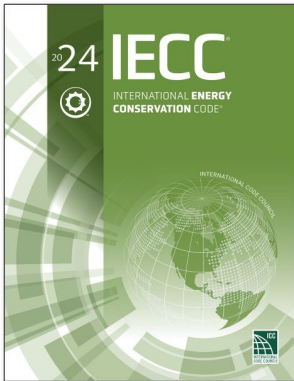


2024 IECC Commercial Energy Code

Chapter 5: Existing Buildings Overview



Key Updates for Commercial Additions, Alterations, Repairs, and Change of Occupancy

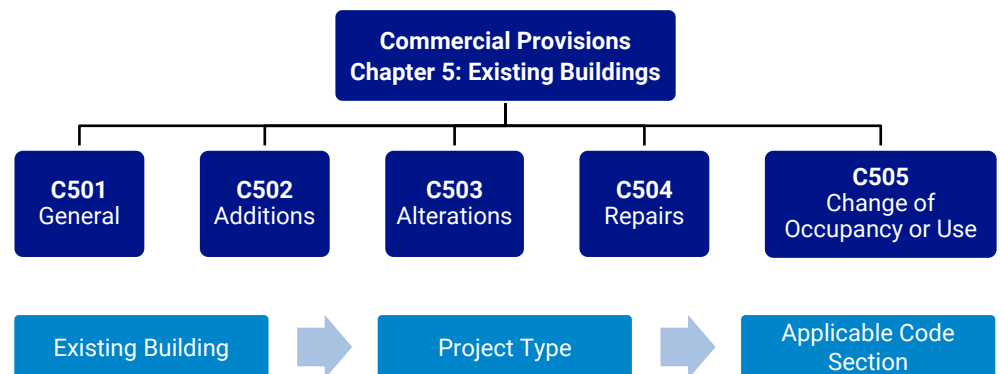
Rhode Island officially adopted the 2024 IECC Commercial Energy Code in full, including Appendix CH Electric-Ready Commercial Building Provisions, effective November 14, 2024. Chapter 5 of the IECC focuses on existing buildings and establishes requirements for additions, alterations, repairs, and changes of occupancy or use. The code is intended to improve energy efficiency while recognizing the practical limitations of working within existing facilities.

Reference: [2024 IECC Chapter 5](#)

Purpose of Chapter 5

2024 IECC Chapter 5 applies to:

- Additions
- Alterations
- Repairs
- Change of occupancy or use
- Relocated Existing Buildings



The code does not require full retroactive upgrades to existing buildings unless new work is being performed; existing systems may remain in place if they are safe, lawfully installed, and maintained

Additions - [C502](#)

- An addition is defined as: “An extension or increase in the conditioned space floor area, number of stories or height of a building or structure.”
- Key Requirements
 - Additions must comply with the same energy code requirements as new construction under Chapter 4.
 - Existing unaltered portions of the building are generally not required to be upgraded
 - Converting an unconditioned space into conditioned space is treated as an addition
- Compliance Flexibility
 - The IECC recognizes the challenges associated with existing buildings and allows:
 - Up to 10% higher envelope UA values under the prescriptive path
 - Up to 10% higher annual energy cost under the performance path

Alterations - [C503](#)

- An alteration includes:
 - Renovations or retrofits to an existing structure
 - Modifications to electrical, mechanical, plumbing, or gas systems
 - Changes to system arrangement, type, or purpose

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- Key Requirements
 - Only the new work must comply with IECC 2024 requirements
 - Existing unaltered systems do not need to be upgraded
 - Alterations cannot make the existing building less compliant than it currently is

Repairs - [C504](#)

- Repairs are limited to reconstruction or renewal work intended to:
 - Maintain an existing system
 - Correct damage
- Key Requirements
 - Repairs generally do not trigger full IECC upgrades.
 - Like-for-like replacement materials are permitted when no new hazards are created
- Maintenance of existing systems is the Owner's responsibility under [RISBC-6 Rhode Island Property Maintenance Code](#) (510-RICR-00-00-6), which is based on the 2021 version of the International Property Maintenance Code

Change of Occupancy or Use - [C505](#)

- A change of occupancy occurs when:
 - Occupancy classification changes
 - Occupancy group changes
- A new use, even without an occupancy group change, can affect which energy code requirements apply
- Key Requirements
 - Changes in occupancy or use may trigger:
 - Mechanical upgrades
 - Domestic hot water upgrades
 - Lighting system upgrades
 - Fenestration compliance requirements
 - Projects with higher energy use intensity may need to comply with portions of Chapter 4 applicable to new construction

Expert Insights

Existing Building Energy Code Compliance Starts with Proper Project Classification

One of the most important early steps in an existing building project is determining whether the work is considered an addition, an alteration, a repair, or a change of occupancy or use under IECC Chapter 5. While these categories may sound straightforward, they are specifically defined in the code and can trigger very different energy code requirements related to HVAC systems, lighting controls, envelope upgrades, commissioning, and renewable energy provisions.

From our experience, early discussions between the owner, architect, engineers, and code officials can help clarify the project classification and avoid unexpected compliance requirements later during permit review or construction. A clearly defined scope early in design often leads to smoother coordination, reduced redesign effort, and more predictable project costs.