CITY OF BALTIMORE ORDINANCE Council Bill 14-0413

Introduced by: Councilmembers Kraft, Stokes, Clarke, Scott, Henry, Middleton Introduced and read first time: June 23, 2014 Assigned to: Judiciary and Legislative Investigations Committee Committee Report: Favorable with amendments Council action: Adopted Read second time: November 10, 2014

AN ORDINANCE CONCERNING

International Green Construction Code

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- FOR the purpose of adopting the International Green Construction Code (2012 Edition) as part of
- 3 the Building, Fire, and Related Codes Article of Baltimore City, subject to certain additions,
- 4 deletions, amendments, and other modifications; providing for certain exceptions and
- 5 alternatives (such as LEED Silver Certification); conforming, correcting, and clarifying
- 6 related language; providing for the effect, construction, and effective date of this Ordinance; 7
- and generally relating to the Building, Fire, and Related Codes for Baltimore City.
- 8 BY adding
- 9 Article - Building, Fire, and Related Codes
- Section(s) 2-103 (BC §§ 101.4.8, 101.4.9, and 202.2.37.3a) 10
- Baltimore City Revised Code 11
- (Edition 2000) 12
- By repealing and reordaining, with amendments 13
- Article Building, Fire, and Related Codes 14
- Section(s) 7-102 (PMC § 102.3) 15
- Baltimore City Revised Code 16
- (Edition 2000) 17

By repealing 18

- 19 Article - Building, Fire, and Related Codes
- 20 Part II. International Building Code
- Chapter37. "Green Building" Requirements 21
- Baltimore City Revised Code 22
- (Edition 2000) 23
- By adding, with modifications 24
- 25 Article - Building, Fire, and Related Codes
- Part XI. International Green Construction Code 26
- Baltimore City Revised Code 27
- (Edition 2000) 28

EXPLANATION: CAPITALS indicate matter added to existing law. [Brackets] indicate matter deleted from existing law. Underlining indicates matter added to the bill by amendment. Strike out indicates matter stricken from the bill by amendment or deleted from existing law by amendment.

1 2 3	SECTION 1. BE IT ORDAINED BY THE MAYOR AND CITY COUNCIL OF BALTIMORE , That Chapter 37 {"Green Building' Requirements"}, of the Building Code of Baltimore City (Building, Fire, and Related Codes Article, Part II, Chapter 37) is repealed, in its entirety.
4 5	SECTION 2. AND BE IT FURTHER ORDAINED, That the Laws of Baltimore City read as follows:
6	Baltimore City Revised Code
7	Article – Building, Fire, and Related Codes
8	Part II. International Building Code
9	§ 2-103. City modifications.
10 11	The additions, deletions, amendments, and other modifications adopted by the City are as follows:
12	Chapter 1. Scope and Administration
13	Section 101 General
14 15 16	101.4 Referenced codes. The standards and codes listed in this § 101.4, as modified by these provisions and as referred to elsewhere in this Code, are part of the requirements of this Code to the extent prescribed by the reference.
17 18 19 20 21	104.4.8 RESIDENTIAL. THE INTERNATIONAL RESIDENTIAL CODE FOR ONE- AND TWO- FAMILY DWELLINGS (2012 EDITION), AS MODIFIED IN PART X OF THIS CODE, APPLIES TO DETACHED 1- AND 2-FAMILY DWELLINGS AND MULTIPLE SINGLE-FAMILY DWELLINGS (TOWNHOUSES), NOT MORE THAN 3 STORIES ABOVE GRADE PLANE IN HEIGHT, AND THEIR ACCESSORY STRUCTURES.
22 23 24 25 26	101.4.9 GREEN CONSTRUCTION. THE INTERNATIONAL GREEN CONSTRUCTION CODE CONSTRUCTION (2012 EDITION), AS MODIFIED IN PART XI OF THIS CODE, APPLIES TO CONSTRUCTION REQUIREMENTS INTENDED TO REDUCE THE NEGATIVE IMPACTS AND INCREASE THE POSITIVE IMPACTS OF THE BUILT ENVIRONMENT ON THE NATURAL ENVIRONMENT AND BUILDING OCCUPANTS.
27	Chapter 2. Definitions; Rules of Construction
28	Section 202 Definitions
29 30	202.2 Supplemental definitions. Notwithstanding any different definition in the International Building Code, the following terms have the meanings given in this § 202.2.
31	202.2.37 International Codes.
32 33	202.2.37.3A GREEN CONSTRUCTION CODE. "GREEN CONSTRUCTION CODE", "BALTIMORE CITY GREEN CONSTRUCTION CODE", "INTERNATIONAL GREEN

1 2 3	CONSTRUCTION CODE", OR "IGCC" MEANS THE INTERNATIONAL GREEN CONSTRUCTION CODE (2012 EDITION), AS SUPPLEMENTED, AMENDED, OR OTHERWISE MODIFIED BY BALTIMORE CITY.
4	Part VII. International Property Maintenance Code
5	§ 7-102. City modifications.
6 7	The additions, deletions, amendments, and other modifications adopted by the City are as follows:
8	Chapter 1. Scope and Administration
9	Section 102 Applicability
10 11 12	102.3 Application of other codes. All repairs, additions, or alterations to a structure and all changes of occupancy must be done in accordance with this Code and with the following codes and standards, as modified by Baltimore City:
13	1. the International Building Code (2012 Edition),
14	2. the National Electrical Code (2011 Edition),
15	3. the International Fuel Gas Code (2012 Edition),
16	4. the International Mechanical Code (2012 Edition),
17	5. the International Plumbing Code (2012 Edition),
18	6. the International Fire Code (2012 Edition),
19	7. the International Energy Conservation Code (2012 Edition),
20 21	8. THE INTERNATIONAL RESIDENTIAL CODE FOR ONE- AND TWO-FAMILY DWELLINGS (2012 EDITION),
22	9. THE INTERNATIONAL GREEN CONSTRUCTION CODE, and
23	10. [8.] the Zoning Code of Baltimore City.
24	PART XI. INTERNATIONAL GREEN CONSTRUCTION CODE
25	§11-101. CITY ADOPTION.
26	(A) IN GENERAL.
27 28	THE INTERNATIONAL GREEN CONSTRUCTION CODE (2012 EDITION) IS ADOPTED AS PART OF THE BUILDING, FIRE, AND RELATED CODES OF BALTIMORE CITY, SUBJECT TO THE

- 1 ADDITIONS, DELETIONS, AMENDMENTS, AND OTHER MODIFICATIONS CONTAINED IN THIS 2 PART XI.
- 3 (B) CODIFICATION.
- 4 UNLESS OTHERWISE SPECIFIED, CHAPTER, ARTICLE, AND SECTION NUMBERS IN THIS
 5 PART XI REFER TO THE CHAPTER, ARTICLE, AND SECTION NUMBERS OF THE
 6 INTERNATIONAL GREEN CONSTRUCTION CODE.
- 7 **§ 11-102.** CITY MODIFICATIONS.
- 8 THE ADDITIONS, DELETIONS, AMENDMENTS, AND OTHER MODIFICATIONS ADOPTED BY THE 9 CITY ARE AS FOLLOWS:
- 10 CHAPTER 1. SCOPE AND ADMINISTRATION
- 11 SECTION 101 GENERAL
- 101.1 TITLE. THE REGULATIONS CONTAINED IN THIS CODE CONSTITUTE AND ARE KNOWN AS
 THE "BALTIMORE GREEN CONSTRUCTION CODE".
- 14 101.1.1 REFERENCES TO "THIS CODE". ALL REFERENCES TO "THIS CODE" REFER TO THE
 15 BALTIMORE CITY GREEN CONSTRUCTION CODE.
- 16 101.2 CODE AS AN OVERLAY DOCUMENT. THIS CODE IS AN OVERLAY DOCUMENT TO BE
 17 USED IN CONJUNCTION WITH THE OTHER CODES AND STANDARDS ADOPTED BY THE CITY. THIS
 18 CODE <u>IS</u> NOT INTENDED TO BE USED AS A STAND-ALONE CONSTRUCTION REGULATION
- 19 DOCUMENT, AND PERMITS ARE NOT TO BE ISSUED UNDER THIS CODE. THIS CODE IS NOT
- 20 INTENDED TO ABRIDGE OR SUPERSEDE ANY HEALTH, SAFETY, OR ENVIRONMENTAL
- 21 REQUIREMENTS OF ANY OTHER APPLICABLE LAW, CODE, OR STANDARD.
- 101.3 Scope. (As in IGCC) Scope and Application. This code applies to the design,
 construction, addition, alteration, change of occupancy, relocation,
 Replacement, repair, equipment, building site, maintenance, removal, and
 Demolition of every structure and any appurtenances connected or attached to
 A structure and to the site on which the structure is located. Occupancy
 Classifications are determined in accordance with the Baltimore City Building
 Code.
- 29 **EXCEPTIONS:** THIS CODE DOES NOT APPLY TO:
 - 1. A 1- OR 2-FAMILY DWELLING, INCLUDING ACCESSORY STRUCTURES, REGULATED BY THE INTERNATIONAL RESIDENTIAL CODE FOR ONE- AND TWO-FAMILY DWELLINGS (2012 EDITION);.
- A MULTIPLE-FAMILY DWELLING THAT IS NO MORE THAN 3 STORIES ABOVE GRADE
 PLANE IN HEIGHT AND CONTAINS NO MORE THAN 5 DWELLING UNITS;.
- A STRUCTURE THAT HAS ACHIEVED ACHIEVES, AS CERTIFIED BY THE GREEN
 BUILDING CERTIFICATION INSTITUTE, A SILVER-LEVEL OR HIGHER RATING IN THE

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1 2	U.S. GREEN BUILDING COUNCIL'S LEED (LEADERSHIP IN ENERGY AND ENVIRONMENTAL DESIGN) RATING SYSTEM , .
3	 <u>4.</u> <u>GROUP R-2 AND R-4 RESIDENTIAL BUILDINGS 5 OR MORE STORIES ABOVE GRADE</u>
4	<u>PLANE IN HEIGHT, INCLUDING THEIR ACCESSORY STRUCTURES AND THE SITE OR</u>
5	<u>LOT ON WHICH THESE BUILDINGS ARE LOCATED, THAT, AS CERTIFIED BY A THIRD-</u>
6	<u>PARTY APPROVED BY THE CODE OFFICIAL, COMPLY WITH THE REQUIREMENTS OF</u>
7	<u>THE ICC 700 ("NATIONAL GREEN BUILDING STANDARD"), AS FOLLOWS:</u>
8	(I) FOR ENERGY EFFICIENCY CATEGORY REQUIREMENTS, AT THE SILVER
9	PERFORMANCE LEVEL OR EQUIVALENT; AND
10	(II) FOR ALL OTHER ICC 700 CATEGORIES AND CHAPTERS, AT THE BRONZE
11	PERFORMANCE LEVEL OR EQUIVALENT.
12	5. GROUP R-2 AND R-4 PORTIONS OF MIXED USE BUILDINGS THAT, AS CERTIFIED BY A
13	THIRD-PARTY APPROVED BY THE CODE OFFICIAL, COMPLY WITH THE
14	REQUIREMENTS OF THE ICC 700 ("NATIONAL GREEN BUILDING STANDARD"), AS
15	FOLLOWS:
16	(I) FOR ENERGY EFFICIENCY CATEGORY REQUIREMENTS, AT THE SILVER
17	PERFORMANCE LEVEL OR EQUIVALENT; AND
18	(II) FOR ALL OTHER ICC 700 CATEGORIES AND CHAPTERS, AT THE BRONZE
19	PERFORMANCE LEVEL OR EQUIVALENT.
20	THE REMAINDER OF THE BUILDING AND THE SITE ON WHICH THE BUILDING IS
21	LOCATED MUST COMPLY WITH THE PROVISIONS OF THIS CODE.
22	<u>6.</u> 4. A STRUCTURE THAT HAS BEEN DESIGNED AND, AS VERIFIED BY THE CODE
23	OFFICIAL OR AN ENTITY APPROVED BY THE CODE OFFICIAL, CONSTRUCTED IN
24	COMPLIANCE WITH THE STANDARD FOR THE DESIGN OF HIGH-PERFORMANCE
25	GREEN BUILDINGS, EXCEPT LOW-RISE RESIDENTIAL BUILDINGS", ADOPTED BY
26	AMERICAN SOCIETY OF HEATING, REFRIGERATING AND AIR-CONDITIONING
27	ENGINEERS, INC. (ASHRAE 189.1);.
28	7. 5. A TEMPORARY STRUCTURE APPROVED UNDER BUILDING CODE SECTION 3103
29	{"TEMPORARY STRUCTURES"} , OR .
30 31	<u>8.</u> 6. EQUIPMENT OR SYSTEMS THAT ARE USED PRIMARILY FOR INDUSTRIAL OR MANUFACTURING PURPOSES.
32	101.3.1 RESIDENTIAL CONSTRUCTION. {NOT ADOPTED}
33	101.4 APPENDICES. THE APPENDICES TO THE INTERNATIONAL GREEN CONSTRUCTION CODE

33 101.4 APPENDICES.34 APPLY AS FOLLOWS:

1 **101.4.1 APPENDICES ADOPTED.** THE FOLLOWING APPENDIX, AS MODIFIED, IS ADOPTED 2 AS PART OF THIS CODE:

- 3 1. APPENDIX A: "PROJECT ELECTIVES".
- 4 **101.4.2 APPENDICES NOT ADOPTED.** THE FOLLOWING APPENDICES ARE NOT ADOPTED AS 5 PART OF THIS CODE:
- 6 1. APPENDIX B: "RADON MITIGATION".
- 7 2. APPENDIX C: "OPTIONAL ORDINANCE".
- 8 3. APPENDIX D: "ENFORCEMENT PROCEDURES".
- 9 **101.5 INTENT.** *{AS IN IGCC}*
- 10 101.6 ADMINISTRATION. THIS CODE IS ADMINISTERED AND ENFORCED BY THE DEPARTMENT
 11 OF HOUSING AND COMMUNITY DEVELOPMENT AND ITS COMMISSIONER. ACCORDINGLY, IN
 12 THIS CODE:
- 13 1. "DEPARTMENT" MEANS THE DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT, AND
- "CODE OFFICIAL" MEANS THE BUILDING OFFICIAL, AS DEFINED IN § 202.2 OF THE
 BALTIMORE CITY BUILDING CODE.
- 17 SECTION 102 APPLICABILITY
- 18 **102.1 TO 102.3** *{AS IN IGCC}*
- 19 102.4 REFERENCED CODES. THE FOLLOWING CODES, AS MODIFIED BY BALTIMORE CITY, ARE
 20 CONSIDERED PART OF THE REQUIREMENTS OF THIS CODE:
- 21 1. THE INTERNATIONAL BUILDING CODE (2012 EDITION),
- 22 2. THE NATIONAL ELECTRICAL CODE (2011 EDITION),
- 23 3. THE INTERNATIONAL FUEL GAS CODE (2012 EDITION),
- 24 4. THE INTERNATIONAL MECHANICAL CODE (2012 EDITION),
- 25 5. THE INTERNATIONAL PLUMBING CODE (2012 EDITION),
- 26 6. THE INTERNATIONAL PROPERTY MAINTENANCE CODE (2102 EDITION)
- 27 7. THE INTERNATIONAL FIRE CODE (2012 EDITION),
- 28 8. THE INTERNATIONAL ENERGY CONSERVATION CODE (2012 EDITION),

1	9. THE INTERNATIONAL RESIDENTIAL CODE (2012 EDITION), AND
2	10. THE ZONING CODE OF BALTIMORE CITY.
3	102.4.1 CONFLICTING PROVISIONS. <i>{As in IGCC}</i>
4	102.5 PARTIAL INVALIDITY. <i>{As in IGCC}</i>
5 6	102.6 EXISTING STRUCTURES. THE LEGAL OCCUPANCY OF ANY STRUCTURE EXISTING ON THIS CODE'S EFFECTIVE DATE IS PERMITTED TO CONTINUE WITHOUT CHANGE, EXCEPT:
7 8 9	1. AS SPECIFICALLY COVERED IN THIS CODE, THE INTERNATIONAL BUILDING CODE, THE INTERNATIONAL PROPERTY MAINTENANCE CODE, OR THE INTERNATIONAL FIRE CODE, OR
10 11	2. AS DEEMED NECESSARY BY THE CODE OFFICIAL FOR THE GENERAL SAFETY AND WELFARE OF THE STRUCTURE'S OCCUPANTS AND THE PUBLIC.
12	102.7 MIXED OCCUPANCY BUILDINGS. <i>{As in IGCC}</i>
13	SECTION 103 DUTIES AND POWERS OF THE CODE OFFICIAL
14	103. 1 TO 103.4 <u>103.3</u> { <i>AS IN IGCC</i> }
15	<u>103.4</u> 103.5 INSPECTIONS. { <i>AS IN IGCC</i> }
16 17 18 19 20	<u>103.4.1</u> 103.5.1 RIGHT OF ENTRY. THE CODE OFFICIAL MAY ENTER ANY STRUCTURE OR PREMISES AT REASONABLE TIMES TO INSPECT, SUBJECT TO CONSTITUTIONAL RESTRICTIONS ON UNREASONABLE SEARCHES AND SEIZURES. IF ENTRY IS REFUSED OR NOT OBTAINED, THE CODE OFFICIAL MAY PURSUE RECOURSE AS PROVIDED BY LAW, INCLUDING § 104 {"POWERS OF BUILDING OFFICIAL"} OF THE BALTIMORE CITY BUILDING CODE.
21 22 23	103.5 EXEMPTIONS. THE CODE OFFICIAL MAY, IN UNUSUAL CIRCUMSTANCES AND ONLY ON GOOD CAUSE SHOWN, GRANT AN EXEMPTION FROM ANY REQUIREMENT OF THIS CODE BASED ON:
24 25	1. <u>SUBSTANTIAL EVIDENCE OF A PRACTICAL INFEASIBILITY OR HARDSHIP IN MEETING A</u> <u>REQUIRED STANDARD;</u>
26 27	2. <u>A DETERMINATION THAT THE PUBLIC INTEREST WOULD NOT BE SERVED BY REQUIRING</u> <u>COMPLIANCE WITH THE REQUIREMENT; OR</u>
28	3. OTHER COMPELLING CIRCUMSTANCES, AS DETERMINED BY THE CODE OFFICIAL.
29 30	103.5.1 BURDEN ON APPLICANT. THE APPLICANT HAS THE BURDEN TO ESTABLISH THE REQUISITE BASIS FOR AN EXEMPTION UNDER THIS SECTION.
31 32	103.5.2 Consideration of other standards. Before the Code Official grants an exemption under this section, the Code Official must consider whether

- 1
 ANOTHER STANDARD IS PRACTICABLE AND SHOULD BE REQUIRED IN PLACE OF THE

 2
 EXEMPTED STANDARD.
- 3 SECTION 104 CONSTRUCTION DOCUMENTS {As in IGCC}
- 4 SECTION 105 APPROVALS {AS IN IGCC}
- 5 SECTION 106 PERMITS
- 6 **106.1 REQUIRED.** *{AS IN IGCC}*
- 106.2 APPLICATION FOR PERMIT. THE REQUIREMENTS FOR OBTAINING A PERMIT ARE AS SET
 FORTH IN § 105.3 {"APPLICATION FOR PERMIT"} OF THE BALTIMORE CITY BUILDING CODE.
- 9 106.3 EXPIRATION OF PERMIT. UNLESS EXTENDED, A PERMIT EXPIRES AS SET FORTH IN
 10 § 105.5 {"EXPIRATION; EXTENSION"} OF THE BALTIMORE CITY BUILDING CODE.
- 106.4 EXTENSION. A PERMIT MAY BE EXTENDED AS PROVIDED IN § 105.5 {"EXPIRATION;
 EXTENSION"} OF THE BALTIMORE CITY BUILDING CODE.
- 13 **106.5 SUSPENSION OR REVOCATION.** THE BUILDING OFFICIAL CODE OFFICIAL MAY
 14 SUSPEND OR REVOKE A PERMIT AS PROVIDED IN § 105.6 {"SUSPENSION OR REVOCATION"} OF
- 15 THE BALTIMORE CITY BUILDING CODE.
- 16 **SECTION 107 FEES**
- 17 **107.1 FEE SCHEDULE.** FEES ARE AS SET FORTH IN § 109 {"FEES"} OF THE BALTIMORE
 18 CITY BUILDING CODE.
- 19 SECTION 108 VIOLATIONS
- 108.1 UNLAWFUL ACTS. IT IS UNLAWFUL FOR ANY PERSON TO BE IN CONFLICT WITH OR IN
 VIOLATION OF ANY PROVISION OF THIS CODE OR OF ANY REGULATION, PERMIT, NOTICE, OR
 ORDER ISSUED UNDER THIS CODE.
- 108.2 VIOLATION PENALTIES. THE PENALTIES FOR A VIOLATION OF THIS CODE ARE AS
 PROVIDED IN § 114 {"VIOLATIONS"} OF THE BALTIMORE CITY BUILDING CODE FOR A
 VIOLATION THAT CODE.
- 108.3 STOP-WORK ORDERS. THE ISSUANCE AND ENFORCEMENT OF STOP-WORK ORDERS ARE
 AS PROVIDED IN § 115 {"STOP-WORK ORDER"} OF THE BALTIMORE CITY BUILDING CODE.
- 28 **108.4 OCCUPANCY PERMIT.** ISSUANCE OF AN OCCUPANCY PERMIT DOES NOT <u>CONSTITUTE</u> AN
- 29 APPROVAL OF A VIOLATION OF THIS CODE OR ANY OTHER LAW. *{NOTE: THE "CERTIFICATE OF*
- 30 OCCUPANCY" TO WHICH THE IGCC REFERS IS KNOWN IN BALTIMORE CITY AS AN "OCCUPANCY
- 31 *PERMIT*".}

SECTION 109 ADMINISTRATIVE AND JUDICIAL REVIEW

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109.1 GENERAL. A DECISION OF THE CODE OFFICIAL IS SUBJECT TO ADMINISTRATIVE AND JUDICIAL REVIEW AS PROVIDED IN THE BALTIMORE CITY BUILDING CODE. **CHAPTER 2. DEFINITIONS SECTION 201 GENERAL** 201.1 SCOPE. {AS IN IGCC} **201.2 INTERCHANGEABILITY.** *{As in IGCC}* **201.3 TERMS DEFINED IN OTHER CODES.** IF A TERM IS NOT DEFINED IN THIS CODE AND IS DEFINED IN ONE OR ANOTHER OF THE CODES LISTED IN § 102.4 {"REFERENCED CODES"} OF THIS CODE, THE TERM HAS THE MEANING GIVEN TO IT IN THAT CODE. **201.4** TERMS NOT DEFINED. *{As in IGCC}* **SECTION 202 GENERAL DEFINITIONS 202.1 GENERAL.** EXCEPT AS PROVIDED IN § 202.2, TERMS THAT ARE USED AND DEFINED IN THE INTERNATIONAL GREEN CONSTRUCTION CODE (2012 EDITION) HAVE THE MEANINGS GIVEN IN THE INTERNATIONAL GREEN CONSTRUCTION CODE (2012 EDITION). **202.2 SUPPLEMENTAL DEFINITIONS.** NOTWITHSTANDING ANY DIFFERENT DEFINITION IN THE INTERNATIONAL GREEN CONSTRUCTION CODE, THE FOLLOWING TERMS HAVE THE MEANINGS GIVEN IN THIS § 202.2. **202.2.1 CODE OFFICIAL.** "CODE OFFICIAL" HAS THE MEANING STATED IN § 101.6 OF THIS CODE. 202.2.2 DWELLING UNIT. "DWELLING UNIT" HAS THE MEANING STATED IN § 202.2 OF THE BALTIMORE CITY BUILDING CODE. 202.2.3 FLOOD HAZARD AREA. "FLOOD HAZARD AREA" MEANS A REGULATED FLOOD HAZARD AREA ESTABLISHED UNDER AND REGULATED BY THE FLOODPLAIN MANAGEMENT CODE. 202.2.4 FLOODPLAIN. "FLOODPLAIN" HAS THE MEANING STATED IN CITY CODE ARTICLE 7 {"NATURAL RESOURCES"}, § 1-2 {"DEFINITIONS – "ACCESSORY STRUCTURE" TO "FLOODPLAIN DISTRICT" }. 202.2.5 FLOODPLAIN MANAGEMENT CODE. "FLOODPLAIN MANAGEMENT CODE" MEANS THE BALTIMORE CITY FLOODPLAIN MANAGEMENT CODE, CITY CODE ARTICLE 7 {"NATURAL RESOURCES"}, DIVISION I {"FLOODPLAIN MANAGEMENT"}. **202.2.6 HABITABLE SPACE.** "HABITABLE SPACE" MEANS SPACE IN A STRUCTURE FOR LIVING, SLEEPING, OR EATING. BATHROOMS, TOILET ROOMS, CLOSETS, HALLS, STORAGE

1 2 3	OR UTILITY SPACES, AND SIMILAR AREAS ARE NOT CONSIDERED HABITABLE SPACES. KITCHENS WITH LESS THAN 56 SQ. FT. (5.2 SQ. M.) OF FLOOR AREA ARE NOT CONSIDERED HABITABLE SPACES.
4 5	202.2.7 HISTORIC BUILDING. "HISTORIC BUILDING" MEANS A BUILDING OR OTHER STRUCTURE THAT IS:
6	<u>1.</u> (1) INDIVIDUALLY LISTED ON THE NATIONAL REGISTER OF HISTORIC PLACES;,
7	<u>2.</u> (II) INDIVIDUALLY LISTED ON THE CITY LANDMARK LIST;
8 9 10	3. (III) LOCATED WITHIN A NATIONAL REGISTER HISTORIC OR LANDMARK DISTRICT AND CERTIFIED BY THE SECRETARY OF THE INTERIOR AS CONTRIBUTING TO THE HISTORIC SIGNIFICANCE OF THAT DISTRICT; OR
11 12 13 14	<u>4.</u> (iv) located within a City Historical and Architectural Preservation District and certified by the Commission for Historical and Architectural Preservation as contributing to the historic significance of that district.
15 16	202.2.8 Low emission, hybrid and electric vehicle <i>{Not Adopted. See § 407.4.2}</i>
17 18	<u>202.2.9</u> 202.2.8 May not, etc. "May not", "must not", and "no … may" are each mandatory negative terms used to establish a prohibition.
19 20 21	<u>202.2.10</u> 202.2.9 Multiple-family dwelling. "Multiple-family dwelling" Means a building or a group of buildings on the same lot that contains or is designed or intended to contain:
22	1. MORE THAN 2 DWELLING UNITS,
23 24	2. 2 DWELLING UNITS AND ANY OTHER RESIDENTIAL OR COMMERCIAL OCCUPANCY, OR
25	3. ANY COMBINATION OF 3 OR MORE ROOMING UNITS AND DWELLING UNITS.
26 27	<u>202.2.11</u> 202.2.10 Must/shall. "Must" and "shall" are each mandatory terms used to express a requirement or to impose a duty.
28 29	<u>202.2.12</u> 202.2.11 Occupancy. "Occupancy" has the meaning stated in § 202.2 of the Baltimore City Building Code.
30 31	<u>202.2.13</u> 202.2.12 Person. "Person" has the meaning stated in § 202.2 of the Baltimore City Building Code.
32 33	<u>202.2.14</u> 202.2.13 PREMISES. "PREMISES" HAS THE MEANING STATED IN § 202.2 OF THE BALTIMORE CITY BUILDING CODE.

1	202.2.15 202.2.14 STRUCTURE. "STRUCTURE" HAS THE MEANING STATED IN § 202.2 OF
2	THE BALTIMORE CITY BUILDING CODE AND, UNLESS THE CONTEXT INDICATES
3	OTHERWISE, INCLUDES PREMISES AND LANDS.

4 CHAPTER 3. JURISDICTIONAL REQUIREMENTS AND 5 LIFE CYCLE ASSESSMENT 6 {NOT ADOPTED}

7 CHAPTER 4. SITE DEVELOPMENT AND LAND USE

8 SECTION 401 GENERAL {As in IGCC}

- 9 **401.1 SCOPE AND INTENT.** THIS CHAPTER PROVIDES REQUIREMENTS FOR THE DEVELOPMENT
- 10 AND MAINTENANCE OF BUILDING AND BUILDING SITES TO MINIMIZE NEGATIVE
- 11 ENVIRONMENTAL IMPACTS AND TO PROTECT, RESTORE, AND ENHANCE THE NATURAL
- 12 FEATURES AND ENVIRONMENTAL QUALITY OF THE SITE.
- 13 401.2 PREDESIGN SITE INVENTORY AND ASSESSMENT. {As in IGCC}

14 SECTION 402 PRESERVATION OF NATURAL RESOURCES

- 402.1 PROTECTION BY AREA. IF WETLANDS OR CONSERVATION AREAS ARE LOCATED ON OR
 ADJACENT TO A LOT, THE DEVELOPMENT OF THE LOT AS A BUILDING SITE MUST COMPLY WITH
 §§ 402.4 AND 402.5 <u>OF THIS CHAPTER.</u>
- 18 **402.2 FLOOD HAZARD AREAS.** (NOT ADOPTED)
- 19 {NOTE: FOR THE ESTABLISHMENT OF REGULATED FLOOD HAZARD AREAS AND THE
 20 SPECIAL REGULATIONS AND LIMITATIONS GOVERNING DEVELOPMENT WITHIN THOSE
 21 AREAS, SEE THE FLOODPLAIN MANAGEMENT CODE, CITY CODE ARTICLE 7 {"NATURAL
 22 RESOURCES"}, DIVISION I {"FLOODPLAIN MANAGEMENT"}.
- 23 **402.3** SURFACE WATER PROTECTION. *{NOT ADOPTED}*
- 24 **402.4** WETLAND PROTECTION. *{As in IGCC}*
- 402.5 CONSERVATION AREA. SITE DISTURBANCE OR DEVELOPMENT OF LAND IN OR WITHIN
 50 FEET (15,240 MM) OF ANY DESIGNATED CONSERVATION AREA IS NOT PERMITTED.
- 27 EXCEPTION: {As in IGCC}
- 28 **402.6 PARK LAND.** *{AS IN IGCC} {NOT ADOPTED}*
- 29 **402.7** AGRICULTURAL LAND. *{NOT ADOPTED}*
- 30 **402.8** GREENFIELD SITES. *{NOT ADOPTED}*

1	SECTION 403 STORMWATER MANAGEMENT <i>{NOT ADOPTED}</i>
2	{NOTE: FOR SPECIAL REGULATIONS AND LIMITATIONS GOVERNING STORMWATER
3	MANAGEMENT, SEE CITY CODE ARTICLE 7 {"NATURAL RESOURCES"}, DIVISION II
4	{"STORMWATER MANAGEMENT"}.}
5	SECTION 404 LANDSCAPE IRRIGATION AND OUTDOOR FOUNTAINS
6	404.1 LANDSCAPE IRRIGATION SYSTEMS. <i>{As in IGCC}</i>
7	404.1.1 WATER FOR OUTDOOR LANDSCAPE IRRIGATION. <i>{As in IGCC}</i>
8	404.1.2 IRRIGATION SYSTEM DESIGN AND INSTALLATION. WHERE IN-GROUND
9	IRRIGATION SYSTEMS ARE PROVIDED, THE SYSTEMS MUST COMPLY WITH ALL OF THE
10	FOLLOWING:
11	1. THE DESIGN AND INSTALLATION MUST BE UNDER THE SUPERVISION OF AN
12	IRRIGATION PROFESSIONAL ACCREDITED OR CERTIFIED BY AN APPROPRIATE LOCAL
13	OR NATIONAL BODY,
14	2. MICROIRRIGATION ZONES MUST BE EQUIPPED WITH PRESSURE REGULATORS THAT
15	ENSURE ZONE PRESSURE IS NOT GREATER THAN 40 PSI (275.8 KPA), FILTERS, AND
16	FLUSH END ASSEMBLIES, AND
17	3. SPRINKLERS:
18	3.1. MUST HAVE NOZZLES WITH MATCHED PRECIPITATION RATES,
19	3.2. ARE PROHIBITED ON LANDSCAPE AREAS LESS THAN 4 FEET (1230 MM) IN
20	ANY DIMENSION,
21	3.3. ARE PROHIBITED ON SLOPES GREATER THAN 1 UNIT VERTICAL TO 4 UNITS
22	HORIZONTAL (25% SLOPE),
23	EXCEPTION: WHERE THE APPLICATION RATE OF THE SPRINKLERS IS
24	LESS THAN OR EQUAL TO 0.5 INCHES (12.7 MM) PER HOUR.
25	3.4. ARE PERMITTED FOR USE ON TURFGRASS AND CROP AREAS ONLY,
26	EXCEPTING MICROSPRAYS OF A FLOW LESS THAN 45 GALLONS (170 LITERS)
27	PER HOUR,
28	3.5. IF OF THE POP-UP CONFIGURATION, MUST POP-UP TO A HEIGHT OF NOT LESS
29	THAN AT LEAST 4 INCHES (101 MM), AND
30	3.6. MAY ONLY BE INSTALLED IN ZONES COMPOSED EXCLUSIVELY OF
31	SPRINKLERS AND MUST BE DESIGNED TO ACHIEVE A LOWER QUARTER
32	DISTRIBUTION UNIFORMITY OF NOT LESS THAN AT LEAST 0.65.
33	404.2 Outdoor ornamental fountains and water features <i>{As in IgCC}</i>

1	SECTION 405 MANAGEMENT OF VEGETATION, SOILS, AND EROSION CONTROL {As in IGCC}
2	405.1 SOIL AND WATER QUALITY PROTECTION. <i>{NOT ADOPTED}</i>
3	{NOTE: FOR SPECIAL REGULATIONS AND LIMITATIONS GOVERNING SOIL EROSION AND
4	SEDIMENT CONTROL, SEE CITY CODE ARTICLE 7 {"NATURAL RESOURCES"}, DIVISION III
5	{"Soil Erosion and Sediment Control"}.}
6	405.2 VEGETATION AND SOIL PROTECTION. <i>{As in IGCC}</i>
7	405.3 NATIVE PLANT LANDSCAPING. <i>{As in IGCC}</i> Where new landscaping is
8	INSTALLED AS PART OF A SITE PLAN OR WITHIN THE BUILDING SITE, AT LEAST 50% OF THE
9	NEWLY LANDSCAPED AREA MUST BE PLANTED WITH NATIVE PLANT SPECIES.
10	SECTION 406 BUILDING SITE WASTE MANAGEMENT {As in IGCC}
11	SECTION 407 TRANSPORTATION IMPACT
12	407.1 WALKWAYS AND BICYCLE PATHS. <i>{As in IGCC}</i>
13	407.2 CHANGING AND SHOWER FACILITIES.
14	407.2 CHANGING AND SHOWER FACILITIES. BUILDINGS WITH A TOTAL BUILDING FLOOR
15	AREA GREATER THAN 10,000 SQUARE FEET (929 M^2) AND THAT ARE REQUIRED TO BE
16	PROVIDED WITH LONG-TERM BICYCLE PARKING AND STORAGE IN ACCORDANCE WITH § 407.3
17	MUST BE PROVIDED WITH ONSITE CHANGING ROOM AND SHOWER FACILITIES.
18	407.3 BICYCLE PARKING AND STORAGE. <i>{As in IGCC}</i>
19	407.3.1 SHORT-TERM BICYCLE PARKING. SHORT-TERM BICYCLE PARKING MUST
20	COMPLY WITH ALL OF THE FOLLOWING:
21	1. TO 2. <i>{AS IN IGCC}</i>
22	3. IT MUST HAVE AN AREA OF NOT LESS THAN <u>AT LEAST</u> 18 INCHES (457MM) BY 72
23	INCHES (1,829MM) FOR EACH BICYCLE;
24	4. TO 5. <i>{AS IN IGCC}</i>
25	407.3.2. LONG-TERM BICYCLE PARKING. LONG-TERM BICYCLE PARKING SHALL COMPLY
26	WITH ALL OF THE FOLLOWING:
27	1. TO 2. <i>{AS IN IGCC}</i>
28	3. IT MUST HAVE AN AREA OF NOT LESS THAN <u>AT LEAST</u> 18 INCHES (457MM) BY 72
29	INCHES (1,829MM) FOR EACH BICYCLE; AND
30	4. <i>{AS IN IGCC}</i>

407.4 PREFERRED VEHICLE PARKING. PARKING PROVIDED AT A BUILDING SITE MUST 1 2 COMPLY WITH THIS SECTION. PREFERRED PARKING SPACES REQUIRED BY THIS SECTION MUST 3 BE THOSE IN THE PARKING FACILITY THAT ARE LOCATED ON THE SHORTEST ROUTE OF TRAVEL 4 FROM THE PARKING FACILITY TO A BUILDING ENTRANCE, BUT MAY NOT TAKE PRECEDENCE 5 OVER PARKING SPACES THAT ARE REQUIRED TO BE ACCESSIBLE IN ACCORDANCE WITH THE INTERNATIONAL BUILDING CODE. IF A BUILDINGS HAS MULTIPLE ENTRANCES WITH ADJACENT 6 7 PARKING, PARKING SPACES REQUIRED BY THIS SECTION MUST BE DISPERSED AND LOCATED 8 NEAR THOSE ENTRANCES. THESE PARKING SPACES MUST BE PROVIDED WITH APPROVED 9 SIGNAGE THAT SPECIFIES THE PERMITTED USAGE.

10 **407.4.1** HIGH -OCCUPANCY VEHICLE PARKING. {*As in IGCC*}

11 **407.4.2** LOW-EMISSION, HYBRID, AND ELECTRIC VEHICLE PARKING. *{AS IN IGCC}*

- 12407.4.2.1 "LOW-EMISSION, HYBRID, AND ELECTRIC VEHICLES" DEFINED. IN THIS13SECTION, "LOW-EMISSION, HYBRID, AND ELECTRIC VEHICLES" MEANS VEHICLES THAT:
- 141.ARE CLASSIFIED AS ZERO EMISSION VEHICLES BY THE CALIFORNIA AIR15RESOURCES BOARD; OR
- 162.HAVE ACHIEVED A MINIMUM GREEN SCORE OF 40 ON THE ANNUAL VEHICLE17RATING GUIDE OF THE AMERICAN COUNCIL FOR AN ENERGY EFFICIENT18ECONOMY.
- 19 SECTION 408 HEAT ISLAND MITIGATION
- 20 **408.1 GENERAL.** *{AS IN IGCC}*

408.2 SITE HARDSCAPE. NOT LESS THAN <u>AT LEAST 25% 40%</u> OF THE SITE HARDSCAPE MUST
 BE PROVIDED WITH 1 OR ANY COMBINATION OF THE OPTIONS DESCRIBED IN §§ 408.2.1
 THROUGH 408.2.5. FOR THE PURPOSES OF THIS SECTION, SITE HARDSCAPE DOES NOT INCLUDE
 AREAS OF THE SITE COVERED BY SOLAR PHOTOVOLTAIC ARRAYS OR SOLAR THERMAL
 COLLECTORS.

- 26 **408.2.1** TO **408.2.4** *{As in IGCC}*
- 408.2.5 POROUS ASPHALT PAVEMENT. POROUS ASPHALT PAVEMENTS INCLUDE OPEN GRADED ASPHALT MIXTURES WITH AIR VOIDS OF NOT LESS THAN AT LEAST 16%. POROUS
 ASPHALT PAVEMENTS ARE PERMITTED ONLY WHERE THE USE OF THESE HARDSCAPES DOES
 NOT INTERFERE WITH:
 - 1. ACCESS OR EGRESS OF FIRE AND EMERGENCY APPARATUS, VEHICLES, OR PERSONNEL,
- 33 2. UTILITIES, OR

31 32

34 **3.** TELECOMMUNICATIONS LINES.

408.3 ROOF SURFACES. {AS IN IGCC} AT LEAST 75% OF THE ROOF SURFACES OF BUILDINGS AND COVERED PARKING MUST BE:

1	<u>1</u> , <u>A ROOF COMPLYING WITH § 408.3.1;</u>
2	2. COVERED WITH A VEGETATIVE ROOF COMPLYING WITH § 408.3.2; OR
3	3. <u>A COMBINATION OF THESE REQUIREMENTS.</u>
4 5	THIS SECTION ALSO APPLIES TO ROOFS OF STRUCTURES THAT PROVIDE SHADE TO PARKING IN ACCORDANCE WITH § 408.2.2.
6	EXCEPTION: {As in IGCC}
7	408.3.1 TO 408.3.2 {As IN IGCC}
8	SECTION 409 SITE LIGHTING
9 10	409.1 LIGHT POLLUTION CONTROL. UPLIGHT, LIGHT TRESPASS, AND GLARE MUST BE LIMITED FOR ALL EXTERIOR LIGHTING EQUIPMENT AS DESCRIBED IN §§ 409.2 AND 409.3.
11	EXCEPTION: {As in IGCC}
12	409.1.1 EXTERIOR LIGHTING ZONES. <i>{As in IGCC}</i>
13	409.2 UPLIGHT. {AS IN IGCC}
14	409.3 LIGHT TRESPASS AND GLARE. <i>{As in IGCC}</i>
15	SECTION 410 DRINKING FOUNTAINS
16 17	410.1 Gymnasium Public Areas. Drinking fountains that serve a gymnasium <u>public</u> area must be equipped with at least 1 water-bottle filler.
18	410.1.1 "PUBLIC AREA" DEFINED. IN THIS SECTION, "PUBLIC AREA" MEANS ANY
19	BUILDING AREA TO WHICH THE GENERAL PUBLIC HAS FREE ACCESS.
20	CHAPTER 5. MATERIAL RESOURCE CONSERVATION AND EFFICIENCY
21	SECTION 501 GENERAL {AS IN IGCC}
22	SECTION 502 CONSTRUCTION MATERIAL MANAGEMENT {As in IGCC}
23 24 25	SECTION 503 CONSTRUCTION WASTE MANAGEMENT {AS IN IGCC. BUT NOTE: THE "CERTIFICATE OF OCCUPANCY" TO WHICH THIS SECTION REFERS IS KNOWN IN BALTIMORE CITY AS AN "OCCUPANCY PERMIT". }
26	SECTION 504 WASTE MANAGEMENT AND RECYCLING {As in IGCC. But Note: The

- "CERTIFICATE OF OCCUPANCY" TO WHICH THIS SECTION REFERS IS KNOWN IN BALTIMORE CITY AS AN "OCCUPANCY PERMIT".} 27
- 28

1 SECTION 505 MATERIAL SELECTION

2 **505.1** MATERIAL SELECTION AND PROPERTIES. *{As in IGCC}*

3 **505.2 MATERIAL SELECTION.** FOR ANY STRUCTURE WITH A TOTAL BUILDING FLOOR AREA GREATER THAN 25,000 SO. FT. (2323 m²), NO LESS THAN AT LEAST 40% 50% OF THE TOTAL 4 BUILDING MATERIALS USED IN THE PROJECT, BASED ON MASS, VOLUME, OR COST, MUST 5 6 COMPLY WITH § 505.2.1, 505.2.2, 505.2.3, 505.2.4, OR 505.2.5. IF A MATERIAL COMPLIES 7 WITH MORE THAN ONE SECTION, THE MATERIAL VALUE IS TO BE MULTIPLIED BY THE NUMBER OF SECTIONS THAT IT COMPLIES WITH. THE VALUE OF TOTAL BUILDING MATERIAL MASS, 8 9 VOLUME, OR COST MUST REMAIN CONSTANT, REGARDLESS OF WHETHER MATERIALS ARE 10 TABULATED IN MORE THAN ONE SECTION.

- 11 **505.2.1** TO **505.2.5** *{As in IGCC}*
- 12 SECTION 506 LAMPS {AS IN IGCC}
- 13 SECTION 507 BUILDING ENVELOPE MOISTURE CONTROL {As in IGCC} {Not Adopted}
- 14 CHAPTER 6. ENERGY CONSERVATION, EFFICIENCY, AND CO₂E EMISSION REDUCTION
- 15 SECTIONS 601 TO 603 {AS IN IGCC}
- 16 SECTION 604 AUTOMATED DEMAND-RESPONSE INFRASTRUCTURE *{Not Adopted}*
- 17 {NOTE: FOR A "PROJECT ELECTIVE" PATTERNED AFTER THIS SECTION, SEE APPENDIX A,
 18 § A106.7.}
- 19 SECTIONS 605 TO 607 {*As in IGCC*}
- 20 SECTION 608 BUILDING ELECTRICAL POWER AND LIGHTING SYSTEMS
- 21 608.1 GENERAL. {As in IGCC}
- 22 **608.2 SLEEPING UNIT CONTROLS.** *{As in IGCC}*
- 23 608.3 TO 608.4 {NOT ADOPTED}
- 24 <u>608.1 TO 608.3 {AS IN IGCC}</u>
- 25 <u>608.4 EXTERIOR LIGHTING CONTROLS {As IN IGCC}</u>
- 26 608.4.1 EXTERIOR LIGHT REDUCTION {As in IGCC}
- 27 608.4.2 EXTERIOR LIGHTING AND SIGNAGE SHUTOFF {NOT ADOPTED}
- 28 **608.5** AUTOMATIC DAYLIGHT CONTROLS {*As in IGCC*}
- 29 **608.6 PLUG LOAD CONTROLS.** *{As in IGCC}*

- 1 608.6.1 DISTRIBUTION AND MARKING. {As in IGCC}
- 2 608.6.2 FURNITURE SYSTEMS. {As in IGCC}
- 3 **608.6.3 TO 608.6.6** *{NOT ADOPTED}*
- 4 <u>608.6.1 TO 608.6.4 {AS IN IGCC}</u>
- 5 608.6.5 TO 608.6.6 {*NOT ADOPTED*}
- 6 608.7 TO 608.12 {AS IN IGCC}
- 7 SECTION 609 SPECIFIC APPLIANCES AND EQUIPMENT
- 8 **609.1** GENERAL. *{As in IGCC}*
- 9 **609.2 PERMANENT APPLIANCE AND EQUIPMENT.** *{As in IGCC}*
- 10 **609.2.1** TO **609.2.2** {*NOT ADOPTED*}
- 11 **609.2.3 TO 609.2.4** {*AS IN IGCC*}
- 12 SECTION 610 BUILDING RENEWABLE ENERGY SYSTEMS {As in IGCC}
- 13 SECTION 610 BUILDING RENEWABLE ENERGY SYSTEMS.
- 610.1 RENEWABLE ENERGY SYSTEMS REQUIREMENTS. THIS SECTION APPLIES TO EACH
 BUILDING THAT CONSUMES ENERGY. EACH BUILDING (OR ITS SURROUNDING LOT), OR EACH
 BUILDING SITE ON WHICH MULTIPLE BUILDINGS ARE LOCATED, MUST BE EQUIPPED WITH 1 OR
 MORE RENEWABLE ENERGY SYSTEMS IN ACCORDANCE WITH THIS SECTION. THESE
- 18 <u>RENEWABLE ENERGY SYSTEMS MUST:</u>
- 19 <u>1</u>, <u>COMPLY WITH THE FOLLOWING REQUIREMENTS:</u>
- 20
 A. FOR SOLAR PHOTOVOLTAIC SYSTEMS, § 610.2 {"SOLAR PHOTOVOLTAIC

 21
 SYSTEMS"},
- 22 <u>B.</u> FOR WIND SYSTEMS, § 610.3 {"WIND ENERGY SYSTEMS"}.
- 23
 C. FOR SOLAR WATER HEATING SYSTEMS, § 610.4 {"SOLAR WATER HEATING

 24
 EQUIPMENT"}, AND
 - D. FOR GEOTHERMAL SYSTEMS, § 610.5 {"GEOTHERMAL ENERGY SYSTEMS"},
- 262.COMPLY WITH § 610.6 FOR PERFORMANCE MONITORING AND METERING OF THESE27SYSTEMS AS APPROVED BY THE CODE OFFICIAL, AND
- 28 <u>3.</u> <u>BE COMMISSIONED IN ACCORDANCE WITH THE REQUIREMENTS OF § 611.</u>

25

1 2	EXCEPTION: RENEWABLE ENERGY SYSTEMS ARE NOT REQUIRED FOR THE FOLLOWING:
3 4 5 6 7	1. BUILDINGS, OR BUILDING SITES ON WHICH MULTIPLE BUILDINGS ARE LOCATED, THAT PROVIDE AT LEAST 1% OF THE TOTAL ESTIMATED ANNUAL ENERGY USE OF THE BUILDING, OR COLLECTIVE BUILDINGS ON THE SITE, WITH ONSITE RENEWABLE ENERGY USING A COMBINATION OF RENEWABLE ENERGY OF THE DATION SYSTEMS THAT COMPLY WITH THE REOLUBER AND SO
7 8	ENERGY GENERATION SYSTEMS THAT COMPLY WITH THE REQUIREMENTS OF § 610.2, § 610.3, § 610.4, OR § 610.5,
9 10	2. BUILDINGS OR SITES WHERE AT LEAST 2% OF THE TOTAL ANNUAL BUILDING ENERGY CONSUMPTION FROM RENEWABLE GENERATION TAKES THE FORM
11 12	OF A 10-YEAR COMMITMENT TO RENEWABLE ENERGY CREDIT OWNERSHIP, CONFIRMED BY THE CODE OFFICIAL, OR
13 14 15 16 17	3. BUILDINGS OR SITES WHERE THE COMBINED APPLICATION OF ONSITE GENERATED RENEWABLE ENERGY AND A COMMITMENT TO RENEWABLE ENERGY CREDIT OWNERSHIP AS CONFIRMED BY THE CODE OFFICIAL TOTALS AT LEAST 1.5% OF THE TOTAL ANNUAL BUILDING ENERGY CONSUMPTION FROM RENEWABLE GENERATION.
18 19	610.1.1 Building performance-based compliance. Buildings (or their surrounding lots), or building sites on which multiple buildings are located,
20	THAT ARE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH § 601.3.1
21	{"PERFORMANCE-BASED COMPLIANCE"} MUST BE EQUIPPED WITH 1 OR MORE RENEWABLE
22	ENERGY SYSTEMS THAT HAVE THE CAPACITY TO PROVIDE AT LEAST 1% OF THE TOTAL
23	CALCULATED ANNUAL ENERGY USE OF THE BUILDING, OR COLLECTIVE BUILDINGS ON THE
24	<u>SITE.</u>
25 26	610.1.2 Building prescriptive compliance. Buildings (or their surrounding lots), or building sites on which multiple buildings are located, that are
20 27	DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH § 601.3.2 {"PRESCRIPTIVE-BASED
28	COMPLIANCE" MUST BE EQUIPPED WITH 1 OR MORE RENEWABLE ENERGY SYSTEMS THAT
29	HAVE THE CAPACITY TO PROVIDE AT LEAST 1% OF THE TOTAL ESTIMATED ANNUAL
30	ENERGY USE OF THE BUILDING, OR COLLECTIVE BUILDINGS ON THE SITE, WITH ONSITE
31	RENEWABLE ENERGY BY CALCULATION DEMONSTRATING THAT ONSITE RENEWABLE
32	ENERGY PRODUCTION HAS A RATING OF AT LEAST 1.75 BTU/H (0.5 W) PER SQUARE FOOT
33	OF CONDITIONED FLOOR AREA, AND USING ANY 1 OR COMBINATION OF RENEWABLE
34	ENERGY GENERATION SYSTEMS THAT COMPLY WITH THE REQUIREMENTS OF § 610.2,
35	<u>§ 610.3, § 610.4, OR § 610.5.</u>
36 37	610.2 SOLAR PHOTOVOLTAIC SYSTEMS. SOLAR PHOTOVOLTAIC SYSTEMS MUST BE SIZED TO PROVIDE AT LEAST 1% OF THE TOTAL ESTIMATED ANNUAL ELECTRIC ENERGY CONSUMPTION
38	OF THE BUILDING, OR COLLECTIVE BUILDINGS ON THE SITE, IN ACCORDANCE WITH § 610.1.1
39	{"BUILDING PERFORMANCE-BASED COMPLIANCE"} OR § 610.1.2 {"BUILDING PRESCRIPTIVE
40	<u>COMPLIANCE"}.</u>
41	610.2.1 LIMITATION. {As in IGCC}

42 <u>610.2.2 REQUIREMENTS. {As in IGCC}</u>

1	610.3 WIND ENERGY SYSTEMS. WIND ENERGY SYSTEMS MUST BE DESIGNED, CONSTRUCTED,
2	AND SIZED TO PROVIDE AT LEAST 1% OF THE TOTAL ESTIMATED ANNUAL ELECTRIC ENERGY
3	CONSUMPTION OF THE BUILDING, OR COLLECTIVE BUILDINGS ON THE SITE, IN ACCORDANCE
4	WITH NFPA 70 AND § 610.1.1 {"BUILDING PERFORMANCE-BASED COMPLIANCE"} OR §
5	610.1.2 {"BUILDING PRESCRIPTIVE COMPLIANCE"}.
6	610.3.1 INSTALLATION, LOCATION, STRUCTURAL REQUIREMENTS. {As in IGCC}
7	610.4 SOLAR WATER HEATING EQUIPMENT. AT LEAST 10% OF THE BUILDING'S ANNUAL
8	ESTIMATED HOT WATER ENERGY USAGE MUST BE SUPPLIED BY ONSITE SOLAR WATER HEATING
9	EQUIPMENT.
10	610.5 GEOTHERMAL ENERGY SYSTEMS. GEOTHERMAL ENERGY SYSTEMS MUST BE
11	DESIGNED, CONSTRUCTED, AND SIZED TO PROVIDE AT LEAST 1% OF THE TOTAL ESTIMATED
12	ANNUAL ELECTRIC ENERGY CONSUMPTION OF THE BUILDING, OR COLLECTIVE BUILDINGS ON
13	THE SITE, IN ACCORDANCE WITH § 610.1.1 {"BUILDING PERFORMANCE-BASED COMPLIANCE"}
14	OR § 610.1.2 {"BUILDING PRESCRIPTIVE COMPLIANCE"}.
15	610.6 RENEWABLE ENERGY SYSTEM PERFORMANCE MONITORING AND METERING.
16	RENEWABLE ENERGY SYSTEMS MUST BE METERED AND MONITORED IN ACCORDANCE WITH $\S\S$
17	<u>610.6.1 AND 610.6.2.</u>
18	610.6.1 METERING. {As in IGCC § 610.5.1}
19	610.6.2 MONITORING. {As in IGCC § 610.5.2}
20	SECTION 611 ENERGY SYSTEMS COMMISSIONING AND COMPLETION {As in IGCC}
21	CHAPTER 7. WATER RESOURCE CONSERVATION, QUALITY, AND EFFICIENCY
22	SECTION 701 GENERAL {As in IGCC}
23	SECTION 702 FIXTURES, FITTINGS, EQUIPMENT, AND APPLIANCES
24	702.1 TO 702.6 {AS IN IGCC}
25	702.7 MUNICIPAL RECLAIMED WATER. <i>{NOT ADOPTED}</i>
26	702.8 EFFICIENT HOT AND TEMPERED WATER DISTRIBUTION. <i>{As in IGCC}</i>
27	702.9 то 702.20 <u>{As in IgCC} {Not Adopted}</u>
28	SECTIONS 703 TO 710 705 {NOT ADOPTED}
29	SECTIONS 706 TO 710 {AS IN IGCC}

1	CHAPTER 8. INDOOR ENVIRONMENTAL QUALITY AND COMFORT
2 3	SECTION 801 GENERAL {As in IGCC}
4 5	SECTION 802 Building and Construction Features, Operations, and Maintenance Facilitation <i>{As in IgCC}</i>
6	SECTION 803 HVAC SYSTEMS
7	803.1 GENERAL. <i>{As in IGCC}</i>
8	803.2 TO 803.5 <u>803.4</u> { <i>NOT ADOPTED</i> }
9	803.5 FILTERS {AS IN IGCC}
10	SECTIONS 804 TO 808 {NOT ADOPTED}
11	SECTION 804 SPECIFIC INDOOR AIR QUALITY & POLLUTANT CONTROL MEASURES
12 13	804.1 FIREPLACES AND APPLIANCES. <i>{As in IgCC}</i>
14 15 16 17 18 19 20	804.2 POST-CONSTRUCTION, PRE-OCCUPANCY BASELINE IAQ TESTING. AFTER ALL INTERIOR FINISHES ARE INSTALLED, THE BUILDING MUST BE TESTED FOR INDOOR AIR QUALITY AND THE TESTING RESULTS MUST INDICATE THAT THE LEVELS OF VOCS MEET THE LEVELS DETAILED IN TABLE 804.2 USING TESTING PROTOCOLS IN ACCORDANCE WITH ASTM D 6196, ASTM D 5466, ASTM D 5197, ASTM D 6345, AND ISO 7708. TEST SAMPLES MUST BE TAKEN IN AT LEAST 1 LOCATION IN EACH 25,000 SQUARE FEET (1860 M ²) OF FLOOR AREA OR IN EACH CONTIGUOUS FLOOR AREA.
21	EXCEPTIONS: {As in IGCC}
22	SECTION 805 PROHIBITED MATERIALS {As in IGCC}
23	SECTION 806 MATERIAL EMISSIONS AND POLLUTANT CONTROL
24	<u>806.1 TO 806.4 <i>{As in IgCC}</i></u>
25	806.5 TO 806.6 {NOT ADOPTED}
26	SECTION 807 ACOUSTICS
27 28 29	807.1 Sound transmission and sound levels. Buildings and tenant spaces must comply with the minimum sound transmission class and maximum sound level requirements of §§ 807.2 through 807.4.
30	EXCEPTION: {As in IGCC}

- 31 **807.2 TO 807.4** *{AS IN IGCC}*
- 32 **807.5 TO 807.6** *{NOT ADOPTED}*

1 SECTION 808 DAY LIGHTING {As IN IGCC}

2

CHAPTER 9. COMMISSIONING

3 SECTION 901 GENERAL

4 **901.1 SCOPE.** THIS CHAPTER IS INTENDED TO FACILITATE THE COMMISSIONING OF BUILDINGS

5 CONSTRUCTED IN ACCORDANCE WITH THIS CODE. ITS REQUIREMENTS APPLY ONLY TO

6 EQUIPMENT AND SYSTEMS THAT ARE COVERED BY THIS CODE AND ARE NEW OR BEING
 7 WHOLLY REPLACED.

8 SECTION 902 APPROVED AGENCY

9 902.1 GENERAL. THE CODE OFFICIAL MUST DETERMINE THE REQUIRED QUALIFICATIONS OF
 10 AN APPROVED AGENCY FOR PURPOSES OF THIS CHAPTER

902.1.1 OWNER'S DUTIES. FOR COMMISSIONING REQUIRED BY THIS CODE, THE OWNER
 MUST IDENTIFY THE INDIVIDUAL OR FIRM WHO WILL BE PERFORMING THE COMMISSIONING
 AND PROVIDING THE REQUISITE CERTIFICATIONS AND VERIFICATIONS.

902.1.2 APPROVED AGENCY'S DUTIES. THE APPROVED AGENCY MUST COMPLY WITH THE
 COMMISSIONING REQUIREMENTS SET FORTH IN THIS CODE.

16 SECTION 903 COMMISSIONING

17 **903.1 GENERAL.** WHERE APPLICATION IS MADE FOR CONSTRUCTION AS DESCRIBED IN THIS 18 SECTION, THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE OR THE APPROVED 19 AGENCY MUST PERFORM COMMISSIONING DURING CONSTRUCTION AS REQUIRED BY TABLE 20 903.1. THE APPROVED AGENCY MUST BE OUALIFIED AND MUST DEMONSTRATE COMPETENCE, 21 TO THE SATISFACTION OF THE CODE OFFICIAL, FOR THE COMMISSIONING OF THE PARTICULAR 22 TYPE OF CONSTRUCTION OR OPERATION. THE REGISTERED DESIGN PROFESSIONAL IN 23 RESPONSIBLE CHARGE AND THE ENGINEER OF RECORD INVOLVED IN THE DESIGN OF THE 24 PROJECT MAY ACT AS THE APPROVED AGENCY IF THOSE PERSONS MEET THE REQUIRED 25 QUALIFICATIONS TO THE SATISFACTION OF THE CODE OFFICIAL.

26 **903.1.1 TO 903.1.2** *{NOT ADOPTED}*

27 **903.2 RECORDS AND COMMISSIONING REPORTS.** THE APPROVED AGENCY MUST:

- 28 1. KEEP RECORDS OF THE COMMISSIONING REQUIRED BY TABLE 903.1, AND
- 29 2. FURNISH COMMISSIONING REPORTS TO:
- 30 I. THE OWNER,
- 31 II. THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE, AND
- 32 III. ON REQUEST, THE CODE OFFICIAL.

1	903.2.1 SCOPE OF REPORTS. THESE REPORTS MUST INDICATE WHETHER WORK WAS OR
2	WAS NOT COMPLETED IN CONFORMANCE TO APPROVED CONSTRUCTION DOCUMENTS.

903.2.2 DISCREPANCIES. DISCREPANCIES MUST BE BROUGHT TO THE IMMEDIATE
ATTENTION OF THE CONTRACTOR FOR CORRECTION. IF THE DISCREPANCIES ARE NOT
CORRECTED, THEY MUST BE BROUGHT TO THE ATTENTION OF THE OWNER, THE CODE
OFFICIAL, AND THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE BEFORE
COMPLETION OF THAT PHASE OF THE WORK.

8 903.3 PRELIMINARY COMMISSIONING REPORT. BEFORE THE FINAL INSPECTION, A
 9 PRELIMINARY COMMISSIONING REPORT MUST BE PROVIDED TO THE OWNER AND, ON
 10 REQUEST, TO THE CODE OFFICIAL.

903.4 FINAL COMMISSIONING REPORT. WITHIN 180 DAYS AFTER ISSUANCE OF AN
 OCCUPANCY PERMIT, A FINAL COMMISSIONING REPORT MUST BE PROVIDED TO THE OWNER
 AND, ON REQUEST, TO THE CODE OFFICIAL.

4 TABLE 903.1. COMMISSIONING PLAN				
15				
16 CONSTRUCTION OR SYSTEM17 REQUIRING VERIFICATION	PRE- OCCUPANCY	METHOD	OCCURRENCE Preoccupancy	SECTION/ STANDARD
18 CHAPTER 4: SITE DEVELOPMENT 19 AND LAND USE				
20 LANDSCAPE IRRIGATION SYSTEMS	Х	FIELD INSPECTION	INSTALLATION	404.1
21 SITE LIGHTING	Х	TESTING & REPORT	INSTALLATION	409
22 CHAPTER 6: ENERGY				
23 Energy consumption, monitoring, 24 targeting, and reporting:				
25 A. MONITORING	X	INSPECTION AND VERIFICATION	DURING CONSTRUCTION & BEFORE OCCUPANCY	603
26 B. CALIBRATION	X	TESTING & REVIEW & EVALUATION OF TEST REPORTS	DURING COMMISSIONING	603
27 MECHANICAL SYSTEMS COMPLETION:				
 28 A. AIR SYSTEM BALANCING – 29 PROVIDE MEANS FOR SYSTEM 30 BALANCING 	Х	INSPECTION AND VERIFICATION	DURING CONSTRUCTION & BEFORE OCCUPANCY	611.1.2.1 AND, BY REFERENCE, <i>IECC</i>

-					
1 2 3	B. HYDRONIC SYSTEM BALANCING – PROVIDE MEANS FOR SYSTEM BALANCING	Х	INSPECTION AND VERIFICATION	DURING CONSTRUCTION & BEFORE OCCUPANCY	611.1.2.2 AND, BY REFERENCE, <i>IECC</i>
4 5 6	C. MECHANICAL SYSTEM MANUALS – CONSTRUCTION DOCUMENTS TO REQUIRE O&M MANUAL	Х	VERIFICATION OF CONSTRUCTION DOCUMENTS	PLAN REVIEW	611.1.5.2
7	MECHANICAL SYSTEMS:				
8 9 10	A. COMMISSIONING REQUIRED AND NOTED IN PLANS AND SPECIFICATIONS	Х	VERIFICATION OF CONSTRUCTION DOCUMENTS	PLAN REVIEW	611.1
11 12	B. DOCUMENTATION OF REQUIRED COMMISSIONING OUTCOMES	Х	VERIFICATION WITH BUILDING OWNER	AFTER COMPLETING ALL COMMISSIONING ACTIVITIES	611.1
13 14	C. PREPARATION & AVAILABILITY OF A COMMISSIONING PLAN	Х	VERIFICATION WITH RDP OR COMMISSIONING AGENT	BETWEEN PLAN REVIEW & COMMISSIONING INITIATION	611.1.1
15 16	D. BALANCE HVAC SYSTEMS (BOTH AIR AND HYDRONIC)	Х	System INSTALLER/ CONTRACTOR OR COMMISSIONING AGENT	AFTER INSTALLATION OF SYSTEMS AND BEFORE OCCUPANCY	611.1.2
17 18	E. FUNCTIONAL PERFORMANCE TESTING OF HVAC EQUIPMENT	Х	SYSTEM INSTALLER/ CONTRACTOR OR COMMISSIONING AGENT	AFTER INSTALLATION OF SYSTEMS AND BEFORE OCCUPANCY	611.1.3
19 20 21	F. FUNCTIONAL PERFORMANCE TESTING OF HVAC CONTROLS AND CONTROL SYSTEMS	Х	System installer/ contractor or commissioning agent	AFTER INSTALLATION OF SYSTEMS AND BEFORE OCCUPANCY	611.1.3.2
22 23	G. PREPARATION OF PRELIMINARY COMMISSIONING REPORT	None	SYSTEM INSTALLER/ CONTRACTOR OR COMMISSIONING AGENT	NONE	611.1.4
24 25 26 27 28 29 30 31 32 33	H. PREPARATION & DISTRIBUTION OF FINAL HVAC SYSTEM COMPLETION – DOCUMENTATION (I) THAT CONSTRUCTION DOCUMENTS REQUIRE DRAWINGS, MANUALS, BALANCING REPORTS, AND COMMISSIONING REPORT TO BE PROVIDED TO OWNER AND (II) THAT THEY HAVE BEEN SO PROVIDED	None	RDP, CONTRACTOR, OR COMMISSIONING AUTHORITY	NONE	611.1.5
34	CHAPTER 6: LIGHTING				

1 VERIFICATION OF LAMP	Х	FIELD INSPECTION	FINAL INSPECTION	608.10
2 LIGHTING CONTROLS:				
3 A. INSTALLATION	Х	FIELD INSPECTION	POST-INSTALLATION	608.11
4 B. CALIBRATION	Х	System installer/ contractor or commissioning agent	POST-INSTALLATION	611.3.3
5 CHAPTER 7: WATER RESOURCE 6 Conservation, Quality, 7 Efficiency				
8 Cooling tower performance				703.7.7
9 Metering	Х			705.1.1
0 Chapter 8: Indoor 1 Environmental Quality and 2 Comfort				
3 AIR-HANDLING SYSTEM ACCESS	Х	Field inspection and verification	DURING CONSTRUCTION & BEFORE OCCUPANCY	802.2
4 AIR-HANDLING SYSTEM FILTERS	Х	FIELD INSPECTION AND VERIFICATION	DURING CONSTRUCTION & BEFORE OCCUPANCY	802.3

15 SECTION 904 BUILDING OPERATIONS AND MAINTENANCE {As in IGCC} {Not Adopted}

16	CHAPTER 10. EXISTING BUILDINGS
17	{ <i>NOT ADOPTED</i> }
18	SECTIONS 1001 TO 1006 {As in IGCC}
19	SECTION 1007 JURISDICTIONAL REQUIREMENTS {NOT ADOPTED}
20	CHAPTER 11. EXISTING BUILDING SITE DEVELOPMENT
21	<u>{As in IGCC}</u> {Not Adopted}
22	CHAPTER 12. REFERENCED STANDARDS
23	{ <i>As in IgCC</i> }
24 25	* * * * * * * *

1 2	APPENDIX A Project Electives
3	SECTION A 101 GENERAL {As in IGCC}
4	SECTION A102 APPLICABILITY AND CONFORMANCE
5	A102.1 GENERAL <i>{As in IGCC}</i>
6 7 8 9 10 11	A 102.2 REQUIRED NUMBER OF PROJECT ELECTIVES. EACH OF TABLES A104 THROUGH A108 INDICATE, IN THE LINE THAT REFERENCES § A102.2, THE MINIMUM NUMBER OF PROJECT ELECTIVES REQUIRED TO BE SELECTED BY THE OWNER FROM THAT TABLE. EVERY PROJECT CONSTRUCTED IN THE CITY IS REQUIRED TO COMPLY WITH THE MINIMUM NUMBER APPLICABLE TO EACH TABLE. SELECTED PROJECT ELECTIVES SHALL BE APPLIED AS MANDATORY REQUIREMENTS FOR THE PROJECT.
12 13	A 102.2.1 SELECTION OF PROJECT ELECTIVES. SELECTED PROJECT ELECTIVES SHALL BE SUBMITTED TO THE CODE OFFICIAL, WITH THE CONSTRUCTION DOCUMENTS, BY:
14	1. COPYING EACH TABLE AND CHECKING THE APPROPRIATE LINES, OR
15	2. SUBMITTING A LIST OF SELECTED PROJECT ELECTIVES.
16	SECTION A103 DEFINITIONS {As IN IGCC}
17	SECTION A104 SITE PROJECT ELECTIVES
18	A104.1 FLOOD HAZARD AREA PROJECT ELECTIVE. <i>{NOT ADOPTED}</i>
19	A104.2 TO A104.6 {AS IN IGCC}
20 21 22 23 24	A104.7 Changing and shower facilities project elective. Where a new building is less than 10,000 square feet (929 M ²) in total building floor area and is required to be provided with long-term bicycle parking and storage, the provision of changing and shower facilities in accordance with § 407.2 is recognized as a project elective.
25	A104.8 LONG-TERM BICYCLE PARKING AND STORAGE PROJECT ELECTIVE. {As in IGCC}
26	A104.9 HEAT ISLAND. <i>{As in IGCC}</i>
27 28 29 30	A104.9.1 SITE HARDSCAPE PROJECT ELECTIVE 1. THE DEVELOPMENT OF A NEW BUILDING AND ASSOCIATED SITE IMPROVEMENTS FOR WHICH A MINIMUM OF 50% OF THE SITE HARDSCAPE IS IN ACCORDANCE WITH 1 OR ANY COMBINATION OF OPTIONS IN §§ 408.2.1 THROUGH 408.2.5, IS RECOGNIZED AS A PROJECT ELECTIVE.
31 32 33 34	A104.9.2 SITE HARDSCAPE PROJECT ELECTIVE 2. THE DEVELOPMENT OF A NEW BUILDING AND ASSOCIATED SITE IMPROVEMENTS FOR WHICH A MINIMUM OF 75% OF THE SITE HARDSCAPE IS IN ACCORDANCE WITH 1 OR ANY COMBINATION OF OPTIONS IN §§ 408.2.1 THROUGH 408.2.5, IS RECOGNIZED AS A PROJECT ELECTIVE.

TABLEA104

A104.9.3 SITE HARDSCAPE PROJECT ELECTIVE 3. {NOT ADOPTED}

A104.9.4 ROOF COVERING PROJECT ELECTIVE. {AS IN IGCC}

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SITE PROJECT ELECTIVES

SECTION	DESCRIPTION
A102.2	MINIMUM NUMBER OF ELECTIVES REQUIRED TO BE FROM THIS TABLE: 2
A104.2	WILDLIFE CORRIDOR
A104.3	UNFILE SITE
A104.4	B ROWNFIELD SITE
A104.5	SITE RESTORATION
A104.6	MIXED USE DEVELOPMENT
A104.7	CHANGING AND SHOWER FACILITIES
A104.8	LONG-TERM BICYCLE PARKING AND STORAGE
A104.9: A104.9.1 A104.9.2 A104.9.4	HEAT ISLAND: Site hardscape project elective 1 - 1 elective Site hardscape project elective 2 - 2 electives Roof covering project elective

18 SECTION A105 MATERIAL RESOURCE CONSERVATION AND EFFICIENCY

19 A105.1 WASTE MANAGEMENT PROJECT ELECTIVE. PROJECTS SEEKING A WASTE

- 20 MANAGEMENT PROJECT ELECTIVE MUST COMPLY WITH § 503.1, EXCEPT THAT THE
- NONHAZARDOUS CONSTRUCTION WASTE MATERIALS REQUIRED TO BE DIVERTED FROM 21 LANDFILLS MUST BE INCREASED BY 20%. 22
- 23 A105.2 TO 105.4 {AS IN IGCC}

24 A105.5 DESIGN FOR DECONSTRUCTION PROJECT ELECTIVE. PROJECTS SEEKING A DESIGN 25 FOR DECONSTRUCTION PROJECT ELECTIVE MUST BE DESIGNED FOR DECONSTRUCTION OF NOT 26 LESS THAN AT LEAST 90% OF THE TOTAL COMPONENTS, ASSEMBLIES, OR MODULES TO ALLOW ESSENTIALLY THE ENTIRE BUILDING TO BE REUSED. DESIGN FOR DECONSTRUCTION SHALL BE 27 28 DOCUMENTED ON THE BUILDING'S PLANS AND CONSTRUCTION DOCUMENTS.

- 29 A105.6 EXISTING BUILDING REUSE PROJECT ELECTIVE. {As in IGCC}
- A105.7 HISTORIC BUILDING REUSE PROJECT ELECTIVE. {AS IN IGCC} 30



	SECTION	DESCRIPTION
	A102.2	MINIMUM NUMBER OF ELECTIVES REQUIRED TO BE FROM THIS TABLE: 2
;	A105.1	WASTE MANAGEMENT
Ļ	A105.2	CONSTRUCTION WASTE LANDFILL MAXIMUM
5	A105.3(1)	REUSED, RECYCLED CONTENT, RECYCLABLE, ETC., MATERIALS (70%) - 1 ELECTIVE
5	A105.3(2)	REUSED, RECYCLED CONTENT, RECYCLABLE, ETC., MATERIALS (85%) - 2 ELECTIVES
,	A105.4	SERVICE LIFE PLAN
	A105.5	DESIGN FOR DECONSTRUCTION
	A105.6	EXISTING BUILDING REUSE
)	A105.6	HISTORIC BUILDING REUSE

11 SECTION A106 ENERGY CONSERVATION, EFFICIENCY, AND EARTH ATMOSPHERIC QUALITY

A106.1 ENERGY REDUCTION PROJECT ELECTIVES. PROJECT ELECTIVES FOR BUILDINGS
 PURSUING PERFORMANCE-BASED COMPLIANCE MUST BE IN ACCORDANCE WITH THOSE
 PORTIONS OF TABLE A106 THAT REFERENCE § A106.1.

15 A106.2 TO A106.6 {As IN IGCC}

16 A106.7 AUTOMATED DEMAND-RESPONSE (AUTO-DR) INFRASTRUCTURE. BUILDINGS THAT 17 CONTAIN HEATING, VENTILATING, OR AIR-CONDITIONING SYSTEMS ("HVAC SYSTEMS") OR LIGHTING SYSTEMS AND THAT SEEK AN AUTOMATED DEMAND-RESPONSE ("AUTO-DR") 18 PROJECT ELECTIVE MUST COMPLY WITH THIS SECTION A106.7. A BUILDING ENERGY 19 MANAGEMENT AND CONTROL SYSTEM ("EMCS") MUST BE PROVIDED AND INTEGRATED WITH 20 BUILDING HVAC SYSTEMS CONTROLS AND LIGHTING SYSTEMS CONTROLS TO RECEIVE AN OPEN 21 22 AND INTEROPERABLE AUTO-DR RELAY OR INTERNET SIGNAL. BUILDING HVAC AND LIGHTING 23 SYSTEMS AND SPECIFIC BUILDING ENERGY-USING COMPONENTS MUST INCORPORATE 24 PREPROGRAMMED DEMAND RESPONSE STRATEGIES THAT ARE AUTOMATED WITH A DEMAND 25 **RESPONSE AUTOMATION INTERNET SOFTWARE CLIENT.**

- 26 **EXCEPTION:** AUTO-DR INFRASTRUCTURE IS NOT REQUIRED FOR THE FOLLOWING:
- BUILDINGS LOCATED WHERE THE ELECTRIC UTILITY OR REGIONAL INDEPENDENT
 SYSTEM OPERATOR ("RISO") OR REGIONAL TRANSMISSION OPERATOR ("RTO")
 DOES NOT OFFER A DEMAND RESPONSE PROGRAM TO BUILDINGS REGULATED BY
 THIS CODE.
- 312. BUILDINGS WITH PEAK ELECTRIC DEMAND IS NO GREATER THAN 0.75 TIMES THAT32OF THE STANDARD REFERENCE DESIGN.
- BUILDINGS THAT HAVE INCORPORATED ONSITE RENEWABLE ENERGY GENERATION
 TO PROVIDE 20% OR MORE OF THE BUILDING'S ENERGY DEMAND.

1 2 3	A106.7.2 SOFTWARE CLIENTS. DEMAND RESPONSE AUTOMATION SOFTWARE CLIENTS SHALL BE CAPABLE OF COMMUNICATING WITH A DEMAND RESPONSE AUTOMATION SERVER VIA THE INTERNET OR OTHER COMMUNICATION RELAY.
4 5 6 7 8	A106.7.3 HEATING, VENTILATING, AND AIR-CONDITIONING SYSTEMS. THE AUTO-DR STRATEGY FOR HVAC SYSTEMS MUST BE CAPABLE OF REDUCING THE BUILDING'S PEAK COOLING OR HEATING HVAC DEMAND BY NOT LESS THAN AT LEAST 10% WHEN SIGNALED FROM THE ELECTRIC UTILITY, RISO, OR RTO THROUGH ANY COMBINATION OF THE STRATEGIES AND SYSTEMIC ADJUSTMENTS, INCLUDING THE FOLLOWING:
9	1. SPACE TEMPERATURE SETPOINT RESET,
10 11	2. INCREASING CHILLED WATER SUPPLY TEMPERATURES OR DECREASING HOT WATER SUPPLY TEMPERATURES,
12 13	3. INCREASING OR DECREASING SUPPLY AIR TEMPERATURES FOR VARIABLE AIR VOLUME ("VAV") SYSTEMS,
14 15	4. LIMITING CAPACITY OF HVAC EQUIPMENT THAT HAS VARIABLE OR MULTIPLE- STAGE CAPACITY CONTROL,
16	5. CYCLING HVAC EQUIPMENT OR TURNING OFF NONCRITICAL EQUIPMENT,
17	6. DISABLING HVAC IN UNOCCUPIED AREAS,
18 19	7. LIMITING THE CAPACITY OF CHILLED WATER, HOT WATER, AND REFRIGERANT CONTROL VALVES,
20 21 22 23	8. LIMITING THE CAPACITY OF SUPPLY AND EXHAUST FANS, WITHOUT REDUCING THE OUTDOOR AIR SUPPLY BELOW THE MINIMUM REQUIRED BY CHAPTER 4 OF THE INTERNATIONAL MECHANICAL CODE, OR THE MINIMUM REQUIRED BY ASHRAE 62.1.
24	9. LIMITING THE CAPACITY OF CHILLED WATER OR HOT WATER SUPPLY PUMPS, AND
25 26	10. ANTICIPATORY CONTROL STRATEGIES TO PRECOOL OR PREHEAT IN ANTICIPATION OF A PEAK EVENT.
27 28	EXCEPTION: THE AUTO-DR STRATEGY IS NOT REQUIRED FOR THE FOLLOWING BUILDINGS AND SYSTEMS:
29	1. HOSPITALS AND CRITICAL EMERGENCY RESPONSE FACILITIES,
30	2. LIFE SAFETY VENTILATION FOR HAZARDOUS MATERIALS STORAGE,
31	3. BUILDING SMOKE EXHAUST SYSTEMS, AND
32	4. MANUFACTURING PROCESS SYSTEMS.

1	A106.7.4 REBOUND AVOIDANCE. THE AUTO-DR STRATEGY MUST INCLUDE LOGIC TO
2	PREVENT A REBOUND PEAK. WHEN THE SIGNAL FOR AUTO-DR IS ENDED, A GRADUAL
3	RETURN TO NORMAL HVAC EQUIPMENT OPERATIONS MUST BE PART OF THE AUTO-DR
4	STRATEGY, THROUGH ANY COMBINATION OF STRATEGIES AND SYSTEMIC ADJUSTMENTS,
5	INCLUDING THE FOLLOWING:
6	1. WHEN CLOSE TO THE UNOCCUPIED PERIOD, EXTENSION OF THE AUTO-DR PERIOD BY
7	USING A REBOUND AVOIDANCE, EXTENDED AUTO-DR CONTROL STRATEGY, UNTIL
8	INITIATION OF THE UNOCCUPIED PERIOD.
9	2. REBOUND AVOIDANCE, SLOW RECOVERY CONTROL STRATEGIES, GRADUALLY
10	INCREASING OR DECREASING SPACE TEMPERATURE SETPOINTS OR A VARIANCE IN
11	THE TIMING BY COOLING OR HEATING ZONE,
12 13	3. REBOUND AVOIDANCE, SLOW RECOVERY CONTROL STRATEGIES, GRADUALLY INCREASING OR DECREASING ZONE SUPPLY AIR TEMPERATURES,
14	4. REBOUND AVOIDANCE, SLOW RECOVERY CONTROL STRATEGIES, GRADUALLY
15	INCREASING OR DECREASING CHILLED WATER TEMPERATURES OR DECREASING HOT
16	WATER TEMPERATURES,
17	5. REBOUND AVOIDANCE, SEQUENTIAL EQUIPMENT RECOVERY STRATEGIES,
18	GRADUALLY RESTORING DEMAND LIMITED EQUIPMENT CAPACITY,
19	6. REBOUND AVOIDANCE, SEQUENTIAL EQUIPMENT RECOVERY STRATEGIES,
20	GRADUALLY RESTORING EQUIPMENT THAT WAS TURNED OFF DURING THE AUTO-
21	DR PERIOD,
22 23	7. REBOUND AVOIDANCE, SLOW RECOVERY CONTROL STRATEGIES, GRADUALLY INCREASING CAPACITY FOR AIR MOVING AND PUMPING SYSTEMS, AND
24	8. REBOUND AVOIDANCE, SEQUENTIAL EQUIPMENT RECOVERY OR REBOUND
25	AVOIDANCE, SLOW RECOVERY CONTROL WHERE CHILLED WATER OR HOT WATER
26	AND OTHER CAPACITY CONTROL VALVES ARE SEQUENTIALLY OR GRADUALLY
27	ALLOWED TO RETURN TO NORMAL OPERATION, RESPECTIVELY.
28 29 30 31	A106.7.5 LIGHTING. IN GROUP B OFFICE SPACES, THE AUTO-DR SYSTEM MUST BE CAPABLE OF REDUCING TOTAL CONNECTED POWER OF LIGHTING, AS DETERMINED IN ACCORDANCE WITH § C405.5 OF THE INTERNATIONAL ENERGY CONSERVATION CODE, BY NOT LESS THAN AT LEAST 15%.
32 33	EXCEPTION: THE FOLLOWING BUILDINGS AND LIGHTING SYSTEMS NEED NOT BE ADDRESSED BY THE AUTO-DR SYSTEM:
34	1. BUILDINGS OR PORTIONS OF BUILDINGS ASSOCIATED WITH LIFELINE SERVICES,
35	2. LUMINAIRES ON EMERGENCY CIRCUITS,
36	3. LUMINAIRES LOCATED IN EMERGENCY AND LIFE SAFETY AREAS OF A BUILDING,

- 4. LIGHTING IN BUILDINGS THAT ARE LESS THAN 5,000 SQUARE FEET (465 M²) IN TOTAL BUILDING FLOOR AREA,
- 5. LUMINAIRES WITHIN A DAYLIGHT ZONE THAT ARE DIMMABLE AND CONNECTED TO AUTOMATIC DAYLIGHT CONTROLS THAT COMPLY WITH § C405.2.2.3.2 OF THE INTERNATIONAL ENERGY CONSERVATION CODE, AND
- 6. SIGNAGE USED FOR EMERGENCY, LIFE SAFETY, OR TRAFFIC CONTROL PURPOSES.

TABLEA106 ENERGY CONSERVATION, EFFICIENCY, AND EARTH ATMOSPHERIC QUALITY

SECTION	DESCRIPTION
A102.2	MINIMUM NUMBER OF ELECTIVES REQUIRED FROM THIS TABLE: 2
A106.1	ENERGY REDUCTION BY THE FOLLOWING PERCENTAGES LESS THAN THAT REQUIRED BY IECC: 5% - 1 ELECTIVE 10% - 2 ELECTIVES 15% - 3 ELECTIVES 20% - 4 ELECTIVES 25% - 5 ELECTIVES
A106.2	MECHANICAL SYSTEMS
A106.3	SERVICE WATER HEATING
A106.4	LIGHTING SYSTEMS
A106.5	PASSIVE DESIGN
A106.6	RENEWABLE ENERGY SYSTEMS: 5% – 1 ELECTIVE 10% – 2 ELECTIVES 20% – 3 ELECTIVES
A106.7	AUTOMATED DEMAND-RESPONSE (AUTO-DR) INFRASTRUCTURE.

18 SECTION A107 WATER RESOURCE CONSERVATION AND EFFICIENCY *{Not Adopted}*

19 SECTION A108 INDOOR ENVIRONMENTAL QUALITY AND COMFORT {As in IGCC}

20 TABLEA108 21 **INDOOR ENVIRONMENTAL QUALITY AND COMFORT** 22 SECTION DESCRIPTION A102.2 23 MINIMUM NUMBER OF ELECTIVES REQUIRED FROM THIS TABLE: 2 24 A108.2 **VOC EMISSIONS – FLOORING** 25 A108.3 **VOC EMISSIONS – CEILING SYSTEMS**

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1	A108.4 VOC EMISSIONS – WALL SYSTEMS
2	A108.5 TOTAL VOC LIMIT
3	A108.6 VIEWS TO BUILDING EXTERIOR
4	SECTION A109 REFERENCED STANDARDS <i>{As in IGCC}</i>
5	APPENDIX B
6 7	RADON MITIGATION
/	{NOT ADOPTED}
8	APPENDIX C
9 10	OPTIONAL ORDINANCE
10	{NOT ADOPTED}
11	APPENDIX D
12 13	ENFORCEMENT PROCEDURES
15	{NOT ADOPTED}
14	SECTION 2. AND BE IT FURTHER ORDAINED, That the catchlines contained in this Ordinance
15 16	are not law and may not be considered to have been enacted as a part of this or any prior Ordinance.
17	SECTION 3. AND BE IT FURTHER ORDAINED, That this Ordinance and the International Green
18	Construction Code adopted by it apply to all building operations for which a permit application is
19	filed on or after the effective date of this Ordinance.
20	SECTION 4. AND BE IT FURTHER ORDAINED, That, except as expressly provided to the
21	contrary in this Ordinance, any transaction, case, proceeding, investigation, or other matter validly
22 23	begun before the effective date of this Ordinance and affected by or flowing from any law amended or repealed by this Ordinance, and any right, duty, or interest flowing from any
23 24	ordinance amended or repealed by this Ordinance, remains valid after the effective date of this
25	Ordinance and may be terminated, completed, enforced, or prosecuted as required or permitted by
26	the prior law as though the amendment or repeal has not occurred. If any change in nomenclature
27	involves a change in name or designation of any City agency or official, the successor agency or
28	official has all the powers and obligations granted the predecessor agency or official.
29	SECTION 5. AND BE IT FURTHER ORDAINED, That notwithstanding any other provision of this

31 (a) This section applies only to construction encompassed by building permits applied for 32 before or within 180 days after the effective date of this Code.

Ordinance:

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1 2	(b) The Code Official may, in unusual circumstances and only on good cause shown, grant an exemption from any requirement of the Green Construction Building Code enacted by this
3	Ordinance based on:
4 5	(1) substantial evidence of a practical infeasibility or hardship in meeting a required standard;
6 7	(2) a determination that the public interest would not be served by requiring compliance with the requirements; or
8	(3) other compelling circumstances, as determined by the Code Official.
9 10	(b) The burden is on the applicant to establish the requisite basis for an exemption under this section.
11 12 13	(c) Before the Building Official grants an exemption under this section, the Code Official must consider whether another standard is practicable and should be required instead of the exempted standard.
14 15	SECTION <u>5</u> 6. AND BE IT FURTHER ORDAINED, That this Ordinance takes effect on the 30 th day after the date it is enacted <u>April 1, 2015</u> .

Certified as duly passed this _____ day of _____, 20____

President, Baltimore City Council

Certified as duly delivered to Her Honor, the Mayor,

this _____ day of _____, 20____

Chief Clerk

Approved this _____ day of _____, 20____

Mayor, Baltimore City