

DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

DIVISION OF ENERGY AND CLIMATE

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

PROPOSED

REGISTER NOTICE

SAN #2013-27

103 Regulations for State Energy Conservation Code

1. TITLE OF THE REGULATIONS:

Regulations for the 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, and the latest 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.

3. POSSIBLE TERMS OF THE AGENCY ACTION:

There is no sunset date for this regulation.

4. STATUTORY BASIS OR LEGAL AUTHORITY TO ACT:

Chapter 76, §7602 of 16 Delaware Code

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

None

6. NOTICE OF PUBLIC COMMENT:

DNREC will hold a public hearing for builders and other interested parties on the regulations for the State Energy Conservation Code on Thursday, January 2, 2014 at 6:00 pm in the DNREC Auditorium, Richardson & Robbins Building, 89 Kings Highway, Dover. The hearing will present information about the proposed draft regulations and collect input from the public and stakeholders regarding these changes.

Interested parties may obtain a copy of the proposed regulations by emailing Crystal.nagyiski@state.de.us.

Written comments on the proposed regulations will be accepted until January 2, 2014 and may be submitted to the DNREC Division of Energy and Climate, attention: Crystal Nagyiski, 1203 College Park Drive, Suite 101, Dover, DE 19904, or by emailing crystal.nagyiski@state.de.us.

7. PREPARED BY:

Crystal Nagyiski
Division of Energy & Climate
1203 College Park Drive Suite 101
Dover, DE 19904
(302)739-9072

Crystal.nagyiski@state.de.us 11/6/2013

103 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 provides the authority for adopting Delaware 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: 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 or the Delaware Energy Office.

“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) Analyst, or successfully complete a course that is approved by the Department of Natural Resources and Environmental Control.

“IECC” means the International Energy Conservation Code published by the International Code Council, Inc.

3.0 Incorporation by Reference

- 3.1 The 2012 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 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: Energy Standard for Buildings except Low-Rise Residential Buildings and Commercial Provisions of the 2012 International Energy Conservation Code are hereby adopted and incorporated by reference in their entirety as the Delaware Commercial Building Energy 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 (169.9/min) per square feet (9.29 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 (169.9/min) per square feet (9.29 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 from the water heater to kitchen outlets.
 4. Piping located outside the conditioned space.
 5. Piping from the water heater to a distribution manifold.
 6. Piping located under a floor slab.
 7. Buried piping.
 8. Supply and return piping in recirculation systems other than demand recirculation systems.
 9. Piping with run lengths greater than the maximum run lengths for the nominal pipe diameter given in Table R403.4.2.

All remaining piping shall be insulated to at least R-3 or meet the run length requirements of Table R403.4.2. 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) attains a HERS Score of 69, using ResNET appliance and plugload defaults:

AND

(2) 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)

5.0 Implementation and Enforcement

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

5.2 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.

6.0 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. 604 (12/01/13) (Prop.)