

# LEED PROCESS GUIDELINES – Long Version

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## LEED Guidelines

### 1.1 Introduction

This guideline was developed to support the LEED process as part of the Green Building Policy 3.10 [http://fod.osu.edu/uess/310\\_interimgreenbuildandenergy.pdf](http://fod.osu.edu/uess/310_interimgreenbuildandenergy.pdf) adopted by The Ohio State University in December 2008. The Green Build Policy was created to comply with Ohio House Bill 251 which establishes a goal to reduce on- and off-campus building energy consumption by at least 20 percent.

As part of the Green Build Policy 3.10, the university requires each new building or total renovation construction project with a budget of \$4 million or more and which qualifies to obtain Leadership in Energy and Environmental Design (LEED) certification. The minimum baseline for design and certification is LEED "Silver" or higher.

The LEED Process and its interpretation by the Design Review Board, offer direction for LEED process requirements in addition to the university "Building Design Standards". This LEED process outlines planning / pre-design, schematic design, design development, construction documents, construction administration, project completion / occupancy. This guide will establish roles and responsibilities of the professional design team (A/E), LEED coordinator, University Architect's office (owner), contractors and members of the Project Planning Team.

### 1.2 Planning / Pre-Design

Sustainable design and LEED requirements are most efficient and economical to integrate into a project when the process begins early.

- Owner will determine programmatic requirements and LEED goals for the project
- Owner will Include a 'sustainable design approach' narrative in the RFP that accurately describes the project intent
- Owner will conduct a pre-interview discussion with prospective design teams around sustainability and LEED

The best time to initiate the LEED discussion is before the project is awarded. A brief discussion about the programmatic requirements and sustainable goals allow design teams to prepare for the interview. Sustainable design goals and LEED requirements integrated early in the process will aid in selection of the right design team for the project.

After the project is awarded there are several key activities that help in getting the project off on the right foot.

- Establish all key design team members for the project.
- Designate a LEED Coordinator for the project, the project team may elect to hire a third-party sustainable design consultant for this role
- Register the project with the USGBC, location, size, budget & scope

The LEED Coordinator will be responsible for managing the process and keep all team members on track throughout the project. The LEED Coordinator will register the project for LEED certification with the USGBC as soon as it is feasible. Early project registration is very important as the ratings system is updated periodically, usually becoming more stringent.

### **1.3 Schematic Design**

This is most efficient and economical point to establish LEED goals and strategies for the project. Establishing clear LEED goals in schematic design will allow items to be accounted for in the construction budget early in the process.

- Hold a Sustainable Design Charrette, Lead Coordinator to schedule typically 4-8 hours
- Update LEED scorecard, after the charrette the Lead Coordinator will update the score card to reflect current LEED goals and strategy, indicating responsibilities and due dates
- Set Project up in LEED Online, after the charrette the Lead Coordinator to setup project
- Project team access LEED online, Lead Coordinator will provide online access to all team members to join the project site
- Review Document Requirements, all team members should sign in to the project site and become familiar with the LEED documentation requirements and responsibilities

If team members are aware of LEED documentation requirements early they can begin to integrate these requirements into the schematic design documents avoid the necessity for altering documents or changing the design at a later date potentially adding cost to the project.

### **1.4 Design Development**

This phase is crucial in designing a high-performance, sustainable building. Many decisions about strategy are made in this phase as a result of design investigation and cost estimation. The LEED Coordinator should ensure that all project team members have access to LEED online in this phase. Each team member should become familiar with the LEED Letter Templates and understand documentation requirements.

- Determine if Enhanced Commissioning will be perused (EA Credit 3), DD is the key timeframe to begin this process
- Precertification, if a project is pursuing certification under the LEED-CS rating system DD is the time to seek precertification from the USGBC
- Design Phase Review, in order to best manage the LEED certification a Design Phase Review and feedback from USGBC is recommended to identify LEED strategies

By the end of the Design Development phase the project team should have a confirmed LEED scorecard and a clear strategy for achieving each Prerequisite and Credit toward LEED certification.

### **1.5 Construction Documents**

It is critical that all LEED requirements show up in both the construction drawings and specifications at the CD phase. The Specifications are critical to successfully implementing LEED requirements during construction. The specifications should clearly indicate what documentation submittals look like and which LEED Credits should be documented in each specification division. In addition Division 1 should include the following LEED requirements.

- LEED Submittal Requirements, A/E is responsible for collecting all submittals and distributing to project team members as required
- Schedule of Values, A/E will review SOV indicating project cost data separated by labor and material for items in Divisions 2-10 & 31-33
- LEED Action Plan, Contractors will provide a plan within 7 days from the Notice to Proceed demonstrating how all LEED Prerequisites and Credits will be achieved.

The LEED Coordinator should review the project construction drawings and specifications to ensure they reflect all LEED requirements associated with the targeted strategies. The LEED Coordinator will participate in the pre-bid conferences to assist in clarifying the projects LEED strategy and sustainability goals.

## **1.6 Construction Administration**

The best strategy to ensure a successful implementation of LEED requirements during construction is to hold a sustainable design kick-off meeting with the general contractor, sub-contractors and for major trades and disciplines. At the Kick-off Meeting the LEED Coordinator should review the LEED scorecard with the contractors paying particular attention to all construction phase LEED Prerequisites and Credits. At this meeting each contractor should appoint its own internal coordinator to manage and collect all information required to demonstrate LEED compliance. Within 60 days from the NTP each contractor shall be responsible for managing the following items during the construction phase.

- LEED Kick-off Meeting Attendance (sign-in sheet)
- LEED Submittal requirements
- Construction Waste Management Plan
- Sedimentation and Erosion Control Plan (SEC)
- Indoor Air Quality (IAQ) Management Plan
- LEED Coordination Meetings, part of regular contractor coordination meetings
- LEED Project Meetings, part of regular weekly project meetings. Report on open LEED issues, answer questions about LEED submittals and discuss upcoming LEED deliverables.
- LEED Progress Reports, to be submitted with monthly payment requests showing actual construction & purchasing activities per the LEED Action Plan.

The LEED Coordinator should make periodic visits to the job site to verify the SEC and IAQ plans are being followed. They should also verify that the LEED documentation that is being collected consistently and appears complete and accurate to date. When construction is complete the LEED Coordinator will submit the construction Phase Review Package to USGBC.

## **1.7 Project Completion / Occupancy**

When construction is completed and final cleaning is complete the project architect, owner and LEED Coordinator will prepare a punch list of items that need to be corrected prior to building occupancy. This is also a good time to conduct the system and maintenance requirements for the building in preparation for building turnover and occupancy. The following items should be reviewed and discussed during the building demonstrations.

- Building Flush Out or IAQ testing
- Equipment Demonstrations, Contractor shall ensure all appropriate zone leaders and maintenance staff are in attendance for the demonstrations
- Maintenance Requirements, Contractor shall ensure all appropriate zone leaders and maintenance staff are in attendance for maintenance, care and cleaning requirements
- O&M & LEED Manuals, Contractor shall organize and turn over all manuals for maintenance and care of the building to the Owner

Together the Owner and LEED Coordinator will develop and implement an Education and Outreach Program for the building occupants. The LEED Coordinator will assist the Owner in registering the project for LEED-EB: O&M.