# **The Connecticut General Assembly**

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# Memorandum

То:	Senator James Maroney Representative Nicole Klarides-Ditria Senator John Kissel Representative Tom Arnone
From:	Chris Reinhart and Shannon McCarthy
Date:	September 27, 2022
Subject:	Proposed 2022 Connecticut State Building Code-Second Resubmittal

This is a resubmittal of the proposed **2022** Connecticut State Building Code that was rejected without prejudice at the committee's meetings on June 28, 2022 and August 30, 2022. The resubmittal addresses the substantive concerns and technical corrections noted in the August 30, 2022 memorandum. Additional technical corrections are also noted below.

Attached are the pages noted in the table below from the second resubmittal of the proposed **2022 Connecticut State Building Code.** There are handwritten comments on the pages of the proposed code referenced that make recommendations for corrections.

## **Substantive Concerns:**

# **Additional Comments:**

LCO Comments/Corrections	Page Numbers of the Code
Technical corrections	13, 87, 97, 107, 127

# **Recommendation:**



## **Authorizing Statute:**

**Sec. 29-252b. Procedure for adoption and amendment of State Building Code.** (a) For the purposes of this section, "proposed code" means a proposal by the State Building Inspector and the Codes and Standards Committee for a new State Building Code or for a change in, addition to or repeal of any provision of the State Building Code.

(b) Notwithstanding the provisions of chapter 54, the adoption of the State Building Code and any amendments thereto shall not be required to comply with the provisions of chapter 54, except as provided in this section.

(c) Prior to the adoption of the State Building Code and any amendments thereto, the State Building Inspector shall (1) post any proposed code, a statement of purpose for which the proposed code is proposed, a fiscal note associated with compliance with the proposed code prepared pursuant to section 4-168, and a regulatory flexibility analysis prepared pursuant to section 4-168 on the Internet web site of the Department of Administrative Services, (2) give notice electronically to the joint standing committee of the General Assembly having cognizance of matters relating to public safety and security, (3) give notice to any person who has requested the State Building Inspector for advance notice of its proposed code adoption proceedings, (4) provide for a public comment period of forty-five days following the posting of such proposed code, fiscal note and regulatory flexibility analysis, and (5) hold a public hearing on the proposed code not less than twenty nor more than thirty-five days after such posting.

(d) After the close of the public comment period, the State Building Inspector and the Codes and Standards Committee shall respond to each written and oral comment respecting the proposed code received during the public comment period and at the public hearing. Such response shall include any change made to the proposed code if applicable, and the rationale for such change. The State Building Inspector shall post such response on the Internet web site of the Department of Administrative Services not later than thirty days after the close of the public comment period.

(e) The State Building Inspector and the Codes and Standards Committee shall create and maintain a code-making record for each proposed code, submit such code-making record electronically to the standing legislative regulation review committee and the joint standing committee of the General Assembly having cognizance of matters relating to public safety and security, and post such code-making record on the Internet web site of the Department of Administrative Services. Such code-making record shall include, but need not be limited to: (1)

The final wording of the proposed code in a format consistent with a nationally recognized model building code, (2) the fiscal note prepared pursuant to subsection (c) of this section, (3) the regulatory flexibility analysis prepared pursuant to subsection (c) of this section, (4) all written and oral comments received during the public comment period, and (5) the response to such comments prepared pursuant to subsection (d) of this section.

(f) The standing legislative regulation review committee shall have not more than forty-five days from the date the code-making record is submitted to the committee pursuant to subsection (e) of this section to convene a meeting to approve, disapprove or reject without prejudice the proposed code, in whole or in part. If the proposed code is withdrawn, the State Building Inspector shall resubmit the proposed code and the committee shall have not more than forty-five days from the date of such resubmittal to convene a meeting to approve, disapprove or reject without prejudice the resubmitted proposed code. If the committee notifies the State Building Inspector in writing that it is waiving its right to convene a meeting or does not act on a proposed code or a resubmitted proposed code, as the case may be, within such forty-five-day period, the proposed code or resubmitted proposed code shall be deemed to be approved by the committee.

(g) If the committee disapproves a proposed code, in whole or in part, the committee shall notify the State Building Inspector of the disapproval and the reasons for the disapproval. The State Building Inspector shall not take any action to implement such disapproved code, except that the State Building Inspector may submit a substantively new proposed code in accordance with the provisions of this section, provided the General Assembly may reverse such disapproval in accordance with the provisions of section 4-171.

(h) If the committee rejects a proposed code without prejudice, in whole or in part, the committee shall notify the State Building Inspector of the reasons for the rejection and the State Building Inspector shall resubmit the proposed code in revised form to the committee not later than thirty days after the date of rejection without prejudice. Each resubmission of the proposed code under this subsection shall include a summary of any revisions to the proposed code. The committee shall have not more than forty-five days after the receipt of the resubmittal to review and take action on such resubmitted proposed code in the same manner as provided in subsection (f) of this section.

(i) The State Building Code or any amendment thereto approved or deemed approved by the committee pursuant to subsection (f) of this section is effective and enforceable against any person or party upon its posting on the Internet web site of the Department of Administrative

Services, except that: (1) If a later date is required by statute or specified in the code, the later date is the effective date, and (2) a code may not be effective before the effective date of the public act requiring or permitting the code. Such posting shall include a statement by the State Building Inspector certifying that the electronic copy of the code is a true and accurate copy of the code approved or deemed approved in accordance with subsection (f) of this section. The electronic copy of the State Building Code posted on the Internet web site of the Department of Administrative Services shall be the official version for all purposes, including all legal and administrative proceedings.

(j) No provision of the State Building Code or any amendment thereto adopted after May 31, 2016, is valid unless adopted in substantial compliance with the requirements of this section. A proceeding to contest any provision of the code on the ground of noncompliance with the requirements of this section shall be commenced within two years from the effective date of the code.

(k) The State Building Inspector shall advise the public concerning how to obtain a copy of the State Building Code and any amendments thereto.

(Amd) **108.3 Temporary power.** The *building official* is authorized to give permission to temporarily supply utilities before an installation has been fully completed and the final certificate of approval has been issued. The part covered by the temporary certificate shall comply with the requirements specified for temporary lighting, heat or power in this code and in NFPA 70, National Electrical Code.

(Amd) **109.2 Schedule of permit fees.** Each municipality shall establish a schedule of fees for each construction document review, building *permit*, *certificate of approval* and *certificate of occupancy*. A schedule of adopted fees shall be posted in the building department for public view.

(Del) 109.4 Work commencing before permit issuance. Delete without substitution.

(Add) **110.1.1 Posting of required inspections.** A schedule of required inspections shall be compiled by the *building official*. The schedule shall be posted in the building department for public view.

(Add) **110.3.13 Electrical inspections.** Required electrical inspections shall include installations of temporary services prior to activation; installation of underground piping and conductors after trenches are excavated and bedded and before backfill is put in place; rough inspections of installed wiring and components after the roof, framing, *fireblocking* and bracing are complete and prior to concealment; and final inspection after all work required by the *permit* is complete.

(Add) **110.6.1** Notification of inspection results. Notification as to passage or failure, in whole or in part, of any required inspection shall be made in writing by the *building official* or his duly authorized representative and shall be left at the job *site* or delivered to the *permit* holder. It shall be the duty of the *permit* holder to ascertain the results of required inspections. Notifications may be delivered electronically.

(Amd) **111.1 Use and occupancy.** Pursuant to subsection (a) of section 29-265 of the Connecticut General Statutes, no *building* or structure erected or altered in any municipality after October 1, 1970, shall be occupied or used, in whole or in part, until a certificate of occupancy has been issued by the *building official*, certifying that such *building* or structure or work performed pursuant to the building *permit* substantially complies with the provisions of this code. Nothing in the code shall require the removal, *alteration* or abandonment of, or prevent the continuance of the use and occupancy of, any single-family *dwelling* but within six years of the date of occupancy of such *dwelling* after substantial completion of construction of, *alteration* to or *addition* to such *dwelling*, or of a *building* lawfully existing on October 1, 1945, except as may be necessary for the safety of life or property. The use of a *building* or premises shall not be deemed to have changed because of a temporary vacancy or change of ownership or tenancy.

#### **Exceptions:**

- 1. Work for which a certificate of approval is issued in accordance with Section 111.6.
- 2. A certificate of occupancy is not required for work exempt from *permit* requirements under Section 105.2.
- 3. State agencies and Connecticut Airport Authority Pursuant to section 29-252a of the Connecticut General Statutes, state agencies or the Connecticut Airport Authority shall not be required to obtain a *certificate of occupancy* from a local *building official*. State agencies or the authority shall obtain a *certificate of occupancy* for construction work as described in section 29-252a of the Connecticut General Statutes from the State Building Inspector.

(Add) **111.1.2 Zoning approval.** Pursuant to subsection (f) of section 8-3 of the Connecticut General Statutes, no *certificate of occupancy* shall be issued for a *building*, use or structure subject to the zoning regulations of a municipality without certification in writing by the official charged with the enforcement of such regulations that such *building*, use or structure is in conformity with such regulations or is a valid nonconforming use under such regulations.

(c) Upon a determination by a local director of health that an automatic fire extinguishing system, irrigation system, change of use, installation of fixtures or facilities in a building or other physical connection between the distribution system of a public water supply system and any other water system creates an unreasonable risk of injury to the health or safety of persons using the water, to the general public, or to any public water supply, the local director of public health may issue an order requiring the immediate implementation of mitigation measures, that include, but are not limited to, the disconnection of the system. In the event that a cross connection with the public water system is found, the owner of such system may terminate services to the premises.

(Amd) **608.17 Connections to the potable water system.** Connections to the potable water system shall conform to Sections 608.17.1 through 608.17.10 and be in accordance with the Public Health Code of the state of Connecticut adopted pursuant to section 19a-36 of the Connecticut General Statutes.

(Amd) **608.18 Protection of individual water supplies.** An individual water supply shall be located and constructed so as to be safeguarded against contamination in accordance with the Public Health Code of the State of Connecticut adopted pursuant to section 19a-36 of the Connecticut General Statutes.

(Del) 608.18.1 through 608.18.8. Delete subsections and referenced table.

#### **CHAPTER 7 – SANITARY DRAINAGE**

(Amd) **708.1.1 Horizontal drains and building drains**. Horizontal drainage pipes, including *horizontal branch drains* consisting of one or more fixtures, in *buildings* shall have *cleanouts* located at intervals of not more than 100 feet (30,480 mm). *Building drains* shall have *cleanouts* located at intervals of not more than 100 feet (30,480 mm) except where manholes are used instead of *cleanouts*, the manholes shall be located at intervals of not more than 400 feet (122 m). The interval length shall be measured from the *cleanout* or manhole opening, along the *developed length* of the piping to the next *drainage fitting* providing access for cleaning, the end of the horizontal drain or the end of the *building drain*.

**Exception**: Horizontal *fixture drain* piping serving a non-removable *trap* shall not be required to have a *cleanout* for the section of piping between the *trap* and the connection to a horizontal or vertical drain if located within 4 feet (1219 mm) of *developed length* of such connection. The 4 feet (1219 mm) shall be measured from the fixture *trap* weir to the connection at the horizontal or vertical piping.

#### **CHAPTER 9 – VENTS**

(Amd) **903.1.1 Roof extension unprotected.** Open vent pipes that extend through a roof shall be terminated not less than 12 inches above the roof.

(Del) 903.2 Frost closure. Delete section.

### **CHAPTER 10 - TRAPS, INTERCEPTORS AND SEPARATORS**

(Amd) **1003.3 Grease interceptors.** Grease interceptors that serve plumbing systems connected to private, on-site septic systems shall comply with the requirements of Sections 1003.3.1 to 1003.3.5, inclusive and in accordance with the Public Health Code adopted pursuant to section 19a-36 of the Connecticut General Statutes. Grease interceptors that serve plumbing systems connected via a *sanitary sewer* to a publicly owned treatment works shall comply with the Department of Energy and Environmental Protection's General Permit for the Discharge of Wastewater Associated with Food Preparation Establishments.

#### AMENDMENTS TO THE 2021 INTERNATIONAL ENERGY CONSERVATION CODE

## *IECC – COMMERCIAL PROVISIONS*

#### CHAPTER 1 [CE] – SCOPE AND ADMINISTRATION

(Amd) C101.1 Title. The 2021 International Energy Conservation Code as amended in this section shall be known as the 2021 International Energy Conservation Code portion of the 2022 State Building Code, hereinafter referred to as "the code" or "this code".

(Amd) C101.5 Compliance. *Residential buildings* shall meet the provisions of IECC – Residential Provisions. *Commercial buildings* shall meet the provisions of IECC – Commercial Provisions. **Exception:** Temporary structures are exempt from the requirements of this code.

(Amd) C101.5.1 Compliance materials. The code official shall be permitted to approve specific computer software, worksheets, compliance manuals and other similar materials that meet the intent of this code.

(Add) C101.5.2 Energy efficiency standards for products. In addition to the requirements of this code, the testing, certification and enforcement of efficiency standards for new products sold, offered for sale or installed in the state of Connecticut shall comply with regulations adopted pursuant to section 16a-48 of the Connecticut General Statutes.

(Add) C101.6 Administrative matters not provided for. Administrative matters not covered by this code shall be in accordance with the provisions of Chapter 1 of the 2021 International Building Code portion of the 2022 Connecticut State Building Code.

(Amd) **C102.1.1** Above code programs. The State Building Inspector and the Codes and Standards Committee may deem a national, state or local energy efficiency program to exceed the energy efficiency required by this code. Such energy efficiency programs may include, but not be limited to, the Leadership in Energy and Environmental Design rating system, the Green Globes USA design program, as established by the Green Building Initiative, the National Green Building Standard, as established by the National Association of Home Builders, or an equivalent rating system approved in accordance with section 29-256a of the Connecticut General Statutes. *Buildings* approved in writing by such an energy efficiency program shall be considered in compliance with this code. The requirements identified as "mandatory" in Table C407.2 shall be met.

(Amd) **C103.1 General.** Construction documents and other supporting data shall be submitted in one or more sets, or in a digital format where allowed by the building official, with each application for a permit. The construction documents shall be prepared by a registered design professional when required by the provisions of chapters 390 or 391 of the Connecticut General Statutes.

**Exception:** The *building official* may waive the submission of construction documents or other supporting data if the *building official* determines they are not necessary to confirm compliance with this code.

(Amd) C103.5 Retention of construction documents. The *building official* shall retain one set of *approved construction documents* for a period as set forth in the records/disposition schedule adopted pursuant to chapter 188 of the Connecticut General Statutes.

(Del) **SECTION C104 – FEES.** Delete in its entirety and refer to Section 109 of the 2021 International Building Code portion of the 2022 Connecticut State Building Code – Fees.

#### **CHAPTER 2 – WIRING AND PROTECTION**

#### (Amd) 210.8 Ground-Fault Circuit-Interrupter Protection for Personnel. (F) as follows:

(Amd) (F) Outdoor Outlets. All outdoor outlets for dwellings, other than those covered in 210.8 (A)(3), Exception to (3), that are supplied by single-phase branch circuits rated 150 volts to ground or less, 50 amperes or less, shall have ground-fault circuit-interrupter protection for personnel.

*Exception No. 1: Ground-fault circuit-interrupter protection shall not be required on lighting outlets other than those covered in 210.8(C).* 

Exception No. 2: Ground-fault circuit-interrupter protection shall not be required for mini-split-type heating/ventilating/air-conditioning (HVAC) equipment and other HVAC units employing power conversion equipment as a means to control compressor speed.

(Amd) **230.46 Spliced and Tapped Conductors.** Service-entrance conductors shall be permitted to be spliced or tapped in accordance with 110.14, 300.5(E), 300.13, and 300.15. Power distribution blocks, pressure connectors, and devices for splices and taps shall be listed.

(Amd) **230.85 Emergency Disconnects.** For new one- and two-family dwelling units, all service conductors shall terminate in disconnecting means having a short-circuit current rating equal to or greater than the available fault current, installed in a readily accessible outdoor location. If more than one disconnect is provided, they shall be grouped. Each disconnect shall be one of the following:

- Service disconnects marked as follows: EMERGENCY DISCONNECT, SERVICE DISCONNECT
- Meter disconnects installed per 230.82(3) and marked as follows: EMERGENCY DISCONNECT, METER DISCONNECT, NOT SERVICE EQUIPMENT
- (3) Other listed disconnect switches or circuit breakers on the supply side of each service disconnect that are suitable for use as service equipment and marked as follows: EMERGENCY DISCONNECT, NOT SERVICE EQUIPMENT

Markings shall comply with 110.21(B).

(Amd) **250.50 Grounding Electrode System**. All grounding electrodes as described in 250.52(A)(1) through (A)(7) that are available at each building or structure served shall be bonded together to form the grounding electrode system. Where none of these grounding electrodes exist, one or more of the grounding electrodes specified in 250.52(A)(4) through (A)(8) shall be installed and used.

Exception: Concrete-encased electrodes of existing buildings or structures shall not be required to be part of the grounding electrode system where the steel reinforcing bars or rods are not accessible for use without disturbing the concrete.

2. A certificate of occupancy is not required for work exempt from permit requirements under Section R105.2

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3. **State agencies and Connecticut Airport Authority**. Pursuant to section 29-252a of the Connecticut General Statutes, state agencies or the Connecticut Airport Authority shall not be required to obtain a certificate of occupancy from a local building official. State agencies and the authority shall obtain a certificate of occupancy for construction work as described in section 29-252a of the Connecticut General Statutes from the State Building Inspector.

(Add) **R110.1.1 Zoning approval.** Pursuant to subsection (f) of section 8-3 of the Connecticut General Statutes, no certificate of occupancy *shall* be issued for a *building*, use or structure subject to the zoning regulations of a municipality without certification in writing by the official charged with the enforcement of such regulations that such *building*, use or structure is in conformity with such regulations or is a valid nonconforming use under such regulations.

(Add) **R110.1.2 Statement of professional opinion.** Pursuant to section 29-276c of the Connecticut General Statutes, no certificate of occupancy *shall* be issued for a proposed structure or *addition* to *buildings* classified as nontransient residential *dwellings* having more than 16 units or 24,000 square feet total gross area per *building*, until the *building official* has been provided with a statement signed by the architect or professional engineer and the general contractor stating that the completed structure or *addition* is in substantial compliance with the *approved* plans on file.

(Amd) **R110.4 Temporary occupancy.** The *building official* may issue a temporary certificate of occupancy before the completion of the entire work covered by the *permit*, provided such portion or portions *shall* be occupied safely prior to full completion of the *building* or structure without endangering life or public welfare. Any occupancy permitted to continue during completion of the work *shall* be discontinued within 30 days after completion of the work unless the *building official* issues a certificate of occupancy. No temporary certificate of occupancy *shall* be issued for work subject to the zoning regulations of a municipality without certification in writing by the official charged with the enforcement of such regulations that the work is in conformity with such regulations or is a valid nonconforming use under such regulations.

(Add) **R110.6** Partial occupancy. The *building official* may issue a partial certificate of occupancy for a portion of the *building* or structure when, in the *building official*'s opinion, the portion of the *building* to be occupied is in substantial compliance with the requirements of this code and no unsafe conditions exist in portions of the *building* not covered by the partial certificate of occupancy that are accessible from the occupied portion. No partial certificate of occupancy *shall* be issued for work subject to the zoning regulations of a municipality without certification in writing by the official charged with the enforcement of such regulations that the work is in conformity with such regulations or is a valid nonconforming use under such regulations.

(Add) **R110.7 Prefabricated assemblies.** A certificate of approval by an *approved agency shall* be furnished with every prefabricated assembly, including modular housing, except where all elements of the assembly are readily accessible for inspection at the *site*. The *building official shall* inspect placement of prefabricated assemblies and the connections to public utilities and private water and septic systems at the building *site*, as well as any site-built or installed components or equipment to determine compliance with this code. A final inspection *shall* be provided in accordance with Section R109.1.6.

(Add) **R110.8 Manufactured housing used as dwellings.** Provisions for foundation systems and *building* service equipment connections necessary to provide for the installation of new *manufactured homes* and for existing *manufactured homes* to which *additions*, *alterations* or *repairs* are made are contained in Appendix E.