

LEED PERFORMANCE PROGRAM (LPP)

#9 LEED CONSTRUCTION STRATEGY PLAN

INSTRUCTIONS

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LEED construction strategy plan
<p>The LEED construction strategy plan is the separate attachment described in the credit description instructions section of this document. The plan is to be completed by the project team and provided to the City in advance of the LEED pre-construction meeting. The team will be required to relay how the LEED construction credits will be achieved and documented for this project. The LEED construction strategy plan should be completed collaboratively by the design and construction teams once the building materials and construction strategies are determined to facilitate conversations around review of the LEED credits, documentation requirements and how to prepare for the LEED inspections throughout the project.</p>
Summary of LEED construction credits
<p>For each construction credit identified as a Y or “?” point in the LEED checklist, please describe the strategy for achieving that point for the project. The descriptions should include:</p> <ol style="list-style-type: none"> 1. Specific information about the approach for each credit 2. References to the project drawings noting building materials <p>The US Green Building Council (USGBC) website provides detailed information for each credit. For step-by-step guidance and a more comprehensive list of the required documentation for each credit, please refer to the LEED reference guide for Building Design and Construction (BD+C) or for Interior Design and Construction (ID+C) and LPP 8 construction documentation.</p>
Credit description instructions
<p>Project teams will be required to provide a LEED construction strategy plan to the City in advance of their LEED pre-construction meeting in accordance with LPP 11 LEED inspection guidelines. Please refer to the directions below to create a separate attachment with a narrative and descriptions of the approach taken to meet each construction credit selected in the LEED checklist.</p>
Sustainable Sites (SS)
<p>SSp1: Construction activity pollution prevention</p> <p>Create and implement an erosion and sedimentation control plan for all construction activities associated with the project. The plan must conform to the erosion and sedimentation requirements of the 2012 U.S. Environmental Protection Agency (EPA) Construction General Permit (CGP) or local equivalent, whichever is more stringent. Projects must apply the CGP regardless of size. The plan must describe the measures implemented.</p> <p>The erosion and sedimentation control plan shall do the following:</p> <ol style="list-style-type: none"> 1. Create and implement environmental protection measures that reduce construction disturbance to neighboring properties, rainwater systems and the site itself. 2. Assess and determine which pollution prevention measures are applicable to the project site. 3. Create and implement an erosion and sedimentation control plan addressing pollution prevention measures applicable to the project site. 4. Track the implementation of the erosion and sedimentation control plan. <ol style="list-style-type: none"> a. Include written records or date-stamped photographs.
Energy and Atmosphere (EA)
<p>EAp1: Fundamental commissioning and verification</p> <p>Complete the following commissioning (Cx) process activities for mechanical, electrical, plumbing, and renewable energy systems and assemblies, in accordance with ASHRAE Guideline 0-2005 and ASHRAE Guideline 1.1-2007 for HVAC&R systems, as they relate to energy, water, indoor environmental quality, and durability. Requirements for exterior enclosures are limited to inclusion in the owner’s project requirements (OPR) and basis of design (BOD), as well as the review of the OPR, BOD and project design. NIBS Guideline 3-2012 for exterior enclosures provides additional guidance.</p> <ol style="list-style-type: none"> 1. Develop the OPR. 2. Develop a BOD <p>The commissioning authority (CxA) must do the following:</p> <ol style="list-style-type: none"> 1. Review the OPR, BOD, and project design. 2. Develop and implement a Cx plan.

3. Confirm incorporation of Cx requirements into the construction documents.
4. Develop construction checklists.
5. Develop a system test procedure.
6. Verify system test execution.
7. Maintain an issues and benefits log throughout the Cx process.
8. Prepare a final Cx process report.
9. Document all findings and recommendations and report directly to the owner throughout the process.

[EA1: Enhanced commissioning](#)

Implement, or have in place a contract to implement, the following commissioning process activities in addition to those required under EA Prerequisite 1: Fundamental commissioning and verification.

Select the option the team is pursuing:

- Option 1. Enhanced systems commissioning (3-4 points)
 - Path 1: Enhanced commissioning (3 points)
 - Path 2: Enhanced and monitoring-based commissioning (4 points)
- Option 2. Envelope commissioning (2 points)

[EA7: Green power & carbon offsets](#)

Engage in a contract for qualified resources that have come online since January 1, 2005, for a minimum of five years, to be delivered at least annually. The contract must specify the provision of at least 50% or 100% of the project's energy from green power, carbon offsets, or renewable energy certificates (RECs).

- Green power and RECs must be Green-e Energy certified or the equivalent. RECs can only be used to mitigate the effects of Scope 2, electricity use.
- Carbon offsets may be used to mitigate Scope 1 or Scope 2 emissions on a metric ton of carbon dioxide–equivalent basis and must be Green-e Climate certified, or the equivalent.

Materials & Resources (MR)

[MRp2: Construction and demolition waste management planning](#)

Develop and implement a construction and demolition waste management plan:

- Establish waste diversion goals for the project by identifying at least five materials (both structural and nonstructural) targeted for diversion. Approximate a percentage of the overall project waste that these materials represent.
- Specify whether materials will be separated or commingled and describe the diversion strategies planned for the project. Describe where the materials will be taken and how the recycling facility will process the material.
- Provide a final report detailing all major waste streams generated, including disposal and diversion rates.
 - Alternative Daily Cover (ADC) does not qualify as material diverted from disposal. Include materials destined for ADC in the calculations as waste. Land-clearing debris is not considered construction, demolition, or renovation waste that can contribute to waste diversion.

[MRc2: Building product disclosure and optimization – environmental product declarations](#)

Provide documentation of the use of products from manufacturers with verified improved environmental life-cycle impacts.

- Option 1: Environmental product declaration (EPD)
 - Identify the 20 permanently installed products from at least five different manufacturers meeting the requirements at the link above.
- Option 2: Multi-attribute optimization
 - Use products that comply with one of the criteria at the link above for 50%, by cost, of the total value of permanently installed products in the project.

[MRc3: Building product disclosure and optimization – sourcing of raw materials](#)

Provide documentation of the use of products and materials that have been verified to have been extracted or sourced in a responsible manner.

- Option 1: Raw material source and extraction reporting
 - Identify the 20 permanently installed products from at least five different manufacturers and list these products.
- Option 2: Leadership extraction practices
 - Use products that meet the responsible extraction criteria for at least 25% by cost and list these products.

[MRc4: Building product disclosure and optimization – materials ingredients](#)

Provide documentation of the use of products and materials that have chemical ingredients that have been inventoried using an accepted methodology and demonstrated to minimize the use and generation of harmful substances.

- Option 1: Material ingredient reporting
 - Identify the 20 permanently installed products from at least five different manufacturers and list these products.
- Option 2: Material ingredient optimization

- Use building products that meet the materials ingredient criteria for at least 25% by cost and list these products.
- Option 3: Product manufacturing supply chain optimization
 - Use building products that meet the materials ingredient criteria for at least 25% by cost and list these products.

Indoor Environmental Quality (EQ)

[EQc2: Low emitting materials](#)

This credit includes requirements for product manufacturing as well as project teams. It covers volatile organic compound (VOC) emissions in the indoor air and the VOC content of materials, as well as the testing methods by which indoor VOC emissions are determined. Different materials must meet different requirements to be considered compliant for this credit. The building interior and exterior are organized in seven categories, each with different thresholds of compliance. The building interior is defined as everything within the waterproofing membrane. The building exterior is defined as everything outside and inclusive of the primary and secondary weatherproofing system, such as waterproofing membranes and air- and water-resistive barrier materials.

- Option 1: Product category calculations
 - Describe how the project will meet the levels of compliance with emissions and content standards for the products in the building envelope.
- Option 2: Budget calculation method
 - The budget calculation method is available if some products in a category do not meet the product category calculation. If the project team anticipates using the budget calculation method compliance path, describe the materials that will be accounted for and how these materials will be.

[EQc3: Construction indoor air quality management plan](#)

Develop and implement an indoor air quality (IAQ) management plan for the construction and preoccupancy phases of the building. Describe how the major aspects of the plan will be incorporated into the construction schedule.

[EQc4: Indoor air quality assessment](#)

Select one of the following two options, to be implemented after construction ends and the building has been completely cleaned. All interior finishes, such as millwork, doors, paint, carpet, acoustic tiles, and movable furnishings (e.g., workstations, partitions), must be installed, and major VOC punch list items must be finished. The options cannot be combined.

- Option 1: Flush-Out
- Option 2: Air Testing

Briefly describe which option will be implemented on this project. Identify the time required for the IAQ assessment on the construction schedule. Describe how the reports for either activity will be submitted.