation requirements. Use high-efficiency irrigation systems and consider using stormwater and/or greywater for irrigation.

Submittals

- ❑ Provide the completed Letter Template, signed by the landscape architect, engineer or responsible party, declaring that potable water consumption for site irrigation has been reduced by either 50% or 75%. Include a brief narrative of the equipment used and/or the use of drought tolerant or native plants.

Category 2: WATER

Credit 2.3

1 Point

Water Efficient Irrigation, No Potable Use or No Permanent Irrigation

Intent

Limit or eliminate the use of potable water for landscape irrigation.

Requirements

Use only captured rain or recycled site water to eliminate all potable water use for site irrigation (except for initial watering to establish plants), OR do not install permanent landscape irrigation systems.

Technologies & Strategies

Perform a soil/climate analysis to determine appropriate landscape types and design the landscape with indigenous plants to reduce or eliminate irrigation requirements. Consider using stormwater and/or greywater for irrigation.

Submittals

- ❑ Provide the completed Letter Template, signed by the responsible architect and/or engineer, declaring that the project site will not use potable water for irrigation. Include a narrative describing the captured rain system, the recycled site water system, and their holding capacity. List all the plant species used. Include calculations demonstrating that irrigation requirements can be met from captured rain or recycled site water.

OR

- ❑ Provide the completed Letter Template, signed by the landscape architect or responsible party, declaring that the project site does not have a permanent landscape irrigation system. Include a narrative describing how the landscape design allows for this.

Category 2: WATER

Credit 3.1 – 3.3

1 - 3 Points

Innovative Wastewater Technologies, 25% - 75%

Intent

Reduce the generation of wastewater and potable water demand, while increasing the local aquifer recharge.

Requirements

Reduce the use of municipally provided potable water for building sewage conveyance by a minimum of 25% (maximum 75%), OR treat a minimum of 50% (maximum 100%) of wastewater on site to tertiary standards.

| <u>Credit</u> | <u>Reduction</u> | or | <u>Treatment</u> | <u>Points*</u> |
|---------------|------------------|----|------------------|----------------|
| Credit 3.1 | 25% | | 50% | 1 |
| Credit 3.2 | 50% | | 75% | 2 |
| Credit 3.3 | 75% | | 100% | 3 |

* Points are cumulative. Find level achieved and use points shown as total for this Credit group.

Technologies & Strategies

Specify high-efficiency fixtures and dry fixtures such as composting toilets and waterless urinals to reduce wastewater volumes. Consider reusing stormwater or greywater for sewage conveyance or on-site wastewater treatment systems (mechanical and/or natural).

Submittals

- ❑ Provide the completed Letter Template, signed by the architect, MEP engineer or responsible party, declaring that water for building sewage conveyance will be reduced by at least 25%, 50% or 75%. Include the spreadsheet calculation and a narrative demonstrating the measures used to reduce wastewater from baseline conditions.

OR

- ❑ Provide the completed Letter Template, signed by the civil engineer or responsible party, declaring that 50%, 75% or 100% of wastewater will be treated to tertiary standards on site. Include a narrative describing the on-site wastewater treatment system.

Category 2: WATER

Credit 4.1 – 4.3

1 - 3 Points

Water Use Reduction, 20% - 40%

Intent

Maximize water efficiency within buildings to reduce the burden on municipal water supply and wastewater systems.

Requirements

Employ strategies that in aggregate use less water than the water use baseline calculated for the building (not including irrigation) after meeting the Energy Policy Act of 1992 fixture performance requirements.

| <u>Credit</u> | <u>Reduction</u> | <u>Points*</u> |
|---------------|------------------|----------------|
| Credit 4.1 | 20% | 1 |
| Credit 4.2 | 30% | 2 |
| Credit 4.3 | 40% | 3 |

* Points are cumulative. Find level achieved and use points shown as total for this Credit group.

Technologies & Strategies

Estimate the potable and non-potable water needs for the building. Use high efficiency fixtures, dry fixtures such as composting toilets and waterless urinals, and occupant sensors to reduce the potable water demand. Consider reuse of stormwater and greywater for non-potable applications such as toilet and urinal flushing, mechanical systems and custodial uses.

Submittals

- ❑ Provide the completed Letter Template, signed by the MEP engineer or responsible party, declaring that the project uses 20%, 30%, or 40% less water than the baseline fixture performance requirements of the Energy Policy Act of 1992.
- ❑ Provide the spreadsheet calculation demonstrating that water consuming fixtures specified for the stated occupancy and use of the building reduce occupancy-based potable water consumption by 20%, 30%, or 40% compared to baseline conditions

Category 3: SITE

Prerequisite 1

Required

Erosion and Sedimentation Control

Intent

Control erosion to reduce negative impacts on water and air quality.

Requirements

Design a sediment and erosion control plan, specific to the site that conforms to United States Environmental Protection Agency (EPA) Document No. EPA 832/R-92-005 (September 1992), *Storm Water Management for Construction Activities*, Chapter 3, OR local erosion and sedimentation control standards and codes, whichever is more stringent. The plan shall meet the following objectives:

- Prevent loss of soil during construction by stormwater runoff and/or wind erosion, including protecting topsoil by stockpiling for reuse.
- Prevent sedimentation of storm sewer or receiving streams and/or air pollution with dust and particulate matter.

Technologies & Strategies

Adopt an erosion and sediment control plan for the project site during construction. Consider employing strategies such as temporary and permanent seeding, mulching, earth dikes, silt fencing, sediment traps and sediment basins.

Submittals

- Provide the completed Letter Template, signed by the civil engineer or responsible party, declaring whether the project follows local erosion and sedimentation control standards or the referenced EPA standard. Provide a brief list of the measures implemented. If local standards and codes are followed, describe how they meet or exceed the referenced EPA standard.

Category 3: SITE

Credit 1

1 Point

Site Selection

Intent

Avoid development of inappropriate sites and reduce the environmental impact from the location of a building on a site.

Requirements

Do not develop buildings, roads, or parking areas on portions of sites that meet any one of the following criteria:

- Prime farmland as defined by the United States Department of Agriculture.
- Land whose elevation is lower than 5 feet above the elevation of the 100-year flood as defined by FEMA.
- Land which is specifically identified as habitat for any species on Federal or State threatened or endangered lists.
- Within 100 feet of any water including wetlands as defined by 40 CFR, Parts 230-233 and Part 22, and isolated wetland or areas of special concern identified by state or local rule OR greater than distances given in state or local regulations as defined by local or state rule or law, whichever is more stringent.
- Land which prior to acquisition for the project was public parkland, unless land of equal or greater value as parkland is accepted in trade by the public landowner (Park Authority projects are exempt).

Technologies & Strategies

During the site selection process, give preference to those sites that do not include sensitive site elements and restrictive land types. Select a suitable building location and design the building with the minimal footprint to minimize site disruption. Strategies include stacking the building program, tuck-under parking, and sharing facilities with neighbors.

Submittals

- ❑ Provide the completed Letter Template, signed by the civil engineer or responsible party, declaring that the project site does not meet any of the prohibited criteria.

Category 3: SITE

Credit 2

1 Point

Development Density

Intent

Channel development to urban areas with existing infrastructure, protect greenfields, and preserve habitat and natural resources.

Requirements

Increase localized density to conform to existing or desired density goals by utilizing sites that are located within an existing minimum development density of 60,000 square feet per acre (two story downtown development).

Technologies & Strategies

During the site selection process, give preference to urban sites.

Submittals

- Provide the completed Letter Template, signed by the civil engineer, Architect or other responsible party, declaring that the project has achieved the required development densities. Provide density calculations for the project and for the surrounding area. Provide an area plan with the project location highlighted.

Category 3: SITE

Credit 3

1 Point

Brownfield Redevelopment

Intent

Rehabilitate or make useful damaged sites where development is complicated by real or perceived environmental contamination, reducing pressure on undeveloped land.

Requirements

Develop on a site documented as contaminated (by means of an ASTM E1903-97 Phase II Environmental Site Assessment) OR on a site classified as a brownfield by a local, state or federal government agency. Provide remediation as required by EPA's Sustainable Redevelopment of Brownfields Program.

Technologies & Strategies

During the site selection process, give preference to brownfield sites. Identify tax incentives and property cost savings. Develop and implement a site remediation plan using strategies such as pump-and-treat, bioreactors, land farming and in-situ remediation.

Submittals

- ❑ Provide a copy of the pertinent sections of the Phase II Environmental Site Assessment documenting the site contamination OR provide a letter from a local, state or federal regulatory agency confirming that the site is classified as a brownfield by a local, state or federal government agency.

- ❑ Provide the completed Letter Template signed by the civil engineer or responsible party, declaring the type of damage that existed on the site and describing the remediation performed.

Category 3: SITE

Credit 4.1

1 Point

Alternative Transportation, Public Transportation Access

Intent

Reduce pollution and land development impacts from automobile use.

Requirements

Locate project within 1/2 mile of a commuter rail, light rail or subway station or 1/4 mile of 1 or more public or campus bus lines usable by building occupants.

Technologies & Strategies

Perform a transportation survey of future building occupants to identify transportation needs. Site the building near mass transit.

Submittals

- ❑ Provide the completed Letter Template with an area drawing or transit map highlighting the building location and the fixed rail stations and bus lines, and indicate the distances between them. Include a scale bar for distance measurement.

Category 3: SITE

Credit 4.2

1 Point

Alternative Transportation, Bicycle Storage & Changing Rooms

Intent

Reduce pollution and land development impacts from automobile use.

Requirements

For commercial or institutional buildings, provide secure bicycle storage, with convenient changing/shower facilities (within 200 yards of the building) for 5% or more of regular building occupants. For multi-family buildings, provide covered storage facilities for securing bicycles for 15% or more of building occupants in lieu of changing/shower facilities.

Technologies & Strategies

Design the building with transportation amenities such as bicycle racks and showering/changing facilities.

Submittals

- ❑ For commercial projects: Provide the completed Letter Template signed by the architect or responsible party, declaring the distance to bicycle storage and showers from the building entrance and demonstrating that these facilities can accommodate at least 5% of building occupants.

OR

- ❑ For multi-family projects: Provide the completed Letter Template, signed by the architect or responsible party, declaring the design occupancy for the buildings, number of covered bicycle storage facilities for securing bicycles, and demonstrating that these facilities can accommodate at least 15% of building occupants.

Category 3: SITE

Credit 4.3

1 Point

Alternative Transportation, Alternative Fuel Refueling Stations

Intent

Reduce pollution and land development impacts from automobile use.

Requirements

Provide alternative fuel vehicles (includes hybrids) for 3% of building occupants AND provide preferred parking for these vehicles, OR install alternative-fuel refueling stations (hybrids not included because they do not require alternative fuel) for 3% of the total vehicle parking capacity of the site. Liquid or gaseous fueling facilities must be separately ventilated or located outdoors.

Technologies & Strategies

Provide transportation amenities such as alternative fuel refueling stations and carpool/vanpool programs. Consider sharing the costs and benefits of refueling stations with neighbors.

Submittals

- ❑ Provide the completed Letter Template with proof of ownership of, or 2 year lease agreement for, alternative fuel vehicles and calculations indicating that alternative fuel vehicles will serve 3% of building occupants. Provide site drawings or parking plan highlighting preferred parking for alternative fuel vehicles.

OR

- ❑ Provide the completed Letter Template with specifications and site drawings highlighting alternative fuel refueling stations. Provide calculations demonstrating that these facilities accommodate 3% or more of the total vehicle parking capacity.

Category 3: SITE

Credit 4.4

1 Point

Alternative Transportation, Parking Capacity

Intent

Reduce pollution and land development impacts from single occupancy vehicle use.

Requirements

Size parking capacity to meet, but not exceed, minimum local zoning requirements AND provide preferred parking for carpools or vanpools capable of serving 5% of the building occupants; OR add no new parking for rehabilitation projects AND provide preferred parking for carpools or van pools capable of serving 5% of the building occupants.

Technologies & Strategies

Minimize parking lot/garage size. Consider sharing parking facilities with adjacent buildings.

Submittals

- ❑ For new projects, provide the completed Letter Template signed by the civil engineer or responsible party stating any relevant minimum zoning requirements and declaring that parking capacity is sized to meet, but not exceed them. Provide copies of photos showing the carpooling slots.

OR

- ❑ For rehabilitation projects, provide the completed Letter Template signed by the civil engineer or responsible party declaring that no new parking capacity has been added.

Category 3: SITE

Credit 5.1

1 Point

Reduced Site Disturbance, Protect or Restore Open Space

Intent

Conserve existing natural areas and restore damaged areas to provide habitat and promote biodiversity.

Requirements

On greenfield sites, limit site disturbance including earthwork and clearing of vegetation to 40 feet beyond the building perimeter, 5 feet beyond primary roadway curbs, walkways and main utility branch trenches, and 25 feet beyond constructed areas with permeable surfaces (such as pervious paving areas, stormwater detention facilities and playing fields) that require additional staging areas in order to limit compaction in the constructed area; OR, on previously developed sites, restore a minimum of 50% of the site area (excluding the building footprint) by replacing impervious surfaces with native or adapted vegetation.

Technologies & Strategies

Perform a site survey to identify site elements and adopt a master plan for development of the project site. Select a suitable building location and design the building with a minimal footprint to minimize site disruption. Strategies include stacking the building program, tuck under parking and sharing facilities with neighbors. Establish clearly marked construction boundaries to minimize disturbance of the existing site and restore previously degraded areas to their natural state.

Submittals

- ❑ For greenfield sites, provide the completed Letter Template, signed by the civil engineer or responsible party, demonstrating and declaring that site disturbance (including earthwork and clearing of vegetation) has been limited to 40 feet beyond the building perimeter, 5 feet beyond primary roadway curbs, walk ways and main utility branch trenches, and 25 feet beyond constructed areas with permeable surfaces. Provide site drawings and specifications highlighting limits of construction disturbance.

OR

- ❑ For previously developed sites, provide the completed Letter Template, signed by the civil engineer or responsible party, declaring and describing restoration of degraded habitat areas. Include highlighted site drawings with area calculations demonstrating that 50% of the site area that does not fall within the building footprint has been restored.

Category 3: SITE

Credit 5.2

1 Point

Reduced Site Disturbance, Development Footprint

Intent

Conserve existing natural areas and restore damaged areas to provide habitat and promote biodiversity.

Requirements

Reduce the development footprint (defined as entire building footprint, access roads and parking) to exceed the local zoning's open space requirement for the site by 25%. For areas with no local zoning requirements (e.g., some university campuses and military bases), designate open space area adjacent to the building that is equal to the development footprint.

Technologies & Strategies

Consider placing parking under (or above) the building, increasing the number of floors in the building, or incorporating more efficient use of the circulation space inside the building.

Submittals

- ❑ Provide a copy of the local zoning requirements highlighting the criteria for open space. Provide the completed Letter Template, signed by the civil engineer or responsible party, demonstrating and declaring that the open space exceeds the local zoning open space requirement for the site by 25%. Provide appropriate drawings and calculations.

OR

- ❑ For areas with no local zoning requirements (e.g., some university campuses and military bases), provide the completed Letter Template, signed by the civil engineer or responsible party, demonstrating and declaring that the open space area adjacent to the building is equal to (or greater than) the development footprint. Provide a letter from the property owner stating that the open space will be conserved for the life of the building.

Category 3: SITE

Credit 6.1

1 Point

Stormwater Management, Rate and Quantity

Intent

Limit disruption and pollution of natural water flows by managing stormwater runoff.

Requirements

If existing imperviousness is less than or equal to 50%, implement a stormwater management plan that prevents the post-development 1.5 year, 24 hour peak discharge rate from exceeding the pre-development 1.5 year, 24-hour peak discharge rate.

OR

If existing imperviousness is greater than 50%, implement a stormwater management plan that results in a 25% decrease in the rate and quantity of stormwater runoff.

Technologies & Strategies

Design the project site to maintain natural stormwater flows by promoting infiltration. Specify garden roofs and pervious paving to minimize impervious surfaces. Reuse stormwater volumes generated for non-potable uses such as landscape irrigation, toilet and urinal flushing and custodial uses.

Submittals

- ❑ Provide the completed Letter Template, signed by the civil engineer or responsible party, declaring the 24 hour peak discharge rate does not exceed the pre-development 1.5 year 24 hour peak discharge rate. Provide calculations demonstrating that existing site imperviousness is less than or equal to 50%.

OR

- ❑ Provide the completed Letter Template, signed by the civil engineer or responsible party, declaring that the stormwater management strategies result in at least a 25% decrease in the rate and quantity of stormwater runoff. Provide calculations demonstrating that existing site imperviousness exceeds 50%.

Category 3: SITE

Credit 6.2

1 Point

Stormwater Management, Treatment

Intent

Limit disruption of natural water flows by eliminating stormwater runoff, increasing on-site infiltration and eliminating contaminants.

Requirements

Construct site stormwater treatment systems designed to remove 80% of the average annual post-development total suspended solids (TSS) and 40% of the average annual post-development total phosphorous (TP) based on the average annual loadings from all storms less than or equal to the 2-year/24-hour storm. Do so by implementing Best Management Practices (BMPs) outlined in Chapter 4, Part 2 (Urban Runoff), of the United States Environmental Protection Agency's (EPA's) *Guidance Specifying Management Measures for Sources of Nonpoint Pollution in Coastal Waters* (Document No. EPA-840-B-93-001c January 1993) or the local government's BMP document (whichever is more stringent).

Technologies & Strategies

Design mechanical or natural treatment systems such as constructed wetlands, vegetated filter strips and bioswales to treat the site's stormwater.

Submittals

- ❑ Provide the completed Letter Template, signed by the civil engineer or responsible party, demonstrating and declaring that the design complies with or exceeds EPA or local government Best Management Practices (whichever set is more stringent) for removal of TSS and TP.

Category 3: SITE

Credit 7.1

1 Point

Reduction of Heat Islands, Non-Roof

Intent

Reduce heat islands (thermal gradient differences between developed and undeveloped areas) to minimize impact on microclimate and human and wildlife habitat.

Requirements

Provide shade (within 5 years) AND/OR use light-colored/high-albedo materials (reflectance of at least 0.3) or open grid pavement for at least 30% of the site's non-roof impervious surfaces, including parking lots, walkways, plazas, etc.; OR place a minimum of 50% of parking spaces underground or covered by structured parking; OR use an open-grid pavement system (less than 50% impervious) for a minimum of 50% of the parking lot area.

Technologies & Strategies

Shade constructed surfaces on the site with landscape features and minimize the overall building footprint. Consider replacing constructed surfaces (i.e. roof, roads, sidewalks, etc.) with vegetated surfaces such as garden roofs and open grid paving or specify high-albedo materials to reduce the heat absorption.

Submittals

- Provide the completed Letter Template, signed by the civil engineer or responsible party, referencing the site plan to demonstrate areas of paving, landscaping (list species) and building footprint, and declaring that:
 - A minimum of 30% of non-roof impervious surfaces areas are constructed with high-albedo materials and/or will be shaded within five years
 - OR
 - a minimum of 50% of parking spaces have been placed underground or are covered by structured parking
 - OR
 - An open-grid pavement system (less than 50% impervious) has been used for a minimum of 50% of the parking lot area.

Category 3: SITE

Credit 7.2

1 Point

Reduction of Heat Islands, Roof

Intent

Reduce heat islands (thermal gradient differences between developed and undeveloped areas) to minimize impact on microclimate and human and wildlife habitat.

Requirements

Use ENERGY STAR Roof-compliant, high-reflectance AND high emissivity roofing (for low slope roofs: initial reflectance of at least 0.65 and three-year-aged reflectance of at least 0.5 when tested in accordance with ASTM E903 and emissivity of at least 0.9 when tested in accordance with ASTM 408; for steep slope roofs: initial reflectance of at least 0.25 and three-year-aged reflectance of at least 0.15 when tested in accordance with ASTM E903 and emissivity of at least 0.9 when tested in accordance with ASTM 408) for a minimum of 75% of the roof surface; OR Install a “green” (vegetated) roof for at least 50% of the roof area. Combinations of high albedo and vegetated roof can be used providing they collectively cover 75% of the roof area.

Technologies & Strategies

Consider installing high-albedo and vegetated roofs to reduce heat absorption.

Submittals

- ❑ Provide the completed Letter Template, signed by the architect, civil engineer or responsible party, referencing the building plan and declaring that the roofing materials comply with the Energy Star Label requirements and have a minimum emissivity of 0.9. Demonstrate that high-albedo and vegetated roof areas combined comprise at least 75% of the total roof area.

OR

- ❑ Provide the completed Letter Template, signed by the architect, civil engineer or responsible party, referencing the building plan and demonstrating that vegetated roof areas comprise at least 50% of the total roof area.

Category 3: SITE

Credit 8

1 Point

Light Pollution Reduction

Intent

Eliminate light trespass from the building and site, improve night sky access and reduce development impact on nocturnal environments.

Requirements

Do not exceed the light levels and uniformity ratios recommended by the Illuminating Engineering Society of North America (IESNA) *Recommended Practice Manual: Lighting for Exterior Environments* (RP-33-99). Design exterior lighting such that all exterior luminaires with more than 1000 initial lamp lumens are shielded and all luminaires with more than 3500 initial lamp lumens meet the Full Cutoff IESNA Classification. The maximum candela value of all interior lighting shall fall within the building (not out through windows) and the maximum candela value of all exterior lighting shall fall within the property. Any luminaire within a distance of 2.5 times its mounting height from the property boundary shall have shielding such that no light or brightness from that luminaire crosses the property boundary.

Technologies & Strategies

Adopt site lighting criteria to maintain safe light levels while avoiding off-site lighting and night sky pollution. Minimize site lighting where possible and model the site lighting using a computer model. Technologies to reduce light pollution include full cutoff luminaires, low-reflectance surfaces and low-angle spotlights.

Submittals

- ❑ Provide the completed Letter Template, signed by the electrical engineer or responsible party, with exterior lighting design drawings demonstrating that the objectives and measures of the credit have been met, that the IESNA RP-33 uniformity of light and maximum illuminance values have not been exceeded, and that the design will not create glare or light trespass onto neighboring property or streets, nor create light pollution in the night sky.
- ❑ Provide cut sheets for all exterior luminaires with more than 3500 lumen lamps, demonstrating that they meet the Full Cutoff IESNA Classification.
- ❑ Provide interior lighting design drawings for the building's perimeter areas demonstrating that the maximum candela value of interior lighting falls within the building and not out through the windows.

Category 4: HEALTH

Prerequisite 1

Required

Environmental Tobacco Smoke (ETS) Control

Intent

Prevent exposure of building occupants and systems to Environmental Tobacco Smoke (ETS).

Requirements

Zero exposure of non-smokers to ETS by Prohibiting smoking in the building and locating any exterior designated smoking areas away from entries and operable windows, commissioning plan and report or as a separate document.

Technologies & Strategies

Prohibit smoking in the building.

Submittals

- ❑ Provide the completed Letter Template, signed by the building owner or responsible party, declaring that the building will be operated under a policy prohibiting smoking.

Category 4: HEALTH

Credit 1

1 Point

Carbon Dioxide (CO₂) Monitoring

Intent

Provide capacity for indoor air quality (IAQ) monitoring to help sustain long-term occupant health, comfort and well being.

Requirements

Install a permanent carbon dioxide (CO₂) monitoring system that provides feedback on space ventilation performance in a form that affords operational adjustments. This system should be utilized to increase Fresh air supply to the building and not to reduce fresh air and increase energy efficiency. Refer to the CO₂ differential for all types of occupancy in accordance with ASHRAE 62-2001, Appendix D.

Technologies & Strategies

Design the HVAC system with carbon dioxide monitoring sensors and integrate these sensors with the building automation system (BAS). NOTE: The maximum concentration differential in parts per million (ppm) = 10,300/ventilation rate in cubic feet per minute. For mixed-use buildings calculate CO₂ levels for each separate use.

Submittals

- ❑ Provide the completed Letter Template, signed by the mechanical engineer or responsible party, declaring and summarizing the installation, operational design and controls/zones for a carbon dioxide monitoring system.

Category 4: HEALTH

Credit 2

1 Point

Increased Ventilation Effectiveness

Intent

Provide for the effective delivery and mixing of fresh air to support the health, safety, comfort and well-being of building occupants.

Requirements

For mechanically ventilated buildings, design ventilation systems that result in an air change effectiveness greater than or equal to 0.9 as determined by ASHRAE 129-1997. For naturally ventilated spaces demonstrate a distribution and laminar flow pattern that involves not less than 90% of the room or zone area in the direction of air flow for at least 95% of hours of occupancy.

Technologies & Strategies

Design the HVAC system and building envelope to optimize air change effectiveness. Air change effectiveness can be optimized using a variety of ventilation strategies including displacement ventilation, low-velocity ventilation, plug-flow ventilation such as under floor or near floor delivery, and operable windows. Test the air change effectiveness of the building after construction.

Submittals

- ❑ For mechanically ventilated spaces: Provide the completed Letter Template, signed by the mechanical engineer or responsible party, declaring that the design achieves an air change effectiveness of 0.9 or greater in each ventilated zone. Include a table summarizing the air change effectiveness achieved for each zone.

OR

- ❑ For mechanically ventilated spaces: Provide the completed Letter Template, signed by the mechanical engineer or responsible party, declaring that the design complies with the recommended design approaches in ASHRAE 2001 Fundamentals Chapter 32, Space Air Diffusion. Include a table summarizing for each zone the air change effectiveness, which must be 0.9 or greater.

OR

- ❑ For naturally ventilated spaces: Provide the completed Letter Template, signed by the mechanical engineer or responsible party, declaring that the design provides effective ventilation in at least 90% of each room or zone area in the direction of airflow for at least 95% of hours of occupancy. Include a table summarizing for each zone the airflow simulation results. Include sketches indicating the airflow pattern for each zone.

Category 4: HEALTH

Credit 3.1

2 Points

Construction IAQ Management Plan, During Construction

Intent

Prevent indoor air quality problems resulting from the construction/renovation process in order to help sustain the long-term health, comfort and well-being of construction workers and building occupants.

Requirements

Develop and implement an Indoor Air Quality (IAQ) Management Plan for the construction and pre-occupancy phases of the building as follows:

- During construction meet or exceed the minimum requirements recommended in Design Approaches of the Sheet Metal and Air Conditioning National Contractors Association (SMACNA) IAQ Guideline for Occupied Buildings under Construction, 1995.
- Protect stored on-site or installed absorptive materials from moisture damage.
- Replace all filtration media immediately prior to occupancy. Filtration media shall have a Minimum Efficiency Reporting Value (MERV) of 13, as determined by ASHRAE 52.2-1999 for media installed at the end of construction, and a MERV of 8, for media used to protect HVAC at each return air grill during construction.

Technologies & Strategies

Adopt an IAQ management plan to protect the HVAC system during construction, control pollutant sources, and interrupt contamination pathways. Sequence the installation of materials to avoid contamination of absorptive materials such as insulation, carpeting, ceiling tile and gypsum wallboard.

Submittals

- ❑ Provide the completed Letter Template, signed by the general contractor or responsible party, listing each different filtration media used during construction and at the end of construction. Include the MERV value, manufacturer name and model number.

AND EITHER

- ❑ Provide 6 photographs at 3 different occasions during construction along with a brief description of the SMACNA approach employed, documenting implementation of the IAQ management measures (such as protection of ducts and on-site stored or installed absorptive materials).

OR

- ❑ Declare the five Design Approaches of SMACNA IAQ Guideline for Occupied Buildings under Construction, 1995, Chapter 3, which were used during building construction. Include a brief description of some of the important design approaches employed.

Category 4: HEALTH

Credit 3.2

1 Point

Construction IAQ Management Plan, Before Occupancy

Intent

Prevent indoor air quality problems resulting from the construction/renovation process in order to help sustain the long-term health, comfort and well-being of construction workers and building occupants. Fresh air should be dehumidified and/or conditioned to ensure that fresh air introduced does not bring in high humidity typically found in Florida.

Requirements

Develop and implement an Indoor Air Quality (IAQ) Management Plan for the construction and pre-occupancy phases of the building as follows:

- After construction ends and prior to occupancy conduct a minimum two-week building flush-out with new filtration media at 100% outside air. Replace filtration media used after the flush-out with new filtration media that have a MERV of at least 13.

OR

- Conduct a baseline indoor air quality testing procedure consistent with the United States Environmental Protection Agency's current *Protocol for Environmental Requirements, Baseline IAQ and Materials, for the Research Triangle Park Campus, Section 01445*.

Technologies & Strategies

Prior to occupancy, perform a two-week building flush-out or test the contaminant levels in the building. Portable Dehumidifiers and Air Conditioners should be utilized if main buildings systems can not handle a 100% fresh air load.

Submittals

- ❑ Provide the completed Letter Template, signed by the architect, general contractor or responsible party, describing the building flush-out procedures including dates of building flush-out.

OR

- ❑ Provide the completed Letter Template, signed by the architect, general contractor or responsible party, with a copy of the IAQ testing results indicating that the maximum chemical contaminant concentration requirements are not exceeded.

Category 4: HEALTH

Credit 4.1

1 Point

Low-Emitting Materials, Adhesives & Sealants

Intent

Reduce the quantity of indoor air contaminants that are odorous, potentially irritating and/or harmful to the health, comfort and well-being of installers and occupants.

Requirements

The VOC content of adhesives and sealants used must be less than the current VOC content limits of South Coast Air Quality Management District (SCAQMD) Rule #1168 AND all sealants used as fillers must meet or exceed the requirements of the Bay Area Air Quality Management District Regulation 8, Rule 51.

Technologies & Strategies

Specify Low-VOC materials in construction documents. Ensure that VOC limits are clearly stated in each section where adhesives and sealants are addressed.

Submittals

- ❑ Provide the completed Letter Template, signed by the architect or responsible party, listing the adhesives and sealants used in the building and declaring that they meet the noted requirements.
- ❑ Provide a manufacturer's catalog cut sheet and a Material Safety Data Sheet (MSDS) highlighting the stated VOC emissions for each adhesive and sealant used in the building.

Category 4: HEALTH

Credit 4.2

1 Point

Low-Emitting Materials, Paints

Intent

Reduce the quantity of indoor air contaminants that are odorous, potentially irritating and/or harmful to the health, comfort and well-being of installers and occupants.

Requirements

VOC emissions from paints must not exceed the VOC and chemical component limits of Green Seal requirements.

| Interior Coating | Gram / Liter |
|------------------|--------------|
| Non-Flat | 150 |
| Flat | 50 |
| Exterior Coating | |
| Non-Flat | 200 |
| Flat | 100 |

Technologies & Strategies

Specify Low-VOC paints and coatings in construction documents. Ensure that VOC limits are clearly stated in each section where paints are addressed

Submittals

- ❑ Provide the completed Letter Template, signed by the architect or responsible party, listing all the paints and coatings used in the building and stating that they comply with the current VOC and chemical component limits of Green Seal requirements.
- ❑ Provide a manufacturer's catalog cut sheet and a Material Safety Data Sheet (MSDS) highlighting VOC limits and chemical component limits for each paint or coating used in the building.

Category 4: HEALTH

Credit 4.3

1 Point

Low-Emitting Materials, Carpet

Intent

Reduce the quantity of indoor air contaminants that are odorous, potentially irritating and/or harmful to the health, comfort and well-being of installers and occupants.

Requirements

Carpet systems must meet or exceed the requirements of the Carpet and Rug Institute Green Label Plus Indoor Air Quality Test Program.

Technologies & Strategies

Specify Low-VOC carpet products and systems in construction documents. Ensure that VOC limits are clearly stated where carpet systems are addressed.

Submittals

- ❑ Provide the completed Letter Template, signed by the architect or responsible party, listing all the carpet systems used in the building and stating that they comply with the current VOC limits of the Carpet and Rug Institute Green Label Plus Indoor Air Quality Test Program.

- ❑ Provide a manufacturer's catalog cut sheet highlighting the Green Label Plus sticker or the VOC limits for each carpet product used in the building.

Category 4: HEALTH

Credit 4.4

1 Point

Low-Emitting Materials, Composite Wood

Intent

Reduce the quantity of indoor air contaminants that are odorous, potentially irritating and/or harmful to the health, comfort and well-being of installers and occupants.

Requirements

Composite wood and agrifiber products must contain no added urea-formaldehyde resins.

Technologies & Strategies

Specify wood and agrifiber products that contain no added urea-formaldehyde resins in construction documents.

Submittals

- ❑ Provide the completed Letter Template, signed by the architect or responsible party, listing all the composite wood products used in the building and stating that they contain no added urea-formaldehyde resins.
- ❑ Provide a manufacturers catalog cut sheet for each composite wood or agrifiber product used in the building indicating that the bonding agent used in each product contains no added urea-formaldehyde.

Category 4: HEALTH

Credit 4.5

1 Point

Low-Emitting Materials, Insulation

Intent

Reduce the quantity of indoor air contaminants that are odorous, potentially irritating and/or harmful to the health, comfort and well-being of installers and occupants.

Requirements

Insulation products must contain no formaldehyde.

Technologies & Strategies

Specify insulation products that contain no formaldehyde in construction documents.

Submittals

- ❑ Provide the completed Letter Template, signed by the architect or responsible party, listing all the insulation products used in the building and stating that they contain no formaldehyde.
- ❑ Provide a manufacturers catalog cut sheet for each insulation product used in the building indicating that it contains no formaldehyde.

Category 4: HEALTH

Credit 4.6

1 Point

Low-Emitting Materials, Environmentally Friendly Maintenance

Intent

Reduce the amount of harmful chemicals used in the maintenance operations of the building.

Requirements

Use only non toxic cleaning supplies in the regular maintenance of the building. Non Toxic is defined as having a zero Health Hazard rating on the product's Material Safety Data Sheet (MSDS) and listed as "non-toxic" for Acute Toxicity under "Section V - Health Information" on the MSDS.

Technologies & Strategies

Identify non-toxic cleaning supplies, and service companies that specialize in healthy cleaning supplies. Visit www.ecomall.com for a sample list of products and companies.

Submittals

- Provide the completed Letter Template, signed by the owner, with a list of cleaning procedures and chemicals used in the daily, weekly, and monthly maintenance of the building. Attach the MSDS for each product highlighting the required compliance sections.

Category 4: HEALTH

Credit 5

1 Point

Indoor Chemical & Pollutant Source Control

Intent

Avoid exposure of building occupants to potentially hazardous chemicals that adversely impact air quality.

Requirements

Design to minimize cross-contamination of regularly occupied areas by chemical pollutants:

- Employ permanent entryway systems (grills, grates, etc.) to capture dirt, particulates, etc. from entering the building at all high volume entryways.
- Where chemical use occurs (including housekeeping areas and copying/printing rooms), provide segregated areas with deck to deck partitions with separate outside exhaust at a rate of at least 0.50 cubic feet per minute per square foot, no air recirculation and maintaining a negative pressure of at least 7 PA (0.03 inches of water gauge).
- Provide drains plumbed for appropriate disposal of liquid waste in spaces where water and chemical concentrate mixing occurs.

Technologies & Strategies

Design separate exhaust and plumbing systems for rooms with contaminants to achieve physical isolation from the rest of the building. Install permanent architectural entryway systems such as grills or grates to prevent occupant-borne contaminants from entering the building.

Submittals

- Provide the completed Letter Template, signed by the architect or responsible party, declaring that:
 - Permanent entryway systems (grilles, grates, etc.) to capture dirt, particulates, etc. are provided at all high volume entryways.
 - Chemical use areas and copy rooms have been physically separated with deck-to-deck partitions; independent exhaust ventilation has been installed at 0.5 cfm/square foot and that a negative pressure differential of 7 Pa has been achieved.
 - In spaces where water and chemical concentrate mixing occurs, drains are plumbed for environmentally appropriate disposal of liquid waste.

Category 4: HEALTH

Credit 6.1

1 Point

Controllability of Systems, Perimeter Spaces

Intent

Provide a high level of ventilation and lighting system control by individual occupants or specific groups in multi-occupant spaces (i.e. classrooms or conference areas) to promote the health, productivity, comfort and well-being of building occupants.

Requirements

Provide minimum of one operable window and one lighting control zone per 200 SF for all occupied areas within 15 feet of the perimeter wall.

Technologies & Strategies

Design the building with occupant controls for airflow and lighting. Strategies to consider include, lighting controls, task lighting and operable windows.

Submittals

- Provide the completed Letter Template, signed by the architect or responsible party, demonstrating and declaring that for regularly occupied perimeter areas of the building, a minimum of one operable window and one lighting control zone are provided per 200 square feet on average.

Category 4: HEALTH

Credit 6.2

1 Point

Controllability of Systems, Non-Perimeter Spaces

Intent

Provide a high level of ventilation and lighting system control by individual occupants or specific groups in multi-occupant spaces (i.e. classrooms or conference areas) to promote the health, productivity, comfort and well-being of building occupants.

Requirements

Provide controls for each individual for airflow and lighting for at least 50% of the occupants in non-perimeter, regularly occupied areas.

Technologies & Strategies

Design the building with occupant controls for airflow and lighting. Strategies to consider include task lighting and underfloor HVAC systems with individual diffusers.

Submittals

- Provide the completed Letter Template, signed by the architect or responsible party, demonstrating and declaring that controls for individual airflow and lighting are provided for at least 50% of the occupants in non-perimeter, regularly occupied areas.

Category 4: HEALTH

Credit 7.1

1 Point

Thermal Comfort, Comply with ASHRAE 55-1992

Intent

Provide a thermally comfortable environment that supports the productivity, health and well-being of building occupants.

Requirements

Comply with ASHRAE Standard 55-1992, Addenda 1995, for thermal comfort standards including humidity control within established ranges per climate zone. Projects must employ both thermal and humidity control measures and systems to keep the space within the designated ranges specified by ASHRAE 55-1992.

Technologies & Strategies

Establish temperature and humidity comfort ranges and design the building envelope and HVAC system to maintain these comfort ranges.

Submittals

- For mechanically ventilated spaces: Provide the completed Letter Template, signed by the engineer or responsible party, declaring that the project complies with ASHRAE Standard 55-1992, Addenda 1995. Include a table that identifies each thermally controlled zone, and that summarizes for each zone the temperature and humidity control ranges and the method of control used.

Category 4: HEALTH

Credit 7.2

1 Point

Thermal Comfort, Dehumidification System

Intent

Provide a thermally comfortable environment that supports the productivity, health and well-being of building occupants.

Requirements

Install a permanent temperature and humidity monitoring system configured to provide operators control over thermal comfort performance and the effectiveness of dehumidification systems in the building. The dehumidification system shall be a centrally located and permanent.

Technologies & Strategies

Establish temperature and humidity comfort ranges and design the building envelope and HVAC system to maintain these comfort ranges. Install and maintain a temperature and humidity monitoring system in the building to automatically adjust building conditions as appropriate.

Submittals

- ❑ Provide the completed Letter Template, signed by the mechanical engineer or responsible party, declaring that a permanent temperature and humidity monitoring system will operate throughout all seasons to permit control of the building zones within the seasonal thermal comfort ranges defined in ASHRAE 55-1992, Addenda 1995.
- ❑ Provide the completed Letter Template, signed by the owner or responsible party, declaring that the temperature and humidity controls were included as part of the scope of work for Energy and Atmosphere Prerequisite 1 (fundamental building systems commissioning). Include the document name and section number where the commissioning work is listed.

Category 4: HEALTH

Credit 8.1 – 8.2

1 - 2 Points

Daylight, Daylight 50% - 75% of Spaces

Intent

Provide for the building occupants a connection between indoor spaces and the outdoors through the introduction of daylight and views into the regularly occupied areas of the building.

Requirements

Achieve a minimum Daylight Factor of 2% (excluding all direct sunlight penetration) in a Percentage of all space occupied for critical visual tasks.

| <u>Credit</u> | <u>Percentage</u> | <u>Points*</u> |
|---------------|-------------------|----------------|
| Credit 8.1 | 50% | 1 |
| Credit 8.2 | 75% | 2 |

* Points are cumulative. Find level achieved and use points shown as total for this Credit group.

Spaces excluded from this requirement include copy rooms, storage areas, mechanical plant rooms, laundry and other low occupancy support areas. Other exceptions for spaces where tasks would be hindered by the use of daylight will be considered on their merits.

Technologies & Strategies

Design the building to maximize daylighting and view opportunities. Strategies to consider include building orientation, shallow floor plates, increased building perimeter, exterior and interior permanent shading devices, high performance glazing and photointegrated light sensors. Model daylighting strategies with a physical or computer model to assess footcandle levels and daylight factors achieved.

Submittals

- ❑ Provide the completed Letter Template, signed by the electrical engineer or responsible party, with area calculations that define the daylight zone and provide prediction calculations or daylight simulation.

Category 4: HEALTH

Credit 9.1 – 9.2

1 - 2 Points

Views, Views for 50% - 75% of Spaces

Intent

Provide for the building occupants a connection between indoor spaces and the outdoors through the introduction of daylight and views into the regularly occupied areas of the building.

Requirements

Achieve direct line of sight to vision glazing for building occupants in a percentage of all regularly occupied spaces, not including copy rooms, storage areas, mechanical, laundry and other low occupancy support areas.

| <u>Credit</u> | <u>Percentage</u> | <u>Points*</u> |
|---------------|-------------------|----------------|
| Credit 9.1 | 50% | 1 |
| Credit 9.2 | 75% | 2 |

* Points are cumulative. Find level achieved and use points shown as total for this Credit group.

Other exceptions for spaces where tasks would be hindered by the use of daylight will be considered on their merits.

Technologies & Strategies

Design the building to maximize view opportunities. Strategies to consider include building orientation, shallow floor plates, increased building perimeter, exterior and interior permanent shading devices, high performance glazing and photo-integrated light sensors.

Submittals

- Provide the completed Letter Template, signed by the architect, with calculations describing, demonstrating and declaring that the building occupants in 50% or 75% of regularly occupied spaces will have direct lines of site to perimeter glazing.

- Provide drawings highlighting the direct line of sight zones.

Category 5: MATERIALS

Prerequisite 1

Required

Storage & Collection of Recyclables

Intent

Facilitate the reduction of waste generated by building occupants that is hauled to and disposed of in landfills.

Requirements

Provide an easily accessible area that serves the entire building and is dedicated to the separation, collection and storage of materials for recycling including (at a minimum) paper, corrugated cardboard, glass, plastics and metals.

Technologies & Strategies

Designate an area for recyclable collection and storage that is appropriately sized and located in a convenient area. Identify local waste handlers and buyers for glass, plastic, office paper, and newspaper, cardboard and organic wastes. Instruct occupants on building recycling procedures. Consider employing cardboard balers, aluminum can crushers, recycling chutes and other waste management technologies to further enhance the recycling program.

Submittals

- Provide the completed Letter Template, signed by the architect or owner, declaring that the area dedicated to recycling is easily accessible and accommodates the building's recycling needs.
- Provide a plan showing the area(s) dedicated to recycled material collection and storage.
- Attach a copy of contract(s) with recyclable waste hauler(s) demonstrating proper disposal of recycled materials collected.

Category 5: MATERIALS

Credit 1.1

1 Point

Building Reuse, Maintain 75% of Existing Shell

Intent

Extend the life cycle of existing building stock, conserve resources, retain cultural resources, reduce waste and reduce environmental impacts of new buildings as they relate to materials manufacturing and transport.

Requirements

Maintain at least 75% (by surface area or weight) of existing building structure and shell (exterior skin and framing, excluding window assemblies).

Technologies & Strategies

Consider reuse of existing building structure, shell and non-shell elements. Remove elements that pose contamination risk to building occupants and upgrade outdated components such as windows, mechanical systems and plumbing fixtures. Quantify the extent of building reuse.

Submittals

- ❑ Provide the completed Letter Template, signed by the architect, owner or other responsible party, listing the retained elements and the proper calculations showing that the above requirements have been met.

Category 5: MATERIALS

Credit 1.2

1 Point

Building Reuse, Maintain 100% of Existing Shell

Intent

Extend the life cycle of existing building stock, conserve resources, retain cultural resources, reduce waste and reduce environmental impacts of new buildings as they relate to materials manufacturing and transport.

Requirements

Maintain 100% total of existing building structure and shell (exterior skin and framing, excluding window assemblies) and non-structural roofing material.

Technologies & Strategies

Consider reuse of existing building structure, shell and non-shell elements. Remove elements that pose contamination risk to building occupants and upgrade outdated components such as windows, mechanical systems and plumbing fixtures. Quantify the extent of building reuse.

Submittals

- ❑ Provide the completed Letter Template, signed by the architect, owner or other responsible party, listing the retained elements and declaring that the above requirements have been met.

Category 5: MATERIALS

Credit 1.3

1 Point

Building Reuse, Maintain 100% Shell & 50% Non-Shell

Intent

Extend the life cycle of existing building stock, conserve resources, retain cultural resources, reduce waste and reduce environmental impacts of new buildings as they relate to materials manufacturing and transport.

Requirements

Maintain 100% of existing building structure and shell (exterior skin and framing, excluding window assemblies) AND at least 50% (by surface area or weight) of non-shell areas (interior walls, doors, floor coverings and ceiling systems).

Technologies & Strategies

Consider reuse of existing building structure, shell and non-shell elements. Remove elements that pose contamination risk to building occupants and upgrade outdated components such as windows, mechanical systems and plumbing fixtures. Quantify the extent of building reuse.

Submittals

- ❑ Provide the completed Letter Template, signed by the architect, owner or other responsible party, listing the retained elements and the proper calculations showing that the above requirements have been met.

Category 5: MATERIALS

Credit 2.1 – 2.2

1 - 2 Points

Construction Waste Management, Divert 50% - 75%

Intent

Divert construction, demolition and land clearing debris from landfill disposal. Redirect recyclable recovered resources back to the manufacturing process. Redirect reusable materials to appropriate sites.

Requirements

Develop and implement a waste management plan, quantifying material diversion goals. Recycle and/or salvage either 50% or 75% of construction, demolition and land clearing waste. Calculations can be done by weight or volume, but must be consistent throughout.

| <u>Credit</u> | <u>Percentage</u> | <u>Points*</u> |
|---------------|-------------------|----------------|
| Credit 2.1 | 50% | 1 |
| Credit 2.2 | 75% | 2 |

* Points are cumulative. Find level achieved and use points shown as total for this Credit group.

Technologies & Strategies

Establish goals for landfill diversion and adopt a construction management plan to achieve these goals. Consider recycling and land clearing debris, cardboard, metal, brick, concrete, plastic, clean wood, glass, gypsum wallboard, carpet and insulation. Designate a specific area on the construction site for recycling and track recycling efforts throughout the construction process. Identify construction haulers and recyclers to handle the designated materials. Note that salvage may include donation of materials to charitable organizations such as Habitat for Humanity.

Submittals

- Provide the completed Letter Template, signed by the architect, general contractor, owner or other responsible party, tabulating the total waste material, quantities diverted and the means by which diverted and declaring that the above requirements have been met.

Category 5: MATERIALS

Credit 3.1

1 Point

Resource Reuse, Specify 5%

Intent

Reuse building materials and products in order to reduce demand for virgin materials and to reduce waste, thereby reducing impacts associated with the extraction and processing of virgin resources.

Requirements

Use salvaged, refurbished or reused materials, products and furnishings for at least 5% of building materials (based on cost).

Technologies & Strategies

Identify opportunities to incorporate salvaged materials into building design and research potential material suppliers. Consider salvaged materials such as beams and posts, flooring, paneling, doors and frames, cabinetry and furniture, brick and decorative items.

Submittals

- ❑ Provide the completed Letter Template, signed by the architect, owner or other responsible party, declaring that the above requirements have been met and listing each material or product used to meet the credit. Include details demonstrating that the project incorporates the required percentage of reused materials and products and showing their costs and total cost of materials for the project.

Category 5: MATERIALS

Credit 4.1 – 4.2

1 - 2 Points

Recycled Content, Specify 25% - 50%

Intent

Increase demand for building products that incorporate recycled content materials, therefore reducing impacts resulting from extraction and processing of new virgin materials.

Requirements

Use materials with recycled content such that post-consumer and/or post-industrial recycled content constitutes either 25% or 50%.

| <u>Credit</u> | <u>Percentage</u> | <u>Points*</u> |
|---------------|-------------------|----------------|
| Credit 4.1 | 25% | 1 |
| Credit 4.2 | 50% | 2 |

* Points are cumulative. Find level achieved and use points shown as total for this Credit group.

The value of the recycled content portion of a material or furnishing shall be determined by dividing the weight of recycled content in the item by the total weight of all material in the item, then multiplying the resulting percentage by the total value of the item.

Mechanical and electrical components shall not be included in this calculation. Recycled content materials shall be defined in accordance with the Federal Trade Commission document, Guide for the Use of Environmental Marketing Claims, 15 CFR 260.7 (e), available at www.ftc.gov/bcp/grnrule/guides980427.htm.

Technologies & Strategies

Establish a project goal for recycled content materials and identify material suppliers that can achieve this goal. During construction, ensure that the specified recycled content materials are installed and quantify the total percentage of recycled content materials installed.

Submittals

- Provide the completed Letter Template, signed by the architect, owner or other responsible party, declaring that the above requirements have been met and listing the recycled content products used. Include details demonstrating that the project incorporates the required percentage of recycled content materials and products and showing their costs and percentage(s) of post-consumer and/or post-industrial content, and the total cost of all materials for the project.

Category 5: MATERIALS

Credit 5

1 Point

Recyclable Materials

Intent

Increase the demand for materials that are recyclable at the end of their useful life cycle.

Requirements

Use materials that at the end of their useful lifecycle can be recycled by the manufacturer into the raw materials stream of another product. The value of such products will constitute a minimum of 10% of the total value of the materials in the project

Technologies & Strategies

An example of this credit is the Armstrong Acoustical ceiling recycling program. Old tiles are palleted and picked up by Armstrong Representatives and turned into new ceiling tiles.

Submittals

- ❑ Provide the completed Letter Template, signed by the architect, owner or other responsible party, declaring that the above requirements have been met and listing the recyclable products used.
- ❑ Provide documentation from the manufacturer(s) stating that each material or product will be accepted into their recycling program.

Category 5: MATERIALS

Credit 6

1 Point

Demountable / Adaptable Interiors

Intent

Extend the life cycle of interior partition materials, conserve resources, reduce waste and reduce environmental impacts of subsequent renovations as they relate to materials manufacturing and transport.

Provide the option for future reuse of interior partition material and products in order to reduce demand for virgin materials and to reduce waste, thereby reducing impacts associated with the extraction and processing of virgin resources.

Requirements

Use demountable / adaptable partitions, which are at least 90% reusable / relocatable during subsequent renovations and that constitute at least 50% of the total square feet of the building interior partitions. Note: This credit does not include the use of systems furniture panels.

Technologies & Strategies

Identify opportunities to incorporate demountable/ adaptable partitions into the building design and research potential material suppliers.

Submittals

- ❑ Provide the completed Letter Template, signed by the architect, owner or other responsible party, declaring that the above requirements have been met and listing each material or product used to meet the credit. Include calculations demonstrating that the project incorporates the required percentage of demountable/ adaptable partitions.
- ❑ Provide a plan showing the wall(s) dedicated to demountable/ adaptable interior partitions.

Category 5: MATERIALS

Credit 7

1 Point

Leased Floor Coverings

Intent

To increase the reclamation and recycling of one of the largest volumes of landfill materials.

Requirements

Demonstrate that the floor coverings utilized on the project are being leased from the manufacture and that once the floor coverings are no longer wanted, the manufacture will reclaim the floor coverings for recycling and materials reuse.

Technologies & Strategies

From traditional flooring leases to manufacture reclamation programs. Projects can utilize a variety of techniques.

Submittals

- ❑ Provide the completed Letter Template, signed by the owner, that highlights the terms of the purchase / lease of floor coverings that will be taken back by the manufacturer for recycling rather than disposal in landfill

Category 5: MATERIALS

Credit 8.1

1 Point

Local/Regional Materials, 20% Manufactured Locally

Intent

Increase demands for building materials and products that are extracted and manufactured within the region, thereby reducing the environmental impacts resulting from transportation and supporting the regional economy.

Requirements

Use a minimum of 20% (by cost) of building materials and products that are manufactured* within the following states: Florida, Georgia, Alabama, Mississippi, South Carolina, North Carolina, or Tennessee.

* Manufacturing refers to the final assembly of components into the building product that is furnished and installed by the tradesman. For example, if the hardware comes from Dallas, Texas, the lumber from Vancouver, British Columbia and the joist is assembled in Kent, Washington; then the location of the final assembly is Kent, Washington.

Technologies & Strategies

Establish a project goal for locally sourced materials and identify materials and material suppliers that can achieve this goal. During construction, ensure that the specified local materials are installed and quantify the total percentage of local materials installed.

Submittals

- ❑ Provide the completed Letter Template, signed by the architect, general contractor, owner or other responsible party, declaring that the above requirements have been. Include calculations demonstrating that the project incorporates the required percentage of regional materials/products and showing their cost, and percentage of regional components, distance from project to manufacturer and the total cost of all materials for the project.

Category 5: MATERIALS

Credit 8.2

1 Point

Local/Regional Materials, of 20% Above, 50% Harvested Locally

Intent

Increase demands for building materials and products that are extracted and manufactured within the region, thereby reducing the environmental impacts resulting from transportation and supporting the regional economy.

Requirements

Of these regionally manufactured materials, use a minimum of 50% (by cost) of building materials and products that are extracted, harvested or recovered (as well as manufactured*) within the following states: Florida, Georgia, Alabama, Mississippi, South Carolina, North Carolina, or Tennessee.

* Manufacturing refers to the final assembly of components into the building product that is furnished and installed by the tradesman. For example, if the hardware comes from Dallas, Texas, the lumber from Vancouver, British Columbia and the joist is assembled in Kent, Washington; then the location of the final assembly is Kent, Washington.

Technologies & Strategies

Establish a project goal for locally sourced materials and identify materials and material suppliers that can achieve this goal. During construction, ensure that the specified local materials are installed and quantify the total percentage of local materials installed.

Submittals

- ❑ Provide the completed Letter Template, signed by the architect, general contractor, owner or other responsible party, declaring that the above requirements have been. Include calculations demonstrating that the project incorporates the required percentage of regional materials/products and showing their cost, and percentage of regional components, distance from project to manufacturer and the total cost of all materials for the project.

Category 5: MATERIALS

Credit 9

1 Point

Rapidly Renewable Materials

Intent

Reduce the use and depletion of finite raw materials and long-cycle renewable materials by replacing them with rapidly renewable materials.

Requirements

Use rapidly renewable building materials and products (made from plants that are typically harvested within a ten-year or shorter cycle) for 5% of the total value of all building materials and products used in the project.

Technologies & Strategies

Establish a project goal for rapidly renewable materials and identify materials and suppliers that can achieve this goal. Consider materials such as bamboo flooring, wool carpets, straw board, cotton batt insulation, linoleum flooring, poplar OSB, and sunflower seed board and wheatgrass cabinetry. During construction, ensure that the specified rapidly renewable materials are installed and quantify the total percentage of rapidly renewable materials installed.

Submittals

- Provide the completed Letter Template, signed by the architect, owner or other responsible party, declaring that the above requirements have been met. Include calculations demonstrating that the project incorporates the required percentage of rapidly renewable products. Show their cost, and percentage of rapidly renewable components and the total cost of all materials for the project.

Category 5: MATERIALS

Credit 10

1 Point

Certified Wood

Intent

Encourage environmentally responsible forest management.

Requirements

Use a minimum of 50% of wood-based materials and products, certified in accordance with the Forest Stewardship Council (FSC) Guidelines, for wood building components including, but not limited to, structural framing and general dimensional framing, flooring, finishes, furnishings and non-rented temporary construction applications such as bracing, concrete form work and pedestrian barriers. To qualify for this credit, wood-based materials and products must constitute at least 2% of the total value of all materials for the building.

Technologies & Strategies

Establish a project goal for FSC-certified wood products and identify suppliers that can achieve this goal. During construction, ensure that the FSC-certified wood products are installed and quantify the total percentage the FSC-certified wood products installed.

Submittals

- Provide the completed Letter Template, signed by the architect, owner or other responsible party, declaring that the above requirements have been met and listing the FSC-certified materials and products used. Include calculations demonstrating that the project incorporates the required percentage of the FSC-certified wood materials/products and their cost together with the total cost of all materials for the project. For each material/product used to meet the requirements, provide the vendor's or manufacturer's Forest Stewardship Council chain-of-custody certificate number.

Category 5: MATERIALS

Credit 11

1 Point

Durable Materials, Exterior Finish Materials

Intent

Reduce the need to replace existing structural finish components and materials over the expected lifetime of the building thereby reducing impacts resulting from removal and disposal of poorly performing material.

Requirements

Use finish systems and materials capable of withstanding the moisture and heat impacts of the local climate for a period of 40 years on 100% of the exposed exterior surfaces.

Technologies & Strategies

Identify opportunities to utilize systems and materials with a minimum 40-year warranty from the manufacturer or with an established history of use in local buildings older than 40 years.

Submittals

- ❑ Provide the completed Letter Template, signed by the architect or other responsible party, identifying all the systems and materials used for the exterior finish of the building. Attach copies of manufacturer's warranties or documentation supporting the established history for any material without a written warranty.

Category 5: MATERIALS

Credit 12

1 Point

Low Maintenance Finishes

Intent

Reduce the need for harsh maintenance chemicals thereby reducing the source pollution within and around the building and improving the indoor air quality.

Requirements

Use materials (on the floors, walls and ceilings) that can be maintained in a serviceable condition using odor free methods for 100% of the interior finishes of the building and 50% (by surface area) of the exterior finishes.

Technologies & Strategies

Identify opportunities to utilize finish materials suitable for the occupancy, which require no maintenance other than vacuuming or cleaning with water and mild soap.

Submittals

- Provide the completed Letter Template, signed by the architect or other responsible party, identifying:
 - All interior finish materials. Attach copies of the manufacturer's recommended maintenance procedures illustrating compliance.
 - The total area of exterior materials and the type and area of exterior finish materials that comply with this standard. Attach copies of the manufacturer's recommended maintenance procedures illustrating compliance.

Category 6: DISASTER MITIGATION

Credit 1

1 Point

Hurricane, Impact Resistance of Openings

Intent

Increase the structural integrity of the building during high wind conditions, reducing the potential for damage, thus decreasing the potential waste and need for replacement materials after the storm.

Requirements

Demonstrate that all windows, skylights, sliding glass doors, and other doors comprised of at least 60% glass (by area) are protected with a Dade County approved shutter or screen product or are classified by Dade County as impact resistant.

Demonstrate that all other exterior doors are protected with a Dade County approved shutter or screen product or are classified by Dade County as impact resistant.

Technologies & Strategies

A list of approved shutter and impact resistant products can be found at www.buildingcodeonline.com. If unsure whether a particular product is approved, just ask the manufacturer. Strengthening of existing skylights may include repair of surrounding roof.

Submittals

- ❑ Provide the completed Letter Template, signed by the architect or other responsible party, and manufacturer's cut sheets indicating the required approvals and classifications.

- ❑ Provide a door and window schedule keyed to the list of shutters and impacted resistant products used on the project.

Category 6: DISASTER MITIGATION

Credit 2

1 Point

Flood, Slab Elevation

Intent

Reduce the potential for flooding and the resulting moisture and mildew problems.

Requirements

The finished floor level must be at least 12” above the 100-year flood plain as determined by the water management district or the local building department.

The bottom of the slab (or in the case of a crawlspace, the floor) must be at least 8” above the finished grade elevation.

Finished grade must be sloped away from the building on all sides (for a distance of 5 feet) to allow water to drain away from the building.

Technologies & Strategies

Use appropriate foundation design to allow for the larger distance between finished floor elevation and finished grade elevation.

Submittals

- ❑ Provide the completed Letter Template, signed by the architect, civil engineer, general contractor, or other responsible party, with appropriate drawings illustrating the foundation design, floor elevation and grading requirements. Include appropriate document from the local building department showing the 100-year flood plain elevation.

Category 6: DISASTER MITIGATION

Credit 3

1 Point

Wildfire, Fire Resistant Exterior Finishes

Intent

Increase the fire resistance of the building, reducing the potential for damage from wildfires, thus decreasing the potential waste and need for replacement materials after the fire.

Requirements

An exterior cladding other than wood or vinyl must be used on all exterior walls.

A roof covering other than asphalt shingles or wood shakes must be used on the entire roof. Credit is also available if the sub-roof (roof deck) is of a fire resistant material, instead of the covering.

Soffit and vent materials must be other than wood or vinyl. When these parts of the building are compromised, embers from nearby fires can enter into the attic.

Technologies & Strategies

Use exterior wall materials made of stucco, unfinished CBS, brick, aluminum, stone or fiber-cement. Use roof coverings made of metal, concrete, fiber-cement, or tile. Use soffit and vent materials made of aluminum or fiber-cement.

Submittals

Provide the completed Letter Template, signed by the architect or other responsible party, and appropriate drawings and manufacturer's cut sheets illustrating the fire resistance of the exterior finish materials.

Category 6: DISASTER MITIGATION

Credit 4.1

1 Point

Termite Prevention

Intent

Increase the termite resistance of the building, reducing the potential for damage from termite infestation, thus decreasing the potential waste and need for replacement materials after the damage is detected.

Requirements

A permanent sign, which identifies the termite treatment provider and the need for re-inspection and treatment contract renewal, shall be provided. The sign shall be posted near the water heater or electric panel.

A single slab must be poured monolithically or must have area treated for termites before each portion of slab is poured. After the slab has substantially cured, any penetration through the slab such as piping or conduit shall be sealed around its perimeter with an elastomeric sealer

Any foam insulation must terminate above ground such that none of it extends below grade. The exterior cladding of the building must terminate at least 8" above grade. This will help prevent termites from entering the building undetected. All wood products must be treated with Borate or ACQ.

Rain gutters must be installed to collect water from all roof slopes and convey it at least 3 feet away from the building foundation. Rain gutters must have leaf screens installed to help prevent clogging.

All HVAC condensate line(s) must discharge at least 3 feet away from the building. All plants and irrigation should be at least 3 feet from building.

Florida law requires that a contract be issued whenever a termite treatment is conducted. A "full" or "unlimited" warranty requires the pest control company to restore any property damaged by wood-destroying organisms during a specified period after the treatment. Generally, for this to be in effect with new construction, the first warranty issued (with the pre-construction treatment) must be a full or unlimited warranty that can be renewed by the homeowner. The duration of post-construction contracts and warranties can vary from one year to five years depending on the policy of the pest control company. Normally, the annual renewal fee will remain the same during the term of the contract. If a "limited" guarantee or warranty is issued, the pest control company promises only to provide additional treatment if an infestation occurs during a specified period after treatment. A full or unlimited warranty is required for this credit.

Technologies & Strategies

No special technologies or strategies required.

Submittals

- Provide the completed Letter Template, signed by the architect or other responsible party, and appropriate drawings and specifications, illustrating compliance to all requirements.
- Provide photos showing all sealed slab penetrations.
- Provide copy of Termite Warranty with highlighting of the section(s) indicating it is a full or unlimited warranty.

Category 6: DISASTER MITIGATION

Credit 4.2

1 Point

Termite, Non Toxic Termite Pretreatment

Intent

Provide a non toxic method to increase the termite resistance of the building, reducing the potential for damage from termite infestation, thus decreasing the potential waste and need for replacement materials after the damage is detected. Note: This Credit cannot be combined with Credit 4.1.

Requirements

The entire structure of the building is constructed of termite-resistant materials. This includes all roof, floor, and exterior/interior wall framing, sheathing, decking, siding, soffit, fascia, and other exterior trim.

Chemical soil treatment must be avoided, and a Florida Building Code approved method of foundation protection must be employed such as Termimesh (www.termimesh.com).

Technologies & Strategies

Use building materials such as concrete, metal, borate or ACQ treated lumber/OSB, or fiber cement.

Submittals

- ❑ Provide the completed Letter Template, signed by the architect or other responsible party, and appropriate drawings and specifications illustrating materials used and their resistance to termites.

Category 7: GENERAL

Prerequisite 1

Required

FGBC Designated Professional

Intent

To support and encourage the design integration required by a FGBC Green Building project and to streamline the application and certification process.

Requirements

At least one principal participant of the project team must qualify as the Designated Professional as defined in the FGBC Green Commercial Building Standard (An individual who is: LEED Accredited (by the US Green Building Council); an integral part of the project design team; and is authorized by the project Owner to collect, organize, review, and submit all documents required by the Standard in order to achieve certification.)

Technologies & Strategies

The architect or engineer for the project can also be the Designated Professional if they meet the requirements.

Submittals

- ❑ Provide the completed Letter Template, signed by the owner, authorizing the person to be the Designated professional. Attach a copy of the USGBC LEED accreditation for that person.

Category 7: GENERAL

Prerequisite 2

Required

Project Charrette: Owner & Architect

Intent

To have a design charrette that focuses on the Sustainable Aspects of the project.

Requirements

The team must utilize a design charrette (run by the Designated Professional) that focuses on the green aspects of the project. The Owner and Architectural Design Team must be present at the minimum Full Day Design Charrette.

Technologies & Strategies

Utilize a Full Day Design Charrette to maximize the creativity of all participants. Third party facilitators can be utilized to move the process along.

Submittals

- ❑ Provide the completed Letter Template, signed by the owner, indicating the charrette agenda, results, and attendance sheet (that must be notarized to ensure compliance). The date, location, and time must be included on the attendance sheet.

Category 7: GENERAL

Credit 1

2 Points

Project Charrette: Owner, Architect, CM, Engineers & Users

Intent

To have a design charrette that focuses on the Sustainable Aspects of the project.

Requirements

The team must utilize a design charrette (run by the designated professional) that focuses on the green aspects of the project. The Owner, Architects, Construction Manager / General Contractor, Engineers, and User Group Representatives (if known) must be present at the minimum Full Day design Charrette.

Technologies & Strategies

Utilize a Full Day Design Charrette to maximize the creativity of all participants. Third party facilitators can be utilized to move the process along.

Submittals

- ❑ Provide the completed Letter Template, signed by the owner, indicating the charrette agenda, results, and attendance sheet (that must be notarized to ensure compliance). The date, location, and time must be included on the attendance sheet.

Category 7: GENERAL

Credit 2

1 Point

Environmental Value Analysis, Cost & Environmental Impact of Each Credit

Intent

To track the cost impact of achieving the certification.

Requirements

The project team must compile the cost impact of each credit and also list any environmental impact of each credit (Energy Use Reduction, Water Use Reduction, etc.) provide the documentation to the Florida Green Building Coalition for review. Only the cost impact and environmental impact for credits achieved need to be provided.

Technologies & Strategies

All team members need to analyze the impact of each credit in terms of environmental impact, design cost, engineering cost, and construction cost.

Submittals

- ❑ Provide the completed Letter Template, signed by the architect, with a spreadsheet that lists all credits submitted for certification and all of the costs associated with achievement of the credit. Break out Design Cost (Architectural), Engineering Cost, and Construction Cost. Items such as daylight modeling, energy analysis and commissioning that affect numerous categories can be submitted in one column.

Category 7: GENERAL

Credit 3.1 – 3.8

1 - 8 Points

Environmental Innovation

Intent

To provide design teams and projects the opportunity to be awarded points for exceptional performance above the requirements set by the FGBC Commercial Standards and/or innovative performance in Green Building categories not specifically addressed by the FGBC Commercial Standards.

Requirements

Credit 4.1 (1 point) In writing, identify the **intent** of the proposed innovation credit, the proposed **requirement** for compliance, the **design approach** (strategies) that might be used to meet the requirements, and the proposed **submittals** to demonstrate compliance.

| <u>Credit</u> | <u>Description</u> | <u>Points</u> |
|---------------|--------------------|---------------|
| Credit 3.2 | Same as Credit 3.1 | 1 |
| Credit 3.3 | Same as Credit 3.1 | 1 |
| Credit 3.4 | Same as Credit 3.1 | 1 |
| Credit 3.5 | Same as Credit 3.1 | 1 |
| Credit 3.6 | Same as Credit 3.1 | 1 |
| Credit 3.7 | Same as Credit 3.1 | 1 |
| Credit 3.8 | Same as Credit 3.1 | 1 |

Technologies & Strategies

Substantially exceed a FGBC Commercial Standard performance credit such as energy performance or water efficiency. Apply strategies or measures that are not covered by FGBC Commercial Standard such as acoustic performance, education of occupants, community development or lifecycle analysis of material choices.

Submittals

- Provide the completed Letter Template, signed by the architect or responsible party, with the proposal(s) (including intent, requirement, possible strategies, and submittals) and relevant evidence of performance achieved.

FGBC Green Commercial Building Designation Standard Checklist

FINAL APPLICATION FORM

SCHEDULE A - Version 1.0, Rev 8/9//10

Instructions

All applications must be submitted by a Designated Professional from the Project Design Team
Mail all documents and required fees to:

FGBC • 3389 Plowshare Rd. • Tallahassee, FL 32309-9755

Pre-Submittal Application (Page 2 of this document)

- Complete the second page of this document only.
- Submit a non-refundable deposit equal to 25% of the Total Required Fee with the Pre-Submittal Application. This will indicate the Design Team's commitment to meet the designation requirements. Upon receipt of the Pre-Submittal Application and deposit, FGBC will assign a Project Evaluator to answer questions regarding verification and submittal materials.

Final Application (Page 1 of this document)

- Complete the Schedule A Final Application Form.
- Schedule A must be accompanied by all required submittals and credit point documentation
- Submit payment for Total Required Fee less the paid deposit. Mail to: FGBC 3389 Plowshare Rd. Tallahassee, FL 32309-9755

FEE SCHEDULE

| <u>BUILDING SIZE (SF)</u> | <u>TOTAL REQUIRED FEE (\$)</u> |
|---------------------------|--------------------------------|
| <= 25,000 | 3,000 |
| > 25,000 and <= 50,000 | 4,500 |
| > 50,000 | 6,000 |

Payment Information:

Credit Card Authorization: (Visa, AX, MC & Discover Accepted)

CC#: _____
Expiration Date: _____
Name on Card: _____
Billing Zip Code: _____
Signature: _____

PROJECT INFORMATION (Attach a copy of the Property Legal Description)

NAME: _____
ADDRESS: _____
OCCUPANCY TYPE: _____ SIZE (SF) _____

OWNER INFORMATION

NAME: _____ COMPANY NAME _____
ADDRESS: _____
TELEPHONE NUMBER: _____ FAX NUMBER: _____
EMAIL ADDRESS: _____

DESIGNATED PROFESSIONAL INFORMATION

NAME: _____ COMPANY NAME _____
ADDRESS: _____
TELEPHONE NUMBER: _____ FAX NUMBER: _____
EMAIL ADDRESS: _____

By signing, I acknowledge that each of the measures intended to qualify this project for the Florida Green Commercial Building Standard have been incorporated into the project's design and will be incorporated into the project's construction and/or renovation.

SIGNATURE: _____

DATE: _____ FLORIDA LICENSE NUMBER: _____

DESIGN TEAM INFORMATION (Name, Company, Telephone #)

ARCHITECT: _____
LANDSCAPE ARCHITECT: _____
CIVIL ENGINEER: _____
STRUCTURAL ENGINEER: _____
MPE ENGINEER: _____
INTERIOR DESIGNER: _____

FGBC Green Commercial Building Designation Standard Checklist

PRE-SUBMITTAL APPLICATION FORM

SCHEDULE A - Version 1.0 Rev 8/9/10

Instructions

Pre-Submittal Application

• Submit a non-refundable deposit equal to 25% of the Total Required Fee with the Pre-Submittal Application.

This will indicate the Design Team's commitment to meet the designation requirements. Upon receipt of the Pre-Submittal Application and deposit, FGBC will assign a Project Evaluator to answer questions regarding verification and submittal materials.

Mail all documents and required fees to:

FGBC 3389 Plowshare Rd. Tallahassee, FL 32309-9755

FEE SCHEDULE

| <u>BUILDING SIZE (SF)</u> | <u>TOTAL REQUIRED FEE (\$)</u> | <u>DEPOSIT (\$)</u> | <u>BALANCE DUE (\$)</u> |
|---------------------------|--------------------------------|---------------------|-------------------------|
| <= 25,000 | 3,000 | 750 | 2,250 |
| > 25,000 and <= 50,000 | 4,500 | 1125 | 3,375 |
| > 50,000 | 6,000 | 1500 | 4,500 |

Payment Information:

Credit Card Authorization: (Visa, AX, MC & Discover Accepted)

CC#: _____

Expiration Date: _____

Name on Card: _____

Billing Zip Code: _____

Signature: _____

PROJECT INFORMATION (Attach a copy of the Property Legal Description)

NAME: _____

ADDRESS: _____

OCCUPANCY TYPE: _____ SIZE (SF) _____

OWNER INFORMATION

NAME: _____ COMPANY NAME _____

ADDRESS: _____

TELEPHONE NUMBER: _____ FAX NUMBER: _____

EMAIL ADDRESS: _____

DESIGNATED PROFESSIONAL INFORMATION

NAME: _____ COMPANY NAME _____

ADDRESS: _____

TELEPHONE NUMBER: _____ FAX NUMBER: _____

EMAIL ADDRESS: _____

I have read the entire standard and will abide by the policies it contains. I understand that this deposit allows FGBC to assign a Project Evaluator to provide information regarding documentation needed to verify points. I plan to submit the necessary documents indicated in the Reference Guide for any credit points I am claiming. Failure to complete the Project or to meet the requirements of the standard will not be

SIGNATURE: _____

DATE: _____ FLORIDA LICENSE NUMBER: _____

DESIGN TEAM INFORMATION (Name, Company, Telephone #)

ARCHITECT: _____

LANDSCAPE ARCHITECT: _____

CIVIL ENGINEER: _____

STRUCTURAL ENGINEER: _____

MPE ENGINEER _____

INTERIOR DESIGNER: _____

FGBC Green Commercial Building Designation Standard Checklist

SCHEDULE A - Version 1.0, Effective June 2004

| | | | |
|--|-------------------------------------|---|--|
| 0 | Points Achieved | | Project Name: |
| 0 | Points Targeted | | Designated Professional: |
| 0 | Points Questionable | | 100 Total Possible FGBC Green Commercial Building Designation Standard Points |
| 0 | Points Not Targeted or Not Possible | | |
| Certified = Minimum of 50 Points Achieved | | | |
| 0 | 0 | 0 | 0 |
| Category 1 : ENERGY | | | Max. Points 23 |
| 3 Points Minimum | | | Brief Description |
| Prereq 1 | Prereq 1 | Fundamental Building Systems Commissioning | Requires a Basic Owner / MEP / Contractor Commissioning Plan at the end of construction |
| Prereq 2 | Prereq 2 | Minimum Energy Performance, 10% more efficient than Code | Requires a project design to be 10% better than the current Florida Code |
| Prereq 3 | Prereq 3 | CFC Reduction in HVAC&R Equipment | Requires that all building HVAC&R systems be free of CFC's |
| Credit 1.1 | Credit 1.1 | Energy Performance, 15% New / 5% Existing | 1 Provide a design that is 15% more efficient than FL Code |
| Credit 1.2 | Credit 1.2 | Energy Performance, 20% New / 10% Existing | 1 Provide a design that is 20% more efficient than FL Code (Credits are cumulative - 2 points are awarded) |
| Credit 1.3 | Credit 1.3 | Energy Performance, 25% New / 15% Existing | 1 Provide a design that is 25% more efficient than FL Code (Credits are cumulative - 3 points are awarded) |
| Credit 1.4 | Credit 1.4 | Energy Performance, 30% New / 20% Existing | 1 Provide a design that is 30% more efficient than FL Code (Credits are cumulative - 4 points are awarded) |
| Credit 1.5 | Credit 1.5 | Energy Performance, 35% New / 25% Existing | 1 Provide a design that is 35% more efficient than FL Code (Credits are cumulative - 5 points are awarded) |
| Credit 1.6 | Credit 1.6 | Energy Performance, 40% New / 30% Existing | 1 Provide a design that is 40% more efficient than FL Code (Credits are cumulative - 6 points are awarded) |
| Credit 1.7 | Credit 1.7 | Energy Performance, 45% New / 35% Existing | 1 Provide a design that is 45% more efficient than FL Code (Credits are cumulative - 7 points are awarded) |
| Credit 1.8 | Credit 1.8 | Energy Performance, 50% New / 40% Existing | 1 Provide a design that is 50% more efficient than FL Code (Credits are cumulative - 8 points are awarded) |
| Credit 1.9 | Credit 1.9 | Energy Performance, 55% New / 45% Existing | 1 Provide a design that is 55% more efficient than FL Code (Credits are cumulative - 9 points are awarded) |
| Credit 1.10 | Credit 1.10 | Energy Performance, 60% New / 50% Existing | 1 Provide a design that is 60% more efficient than FL Code (Credits are cumulative - 10 points are awarded) |
| Credit 1.11 | Credit 1.11 | Energy Performance, 65% New / 55% Existing | 1 Provide a design that is 65% more efficient than FL Code (Credits are cumulative - 11 points are awarded) |
| Credit 1.12 | Credit 1.12 | Energy Performance, 70% New / 60% Existing | 1 Provide a design that is 70% more efficient than FL Code (Credits are cumulative - 12 points are awarded) |
| Credit 2.1 | Credit 2.1 | Renewable Energy, 5% | 1 Provide 5% of the total building energy budget from renewable energy sources |
| Credit 2.2 | Credit 2.2 | Renewable Energy, 10% | 1 Provide 10% of the total building energy budget w/ renewable sources (Credits are cumulative - 2 points are awarded) |
| Credit 2.3 | Credit 2.3 | Renewable Energy, 15% | 1 Provide 15% of the total building energy budget w/ renewable sources (Credits are cumulative - 3 points are awarded) |
| Credit 2.4 | Credit 2.4 | Renewable Energy, 20% | 1 Provide 20% of the total building energy budget w/ renewable sources (Credits are cumulative - 4 points are awarded) |
| Credit 3 | Credit 3 | Additional Commissioning | 1 Requires a certified commissioning agent to review design, construction, and operations |
| Credit 4 | Credit 4 | Ozone Depletion, HCFC Free HVAC&R Equipment | 1 Requires that all building HVAC&R systems be free of HCFC's and Halons |
| Credit 5 | Credit 5 | Measurement & Verification | 2 Requires point monitoring of building systems and loads on all major equipment to provide data on Operations and Maintenance |
| Credit 6.1 | Credit 6.1 | Green Power, 25% | 1 Owner shall purchase 25% certified green power for one year |
| Credit 6.2 | Credit 6.2 | Green Power, 50% | 1 Owner shall purchase 50% certified green power for one year (Credits are cumulative - 2 points are awarded) |
| Credit 6.3 | Credit 6.3 | Green Power, 75% | 1 Owner shall purchase 75% certified green power (Credits are cumulative - 3 points are awarded) |

FGBC Green Commercial Building Designation Standard Checklist

SCHEDULE A - Version 1.0, Effective June 2004

| | | | | |
|--|-------------------------------------|--|--|--|
| 0 | Points Achieved | | Project Name: | |
| 0 | Points Targeted | | Designated Professional: | |
| 0 | Points Questionable | | 100 Total Possible FGBC Green Commercial Building Designation Standard Points | |
| 0 | Points Not Targeted or Not Possible | | | |
| Certified = Minimum of 50 Points Achieved | | | | |
| 0 | 0 | 0 | 0 | 12 |
| Category 2 : WATER | | | Max. Points | Brief Description |
| 3 Points Minimum | | | | |
| / | / | / | / | / |
| | Prereq 1 | Drought Tolerant Landscape, 25% | | Landscape comprised of a minimum of 25% of Drought Tolerant Plants |
| | Credit 1.1 | Drought Tolerant Landscape, 50% | 1 | Landscape comprised of a minimum of 50% of Drought Tolerant Plants |
| | Credit 1.2 | Drought Tolerant Landscape, 75% | 1 | Landscape comprised of a minimum of 75% of Drought Tolerant Plants (Credits are cumulative - 2 points are awarded) |
| | Credit 1.3 | Drought Tolerant Landscape, 100% | 1 | Landscape comprised of a minimum of 100% of Drought Tolerant Plants (Credits are cumulative - 3 points are awarded) |
| | Credit 2.1 | Water Efficient Irrigation, Reduce Potable Water Use for 50% of area | 1 | Reduce potable water consumption for irrigation on 50% of area irrigated |
| | Credit 2.2 | Water Efficient Irrigation, Reduce Potable Water Use for 75% of area | 1 | Reduce potable water consumption for irrigation on 75% of area irrigated (Credits are cumulative - 2 points are awarded) |
| | Credit 2.3 | Water Efficient Irrigation, No Potable Use or No Permanent Irrigation | 1 | Irrigation system to use no potable water or have no permanent system (Credits are cumulative - 3 points are awarded) |
| | Credit 3.1 | Innovative Wastewater Technologies, 25% | 1 | Reduce Potable water usage 25% in flush fixtures. |
| | Credit 3.2 | Innovative Wastewater Technologies, 50% | 1 | Reduce Potable water usage 50% in flush fixtures. (Credits are cumulative - 2 points are awarded) |
| | Credit 3.3 | Innovative Wastewater Technologies, 75% | 1 | Reduce Potable water usage 75% in flush fixtures. (Credits are cumulative - 3 points are awarded) |
| | Credit 4.1 | Water Use Reduction, 20% Reduction | 1 | Reduce water budget of the building by 20% |
| | Credit 4.2 | Water Use Reduction, 30% Reduction | 1 | Reduce water budget of the building by 30% (Credits are cumulative - 2 points are awarded) |
| | Credit 4.3 | Water Use Reduction, 40% Reduction | 1 | Reduce water budget of the building by 40% (Credits are cumulative - 3 points are awarded) |

FGBC Green Commercial Building Designation Standard Checklist

SCHEDULE A - Version 1.0, Effective June 2004

| | | | | | | |
|--|-------------------------------------|---|----------|--|---|--|
| 0 | Points Achieved | | | | | Project Name: |
| 0 | Points Targeted | | | | | Designated Professional: |
| 0 | Points Questionable | | | | | 100 Total Possible FGBC Green Commercial Building Designation Standard Points |
| 0 | Points Not Targeted or Not Possible | | | | | |
| Certified = Minimum of 50 Points Achieved | | | | | | |
| 0 | 0 | 0 | 0 | Category 3 : SITE 3 Points Minimum | | Max. Points 14 |
| | | | | | | Brief Description |
| | | | | | | |
| | Prereq 1 | Erosion & Sedimentation Control | | | | Exceed Florida Water Management District Standards |
| | Credit 1 | Site Selection | | | 1 | Do not develop on: Prime farmland, Flood prone areas, habitat for threatened species, 100ft of Wetland, Public Parkland |
| | Credit 2 | Development Density | | | 1 | Any type of In-Fill Development |
| | Credit 3 | Brownfield Redevelopment | | | 1 | Development of any EPA Classified Brownfield |
| | Credit 4.1 | Alternative Transportation , Public Transportation Access | | | 1 | Projects need to be within a minimum of 1/2 mile of one Rail node or 1/4 mile of 1 or more bus lines |
| | Credit 4.2 | Alternative Transportation , Bicycle Storage & Changing Rooms | | | 1 | Project must provide securing locations for bicyclers and showering and changing rooms for 5% of total occupants |
| | Credit 4.3 | Alternative Transportation , Alternative Fuel Refueling Stations | | | 1 | Provide preferred parking for 3% of the parking capacity for the use of alternate fuel vehicles: Including Hybrid Vehicles |
| | Credit 4.4 | Alternative Transportation , Parking Capacity | | | 1 | Do not exceed the minimum zoning parking requirements |
| | Credit 5.1 | Reduced Site Disturbance , Protect or Restore Open Space | | | 1 | Limit site disturbance to 40 feet beyond the building perimeter |
| | Credit 5.2 | Reduced Site Disturbance , Development Footprint | | | 1 | Exceed minimum zoning requirements for open space by 25% |
| | Credit 6.1 | Stormwater Management , Rate and Quantity | | | 1 | No net increase in Stormwater runoff from pre-development conditions to post-development |
| | Credit 6.2 | Stormwater Management , Treatment | | | 1 | Provide onsite treatment of stormwater to remove 80% of (TSS) Total Suspended Solids and 40% of (TP) Total Phosphorous |
| | Credit 7.1 | Reduction of Heat Islands , Non-Roof | | | 1 | Provide onsite measures to reduce Heat Island effects |
| | Credit 7.2 | Reduction of Heat Islands , Roof | | | 1 | Provide either a Green Roof (50% of roof area) or Energy Star Certified Roofing material (75% of roof area) |
| | Credit 8 | Light Pollution Reduction | | | 1 | Meet or provide lower light levels than those recommended by the Illuminating Engineering Society of North America (IESNA) |

FGBC Green Commercial Building Designation Standard Checklist

SCHEDULE A - Version 1.0, Effective June 2004

| 0 | Points Achieved | | | Project Name: | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|-------------------------------------|---|-------------|--|--|----------|--|-------------|------------------------------------|--|----------|---|-----------|---|--|----------|--|---|--|--|------------|--|---|--|--|------------|---|---|---|--|------------|---|---|--|--|------------|---------------------------------------|---|----------------------------------|--|------------|---------------------------------------|---|--|--|------------|---|---|---|--|------------|---|---|--|--|------------|---|---|--|--|----------|---|---|--|--|------------|---|---|---|--|------------|---|---|--|--|------------|--|---|---|--|------------|---|---|---|--|------------|---|---|---|--|------------|---|---|---|--|------------|---------------------------------------|---|--|--|------------|---------------------------------------|---|--|
| 0 | Points Targeted | | | Designated Professional: | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0 | Points Questionable | | | 100 Total Possible FGBC Green Commercial Building Designation Standard Points | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0 | Points Not Targeted or Not Possible | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Certified = Minimum of 50 Points Achieved | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0 | 0 | 0 | 0 | <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 10%;"></th> <th style="width: 15%;"></th> <th style="width: 35%;">Category 4 : HEALTH</th> <th style="width: 10%; text-align: center;">Max. Points</th> <th style="width: 30%;"></th> </tr> <tr> <td></td> <td></td> <td>5 Points Minimum</td> <td style="text-align: center;">20</td> <td style="text-align: center;">Brief Description</td> </tr> </table> | | | Category 4 : HEALTH | Max. Points | | | | 5 Points Minimum | 20 | Brief Description | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | Category 4 : HEALTH | Max. Points | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 5 Points Minimum | 20 | Brief Description | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| | Credit 1 | Carbon Dioxide (CO₂) Monitoring | 1 | Systems shall be designed to monitor (CO ₂) within the building | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| | Credit 3.1 | Construction IAQ Management Plan, During Construction | 2 | Indoor Environmental Quality shall be protected during construction according to SMACNA guidelines | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| | Credit 4.1 | Low-Emitting Materials, Adhesives & Sealants | 1 | All Adhesives and Sealants shall meet VOC limits | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Credit 4.2 | Low-Emitting Materials, Paints | 1 | All Paints shall meet VOC limits | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Credit 4.3 | Low-Emitting Materials, Carpet | 1 | All carpet and carpet products shall meet the Carpet & Rug Institute Green Label Certification Program | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Credit 4.4 | Low-Emitting Materials, Composite Wood | 1 | All composite wood and agrifiber products will contain no added urea-formaldehyde | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Credit 4.5 | Low-Emitting Materials, Insulation | 1 | All Insulation products will be free or formaldehyde | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Credit 4.6 | Low-Emitting Materials, Environmentally Friendly Maintenance | 1 | Owner shall maintain the property utilizing environmentally friendly cleaning products | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Credit 5 | Indoor Chemical & Pollutant Source Control | 1 | Project shall employ measures to reduce pollutant contamination in the building entrances and housekeeping areas | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Credit 6.1 | Controllability of Systems, Perimeter Spaces | 1 | Provide minimum of one operable window and one lighting control zone per 200 SF for all areas within 15 ft of perimeter | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Credit 6.2 | Controllability of Systems, Non-Perimeter Spaces | 1 | Provide 50% of all occupants individual control of airflow, temperature, and lighting. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Credit 7.1 | Thermal Comfort, Comply with ASHRAE 55-1992 | 1 | Comply with ASHRAE Standard 55-1992, Addenda 1995, for thermal comfort standards including humidity control | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Credit 7.2 | Thermal Comfort, Dehumidification System | 1 | Provide a central dehumidification system | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Credit 8.1 | Daylight, Daylight 50% of Spaces | 1 | Provide natural daylighting to 50% of interior spaces | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Credit 8.2 | Daylight, Daylight 75% of Spaces | 1 | Provide natural daylighting to 75% of interior spaces (Credits are cumulative - 2 points are awarded) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Credit 9.1 | Views, Views for 50% of Spaces | 1 | Provide views to vision glazing for 50% of all occupants | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Credit 9.2 | Views, Views for 75% of Spaces | 1 | Provide views to vision glazing for 75% of all occupants (Credits are cumulative - 2 points are awarded) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

FGBC Green Commercial Building Designation Standard Checklist

SCHEDULE A - Version 1.0, Effective June 2004

| | | |
|--|---|--|
| 0 | Points Achieved | Project Name: |
| 0 | Points Targeted | Designated Professional: |
| 0 | Points Questionable | 100 Total Possible FGBC Green Commercial Building Designation Standard Points |
| 0 | Points Not Targeted or Not Possible | |
| Certified = Minimum of 50 Points Achieved | | |
| 0 | 0 | 0 |
| Category 5 : MATERIALS | | Max. Points 15 |
| 3 Points Minimum | | Brief Description |
| Prereq 1 | Storage & Collection of Recyclables | Project must have infrastructure for recycling: paper, cardboard, glass, plastics, and metal |
| Credit 1.1 | Building Reuse , Maintain 75% of Existing Shell | 1 Renovation project shall maintain 75% of existing Shell (not including windows & doors) |
| Credit 1.2 | Building Reuse , Maintain 100% of Existing Shell | 1 Renovation project shall maintain 100% of existing Shell (not including windows & doors) |
| Credit 1.3 | Building Reuse , Maintain 100% Shell & 50% Non-Shell | 1 Renovation project shall maintain 100% of existing Shell & 50% non-shell (excluding windows & doors) |
| Credit 2.1 | Construction Waste Management , Divert 50% | 1 Project must divert a minimum of 50% of all waste from landfill |
| Credit 2.2 | Construction Waste Management , Divert 75% | 1 Project must divert a minimum of 75% of all waste from landfill (Credits are cumulative - 2 points are awarded) |
| Credit 3.1 | Resource Reuse , Specify 5% | 1 Incorporate 5% (based on cost) salvaged or refurbished materials |
| Credit 4.1 | Recycled Content , Specify 25% | 1 Incorporate 25% (based on material cost) recycled materials |
| Credit 4.2 | Recycled Content , Specify 50% | 1 Incorporate 50% (based on material cost) recycled materials (Credits are cumulative - 2 points are awarded) |
| Credit 5 | Recyclable Materials | 1 Incorporate 10% (based on material cost) recyclable materials (recyclable through a structured existing program) |
| Credit 6 | Demountable / Adaptable Interiors | 1 Incorporate 50% demountable and adaptable Interior walls (based on LF) |
| Credit 7 | Leased Floor Coverings | 1 Project to lease 50% of floor coverings from a manufacturer that reclaims the materials into another useful life cycle |
| Credit 8.1 | Local/Regional Materials , 20% Manufactured Locally | 1 Project to purchase 20% (based on cost) of materials from a 700 mile radius from project site |
| Credit 8.2 | Local/Regional Materials , of 20% Above, 50% Harvested Locally | 1 Project to purchase 50% of the above mentioned materials that are harvested, extracted, recovered within 700 miles |
| Credit 9 | Rapidly Renewable Materials | 1 Project to purchase 5 % (based on cost) of all building materials to be rapidly renewable (plant to harvest cycle <10 years) |
| Credit 10 | Certified Wood | 1 Project to purchase 50% (based on cost) of all wood products certified by the Forest Stewardship Council (FSC) |
| Credit 11 | Durable Materials , Exterior Finish Materials | 1 Use exterior systems capable of withstanding the moisture and heat impacts of the local climate for a period of 40 years |
| Credit 12 | Low Maintenance Finishes | 1 Use interior and exterior finish materials that require none or minimal periodic cleaning |

FGBC Green Commercial Building Designation Standard Checklist

SCHEDULE A - Version 1.0, Effective June 2004

| | | | | | |
|--|-------------------------------------|--|----------|-------------|---|
| 0 | Points Achieved | | | | Project Name: |
| 0 | Points Targeted | | | | Designated Professional: |
| 0 | Points Questionable | | | | 100 Total Possible FGBC Green Commercial Building Designation Standard Points |
| 0 | Points Not Targeted or Not Possible | | | | |
| Certified = Minimum of 50 Points Achieved | | | | | |
| 0 | 0 | 0 | 0 | 5 | Brief Description |
| Category 6 : DISASTER MITIGATION | | | | Max. Points | |
| | Credit 1 | Hurricane, Impact Resistance of Openings | | 1 | Project must utilize impact resistant Glazing and Impact resistant Entry Points |
| | Credit 2 | Flood, Slab Elevation | | 1 | Slab Elevation must be 12" above 100 year flood plan and all grades around building must slope away |
| | Credit 3 | Wildfire, Fire Resistant Exterior Finishes | | 1 | Project must utilize Fire Resistant Exterior Wall cladding, roof covering or Subroof, Soffit and Vent materials |
| | Credit 4.1 | Termite Prevention | | 1 | Treat Soil. Seal slab penetrations. All plants, Turf and irrigation lines minimum 3' from building exterior and all treated lumber either borate or ACQ |
| | Credit 4.2 | Termite, Non Toxic Termite Pretreatment | | 1 | Termite protection from a non-toxic system such as the stainless steel mesh. |
| 0 | 0 | 0 | 0 | 11 | Brief Description |
| Category 7 : GENERAL 2 Points Minimum | | | | Max. Points | |
| | Prereq 1 | FGBC Designated Professional | | | FGBC Designated Professional needs to be involved with project design & construction |
| | Prereq 2 | Project Charrette: Owner & Architect, | | | Team involvement with the conceptual design of a green project is the most important step of the process |
| | Credit 1 | Project Charrette: Owner, Architect, CM, Engineers & Users, | | 2 | Team involvement with the conceptual design of a green project is the most important step of the process |
| | Credit 2 | Environmental Value Analysis, Cost & Environmental Impact of Each Credit | | 1 | Team shall document the cost impact of each credit submitted for certification |
| | Credit 3.1 | Environmental Innovation | | 1 | These credits To provide design teams and projects the opportunity to be awarded points for exceptional performance above the requirements set by the Florida Green Building Coalition and/or innovative performance in Green Building categories not specifically addressed by this standard |
| | Credit 3.2 | Environmental Innovation | | 1 | Same as above |
| | Credit 3.3 | Environmental Innovation | | 1 | Same as above |
| | Credit 3.4 | Environmental Innovation | | 1 | Same as above |
| | Credit 3.5 | Environmental Innovation | | 1 | Same as above |
| | Credit 3.6 | Environmental Innovation | | 1 | Same as above |
| | Credit 3.7 | Environmental Innovation | | 1 | Same as above |
| | Credit 3.8 | Environmental Innovation | | 1 | Same as above |

Sample Transmittal Letter

**Green Commercial Building Designation Standard
of the Florida Green Building Coalition, Inc.**

Version 1.0
June 2004

Project Name: _____ Category: _____
Date: _____ Credit Number: _____

Responsible Professional completing this Documentation Letter:

Name: _____ Title: _____
Company: _____ Phone #: _____
Email: _____ Fax #: _____

Sealed Signature

Date

Florida License Number

I hereby certify that the requirements of this credit have been achieved in accordance with the Florida Green Building Coalition Commercial Building Standard as described in the Reference Manual.

Listed below are the features that are included in the design and construction of this project (*Please attach (and reference) any pertinent documents, product data sheets, specifications, or drawings to this letter (maximum size of 11"x 17" and at a scale that can be read and reviewed)*).

Features:

1. First Feature Description Text
2. Second Feature Description Text
3. Etc...

Green Commercial Building Standard
Financial Interest Disclosure Form

Project Name: _____ Date: _____

Project Evaluator's Name: _____ Title: _____

Project Evaluator's Address: _____

Phone #: _____ Email: _____

As the FGBC, Inc. Project Evaluator for this project, I hereby disclose that I do not have the following potential financial interest(s) in the outcome of this designation.

- I have no potential financial interest in the results of the designation on this project.
- I am neither part of the design team of this project nor employed by any company or organization that is part of the design team.
- I am neither the builder nor the employee of the builder of this project.
- I am not the contractor nor a sub-contractor, nor an employee of neither the contractor nor a subcontractor for this project.
- I am not the seller nor agent of seller, nor an employee of the neither seller nor agent of seller for this project.
- I am neither the mortgagor nor an employee of the mortgagor for some portion of the financed payments on this project.
- I am not an employee, contractor, nor consultant of the electric, natural gas, or water utility serving this project.
- I am not an owner, partner, officer, nor employee of a company that may choose to supply or install or offer to bid to supply or install improvements to this project.
- I am not a manufacturer nor supplier, nor an employee of a manufacturer or supplier of product(s) that may be used to improve the efficiency of this project. If checked, please specify all products involved: _____
- However, I have some other potential financial interest in the results of this rating (fully specify the nature of the financial interest on an attached sheet).

Signature of Project Evaluator: _____