

1. OVERVIEW OF THE BALTIMORE CITY GREEN BUILDING STANDARDS

1.A. Introduction

The Baltimore City Green Building Standards (the *Standards* or BCGBS) are the regulations and process by which the City will ensure the design and construction of green buildings for public and private development in Baltimore. The *Standards* are based on the US Green Building Council LEED® v3.0 (2009) Leadership in Energy and Environmental Design rating program, which has been adapted and customized to fit the development conditions, local market and sustainability goals of the City. Project Teams submitting for building permits after July 1, 2009 will be required to document that they could achieve a LEED® v3.0 Silver rating. As the Baltimore Standards comes on line, after July 1, 2009, scorecards and checklists will be made available as per the decision of the Building Official. Projects do not need to secure an actual LEED® certification to comply with the *Standards*.

The *Standards* are designed to work with the regular permit review and construction inspection process conducted by the Baltimore City Department of Housing and Community Development (HCD) Permit and Code Enforcement. Project Teams will be required to have a LEED® Accredited Professional on their team and to designate a Commissioning Agent prior to submitting the permit application. Projects may opt to achieve an actual LEED® certification, which will take more time than meeting the requirements of the *Standards*. Project Teams should be able to use their documentation material required to verify compliance with the *Standards* for LEED® submittals, and/or their LEED documentation can be applied to the *Standards*.

There are a total of 150 points available in the Baltimore City Green Building Standards and approximately 8 Required Credits, depending on the building type selected. Approximately 87-90 credits are spread throughout six standard credit categories, similar to those found in LEED®. Project Teams will be required to earn a Baltimore City 2-Green Star rating, which equals a minimum of 65 credit points and all Required Credits in order to meet the criteria of the *Standards*. This is equivalent to a LEED® 2009 v3.0 Silver Rating in each of the various LEED® rating programs.

The *Standards* rating applicable to Commercial Interiors and LEED® CI ratings will be available in early 2010. In the interim, projects qualifying for this rating program will be handled and reviewed on a case-by-case basis, as by the Building Official or their designated agent.

Baltimore City Green Building Standards are different from both the LEED® process and other jurisdictions in that verification of Construction Phase credit installation will be observed and approved by the Construction Code Enforcement inspectors prior to issuing a Certificate of Occupancy. When projects are complete and have proven to the satisfaction of the City that they have met the requirements of the *Standards* then the City will issue a Baltimore Green Building Rating with a certificate or plaque.

Table I.1 The *Standards* Green Star Rating System

Rating	Green Stars	Total BCGBS Points (Plus Required Credits)	LEED® Comparable Rating	LEED® Points
1 Green Star	★	55-64	Certified	40-49
2 Green Star	★★	65-84	Silver	50-59
3 Green Star	★★★	85-104	Gold	60-69
4 Green Star	★★★★	105-114	Platinum	70-110
5 Green Star	★★★★★	115+		
Total BCGBS Possible Points		150	Total LEED® Possible Points	110

1.B. Organization of the *Standards*

The *Standards* are organized into 3 volumes. Volume 1: Regulations Manual contains 3 sections that give an overview and description of the *Standards*. It is intended to be used by the City, the general public, permit Applicants and Project Teams. Volume 1 primarily focuses on guiding the Applicant through the *Standards* process.

- Volume 1- Regulation Manual
 - § Section I: Overview to the *Standards* – includes legal background, alternate compliance strategies, waivers, general description of the process of using the *Standards*.
 - § Section II: Applicants’ step-by-step guide to successfully completing the *Standards*
 - § Section III: sample documents including samples of the Applicant Checklist and supporting documentation form required of Project Teams.
- Volume 2 – *Standards* Reference Materials: For City Use Only, primarily for use by reviewers, inspectors describing processes and references for compliance
- Volume 3 – Implementation Manual: For City Use Only, Training, staffing and educational materials

1.C. Primary Goal

The primary goal of the Baltimore City Green Building Standards is to promote the design and construction of verifiable green building projects in Baltimore City. Green buildings and projects can add to the quality of life in Baltimore, reduce our collective energy and water use and lower our impact on the natural environment. Green building is also an important economic development tool that will promote

high quality development and will attract people who want to live, work and play in a vibrant, cleaner, greener and revitalized urban center.

Not only do green developments reduce energy consumption, lower Green House Gas (GHG) emissions and restore valuable water supplies, they also make our city healthier and foster the restoration of local and regional ecosystems.

Standard construction practices in the United States create buildings that use 40% of our national primary energy use, 13.6% of water consumption and contribute 39% to our national CO₂ emissions (USGBC website). Green buildings reduce all of these measures in often significant ways, allowing for greater investment value, lower operating costs and more productive, healthier workplaces and learning spaces. In addition, generally better quality, environmentally friendly outdoor space is created with significantly improved tree canopies, landscaping and improved water quality especially for the Baltimore Harbor, watersheds, parks and the Chesapeake Bay.

ADAPTION OF LEED® CREDITS FOR THE STANDARDS

HCD protects the health, safety and welfare of the City's population through its regulations of the building process. For the *Standards*, LEED® has been adapted to allow HCD to continue its working agreement with the City. All of the LEED® Credits and Pre-requisites for each rating program are included as written by the USGBC; however, eight LEED® Credits have been moved to "automatic" status because construction is occurring within the city limits. Automatic credits will require no documentation or verification. They will not be subject to Plans Examining review or Inspection.

The *Standards* awards additional points to certain credits to promote the Sustainability Goals of the City. A set of 9 "Pledge Point" credits are included to promote long term sustainable operations and maintenance procedures by building owners. Approximately 14 credit points or about 20% of the minimum points needed to achieve the Standards 2-Green Star rating are Automatic Credits and no documentation is required from project teams for these credits. These credits are automatically awarded on the Applicants Scorecard and are known from the start of the project.

For projects that cannot meet the *Standards* there are Alternate Compliance Points that serve as "Fee-In-Lieu-Of" payments and there is a limited waiver process allowed in the *Standards*.

In order to customize the LEED® credits for Baltimore City and tailor specific credit categories to the Sustainability Goals of the city, the Baltimore City Green Building Standards will have more points allotted than the LEED rating for a 150 point total. One to five Green Stars will signify the level of compliance with the following point totals:

- 1 Green Star = 55-64 points. Comparable to a LEED® Certified Level
- 2 Green Star = 65-84 points. Comparable to a LEED® Silver Level
- 3 Green Star = 85-104 points. Comparable to a LEED® Gold Level
- 4 Green Star = 105-114 points. Comparable to a LEED® Platinum Level
- 5 Green Star = 115+ points. No comparable LEED® Level