

DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

DIVISION OF CLIMATE, COASTAL, & ENERGY

Statutory Authority: 16 Delaware Code, Section 7602 (16 Del.C. §7602)

7 DE Admin. Code 2101

PROPOSED

REGISTER NOTICE

SAN# 2019-04

2101 Regulations for State Energy Conservation Code

1. TITLE OF THE REGULATIONS:

7 DE Admin. Code 2101 *Regulations for State Energy Conservation Code*

2. BRIEF SYNOPSIS OF THE SUBJECT, SUBSTANCE, AND ISSUES:

Delaware's Energy Conservation Code Act (16 Del.C. §7602) requires DNREC to adopt the most recent and/or highest available version of the International Energy Conservation Code (IECC), and the latest American Society of Heating, Refrigerating and Air-Conditioning Engineers/Illuminating Engineering Society of North America (ASHRAE/IESNA) energy standard. The regulations must also set out procedures for certification of compliance with these codes and standards to be utilized by the respective local governments. The Energy Conservation Code Act instructs DNREC to review the state energy codes triennially for potential updates to adopt newer versions of the IECC and ASHRAE energy code standards.

Since May 1, 2014, Delaware has required the 2012 IECC for residential buildings and ASHRAE 90.1-2010 for commercial and high-rise residential structures. In 2017, the Department convened the Delaware Energy Code Coalition to begin the triennial review of the available energy conservation codes and evaluate the impacts of adopting a newer version of the IECC and ASHRAE standards. The Coalition met eleven times between March 2017 and January 2019 to review newer versions of the IECC and ASHRAE standards. The Department, in consultation with the Codes Coalition, considered the 2015 and 2018 versions of the IECC standards and ASHRAE 90.1-2013 and ASHRAE 90.1-2016. The Department collected input through the Delaware Energy Code Coalition to inform the proposed draft regulations.

The Department is proposing to adopt by reference the 2018 IECC and ASHRAE 90.1-2016 in their entirety. The modest increased cost of the more stringent energy conservation codes is offset by the benefits accrued to the building owners and occupants over the life of the building. Adopting the current version of the IECC and ASHRAE energy conservation codes will increase building sector energy efficiency, bring energy cost savings for building owners and occupants, increase occupant comfort, and reduce emissions in Delaware.

3. POSSIBLE TERMS OF THE AGENCY ACTION:

None

4. STATUTORY BASIS OR LEGAL AUTHORITY TO ACT:

Delaware Energy Conservation Code Act pursuant to 16 Del.C. §7602.

5. OTHER REGULATIONS THAT MAY BE AFFECTED BY THE PROPOSAL:

None

6. NOTICE OF PUBLIC COMMENT:

Persons wishing to comment on the proposed amendments to 7 DE Admin. Code 2101 *Regulations for State Energy Conservation Code* may do so either orally or in written form at the public hearing on Tuesday, December 3, 2019 beginning at 6:00 PM in the DNREC Auditorium at 89 Kings Highway, Dover, DE 19901. In lieu of attending the public hearing, written comments may be submitted to the Hearing Officer via either email to DNRECHearingComments@delaware.gov, or via USPS to the DNREC Hearing Officer, 89 Kings Highway, Dover, DE 19901. The Department will accept public comment through the close of business on Wednesday, December 18, 2019.

7. PREPARED BY:

Jessica Quinn

Email: Jessica.Quinn@delaware.gov

Ph: 302-735-3485

2101 Regulations for State Energy Conservation Code

1.0 Purpose and Statutory Authority

- 1.1 The purpose of these regulations is to provide the Department of Natural Resources and Environmental Control's determination of the most recent and/or highest available version of the International Energy Conservation Code and the latest ASHRAE/IESNA standard. The goal of establishing these regulations is to provide a statewide building energy conservation code.
- 1.2 These regulations provide rules of practice and procedures for certification of compliance with these codes and standards to be utilized by the respective local governments.
- 1.3 ~~Delaware Code Title 16 Section 7602~~ 16 Del.C. §7602 provides the authority for adopting ~~Delaware Energy Conservation~~ the State Energy Conservation Code. These regulations are promulgated under the authority of 16 Del.C. §7602.

2.0 Definitions

For purposes of these regulations, the following words and phrases shall have the meanings set forth below.

"**ASHRAE**" means the ANSI/ASHRAE/IES Standard ~~90.1-2010~~ 90.1-2016: Energy Standard for Buildings except Low-Rise Residential Buildings published by the American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc.

"**Department**" means the Department of Natural Resources and Environmental Control, the Division of Energy and Climate Climate, Coastal, & Energy or the Delaware Energy Office, as appropriate.

"**DET verifier**" means a certified Duct and Envelope Tightness verifier. A certified DET verifier shall be a certified Home Energy Rating Systems (HERS) rater, or be a certified Home Performance with ENERGY STAR contractor, or be a Building Performance Institute (BPI) Heating Professional to perform duct tightness testing or a BPI Building Analyst or Envelope Professional to perform building tightness testing, or successfully complete a course that is approved by the Department of Natural Resources and Environmental Control.

"**IECC**" means the 2018 International Energy Conservation Code published by the International Code Council, Inc.

3.0 Incorporation by Reference

- 3.1 The ~~2012~~ 2018 International Energy Conservation Code (IECC), published by the International Code Council, Inc., is hereby adopted and incorporated by reference ~~with revisions~~ as the Delaware Residential Building Energy Conservation Code and is an enforceable part of the Delaware Building Codes. ~~The revisions to the 2012 IECC code are stated in Section 4.0 of these regulations.~~
- 3.2 The American Society of Heating, Refrigerating and Air-Conditioning Engineers Standards (ASHRAE) ~~90.1-2010~~ 90.1-2016: Energy Standard for Buildings except Low-Rise Residential Buildings and ~~Commercial Provisions~~ the commercial provisions of the ~~2012~~ 2018 International Energy Conservation Code are hereby adopted and incorporated by reference in their entirety as the Delaware Commercial Building Energy Conservation Code and is an enforceable part of the Delaware Building Codes.

4.0 Revisions to the 2012 IECC

- 4.1 ~~The following additions, insertions, deletions, and other changes are hereby made to the 2012 International Energy Conservation Code.~~
 - 4.1.1 ~~R403.2.2 amend to add: Supply duct tightness shall be verified by either of the following:~~
 1. ~~Post construction test: Total leakage less than or equal to 6 cfm (160.9/min) per square foot (0.29 m²) of conditioned floor area when tested at the pressure differential of 0.1 inches w.g. (25 Pa)....~~
 2. ~~Rough in test: Total leakage less than or equal to 6 cfm (160.9/min) per square foot (0.29 m²) of conditioned floor area when tested at the pressure differential of 0.1 inches w.g. (25 Pa) (remainder unchanged — If the air handler is not installed.... ≤ 4 cfm....)~~
 - 4.1.2 ~~R403.4.2: amend list to:~~
 1. ~~Piping larger than 3/4 inch nominal diameter.~~
 2. ~~Piping serving more than one dwelling unit.~~
 3. ~~Piping located outside the conditioned space.~~
 4. ~~Piping from the water heater to a distribution manifold.~~
 5. ~~Piping located under a floor slab.~~
 6. ~~Buried piping.~~
 7. ~~Supply and return piping in recirculation systems.~~
- ~~Delete Table R403.4.2 without substitution.~~

4.1.3 R402.4.1.2:

Exception: A building or dwelling unit with 2,000 ft² or less of conditioned floor area (CFA) may satisfy R402.4.1.2 if it:

(1) is tested to have an air leakage rate no greater than:

5 ACH 50 for homes with < 1,500 ft² of CFA, or

4 ACH 50 for homes with 1,500—2,000 ft² of CFA.)

4.1.4 R403.2.3 Building framing cavities shall not be used as ducts or plenums.

Exception: Returns run exclusively through conditioned space.

4.1.5 R403.5 The building shall be provided with ventilation that meets the requirements of the *International Residential Code (IRC)* or *International Mechanical Code (IMC)*, as applicable, or with other approved means of ventilation. Outdoor air intakes shall have automatic or gravity dampers that close when the ventilation system is not operating. Required ventilation rates shall also include adequate provisions for fuel-fired appliance, stove and fireplace makeup air supply; kitchen, bath, clothes dryer, and central vacuum exhausts; and other makeup air system supplies and/or exhausts as required in either the IRC or IMC.

(remainder of section unchanged)

5.04.0 Implementation and Enforcement

5.14.1 All buildings must meet all requirements of the applicable referenced code six months after date of promulgation.

5.24.2 All projects may utilize the new applicable reference codes at any time after the date of promulgation, provided such choice is stated on the construction documents.

4.3 Procedures for certification of compliance and standards to be utilized by respective local governments are those specified in the IECC at Chapter 1 ("Scope and Administration") and in the ASHRAE at Chapter 4 ("Administration and Enforcement") as enforceable parts of the Delaware Building Codes pursuant to subsections 3.1 and 3.2 herein.

6.05.0 Certified duct and envelope tightness (DET) verifier.

Testing for duct and building envelope tightness shall be conducted by a certified DET verifier.

17 DE Reg. 1086 (05/01/14)

23 DE Reg. 363 (11/01/19) (Prop.)

Regulatory Flexibility Analysis and Impact Statement Form

For Proposed New and Amended Regulations Affecting Small Businesses or Individuals

Introduction

Beginning January 1, 2016, agencies submitting proposed new or amended regulations that affect small businesses or individuals are required, under the new Regulatory Transparency and Accountability Acts of 2015 (see 80 Del. Laws, c. 112 and 113), to submit a Regulatory Flexibility Analysis (RFA) and a Regulatory Impact Statement (RIS) with the proposed regulation to the Registrar of Regulations (see **29 Del.C. Ch. 104**).

This RFA and RIS form is intended to benefit the small businesses and individuals impacted by proposed regulations by ensuring a reasonable level of consistency in the formatting of RFAs and RISs across different agencies and regulations.

State agencies proposing new or amended regulations that are substantially likely to impose additional costs or burdens on small businesses¹ or individuals² must submit a Regulatory Flexibility Analysis (RFA) **and** a Regulatory Impact Statement (RIS) to the Registrar of Regulations, with the proposed regulation. For agencies proposing amendments to existing regulations, the promulgating agency shall only be required to complete the RFA and RIS for the proposed amended portion of the existing regulation, and not for the entire existing regulation.

What is a Regulatory Flexibility Analysis (RFA)?

In each RFA, an agency must consider, where applicable, lawful, feasible and desirable, specific methods of reducing the burdens of the regulation on individuals and/or small businesses, including: (1) establishing less stringent requirements and deadlines; (2) establishing performance standards to replace design standards; (3) exempting individuals and small businesses from all or part of the regulation; and (4) examining other ways to accomplish the regulation's purpose, while minimizing the impact upon individuals and/or small businesses.

What is a Regulatory Impact Statement (RIS)?

Among other things, each RIS must (1) describe the purpose of the regulation; (2) identify the individuals and/or small businesses subject to it; (3) provide an estimate of the potential costs of compliance; and (4) describe any less intrusive or less costly alternative methods of achieving the purpose of the regulation. In addition, the Act further enhances transparency by requiring the Registrar of Regulations to transmit regulatory impact statements to the appropriate standing committee of the General Assembly.

¹"Small business" means any not-for-profit enterprise, sheltered workshop or business enterprise which is engaged in any phase of manufacturing, agricultural production or personal service, regardless of the form of its organization, when such enterprise or workshop employs fewer than 50 persons, has gross receipts of less than \$10,000,000 and is not owned, operated or controlled by another business enterprise.

²"Individual" means any natural person, including any sole proprietorship. The term "individual" does not include any natural person affected by a regulation in his/her capacity as an officer, director, or employee of an organization that is not a "small business"; e.g. the CEO of a large business.

Agencies, Boards, and Commissions: please fill out this form when proposing new or amended regulations for the purpose of informing the public and business community. All proposed regulations, even if an exemption applies, must have this form attached when submitting to the Registrar of Regulations.

Date _____ Agency _____ Division/Office _____

Contact Name _____

Contact Email (or mailing address for comments) _____

Regulation # _____ Title _____

Exemptions

Exemption A: This proposed regulation is **not subject to Chapter 104, Title 29 of the Delaware Code**, because it will not apply to small businesses or individuals at all.

Exemption B: The agency, board, or commission is exempt from completing the RFA and Impact Statement due to the nature of the proposed regulation.

Choose the reason for exemption:

B1. This proposed regulation is not substantially likely to impose additional costs or burdens upon individuals and/or small businesses. Explain this conclusion:

B2. This is an emergency regulation pursuant to **29 Del.C. §10119**.

B3. This proposed regulation is exempt from the procedural requirements of the Administrative Procedures Act, **29 Del.C. §10113(b)**. Choose which reason:

B3a. Descriptions of agency organization, operations and procedures for obtaining information

B3b. Rules of practice and procedure used by the agency

B3c. Delegations of authority to subordinates

B3d. Nonsubstantive changes in existing regulations to alter style or form or to correct technical errors

B3e. Amendments to existing regulations to make them consistent with changes in basic law but which do not otherwise alter the substance of the regulations

B3f. Codifications of existing agency or judicial principles of decision derived from previous decisions and rulings

B4. This proposed regulation defines standard of conduct or qualifications of individuals applying for licensure or as licensed professionals. Identify which professional license or professional qualification this would apply to:

B5. Regulations that are required by federal law and/or have already complied with the federal Regulatory Flexibility Act, 5 U.S.C. § 601 et seq. (If this is checked, the agency, board, or commission shall cite the federal law, regulation, directive, or guidance strictly mandating such state regulation and shall attach any applicable Federal RFA related to the regulation, if available. Attach the Federal RFA statement to this form, or provide the URL):

End of Exemption Section

Regulatory Flexibility Analysis

State agencies, boards, and commissions proposing to adopt or amend a regulation that is substantially likely to impose additional costs or burdens upon individuals and/or small businesses shall consider, where **applicable, lawful, feasible and desirable**, the following methods of reducing the additional costs and burdens of proposed regulations **on individuals and small businesses**:

1. The establishment of less stringent compliance or reporting requirements;
2. The establishment of less stringent schedules or deadlines for compliance or reporting requirements;
3. The consolidation or simplification of compliance or reporting requirements;
4. The establishment of performance standards to replace design or operational standards required in the proposed regulation;
5. The exemption of certain individuals or small businesses from all or part of the requirements contained in the proposed regulation; and
6. Such other alternative regulatory methods that will accomplish the objectives of the proposed regulation while minimizing the adverse impact upon individuals and small businesses.

Explain whether each of the above methods would be applicable, lawful, feasible, and desirable to reduce the costs or burdens of the proposed regulation:

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.

If the above RFA section does not address each of the six methods and there is not an exemption that applies, explain why the agency, board, or commission decided it was not applicable, lawful, feasible, and desirable to complete the RFA section above:

End of Regulatory Flexibility Analysis Section

- Provide a **good-faith estimate** of the potential cost of compliance for individuals and/or small businesses, which at minimum shall include the projected reporting, recordkeeping, and other administrative costs required to comply with the proposed regulation. Use the below space for a free-text response (*Cost Estimate Option 1*) or, use the questionnaire below to guide the response (*Cost Estimate Option 2*):

Cost Estimate Option 1:

	Cost Estimate Option 2	Yes	No	Unknown
1	Is this regulation being proposed to implement a state or federal program that provides funds to Delaware?			
2	If this regulation is not implemented, will individuals, businesses, or programs lose federal funding?			
3	Does this regulation implement a plan that has already been approved by the federal government, after an opportunity for public comment?			
4	Does this regulation follow industry standards and best practices?			
5	Are there potential costs in not establishing these standards?			
6	Does the regulation require capital costs (building costs, material costs, upgrades to property or structures, retrofitting of systems, etc.)?			
7	Does the regulation require additional recurring costs on small businesses or individuals?			
8	Does the regulation impose additional administrative burden for a small business or individual?			
8a	If answering yes to #8, is it ongoing reporting or one time? (Choose answer) Ongoing One Time Unknown			
8b	If answering yes to #8, generally, how much administrative effort will be required to comply with the regulation? Large Amount Small Amount Unknown			
9	Does the regulation require new or changed record keeping that will create new processes or change processes already in place for small businesses or individuals?			

	<i>Cost Estimate Option 2 (continued)</i>	Yes	No	Unknown
10	Would a small businesses or individual be required to hire an outside professional to comply with the proposed regulation (such as an attorney, accountant, tax advisor, environmental consultant, engineering firm, etc.)?			
10a	If answering yes to #10, estimate how many hours an outside professional may be needed to assist			
10b	If answering yes to #10, will a small business or individual be required to retain the services of the outside professional on an ongoing basis?			
11	Does the regulation require small businesses to purchase goods or services that are unusual or not commercially reasonable?			
12	Does the regulation require that small businesses exceed commercially reasonable data storage and transmission standards?			
13	Will small businesses have to hire additional employees in order to comply with the proposed regulation?			
14	Does the regulation require small businesses to cooperate with audits, inspections, or other regulatory enforcement activities?			
15	Does the regulation have the effect of creating additional licenses, taxes and/or fees for small businesses?			
16	Does the regulation require small businesses to obtain additional education to keep up to date with regulatory requirements?			
17	Please further explain any additional costs or burdens, which at a minimum shall include the projected reporting, recordkeeping, and other administrative costs required to comply with the proposed regulation.			

