LEED BD+C: Homes | v4

Minimum energy performance

Required

Glossary

Intent

To improve the building's overall energy performance and reduce its greenhouse gas emissions.

Requirements

Meet all of the following requirements:

1. Meet the requirements of ENERGY STAR for Homes, version 3

   Complete the thermal enclosure system rater checklist, the HVAC system quality installation rater and contractor checklists, and the water management system builder checklist. Certified passive house projects automatically meet the thermal enclosure system rater checklist requirement.

   Achieve a HERS index rating at or below the HERS index target (or USGBC-approved equivalent for projects outside the U.S.) or meet the requirements of the ENERGY STAR for Homes version 3 Prescriptive Pathway, which includes meeting or exceeding all components of the ENERGY STAR Reference Design.

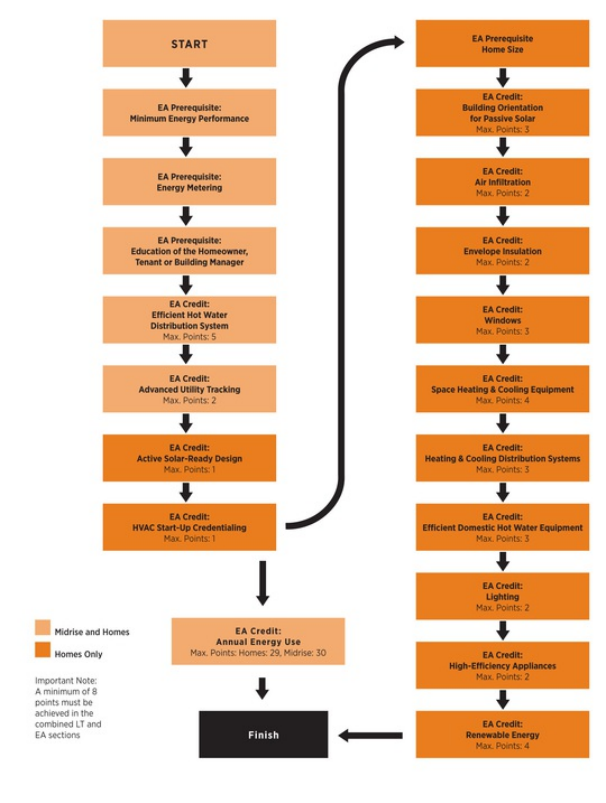
2. At least one of the following appliances must be ENERGY STAR qualified (or performance equivalent for projects outside the U.S.) and installed in each dwelling unit:

   - refrigerator;
   - dishwasher; or
   - clothes washer.

3. All duct runs must be fully ducted (i.e., building cavities may not be used as ducts).

Existing portions of an existing building are given the following allowances:
Thermal Enclosure System Rater Checklist
2.1. Slab insulation is strongly encouraged but not required to meet or exceed 2009 IECC levels.
4.1. Attic insulation at the intersection of existing roof and existing exterior walls does not have to meet R-value requirements.
4.4.5e. Advanced framing is not required on existing framed walls,
5.2.1. Existing sill plates on top of concrete are not required to be placed on a foam gasket.
Water-Managed Site and Foundation
1.3. A capillary break under an existing slab is not required unless there are visible signs of moisture damage on the slab floor.
1.5. Exterior below-grade walls are not required to be damp-proofed on the exterior surface unless there are visible signs of moisture damage on the interior of the wall.
1.8 - Drain tiles surrounded with clean gravel and fabric filter are not required for existing slabs, unless there are visible signs of moisture damage on the slab floor
2, 3. Water-managed wall and roof assembly requirements are not required for existing walls or roofing unless there are signs of moisture damage related to vulnerabilities in the walls or roof.

Prerequisite required for all projects, whether they use the EA performance or EA prescriptive path


START
EA Prerequisite: Minimum Energy Performance
EA Prerequisite: Energy Metering
EA Prerequisite: Education of the Homeowner, Tenant or Building Manager
EA Credit: Efficient Hot Water Distribution System Max. Points: 5
EA Credit: Advanced Utility Tracking Max. Points: 2
EA Credit: Active Solar-Ready Design Max. Points: 1
EA Credit: HVAC Start-Up Credentialing Max. Points: 1
EA Credit: Annual Energy Use Max. Points: Homes: 29, Midrise: 30
Finish
EA Prerequisite Home Size
EA Credit: Building Orientation for Passive Solar Max. Points: 3
EA Credit: Air Infiltration Max. Points: 2
EA Credit: Envelope Insulation Max. Points: 2
EA Credit: Windows Max. Points: 3
EA Credit: Space Heating & Cooling Equipment Max. Points: 4
EA Credit: Heating & Cooling Distribution Systems Max. Points: 3
EA Credit: Efficient Domestic Hot Water Equipment Max. Points: 3
EA Credit: Lighting Max. Points: 2
EA Credit: High-Efficiency Appliances Max. Points: 2
EA Credit: Renewable Energy Max. Points: 4
Midrise and Homes
Homes Only
Important Note: A minimum of 8 points must be achieved in the combined LT and EA sections