



Integrated project planning in mid-rise buildings

MIDc1 | Possible 4 points

Intent

Maximize opportunities for integrated, cost-effective adoption of green design and construction strategies.

Requirements

Prerequisite

1.1 Preliminary rating. As early as practical, conduct a preliminary LEED for Homes meeting, with the participation of the Provider and key members of the project team. As part of the meeting, create an action plan that identifies the following:

- The targeted LEED award level (Certified, Silver, Gold, or Platinum).
- The LEED for Homes credits that have been selected to meet the targeted award level.
- The party accountable for meeting the LEED for Homes requirements for each selected credit.

1.2 Energy expertise in mid-rise. Each project team must include at least the following set of expertise:

- An individual familiar with mid-rise energy systems and components, including mechanical equipment, envelope upgrades, etc. Experience with green mid-rise or high-rise residential buildings is preferred, but not required
- An individual with experience performing energy modeling per ASHRAE Standard. 90.1, Appendix G. Experience with LEED-NC energy modeling is preferred, but not required.

Credits

1.3 Professional credentialed with respect to LEED for Homes (1 point). At least one principal member of the project team shall be a professional who is credentialed with respect to LEED for Homes as determined by the U.S. Green Building Council.

1.4 Design charrette (1 point). No later than the design development phase and preferably during schematic design, conduct at least one full-day integrated design workshop with the project team, which must include at least three of the following skill sets:

- Architecture or residential building design;
- Mechanical or energy engineering, or someone that meets the qualifications defined in ID 1.2;
- Building science or performance testing;
- Green building or sustainable design;
- Civil engineering, landscape architecture, habitat restoration, or land-use planning

Use the workshop to integrate green strategies across all aspects of the building design, drawing on the expertise of all participants.

1.5 Building orientation for solar design (1 point). Design the building such that all of the following requirements are met:

1. The glazing area on the north- and south-facing walls of the building is at least 50% greater than the sum of the glazing area on the east- and west- facing walls.
2. The east-west axis of the building is within 15 degrees of due east-west.
3. The roof has a minimum of 450 square feet of south-facing area that is oriented appropriately for solar applications.
4. At least 90% of the glazing on the south-facing wall is completely shaded (using shading, overhangs, etc.) at noon on June 21 and unshaded at noon on December 21.

1.6 Trades training for mid-rise (1 point). Beginning prior to construction but after trades have been hired for the project, hold a total of 8 hours of training focusing on the green or otherwise unusual aspects of the project, including each LEED for Homes relevant prerequisite, and the expectations for ensuring certification. Include at least the following trades:

- Plumbing
- Mechanical systems
- Insulation