High Performance Green Building ProgramMaryland Green Building Council

Revised and Updated March 2024



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Wes Moore Governor

Aruna Miller Lt Governor



Atif Chaudhry Secretary

Nelson E. Reichart Deputy Secretary

22 March 2024

Mr. Atif Chaudhry, J.D. MBA, Secretary Maryland Department of General Services 301 West Preston Street, Room 1401 Baltimore, Maryland 21201

Ms. Helene T. Grady, Secretary Maryland Department of Budget and Management 45 Calvert Street Annapolis, Maryland 21401

Re: Approval of the Maryland High Performance Green Building Program (2024)

Dear Secretaries Chaudhry and Grady:

The revised and updated *Maryland High Performance Green Building Program (2024)* (HPGBP) incorporates input from the Maryland Green Building Council members, Department of General Services staff and the Maryland Attorney General. This version incorporates requirements of the Department of Labor-adopted version of the *International Green Building Code 2021* (IgCC). Sustainability standards required by House Bill 6, 2023 (Chapter 581) have been added.

No statutory or regulatory changes have been made to this version of the HPGBP. It has been revised and updated for clarity and ease of use, typographic corrections, and references to current, applicable sustainability codes, programs and standards.

At its July 2023 meeting, the Maryland Green Building Council voted unanimously to adopt the version now presented for your approval as required by Maryland State Finance and Procurement Code Ann. § 3-602.1.

Thank you for your consideration.

Stuart Kaplow
Stuart Kaplow, Esquire, Acting Chair
Maryland Green Building Council

Approved and Dated

Atif Chaudhry, J.D., MBA, Secretary Maryland Department of General Services

3/26/2024

Date

Helene T. Grady, Secretary

Maryland Department of Budget and Management

Date

cc: Ellen Robertson, Legislative Liaison, DGS Courtney League, Assistant Secretary, DGS Steve Lauria, Chief of Design, DGS



Maryland Green Building Council Contact

For submission of compliance forms and annual reporting by agencies, please contact the Maryland Green Building Council at the information listed here.

For answers to questions relating to this (Maryland) HPGBP, refer to the Maryland Green Building Council's website at http://www.dgs.maryland.gov/Energy/GreenBuilding/index.html and/or contact the council at

Maryland Green Building Council
Attn: Steve Lauria, Architect, Landscape Architect, LEED AP
Chief of Design
Design, Construction & Energy
Maryland Department of General Services
301 West Preston Street
Baltimore, Maryland 21201
Steve.Lauria@maryland.gov
(443) 204 3543 (M)
(667) 425 9830 (M)

Maryland Interagency Commission on School Construction Contact

For answers to questions relating to public schools, refer to the Maryland Interagency Commission on School Construction's (IAC's) website at www.mdschoolconstruction.org and/or contact the IAC at iac.pscp@maryland.gov.

Summary

State of Maryland laws require use of green building technologies when constructing or renovating State of Maryland-owned buildings that meet specific criteria. In response to the laws, the Maryland Green Building Council (Council) established the High-Performance Green Building Program (HPGBP) to guide Maryland state agencies and local educational agencies (LEAs) in programing, design, and construction of facilities.

Requirements of the HPGBP apply to facility design, and construction of projects funded solely with State of Maryland funds, state-funded new and replacement school-construction and community-college projects that are funded in part with state funds. The HPGBP requires the use of one of the three approved green building rating programs or codes in the design, construction, and operation of facilities:

- 1. Leadership in Energy and Environmental Design (LEED), a program of the U.S. Green Building Council; or
- 2. International Green Construction Code (IgCC), one of the codes of the International Code Council;
- 3. The Green Globes protocol of the Green Building Initiative (GBI).

Maryland Local Education Agencies (LEAs) must follow the HPGBP but are exempt from certification requirements. The HPGBP is intended to be used in conjunction with other State of Maryland and federal statutes, codes, standards and policies. The HPGBP is periodically updated by the Maryland Green Building Council. The current edition has been revised to address the current versions of referenced programs and codes, and to clarify the process for waivers from the HPGBP and its specific requirements.

The HPGBP is intended to be consistent with and to implement the Governor's Executive Order 01.01.2023.06 "Leading By Example In State Government" dated 17 May 2023. The order includes requirements by Fiscal Year 2031 to reduce energy consumption in state owned buildings by twenty percent (20%) compared to a Fiscal Year 2018 baseline; and, to ensure that all new buildings subject to this HPGBP align with the State's goal of achieving net zero greenhouse gas emissions by 2045.

¹ Md. Code Ann., State Fin. & Proc. (SFP) §3-602.1 (2015).

High Performance Green Building Program

Chapter 1 Scope and Administration

Section 101 General

101.1 Title.

This program shall be known as the Maryland High Performance Green Building Program (HPGBP).

101.2 Scope

The provisions of this HPGBP apply to:

- A. New building and major renovation² projects that are funded solely with state funds and are of 7,500-gross square feet or larger or are community college projects that receive any State funds and are of 7,500-gross square feet or larger;³
- B. New and major renovations of pre-kindergarten through 12th grade (PK-12) public schools for which the Request for Proposal (RFP) for architecture and engineering (A/E) design services is issued after July 1, 2009 and is partly funded by state funds;⁴ and
- C. Any construction implemented by another instrumentality, public or private, that may be subject to the HPGBP pursuant to other Maryland statutes or regulations.⁵

To the extent practicable, the State shall employ green building technologies when constructing or renovating a State building not subject to this section.⁶

101.2.1 Exceptions

The HPGBP does not apply to the following facility and project types:

- A. Unoccupied buildings including warehouse and storage facilities; garages; maintenance facilities; transmitter buildings; pumping stations; and other similar types of buildings, as determined by the Maryland Department of Budget and Management; and
- B. Facilities as described in Chapter 3 of the *International Building Code* (IBC):
 - 1. High-hazard Group: H
 - 2. Storage Group: S
 - 3. Utility And Miscellaneous Group: U

Section 102 Applicability

102.1 General

Where there is a conflict between a general requirement of the HPGBP and a specific requirement, the specific requirement shall apply.

² Pursuant to 2021 International Existing Building Code (IEBC), SECTION 604 ALTERATION—LEVEL 3

³ Md. Code Ann., State Finance and Procurement Article §3-602.1.

⁴ Md. Code Ann., Education Article § 5–312.

⁵ For the purposes of the Maryland Historic Revitalization Tax Credit program, a High-Performance Building shall include a project that meets or exceeds 3-Green Globes in the current version of the Green Building Initiatives' Green Globes Certification program (i.e., as "comparable to LEED Gold). See Md. Code Ann., SFP Art. § 5A–303 (a)(9).

⁶ Md. Code Ann., SFP Art. §3-602.1(b).

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102.2 Supersedes previous versions of the HPGBP.

This HPGBP version supersedes prior versions of *High Performance Green Building Program* and its appendices, the Council's Guidance for New Public-School Buildings to Achieve High-Performance Buildings (October 23, 2019), and other previous HPGBP documents.

102.3 Other laws, regulations, and codes.

The provisions of the HPGBP shall not be deemed to nullify provisions of federal, state, or local laws, regulations, or codes. Projects shall comply with applicable federal laws, federal regulations, state laws, state regulations, Maryland Performance Codes, Maryland Building Performance Standards⁷ and codes and ordinances of local authorities having jurisdiction for building design, construction and operation. The HPGBP is to be used in conjunction with other federal and State of Maryland statutes, codes, standards, rules, and policies. The Council intends to periodically update this HPGBP to reflect changes to related or referenced statutes, regulations, programs, policies, and codes.

Section 103 Administration

103.1 Administration of the HPGBP.

The Council⁸ has primary responsibility for administration of the HPGBP.⁹ The Council is composed of gubernatorial appointees and the secretaries of key state agencies or their designees. The Council resides within the Maryland Department of General Services (DGS), which provides staff support. DGS, the Maryland Department of Budget and Management (DBM), and the Maryland Department of Transportation (MDOT) each have a role in the HPGBP and joint authority to approve waivers for an entire project in accordance with other sections of this HPGBP.¹⁰

103.2 Relationship of the HPGBP to other State and Local Programs and Authorities.

Entities and jurisdictions other than those specifically referenced herein may rely on the HPGBP for the purpose of activities such as granting tax credits, zoning allowances, reduced fees, and expedited permitting. However, the Council's authority does not extend to taking positions or arbitrating disputes on matters outside the specific provisions of this HPGBP.

⁷ Maryland Department of Labor, Maryland Building Codes - Building Codes Administration: Web https://www.dllr.state.md.us/labor/build/buildcodes.shtml

⁸ Md. Code Ann., SFP Art. § 4-809.

⁹ See Md. Code Ann., SFP Art. § 3-602.1.

¹⁰ Md. Code Ann., SFP Art. § 3-602.1(e).

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Chapter 2 Definitions

Section 201 General

201.1 Scope.

Unless otherwise expressly provided, the following words and terms shall for the purposes of this HPGBP, have meanings as set forth in this chapter. Where terms are not defined through the methods authorized by this section, such terms shall have ordinarily accepted meanings such as the context implies.

201.2 Definitions.

Designer of Record (DOR)/Architect Engineer (AE). The designer or architect or engineer of record means the architect or engineer and registered and licensed by the Maryland Department of Labor to practice in Maryland with primary responsibility for design documentation of the project and that serves as the final signatory on the plans and specifications for the design.

Elementary and secondary education. Education and programs of education from and including preschool through the end of high school and their equivalent.

High-performance building. A building that:

- 1. Meets or exceeds the current version of the United States Green Building Council's LEED Green Building Rating System Silver rating.
- 2. Achieves at least a comparable numeric rating according to a nationally recognized, accepted, and appropriate numeric sustainable development rating system, guideline, or standard approved by the Secretaries of Budget and Management and General Services.
- 3. Complies with a nationally recognized and accepted green building code, guideline, or standard reviewed and recommended by the Maryland Green Building Council and approved by the Secretaries of DBM and DGS;¹¹ or
- 4. Is designed and constructed to meet or exceed the then requirements for certification under the U. S. Green Building Council's LEED Zero Energy program or a LEED Zero Carbon program or a similar net-zero program in accordance with standards or guidelines recommended by this Council, irrespective of the other requirements of this HPGBP.

Independent Third Party. An independent organization or entity that is not the owner or a member of the architectural/engineering design or builder team for the subject facility design or construction and is a consultant to the owner. The independent third party shall have a minimum of five (5) years of demonstrable experience in certification of high-performance facilities utilizing a scientifically based, transparent, objective and progressive system that is commonly recognized in the US design and construction industry.

Local education agency (LEA). A public school system led by a county board of education established pursuant to Maryland Code Annotated, Education § 3–103.

¹¹ Md. Code Ann., SFP § 3–602.1(a)(2).

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Major renovation. A project in which the building shell is to be reused for the new construction, the heating, ventilating and air conditioning (HVAC), electrical, and plumbing systems are to be replaced, and the scope of the renovation is 7,500 square feet or greater.¹²

Public schools. The schools in the public elementary and secondary education system of the State of Maryland.¹³

State funds. Any funds authorized via State of Maryland legislative action, including but not limited to: General Obligation Bonds and including Maryland Consolidated Capital Bond Loan (MCCBL); Academic Revenue Bonds (AFBA); General Funds (GF); institutional operating funds; and grants from State entities.

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¹² Md. Code Ann., SFP § 3–602.1(a)(3).

¹³ Md. Code Ann., Educ. § 1–101(k).

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Chapter 3 Requirements

Section 301 General Requirements

The HPGBP is intended to be consistent with and to implement the Governor's Executive Order 01.01.2023.06 "Leading By Example In State Government" dated 17 May 2023. The order includes requirements by Fiscal Year 2031 to reduce energy consumption in state owned buildings by twenty percent (20%) compared to a Fiscal Year 2018 baseline; and, to ensure that all new buildings subject to this HPGBP align with the State's goal of achieving net zero greenhouse gas emissions by 2045.

301.1 Applicable Rating Systems and Codes.

Projects to which the HPGBP applies shall <u>comply with</u> the requirements of one of the following rating systems or codes in the version most recently adopted by the State <u>of Maryland Department of Labor</u>:

- A. U.S. Green Building Council (USGBC) LEED a minimum of LEED Silver in the appropriate rating system (i.e. LEED BD+C, LEED for Schools, etc.). Projects shall strive to achieve a LEED Gold rating or higher.
- B. **Green Building Initiative, Inc., Green Globes (GG)** a minimum rating of two Green Globes in the appropriate rating system. Projects shall strive to achieve three Green Globes or better.
- C. International Code Council, Inc., International Green Construction Code (IgCC) the current State of Maryland Green Building Council-adopted version of the IgCC as amended by the appendix to this document (see Section 303). However, if the locality where the building is or to be located has adopted a version of IgCC that is the same or is a more recent edition than that adopted by the Maryland Green Building Council, compliance by the project with the version adopted by the locality shall satisfy this requirement.
- 301.1.1 For pre-kindergarten through twelfth grade (PK-12) school construction projects

Only LEAs may obtain independent third-party verification of compliance with one of the above-referenced rating systems or code without obtaining certification by the certification-granting organization.

301.2 Additional Requirements.

In addition to complying with one of the rating systems or code, all projects shall meet the requirements listed in the following sections within this chapter.

Section 302 Specific Requirements

302.1 Energy Use and Efficiency.

302.1.1 Energy code performance-based designs shall demonstrate through modeling that the building's energy meets the requirements of the current Maryland <u>Department of Labor</u>-adopted version of the *International Energy Conservation Code* (IECC) or the equivalent ANSI/ASHRAE/IESNA 90.1.¹⁴

¹⁴ Per COMAR 09.12.50 and COMAR 09.12.51

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302.1.2 Energy code prescriptive-based designs shall be designed and constructed to comply with the current State of Maryland-adopted version of the *International Energy Conservation Code* or the equivalent ANSI/ASHRAE/IESNA 90.1, in which case, unless necessary for certification or compliance, no energy modeling will be required.

302.2 Limitations on Exterior Nighttime Illumination.

State-owned or leased buildings shall comply with the restrictions stated in Maryland Annotated Code, State Finance and Procurement Article § 14-412 restricting uplight on the grounds and exterior of such buildings and providing for a separate waiver process.

302.3 Options for Financing Energy Efficiency.

During design, the project design team shall analyze and document utility service incentives, grants, and other energy-efficiency or renewable-energy financing opportunities available for the project. A summary and analysis of options and project-associated values shall be reported to the project's owner. The designer of record (DOR) or architect/engineer of record (AE) shall implement programs appropriate to the project at the owner's direction.

302.4 Additional Requirements.

To the extent practicable as deemed by the owner, projects shall:

- A. Be designed and constructed to provide operations data in sufficient measure to properly maintain and operate the building at peak efficiency. For guidance, refer to LEED BD+C EA Credit Enhanced Commissioning, Path 2 Enhanced and Monitoring-Based Commissioning.
- B. Perform building envelope commissioning during design and construction. For guidance, refer to LEED BD+C EA Credit Enhance Commissioning Option 2: Building Envelope Commissioning.
- C. Be designed and constructed to reduce the building's embodied carbon. For guidance, refer to LEED BD+C MR Credit Building Life-Cycle Impact Reduction.
- D. Be designed and constructed to provide for healthy indoor air quality for all occupants. For guidance, refer to relevant features of the Well Building Standard such as Feature 03 Ventilation Effectiveness, Feature 04 VOC Reduction, Feature 05 Air Filtration, Feature 07 Construction Pollution Management, and Feature 25 Toxic Material Reduction.
- E. Be designed and constructed to reduce bird injury and mortality from in-flight collisions with buildings, including complying with the "building façade and site structures" and "exterior lighting" requirements, with lighting reductions expressly taking safety into account. For guidance, refer to the current version of LEED BD+C: NC v4 v4.1 <u>Innovation catalog</u> Bird Collision Deterrence credit.
- F. Be designed and constructed to be electric-vehicle ready for ten (10) percent of all non-pre-kindergarten through twelfth grade project off-street parking spaces or at least 6 spaces, whichever is greater. For guidance, refer to the current version of LEED BD+C: NC v4.1 Electric Vehicle credit.
- G. Be designed and constructed to include or accommodate a rooftop solar voltaic system or constructed to optimize the installation of a rooftop solar voltaic system after the building has been constructed. For guidance, refer to Appendix CA Solar-ready Zone - Commercial of the 2018 IECC.
- H. Be designed and constructed with no goods produced from forced labor in supply chains. The project seeks to address human rights, protecting against social justice abuses (the "S" in ESG) at every stage, from extraction of raw materials to building erection. For guidance, refer to the current version of LEED BD+C: IPpc 144 Social Equity within the Supply Chain credit.
- I. Comply with the Maryland DGS Green Purchasing Guidelines for preferential purchasing.

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J. Be designed and constructed consistent with Education Article 5-327 which requires schools to include disposal infrastructure for segregating food waste (i.e., a place for the disposal of food scraps) such that it can be removed to an organics recycling operation to accomplish composting of food waste from all state funded building.

302.5 Prohibited Compliance.

302.5.1 LEED Certified Wood Credits.

Pursuant to Md. Code Ann., Tax-Property Art. § 9–242(a)(2), credit may be awarded for the use of wood-based materials derived from all credible sources, including the Sustainable Forestry Initiative Program, the Canadian Standards Association, the American Tree Farm System, and other credible certified sources programs.

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Section 303 International Green Construction Code (IgCC)

303.1 Adopted Version.

The *International Green Construction Code (2021)*, second <u>version</u>, <u>April 2022</u>, as modified by the additions, deletions, amendments, and other changes listed in Appendix A of this document, is adopted by the Maryland Green Building Council.

Chapter 4 Compliance

Section 401 Project-Level Reporting

401.1 Requirements for All Projects.

The prime designer of record or architect/engineer (DOR/AE) shall submit documentation of compliance with the HPGBP to the owner at project milestones. Minimum milestones are concept or schematic design; 50-percent-complete construction documents; 100-percent-complete construction documents; and project closeout. The owner bears responsibility for review of submittals and confirmation of compliance with the HPGBP. The Owner shall submit documentation of compliance with the HPGBP to the Council at project closeout. In addition, the following submission requirements apply:

- A. LEED and Green Globes Projects
 - 1. State Buildings and Community Colleges
 - a. The DOR/AE shall provide the latest scoresheet to the owner at completion of defined milestones;
 - b. The owner shall provide the final scoresheet to the Council at project completion; and
 - c. The owner shall provide a copy of the final certificate to the Council upon award by the certification-granting organization.
 - 2. Public Schools
 - a. The DOR/AE shall report as required by the Maryland Interagency Commission on School Construction (IAC) regulations and Administrative Procedures Guide; and
 - b. The owner shall provide the final scoresheet to the Council <u>upon project construction</u> closeout.
- B. Independent Third-Party Verification for Pre-kindergarten Through Twelfth Grade Schools Only
 - 1. Documentation shall be prepared and submitted to the LEA by an <u>independent third-party</u> Letter of Opinion stating that the facility meets or exceeds the requirements of the HPGBP with the exception of third-party certification.
 - 2. Required content of Letter of Opinion:
 - a. Date of opinion
 - b. LEA for which the facility is designed or constructed and responsible party contact information
 - c. Narrative description of subject facility including use, size, cost, features
 - d. Design and construction team names and contact information
 - e. Professional credentials of the Independent Third Party responsible for preparation of the Letter of Opinion
 - f. The selected high-performance rating system or code used for design and construction with which the project is compliant
 - g. Signed statement attesting that the project meets the requirements of the HPGBP
 - 3. The letter shall be submitted to the LEA responsible for the project's construction and a copy forwarded to the Maryland Interagency Commission on School Construction. The letter shall be submitted within two months of the project construction closeout.

C. IgCC Projects

- 1. State Buildings and Community Colleges
 - a. The DOR/AE shall provide the latest IgCC Compliance form to the owner at completion of defined milestones; and
 - b. The owner shall provide the final signed IgCC Compliance form to the Council at <u>project</u> construction closeout.

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- 2. Public Schools
 - a. The DOR/AE shall report as required by IAC regulations and the IAC's Administrative Procedures Guide and provide the final signed IgCC Compliance form to the IAC at project completion; and
 - b. The Owner shall provide the final IgCC Compliance form to the IAC at project completion.

Section 402 Annual Reporting

402.1 Annual Reporting by Using Agencies and LEAs

- A. State agencies and community colleges shall provide an annual project status report to the Council no later than September first (1st) each year for projects from the previous fiscal year. The report shall include the status of projects initiated, completed, and in progress for that year and the rating system or code applied to each project. All reporting documentation shall be submitted to the Council in electronic (PDF) format.
- B. LEAs shall provide to the IAC all reports as required by IAC regulations and the IAC's Administrative Procedures Guide in electronic (PDF) format to iac.pscp@maryland.gov.

Chapter 5 Waivers

Section 501 Waiver of All HPGBP Requirements

501.1 State Buildings and Community Colleges

- A. A unit of government or a community college may in the case of a specific project otherwise required to comply with the HPGBP, seek a waiver from complying with all requirements of the HPGBP when compliance would not be practicable. ¹⁵ The waiver request and approval process shall be administered by the Council. A waiver application shall be made by the owner in writing and directed and delivered to the Council. The application shall include:
 - 1. A physical and financial description of the project, fund source(s) and schedule of design and construction.
 - 2. An explanation of why compliance with the requirements of the available HPGBP paths is not practicable to achieve.
 - 3. An analysis of whether relief can be granted in such fashion that the spirit of the requirements will be observed and the natural environment protected.
 - 4. A description of the proposed alternative compliance paths or mitigation measure(s) or other construction method, strategy or material that the owner offers in lieu of strict compliance with the HPGBP requirements; and
 - 5. Any other information of relevance to the waiver request.
- B. A waiver request shall be submitted to the Council prior to the owner's approval of the schematic design and a minimum of thirty (30) days in advance of the meeting of the Council at which the owner requests consideration of the request. The determination by the Council will be made at a public meeting of the Council. If the determination by the Council shall be that the use of a high-performance building in a proposed project is not practicable, a recommendation and request for approval of the waiver shall be made to the Secretaries of DBM, DGS, and MDOT. The waiver shall not be granted without approval by each of the three secretaries, or their designees. The decision to grant or deny the waiver shall be communicated from the secretaries, or their designees, to the Council. The Council shall provide written notification of the secretaries' decisions to the owner. Any approval or rejection of a waiver request shall be final and non-reviewable..

501.2 Public Schools.

- A. A LEA may, in the case of a specific project, seek a waiver from complying with all requirements of the HPGBP when compliance would not be practicable.¹⁶ The waiver process shall be administered by the IAC. A waiver application shall be made by the owner in writing and directed and delivered to the IAC. The application shall include the following:
 - 1. A physical and financial description of the project, fund source and schedule of design and construction.
 - 2. An explanation of why compliance with the requirements of the HPGBP is not practicable to achieve.
 - 3. An analysis of whether relief can be granted in such fashion that the spirit of the requirements will be observed and the natural environment protected;

¹⁵ See Md. Code Ann., SFP Art. § 4-809(f)(4) and § 3-602.1(e).

¹⁶ See Md. Code Ann., Educ. Art. § 5-312.

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- 4. A description of the proposed alternative compliance path or mitigation measure(s) or other construction method, strategy or material that the owner offers in lieu of strict compliance with the HPGBP requirements; and
- 5. Any other information of relevance to the waiver request.
- B. A waiver request shall be submitted to the IAC prior to the owner's approval of the schematic design and a minimum of thirty (30) days in advance of the meeting of the IAC at which the owner requests consideration of the request. The determination by the IAC will be made at a public meeting of the IAC and the owner notified. Any approval or rejection of a waiver request shall be final and non-reviewable.

Section 502 Waiver of Specific Requirements of the HPGBP

502.1 State Buildings and Community Colleges

- A. A unit of government or a community college may in the case of a specific project seek a waiver from complying with a specific requirement or requirements of the HPGBP when compliance would not be practicable.¹⁷ The waiver process shall be administered by the Council. A waiver application shall be made by the owner in writing and directed and delivered to the Council. The application shall include the following:
 - 1. A physical and financial description of the project, fund source and schedule of design and construction;
 - 2. An explanation of why compliance with the specified requirement(s) of the HPGBP is not practicable to achieve;
 - 3. An analysis of whether relief can be granted in such fashion that the spirit of the requirement(s) will be observed and the natural environment protected;
 - 4. A description of the proposed alternative compliance path or mitigation measure(s) or other construction method, strategy or material that the owner offers in lieu of strict compliance with the HPGBP requirement(s); and
 - 5. Any other information of relevance to the waiver request.
- B. A waiver request shall be submitted to the Council prior to the owner's approval of the schematic design and a minimum of thirty (30) days in advance of the meeting of the Council at which the Owner requests consideration of the request. The determination by the Council will be made at a public meeting of the Council. If the determination by the Council shall be that the use of a specific high-performance building requirement in a proposed project is not practicable, a recommendation and request for approval of the waiver shall be made to the Secretaries of DBM, DGS, and MDOT. The waiver shall not be granted without approval by each of the three Secretaries, or their designees. The decision to grant or deny the waiver shall be communicated from the Secretaries, or their designees to the Council. The Council shall provide written notification of the Secretaries' decisions to the owner. Any approval or rejection of a waiver request shall be final and non-reviewable.

502.2 Public Schools.

A. In the case of a specific project, an LEA may seek a waiver from complying with a specific requirement or requirements of the HPGBP when compliance would not be practicable.¹⁸ A request may be made for a waiver of a particular LEED prerequisite or credit, an IgCC provision

¹⁷ See Md. Code Ann., SFP Art. § 3-602.1(e).

¹⁸ See Md. Code Ann., Educ. § 5-312.

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(for the IgCC, this waiver process is in addition to and an alternative to the IgCC modification provision), or to allow use of another alternate green building rating system or code in lieu of those listed in the HPGBP. The waiver process shall be administered by the IAC. A waiver application shall be made by the owner in writing and directed and delivered to the IAC. The application shall include the following:

- 1. A physical and financial description of the project, fund source and schedule of design and construction;
- 2. An explanation of why compliance with the specified requirement(s) of the HPGBP is not practicable to achieve;
- 3. An analysis of whether relief can be granted in such fashion that the spirit of the requirement(s) will be observed and the natural environment protected;
- 4. A description of the proposed alternative compliance path or mitigation measure(s) or other construction method, strategy or material that the owner offers in lieu of strict compliance with the HPGBP requirement(s); and
- 5. Any other information of relevance to the waiver request.
- B. A waiver request shall be submitted to the IAC prior to the owner's approval of the schematic design and a minimum of thirty (30) days in advance of the meeting of the IAC at which the owner requests consideration of the request. The determination by the IAC will be made at a public meeting of the IAC and the Owner notified. Any approval or denial of a waiver shall be final and non-reviewable.

Appendix A:

International Green Construction Code (IgCC) Supplement

The HPGBP incorporates the 2021 IgCC (second <u>version</u>, published <u>April 2022</u>) as amended by this supplement as an alternative compliance path for buildings developed under the State High Performance Buildings Act. ¹⁹ This document amends and alters certain sections of the 2018 edition of the IgCC. This document should be reviewed and utilized concurrently with that document in design of high-performance buildings.

IgCC Chapters Amended by This Supplement:

Chapter 1	Scope and Administration
Chapter 3	Definitions, Abbreviations and Acronyms
Chapter 5	Site Sustainability
Chapter 6	Water Use Efficiency
Chapter 7	Energy Efficiency
Chapter 8	Indoor Environmental Quality (IEQ)
Chapter 9	Materials and Resources
Chapter 10	Construction and Plans for Operation
Forms	IgCC Compliance Form 103.2

CHAPTER 1 SCOPE AND ADMINISTRATION

SECTION 101 GENERAL PART 1- SCOPE AND APPLICATION

Strike SECTIONS 101.3.4 and 101.3.21.

Strike SECTION 101.5.1 Jurisdictional options.

Strike SECTION 102.6 Existing structures.

PART 2- ADMINISTRATION AND ENFORCEMENT SECTION 103 – DUTIES AND POWERS OF THE AUTHORITY HAVING JURISDICTION CODE COMPLIANCE AGENCY OR AUTHORITY.

Change the title of this Section to: "INTERPRETATION, COMPLIANCE, ENFORCEMENT AND REPORTING."

SECTION 103.1 General - is fully deleted and replaced with:

"103.1 General – The Maryland Green Building Council (the Council) is hereby authorized to enforce the provisions of this code. The Council shall have the authority to render interpretations of this code and to adopt policies and procedures in order to clarify the application of its provisions and how this code relates

¹⁹ 2008 Md. Laws Chap. 124 (codified as amended at SFP §3-602.1 (2008)).

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to other applicable codes and ordinances. Such interpretations, policies and procedures shall be in compliance with the intent and purpose of this code and other applicable codes and ordinances. Such policies and procedures shall not have the effect of waiving requirements specifically provided for in this code or other applicable codes and ordinances."

Strike SECTIONS 103.2 and 103.3

SECTION 104 - DUTIES AND POWERS OF THE AUTHORITY HAVING JURISDICTION

SECTION 1034.2 Applications and permits - Is fully deleted and replaced with:

"Section 1034.2 – Compliance and Reporting. The Sustainability Consultant shall administer completion of and submit form 103.2 Compliance Report to the Council within 90 days of Substantial Completion that is Appendix B, established hereto."

Strike SECTIONS 1034.3 Notices and orders and 1034.4 Inspections.

SECTION 105 APPROVAL - Change the term "authority having jurisdiction" to "Maryland Green Building Council" throughout.

SECTION 105.3 Modifications - Is fully deleted and replaced with:

"Section 105.3 Modifications. Where there are practical difficulties involved in carrying out the provisions of this code, the Council shall have the authority to grant modifications for individual cases, upon application of the owners or owner's authorized agent, provided that the Council shall first find that the special individual reason makes the strict letter of this code impractical, and that the modification is in compliance with the intent and purpose of this code. The details of granting modifications shall be recorded and entered in the files of the Department of General Services."

Strike SECTION 105.5 Compliance materials.

Strike SECTION 105.6 Approved programs.

Strike SECTION 106 Permits.

Strike SECTION 107 Construction Documents Inspections.

Strike SECTION 108 Fees.

Strike SECTION 109 Inspections.

Strike SECTION 10810 Certificate of Occupancy Board of Appeals.

Strike SECTION 10911 Means of Appeals Certificate of Occupancy.

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CHAPTER 3 DEFINITIONS

SECTION 301.1 GENERAL

Add the following definition: "SUSTAINABILITY CONSULTANT. A designated agent of the Owner charged with managing the implementation of the International Green Construction Code. The Sustainability Consultant may be the Architect/Engineer (A/E) or a subconsultant to the A/E. Responsibilities shall be as described in this IgCC Supplement and as required by the Owner. Responsibilities include but are not limited to assignment of documentation and verification, compilation of project documents, organization and submission of documents to the Maryland Green Building Council."

CHAPTER 5 SITE SUSTAINABILITY

Strike SECTION 501.3.1 Site Selection.

Strike SECTION 501.3.4 Stormwater Management.

Section 501.3.5.1 Site Hardscape - Delete the first sentence and replace with: "At least 25% of the site hardscape that is not covered by solar energy systems shall be provided with one or any combination of the following:"

Strike SECTION 501.3.5.2 Walls.

SECTION 501.3.7.1.1 Pedestrian Walkways - Amend first sentence to read:

"If the building project is adjacent to either a public way or a transit stop, each primary building entrance shall be provided with a pedestrian walkway that extends to the public way or transit stop. Walkways shall not be less than 5 ft (1.5 m) in width and shall be clearly delineated."

SECTION 501.3.7.1.2 Bicycle Paths - is fully deleted and replaced with:

"If existing and planned off-site bicycle paths are adjacent to the building project, on-site bicycle paths shall be designed to connect bicycle parking areas to said paths."

SECTION 501.3.7.2 Bicycle Parking - Add the following as a second sentence:

"If the building project is adjacent to existing or planned off-site bicycle paths, projects shall follow Sections 501.3.7.2.1 through Section 501.3.7.2.6."

SECTION 501.3.8.1 Building Site Waste Management Plan. - Amend the first sentence of the second paragraph to read: "Not less than 50% of the land-clearing debris, excluding invasive plant materials, shall be diverted from disposal in landfills and incinerators other than waste-to-energy systems with an energy-recovery efficiency rate higher than 60%."

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CHAPTER 6 WATER USE EFFICIENCY

Strike SECTION 601.3.3 Hot water distribution.

Strike SECTION 601.3.5.1 Consumption Management.

SECTION 601.3.4.1 Consumption Management. Delete the third sentence of the first paragraph (pertaining to separate submeters).

CHAPTER 7 ENERGY EFFICIENCY

Strike SECTION 701.3.2 On-site Renewable Energy Systems.

SECTION 701.3.3.2 Energy Consumption Data Collection and Display - Change title of Section 701.3.3.2 to "Energy Consumption Data Collection" and delete the last sentence in the section.

Strike SECTION 701.3.4 Automated Demand Response.

Strike SECTION 701.4.1.1.1 Standard Renewables Approach: Baseline On-Site Renewable Energy Systems.

Strike SECTION 701.4.1.1.2 Alternate Renewables Approach: Reduced On-Site Renewable Energy Systems and Higher-Efficiency Equipment.

Strike SECTION 701.4.2.3 Single Rafter Roof Insulation.

Strike SECTION 701.4.3.1 Minimum Equipment Efficiencies for the Alternate Renewables Approach.

Strike SECTION 701.4.3.5. Zone Controls.

Strike SECTION 701.4.3 7. Exhaust Air Energy Recovery

Strike SECTION 701.4.4.1 Equipment Efficiency for the Alternate Renewables Approach.

Strike SECTION 701.4.7.1 Equipment Efficiency for the Alternate Renewables Approach.

Strike SECTION 701.4.7.3.2 ENERGY STAR Requirements for Equipment Covered by Federal Appliance Efficiency Regulations (Alternate Renewables Approach).

Strike SECTION 701.5.4 Energy Simulated Aided Design.

CHAPTER 8 INDOOR ENVIRONMENTAL QUALITY (IEQ)

Strike Section 801.3.1.3 Filtration and Air Cleaner Requirements - subsection b. Ozone.

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SECTION 801.3.3.1 Documentation - Change "authority having jurisdiction" to "Sustainability Consultant."

Strike SECTION 801.3.3.2.4 Acoustical Control Interior Background Noise Testing.

Strike SECTION 801.3.6 Moisture Control

Strike SECTION 801.3.9 Exterior views.

Strike SECTION 801.3.3.3.3 Interior Sound Transmission – Testing.

Strike SECTION 801.4.1 Daylighting.

Strike SECTION 801.5.1 Daylight Simulation.

Strike SECTION 1001.5. Acoustical field measurement.

Strike SECTION 1001.10 Service Life Plan.

Strike SECTION 1001.11.2. Transportation Management Plan Building.

Strike SECTION 1001.11.3. Transportation Management Plan Tenant.

CHAPTER 9 MATERIALS AND RESOURCES

SECTION 901.4.1.4 Multiple-Attribute Product Declaration or Certification - Change "authority having jurisdiction (AHJ)" to "Sustainability Consultant" in the first paragraph.

CHAPTER 10 CONSTRUCTION AND PLANS FOR OPERATION

Strike SECTION 1001.3.1.1.2 Acoustical Control.

Strike SECTION 1001.3.2.1.4 IAQ.

SECTION 1001.3.2.1.5 Indoor Environmental Quality Survey - Delete the last sentence in paragraph a.

Strike SECTION 1001.3.2.411.2 Transportation Management Plan Building.

Strike SECTION 1001.11.3 Transportation Management Plan Tennant.

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INFORMATIVE APPENDIX H OPTION FOR ENERGY EFFICIENCY USING THE IECC PRESCRIPTIVE COMPLIANCE PATH

SECTION H201 (H2)

COMPLIANCE

H201.1 (H2.1) Compliance.

The energy systems shall comply with Sections 701.3.2 through 701.3.5 (7.3.2 through 7.3.5) and with the International Energy Conservation Code (IECC), Sections C402 through C405. In addition, commercial buildings shall comply with the IECC, Section C406, except as modified by this appendix.

Where requirements are provided below (in the Appendix H of the IgCC), they shall supersede the requirements of the IECC.

[End of IgCC Amendments]

Required Project and Team Information

Appendix B:

International Green Construction Code (IgCC) Compliance Form

MARYLAND GREEN BUILDING COUNCIL INTERNATIONAL GREEN CONSTRUCTION CODE COMPLIANCE FORM 103.2

Date of Submittal to MGBC Date of Substantial Completion Owner (Agency) Project Name Location (Address) Projected Energy Use Project Narrative (Use, GSF, Construction Cost, Brief Summary, Features) Designer or Architect/Engineer of Record (Entity) Sustainability Consultant (Entity)

General Contractor (Entity)

Commissioning Agent (Entity)

High Performance Green Building Program

Declaration

(Sign and Date)

To the best of my knowledge and ability, this project was designed and constructed pursuant to the IgCC as implemented by the State of Maryland Green Building Council and in accordance with the High-Performance Building Act:

Owner (Agency)	Date
Owner (Authorized Representative and Title)	
Designer or Architect/Engineer of Record (Entity)	
Designer or Architect/Engineer of Record (Representative and Title)	
Sustainability Consultant (Entity)	
Sustainability Consultant (Representative and Title)	
General Contractor (Entity)	
General Contractor (Representative and Title)	
Commissioning Agent (Entity)	
Commissioning Agent (Representative and Title)	

IgCC Compliance Form Checklist

Project Name Location		Date		
IgCC Section	IgCC Item	Applicable	Performed By	Reviewed By
501.3.2	Predesign Site inventory and Assessment	□ Yes		-
501.3.3	Plants	□ Yes □ No		
501.3.4	Stormwater Management	□ Yes □ No		
501.3.5	Heat Island Mitigation Calculations	□ Yes □ No		
501.3.6	Reduction of Light Pollution	□ Yes □ No		
501.3.7.3	Site Vehicle Provisions	□ Yes □ No		
501.3.8.1	Building Site Waste Management Plan	□ Yes □ No		
601.3.1	Site Water Use Calculations	□ Yes		
601.3.2	Building Water Use Reduction Documentation	□ Yes		
701.3.3.1	Energy Consumption Management	□ Yes □ No		
701.3.3.2	Energy Consumption Data Collection	□ Yes		
701.4.1	General Comprehensive Prescriptive Requirements	□ Yes		
701.4.2	Building Envelope	□ Yes		
701.4.3	Heating, Ventilating, and Air Conditioning	□ Yes		
701.4.4	Service Water Heating	□ Yes		

Project Name		Date		
Location				
IgCC Section	IgCC Item	Applicable	Performed By	Reviewed By
701.4.5	Power	☐ Yes ☐ No		
701.4.6	Lighting	□ Yes □ No		
701.4.7	Other Equipment	□ Yes		
701.5	Performance Option	□ Yes □ No		
801.3.1	Indoor Air Quality	□ Yes □ No		
801.3.2	Thermal Environmental Conditions for Human Occupancy	□ Yes □ No		
801.3.3	Acoustical Control	□ Yes		
801.3.5	Lighting Quality	□ Yes		
801.3.6	Moisture Control	□ Yes		
801.3.7	Glare Control	□ Yes		
801.3.8	Occupant Override	□ Yes		
801.4.2	Materials	□ Yes		
901.3.1	Construction Waste Management	□ Yes		
901.3.2	Extracting, Harvesting, and/or Manufacturing	□ Yes		
901.3.3	Refrigerants	□ Yes		

Project Name		Date		
Location				
IgCC Section	IgCC Item	Applicable	Performed By	Reviewed By
901.3.4	Areas for Storage and Collection of Recyclables and Discarded Goods	□ Yes □ No		
901.3.5	Mercury content Levels of Lamps	□ Yes □ No		
901.4.1	Reduced Impact Materials	□ Yes □ No		
901.5.1	Life-Cycle Assessment	☐ Yes ☐ No		
1001.3.1.1	Building Systems FPT	☐ Yes ☐ No		
1001.3.1.2	Building Project Commissioning Process	☐ Yes ☐ No		
1001.3.1.3	Project Cx Documents	□ Yes □ No		
1001.3.1.5	IAQ Construction Management	□ Yes □ No		
1001.3.1.6	Moisture Control	☐ Yes ☐ No		
1001.3.1.7	Idling of Construction Vehicles	□ Yes □ No		
1001.3.1.8	Protection of Occupied Areas	□ Yes □ No		
1001.3.1.10	Construction Waste Management	□ Yes		

Maryland Green Building Council High Performance Green Building Program
ENTER LIST OF WAIVERS RECEIVED (IF APPLICABLE)
[END OF SECTION]

Appendix C: Maryland High Performance Green Building Program – Sustainability Standards

Maryland Green Building Council High Performance Green Building Program

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CHAPTER 6 - TO CONSERVE ENERGY AND MINIMIZE ADVERSE IMPACTS ON BIRDS

Maryland Green Building Council (MGBC) Approved

15 June 2023

Maryland Department of General Services (MDGS) Secretary Approved and Issued

22 March 2024

PART 1 - GENERAL

1.1 SUMMARY

- A. This standard requires certain State buildings to conserve energy and minimize adverse collision impacts with birds in compliance with House Bill 6, 2023 (Chapter 581).
- B. This Chapter responds to the requirement that the Department of General Services establish and periodically update standards for certain State buildings; requires the Maryland Green Building Council to include the standards in any certain requirements that the Council establishes for participation in the Maryland High Performance Green Building Program; and, generally relating to the construction, alteration, or acquisition of State buildings.

1.2 DEFINITIONS

In this Chapter the following words have the meanings indicated:

- A. "Acquired" does not include a building leased by the State.
- B. "Secretary" means Secretary of the Maryland Department of General Services.
- C. "State building" means:
 - 1. a building acquired through any means by the State for use by a State agency or department;
 - 2. a building constructed or renovated by or for the State for use by a State agency or department; or
 - 3. a building acquired, constructed or renovated for which more than 50% of the money for the acquisition, construction or renovation came from State funds.
- D. This Chapter only applies to such a State Building.
- E. This Chapter does not apply to:
 - 1. A public work contract of less than \$500,000;
 - 2. A public work contract for which 50% or less of the funds used for the project are State funds;
 - 3. A project for which funding is provided in the Capital Budget as a grant to a nonprofit organization; or
 - 4. A public school construction project.

Appendix C – Sustainability Standards

1.3 INTENT

To reduce bird injury and mortality from inflight collisions with buildings.

- 1.4 REQUIREMENTS CONSTRUCTION, ALTERATION OR ACQUISITION OF STATE BUILDINGS
 - A. Achieve the U.S. Green Building Council LEED BD+C New Construction v4.1 Innovation Credit: Bird Collision Deterrence, as amended from time to time; or
 - B. The U.S. Green Building Council LEED BD+C New Construction v4.1 Innovation Credit: Bird Collision Deterrence, as amended from time to time, is achievable on a project,
 - 1. Except does not include bird collision monitoring;
 - 2. While considering the physical health and mental health of building occupants; and
 - 3. that the project otherwise meets or exceeds the requirements of the credit (i.e., the credit is achievable) as reported by the Designer of Record or Architect or Engineer for a project or Independent Third Party to the Owner.
 - C. Prepare and implement a site-specific bird mitigation program that meets or exceeds the Intent and Requirements of this Chapter which program shall reduce bird injury and mortality from inflight collisions with buildings which may, by way of example but not limitation include trash removal practices, structural designs, landscaping, water sources, and audio deterrents including ultrasonic sound emitters, audible digital recordings of distressed and alarmed birds, wind chimes, etc.
 - 1. Except does not include bird collision monitoring;
 - 2. While considering the physical health and mental health of building occupants; and
 - 3. As reported by the Designer of Record or Architect or Engineer for a project or Independent Third Party to the Owner.
 - D. It is not the intent of this Chapter that liquid bird repellent, bird gel nor similar means be employed to repel birds in furtherance of this Chapter.
 - E. In the event that a waiver is requested of a specific requirement under this Chapter, such waiver should be requested as early as practicable and submitted to the Maryland Green Building Council as described in Section 502 above.

1.5 REQUIREMENTS – EXISTING STATE BUILDINGS

A. The lighting of existing state-owned buildings shall be reduced to the extent practicable and within budgetary constraints as determined by the Department of General Services:

 $Appendix \ C-Sustainability \ Standards$

High Performance Green Building Program

- B. Except where full operation of building lighting is documented as necessary, including for public safety or other purposes, interior and exterior lighting shall be appropriately shielded and minimized from midnight to dawn each day:
 - 1. From March 1 through May 31, both inclusive; and
 - 2. From August 1 through October 31, both inclusive; and
- C. By using automatic control technologies, which may include timers, photosensors, infrared detectors, and motion detectors which may be augmented by any of the means described in section 1.4.C above.
- D. It is not the intent of this Chapter that liquid bird repellent, bird gel nor similar means be employed to repel birds in furtherance of this Chapter.

1.7 UPDATES

- A. This Chapter is intended to be effective on the date approved and issued by the Secretary for all new construction, alteration, or acquisition after that date.
- B. The U.S. Green Building Council LEED BD+C New Construction v4.1 Innovation Credit: Bird Collision Deterrence, may be amended from time to time.
- C. This Chapter shall be updated by the Maryland Department of General Services not less than every 5 years.

1.8 REFERENCES

- A. U.S. Green Building Council LEED BD+C New Construction v4.1 Innovation Credit: Bird Collision Deterrence, as amended from time to time, as of dated of drafting is available at: https://www.usgbc.org/credits/new-construction-core-and-shell-schools-new-construction-retail-new-construction-data-42
- B. This standard addresses requirements of the Maryland Sustainable Buildings Act of 2023: Requiring the Department of General Services to establish and update standards for State buildings to conserve energy and minimize adverse impacts on birds; requiring the Maryland Green Building Council to include the standards in any requirements established for participation in a higher-performance building program in the State; and defining "State building" as one acquired, constructed, or renovated by the State or one for which 50% of the money for acquisition, construction, or renovation came from State funds. https://mgaleg.maryland.gov/mgawebsite/Legislation/Details/SB0092

END OF SECTION

Appendix C - Sustainability Standards