



| v3 - LEED 2009

Optimize energy performance - building envelope

EAc1.5 | Possible 1 point

Glossary

Intent

To achieve increasing levels of energy conservation beyond the prerequisite standard to reduce environmental and economic impacts associated with excessive energy use.

Requirements

Option 1. Performance compliance path

Demonstrate a 15% reduction in the heat loss and heat gain of the proposed building envelope compared with the baseline building performance rating per ANSI/ASHRAE/IESNA Standard 90.1-2007 (with errata but without addenda¹) for the building envelope components such as glazing, insulation, roofing, and slab using a modeling protocol or overall UA (U factor x Area) calculation. Projects outside the U.S. may use a USGBC approved equivalent standard².

OR

Option 2. Prescriptive compliance path

Comply with the prescriptive measures for building envelopes of ASHRAE Advanced Energy Design Guide for Small Retail Buildings 2006. The building must meet the following requirements:

- The building in which project is located must be less than 20,000 square feet (1,800 square meters).
- The building must be retail occupancy.
- The project must fully comply with all applicable criteria as established in the Advanced Energy Design Guide for the climate zone in which the building is located. Projects outside the U.S. may use ASHRAE/ASHRAE/IESNA Standard 90.1-2007 Appendices B and D to determine the appropriate climate zone.

¹Project teams wishing to use ASHRAE approved addenda for the purposes of this prerequisite may do so at their discretion. Addenda must be applied consistently across all LEED credits.

² Projects outside the U.S. may use an alternative standard to ANSI/ASHRAE/IESNA Standard 90.1-2007 if it is approved by USGBC as an equivalent standard using the process identified in the LEED 2009 Green Building Design and Construction Global ACP Reference Guide Supplement.