

**SECTION 01 81 13.21**

**SUSTAINABILITY CERTIFICATION REQUIREMENTS - GREEN GLOBES**

**PART 1 - GENERAL**

**1.1 DESCRIPTION**

- A. This section describes general requirements and procedures to comply with the Green Building Initiative's (GBI) Green Globes for New Construction, Version 1.3. These requirements are additional and compatible requirements to objectives of Section 08 11 13, SUSTAINABLE CONSTRUCTION REQUIREMENTS.
- B. Refer to 'Guiding Principles Checklist for Green Globes New Construction' for mandatory credits.
- C. A copy of Green Globes Project Checklist is attached at end of this Section for information only.

**1.2 RELATED WORK**

- A. General sustainable requirements: Section 01 81 13 SUSTAINABLE CONSTRUCTION REQUIREMENTS.
- B. Construction waste management and disposal: Section 01 74 19 CONSTRUCTION WASTE MANAGEMENT.

**1.3 DEFINITIONS**

- A. Green Globes: Green Building Initiative's (GBI) Green Globes for New Construction, Version 1.3.
- B. Definitions that are a part of Green Globes apply to this Section.
- C. Recommended Exposure Limit (REL): Recommended Exposure Limit as defined by U.S. National Institute of Occupational Safety and Health (NIOSH) to define the standard for protecting worker safety and health over a working lifetime.

**1.4 SUBMITTALS**

- A. Provide submittals to COR/Resident Engineer and Architect; provide additional copies of typical submittals required under technical section, when sustainability certification requires copies of record submittals.
- B. Sustainable Construction Documentation Submittals: Sustainable construction documentation submittals are in addition to other submittals and must be differentiated from items submitted to comply with other requirements, such as Product Data and Certificates.
  - 1. Sustainability Action Plan: Refer to Section 01 81 13, SUSTAINABLE CONSTRUCTION REQUIREMENTS.

2. Verify compliance with indicated certification requirements and required documentation, for each product identified within the Sustainability Action Plan or indicated for certification submittal within specifications.
  3. Documentation of action items listed under PERFORMANCE REQUIREMENTS of this section.
  4. Responses to questions and requests from Architect about Green Globes requirements that are the responsibility of contractor.
  5. Documentation to GBI-authorized Assessor and respond to questions and requests from GBI-authorized Assessor about Green Globes credits that are the responsibility of contractor.
  6. Environmental management system documents.
  7. Environmental product declarations.
  8. Third-party certifications based on multiple attribute standards.
  9. Third-party-certified life-cycle product assessments.
  10. Documentation complying with Section 01 74 19, CONSTRUCTION WASTE MANAGEMENT.
  11. Product Data and laboratory test reports for adhesives and sealants indicating VOC content and compliance with requirements for low-emitting materials.
  12. Certificates for carpet and under-carpet adhesives indicating compliance with CRI's Green Label Plus testing program.
  13. Product Data and laboratory test reports for paints indicating VOC content and compliance with requirements for low-emitting materials.
  14. Laboratory test reports for flooring, insulation, acoustical ceilings, and wall coverings, indicating compliance with requirements for low-emitting materials.
- C. Qualification Data: For Green Globes Coordinator described in this specification section.
- D. Project Materials Cost Data: Provide statement indicating total cost for materials used for Project. Costs exclude labor, overhead, and profit. Include breakout of costs for following categories of items:
1. Plumbing.
  2. Mechanical.
  3. Electrical.
  4. Specialty items such as elevators and equipment.
  5. Wood-based construction materials.
- E. Closeout Submittals:

1. Operations and Maintenance Manuals as indicated by Green Globes 3.1.3.4, in addition to requirements specified within construction documents.
2. Energy Reporting Plan as prescribed by Green Globes Section 3.3.3.2, including measurement, verification and metering information. Reporting Plan must include comparisons to anticipated energy demand and consumption values created for Green Globes Section 3.3.1 Energy Performance.

#### **1.5 PRE-INSTALLATION MEETING**

- A. Pre-installation Conference: Conduct conference at project site. Review Green Globes requirements and action plans for compliance with requirements.

#### **1.6 ADMINISTRATIVE REQUIREMENTS**

- A. Submit documentation to GBI-authorized Assessor and respond to questions and requests from GBI-authorized Assessor regarding Green Globes credits that are the responsibility of contractor, depend on product selection or product qualities, or depend on contractor's procedures, until GBI-authorized Assessor has made its determination on certification application. Document correspondence with GBI-authorized Assessor as Sustainable Design Documentation submittals.
- B. Schedule and enforce requirement prohibiting the installation of interior walls, floors, ceilings, or HVAC systems prior to confirming building envelope as weather-tight and dry interior conditions.

#### **1.7 QUALITY ASSURANCE**

- A. Green Globes Coordinator: Engage an experienced coordinator to coordinate Green Globes requirements.
  1. Green Globes coordinator may also serve as waste management coordinator.
  2. Green Globes coordinator shall have previously coordinated at least one Green Globes project.

#### **1.8 APPLICABLE PUBLICATIONS**

- A. Green Globes for New Construction, Technical Reference Manual.

#### **1.9 DELIVERY, STORAGE, AND HANDLING**

- A. Deliver, store, and handle organic building materials capable of absorbing moisture, to prevent deterioration or damage due to moisture, temperature changes, contaminants, or corrosion.
- B. Protect stored material from organic matter including leaves, soil, or insects.

- C. Do not deliver or install organic materials or materials capable of absorbing moisture until concrete has cured and wet work including painting or similar operations have been completed.

## **PART 2 - PRODUCTS**

### **2.1 MATERIALS**

- A. Provide products and procedures necessary to comply with Green Globes requirements referenced in this section. Although specifications include requirements that contribute to referenced Green Globes requirements, contractor determines additional materials and procedures necessary to comply with Green Globes requirements indicated.

### **2.2 PRODUCT TRANSPARENCY**

- A. At least 25 percent of products shall have environmental product declarations that comply with Green Globes requirements.
- B. At least 25 percent of products shall have third-party certifications that are based on multiple attribute standards that comply with Green Globes requirements.
- C. At least 10 percent of products shall have third-party life-cycle product assessments that comply with Green Globes requirements.
- D. At least 10 percent of products shall comply with one of the following:
  - 1. Products shall have environmental product declarations that comply with Green Globes requirements.
  - 2. Products shall have third-party certifications that are based on multiple attribute standards that comply with Green Globes requirements.
  - 3. Products shall have third-party life-cycle product assessments that comply with Green Globes requirements.

## **PART 3 - EXECUTION**

### **3.1 CERTIFICATION ACTION ITEMS**

- A. Document the Environmental Management System (EMS) by incorporating the key elements listed in Green Globes Section 3.1.2.1 Environmental Management during Construction as follows:
  - 1. Organizational principles.
  - 2. Regulatory compliance and training.
  - 3. Environmental risk assessment.
  - 4. Environmental risk management strategies.
  - 5. Environmental management roles, responsibilities and reporting structure.

6. Site and work instructions for on-site personnel, outlining environmental procedures.
7. Environmental inspection checklists.
8. Records of compliance.
9. Emergency response plan.
- B. Document a Clean Diesel Practice in addition to mandatory regulatory requirements by documenting and implementing strategies as follows:
  1. Idle reduction strategies.
  2. Use of clean or alternative fuels.
  3. Engine retrofits or repower.

### **3.2 NONSMOKING BUILDING**

- A. Smoking is not permitted within the building or within 8 M (25 feet) of entrances, operable windows, or outdoor-air intakes.

### **3.3 ECOLOGICAL IMPACTS**

- A. Ensure full implementation the erosion and sedimentation control plan for project.
- B. Tree Protection: Document and implement tree protection procedures compliant with Green Globes Section 3.2.2.3.2.

### **3.4 CLEAN DIESEL PRACTICES**

- A. Comply with Green Globes requirements for clean diesel practices.

### **3.5 INSPECTIONS**

- A. Inspect project site on a periodic basis and produce a report that includes date-stamped electronic photograph files demonstrating construction activity pollution prevention.

### **3.6 CONSTRUCTION INDOOR-AIR-QUALITY MANAGEMENT AND ASSESSMENT**

- A. Comply with Section 08 11 13 SUSTAINABLE CONSTRUCTION REQUIREMENTS.
- B. Employ strategies of SMACNA's IAQ Guidelines for Occupied Buildings Under Construction, to control dust, odors, or irritants.

### **3.7 CLOSEOUT ACTIVITIES**

- A. Schedule walk-through by GBI-authorized Assessor to assess compliance with requirements; provide advance notice to GBI to assign assessor to project. Contractor is responsible party for timely walk-through without delay to Final Inspection and project closeout.
- B. Cooperate with GBI-authorized Assessor and provide access to work and incidental labor and facilities necessary to perform inspections.

### **3.8 MEASUREMENT AND VERIFICATION**

- A. Set-up Building Automation System to continually track and report energy usage broken down by major end-use.

### 3.9 ATTACHMENTS

A. Green Globes Project Checklist

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