Overview of the Baltimore City Green Building Standards

Why the Standards? - Achieving Sustainability and Economic Goals for the City

The main goal of the **Baltimore City Green Building Standards** (the *Standards*) is to promote the design and construction of verifiable green building projects in Baltimore City while meeting the requirements of the Green Building Ordinance passed in 2007. Baltimore City is fast becoming a center of green activity in the mid-Atlantic region, through the Baltimore Sustainability Plan, the *Standards*, multiple watershed restoration projects and the creation of effective and sustainable urban revitalization. The Standards should be considered an economic development tool that will promote value-added and healthier buildings, residences schools and workplaces.

Standards projects will:
♦ Reduce energy use and GHG emissions,
♦ Protect our water resources and watersheds and help to restore the Inner Harbor and Chesapeake Bay
♦ Provide a more efficient review process with credits designed for Baltimore.
♦ Attract people, developers and jobs to a greener, cleaner and vibrant City

What are the Green Building Standards?

The **Baltimore City Green Building Standards** 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. This rating system has been adapted and customized to fit the development conditions, local market and sustainability goals of Baltimore, MD. 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.

The *Standards* were approved on September 17, 2010 and are now in full effect in the city. Forms for the *Standards* Verification Package and the Applicants *Standards* Scorecard are available on line on the HCD website.

Go to: http://www.baltimorehousing.org/permit_bcgbs for registration, online access and free downloadable documents

Projects do not need to secure an actual LEED® certification to comply with the *Standards*. Project Teams will need to earn a Baltimore *Standards* 2-Green Star rating of 65 points (out of 150 total points) and meet 8 to 10 required credits. The City's certification is equivalent to a LEED Silver rating.

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 are strongly encouraged to have a LEED® Accredited Professional on their team and will be required 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 may chose to use either documentation for either the Standards or for a LEED project interchangeably to verify compliance with the *Standards*.

Table 1.1 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

How do Project Teams use the Standards ?

The *Standards* are designed to work on the same model as a LEED rated project. Project Teams will fill out an initial Scorecard, select the credits to be considered in the design and construction of the project. Then submit documentation, drawing references, an energy model and perform commissioning activities as in LEED projects. All documentation will be submitted in a *Standards* Verification Package (SVP), when the project is submitted for Building Permit. Plans Examining reviews the *Standards* application and if acceptable, issues the permit.

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 a project is complete and the City is satisfied that the Standards requirements have been met, then the City will issue a Baltimore Green Building Rating with a certificate or plaque.

Credit & Point Structure

♦ 150 points total in all *Standards* programs: NB/MH, EDU, SD and TFO
♦ 6 Credit Categories—the same as LEED divisions—approximately 70% of all credits are identical to LEED requirements and reference the LEED programs.
♦ 8—10 Required Credits—the same as LEED Pre-requisites, must be done in order to be certified;
♦ 14 "Automatic" credits— Freebies due to building in Baltimore City and require no documentation
♦ 8 "Pledge" credits—based on future green operations developed specifically for Baltimore or reference the EBOM LEED Credits for green operations of facilities.
♦ This is equivalent to a LEED® 2009 v3.0 Silver Rating in each of the four selected LEED® rating programs.

About Team TerraLogos

TerraLogos: eco architecture as the prime consultant, coordinated a large consulting team to develop the new Baltimore City Green Building Standards in 2009 (*Standards*). Working for the Baltimore City Department of Housing and Community Development (HCD), Team TerraLogos included: CCJM Engineers, Chicago IL; ATI Architects, Columbia MD; the Ecological Studio of the RBA Group, Columbia, MD; (*www.rbagroup.com*) and ImpactHR with Thomas Point Consultants of Annapolis, MD. Working closely with the Permit Review and Construction Code Enforcement divisions of HCD and the Baltimore City Office of Sustainability located in the Dept. of Planning, we developed a strategy and program for meeting the requirements of the city's 2007 Green Building Ordinance.

If you would like more information on the *Standards*, how Team TerraLogos can assist your community in generating similar guidelines or develop tailored regulations that can help your community move in a sustainable direction, please contact **Kim Schaefer** at kims@terralogos.com; **410-276-8519**.

Sample first page of the Applicants Scorecard

To be used throughout the design and construction phase of the project.

Baltimore City Green Building Standards		BCGBS NEW BUILDING / MAJOR REHAB				Final 11.9.2009
APPLICANTS PRELIMINARY SCORECARD		LEED® NEW CONSTRUCTION				
Name of Project:			BCGBS Anticipated rating:			
Address:			Date:			

Baltimore City GBS Credits		STDS PTS	PT Actual	LEED 2009 Reference Credit		PTS Avail	YES	COMMENTARY
Site Related Credits				**Sustainable Sites**				
S.R1	Chesapeake Bay Construction Protection	R	R	NC SSp1	Construction Activity Pollution Prevention	R	R	For BCGBS: this is an automatic credit, no documentation required.
S.1	City Fabric - Site Selection	1	1	NC SSc1	Site Selection	1		For BCGBS: this is an automatic credit, no documentation required.
S.2	City Fabric - Density	5	5	NC SSc2	Development Density & Community Connectivity	5		For BCGBS: this is an automatic credit, no documentation required.
S.3.1	City Fabric -Redevelop on a Brownfield Site	2		NC SSc3	Brownfield Redevelopment	1		
S.3.2	City Fabric - Remediate Brownfield Site	1		NA	No Comparable LEED Credit			
S.4	City Fabric - Public Transit	6	6	NC SSc 4.1	Alternative Transportation- Public Transportation Access	6		For BCGBS: this is an automatic credit, no documentation required.
S.5.1	Smart Transportation-Encourage Bicycle Use	1		NC SSc 4.2	Alternative Transportation- Bicycle Storage and Changing Rooms	1		
S.5.2	Smart Transportation - Additional Bike Racks	1		NC SSc 4.2	Enhanced LEED credit for BC			10% of building population
S.6.1	Smart Transportation - LEFEV Parking	1		NC SSc4.3 OPT 1	Alternative Transportation- Low Emitting and Fuel- Efficient Vehicles	3		In LEED 3 points are awarded for complying with any option. In BCGBS 1 point is awarded *per option*. S.6.1 = Encourage LEFEVs - 5% preferred parking space.
S.6.2	Smart Transportation - Provide LEFEV fleet vehicles	1		NC SSc4.3 OPT 3	Alternative Transportation- Low Emitting and Fuel- Efficient Vehicles			Provide LEFEVs for 3% of bldg occupants, **and p**referred parking for LEFEVs
S.6.3	Smart Transportation - LEFEV Vehicle Sharing	1		NC SSc4.3 OPT 4	Alternative Transportation- Low Emitting and Fuel- Efficient Vehicles			Encourage LEFEVs - Provide vehicle sharing program
S.7	Smart Transportation - Minimize Parking	2		NC SSc4.4	Alternative Transportation- Parking Capacity	2		
S.8	Site Development- Protect Natural Habitat	1		NC SSc5.1	Site Development- Protect or Restore Habitat	1		
S.9.1	City Fabric - Maximize Open Space	1		NC SSc5.2	Site Development- Maximize Open Space	1		
S.9.2	City Fabric - Open Space Public Access	1		NA	No Comparable LEED Cr			Extra point if PT earns S.9.1 and the project open space is open to the public.