LEED ID+C: Commercial Interiors | v4

Integrative process

Possible 2 points

Glossary

Intent

To support high-performance, cost-effective project outcomes through an early analysis of the interrelationships among systems.

Requirements

Site Selection and Energy-Related Systems (1 point)

Starting in predesign and continuing throughout the design phases, identify and use opportunities to achieve synergies across disciplines and building systems. Use the analyses described below to inform the owner's project requirements (OPR), basis of design (BOD), design documents, and construction documents. Conduct analyses in site selection and energy-related systems (1 point).

Site Selection

Before site selection, analyze project goals to identify and select the building site that will provide the most opportunities and fewest barriers for the tenant improvement project. Assess at least two potential locations or base building options, taking into consideration at least the following:

- *Building site attributes.* Assess the base building's location and site design characteristics.
- *Transportation.* Assess the tenant occupants' transportation needs for commuting to and from the site, including convenient access to alternative transportation that meets occupants' needs.
- *Building features.* Assess the base building's envelope, mechanical and electrical systems that will affect tenant space (e.g., controls, HVAC, plumbing fixtures, renewable energy supply), adaptability to future needs, and resilience in the event of disaster or infrastructure failure.
- *Occupants' well-being.* Assess the base building's ability to provide daylight and views, indoor air quality, and other indoor environmental quality characteristics.

Implementation:

Document how the above analysis informed selection of a building site for the project's tenant improvement and informed the OPR and BOD and site selection for the interior design project, including the following, as applicable:

- suitability of the base building for meeting project goals relative to the building's site attributes;
- suitability of the base building site location for meeting daily occupants' commuting needs;
- suitability of the base building's mechanical and electrical systems for meeting project goals;
- capability of the tenant space for meeting the project's goals related to indoor environmental quality and occupants' well-being; and
- other systems.

Commit to the establishment and use of ongoing feedback mechanisms that provide information about tenant space performance and occupants' satisfaction. Provide documentation of methods planned to gather feedback on occupants' satisfaction.

Energy-Related Systems

Discovery:

Perform a preliminary energy analysis before the completion of schematic design that explores how to reduce energy loads for the interior design project and accomplish related sustainability goals by questioning default assumptions and testing options. Assess at least two potential options associated with each of the following in terms of project and human performance:

- *Basic envelope attributes.* Insulation values, window-to-wall ratios, glazing characteristics, shading, window operability.
- *Programmatic and operational parameters.* Multifunctioning spaces, operating schedules, space allotment per person, teleworking, reducing building area, ongoing operations and maintenance issues.
- *Lighting levels.* Interior surface reflectance values and lighting levels in occupied spaces.
- *Thermal comfort ranges.* Assess thermal comfort range options.
- *Plug and process load needs.* Reducing plug and process loads through programmatic solutions such as equipment and purchasing policies or layout options.

Document how the above analysis informed interior design decisions in the project's OPR and BOC and the interior design of the project, including the following, as applicable:

- building envelope and façade conditions;
- elimination and/or significant downsizing of building systems (e.g., HVAC, lighting, controls, exterior materials, interior finishes, functional program elements);
- methods planned to gather feedback on energy performance and occupants' satisfaction during operations.; and
- other systems.

Project teams may also choose Option 1 for an additional point..

Option 1. Water-Related Systems (1 point)

Perform a preliminary water budget analysis before the completion of schematic design that explores how to reduce potable water loads and accomplish related sustainability goals. Assess and estimate the project's potential nonpotable water supply sources and water demand volumes, including the following:

- *Fixture and fitting water demand.* Assess flow and flush fixture demand volumes, calculated in accordance with WE Prerequisite Water-Use Reduction.
- *Process water demand.* Assess kitchen, laundry, cooling tower, and other equipment demand volumes, as applicable.
- *Supply sources.* Assess all potential nonpotable water supply source volumes, such as on-site rainwater and graywater, municipally supplied nonpotable water, and HVAC equipment condensate.

Document how the above analysis informed interior design decisions in the OPR and BOD. Demonstrate how at least one on-site nonpotable water supply source was used to reduce the burden on municipal supply and/or wastewater treatment systems by contributing to the water demand components listed above. Demonstrate how the analysis informed the interior design and systems affected by the project, as applicable, for the following:

- plumbing systems;
- sewage conveyance and/or on-site treatment systems;
- process water systems;
- methods planned to gather feedback on the performance and efficiency of water-related systems during operations; and
- other systems.