



National Ready Mixed Concrete Association Green Building Rating System Model Legislation

What is a green building?

"Green" or "sustainable" buildings use key resources like energy, water, materials, and land more efficiently than buildings that are just built to code. They also tend to create healthier work, learning, and living environments, with more natural light and better air quality, and typically contribute to improved employee and student health, comfort, and productivity.

NRMCA encourages states to adopt green building legislation.

The built environment plays a substantial role in environmental health, human welfare and the economic stability of the United States. Building operation accounts for 40% of U.S. energy use and the waste from construction debris makes up over 35% of all non-industrial waste. Building operations alone contribute over 38% of the U.S.'s carbon dioxide emissions and over 12% of its water consumption. The use of concrete in the built environment can aid in the reduction of energy consumption, carbon dioxide emissions and construction waste of buildings.

NRMCA believes there are multiple benefits to green building.

Lifecycle Savings – A 2003 study conducted for the California Sustainable Building Task Force shows that green building construction costs approximately 2% more compared to conventional buildings. The green building will yield lifecycle savings of more than ten times the initial investment, or 20% of total construction costs. [The Costs and Financial Benefits of Green Buildings: A Report to California's Sustainable Building Task Force. Principal author: Greg Kats of Capital E. 2003]

Productivity and Health – A green building should not only be aesthetically pleasing but should provide enhanced indoor air quality; and improve employee health, comfort and productivity. Studies have shown that worker productivity have increased from 1-10% when they are employed in a green building. Worker health has improved and employee absenteeism was cut by 40%. [The Costs and Financial Benefits of Green Buildings: A Report to California's Sustainable Building Task Force. Principal author: Greg Kats of Capital E. 2003]

Community Advancement– Community leaders can send a strong message about their commitment to their conserving natural resources by choosing to build green. For business owners, building green is a way of demonstrating social consciousness by minimizing pollutants and reducing demand on local energy and water infrastructures.

NRMCA encourages states and local jurisdictions to adopt minimum green building rating standards for private and public buildings.

Several green building ratings systems are currently available to the communities to aid in their sustainable development practices. These ratings systems include, but are not limited to, the Leadership in Environmental Energy Design (LEED), the Green Globes, and the Energy Star



green rating system. Concrete has been used successfully in each of these rating systems to achieve the overall goal of providing the community with a sustainable building. The green rating systems do not, however, specify concrete as the material of choice to achieve the sustainable goal nor do the organizations representing the systems provide information on the historic use of concrete in their certified buildings. Therefore, it is unclear if the adoption of the green building standards will increase the market share of concrete in the jurisdictions or states where the standards are adopted. However, the benefits of a sustainable built environment are clear for all persons of the community and will provide an enhanced lifestyle for future generations.

NRMCA believes that all green rating systems provide a benefit to the community.

The LEED rating system and International Green Construction Code are provided as examples in this model, however, comparable green standards may be used if they provide similar environmentally friendly attributes. It is not the intention of NRMCA to limit the use of green standards. If programs of similar rigor are available or developed over time, it is the intention to allow for their adoption with this model.

Incentivizing Green Building

In addition to the green building requirement of privately owned buildings, local jurisdictions should consider offering building owners a green building tax credit as additional incentive to build green. Tax credits could be made available to a taxpayer for either the construction of a covered building meeting the appropriate green code or rating system or the rehabilitation of a covered building, which is not a green building, into a green, certified building; or, for the construction or rehabilitation of a tenant space, which is not green tenant space, into green, certified tenant space.

Examples of tax credits offered in some jurisdictions are:

- Maryland enacted 5/26/04, HB 804 which allows the governing body of a county or municipal corporation to grant a property tax credit against county/municipal property tax imposed on a high performance building that meets or exceeds the LEED Silver rating requirements. See Maryland Statutes § 9-242.
- Massachusetts S 1733 establishes a green building income tax credit for buildings that are designed and operated in accordance with standards informed by the LEED rating system.
- New Jersey introduced in the 2003 and 2004 Legislatures, S 2502 / A 1356, and is perhaps the most innovative and comprehensive plan to address urban design and environment issues. Entitled the “Smart Growth Tax Credit Act,” this bill provides tax incentives for developers and owners who design and build residential and mixed-use developments, which meet specific “smart growth” and “green building” criteria. These criteria ensure that participating developments are appropriately located, resource-efficient, pedestrian-friendly, adequately serviced by mass transit, and built using materials and technologies that minimize environmental impacts and provide a healthier



built environment. To be a “green building,” buildings must comply with either LEED Green Building standards or specific green building standards set forth in the bill.

- Oregon, in 2001, enacted a law establishing a sustainable building tax credit. The Business Energy Tax Credit (BETC), Oregon Revised Statutes § 469, is offered to businesses that build sustainable commercial buildings in accordance with the LEED Green Building Rating System Silver rating.

About NRMCA

Founded in 1930, the National Ready Mixed Concrete Association is the leading industry advocate. Our mission is to provide exceptional value for our members by responsibly representing and serving the entire ready mixed concrete through leadership, promotion, education, and partnering to ensure ready mixed concrete is the building material of choice.

A model green building adoption Act is attached. This model could be used by NRMCA Affiliates, NRMCA members, or others interested in supporting sustainable green buildings. For additional information on concrete’s role in sustainability visit www.nrmca.org or contact John Loyer, Sr. Dir. of State and Local Gov’t. Affairs at (703) 675-7603 or jloyer@nrmca.org.



SECTION 3. DEFINITIONS

- A. General: In this chapter, the following terms have the meanings indicated.
- B. Building: Any covered building or which the city or jurisdiction finances at least 25% of the cost of construction for a newly constructed building or the cost of modification for a building that is extensively modified.
- C. Covered Building: A newly constructed or extensively modified non-residential or multifamily residential building that has or will have at least 10,000 square feet of gross floor area.
- D. Extensively Modified: A structural modification that alters more than 50% of a building's gross floor area as indicated on the application for a building permit.
 - 1. Extensively modified does not include any modification that is limited to one or more of the following building systems –
 - Mechanical
 - Electrical
 - Plumbing
 - HVAC
 - Fire Protection
- E. US Green Building Council: An organization that has developed and published the LEED rating system to measure the energy and environmental performance of a building.
- F. LEED: The Leadership in Energy and Environmental Design rating system developed by the US Green Building Council.
- G. Green Globes: Green building rating system operated by the Green Building Initiative (GBI)
- H. Living Building Challenge: Green building standard operated by the International Living Building Institute
- I. Multi-family residential building: Any multi-family residential or mixed used building that is taller than three (3) stories or has more than five units.
- J. Newly Constructed: New stand-alone building or an addition to an existing building.
- K. Non-residential Building: Building not used as a dwelling

Section 4. APPLICABILITY

- A. Required Elements.
 - 1. Every State/City/Jurisdiction Building Must Achieve:
 - A Silver level rating in the appropriate LEED rating system, as certified by the US Green Building Council;
 - Minimum requirements of the 2012 International Green Construction Code as verified by the building official; or
 - Energy and environmental design standards that the building official identifies as equivalent to a silver-level rating in the appropriate LEED rating system, a qualified person approved by the building official.
 - 2. Every other Covered Building must achieve:
 - A certified level rating in the appropriate LEED rating system, as certified by the US Green Building Council;



- Minimum requirements of the 2012 International Green Construction Code as verified by the building official; or
- Energy and environmental design standards that the building official identifies as equivalent to a certified-level rating in the appropriate LEED rating system, or a qualified person approved by the building official.

3. EXCEPTIONS.

- A. For any building for which all applications for all necessary building permits were filed before INSERT DATE, any later addition to that building need only meet the requirements of section 4.A.2 or if the addition would:
1. Increase the building's land coverage by 100% or more, and
 2. Increase the building's gross floor area by at least 10,000 sq. ft.

4. AND BE IT FURTHER ORDAINED.

- A. All Acts or parts of Acts inconsistent herewith are hereby repealed to the extent of such inconsistency.
- B. If any portion of this Act shall be determined to be invalid; such determination shall not affect the validity of the remaining portions of said Act.
- C. This Act shall take effect one year from the day it is enacted.