## **COMMUNITY AFFAIRS**

## **DIVISION OF CODES AND STANDARDS**

# **Uniform Construction Code**

Adopted Amendment: N.J.A.C. 5:23-3.18

Proposed: May 2, 2022, at 54 N.J.R. 759(a).

Adopted: September 22, 2022, by Lt. Governor Sheila Y. Oliver, Commissioner, Department of

Community Affairs.

Filed: October 19, 2022, as R.2022 d.142, with non-substantial changes not requiring

additional public notice and comment (see N.J.A.C. 1:30-6.3).

Authority: N.J.S.A. 52:27D-119 and 52:27D-123.19.

Effective Date: November 21, 2022.

Expiration Date: February 9, 2029.

**Summary** of Public Comments and Agency Responses:

The following comments were received from Mitchell Malec, a retired former employee of the Department of Community Affairs (Department).

## **General Comments**

COMMENT: The commenter would like clarification on why the Department is proposing
adopting 2021 editions of model codes (including energy) and proposes adoption of Appendix
CA of the 2018 International Energy Conservation Code (IECC), instead of Appendix CB of the

2021 edition, which has Solar Ready as an optional requirement.

2. COMMENT: The commenter recommends updating N.J.A.C. 5:23-3.18, to the 2021 edition of the IECC because the Department has already proposed adoption of that edition.

RESPONSE TO COMMENTS 1 AND 2: Upon adoption, the Department is changing the language of this rulemaking to reflect the current text at N.J.A.C. 5:23-3.18, which was updated on September 6, 2022, to incorporate the 2021 edition of the IECC, while still maintaining the requirements set forth at N.J.S.A. 52:27D-123.19 for solar-ready warehouses. This change would reflect the renumbering of the Solar-Ready Appendix as Appendix CB. Further, the Department adopted Appendix CB as optional at the discretion of the permit applicant; with this rulemaking now adopted, it will be a requirement for all warehouses, pursuant to N.J.S.A. 52:27D-123.19.

3. COMMENT: The commenter seeks clarification on the types of buildings within the scope of the requirements. Specifically, is the 100,000 square foot (sq. ft.) requirement the roof area, or is it the total square footage of the building? The commenter is unsure if the proposal would require a four story 25,000 sq. ft. warehouse to be solar-ready, or does it pertain solely to one story 100,000 sq. ft. buildings used for the storage of goods to be sold and does this also include both on and off grid installations? The commenter further states: "If the Department believes or determines that the four story 25,000 square foot per floor is subject to these requirements ... is the installation (if installed) cost-effective over the economic life of the building? What is the additional cost associated with adding these additional upgrades to this building especially if never used in the future? ... Commercial PV panels may be over 50 pounds per panel and with ballast resulting in additional weight for a total of 10 psf, the future design using 5 psf does not seem appropriate ... also consider wind uplift. The code requirements do not appear to the address the space requirements needed for equipment considering 17.6 square feet for each panel, 280 watts per panel, inverters, battery storage, and even the electrical over current

protection device increase. (As an example – consider a 60,000 square foot installation with 2500 panels of 400 watts each with 18 inverters and a OCPD of 1440 amps.)" The commenters opinion is that the provisions should only apply to one story warehouses of 100,000 sq. ft. or more.

RESPONSE: The Department utilized the definition of warehouse provided at N.J.S.A. 52:27D-123.19, which is "any building, room, structure, or facility of at least 100,000 square feet used primarily for the storage of goods intended for sale." In accordance with the definitions within the building subcode, "area, building," thus, includes any roofed over portion of the building regardless of stories. However, regarding the possible multi-story examples, it is not anticipated that newly constructed warehouses, pursuant to this rulemaking, will be constructed as multi-story buildings.

Concerning cost effectiveness, this rulemaking is the result of N.J.S.A. 52:27D-123.19.

As such, the Legislature has deliberated and voted on these matters, and the Governor has signed this into law for the State. The steps taken to pass and implement this requirement have been extensively considered and discussed. Furthermore, the costs incurred in constructing solar-ready warehouses are expected to be outweighed by future energy savings.

Finally, regarding the commenter's concerns on weight and space requirements of solar energy equipment and possible issues this may cause, the building and electrical subcodes address the installation and design of these systems, pursuant to Section 3111, Solar Energy Systems, and Chapter 16, Structural Design, of the International Building Code, and Article 690, Solar Photovoltaic Systems, of the National Electrical Code (NEC).

#### **Federal Standards Statement**

No Federal standards analysis is required for the adopted amendment because the amendment is not being adopted in order to implement, comply with, or participate in, any program established pursuant to Federal law or under a State law that incorporates or refers to Federal law, standards, or requirements.

**Full text** of the adoption follows (additions to proposal indicated in boldface with asterisks \*thus\*):

(**Agency Note:** The text at N.J.A.C. 5:23-3.18 below reflects amendments adopted effective September 6, 2022 (see 54 N.J.R. 677(a); 1707(a).)

SUBCHAPTER 3. SUBCODES

5:23-3.18 Energy subcode

- (a) (No change.)
- (b) The following chapters and sections of the commercial provisions of the energy subcode are amended\*,\* as follows:
  - 1.–6. (No change.)
  - 7. Appendices
    - i. (No change.)
    - ii. Appendix CB, Solar-Ready Zone, is optional at the discretion of the permit applicant\*, except that this appendix is adopted as a requirement for the construction of a warehouse for which a construction permit has not been declared complete by the enforcing agency before July 1, 2022, pursuant to P.L. 2021, c. 290. A warehouse means any building, room, structure, or facility of at least 100,000 square feet used primarily for the storage of goods intended for sale\*.

iii. (No change.)

(c) (No change.)