

DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

DIVISION OF CLIMATE, COASTAL AND ENERGY

Statutory Authority: 16 Delaware Code, Section 7602 (16 Del.C. §7602)
7 DE Admin. Code 2101

PROPOSED

PUBLIC NOTICE

2101 Regulations for State Energy Conservation Code

SAN # 2025-04
DOCKET # 2025-R-CCE-0008

BRIEF SYNOPSIS OF THE SUBJECT, SUBSTANCE AND ISSUES:

The proposed regulation was published in the July edition of the *Delaware Register of Regulations*, and a hearing was held on July 22, 2025. As a result of the Secretary's Letter that was released on October 27, 2025, the State Energy Office (SEO) has revised the proposed regulation to remove the zero net energy capable amendments. All relevant documents, including the July publication, the hearing transcript, and the Secretary's Letter, can be found on the DNREC public hearing webpage for the State Energy Conservation Code (<https://dnrec.delaware.gov/events/public-hearing-regulations-for-state-energy-conservation-code-2/>). The SEO is now proposing to amend 7 DE Admin. Code 2101 Regulations for State Energy Conservation Code to adopt the 2024 International Energy Conservation Code (IECC) for residential buildings and the 2024 IECC/American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) 90.1-2022 for commercial and high-rise residential buildings. These proposed updates are prompted by the requirement in Delaware's Energy Conservation Code Act (16 Del.C. §7602) to conduct a triennial update of the state energy code to adopt newer versions of the IECC and ASHRAE energy code standards. The proposed regulation also adopts amended versions of Appendix RE: EV Charging Infrastructure and Appendix CB: Solar-Ready Zone to comply with corresponding statutory requirements. 16 Del.C. Ch. 80 establishes EV charging infrastructure requirements for new residential buildings. 16 Del.C. §7605 establishes solar-ready zone requirements for new commercial buildings. This regulatory update is necessary to comply with statutory mandates, to align with national standards, and to improve the quality and efficiency of buildings across the state.

POSSIBLE TERMS OF THE AGENCY ACTION:

None.

STATUTORY BASIS OR LEGAL AUTHORITY TO ACT:

16 Del.C. §7602.

OTHER REGULATIONS THAT MAY BE AFFECTED BY THE PROPOSAL:

The State Energy Office does not believe that other regulations will be impacted.

NOTICE OF PUBLIC COMMENT:

The hearing record on the proposed revisions to 7 DE Admin. Code 2101 Regulations for State Energy Conservation Code will be re-opened December 1, 2025, for a 30-day public comment period ending close of business December 31, 2025. Individuals may submit written comments regarding the revisions to the proposed regulation via e-mail to DNRECHearingComments@delaware.gov, or by using the online form at <https://de.gov/dnrecomments>, or by U.S. mail to the following address:

Theresa Smith, Hearing Officer
DNREC – Office of the Secretary
89 Kings Highway, Dover, DE 19901

2101 Regulations for State Energy Conservation Code

1.0 Purpose and Statutory Authority

- 1.1 The purpose of ~~these regulations~~this regulation 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/ANSI~~/ASHRAE/IES standard. The goal of establishing ~~these regulations~~this regulation is to provide a statewide building energy conservation code.

- 1.2 ~~These regulations provide~~ This regulation provides rules of practice and procedures for certification of compliance with these codes and standards to be utilized by the respective local governments.
- 1.3 16 Del.C. §7602 provides the authority for adopting the State Energy Conservation Code. ~~These regulations are~~ This regulation is promulgated under the authority of 16 Del.C. §7602.
23 DE Reg. 1036 (06/01/20)

2.0 Definitions

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

“**ASHRAE**” means the ANSI/ASHRAE/IES Standard 90.1-~~2016~~2022: 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 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~~2024 International Energy Conservation Code published by the International Code Council, Inc.

23 DE Reg. 1036 (06/01/20)

3.0 Incorporation by Reference with Provisions

- 3.1 ~~The 2018 International Energy Conservation Code (IECC), published by the International Code Council, Inc., is hereby adopted and incorporated by reference as the Delaware Residential Building Energy Conservation Code and is an enforceable part of the Delaware Building Codes.~~ The Residential Provisions of the 2024 International Energy Conservation Code (IECC), published by the International Code Council, Inc., are hereby adopted with the following amendments as the Delaware Residential Building Energy Conservation Code, an enforceable part of the Delaware Building Codes.

R401.2 *Revise Section R401.2 as follows:*

R401.2 Application. Residential buildings shall comply with Section R401.2.1, R401.2.2, R401.2.3 or R401.2.4, and Appendix RE.

Exception: Additions, alterations, repairs and changes of occupancy to existing buildings complying with Chapter 5.

Appendix RE Electric Vehicle Charging Infrastructure: Revise as follows:

SECTION RE101—ELECTRIC VEHICLE POWER TRANSFER

RE101.1 Definitions.

AUTOMOBILE PARKING SPACE. A space within a *building* or private or public parking lot, exclusive of driveways, ramps, columns, office and work areas, for the parking of an automobile.

ELECTRIC VEHICLE (EV). An automotive-type vehicle for on-road use, such as passenger automobiles, buses, trucks, vans, neighborhood electric vehicles and electric motorcycles, primarily powered by an electric motor that draws current from an onboard battery charged through a building electrical service *electric vehicle supply equipment (EVSE)*, a rechargeable storage battery, a fuel cell, a photovoltaic array or another source of electric current.

ELECTRIC VEHICLE READY SPACE (EV READY SPACE). An *automobile parking space* that is provided with a branch circuit and an outlet, junction box or receptacle that will support an installed EVSE.

ELECTRIC VEHICLE SUPPLY EQUIPMENT (EVSE). Equipment for plug-in power transfer, including ungrounded, grounded and equipment grounding conductors; electric vehicle connectors; attached plugs; any personal protection system; and all other fittings, devices, power outlets or apparatus installed specifically for the purpose of transferring energy between the premises wiring and the *electric vehicle*.

ELECTRIC VEHICLE SUPPLY EQUIPMENT INSTALLED SPACE (EVSE SPACE). An *automobile parking space* that is provided with a dedicated EVSE connection which can charge an electric vehicle within 5 feet of the parking space.

RE101.2 Electric vehicle power transfer infrastructure. New residential *automobile parking spaces* for residential *buildings* shall be provided with electric vehicle power transfer infrastructure in accordance with Sections RE101.2.1 through RE101.2.4

RE101.2.1 Quantity. New one- and two-family dwellings and townhouses with a designated attached or detached garage or other on-site private parking provided adjacent to the *dwelling unit* shall be provided with one *EV ready* or *EVSE space* per *dwelling unit*. R-2 occupancies or allocated

parking for R-2 occupancies in mixed-use buildings shall be provided with an EV ready space or EVSE space for 20 percent of the dwelling units or automobile parking spaces, whichever is less.

1. At least 1 EVSE space must be in an area available for use by all residents and available for use by all residents of the R-2 occupancy. The EVSE space must be accessible by an individual with a disability.
2. Construction documents must indicate the location of proposed EVSE spaces and EV ready spaces. The construction documents, or other clear identification of the location of EVSE spaces and EV ready spaces, must be available to the residents of the multi-family residential dwelling on request.

Exceptions:

1. Where the local electric distribution entity certifies in writing that it is not able to provide 100 percent of the necessary distribution capacity within 2 years after the estimated certificate of occupancy date, the required EV charging infrastructure shall be reduced based on the available existing electric distribution capacity.
2. Where substantiation is approved that meeting the requirements of Section RE101.2.4 will alter the local utility infrastructure design requirements on the utility side of the meter so as to increase the utility side cost to the builder or developer by more than \$450 per dwelling unit.

RE101.2.2 EV ready spaces. Each branch circuit serving EV ready spaces shall comply with all of the following:

1. Termination at an outlet or enclosure, located within 5 feet of each EV ready space it serves and marked "For electric vehicle supply equipment (EVSE)."
2. Service by an electrical distribution system and circuit capacity in accordance with Section RE101.2.4.
3. Designation on the panelboard or other electrical distribution equipment directory as "For electric vehicle supply equipment (EVSE)."

RE101.2.3 EVSE spaces. An installed EVSE with multiple output connections shall be permitted to serve multiple EVSE spaces. Each EVSE serving either a single EVSE space or multiple EVSE spaces shall comply with the following:

1. Be served by an electrical distribution system in accordance with Section RE101.2.4.
2. Have a nameplate charging capacity of not less than 6.2 kVA (or 30A at 208/240V) per EVSE space served. Where an EVSE serves three or more EVSE spaces and is controlled by an energy management system in accordance with Section RE101.2.4, the nameplate charging capacity shall be not less than 2.1 kVA per EVSE space served.
3. Be located within 5 feet of each EVSE space it serves.
4. Be installed in accordance with NFPA 70 and be listed and labeled in accordance with UL 2202 or UL 2594.

RE101.2.4 Electrical distribution system capacity. The branch circuits and electrical distribution system serving each EV ready space and EVSE space used to comply with Section RE101.2.1 shall comply with one of the following:

1. Sized for a calculated EV charging load of not less than 6.2 kVA per EVSE or EV ready space. Where a circuit is shared or managed, it shall be in accordance with NFPA 70.
2. The capacity of the electrical distribution system and each branch circuit serving multiple EVSE spaces or EV ready spaces designed to be controlled by an energy management system in accordance with NFPA 70 shall be sized for a calculated EV charging load of not less than 2.1 kVA per space. Where an energy management system is used to control EV charging loads for the purpose of this section, it shall not be configured to turn off electrical power to EVSE or EV ready spaces used to comply with Section RE101.2.1.

SECTION RE102-REFERENCED STANDARDS

RE102.1 General. See Table RE102.1 for standards that are referenced in various sections of this appendix. Standards are listed by the standard identification with the effective date, standard title, and the section or sections of this appendix that reference the standard.

TABLE RE102.1-REFERENCED STANDARDS

| <u>STANDARD ACRONYM</u> | <u>STANDARD NAME</u> | <u>SECTIONS HEREIN REFERENCED</u> |
|--------------------------------|---|--|
| <u>UL 2202-2009</u> | <u>Electric Vehicle (EV) Charging System Equipment – with revisions through February 2018</u> | <u>RE101.2.3</u> |
| <u>UL 2594-2016</u> | <u>Standard for Electric Vehicle Supply Equipment</u> | <u>RE101.2.3</u> |

3.2 The American Society of Heating, Refrigerating and Air-Conditioning Engineers Standards (ASHRAE) 90.1-2016: Energy Standard for Buildings except Low-Rise Residential Buildings and the commercial provisions of the 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. The Commercial Provisions of the 2024 International Energy Conservation Code (IECC), published by the International Code Council, Inc., are hereby adopted with the following amendments as the Delaware Commercial Building Energy Conservation Code, an enforceable part of the Delaware Building Codes:

C401.2 *Revise Section C401.2 as follows:*

C401.2 Application. Commercial buildings shall comply with Appendix CB and either Section C401.2.1 or C401.2.2.

C401.2.1 International Energy Conservation Code. Commercial buildings shall comply with one of the following:

1. Prescriptive Compliance. The Prescriptive Compliance option requires compliance with Sections C402 through C406 and Section C408. Dwelling units and sleeping units in Group R-2 buildings shall be deemed to be in compliance with this chapter, provided that they comply with Section R406.
2. Simulated Building Performance. The Simulated Building Performance option requires compliance with Section C407.

Exception: Additions, alterations, repairs and changes of occupancy to existing buildings complying with Chapter 5.

C401.2.2 ASHRAE 90.1. Commercial buildings shall comply with the requirements of ANSI/ASHRAE/IES 90.1.

Appendix CB Solar-Ready Zone: Revise as follows:

SECTION CB101-SCOPE

CB101.1 General. These provisions shall be applicable for new construction where solar-ready provisions are required.

SECTION CB102-GENERAL DEFINITION

SOLAR-READY ZONE. A section or sections of the roof or building overhang designated and reserved for the future installation of a solar photovoltaic or solar thermal system.

SECTION CB103-SOLAR-READY ZONE

CB103.1 General. A solar-ready zone shall be located on the roof of buildings that are five stories or less in height above grade plane, and are oriented between 110 degrees and 270 degrees of true north or have low slope roofs. Solar-ready zones shall comply with Sections CB103.2 through CB103.8.

Exceptions:

1. A building with a permanently installed, on-site renewable energy system.
2. A building with a solar-ready zone that is shaded for more than 70 percent of daylight hours annually.
3. A building where the licensed design professional certifies that the incident solar radiation available to the building is not suitable for a solar-ready zone.
4. A building where the licensed design professional certifies that the solar zone area required by Section CB103.3 cannot be met because of extensive rooftop equipment, skylights, vegetative roof areas or other obstructions.

CB103.2 Construction document requirements for a solar-ready zone. *Construction documents shall indicate the solar-ready zone.*

CB103.3 Solar-ready zone area. The total solar-ready zone area shall be not less than 40 percent of the roof area calculated as the horizontally projected gross roof area less than the area covered by skylights, occupied roof decks, vegetative roof areas and mandatory access or set back areas as required by the *International Fire Code*. The solar-ready zone shall be a single area or smaller, separated sub-zone areas. Each sub-zone shall be not less than 5 feet (1524 mm) in width in the narrowest dimension.

CB103.4 Obstructions. Solar-ready zones shall be free from obstructions, including pipes, vents, ducts, HVAC equipment, skylights and roof-mounted equipment. Solar-ready zones may be relocated to allow future installation of roof equipment as long as the 40 percent minimum allocation is maintained.

CB103.5 Roof loads and documentation. A collateral dead load of not less than 5 pounds per square foot (5 psf) (24.41 kg/m²) shall be included in the gravity and lateral design calculations for the solar-ready zone. The structural design loads for roof dead load and roof live load shall be indicated on the *construction documents*.

CB103.6 Interconnection pathway. *Construction documents shall indicate pathways for routing of conduit or piping from the solar-ready zone to the electrical service panel or service hot water system.*

CB103.7 Electrical service reserved space. The main electrical service panel shall have a reserved space to allow installation of a dual-pole circuit breaker for future solar electric and shall be labeled "For Future Solar Electric." The reserved space shall be positioned at the end of the panel that is opposite from the panel supply conductor connection.

CB103.8 Construction documentation certificate. A permanent certificate, indicating the solar-ready zone and other requirements of this section, shall be posted near the electrical distribution panel, *water heater* or other conspicuous location by the builder or *registered design professional*.

23 DE Reg. 1036 (06/01/20)

4.0 Implementation and Enforcement

- 4.1 ~~All buildings must meet all requirements of the applicable referenced code six months after date of promulgation.~~ County and municipal building and plumbing codes shall meet all requirements of the applicable referenced code set forth in 7 **DE Admin. Code** 2101, Section 3.0 12 months after the date of promulgation, except as otherwise noted in 16 **Del.C.** §7602.
- 4.2 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.

23 DE Reg. 1036 (06/01/20)

5.0 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. 1036 (06/01/20)

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

23 DE Reg. 1036 (06/01/20)