

# CHAPTER C5

## EXISTING BUILDINGS

### SECTION ECC C501 GENERAL

**C501.1 Scope.** The provisions of this chapter shall control the alteration, repair, addition and change of occupancy of existing buildings and structures.

**C501.2 Existing buildings.** Except as specified in this chapter, this code shall not be used to require the removal, alteration or abandonment of, nor prevent the continued use and maintenance of, an existing building or building system lawfully in existence at the time of adoption of this code.

**C501.3 Maintenance.** Buildings and structures, and parts thereof, shall be maintained in a safe and sanitary condition. Devices and systems that are required by this code shall be maintained in conformance to the code edition under which installed. The owner or the owner's authorized agent shall be responsible for the maintenance of buildings and structures. The requirements of this chapter shall not provide the basis for removal or abrogation of energy conservation, fire protection and safety systems and devices in existing structures.

**C501.4 Compliance.** Alterations, repairs, additions and changes of occupancy to, or relocation of, existing buildings and structures shall comply with (i) all applicable provisions of this code, (ii) the provisions for alterations, repairs, additions and changes of occupancy or relocation, respectively, in the *New York City Construction Codes*, (iii) the *New York City Fire Code*, and (iv) the *New York City Electrical Code*.

**C501.5 New and replacement materials.** Except as otherwise required or permitted by this code, materials permitted by the applicable code for new construction shall be used. Like materials shall be permitted for repairs, provided hazards to life, health or property are not created. Hazardous materials shall not be used where the code for new construction would not permit use of these materials in buildings of similar occupancy, purpose and location.

**C501.6 Historic buildings.** No provisions of this code relating to the construction, repair, alteration, restoration, and change of occupancy shall be mandatory for historic buildings.

**C501.7 Compliance alternative.** Additions, alterations, repairs, and changes of occupancy are permitted to comply with the requirements of ASHRAE 90.1-2013 in lieu of compliance with the requirements of Sections C502, C503, C504 and C505, as applicable.

### SECTION ECC C502 ADDITIONS

**C502.1 General.** Additions to an existing building, building system or portion thereof shall conform to the provisions of this code as those provisions relate to new construction without requiring the unaltered portion of the existing building or building system to comply with this code. Additions shall not create an unsafe or hazardous condition or overload existing building systems. An addition shall be deemed to comply with this code if the addition alone complies or if the existing building and addition comply with this code as a single building. Additions shall comply with Section C502.2.

Additions complying with ANSI/ASHRAE/IESNA 90.1 need not comply with Sections C402, C403, C404 and C405.

**C502.2 Prescriptive compliance.** Additions shall comply with Sections C502.2.1 through C502.2.6.2.

**C502.2.1 Vertical fenestration.** New vertical fenestration area that results in a total building fenestration area less than or equal to that specified in Section C402.4.1 shall comply with Section C402.4. Additions with vertical fenestration that result in a total building fenestration area greater than Section C402.4.1 or additions that exceed the fenestration area greater than Section C402.4.1 shall comply with Section C402.4.1.1 for the addition only. Additions that result in a total building vertical glass area exceeding that specified in Section C402.4.1.1 shall comply with Section C407.

**C502.2.2 Skylight area.** New skylight area that results in a total building fenestration area less than or equal to that specified in Section C402.4.1 shall comply with Section C402.4. Additions with skylight area that result in a total building skylight area greater than C402.4.1 or additions that exceed the skylight area shall comply with Section C402.4.1.2 for the addition only. Additions that result in a total building skylight area exceeding that specified in Section C402.4.1.2 shall comply with Section C407.

**C502.2.3 Building mechanical systems.** New mechanical systems and equipment that are part of the addition and serve the building heating, cooling and ventilation needs shall comply with Section C403.

**C502.2.4 Service water-heating systems.** New service water-heating equipment, controls and service water heating piping shall comply with Section C404.

**C502.2.5 Pools and inground permanently installed spas.** New pools and inground permanently installed spas shall comply with Section C404.9.

**C502.2.6 Lighting power and systems.** New lighting systems that are installed as part of the addition shall comply with Section C405.

**C502.2.6.1 Interior lighting power.** The total interior lighting power for the addition shall comply with Section C405.4.2 for the addition alone, or the existing building and the addition shall comply as a single building.

**C502.2.6.2 Exterior lighting power.** The total exterior lighting power for the addition shall comply with Section C405.5.1 for the addition alone, or the existing building and the addition shall comply as a single building.

## **SECTION ECC C503 ALTERATIONS**

**C503.1 General.** Alterations to any building or structure shall comply with the requirements of the code for new construction. Alterations shall be such that the existing building or structure is no less conforming to the provisions of this code than the existing building or structure was prior to the alteration. Alterations to an existing building, building system or portion thereof shall conform to the provisions of this code as those provisions relate to new construction without requiring the unaltered portions of the existing building or building system to comply with this code. Alterations shall not create an unsafe or hazardous condition or overload existing building systems.

Alterations complying with ANSI/ASHRAE/IESNA 90.1 need not comply with Sections C402, C403, C404 and C405.

**Exception:** The following alterations need not comply with the requirements for new construction, provided the energy use of the building is not increased:

1. Storm windows installed over existing fenestration.
2. Surface-applied window film installed on existing single-pane fenestration assemblies reducing solar heat gain, provided the code does not require the glazing or fenestration to be replaced.
3. Existing ceiling, wall or floor cavities exposed during construction, provided that these cavities are filled with insulation.
4. Construction where the existing roof, wall or floor cavity is not exposed.
5. Roof recover.
6. Air barriers shall not be required for roof recover and roof replacement where the alterations or renovations to the building do not include alterations, renovations or repairs to the remainder of the building envelope.
7. Alterations that replace less than 20 percent of the luminaires in a space, provided that such alterations do not increase the installed interior lighting power.

**C503.2 Change in space conditioning.** Any nonconditioned or low-energy space that is altered to become conditioned space shall be required to be brought into full compliance with this code.

**C503.3 Building envelope.** New building envelope assemblies that are part of the alteration shall comply with Sections C402.1 through C402.5.

**C503.3.1 Roof replacement.** Roof replacements shall comply with Table C402.1.3 or C402.1.4 where the existing roof assembly is part of the building thermal envelope and contains insulation entirely above the roof deck.

**C503.3.2 Vertical fenestration.** The addition of vertical fenestration that results in a total building fenestration area less than or equal to that specified in Section C402.4.1 shall comply with Section C402.4. The addition of vertical fenestration that results in a total building fenestration area greater than Section C402.4.1 shall comply with Section C402.4.1.1 for the space adjacent to the new fenestration only. Alterations that result in a total building vertical glass area exceeding that specified in Section C402.4.1.1 shall comply with Section C407.

**C503.3.3 Skylight area.** The addition of skylight area that results in a total building skylight area less than or equal to that specified in Section C402.4.1 shall comply with Section C402.4. The addition of skylight area that results in a total building skylight area greater than Section C402.4.1 shall comply with Section C402.4.1.2 for the space adjacent to the new skylights. Alterations that result in a total building skylight area exceeding that specified in Section C402.4.1.2 shall comply with Section C407.

**C503.4 Heating and cooling systems.** New heating, cooling and duct systems that are part of the alteration shall comply with Sections C403.

**C503.4.1 Economizers.** New cooling systems that are part of alteration shall comply with Section C403.3.

**C503.5 Service hot water systems.** New service hot water systems that are part of the alteration shall comply with Section C404.

**C503.6 Lighting systems.** New lighting systems that are part of the alteration shall comply with Section C405.

**Exception:** Alterations that replace less than 20 percent of the luminaires in a space, provided that such alterations do not increase the installed interior lighting power.

## **SECTION ECC C504 REPAIRS**

**C504.1 General.** Buildings and structures, and parts thereof, shall be repaired in compliance with Section C501.3 and this section. Work on nondamaged components that is necessary for the required repair of damaged components shall be considered part of the repair and shall not be subject to the requirements for alterations in this chapter. Routine maintenance required by Section C501.3, ordinary repairs exempt from permit and abatement of wear due to normal service conditions shall not be subject to the requirements for repairs in this section.

Where a building was constructed to comply with ANSI/ASHRAE/IESNA 90.1, repairs shall comply with the standard and need not comply with Sections C402, C403, C404 and C405.

**C504.2 Application.** For the purposes of this code, the following shall be considered repairs:

1. Glass-only replacements in an existing sash and frame.
2. Roof repairs.
3. Air barriers shall not be required for roof repair where the repairs to the building do not include alterations, renovations or repairs to the remainder of the building envelope.
4. Replacement of existing doors that separate conditioned space from the exterior shall not require the installation of a vestibule or revolving door, provided that an existing vestibule that separates a conditioned space from the exterior shall not be removed.
5. Repairs where only the bulb, the ballast or both within the existing luminaires in a space are replaced, provided that the replacement does not increase the installed interior lighting power.

## **SECTION ECC C505 CHANGE OF OCCUPANCY OR USE**

**C505.1 General.** Spaces undergoing a change in occupancy that would result in an increase in demand for either fossil fuel or electrical energy shall comply with this code. Where the use in a space changes from one use in Table C405.4.2(1) or C405.4.2(2) to another use in Table C405.4.2(1) or C405.4.2(2), the installed lighting wattage shall comply with Section C405.4.