

Optimize energy performance, HVAC

EAc1.3 | Possible 2 points

Intent

Achieve increasing levels of energy conservation beyond the prerequisite standard to reduce environmental impacts associated with excessive energy use.

Requirements

Projects are required to achieve two (2) Optimize Energy Performance points. Project teams are awarded these two points towards LEED certification but documentation that verifies compliance with two (2) Optimize Energy Performance points is mandatory for a project to be awarded LEED certification.

For projects without HVAC in the scope

The credit can be achieved if the base building HVAC used by the project complies based on either Option A or B.

For projects with HVAC in the scope

Follow the Options below.

Option A

Implement one or both of the following strategies:

- Equipment Efficiency: (1 point)
Install HVAC systems which comply with the efficiency requirements outlined in the New Buildings Institute, Inc.'s publication "Advanced Buildings: Energy Benchmark for High Performance Buildings (E-Benchmark)" prescriptive criteria for mechanical equipment efficiency requirements, sections 2.4 (less ASHRAE standard 55), 2.5, and 2.6.
- Appropriate Zoning and Controls: (1 point)
Zone tenant fit out of spaces to meet the following requirements:
 - Every Solar Exposure must have a separate control zone
 - Interior spaces must be separately zoned
 - Private offices and specialty occupancies (conference rooms, kitchens, etc.) must have active controls capable of sensing space use and modulating HVAC system in response to space demand.

Option B

Reduce design energy cost compared to the energy cost budget for regulated energy components described in the requirements of ASHRAE/IESNA Standard 90.1- 2004.

- Demonstrate that HVAC system component performance criteria used for tenant space are 15% better than a system that is in minimum compliance with ASHRAE/IESNA Standard 90.1-2004.

(1 point)

OR

- Demonstrate that HVAC system component performance criteria used for tenant space are 30% better than a system that is in minimum compliance with ASHRAE/IESNA Standard 90.1-2004. (2 points)