

**MARYLAND GREEN BUILDING COUNCIL
INTERNATIONAL GREEN CONSTRUCTION CODE
(IgCC) SUPPLEMENT
NOVEMBER 2014**

The State of Maryland has enabled use of the 2012 edition of the *International Green Construction Code (IgCC)* for all state and local jurisdictions in Maryland. The Maryland Green Building Council has adopted the IgCC as amended by this Supplement as an alternate compliance path to the minimum LEED Silver Certification for buildings developed under the State High Performance Buildings Act. This document amends and alters certain Sections of the 2012 edition of the *International Green Construction Code* and should be studied concurrently with that document prior to design.

IgCC CHAPTERS AMENDED BY THIS SUPPLEMENT:

CHAPTER 1	SCOPE AND ADMINISTRATION
CHAPTER 2	DEFINITIONS
CHAPTER 3	JURISDICTIONAL REQUIREMENTS AND LIFE CYCLE ASSESSMENT
CHAPTER 4	SITE DEVELOPMENT AND LAND USE
CHAPTER 5	MATERIAL RESOURCE CONSERVATION AND EFFICIENCY
CHAPTER 6	ENERGY CONSERVATION, EFFICIENCY AND CO2 EMISSION REDUCTION
CHAPTER 7	WATER RESOURCE CONSERVATION, QUALITY AND EFFICIENCY
CHAPTER 8	INDOOR ENVIRONMENTAL QUALITY AND COMFORT
CHAPTER 9	COMMISSIONING
CHAPTER 10	EXISTING BUILDINGS – NOT APPLICABLE
CHAPTER 11	EXISTING BUILDING SITE DEVELOPMENT
CHAPTER 12	REFERENCED STANDARDS – NOT APPLICABLE
APPENDIX A	PROJECT ELECTIVES
FORMS	IgCC COMPLIANCE FORM 103.2

CHAPTER 1 SCOPE AND JURISDICTION

SECTION 101 GENERAL

PART 1- SCOPE AND APPLICATION

Strike Section 101.3 Scope and 101.3.1 Residential construction and replace with the following:

“101.3 Scope. The provisions of this code shall apply to the design, construction and renovation of buildings fully owned and funded by the State of Maryland and which are required to comply with the High Performance Buildings Act (State Finance and Procurement Article 3-602.1) including K – 12 public schools and Community Colleges.”
“Exception: Said buildings which are designed to meet and are to be certified as LEED Silver or higher under the US Green Building Council’s LEED Green Building Rating System are not required to comply with this code.”

Strike Section 102.4 Referenced codes and standards and 102.4.1 Conflicting provisions and replace with the following:

“102.4 Referenced codes and standards. This code shall be applied as a Supplement to all other codes in force by the State of Maryland for its buildings. No part of this code shall supersede or take precedence over any life safety requirements or other regulations of the State of Maryland without the written permission of the Office of the State Fire Marshal or other governing State Departments.”

Strike Section 102.6 Existing structures

PART 2- ADMINISTRATION AND ENFORCEMENT

SECTION 103 – DUTIES AND POWERS OF THE CODE OFFICIAL

Change the title of this Section to:

“INTERPRETATION, COMPLIANCE, ENFORCEMENT AND REPORTING”

Section 103.1 General.

Change the first sentence to read:

“103.1 General – The Maryland Green Building Council is hereby authorized and directed to enforce the provisions of this code.”

Change the term “code official” to “Maryland Green Building Council”

Section 103.2 Applications and permits.

Change to read:

“Section 103.2 – Compliance and Reporting. The Sustainability Consultant shall administer completion of and submit form **103.2 Compliance Report** to the Maryland Green Building Council within 60 days of Substantial Completion.”

Strike Sections 103.3 Notices and orders and 103.4 Inspections

Section 105.1 General

Change the term “code official” to “Maryland Green Building Council”

Strike Sections 105.2 Approved materials and equipment and 105.2.1 Used materials, products and equipment

Section 105.3 Modifications.

Change the term “code official” to “Maryland Green Building Council”

Strike Sections, 105.4 Innovative approaches and alternative materials, design and methods of construction and equipment, 105.5 Compliance materials, 105.6 Approved programs, and Sections 106 PERMITS, 107 FEES, 108 BOARD OF APPEALS and 109 CERTIFICATE OF OCCUPANCY.

CHAPTER 2 DEFINITIONS

SECTION 201 GENERAL

Add: Section 201.5 – General. Delete the definition and all uses of the term “code official” from this Section and the code in its entirety. Where found and not otherwise addressed in this code supplement, replace with Sustainability Consultant.

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 3 JURISDICTIONAL REQUIREMENTS AND LIFE CYCLE ASSESSMENT

Strike CHAPTER 3 in its entirety

CHAPTER 4 SITE DEVELOPMENT AND LAND USE

Strike SECTION 402 PRESERVATION OF NATURAL RESOURCES - Comply with applicable laws and regulations

Strike Section 403.1 Stormwater management- Comply with applicable laws and regulations.

Section 404.1.1 Water for outdoor landscape irrigation.

Delete the first sentence and replace with:

“Reduce the project’s potable landscape water requirement (LWR) by at least 50% from the calculated baseline for the site’s peak watering month. Reductions must first be achieved through plant species selection and irrigation system efficiency as calculated in the Environmental Protection Agency (EPA) WaterSense Water Budget Tool. Systems shall be designed in accordance with Section 404.1.2. Where permitted by State regulation, the system shall be supplied by municipal reclaimed water or with alternate onsite nonpotable water complying with Chapter 7.”

Section 405.1 Soil and water quality protection plan.

Strike entire Section except for Section 405.2. through 405.2.2. Comply with applicable laws and regulations.

Section 405.3 Native plant landscaping.

Change to read:

“Where new landscaping is installed as part of a site plan or within the building site, not less than 25% or more of the newly landscaped area shall be planted with native or climate adaptive species.”

Section 406.1 Building site waste management plan

Delete from item 2:

“except where *approved* by the *code official*.”.

Replace second sentence of item 7 with:

“ Evidence of diversion report shall be provided to the Sustainability Consultant.”

SECTION 407 – TRANSPORTATION IMPACT

General - All portions of this Section apply to buildings greater than 7,500 gsf rather than 10,000 gsf as stated.

Section 407.2 Changing and Shower Facilities.

Delete: “Not less than one shower.....spaces, or fraction thereof.”

Replace with: “Provide showers for not less than .5% of the FTE (full time employees)

Add: “ Exception - In campus settings where these facilities are provided in existing buildings located within 200 yards of the proposed building, the requirement shall be waived.”

Section 407.3 Bicycle parking and storage.

Replace: Sections 407.3, 407.3.1 and table 407.3 with:

“407.3 – Provide bicycle parking complying with Section 407.3.2 for 5% or more of building occupants or in the case of schools 5% or more of all building staff and students above grade level 3.”

Section 407.4.2 – Low-emission, hybrid and electric vehicle parking.

Add: A discounted parking rate of at least 20% for green vehicles, where applicable, is an acceptable substitute for preferred. Refer to Appendix A Project electives for elective for providing electric vehicle charging stations.”

Section 408.1 General.

Change: Reference to Section 404.3 to 408.3

Section 408.2 Site Hardscape.

Change first sentence to read: “not less than 30 percent”.

Section 408.2.4 Pervious and permeable pavement.

Add: “Materials under this section shall also comply with the requirements of Section 408.2.1.”

Section 408.3 Roof Surfaces.

Change: “climate zones 1 through 3” to “climate zones 1 through 6”

Section 409.1 Light pollution control.

Add: “Site lighting shall also comply with Maryland State Finance and Procurement Code Ann. 14-412 (2013). Where any conflicts occur, this statute shall supersede this code.”

CHAPTER 5 MATERIAL RESOURCE CONSERVATION AND EFFICIENCY

503.1 – Construction material and waste management plan.

Change: “ 50 percent” to “75 percent”.

503.1 – Construction material and waste management plan.

Replace second sentence of Item 4 – with:

“ Evidence of diversion report shall be provided to the Sustainability Consultant.”

Strike Section 505.1 Material selection and properties - Exception 2

505.2 – Material selection

Delete the words “mass and volume” from the first sentence. Materials complying with this Section shall be measured by cost.

Add: “This Section applies to permanently installed materials and furnishings. It does not apply to movable furniture. The contractor shall submit documentation based on the project “schedule of values” to the Sustainability Consultant.”

CHAPTER 6 ENERGY CONSERVATION EFFICIENCY AND CO2 EMISSION REDUCTION

602.1 Performance-based compliance

Replace “source” BTU” with “site” BTU”. Strike reference to Section 602.3 CO2 emissions

Section 601.3 Application.

Change to read:

Buildings and their associated building sites shall comply with Section 601.3.1.

Strike Section 601.3.2 Prescriptive based compliance

602.1.1 zEPI.

Delete paragraph 1 and equation 6-1 and replace with:

“Performance based designs shall demonstrate an energy savings of at least 15% over the current version of the International Energy Conservation Code (IECC).”

$(EUI_p / EUI_b) = < .85$ of current IECC

In definitions of EUI_p replace “source” with “site”

EUI_b = the base annual energy use index is equal to the energy use index of the current adopted version of the IECC in Maryland in site kBtu/sf-y for the building and its site calculated in accordance with Section 602.1.2.

602.1.2.2 Electric Power

602.1.2.2 Electric Power- Delete “and multiplying by the conversion factor in Table 602.1.2.1 based on the geographical location of the building.”

Strike Table 602.1.2.1 Electricity Generation Energy Conversion Factors By EPA eGRID Sub-Region

602.1.2.3 Nonrenewable energy

Change to read:

“In calculating the annual energy use index for fuel other than electrical power, energy use shall be converted to consistent units by converting the nonrenewable energy fossil fuel use at the utility meter or measured point of delivery to BTUs.”

Strike Table 602.1.2.2 U.S. Average Building Fuels Energy Conversion Factors by Fuel type

602.1.3 – Registered design professional in responsible charge of building energy simulation

Strike in its entirety and replace with:

“Energy modeling must be overseen by a Maryland registered professional engineer or Architect but may be performed by an energy modeler holding either a current ASHRAE Building Energy Assessment Professional certification or an Association of Energy Engineers Certified Energy Auditor certification.”

Strike Section 602.2 Annual direct and indirect CO₂e. Comply with applicable laws and regulations

Strike Table 602.2.1 Electricity Emission Rate By EPA eGrid Sub-Region

Section 603.1 Purpose

Change first sentence to read :

“Buildings required to comply with the Maryland High Performance Building Program shall comply with Section 603.”

Delete portion of third sentence:

“the design of energy distribution systems so as to isolate load types”.

Delete from second paragraph: “all energy load types”.

Strike Section 603.2 Energy distribution design requirements and load type isolation in buildings. and all Subsections.

Section 603.3.7 Renewable and waste energy.

Delete: “building zEPI” and replace with “building EUI ratio”.

Section 603.4 Energy load type sub-metering

This Section is not required. It can be selected as a project Elective in accordance with APPENDIX A – PROJECT ELECTIVES.

SubSection 603.5.1 Annual emissions.

Delete last sentence: “Where reporting of emissions is required.....in accordance with Section 602.2.3.”

Section 603.6 Energy display.

This Section is not required. It can be selected as a project Elective in accordance with APPENDIX A – PROJECT ELECTIVES.

Section 604.1 – Establishing an open and interoperable automated demand – response (Auto-DR) infrastructure

Add: “Exception :
4. Local school districts which have implemented their own Auto – DR strategy”

Strike SECTION 605 BUILDING ENVELOPE SYSTEMS, and all subsections except Subsection 605.1.1.1, modified herein.

SubSection 605.1.1.1 – Permanent shading devices for fenestration.

This Section is not required. It can be selected as a project Elective in accordance with APPENDIX A – PROJECT ELECTIVES.

Strike SECTION 606 BUILDING MECHANICAL SYSTEMS, and all subsections.

Strike SECTION 607 BUILDING SERVICE WATER HEATING SYSTEMS, and all subsections.

Strike SECTION 608 BUILDING ELECTRICAL POWER AND LIGHTING SYSTEMS, and all subsections except Subsection 608.6, modified herein.

Section 608.6 - Plug load controls.

This Section is not required. It can be selected as a project Elective in accordance with APPENDIX A – PROJECT ELECTIVES.

Section 610.1 – Renewable energy systems requirements.

This Section is not required. It can be selected as a project Elective in accordance with APPENDIX A – PROJECT ELECTIVES.

Section 611.1 – Mechanical systems commissioning and completion requirements –

Replace first reference to “*code official*” with “Owner and Sustainability Consultant”.

Change last sentence to read:

“Copies of all documentation shall be given to the Owner and Sustainability Consultant.”

SubSection 611.1.4.1 Acceptance

Delete: “the code official has received a letter of transmittal from the building owner acknowledging that”

SubSection 611.1.4.2 Copy

Replace with: “A copy of the Preliminary Commissioning Report shall be provided for review to the Owner and the Sustainability Consultant.”

SubSection 611.1.4.3 – Certification

Replace “code official” with “Owner and Sustainability Consultant.”

SubSection 611.1.5.5 - Post-occupancy recommissioning.

This Section is not required. It can be selected as a project Elective in accordance with APPENDIX A – PROJECT ELECTIVES.

Section 611.3 –Lighting and electrical systems commissioning and completion requirements

Change the last sentence to read:

“Copies of all documentation shall be given to the owner, the A/E and the Sustainability Consultant.”

Section 611.3 – Preconstruction documentation, lighting.

Delete: “as approved by the *code official*.”

Strike Sub Section 611.3.5 – Post –occupancy recommissioning

Section 611.4 Building envelope systems commissioning and completion requirements-

Change the last sentence to read:

“Copies of all documentation shall be given to the owner, the A/E and the Sustainability Consultant.”

SubSection 611.4.1 Preconstruction documentation, building thermal envelope.

Delete: “as approved by the *code official*.”

CHAPTER 7 WATER RESOURCE CONSERVATION, QUALITY AND EFFICIENCY

SECTION 701 – GENERAL

Add : **701.2 Applicable Code.** Change all references to the “International Plumbing Code” in CHAPTER 7 to “all applicable plumbing codes”

Section 702.1 – Fitting and fixture consumption.

Change first sentence to read:

“ Provide a minimum aggregate fixture consumption reduction of 35% over the minimum applicable plumbing code or provide fixtures to comply with Table 702.1 and the following:”

Section 703.1 Hydronic closed system.

Change to read:

“Closed loop hydronic heating and cooling systems, and ground sourced heat pump systems shall not be *permanently* connected to a potable makeup water supply.”

SubSection 703.7.3 Metering.

Change reference to Section 705.2 to Section 705.

Section 705.1 Metering.

Delete reference to Table 705.1.1 from the fourth sentence

SubSection 705.1.1 Metering.

Change to read:

“All HVAC system cooling towers or groups of cooling towers shall be required to utilize a meter in accordance with the requirements of Section 705.1 on make-up water and blow down water supply lines. Automatically controlled irrigation systems shall also be metered.”

Section 708.2 Permits

Change the first sentence to read:

“For schools and Community Colleges subject to permitting by local jurisdictions, permits shall be required for the construction, installation, alteration, and repair of gray water systems.”

Subsection 708.12.1 Gray water sources.

Delete: “as approved by the code official” and replace with “as allowed by applicable plumbing code”

Section 709.1 Scope

Add: “All systems shall be installed in compliance with all applicable codes for fully state funded buildings or any applicable local plumbing codes for school and Community College buildings.”

Section 709.2 Permits-

Change the first sentence to read:

“For schools and Community Colleges subject to permitting by local jurisdictions, permits shall be required for the construction, installation, alteration, and repair of reclaimed water systems.”

SubSection 709.5.1 – Reclaimed water for landscape irrigation. Exception:

Change to read:

“As allowed by applicable plumbing code and as appropriate for the intended application, reclaimed water shall be permitted in sprinkler irrigation applications.”

CHAPTER 8 INDOOR ENVIRONMENTAL QUALITY AND COMFORT

Section 801.2 – Indoor air quality management plan required

Add: “The Indoor Air Quality Plan shall comply with SMACNA - IAQ Guidelines for Occupied Bldgs under Construction, 2nd edition, 2007, ANSI/SMACNA 008-2008 Chapter 3.”

Section 803.3 – Environmental tobacco smoke control.

Change second sentence to read:

“Any exterior designated smoking areas shall be located not less than 50 ft away from building entrances, outdoor air intakes, and operable windows. Wherever possible and at the discretion of the Using Agency encourage non-smoking campuses at State owned buildings.”

SubSection 803.4.1 – Printer, copier and janitorial rooms.

Change first sentence to read:

“Enclosed rooms or spaces of any size that are used primarily as a print or copy facility containing three or more printers, copy machines, scanners, facsimile machines or similar machines in any combination, and rooms used primarily as janitorial rooms or closets where the use or storage of chemicals occurs, and storage and maintenance rooms and workshops shall comply with the following:”

Section 803.5 Filters

Add: “Provide for each filter location a filter replacement log including filter specifications, a filter replacement schedule and columns for filter service and replacement dates. Provide for a minimum of 10 years of logging per the replacement schedule.”

Section 804.2 Post–construction, pre-occupancy baseline IAQ testing.

Strike exception 2

Sections 806.2, 806.3, 806.4 – Change the wording at the beginning of each Section from “A minimum of 85 percent...” to:
“Provide 100 percent...”

Strike 807.5 Special inspections for sound levels and 807.6 Special inspections for sound transmission

Section 808.2 – Daylighting – Applicability

Add the following:

“5. A waiver may be applied for through the Maryland Green Building Council for building types or specific spaces where daylighting compliance may not be practicable.”

CHAPTER 9 COMMISSIONING, OPERATION AND MAINTENANCE

Section 901.1 Scope.

Strike: “and post-” **from the first sentence.**

Add: “**Section 901.1.1** – The term *Certificate of Occupancy* shall mean throughout this Section.: “*Substantial Completion or, in the case of school buildings, Certificate of Occupancy,*

Section 902 Approved Agency.

Change to read:

“An approved agency shall provide all of the information necessary for the owner and Sustainability Consultant to determine that the agency meets the applicable requirements.”

Section 903.1 General.

Change to read:

“An Accredited Commissioning Agent (CXa) hired by the Owner or their agent shall perform commissioning during construction at a minimum as required by Table 903.1. The CXa shall provide a schedule for all commissioning activities to the Owner, AE and the contractor. The Commissioning Agency shall provide written documentation to the owner and Sustainability Consultant demonstrating competence and relevant experience. Experience shall be considered relevant where the documented experience is related in complexity to the same type of commissioning activities of similar complexity and material qualities.”

SubSection 903.1.1 Preoccupancy report requirement.

Replace “code official” in both instances with: “owner and Sustainability Consultant”

Change the last sentence of this Section to read:

“Within 60 days of the issuance of Substantial Completion or issuance of Certificate of Occupancy, a final commissioning report shall be submitted to and accepted by the Owner and Sustainability Consultant.”

Strike SubSection 903.1.2 Post – occupancy report requirement

TABLE 903.1 COMMISSIONING PLAN

Strike: All CHAPTER 4 requirements for commissioning with the exception of Vegetative Roofs and Site Lighting

Add: Under CHAPTER 7, add “Plumbing fixtures / preoccupancy commissioning” method shall be: “ field testing and verification”.

Section 904 BUILDING OPERATIONS AND MAINTENANCE

Section 904.1 General.

Delete the third sentence of this Section:

“The building owner shall file.....building operations and maintenance documents.”

CHAPTER 10 EXISTING BUILDINGS

Strike CHAPTER 10 in its entirety

CHAPTER 11 EXISTING BUILDING SITE DEVELOPMENT

No changes

CHAPTER 12 REFERENCE STANDARDS

Add: SMACNA - IAQ Guidelines for Occupied Bldgs under Construction, 2nd edition, 2007, ANSI/SMACNA 008-2008 Chapter 3

APPENDIX A PROJECT ELECTIVES

Section A102.2 General.

Replace with “Projects should achieve a minimum of 10 electives – at least 3 of which shall be from the Energy Conservation and Efficiency Section. Selected project electives shall be communicated to the MDGBC by means of checking the appropriate boxes in the electives table on the International Green Construction Code Compliance Form 103.2.”

SECTION A103 DEFINITIONS

PROJECT ELECTIVE

Delete: “and Tables A104, A105, A106, A107, and A108.”

SECTION A104 SITE PROJECT ELECTIVES

Strike TABLE A104

Strike A104.1 Flood hazard area project elective.

Strike A104.3 Infill site project elective.

Strike A104.4 Brownfield site project elective.

Strike A104.6 Mixed-use development project elective.

Strike A104.7 Changing and shower facilities project elective.

A104.8 Long Term Bicycle parking and storage.

Replace: "TABLE 407.3" with "Section 407.3"

A.104.9.1 Site hardscape project elective 1.

Replace: "75 percent" with "50 percent"

Strike A104.9.3 Site hardscape project elective 3.

A104.9.4 Roof covering project elective.

Replace with: "The development of a new building with 100% of roof coverings in accordance with Section 408.3 shall be considered a project elective."

ADD: *404.1.1 Reduce potable water for irrigation by 100% in accordance with section 404.1.1 Water for outdoor landscape irrigation*

ADD: *405.1.4 Perform Soil Restoration in accordance with section 405.1.4 Soil Restoration.*

ADD: *405.3 Native Plant Landscaping – Where new landscaping is installed as part of a site plan or within the building site, not less than 50% of the newly landscaped area shall be planted with native or adapted species.*

ADD: *407.4 Electric Vehicle Charging Station(s) – Install electrical vehicle supply equipment for a minimum of 2% of all parking spaces used by the project. Clearly reserve and identify these spaces for the sole use of plug-in electric vehicles. Provide a Level 2 charging capacity (208-240 volts) or greater.*

A105 Material Resource Conservation and Efficiency

Strike TABLE A105.

A105.1 Waste Management project elective.

Delete the second sentence in the paragraph:

"Where another percentage.....above the percentage indicated in Table 302.1."

Strike A105.2 Construction waste landfill maximum project elective.

A105.3 Material selection project electives

Delete: "mass, volume, or" from the last sentence in Item 1.

Delete: "mass, volume, or" from the last sentence in Item 2.

Strike A105.4 Building service life plan project electives and Sub Section A105.4.1 Plan and components.

Strike A105.5 Design for deconstruction and building reuse project elective.

Strike A105.6 Existing building reuse project elective.

Strike A105.7 Historic building reuse project elective.

SECTION A106 ENERGY CONSERVATION, EFFICIENCY AND EARTH ATMOSPHERIC QUALITY

Strike TABLE A106

Replace A106.1 with “Performance based designs will demonstrate an energy savings of at least the following percentage(s) over the State's most recently adopted version of the International Energy Conservation Code per calculation procedures in Section 602.1.2.1. Each “step” shall count as one project elective.

- a. (EUIp / EUIb) = < .82 of current IECC*
- b. (EUIp / EUIb) = < .79 of current IECC*
- c. (EUIp / EUIb) = < .76 of current IECC*
- d. (EUIp / EUIb) = < .73 of current IECC*
- e. (EUIp / EUIb) = < .70 of current IECC*
- f. (EUIp / EUIb) = < .67 of current IECC*
- g. (EUIp / EUIb) = < .64 of current IECC*
- h. (EUIp / EUIb) = < .61 of current IECC*

Strike A106.2 Mechanical systems project elective.

Strike A106.3 Service water heating project elective.

Strike A106.4 Lighting system efficiency project elective.

Strike A106.5 Passive design project elective.

A106.6 Renewable energy system project electives.

Replace “TABLE A106” with “the electives table in the International Green Construction Code Compliance Form 103.2”.

ADD: 603.4 *Provide energy load type sub-metering in accordance with Section 603.4 Energy load type sub-metering.*

ADD: 603.6 *Provide a building Energy Display in accordance with Section 603.6 Energy Display*

ADD: 605.1.1.1 *Install permanent shading devices for fenestration in accordance with Section 605.1.1.1 Permanent shading devices for fenestration.*

ADD: 608.6 *Install plug load controls in accordance with Section 608.6 Plug load controls.*

ADD: 611.1.5.5 *Perform post-occupancy commissioning in accordance with Section 611.1.5.5 Post-Occupancy commissioning.*

SECTION A107 WATER RESOURCE CONSERVATION AND EFFICIENCY

Strike TABLE A107

Strike A107.5 Automatic fire sprinkler system project elective.

Strike A107.6 Alternate onsite nonpotable water to fire pumps project elective.

Strike A107.7 Alternate onsite nonpotable water for industrial process make-up water project elective

ADD: *A107.10 Water Use Reduction. Reduce aggregate water use (not including irrigation) by 40% over applicable plumbing code requirements OR For fixtures and fittings listed in TABLE 702.1, reduce aggregate fitting flow rate by 20% from this proposed baseline based on estimated occupant usage.*

SECTION A108 INDOOR ENVIRONMENTAL QUALITY AND COMFORT

Strike TABLE A108

Strike A108.1 VOC emissions project electives.

Strike A108.2 Flooring material project elective.

Strike A108.3 Ceiling materials project elective.

Strike A108.4 Wall materials project elective.

ADD: *“A108.7 Environmental Product Declarations. Use at least 20 products or finishes that have an Environmental Product Declaration which conforms to ISO 14025, 14040, 14044, and EN 15804 or ISO 21930 and have at least “cradle to grave” scope.”*

ADD: *“A108.8 Ventilation Controls for densely occupied spaces. Provide Ventilation Controls for Densely Occupied Spaces per ASHRAE Standard 189.1-2011 Section 7.4.3.2.*

ADD: *“A108.9 Occupant comfort survey. Develop a plan to implement and respond to at least one Occupant Comfort Survey 6-18 months after building occupancy. Survey should collect anonymous responses about thermal comfort, acoustics, indoor air quality, lighting levels, building cleanliness and other occupant comfort issues. The survey must be collected from a representative sample of building occupants making up at least 30% of the total occupants, and it must include an assessment of overall satisfaction with building performance and identification of any comfort-related problems. Document survey results and corrective actions to address comfort issues identified through the survey(s). Conduct at least one occupant survey during the performance period.”*

**MARYLAND GREEN BUILDING COUNCIL
INTERNATIONAL GREEN CONSTRUCTION CODE
COMPLIANCE FORM 103.2**

PROJECT AND TEAM INFORMATION

Date

Project Name and Narrative

State Using Agency

Owner's Representative

Designer

Constructor

Sustainability Consultant

Commissioning Agent

Total Project Construction Cost

Date of Substantial Completion

GSF/NASF

Projected Energy Use

DECLARATION

This project was designed and constructed per the IgCC as implemented by the State of Maryland in accordance with the High Performance Building Act to the best of my knowledge and ability:

Owner _____

Architect of Record _____

Sustainability Consultant _____

Contractor _____

Commissioning Agent _____

IGCC COMPLIANCE FORM

IgCC Section	IgCC Item	Performed By	Reviewed By
404.1.1	Irrigation Calculations		
406.1	Site waste diversion from landfill		
408	Heat Island Mitigation Calculations		
409	Site Lighting Calculations		
503.1 (4)	Construction waste management		
505	Material Selection calculations		
602	Energy Model Calculations		
603	Energy Metering, Monitoring and Reporting		
604	Automated Demand Response Infrastructure		
609	Specific Appliances and Equipment		
611.1.4.3	Preliminary Cx Report		
611.3	Lighting and electrical Cx documentation		
611.3	Construction and owner education documents		
611.4	Building envelope Cx documentation		
702	Fixtures, Fittings, Equipment and Appliances		
703	HVAC Systems and Equipment		
704	Water treatment devices and equipment		
705	Metering		
706	Nonpotable Water Requirements		
707	Rainwater Collection and Distribution Systems		
708	Gray Water Systems		
709	Reclaimed Water Systems		
802	Building Construction Features, Operations & Maintenance Facilitation		

803	HVAC Systems		
804	Specific Indoor Air Quality and Pollutant Control Measures		
805	Prohibited Materials		
806	Material Emissions and Pollutant Control		
807	Acoustics		
808	Daylighting Calculations		
903.1	Cx Schedule		
903.1.1	Final Cx Report		
904.1	Building O&M Documentation		

ELECTIVES

Projects should achieve a minimum of 10 electives – at least 3 of which shall be from the Energy Conservation and Efficiency Section.

	IgCC Section (If Applicable)	Description	Performed by	Reviewed by
SECTION A104 SITE ELECTIVES				
<input type="checkbox"/>	A104.2	Wildlife Corridor		
<input type="checkbox"/>	A104.5	Site Restoration		
<input type="checkbox"/>	A104.8	Long term bicycle parking and storage		
<input type="checkbox"/>	A104.9.1	Site hardscape elective – 50%		
<input type="checkbox"/>	A104.9.2	Site hardscape elective – 100%		
<input type="checkbox"/>	A104.9.4	Roof covering project elective – 100%		
<input type="checkbox"/>	404.1.1	Reduce potable water for irrigation by 100% in accordance with Section 404.1.1		
<input type="checkbox"/>	405.1.4.2	Soil Restoration		
<input type="checkbox"/>	405.3	Native Landscaping – not less than 50% native or adapted		
<input type="checkbox"/>	407.4	Electric vehicle charging stations – minimum 2%		

SECTION A105 MATERIAL RESOURCE CONSERVATION AND EFFICIENCY ELECTIVES			
<input type="checkbox"/>	A105.1	Waste Management – 95%	
<input type="checkbox"/>	A105.3 (1)	Reused, recycled content, recyclable, bio-based, indigenous – 70%	
<input type="checkbox"/>	A105.3 (2)	Reused, recycled content, recyclable, bio-based, indigenous – 85%	
SECTION A106 ENERGY CONSERVATION AND EFFICIENCY ELECTIVES			
	A106.1	Performance based energy calculations	
<input type="checkbox"/>		EUIp / EUIb =<.82	
<input type="checkbox"/>		EUIp / EUIb =<.79	
<input type="checkbox"/>		EUIp / EUIb =<.76	
<input type="checkbox"/>		EUIp / EUIb =<.73	
<input type="checkbox"/>		EUIp / EUIb =<.70	
<input type="checkbox"/>		EUIp / EUIb =<.67	
<input type="checkbox"/>		EUIp / EUIb =<.64	
<input type="checkbox"/>		EUIp / EUIb =<.61	
	A106.6	Renewable energy systems	
<input type="checkbox"/>		2%	
<input type="checkbox"/>		5%	
<input type="checkbox"/>		10%	
<input type="checkbox"/>		20%	
<input type="checkbox"/>	603.4	Energy Load Type Sub-metering	
<input type="checkbox"/>	603.6	Energy Display	
<input type="checkbox"/>	605.1.1.1	Permanent shading devices for fenestration	
<input type="checkbox"/>	608.6	Plug load controls	
<input type="checkbox"/>	611.1.5.5	Post-Occupancy Commissioning	
SECTION A107 WATER RESOURCE CONSERVATION AND EFFICIENCY ELECTIVES			
<input type="checkbox"/>	A107.2	Onsite waste water treatment	
<input type="checkbox"/>	A107.3	Alternate onsite nonpotable water for outdoor hose connections	
<input type="checkbox"/>	A107.4	Alternate onsite nonpotable water for plumbing fixture flushing	
<input type="checkbox"/>	A107.8	Alternate onsite	

		nonpotable water for cooling tower makeup water		
<input type="checkbox"/>	A107.9	Gray water collection		
<input type="checkbox"/>	A107.10	Reduce aggregate water use by 40% OR For fixtures listed in Table 702.1, reduce aggregate fitting flow rate by 20%		
SECTION A108 INDOOR ENVIRONMENTAL QUALITY AND COMFORT ELECTIVES				
<input type="checkbox"/>	A108.6	Views to building exterior		
<input type="checkbox"/>	A108.7	Use at least 20 products with an Environmental Product Declaration		
<input type="checkbox"/>	A108.8	Ventilation controls in all regularly occupied spaces		
<input type="checkbox"/>	A108.9	Perform an Occupant Comfort Survey 6-18 months after building occupancy		

TOTAL ELECTIVES _____

WAIVERS RECEIVED (IF APPLICABLE)