



### **What is Stage I assessment?**

As the design phase draws to a close, and your Green Globes construction document questionnaire is completed, it is time for a GBI authorized Green Globes Assessor to compare the answers you supplied in the questionnaire with the construction documents that you provide. The assessor then responds with a brief letter describing his initial findings and notifying you of additional documentation you will need to provide during the on-site visits. From this letter, you will know whether or not you are on track to receive a rating of one, two, three or four Green Globes.

### **What is Stage II assessment?**

As the construction phase approaches substantial completion, it is time to contact the GBI to schedule the Stage II assessment. The GBI will arrange for a third-party assessor to perform an on-site assessment. An ideal timeframe would be two months before final (punchlist) completion and/or beneficial occupancy. The optimal time for the visit is toward the end of the punchlist completion period and before occupancy, although it is recognized that circumstances vary by project. The assessor will call to schedule a visit no later than 30 days before your estimated construction completion date. .

### **How long will it take?**

The duration of the site visit varies considerably with the scope and size of the completed building project. For smaller buildings less than 50,000 square feet, please allow approximately 3-5 hours for the assessor to review new documentation onsite, conduct a thorough walk-through audit of your facility, and interview you and/or other designated representatives.

### **What documentation is required?**

Below is a sample of documents that will be helpful to have on hand prior to the completion of the survey and that assessors will likely request to review as part of the Stage I and/or Stage II assessment. Close coordination with your assessor, once assigned, can help ensure that you will have all documentation required prior to both the Stage I and Stage II review processes.

The following list is the suggested documentation for a Green Globes assessment:

#### **Section 1**

##### **Project Management:**

- List of written performance goals.
- Progress meeting agendas and meeting minutes.
- EMS plan to be used by the general contractor.
- Description of supplemental clean diesel practices.
- Construction documents.\*
- Manufacturers specifications, cut sheets and performance documentation.
- Photographs of protected building materials.
- Baseline indoor air quality test.
- Commissioning reports.
- Operations and maintenance manual (including all plans, protocols, strategies and contracts).

#### **Section 2**

##### **Site**

- Site civil plans and existing site civil plans.
- Site plans that show the building, parking, street access, etc. and civil engineering plans that show topography, drainage and infrastructure.
- Documentation by EPA, municipal, or other governmental authority of Superfund and Brownfield site.

- Construction Documents.\*
- Manufacturer's specifications, zoning maps, cut sheets and performance documentation.
- Pre-construction site documentation.
- Landscaping plans.
- Floodplain map.
- Photo documentation
- Manufacturer's specifications and/or interior design plans that show interrupted spaces.
- Erosion and Sediment Control plan.
- Shade site plan.
- Roofing plans.
- Percolation test results.
- Area rainfall charts
- Storm water discharge plan.
- Exterior lighting plans
- Electrical engineer's site lighting plan with illumination map.
- Zoning ordinance requirements.

### **Section 3**

#### **Energy**

- Energy simulation program's input and results.
- Construction documents.\*
- Manufacturer's specifications, cut sheets, and performance documentation.
- Energy simulation program results.
- Power demand factor calculations.
- Energy metering reporting plan.
- Measurement and verification program details.
- Energy certification or label.
- References to specifications and drawings of sub-metering equipment.
- Cut sheets for meters and meter reading equipment.
- Description of the monthly monitoring and verification reports that will be sent to building management.
- Landscaping plans.
- Site plans.
- Effective aperture for vertical fenestration calculations.
- Equipment specifications, control schedules and diagrams.
- Results of leak-testing.
- Drawings and specifications of vertical transport equipment.
- On-site renewable energy generation documentation.
- Copy of the off-site renewable energy contract.

### **Section 4**

#### **Water**

- Construction documents.\*
- Manufacturer's specifications, cut sheets, and performance documentation for all plumbing fixtures, fittings and appliances.
- Manufacturer's specifications, cut sheets and performance documentation for cooling equipment, makeup meter, blowdown meter, drift eliminators, conductivity controllers and wet/dry cooling towers.
- Plumbing plans.
- Manufacturer's specifications, cut sheets, and performance documentation for pre-rinse spray valves, ice machines, food steamers, dishwashers and combination ovens.
- Manufacturer's specifications, cut sheets, and performance documentation for steam sterilizers, laboratory or medical equipment using non-potable water for once through cooling, water recycling units, and wet scrubbers.
- Description of alternate sources of water to be used.
- Manufacturer's specifications, cut sheets and performance documentation for clothes washers.

- Manufacturer's specifications, cut sheets, and performance documentation for all special water features and for all meters.
- Manufacturer's specifications, cut sheets and performance documentation for filtration systems, pressure drop gauges, reverse osmosis systems, water softeners, and recharge controls.
- Description of alternate source of water and implementation for non-potable water applications.
- Manufacturer's specifications, cut sheets and performance documentation for the Meter Data Management System and meters.

## **Section 5**

### **Materials and Resources**

- Construction documents.\*
- Input and results from the Green Globes LCA Credit Calculator for Building Assemblies.
- Input and results from any BEES or Athena Impact Estimator or other LCA instrument.
- Manufacturer's specifications, cut sheets and performance documentation.
- List of recycled content materials and percentage calculations.
- List of bio-based materials and percentage calculations.
- List of harvested, reclaimed, salvaged or extracted materials and transportation distance calculations.
- List of processed or manufactured materials and transportation distance calculations.
- List of salvaged materials.
- Wood-based products certification documentation.
- Calculation for percentage of façade retained.
- Calculation for the percentage of existing major structural systems re-used.
- Calculations for area of existing non-structural elements re-used.
- Waste minimization plan.
- Landscaping and Site Development Plans showing incorporation of existing on-site materials.
- Tipping records.
- Letters and building models from architects or design professional.
- Formal Building Service Life Plan.
- Field testing reports
- Manufacturer's laboratory test results.
- Plan for foundation systems, flashings, roof and wall openings, roofing, and cladding systems.
- Construction plans.

## **Section 6**

### **Emissions, Effluents, and Pollution Reduction**

- Construction documents.\*
- Manufacturer's specifications, cut sheets, and performance documentation for boilers and furnaces.
- Manufacturer's specifications, cut sheets, and performance documentation for cooling equipment, leak detection equipment and alarms.
- Manufacturer's specifications, cut sheets, and performance documentation.

## **Section 7**

### **Indoor Air Quality**

- Construction documents\* and specifications.
- Ventilation schedules.
- Manufacturing specifications for ventilation systems, CO<sub>2</sub> sensing and ventilation control equipment.
- Ventilation air quantity design data.
- Local ventilation codes or standards.
- Manufacturer's specifications, cut sheets, and performance documentation for HVAC systems, humidification/dehumidification systems, CO<sub>2</sub> monitoring devices, wet cooling towers and domestic hot water systems list of mold resistant materials.

- Documentation demonstrating compliance with ASHRAE 62.1-07: section 5.14, SMACNA HVAC Duct Construction Standards: Metal and Flexible, and ICC International Building Code.
- Materials Safety Data Sheets or proof of certification for low-VOC products or materials.
- Description of radon assessment.
- Description of pest management strategies.
- Manufacturer's specifications, cut sheets, and performance documentation.
- Percentages and calculations for occupied areas with daylight illumination levels.
- Percentages and calculations for views to building exterior or atria.
- Percentages and calculations for primary occupied spaces with IESNA recommended task lighting levels.
- Specifications for solar shading devices and luminaries.
- Lighting plans.
- Documentation demonstrating compliance with ANSI/ASHRAE Standard 55-04.
- Sound level measurements taken at the property line.
- Description of acoustic design strategies and all design targets.
- FIIC value for flooring assemblies.
- Acoustic mitigation measures for mechanical equipment and plumbing systems.
- Specification that includes Annex E of ANSI S12.60 . 2006.
- Test report indicating compliance with ANSI S12.60 . 2006.

\*Construction documents are defined as: all of the written and graphic documents prepared or assembled by the architect/engineer for communicating the design and administering the project. The term Construction Documents also includes the Project Manual that contains the bidding forms and instructions, contract forms and conditions, and specifications, as well as documentation of all modifications made after the construction agreements are signed.

Any initiatives taken by the Green Globes-NC program participants should be, first and foremost, in full and legal compliance with applicable municipal, state, and federal regulations. Legal requirements may prohibit the implementation of suggested initiatives in specific circumstances.

For more information, please contact GBI at:(503) 274-0448. We look forward to working with you