Statement of Substantial Need for Earlier Implementation

I hereby find, pursuant to §1043, subdivision f, paragraph 1(c) of the New York City Charter, and hereby represent to the Mayor, that there is substantial need for the implementation of Section 5000-01 of Title 1 of the Rules of the City of New York, regarding construction document compliance with the 2011 New York City Energy Conservation Code ("NYCECC"), upon the publication in the City Record of its Notice of Adoption.

Local Law 1 for the year 2011, which enacted the 2011 NYCECC, became effective on December 28, 2010, along with the 2010 Energy Conservation Construction Code of New York State, which Local Law 1/11 amends. Requirements for progress inspections in the original 1 RCNY §5000-01 cite an earlier version of the NYCECC, making the citations from the rule incorrect for the new code and associated inspection forms. Adoption of this proposed amendment to the original rule will correct the misalignment between the code and the rule, and resolve the considerable confusion resulting in the industry.

Robert D. LiMandri
Commissioner
Department of Buildings

APPROVED: _____
Michael R. Bloomberg
Mayor

DATE: April 7, 2011

NOTICE OF ADOPTION OF RULE

NOTICE IS HEREBY GIVEN, pursuant to the authority vested in the Commissioner of the Department of Buildings by Section 643 of the New York City Charter and in accordance with Section 1043 of the Charter, that the Department of Buildings hereby adopts the amendments to section 5000-01 of Chapter 5000 of Title 1 of the Official Compilation of the Rules of the City of New York, regarding compliance with the energy code.

This rule was first published on February 25, 2011 and a public hearing thereon was held on March 28, 2011.

Dated: 3/31/11
New York, New York

Robert D. LiMandri
Commissioner

Statement of Basis and Purpose

This rule amendment is promulgated pursuant to the authority of the Commissioner of Buildings under Sections 643 and 1043 of the New York City Charter.

On December 28, 2010, Local Law 1 of 2011 became effective. Local Law 1 updates the New York City Energy Conservation Code ("City Energy Code") to comply with the requirements of the State Energy Law and the 2010 update to the Energy Conservation Construction Code of New York State ("State Energy Code"). This rule amends the implementing rule for the City Energy Code, 1 RCNY §5000-01, to conform to changes in the 2011 City Energy Code.

For the purposes of this rule amendment, the terms "shall" and "must" have the same meaning.

The rule details filing requirements outlined in the City Energy Code and reflects changes in the State Energy Code regarding specific tests, inspections and code references.

Specifically, this amendment to section 5000-01:

- Updates submission requirements for compliance with the updated City Energy Code.
- Clarifies how to apply new exterior lighting zones in the City Energy Code by correlating them with zoning districts in the Zoning Resolution.
- Clarifies how a professional who is not a design applicant of record but prepares an energy analysis and/or electrical drawings may file such professional's business and licensing information with the Department.
- Clarifies the role of lead professional in the filing of an energy analysis.

Section 1. Subdivision c of section 5000-01 of Chapter 5000 of Title 1 of the Rules of the City of New York is amended to read as follows:

(c) Definitions. For the purposes of this chapter, the following terms shall have the following meanings:

(1) ADDITION. An addition as defined in the Energy Code.

(2) APPROVED PROGRESS INSPECTION AGENCY. An approved progress inspection agency as described in subparagraph (iii) of paragraph (3) of subdivision (c) of section 101-07 of the rules of the Department.

([2]3) COMMERCIAL BUILDING. A commercial building as defined in the Energy Code.

(4) DESIGN APPLICANT. An applicant of record who develops, signs and seals the construction drawings. The design applicant may be someone other than the registered design professional who prepares, signs and seals the energy analysis.

([3]5) ENERGY CODE. The New York City Energy Conservation Code ("ECC"), including American Society of Heating, Refrigerating and Air Conditioning Engineers, Inc., Standard 90.1, "Energy Standard for Buildings Except Low-Rise Residential Buildings," ("ASHRAE 90.1") where applicable.

([4]6) PROJECT. A [design and construction undertaking comprised of work related to one or more buildings and the site improvements. A project is represented by one or more plan/work applications, including construction documents compiled in accordance with Section BC 106 of the New York City Building Code, that relate either to the construction of a new building or buildings or to the demolition or alteration of an existing building or buildings. Applications for a project may have different registered design professionals and different job numbers, and may result in the issuance of one or more permits.]project as defined in the Energy Code.

([5]7) RESIDENTIAL BUILDING. A residential building as defined in the Energy Code.

§2. Section 5000-01 of Chapter 5000 of Title 1 of the Rules of the City of New York is amended by adding a new subdivision d to read as follows:

(d) Applicability.

(1) Applicable version and edition of Energy Code. Applications must comply with the Energy Code version and edition in effect when the application is filed, continuing through construction and sign-off of the application by the Department.

(2) Commercial building projects. All applications related to a single commercial building project must use either ECC Chapter 5 or ASHRAE 90.1 (as required by section ECC 501).

(3) Commercial buildings with vertical fenestration exceeding 40% of the above-grade wall. Commercial buildings with vertical fenestration exceeding 40% of the above-grade wall must be designed in accordance with either section ECC 506 or ASHRAE 90.1, and the design team must use energy modeling to comply with the Energy Code, as provided in subparagraph (iv) of paragraph (1) of subdivision (f) of this section.

(4) Identification of related applications. Applicants must indicate in the application form all applications related to the project or, if an application has not yet been filed, the name of the applicant or the applicant's firm and discipline for any anticipated related applications.

§3. Subdivision d of section 5000-01 of Chapter 5000 of Title 1 of the Rules of the City of New York is re-lettered e and amended to read as follows:

[(d)](e) Professional statement. Every application filed by a registered design professional for approval of construction documents[,] for a new building or alteration shall include a professional statement of either compliance with or exemption from the Energy Code [as set forth in Section BC 106.13; however, if the project is exempt from the requirements of the Energy Code in accordance with Section ECC 101, the professional shall include a statement of exemption instead and provide the citation to the provision that allows the exemption].

(1) Compliance. All new building and alteration applications must indicate compliance on the application form, except as specifically excluded in paragraph (2) of this subdivision.

(2) Exemption. Only applications that consist entirely of work exempt from the Energy Code may indicate exemption in the professional statement. The application must state one of the following bases for exemption:

(i) Historic building. All the proposed work is in or on the premises of

(A) a National- or State-designated historic building

(B) a building certified as a contributing building within a National or State historic district

(C) or, a building certified as eligible for such designation, as provided in section ECC 101.4.2.

(ii) Envelope of low-energy building. All the proposed work is related to the envelope system of a low-energy or unconditioned building, as described in section ECC 101.5.2.

(iii) Categories of work not affecting energy use. Temporary structures (as described in sections 28-111 and BC 3103) are exempt from compliance with the Energy Code. In addition, the following work types are exempt:

(A) FA (fire alarm)
(B) FP (fire suppression in a range hood)
(C) SD (standpipe)
(D) SP (sprinklers)
(E) FS (fuel storage)
(F) EQ (construction equipment)
(G) CC (curb cut)
(H) OT/BPP (builder's pavement plan)
(I) OT/FPP (fire protection plan).

§4. Subdivision e of section 5000-01 of Chapter 5000 of Title 1 of the Rules of the City of New York is deleted.

[(e) Owner statement. The owner of the property for which an application for construction document approval is being filed shall attest on the application form that he or she shall not knowingly authorize construction documents or construction work that fail to comply with the Energy Code.]

§5. Subdivision f of section 5000-01 of Chapter 5000 of Title 1 of the Rules of the City of New York is amended to read as follows:

(f) Energy analysis. [The applicant shall include an energy analysis on a sheet in the construction drawing set in the initial application filing.] An energy analysis is required for every project that is not entirely exempt. The energy analysis shall identify the compliance path followed, demonstrate how the [applicant intends to comply with the Energy Code] project design complies with the Energy Code and, for commercial projects, indicate whether the project is designed in accordance with ECC Chapter 5 or with ASHRAE 90.1.

[Exception: An energy analysis is not required for a project that is exempt from the Energy Code.]

(1) Accepted formats for energy analysis. One of the following formats may be used to present the energy analysis:

(i) Tabular analysis. For new buildings, additions and/or alterations to existing residential or commercial buildings for which either ECC Chapter 4 [or 8], ECC Chapter 5 or ASHRAE 90.1 has been used, the applicant may create a table entitled "Energy Analysis" as described in figure 1.

Such table shall compare the proposed values of each Energy Code-regulated item in the scope of work with the prescriptive values required by the Energy Code. The items shall be organized by discipline, including Envelope Systems, Mechanical and Service Water Heating Systems, and Lighting and Electrical Systems, as applicable.

[Commercial]For commercial building [alterations and] additions and/or alterations involving lighting, the applicant may choose to utilize the Lighting Application Worksheet from COMcheck [and the tenant-area or portion-of-building method] for the lighting part of the analysis in lieu of including [it]lighting in the tabular analysis. See subparagraph iii of this paragraph.

Figure 1: Sample tabular energy analysis:

ENERGY ANALYSIS Code chapter and/or standard used for design Climate Zone [XXX (climate zone shall be identified here)]4A		
Item Description	**Proposed Design Value**	**Code Prescriptive Value and Citation**
([list]List all elements of the scope of work in the detail that they are addressed by the energy code.)	([list]List the value used in the design.)	([list]List the prescriptive value required by the Energy Code and provide the citation for such value.)

(ii) REScheck Software Program. The REScheck software program available from the United States Department of Energy website may be used for residential buildings as follows:

(A) New buildings. REScheck may be used for new residential buildings.

(B) Additions. REScheck may be used for additions only where a whole-building analysis, including the existing building and the addition, is performed.

(C) **Alterations and repairs**. REScheck may be used for alterations and repairs only where a whole-building analysis, including the existing-to-remain and altered envelope and mechanical systems, is performed.

(D) **New York State form**.

1. Only the New York State version of the REScheck form [shall be] is permitted.

2. For applications filed on or after December 28, 2010, the report must specify the 2010 Energy Conservation Construction Code of New York State.

3. For applications filed before December 28, 2010, the report must specify the edition of REScheck that matches the edition of the Energy Conservation Construction Code of New York State in effect when the application was filed.

(iii) **COMcheck.** The COMcheck software program available from the United States Department of Energy website may be used for commercial buildings as follows:

(A) **New buildings.** COMcheck may be used for new commercial buildings.

(B) **Additions.** COMcheck may be used for additions only as follows:

1. Where a whole-building analysis, including the existing building and the addition, is performed; or

2. Where the COMcheck report states “addition” as the project type.

(C) **Alterations and repairs.** COMcheck may be used for alterations and repairs only as follows:

1. Where a whole-building analysis, including the existing-to-remain and altered parts of the building, is performed; or

2. Where the COMcheck report states “alteration” as the project type.

(D) **COMcheck versions.** [Only] Applicants must use only the New York State COMcheck form [shall be permitted, except that where ASHRAE 90.1 is used in accordance with ECC Chapter 8, the comparable ASHRAE 90.1 COMcheck form shall be used instead] or the ASHRAE 90.1 COMcheck form, whichever reflects the standard used for project design.

All three parts of the COMcheck report – the envelope, the mechanical/service water heating and the lighting/power parts – shall be presented, except where the project type is an addition or alteration as described above and some parts of the report are not relevant to the scope of work.

Where ECC Chapter 5 has been used for design, the report must specify the 2010 Energy Conservation Construction Code of New York State version of COMcheck unless a stand-alone New York State-specific version of the software is no longer supported. In the event that a New York State-specific version is no longer supported, the report must specify the 2007 ASHRAE 90.1 version of the software.

Where ASHRAE 90.1 has been used for design, the report must specify the 2007 ASHRAE 90.1 version of the software.

(iv) Energy [cost budget worksheet] modeling based on DOE2. For new commercial buildings and additions or alterations to commercial buildings, where [the Energy Cost Budget Method of ASHRAE 90.1 is] trade-offs among disciplines and/or the performance path are used in accordance with section ECC [Chapter 8]506 or ASHRAE 90.1 section 11, an energy modeling program developed by the United States Department of Energy, including DOE2 or updates of DOE2, shall be used; such updates include DOE2.1E, VisualDOE, EnergyPlus and eQuest.

Other energy modeling programs must be approved by the Secretary of State of New York State [may also be used. The lead energy professional shall identify the software and report inputs and outputs on a Department form.]and the commissioner. The commissioner may at his or her discretion require the energy modeling report to be submitted to the Department.

The applicant shall provide the project-relevant utility company energy cost time-of-use rate structure in effect on January 1 of the calendar year in which the initial filing of the project application(s) occurs, and shall utilize the time-of-use electricity, gas and steam prices from the rate structure in the energy model. Fuel oil prices used in the model shall be supported by comparable local supplier information from the provider in effect on January 1 of such calendar year.

The results of the energy modeling report must be reported on a Department form.

(v) Alternative formats. Formats other than those listed in subparagraphs i through iv of this paragraph, including, but not limited to, [the simulated performance alternative set forth in section ECC 404 or the total building performance method set forth in section ECC 806, may be used only if they are approved in advance by the commissioner. Use of these performance methods, when approved by the commissioner, shall utilize software programs acceptable to the commissioner. The applicant shall provide the project-relevant utility company energy cost rate structure in effect on January 1 of the calendar year in which the initial submission of the project application(s) is filed, and shall utilize the electricity, gas and steam prices from the rate structure in the energy model. Fuel oil prices used in the model shall be supported by comparable local supplier information from the provider in effect on January 1 of such calendar year.]the home energy software programs described in section ECC 101.5.1, may be used for a project only if they are approved in advance by both the Secretary of State of New York State and the commissioner.

(2) Mixed-occupancy buildings three stories or fewer. In accordance with section ECC 101.4.6, buildings three stories or fewer above grade with mixed residential and non-residential occupancies must comply with the respective requirements of Chapters 4 and 5, and must have separate energy analyses, except that a tabular analysis format may be used to show both the residential and non-residential requirements.

(3) Build-outs of tenant space prior to issuance of new building certificate of occupancy. The energy analysis for any alteration application for a build-out of a new building tenant space before the final certificate of occupancy is issued must be consistent with the energy analysis for the new building. Such energy analysis for the new building must be provided upon request.

([2]**4) Professional responsibility for energy analysis.** The energy analysis shall be signed and sealed by registered design professional(s)[as follows:].

[**(i) Lead professional.** Where a whole-building analysis is performed for the energy analysis or where the design uses tradeoffs such that one or more systems of the energy analysis – envelope, mechanical/ service water heating and lighting/power – could not meet the prescriptive requirements of the Energy Code on its own, a lead professional shall be identified who shall sign and seal the entire energy analysis for all systems involved. Such lead

professional shall be a registered design professional and may or may not be an applicant of record.

(ii) Responsibility by discipline. Where each system of the energy analysis – envelope, mechanical/service water heating and lighting/power – meets the prescriptive requirements of the Energy Code individually, different registered design professionals may sign and seal their respective parts of the energy analysis report individually; however, all parts of the energy analysis report shall be presented together on a sheet in the drawing set of the initial filing.]

(i) Election. The project team must elect one of the following methods for performing the energy analysis:

(A) Responsibility by discipline. Where each system of the energy analysis – envelope, mechanical/service water heating and lighting/power – meets the prescriptive requirements of the Energy Code individually, different registered design professionals may sign and seal their respective parts of the energy analysis report and include them as follows:

1. If all such systems are filed with the Department under the same application number, each registered design professional may include his or her part of the energy analysis in his or her respective parts of the project construction drawings.
2. If such systems are filed with the Department under different application numbers, all parts of the energy analysis shall be filed in the initial application for the project; except that in the case of foundation and earthwork permits issued pursuant to section 28-104.2.5, the energy analysis for the new building project must be submitted with subsequent construction documents. Refer also to paragraph (5) of this subdivision.

(B) Lead professional. Where energy modeling (whole-building analysis) is performed for the energy analysis or where the project design uses tradeoffs among disciplines such that one or more systems of the energy analysis – envelope, mechanical/service water heating and lighting/power – could not meet the prescriptive or performance requirements of the Energy Code on its own, a lead professional must be identified who must sign and seal the entire energy analysis for all systems involved.

The energy modeling program must be based on the DOE2 energy modeling software in accordance with subparagraph (iv) of paragraph (1) of this subdivision. The energy analysis must be presented in the construction drawings for one application only. The lead professional must be a registered design professional and need not be a design applicant.

(ii[i]) Registered design professional other than [an] a design applicant [of record]. A registered design professional other than [an] a design applicant [of record] may prepare, sign and seal the energy analysis, either as lead professional or for individual discipline(s) in accordance with subparagraph [ii]i of this paragraph. Such registered design professional shall file a PW1 form as a subsequent filing [to the initial application document] and indicate "Energy" or "Electrical" as applicable in Section 6D, OT - Other.

(5) Foundation and earthwork permits. When phased or partial approval is requested by the applicant for the purpose of issuance of a foundation and earthwork permit in accordance with §28-104.2.5 of the *Administrative Code*, a tabular analysis must be filed showing the foundation insulation requirements of the ECC. Refer also to subclause 2 of clause (A) of subparagraph (i) of paragraph (4) of this subdivision.

§6. Subdivision g of section 5000-01 of Chapter 5000 of Title 1 of the Rules of the City of New York is amended to read as follows:

(g) Supporting documentation. The construction drawings submitted for approval shall provide all energy design elements and shall match or exceed the energy efficiency of each value in each part of the energy analysis – envelope, mechanical/service water heating and lighting/power.

In addition, other mandatory Energy Code requirements shall be provided as described in paragraphs 1 through [4 and as referenced in paragraph] 5 of this subdivision.

Further, supporting documentation shall provide all information necessary for a progress inspector to verify during construction that the building has been [constructed]built in accordance with the approved construction documents [and subdivision h of this section] to meet the requirements of the Energy Code.

For additions and alterations, the applicant must clearly show those physical portions of the systems that are being brought up to code and those that are not being upgraded.

(1) Envelope. Building wall sections and details shall be provided for each unique type of roof/ceiling, wall, and either the foundation, slab-on-

grade, basement or cellar assembly. Such building wall sections shall show each layer of the assembly, including, but not limited to, insulation, moisture control and [vapor retarders, and the] air barriers. The insulation in each case shall be labeled and shall be equal to or greater than the R values, and an assembly in each case shall be equal to or less than the assembly U factors, in the energy analysis.

Door, window and skylight schedules shall include columns for U and SHGC values for each fenestration assembly type, and such values shall be equal to or less than those in the energy analysis. Mandatory requirements to prevent air leakage shall be detailed. Siding attachment over foam sheathing shall comply with the Energy Code as required.

(2) Mechanical/service water heating. Mechanical system design criteria, and mechanical and service water heating system and equipment types, sizes and efficiencies shall be provided.

Space heating and cooling equipment, energy recovery equipment, economizers, ventilation equipment, service water heating equipment, and mandatory requirements including control systems, duct sealing and duct and piping insulation shall be shown on the construction drawings and shall be equal to or greater than the energy efficiency requirements established in the energy analysis, the Energy Code and/or this section, as applicable. A narrative shall be provided for each mandatory control system describing its function and operation and specifying proper setpoints of equipment and controls.

> **[(i) Joints and sealing in residential buildings.** In accordance with the New York State Residential Code as referenced in the Energy Code, joints of duct systems in residential buildings shall be made substantially airtight by means of tapes, mastics or gasketing. Closure systems used with rigid fibrous glass ducts shall comply with UL 181A and shall be marked "181A-P" for pressure-sensitive tape, "181A-M" for mastic or "181A-H" for heat-sensitive tape. Closure systems used with flexible air ducts and flexible air connectors shall comply with UL 181B and shall be marked "181B-FX" for pressure-sensitive tape or "181B-M" for mastic. Duct connections to flanges of air distribution system equipment or sheet metal fittings shall be mechanically fastened. Crimp joints for round ducts shall have a contact lap of at least 1.5 inches (38 mm) and shall be mechanically fastened by means of at least three sheet metal screws or rivets equally spaced around the joint.]

(3) Electrical. The applicant must provide supporting documents for lighting, power and controls on either electrical drawings or drawings of other disciplines as appropriate. Such documents must:

- support the energy analysis;
- satisfy mandatory requirements of the Energy Code, such as controls, transformers, metering, voltage drop and electric motor requirements; and
- support progress inspections required by this section.

The drawings must be numbered with an "E," "EN" or other discipline designator and must be signed and sealed by a registered design professional. If the registered design professional is an electrical engineer, the engineer must file a PW1 form as an initial or subsequent filing and indicate either "Electrical" or "Energy" in Section 6D, OT – Other.

(i) Interior and exterior lighting. Supporting documentation for lighting must be as follows:

[(3) Lighting/power.] **(A) Commercial buildings, except dwelling units.** The applicant shall provide reflected ceiling plans, floor plans and/or electrical drawings with lighting layouts for each floor or space in the project, and for exterior lighting as applicable.

The lighting fixtures shall be described and keyed to the lighting plans, including type designation, brief description, locations, lamp type, ballast/transformer type, watts per lamp, quantity of lamps per fixture, [ballast/transformer type,] and system input watts per fixture, such that the drawings support the energy analysis.

In addition, mandatory lighting controls shall be shown and described, and a narrative provided describing their function and operation.

Control devices and zones shall be indicated on drawings. [Lighting documentation shall not be required within dwelling units as such term is defined in the Energy Code and for buildings regulated by ECC Chapter 4.]

(B) Dwelling units in residential and commercial buildings. In homes and dwelling units, the applicant must indicate on floor plans what fixtures are to be installed with high-efficacy lamps, and where the separate meter for each dwelling unit is located.

(ii) Exterior lighting zones. Exterior lighting zones as set forth in ECC Table 505.6.2(1) correspond with the following zoning districts in the New York City Zoning Resolution:

Lighting zone 1:	Park land.
Lighting zone 2:	All R districts, R districts with C overlays and MX districts.
Lighting zone 3:	M districts, except MX; C districts, except C5, C6 and C overlays on R districts.
Lighting zone 4:	C5 and C6 districts.

(iii) Fan motors and controls. Fan motor horsepower and controls must be shown on the drawings and described.

(iv) Feeders. For applications using ASHRAE 90.1 for compliance, calculated feeder voltage drops must be provided in accordance with ASHRAE 90.1 section 8.4.

[(4) Electrical construction drawings required. Construction documents, including a single-line diagram of the building or tenant electrical distribution system and other relevant electrical construction drawings, shall be submitted as supporting documentation if required for any of the following: to support the energy analysis; to satisfy mandatory requirements of the Energy Code, such as controls, transformer, metering, voltage drop and electric motor requirements; or to support progress inspections required by this section. Such drawings shall be numbered with an "EN" discipline designator and shall be signed and sealed by a registered design professional. Such registered design professional, if not an applicant of record, shall file a PW1 form as a subsequent filing to the initial application document.]

[(5)](4) Mandatory requirements. The construction documents shall comply with all mandatory requirements of the Energy Code.

For residential buildings, references for such requirements are listed in Section ECC [404.2]401.2.

For commercial buildings complying with ECC Chapter [8]5 provisions, references for such requirements are listed [as the Exceptions to Section ECC 801.2;]throughout Chapter 5 or, if Section 506 is used, in Section ECC 506.2; for commercial buildings complying with ASHRAE 90.1, such requirements are set forth in Sections 5.4, 6.4, 7.4, 8.4, 9.4 and 10.4.

Exception: Sections ECC 402.5 and 502.5 shall not be mandatory as vapor barriers are not required in Zone 4A.

[(6)](5) Permanent certificate in residential buildings. For residential buildings, the construction documents shall indicate the following [with regard to the permanent certificate required] in accordance with Section ECC 401.3:

(i) New buildings. For new buildings regulated under ECC Chapter 4, a permanent certificate shall be required to be installed indoors and in accordance with Section ECC 401.3, except that it may be posted near the electrical distribution panel at eye level and in plain sight.

(ii) Additions and alterations. For additions and alterations affecting information on an existing permanent certificate, such permanent certificate shall be updated, initialed where changed and reposted such that the values on the posted permanent certificate remain current.

[(7)](6) Deferred submittals. Drawings showing design intent and performance criteria matching those in the energy analysis may be submitted as supporting documentation [for the initial construction document approval] provided that, in accordance with Section 28-104.2.6 of the Administrative Code, the applicant [elects to defer any additional drawings that may be required by Section 28-104.7.1.] lists such deferred submittals in the construction drawings and submits them for approval prior to installation or construction. If required, the energy analysis must be updated when deferred submittals are provided for approval.

[(8)](7) Required progress inspections. Supporting documentation shall also set forth all applicable required progress inspections in accordance with the Energy Code, 1 RCNY §101-07 and this section.

(i) Applicant's instructions regarding required progress inspections. Progress inspections required to be performed during construction for any new building, addition or alteration project shall be identified by the design applicant according to the scope of work and listed and described in the approved construction drawings as required progress inspections.

The description shall set forth the standard of construction and the inspection criteria [in accordance with the cited section(s)]as appropriate for the scope of work in accordance with Table I or Table II of subdivision (h) of this section, as applicable; simple reference to the citations provided, without such description, is not sufficient.

The applicant shall include the instruction that, in accordance with Sections BC 109.9 and ECC 104.2.3, where an inspection or test fails, the construction shall be corrected and must be made available for reinspection and/or retesting by the progress inspector until it complies.

For additions and alterations, the applicant must clearly indicate what portions of the altered systems should be inspected and/or tested, and what inspection and/or testing may be outside the scope of the work.

(ii) Construction scheduling instructions. The drawings shall state that, in accordance with Article 116 of Title 28 and Section BC 109, construction shall be scheduled to allow required progress inspections to take place, and that roofs, ceilings, exterior walls, interior walls, floors, foundations, basements and any other construction shall not be covered or enclosed until required progress inspections are completed or the progress inspector indicates that such covering or enclosure may proceed, at each stage of construction, as applicable.

(iii) Commercial building reference standards and citations. Progress inspection reference standards and citations shall conform to the respective requirements of ECC Chapter [(8)]5 or ASHRAE 90.1 as used for design, in accordance with the following:

(A) When ECC Chapter [(8)]5 has been used for the project design, as reflected in the energy analysis, the applicant shall [direct]list on the drawings [that]the respective references and citations for ECC [shall be used]for the progress inspection.

(B) When ASHRAE 90.1 has been used for the project design, as reflected in the energy analysis, the applicant shall [direct]list on the drawings [that]the respective references and citations for ASHRAE 90.1 [shall be used]for the progress inspection.

§7. Subdivision h of section 5000-01 of Chapter 5000 of Title 1 of the Rules of the City of New York is amended to read as follows:

(h) List of progress inspections required. The following progress inspections and/or testing set forth in Tables I and II shall be required when applicable to the scope of work and shall be identified/described in the supporting documentation. Energy Code sections cited in Tables I and II of this section shall

be understood to include the section, all subsections, [and]all tables and, when ASHRAE 90.1 is used, appendices related to the cited Energy Code section.

(1) Residential buildings. The progress inspections and tests described in Table I shall be performed for buildings regulated by ECC Chapter 4. For heating, cooling and/or service hot water systems in multiple dwellings, including where such systems serve a single dwelling unit, the applicant shall list inspections, tests and citations from Table II, in accordance with Section ECC 403.7.

TABLE I – PROGRESS INSPECTIONS FOR ENERGY CODE COMPLIANCE – RESIDENTIAL BUILDINGS

	Inspection/ Test	**Frequency (minimum)**	**Reference Standard (See ECC Chapter [(10)]6) or Other Criteria**	**ECC or Other Citation**
IA	**Envelope Inspections**			
IA1	**Protection of exposed foundation insulation**: Insulation shall be visually inspected to verify proper protection where applied to the exterior of basement or cellar walls, crawl-space walls and/or the perimeter of slab-on-grade floors.	Prior to backfill	Approved construction documents	[102.2.1] 303.2.1
IA2	**Insulation placement and R-values**: Installed insulation for each component of the conditioned space envelope and at junctions between components shall be visually inspected to ensure that the R-values are marked, that such R-values conform to the R-values identified in the construction documents and that the insulation is properly installed. Certifications for unmarked insulation shall be similarly visually inspected.	As required to verify continuous enclosure while walls, ceilings and floors are open	Approved construction documents	[102.1] 303.1, 303.1.1, 303.1.2, 402.1, 402.2, [402.2.5] 402.4.2.2, Table 402.4.2

IA3	**Fenestration thermal values and product ratings** [for U-factors]: U-factors of installed fenestration shall be verified by visual inspection for conformance with the U-factors identified in the construction drawings, either by verifying the manufacturer's NFRC labels or, where not labeled, using the ratings in ECC Tables [102]303.1.3(1) and (2).	As required during installation	Approved construction drawings; NFRC 100[, Tables 102.1.3]	[102.1.3] 303.1, 303.1.3, 402.1, 402.3, 402.6
IA4	**Fenestration product ratings for air leakage**: Windows, skylights and sliding glass doors, except site-built windows, skylights and doors, shall be visually inspected to verify that installed assemblies are listed and labeled to the referenced standard.	As required during installation	NFRC 400, AAMA/WDMA/ CSA 101/I.S.2[, or AAMA/WDMA 101/I.S.2/NAFS]/A440	402.4.[2]4
IA5	**Fenestration areas**: Dimensions of windows, doors and skylights shall be verified by visual inspection.	Prior to final construction inspection	Approved construction documents	402.3, [402.5.1] 402.6
IA6	[Sealing]**Air sealing and insulation – visual inspection option**: Openings and penetrations in the building envelope, including site-built fenestration and doors, shall be visually inspected to verify that they are properly sealed, in accordance with Table 402.4.2.	As required during envelope construction	Approved construction documents; ASTM E283; ASTM E84; RCNYS	402.4.1, 402.4.2.2, 402.4.3
IA7	[Whole building envelope infiltration testing: When the R values of ECC Table 402.1(2) are used for the design, and ECC 402.1, Exception 3.1 is utilized as a result, the results of the air change test shall be reviewed for compliance with ECC 402.4.4.] **Air sealing and insulation – testing option**: Testing shall be performed in	Prior to final construction inspection	ASHRAE/ASTM E779; ANSI Z65; Approved construction documents	[402.4.4] 402.4.2.1

	accordance with section ECC 402.4.2.1 and shall be accepted if the building meets the requirements detailed in such section. Test results shall be retained in accordance with the provisions of Title 28.			
[IA8]	[Moisture control, vapor retarder: Construction, including, but not limited to, above-grade frame walls, floors and ceilings that are not ventilated to allow moisture to escape, shall be visually inspected for installation of vapor retarder.]	[As required during envelope construction and prior to covering vapor retarder]	[Approved construction documents]	[402.5]
IB	**Mechanical and Plumbing Inspections**			
IB1	**Fireplaces**: Provision of combustion air and tight-fitting fireplace doors shall be verified by visual inspection.	Prior to final construction inspection	Approved construction documents; ANSI Z21.60 (see also MC 904), ANSI Z21.50	[102.5] 303.1.5; BC 2111; MC Chapters 7, 9; FGC Chapter 6
IB2	[Fresh]**Outdoor air intake and exhaust dampers**: Not less than 20% of installed automatic or gravity dampers, and a minimum of one of each type, shall be visually inspected and physically tested for proper operation.	Prior to final construction inspection	Approved construction documents	403.5, 403.7, 503
IB3	**Equipment** [efficiencies]: [When the R values of ECC Table 402.1(2) are used for the design, and ECC 402.1, Exception 3.3 is utilized as a result, the efficiencies of all installed mechanical]Heating and cooling equipment shall be verified by visual inspection for proper sizing. Pool heaters and covers shall be verified by visual inspection.	Prior to final plumbing and construction inspection	ACCA Manual J; Approved construction documents, including energy analysis	403.6, 403.7, 403.9, 503
IB4	**Controls**: System controls shall be inspected to verify that each dwelling is provided	Prior to final electrical and construction inspection	Approved construction documents, including	403.1, [403.1.1]403.4, 403.7, 403.8,

	with at least one individual programmable thermostat[s] with capabilities as described in ECC 403.1.1, and that such controls are set and operate as specified in ECC 403.1.1. Controls for supplementary electric-resistance heat pumps shall be inspected to verify that such controls prevent supplemental heat operation when the heat pump compressor can meet the heating load. Controls for snow- and ice-melting systems and pools shall be inspected for proper operation. Not less than 20% or one of each control type, whichever is more, shall be inspected.		control system narratives	403.9, 503, 504
IB5	**Duct and piping insulation and duct sealing**: Installed duct and piping insulation shall be visually inspected to verify correct insulation placement and values. Ducts, air handlers, filter boxes and building cavities used as ducts shall be visually inspected for proper sealing.	Prior to closing ceilings and walls and prior to final construction inspection	Approved construction documents; RCNYS M1601.3.1	403.2.1, 403.2.2, 403.3, 403.4, 403.7, 503, 504; MC Section 603; 1RCNY §5000-01
IB6	**Duct leakage testing**: [When the R values of ECC Table 402.1(2) are used for the design, and ECC 402.1, Exception 3.2 is utilized as a result, the results of the duct leakage tests shall be reviewed for compliance with ECC 403.2.4.]Where the air handler and/or some ductwork is in unconditioned space, duct-leakage testing shall be performed either after rough-in or post-construction to ensure compliance with ECC 403.2.2. Not less than 20%	Prior to closing ceilings and walls and prior to final construction inspection	Approved construction documents; ANSI/ASHRAE 152, ASTM E1554 Test Method A	[403.2.4] 403.2.2, 403.7, 503

	of such ductwork shall be tested.			
IC [Other]Electrical Power and Lighting Systems				
IC1	**Electrical metering**: The presence and operation of individual meters or other means of monitoring individual dwelling units shall be verified by visual inspection for all dwelling units.	Prior to final electrical and construction inspection	Approved construction documents	[102.4] 404.2
IC2	[Transformers: Single-phase and three phase dry-type and liquid-filled distribution transformers installed as part of the scope of work (and not by the utility) shall be visually inspected to ensure that the installed transformers are listed and labeled to the referenced standard, or that associated product literature confirms that the transformers meet the referenced standard.]**Lighting in dwelling units**: Lamps in permanently installed lighting fixtures shall be visually inspected to verify compliance with high-efficacy requirements.	Prior to final electrical and construction inspection	Approved construction documents[; NEMA TP1]	[102.6, 805.7] 404.1
[IC3]	**[Permanent certificate**: The installed permanent certificate shall be visually inspected for location, completeness and accuracy.]	[Prior to final inspection]	[Approved construction documents]	[401.3; 1RCNY 5000-01]
[IC4]	[**Maintenance information**: Maintenance manuals for equipment and systems requiring preventive maintenance shall be reviewed for applicability to installed equipment and systems before such manuals are provided to the owner. Labels required for such equipment or systems shall be inspected for	[Prior to sign-off or issuance of Certificate of Occupancy]	[Approved construction documents]	[102.3]

	accuracy and completeness and for compliance with ECC 102.3.]			
ID Other				
ID1	**Maintenance information**: Maintenance manuals for equipment and systems requiring preventive maintenance shall be reviewed for applicability to installed equipment and systems before such manuals are provided to the owner. Labels required for such equipment or systems shall be inspected for accuracy and completeness.	Prior to sign-off or issuance of Certificate of Occupancy	Approved construction documents	303.3
ID2	**Permanent certificate**: The installed permanent certificate shall be visually inspected for location, completeness and accuracy.	Prior to final plumbing, electrical and/or construction inspection as applicable	Approved construction documents	401.3; 1RCNY 5000-01(g)(5)

(2) Commercial buildings. The progress inspections and tests described in Table II shall be performed for buildings regulated by either ECC Chapter [8, including]5 or ASHRAE 90.1 [where]as applicable.

TABLE II – PROGRESS INSPECTIONS FOR ENERGY CODE COMPLIANCE – COMMERCIAL BUILDINGS

	Inspection/ Test	**Periodic (minimum)**	**Reference Standard (See ECC Chapter [10]6) or Other Criteria**	**ECC or Other Citation**
IIA Envelope Inspections				
IIA1	**Protection of exposed foundation insulation**:	As required during foundation	Approved construction documents	[102.2.1] 303.2.1; ASHRAE

	Insulation shall be visually inspected to verify proper protection where applied to the exterior of basement or cellar walls, crawl-space walls and/or the perimeter of slab-on-grade floors.	work and prior to backfill		90.1 – 5.8.1.7
IIA2	**Insulation placement and R-values**: Installed insulation for each component of the conditioned space envelope and at junctions between components shall be visually inspected to ensure that the R-values are marked, that such R-values conform to the R-values identified in the construction documents and that the insulation is properly installed. Certifications for unmarked insulation shall be similarly visually inspected.	As required to verify continuous enclosure while walls, ceilings and floors are open	Approved construction documents	[102.1, 802.2, Tables 802.2;] 303.1, 303.1.1, 303.1.2, 502.1, 502.2; ASHRAE 90.1 – [5.4.1] 5.5, 5.6[.] or 11; 5.8.1
IIA3	**Fenestration thermal values and product ratings** [for U-factors and SHGC values]: U-factors and SHGC values of installed fenestration shall be visually inspected for conformance with the U-factors and SHGC values identified in the construction drawings by verifying the manufacturer's NFRC labels or, where not labeled, using the ratings in ECC Tables [102]303.1.3(1), (2) and (3). Where ASHRAE 90.1 is used, visible light transmittance values shall also be verified.	As required during installation	Approved construction documents; NFRC 100, NFRC 200[, Tables 102.1.3]	[102.1.3, Tables 802.2.] 303.1, 303.1.3; 502.3; ASHRAE 90.1– [5.4.2, 5.5.4, Tables] 5.5; 5.6[,] or 11; 5.8.2
IIA4	**Fenestration and door assembly product ratings for air leakage**: Windows[, skylights] and sliding or swinging door assemblies, except site-built windows[, skylights] and/or doors, shall be visually inspected to	As required during installation; prior to final construction inspection	NFRC 400, AAMA/WDMA /CSA 101/ I.S.2[, AAMA/WDMA 101/I.S.2/NAF S-02;]/A440;	[802.3.1, 802.3.2;] 502.4; ASHRAE 90.1 – [5.4.3.1,] 5.4.3.2[,5.5.4,

	verify that installed assemblies are labeled by the manufacturer to the referenced standard. For curtain wall, storefront glazing, commercial entrance doors and revolving doors, the testing reports shall be reviewed to verify that the installed assembly complies with the standard cited in the approved plans.		ASTM E283; ANSI/DASMA 105	5.6, 5.8.2]
IIA5	**Fenestration areas**: Dimensions of windows, doors and skylights shall be verified by visual inspection.	Prior to final construction inspection	Approved construction documents	[802.2;] 502.3; ASHRAE 90.1 – 5.5.4[.1], 5.6 or 11
IIA6	**Sealing**: Openings and penetrations in the building envelope, including site-built fenestration and doors, shall be visually inspected to verify that [they are properly sealed.]a continuous air barrier around the envelope forms an air-tight enclosure. The progress inspector shall visually inspect to verify that materials and/or assemblies have been tested and meet the requirements of the respective standards, or that the building is tested and meets the requirements of the standard, in accordance with the standard(s) cited in the approved plans.	As required during construction	Approved construction documents; ASTM E2178, ASTM E2357, ASTM E1677, ASTM E779, ASTM E283.	[802.3.3, 802.3.5, 802.3.6, 802.3.7;] 502.4.3, 502.4.7; ASHRAE 90.1 – 5.4.3.1[, 5.4.3.3 5.4.3.4]
IIA7	**Projection factors**: Where the energy analysis utilized a projection factor > 0, the projection dimensions of overhangs, eaves or permanently attached shading devices shall be verified [against] for conformance with approved plans by visual inspection.	Prior to final construction inspection	Approved construction documents, including energy analysis	[Tables 802.2; 802.2.3] 502.3; ASHRAE 90.1 – 5.5,4, 5.6 or 11
IIA8	[Moisture control, vapor retarder:	[As required	Approved	[802.1.2]

	Framed walls, floors and ceilings that are not ventilated to allow moisture to escape, shall be visually inspected for installation of a vapor retarder for moisture control.]**Loading dock weatherseals**: Weatherseals at loading docks shall be visually verified.	during construction of envelope and prior to covering vapor barrier] Prior to final construction inspection	construction documents[; ASTM E96 Procedure A]	502.4.5; ASHRAE 90.1 – 5.4.3.3
IIA9	**Building entrance vestibules**: Required entrance vestibules shall be visually inspected for proper operation.	Prior to final construction inspection	Approved construction documents	502.4.6; ASHRAE 90.1 – 5.4.3.4
IIB Mechanical and Service Water Heating Inspections				
IIB1	**Fireplaces**: Provision of combustion air and tight-fitting fireplace doors shall be verified by visual inspection.	Prior to final construction inspection	Approved construction documents; ANSI Z21.60 (see also MC 904), ANSI Z21.50	[102.5;] 303.1.5; BC 2111; MC Chapters 7, 9; FGC Chapter 6
IIB2	[Dampers integral to the building thermal envelope:]**Outdoor air intakes and exhaust openings**: Dampers for stair and elevator shaft vents and other outdoor air intakes and exhaust openings integral to the building envelope shall be visually inspected to verify that such [openings are equipped with motorized dampers that have been tested and listed or labeled. If such dampers are not listed or labeled, they shall be tested and shall meet the requirements to the satisfaction of the progress inspector.]dampers, except where permitted to be gravity dampers, comply with approved construction drawings. Manufacturer's literature shall be reviewed to verify that the product	As required during installation	Approved construction documents; AMCA 500D	[802.3.4] 502.4.4; ASHRAE 90.1 – 6.4.3.4[.4]

	has been tested and found to meet the standard.			
IIB3	**HVAC** [and], **service water heating and pool equipment sizing and performance**: Equipment sizing, efficiencies and other performance factors of all major equipment units, as determined by the applicant of record, and no less than 15% of minor equipment units, shall be verified by visual inspection and, where necessary, review of manufacturer's data. Pool heaters and covers shall be verified by visual inspection.	Prior to final plumbing and construction inspection	Approved construction documents	[803.2.2, Tables 803.2.2; 803.3.2, Tables 803.3.2; 804.2, Table 804.2; ASHRAE 90.1 – 6.1, 6.3, 6.4.1, 6.8, Tables 6.8.1; 7.4.2, Table 7.8] 503.2, 504.2, 504.7; ASHRAE 90.1 – 6.3, 6.4.1, 6.4.2, 6.8; 7.4, 7.8
IIB4	**HVAC system controls and economizers and service hot water system controls**: No less than 20% of each type of required controls and economizers shall be verified by visual inspection and tested for functionality and proper operation. Such controls shall include, but are not limited to: ▪ Thermostatic[;] ▪ Set point overlap restriction[;] ▪ Off-hour[;] ▪ Shutoff damper[;] ▪ Snow-melt system ▪ Demand control systems ▪ Outdoor heating systems ▪ Zones ▪ Economizers[;] ▪ Air systems ▪ Variable air volume fan[;] ▪ Hydronic systems[;] ▪ Heat rejection equipment fan	After installation and [before] prior to final electrical and construction inspection, except that for controls with seasonally dependent functionality, such testing shall be performed before sign-off for issuance of a Final Certificate of Occupancy	Approved construction documents, including control system narratives; ASHRAE Guideline 1: The HVAC Commission-ing Process, where applicable	[803.2.3, 803.2.4, 803.2.5, 803.2.6, 803.2.7, 803.3.3, 803.3.4, 803.3.5, 803.3.9, 804.3, 804.6; ASHRAE 90.1 – 6.3, 6.4.3, 6.5, 6.7.2.4, 7.4.4, Appendix E ; 1RCNY 5000-01(g)(2)] 503.2.4, 503.2.5.1, 503.2.11, 503.3, 503.4, 504.3, 504.6, 504.7; ASHRAE

	speed[;] ▪ Complex mechanical systems serving multiple zones[;] ▪ Ventilation[;] ▪ Energy recovery systems[;] ▪ Hot gas bypass limitation ▪ Temperature ▪ Service water heating[;] ▪ Hot water system[;] ▪ Pool heater and time switches ▪ Exhaust hoods[;] ▪ Radiant heating systems[; and Hot gas bypass systems]. **Controls with seasonally dependent functionality**: Controls whose complete operation cannot be demonstrated due to prevailing weather conditions typical of the season during which progress inspections will be performed shall be permitted to be signed off for the purpose of a Temporary Certificate of Occupancy with only a visual inspection, provided, however, that the progress inspector shall perform a supplemental inspection where the controls are visually inspected and tested for functionality and proper operation during the next immediate season thereafter. The owner shall provide full access to the progress inspector within two weeks of the progress inspector's request for such access to perform the progress inspection. For such supplemental inspections, the Department shall be notified by the approved progress inspection [approved] agency of any unresolved deficiencies in the			90.1 – 6.3, 6.4, 6.5, 6.7.2.4, 7.4.4, 7.4.5

	installed work within 180 days of such supplemental inspection.			
IIB5	**Duct, plenum and piping insulation and sealing**: Installed duct and piping insulation shall be visually inspected to verify proper insulation placement and values. Joints, longitudinal and transverse seams and connections in ductwork shall be visually inspected for proper sealing.	After installation and prior to closing shafts, ceilings and walls	Approved construction documents; SMACNA Duct Construction Standards, Metal and Flexible[; UL 181A or UL 181B]	[803.2.8, 803.2.9, 803.3.6, 803.3.7, 804.5; ASHRAE 90.1 – 6.3, 6.4.4.1, 6.4.4.2.1, Tables 6.8.2 and 6.8.3; 7.4.3] 503.2.7, 503.2.8, 504.5; ASHRAE 90.1 – 6.3, 6.4.4.2, 6.8.2, 6.8.3; 7.4.3
IIB6	**Air leakage testing for high-pressure duct systems**: For duct systems designed to operate at static pressures in excess of 3 inches w.g. (746 Pa)[: Representative], representative sections, as determined by the progress inspector, totaling at least 25% of the duct area, per ECC [803.3.6]503.2.7.1.3, shall be tested to verify that actual air leakage is below allowable amounts.	After installation and sealing and prior to closing shafts, ceilings and walls	Approved construction documents; SMACNA HVAC Air Duct Leakage Test Manual	[803.2.8.1.1, 803.3.6;] 503.2.7.1.3; ASHRAE 90.1 – 6.4.4.2[.2]
IIC Electrical Power and Lighting Systems				
IIC1	**Electrical metering**: The presence and operation of individual meters or other means of monitoring individual apartments shall be verified by visual inspection for all apartments.	Prior to final electrical and construction inspection	Approved construction documents	[102.4; 805.8] 505.7
IIC2	[Transformers: Single-phase and three phase dry-type and liquid-filled	Prior to final electrical and	Approved construction	[102.6, 805.7] 505.5.3

	distribution transformers shall be visually inspected to ensure that the installed transformers are listed and labeled to the referenced standard, or that associated product literature confirms that the transformers meet the referenced standard.]**Lighting in dwelling units**: Lamps in permanently installed lighting fixtures shall be visually inspected to verify compliance with high-efficacy requirements.	construction inspection	documents[; NEMA TP1]	
IIC3	[Electric motors: Where required by the construction documents for energy code compliance, motor listing or labels shall be visually inspected to verify that they comply with the respective energy requirements in the construction documents.]**Interior lighting power**: Installed lighting shall be verified for compliance with the lighting power allowance by visual inspection of fixtures, lamps, ballasts and transformers.	Prior to final electrical and construction inspection	Approved construction documents	505.5; ASHRAE 90.1 – [10.4.1] 9.1, 9.2, 9.5, 9.6; 1RCNY §101-07(c)(3)(v)(C)4
IIC4	[Lighting controls: Not less than 15% of each type of required lighting controls, including manual interior lighting controls, light-reduction controls, automatic lighting shut-off, guestroom controls, exterior building lighting controls and exterior grounds lighting controls, shall be verified by visual inspection and tested for functionality and proper operation.]**Exterior lighting**: Installed lighting shall be verified for compliance with source efficacy and/or the lighting power allowance by visual inspection of fixtures, lamps, ballasts and relevant transformers.	Prior to final electrical and construction inspection	Approved construction documents[, including control system narratives]	[805.2; ASHRAE 90.1 – 9.1, 9.4.1; 1RCNY 5000-01(g)(3)]505.6; ASHRAE 90.1 – 9.4.4, 9.4.5; 1RCNY §101-07(c)(3)(v)(C)4

IIC5	[Tandem wiring: Tandem wiring shall be tested for functionality.]**Lighting controls**: Each type of required lighting controls, including: ▪ occupant sensors ▪ manual interior lighting controls ▪ light-reduction controls ▪ automatic lighting shut-off ▪ daylight zone controls ▪ sleeping unit controls ▪ exterior lighting controls shall be verified by visual inspection and tested for functionality and proper operation.	Prior to final electrical and construction inspection	Approved construction documents, including control system narratives	[805.3;] 505.2, 505.2.2.2; ASHRAE 90.1 – [9.4.2] 9.4.1, 9.4.1.2 (as modified by section ECC A102)
IIC6	**Exit signs**: Installed exit signs shall be visually inspected to verify that the label indicates that they do not exceed maximum permitted wattage.	Prior to final electrical and construction inspection	Approved construction documents	[805.4;] 505.4; ASHRAE 90.1 – 9.4.3
IIC7	[Interior lighting power: Installed lighting shall be verified for compliance with the lighting power allowance by visual inspection of fixtures, lamps, ballasts and relevant transformers.]**Tandem wiring**: Tandem wiring shall be tested for functionality.	Prior to final electrical and construction inspection	Approved construction documents	[805.5; ASHRAE 90.1 – 9.1.3, 9.1.4, 9.2.1, 9.5, 9.6; 1RCNY 5000-01(i)] 505.3; ASHRAE 90.1 – 9.4.2
IIC8	[Exterior lighting power: Installed lighting shall be verified for compliance with source efficacy and/or the lighting power allowance by visual inspection of fixtures, lamps, ballasts and relevant transformers.]**Electric motors (including but not limited to fan motors**): Where required by the construction	Prior to final electrical and construction inspection	Approved construction documents	[805.6; ASHRAE 90.1 – 9.1.1, 9.4.4, 9.4.5] 503.2.10; ASHRAE 90.1 – 10.4

	documents for energy code compliance, motor listing or labels shall be visually inspected to verify that they comply with the respective energy requirements in the construction documents.			
IID Other				
IID1	**Maintenance information**: Maintenance manuals for mechanical, service hot water and electrical equipment and systems requiring preventive maintenance shall be reviewed for applicability to installed equipment and systems before such manuals are provided to the owner. Labels required for such equipment or systems shall be inspected for accuracy and completeness[and for compliance with ECC 102.3].	Prior to sign-off or issuance of Final Certificate of Occupancy	Approved construction documents, including electrical drawings where applicable; ASHRAE Guideline 4: Preparation of Operating and Maintenance Documenta-tion for Building Systems	[102.3; 803.3.8.3;] 303.3, 503.2.9.3; ASHRAE 90.1 – 4.2.2.3, 6.7.2.2, 8.7.2

§8. Subdivision i of section 5000-01 of Chapter 5000 of Title 1 of the Rules of the City of New York is amended to read as follows:

(i) Energy Analysis of Constructed Conditions. In accordance with Section 28-104.3 of the Administrative Code and section ECC 103.4, if constructed work differs from the last-approved full energy analysis, an as-built energy analysis shall be submitted[as a post-approval amendment] to the Department, listing the actual values used in the building for all applicable Energy Code-regulated items and demonstrating that the building complies with the Energy Code. Such energy analysis shall be signed and sealed by a registered design professional[, who]. The progress inspector shall certify that to the best of his or her knowledge and belief the building as built complies with [the Energy Code;] such signed and sealed energy analysis and construction drawings for energy code compliance; where no trade-offs have been used among disciplines, more than one registered design professional may sign and seal the elements of the energy analysis. The energy analysis shall be approved or accepted by the Department prior to sign-off[or issuance of the certificate of occupancy].