

A comparison of 2015 Enterprise Green Communities Criteria and USGBC's LEED v4 Homes Design and Construction (Includes LEED BD+C Homes and Multifamily Lowrise, LEED BD+C Midrise) Released: February 19, 2016

EXECUTIVE SUMMARY

LEED v4 Homes and the 2015 Enterprise Green Communities Criteria (2015 Criteria) are very similar programs. Similar categories are covered, although each program includes distinct mandatory requirements and optional points that do not overlap. Importantly, the 2015 Criteria and LEED v4 BD+C Homes and MFMR pathways incorporate ENERGY STAR or ASHRAE 90.1-2010 performance targets for building energy performance standards, and feature criterion/points that focus on improving indoor air quality and health by considering material selection and ventilation strategies. A project that meets the 2015 Criteria will most likely meet the Silver tier of LEED v4 Homes, assuming the verification steps of LEED v4 are followed.

INTRODUCTION: LEED v4

Leadership in Energy and Environmental Design (LEED) is a suite of rating systems developed by the United States Green Building Council (USGBC). LEED rating systems are applicable to buildings (including schools, residential, commercial) as well as neighborhoods. The LEED v4 Homes Design and Construction program focuses on whole buildings and has two pathways: Homes and Multifamily Lowrise (Homes), and Multifamily Midrise (MFMR). The LEED v4 Homes Design and Construction program is an updated framework designed around goal oriented impact categories in order to improve the residential built environment. Certification to all of the LEED rating systems is completed by the Green Building Certification Institute (GBCI).

PROGRAM ELIGIBILITY: LEED v4

The **LEED v4 Homes** pathway applies to single family homes and low-rise multi-family buildings (one to three stories). These projects may be new construction or rehabilitation.*

The **LEED MFMR** pathway applies to mid-rise multi-family buildings (four to eight plus stories). These projects may be new construction or rehabilitation.* Buildings that are greater than eight stories should contact the USGBC to determine the appropriate pathway.

Under either pathway of the LEED v4 Homes Design and Construction program, prerequisites and credits are applicable for the entire building, not just the residential spaces.

For more information on building classifications, see http://www.usgbc.org/cert-guide/homes

Category Comparison		Homes and Multifamily Lowrise		Multifamily Midrise	
LEED CATEGORIES	EGC SECTION ALLIGNMENT	Number of Prerequisites	Optional Points (max)	Number of Prerequisites	Optional Points (max)
	1. Integrative Design	LEED does not feature an Integrative Design category, but does include Integrative Process credit (2 points)			
Location and Transportation	2. Location + Neighborhood Fabric	1	15	1	15
Sustainable Sites	3. Site Improvements	2	7	2	7
Water Efficiency	4. Water Conservation	1	12	1	12
Energy and Atmosphere	5. Energy Efficiency	4	38	3	37
Materials and Resources	6. Materials	2	10	2	9
Indoor Environmental	7. Healthy Living Environment	7	16	7	18
	8. Operations, Maintenance + Resident Engagement	LEED does not feature an Operations, Maintenance and Resident Engagement category, but does include several credits that address these topics.			
Innovation	n/a	1	6	1	6
Regional Priority	n/a	n/a	4	n/a	4

* Rehabilitation projects must be of a significant scope to meet the requirements.

POINT STRUCTURE: LEED v4

LEED v4 BD+C: Homes and MFMR include four levels of certification that a project may achieve through meeting the applicable prerequisites and optional credits for the project type. The certification tiers include "Certified" (40-49) points, "Silver" (50-59), "Gold" (60-79), and "Platinum" (80+ Points).

CERTIFICATION: LEED v4

To certify to the LEED v4 Homes Design and Construction system, project teams will:

- **Register:** Register the project in LEED Online
- Identify: Assemble the project team and assign roles for the submission.
- **Build:** Ensure the project is built to meet the stated goals and have the green measures verified by the Verification Team.
- Verify: The project verification team confirms all prerequisites and pursued credits
- **Review:** The Green Raters submits the appropriate documentation to the LEED for Homes Provider for review and then the GBCI review begins.
- **Certify:** Achieve certification and marketing support.

A Green Rater must be involved throughout the design and construction process of each LEED v4 certified home. At design, the Green Rater will be responsible for confirming all prerequisites and credits in the applicable LEED v4 BD+C: Homes or MFMR rating system have been incorporated into the plans. During construction, the Green Rater will perform onsite verification (including diagnostic testing) at key intervals. And prior to submission of the project to GBCI, the Green Rater will be responsible for confirming that all of the necessary credits have been met.

The Green Rater will conduct several inspections and provide performance testing for several credits including:

- Preliminary Ratings
- Mid-construction verification visit
- Final construction verification visit
- Supplemental Documentation

Verification fees will be negotiated between the Green Rater and the project team.

See more: http://www.usgbc.org/guide/homes

FEES: LEED v4

The certification fee depends upon the project rating system and size. Please consult the USGBC <u>Homes</u> <u>program fee page</u> for additional information.

SIMILARITIES AND DIFFERENCES WITH THE 2015 GREEN COMMUNITIES CRITERIA:

Similarities:

- Similar categories are covered by Enterprise Green Communities (2015 Criteria) and the LEED v4 BD+C Homes and MFMR pathways, although each program has mandatory requirements and optional points that do not overlap.
- A pre-construction green development plan is a component of both programs. In the 2015 Criteria this requirement is addressed in the mandatory Criteria 1.1a Goal Setting and 1.1b Criteria Documentation. In the LEED v4 BD+C Homes and MFMR pathways, a preliminary meeting to identify the goals of the project is documented in the optional credit: Integrative Process.
- The 2015 Criteria and LEED v4 BD+C Homes and MFMR pathways incorporate ENERGY STAR or ASHRAE 90.1-2010 performance targets to set requirements for the building energy performance standards.
- The 2015 Criteria and the LEED v4 BD+C Homes and MFMR pathways feature criterion/points that focus on improving indoor air quality and health by considering material selection and ventilation strategies.

Differences:

- The 2015 Criteria is designed with mandatory measures that address resident health (Criteria 1.2a Resident Health and Well-Being: Design for Health) and resiliency (Criteria 1.3a Resilient Communities: Design for Resilience).
- While new construction projects would follow similar combustion safety prerequisites in the 2015 Criteria and the LEED v4 BD+C Homes and MFHR pathways, the 2015 Criteria also contains allowances for Substantial and Moderate Rehab projects, including a measure that allows these projects to keep space or water heating that is not power-vented or direct vent so long as these pass a combustion safety test.
- LEED v4 BD+C Homes implements a Home Size Adjuster.
- LEED v4 BD+C Homes and MFHR require onsite verification by a Green Rater
- A project that meets the 2015 Criteria will most likely meet the "Silver" tier of LEED v4 BD+C Homes and MFMR. On the other hand, a LEED v4 BD+C Homes and MFMR may not meet all of the mandatory requirements of the 2015 Criteria.