

NGBS 2020 vs LEED v4 BD+C New Construction



OVERVIEW

Both the NGBS and LEED rating systems offer a framework for assessing the health, performance, and sustainability of new and renovated buildings. But there are differences in the two programs that builders and developers should examine in order to select the appropriate rating system for their project(s).

LEED for New Construction (LEED NC) Version 4 is intended for use by commercial office buildings, and can also be used for multifamily residential buildings. LEED NC addresses design and construction activities. The NGBS was designed to address all residential construction, including single-family homes, multifamily and mixed-use buildings, land developments, and remodeling projects. While commercial buildings and multifamily buildings may share construction types and methods, occupancy matters; the NGBS is uniquely suited for residential occupancy.

The NGBS is more than a design standard; it includes an expansive array of green building practices aimed at all phases of the development process – design; construction; verification; and building operations. The NGBS requires that a qualified, independent third-party inspect the project and verify that all green design or construction practices claimed by the builder toward green certification are incorporated correctly into the project.

Although functionally equivalent, NGBS is superior to LEED in terms of third-party verification. For a building to be NGBS Green Certified, all units must be verified on site by an accredited NGBS Green Verifier. The LEED program allows certification for a multifamily building to be issued after just 60% of units have been constructed and verified.

CATEGORIES OF GREEN PRACTICES

The NGBS and LEED have practices in five identical categories. LEED also includes categories for Innovation and Regional Priority, which are not called out as separate, stand-alone categories in the NGBS but rather integrated into and addressed in each of its six categories. The NGBS also includes a category for building Operation, Maintenance, and Building Owner Education; LEED has no comparable category.

LEED NC Version 4	2020 NGBS
<ul style="list-style-type: none"> • Integrative Process • Sustainable Sites • Location & Transportation • Water Efficiency • Energy & Atmosphere • Materials & Resources • Indoor Environmental Quality • Innovation* • Regional Priority 	<ul style="list-style-type: none"> • Lot Design, Preparation, and Development • Resource Efficiency • Energy Efficiency • Water Efficiency • Indoor Environmental Quality • Operations, Maintenance, and Homeowner Education

* Rather than a stand-alone “Innovation” category, each 2020 NGBS category includes an Innovative Practice section.

For more information on how NGBS Green compares to LEED and other green home certification programs, visit www.HomeInnovation.com/CompareNGBS

MANDATORY REQUIREMENTS

LEED NC Version 4	2020 NGBS
Sustainable Sites <ul style="list-style-type: none"> Develop and implement Construction Activity Pollution Plan 	Lot Design, Preparation, and Development <ul style="list-style-type: none"> No Mandatory practices
Water Efficiency <ul style="list-style-type: none"> Outdoor water use reduction (reduce the project's landscape water requirement by at least 30% from the calculated baseline) Indoor water use reduction (reduce aggregate water consumption by 20% from the baseline) Building-level water metering 	Water Efficiency <ul style="list-style-type: none"> Water Rating Index (WRI) score of 70, or 25 points from Chapter 8 (roughly equivalent to a 30% reduction in water use) A dedicated water meter for pools and spas
Energy & Atmosphere <ul style="list-style-type: none"> Fundamental commissioning and verification Minimum energy performance Building level energy metering Fundamental refrigerant management 	Energy Efficiency <ul style="list-style-type: none"> Minimum energy performance HVAC sizing and installation Duct air sealing and testing Insulation and air sealing Grade I insulation installation High-efficacy lighting
Materials & Resources <ul style="list-style-type: none"> Storage and collection of recyclables Develop and implement a construction and demolition waste management plan 	Resource Efficiency <ul style="list-style-type: none"> Install a capillary break and vapor retarder at concrete slabs and crawlspaces Install exterior drain tile for below grade spaces Dampproof walls required for walls below finished grade Insulation within cavities is dry when enclosed by drywall Flashing is provided to minimize water entry into wall or roof assemblies Finished grade is sloped to facilitate drainage away from the building
Indoor Environmental Quality <ul style="list-style-type: none"> Minimum indoor air quality performance Environmental tobacco smoke control 	Indoor Environmental Quality <ul style="list-style-type: none"> Whole-building ventilation for dwelling units when the maximum air infiltration rate is less than 5.0 ACH50 Local kitchen and bathroom exhaust combustion venting Garage pollutant protection Radon resistant construction
Nothing equivalent exists within the LEED rating system.	Operations, Maintenance, and Homeowner Education <ul style="list-style-type: none"> Building construction manual Operations manual Maintenance manual Training of building owners

ENERGY EFFICIENCY COMPARISON

At the minimum certification levels, the NGBS and LEED NC v4 are on par for energy efficiency. At the higher certification levels (Silver, Gold, Emerald/Platinum) the NGBS is more stringent than LEED regarding minimum required energy performance. LEED does not require higher energy performance for higher certification levels (Silver, Gold, Platinum), but the NGBS requires increasingly higher energy performance. View the energy efficiency comparison charts at www.HomeInnovation.com/CompareNGBS.

NGBS AND LEED EQUIVALENCY

The 2020 NGBS is clearly equivalent to LEED NC v4 when individual green categories are compared, and far more stringent than LEED NC regarding both the level of environmental performance and the comprehensiveness of green practices.