2021 IECC COMPLIANCE ALTERNATIVES



NGBS GREEN AS 2021 IECC ALTERNATIVE COMPLIANCE OPTION

The 2021 International Energy Conservation Code (IECC) provides an alternative compliance option for energy efficiency programs deemed equivalent. Alternative code compliance options are beneficial to local jurisdictions and builders alike, as they provide compliance flexibility without compromising energy performance. Compliance alternatives also ensure more thorough inspections and higher compliance at a reduced cost to the jurisdiction.

2021 IECC R102.1.1 Above code programs

The code official or other authority having jurisdiction shall be permitted to deem a national, state, or local energy-efficiency program to exceed the energy efficiency required by this code. Buildings approved in writing by such an energy-efficiency program shall be ... in compliance with this code where such buildings also meet the requirements identified in Table R405.2 and the building thermal envelope is greater than or equal to the levels of the efficiency and solar heat gain coefficients in Table 402.1.1 and 402.1.3 of the 2009 *International Energy Conservation Code*.

ICC 700-2020 AS AN IECC EQUIVALENT

The *ICC 700-2020 National Green Building Standard* (NGBS) is an ANSI-approved green building standard within the International Code Council's (ICC) suite of building codes. The NGBS's performance baseline is aligned with the International Residential Code (IRC), International Building Code (IBC), and the IECC. Builders seek **NGBS Green** certification to prove a building is compliant.

Research and analysis demonstrates that the 2020 NGBS at the Silver level for energy efficiency is equivalent to the 2021 IECC for residential buildings (see here) and for commercial (multifamily) buildings (see here).

The NGBS is far more comprehensive than merely an energy program, with six performance categories:

- Lot & Site Development
- Resource Efficiency
- Energy Efficiency

- Water Efficiency
- Indoor Environmental Quality
- Homeowner Education

The NGBS requires a building to comply with a mandatory baseline aligned with the I-codes, and, in addition, incorporate a minimum number of additional green practices for each performance category.

Buildings can earn four certification levels: Bronze, Silver, Gold, or Emerald. To earn higher certification levels, a building must earn <u>more points</u> in <u>every category</u>. That means that a Silver certified building is expected to perform at a higher level in every category than a Bronze certified building.

NGBS practices are written in ICC code language; so, code officials, builders, developers, architects, and contractors find the NGBS requirements familiar and easy to understand.

Buildings certified to the NGBS are more likely to be code compliant than buildings that do not. Why? First, NGBS Green certification requires that a qualified, independent third-party Verifier inspect the building and confirm NGBS practices are incorporated correctly. Most projects require at least two inspections. The Verifier inspects the building before drywall installation to observe completed wall cavities and again when construction is complete. On-site verification imbues an elevated level of rigor and quality assurance to certified buildings.

Second, at any time during certification, builders, architects, and contractors can avail themselves of Home Innovation's deep building science expertise. Technical assistance and interpretations are **free**, and we typically respond within one-business day.

NGBS GREEN CERTIFICATION OF CONFORMANCE

<u>Home Innovation Research Labs</u> serves as NGBS <u>Certification Agency</u>. Home Innovation is a nearly 60-year-old, internationally recognized, accredited product testing and certification laboratory located in Upper Marlboro, Maryland. Our work is focused on residential construction, and our mission is to improve the affordability, performance, and durability of housing. Our core competency is as an <u>independent</u>, <u>third-party product testing and certification lab</u>, making us uniquely suited to administer a green certification program.

NGBS Green is the leading certification for residentially used buildings in the U.S. and Caribbean. NGBS Green is recognized by federal agencies such as the <u>Department of Housing and Urban Development (HUD)</u>, the Army, the <u>Veterans Administration</u>, and the <u>Department of Agriculture</u>. NGBS Green is recognized for preferred financing or tax incentives by Fannie Mae, Freddie Mac, the Federal Housing Finance Agency (FHFA), and nearly thirty State Housing Finance Agencies.

MARYLAND DETERMINED NGBS IS 2021 IECC EQUIVALENT

In January 2023, the Maryland Department of Labor, which has jurisdiction over the State's building codes, formally deemed the NGBS as equivalent compliance for the 2021 IECC.

Prior to this decision, numerous jurisdictions in Maryland already required or recognized NGBS Green certification for code compliance and/or incentives, including the City of Baltimore, Montgomery County, Howard County, the City of Rockville, and the City of Annapolis.

BENEFITS OF THIRD-PARTY CODE COMPLIANCE

More cost-effective. The building code is complex and increasingly focused on attributes beyond life and safety issues making compliance determinations more time-consuming for code officials. Energy efficiency practices are difficult to verify without additional training. Time spent on energy efficiency compliance reduces the amount of time that code officials have available to spend on critical life, safety, and health compliance.

Greater compliance. While most code officials inspect buildings using a pass/fail system, NGBS Green Verifiers inspect buildings with a goal of remedying compliance issues. The Verifier works with the builder and contractors to get non-compliance issues fixed before it is too late. NGBS Green's on-site verification imbues a QA aspect that provides value to the local jurisdiction, the builder, and the building's future residents.

More than Energy Efficiency. NGBS Green certified buildings:

- Are energy efficient;
- Use less water;
- Provide improved indoor air quality;
- Have fewer environmental impacts because of site and land development considerations;
- Use fewer resources; and
- Have a training, operation, and maintenance plan to help ensure lasting building performance.

Recognizing NGBS Green as a code equivalent allows builders and developers to access a host of benefits that come with certification, such as preferred financing, recognition on the local multiple listing service, interest from investors looking for sustainable projects, FTC compliant green marketing, access to free technical and building science assistance, and higher appraisal valuations. This can be the "secret sauce" for a jurisdiction that wants higher performing buildings: adopt the 2021 IECC as code (the stick) but allow NGBS Green compliance as an equivalent (the carrot).