

CHAPTER 4 LIGHT, VENTILATION AND OCCUPANCY LIMITATIONS

SECTION 401 GENERAL

401.1 Scope. The provisions of this chapter shall govern the minimum conditions and standards for light, ventilation and space for occupying a structure.

401.2 Responsibility. The owner of the structure shall provide and maintain light, ventilation and space conditions in compliance with these requirements. A person shall not occupy as owner-occupant, or permit another person to occupy, any premises that do not comply with the requirements of this chapter.

401.3 Alternative devices. In lieu of the means for natural light and ventilation herein prescribed, artificial light or mechanical ventilation complying with the City Building Code shall be permitted.

SECTION 402 LIGHT

402.1 Habitable spaces. Every habitable space shall have at least one window of approved size facing directly to the outdoors or to a court. The minimum total glazed area for every habitable space shall be 8 percent of the floor area of such room. Wherever walls or other portions of a structure face a window of any room and such obstructions are located less than 3 feet (914 mm) from the window and extend to a level above that of the ceiling of the room, such window shall not be deemed to face directly to the outdoors nor to a court and shall not be included as contributing to the required minimum total window area for the room.

Exception: Where natural light for rooms or spaces without exterior glazing areas is provided through an adjoining room, the unobstructed opening to the adjoining room shall be at least 8 percent of the floor area of the interior room or space, but not less than 25 square feet (2.33 m²). The exterior glazing area shall be based on the total floor area being served.

402.2 Common halls and stairways. Every common hall and stairway in residential occupancies, other than in one- and two-family dwellings, shall be lighted at all times with at least a 60-watt standard incandescent light bulb for each 200 square feet (19 m²) of floor area or equivalent illumination, provided that the spacing between lights shall not be greater than 30 feet (9144 mm). In other than residential occupancies, means of egress, including exterior means of

egress, stairways shall be illuminated at all times the building space served by the means of egress is occupied with a minimum of 1 footcandle (11 lux) at floors, landings and treads.

402.3 Other spaces. All other spaces shall be provided with natural or artificial light sufficient to permit the maintenance of sanitary conditions, and the safe occupancy of the space and utilization of the appliances, equipment and fixtures.

SECTION 403 VENTILATION

403.1 Habitable spaces. Every habitable space shall have at least one openable window. The total openable area of the window in every room shall be equal to at least 45 percent of the minimum glazed area required in Section 402.1.

Exception: Where rooms and spaces without openings to the outdoors are ventilated through an adjoining room, the unobstructed opening to the adjoining room shall be at least 8 percent of the floor area of the interior room or space, but not less than 25 square feet (2.33 m²). The ventilation openings to the outdoors shall be based on a total floor area being ventilated.

403.2 Bathrooms and toilet rooms. Every bathroom and toilet room shall comply with the ventilation requirements for habitable spaces as required by Section 403.1, except that a window shall not be required in such spaces equipped with a mechanical ventilation system. Air exhausted by a mechanical ventilation system from a bathroom or toilet room shall discharge to the outdoors and shall not be recirculated.

403.3 Cooking facilities. Unless approved through the certificate of occupancy, cooking shall not be permitted in any rooming unit or dormitory unit, and a cooking facility or appliance shall not be permitted to be present in the rooming unit or dormitory unit.

Exceptions:

1. Where specifically approved in writing by the City Building Inspector.
2. Devices such as coffee pots and microwave ovens shall not be considered cooking appliances.

403.4 Process ventilation. Where injurious, toxic, irritating or noxious fumes, gases, dusts or mists are generated, a local exhaust ventilation system shall be provided to remove the contaminating agent at the source. Air shall be exhausted to the exterior and not be recirculated to any space.

403.5 Clothes dryer exhaust. Clothes dryer exhaust systems shall be independent of all other systems and shall be exhausted in accordance with the manufacturer's instructions.

SECTION 404

OCCUPANCY LIMITATIONS

404.1 Privacy. Dwelling units, hotel units, housekeeping units, rooming units and dormitory units shall be arranged to provide privacy and be separate from other adjoining spaces.

404.2 Minimum room widths. A habitable room, other than a kitchen, shall not be less than 7 feet (2134 mm) in any plan dimension. Kitchens shall have a clear passageway of not less than 3 feet (914 mm) between counterfronts and appliances or counterfronts and walls.

404.3 Minimum ceiling heights. Habitable spaces, hallways, corridors, laundry areas, bathrooms, toilet rooms and habitable basement areas shall have a clear ceiling height of not less than 7 feet (2134 mm).

Exceptions:

1. In one- and two-family dwellings, beams or girders spaced not less than 4 feet (1219 mm) on center and projecting not more than 6 inches (152 mm) below the required ceiling height.
2. Basement rooms in one- and two-family dwellings occupied exclusively for laundry, study or recreation purposes, having a ceiling height of not less than 6 feet 8 inches (2033 mm) with not less than 6 feet 4 inches (1932 mm) of clear height under beams, girders, ducts and similar obstructions.
3. Rooms occupied exclusively for sleeping, study or similar purposes and having a sloped ceiling over all or part of the room, with a clear ceiling height of at least 7 feet (2134 mm) over not less than one-third of the required minimum floor area. In calculating the floor area of such rooms, only those portions of the floor area with a clear ceiling height of 5 feet (1524 mm) or more shall be included.

404.4 Bedroom and living room requirements. Every bedroom and living room shall comply with the requirements of Section 404.4.1 through 404.4.5.

404.4.1 Room area. Every living room shall contain at least 120 square feet (11.2 m²) and every bedroom shall contain at least 70 square feet (6.5 m²).

404.4.2 Access from bedrooms. Bedrooms shall not constitute the only means of access to other bedrooms or habitable spaces and shall not serve as the only means of egress from other habitable spaces.

Exception: Units that contain fewer than two bedrooms.

404.4.3 Water closet accessibility. Every bedroom shall have access to at least one water closet and one lavatory without passing through another bedroom. Every bedroom in a dwelling unit shall have access to at least one water closet and lavatory located in the same story as the bedroom or an adjacent story.

404.4.4 Prohibited occupancy. Kitchens and nonhabitable spaces shall not be used for sleeping purposes.

404.4.5 Other requirements. Bedrooms shall comply with the applicable provisions of this code including, but not limited to, the light, ventilation, room area, ceiling height and room width requirements of this chapter; the plumbing facilities and water-heating facilities requirements of Chapter 5; the heating facilities and electrical receptacle requirements of Chapter 6; and the smoke detector and emergency escape requirements of Chapter 7.

404.5 Overcrowding. The number of persons occupying a dwelling unit shall not create conditions that, in the opinion of the City Building Inspector, endanger the life, health, safety or welfare of the occupants.

404.6 Efficiency unit. Nothing in this section shall prohibit an efficiency living unit from meeting the following requirements:

1. A unit occupied by not more than two occupants shall have a clear floor area of not less than 220 square feet (20.4 m²). A unit occupied by three occupants shall have a clear floor area of not less than 320 square feet (29.7 m²). These required areas shall be exclusive of the areas required by Items 2 and 3.
2. The unit shall be provided with a kitchen sink, cooking appliance and refrigeration facilities, each having a clear working space of not less than 30 inches (762 mm) in front. Light and ventilation conforming to this code shall be provided.
3. The unit shall be provided with a separate bathroom containing a water closet, lavatory and bathtub or shower.
4. The maximum number of occupants shall be three.

404.7 Food preparation. All spaces to be occupied for food preparation purposes shall contain suitable space and equipment to store, prepare and serve foods in a sanitary manner. There shall be adequate facilities and services for the sanitary disposal of food wastes and refuse, including facilities for temporary storage.

CHAPTER 5

PLUMBING FACILITIES AND FIXTURE REQUIREMENTS

SECTION 501

GENERAL

501.1 Scope. The provisions of this chapter shall govern the minimum plumbing systems, facilities and plumbing fixtures to be provided.

501.2 Responsibility. The owner of the structure shall provide and maintain such plumbing facilities and plumbing fixtures in compliance with these requirements. A person shall not occupy as owner-occupant or permit another person to occupy any structure or premises which does not comply with the requirements of this chapter.

SECTION 502

REQUIRED FACILITIES

502.1 Dwelling units. Every dwelling unit shall contain its own bathtub or shower, lavatory, water closet and kitchen sink which shall be maintained in a sanitary, safe working, condition. The lavatory shall be placed in the same room as the water closet or located in close proximity to the door leading directly into the room in which such water closet is located. A kitchen sink shall not be used as a substitute for the required lavatory.

502.2 Rooming houses. At least one water closet, lavatory and bathtub or shower shall be supplied for each four rooming units.

502.3 Hotels. Where private water closets, lavatories and baths are not provided, one water closet, one lavatory and one bathtub or shower having access from a public hallway shall be provided for each ten occupants.

502.4 Employees' facilities. A minimum of one water closet, one lavatory and one drinking facility shall be available to employees.

502.4.1 Drinking facilities. Drinking facilities shall be a drinking fountain, water cooler, bottled water cooler or disposable cups next to a sink or water dispenser. Drinking facilities shall not be located in toilet rooms or bathrooms.

SECTION 503 TOILET ROOMS

503.1 Privacy. Toilet rooms and bathrooms shall provide privacy and shall not constitute the only passageway to a hall or other space, or to the exterior. A door and interior locking device shall be provided for all common or shared bathrooms and toilet rooms in a multiple dwelling.

503.2 Location. Toilet rooms and bathrooms serving hotel units, rooming units or dormitory units or housekeeping units, shall have access by traversing not more than one flight of stairs and shall have access from a common hall or passageway.

503.3 Location of employee toilet facilities. Toilet facilities shall have access from within the employees' working area. The required toilet facilities shall be located not more than one story above or below the employees' working area and the path of travel to such facilities shall not exceed a distance of 500 feet (152 m). Employee facilities shall either be separate facilities or combined employee and public facilities.

Exception: Facilities that are required for employees in storage structures or kiosks, which are located in adjacent structures under the same ownership, lease or control, shall not exceed a travel distance of 500 feet (152 m) from the employees' regular working area to the facilities.

503.4 Floor surface. In other than dwelling units, every toilet room floor shall be maintained to be a smooth, hard, nonabsorbent surface to permit such floor to be easily kept in a clean and sanitary condition.

SECTION 504 PLUMBING SYSTEMS AND FIXTURES

504.1 General. All plumbing fixtures shall be properly installed and maintained in working order, and shall be kept free from obstructions, leaks and defects and be capable of performing the function for which such plumbing fixtures are designed. All plumbing fixtures shall be maintained in a safe, sanitary and functional condition.

504.2 Fixture clearances. Plumbing fixtures shall have adequate clearances for usage and cleaning.

504.3 Plumbing system hazards. Where it is found that a plumbing system in a structure constitutes a hazard to the occupants or the structure by reason of inadequate service, inadequate venting, cross connection, backsiphonage, improper installation, deterioration or damage or for similar reasons, the City Building Inspector shall require the defects to be corrected to eliminate the hazard.

SECTION 505 WATER SYSTEM

505.1 General. Every sink, lavatory, bathtub or shower, drinking fountain, water closet or other plumbing fixture shall be properly connected to either a public water system or to an approved private water system. All kitchen sinks, lavatories, laundry facilities, bathtubs and showers shall be supplied with hot or tempered and cold running water in accordance with the City Plumbing Code.

505.2 Contamination. The private portion of the water supply system shall be maintained free from contamination, and all water inlets for plumbing fixtures shall be located above the flood-level rim of the fixture. Shampoo basin faucets, janitor sink faucets and other hose bibs or faucets to which hoses are attached and left in place, shall be protected by an approved atmospheric-type vacuum breaker or an approved permanently attached hose connection vacuum breaker.

505.3 Supply. The private portion of the water supply system shall be installed and maintained to provide a supply of water to plumbing fixtures, devices and appurtenances in sufficient volume and at pressures adequate to enable the fixtures to function properly, safely, and free from defects and leaks.

505.4 Water heating facilities. Water heating facilities shall be properly installed, maintained and capable of providing an adequate amount of water to be drawn at every required sink, lavatory, bathtub, shower and laundry facility at a temperature of not less than 110°F (43°C). A gas-burning water heater shall not be located in any bathroom, toilet room, bedroom or other occupied room normally kept closed, unless adequate combustion air is provided. An approved combination temperature and pressure-relief valve and relief valve discharge pipe shall be properly installed and maintained on water heaters.

SECTION 506 SANITARY DRAINAGE SYSTEM

506.1 General. All plumbing fixtures shall be properly connected to either a public sewer system or to an approved private sewage disposal system.

506.2 Maintenance. Every plumbing stack, vent, waste and sewer line shall function properly and be kept free from obstructions, leaks and defects.

SECTION 507 STORM DRAINAGE

507.1 General. Drainage of roofs and paved areas, yards and courts, and other open areas on the premises shall not be discharged in a manner that creates a public nuisance.

CHAPTER 6

MECHANICAL AND ELECTRICAL REQUIREMENTS

SECTION 601

GENERAL

601.1 Scope. The provisions of this chapter shall govern the minimum mechanical and electrical facilities and equipment to be provided.

601.2 Responsibility. The owner of the structure shall provide and maintain mechanical and electrical facilities and equipment in compliance with these requirements. A person shall not occupy as owner-occupant or permit another person to occupy any premises which does not comply with the requirements of this chapter.

SECTION 602

HEATING FACILITIES

602.1 Facilities required. Heating facilities shall be provided in structures as required by this section.

602.2 Residential occupancies. Dwellings shall be provided with heating facilities capable of maintaining a room temperature of 68°F (20°C) in all habitable rooms, bathrooms and toilet rooms based on the winter outdoor design temperature for the locality indicated in the City Plumbing Code. Cooking appliances shall not be used to provide space heating to meet the requirements of this section.

602.3 Heat supply. Every owner and operator of any building who rents, leases or lets one or more dwelling units or sleeping units on terms, either expressed or implied, the heating facilities shall supply sufficient heat to be capable of maintaining a temperature of not less than 68°F (20°C) in all habitable rooms, bathrooms, and toilet rooms.

Exceptions:

1. When the outdoor temperature is below the winter outdoor design temperature for the locality, maintenance of the minimum room temperature shall not be required provided that the heating system is operating at its full design capacity. The winter outdoor design temperature for the locality shall be as indicated in the City Plumbing Code.

602.4 Occupiable work spaces. Indoor occupiable commercial work spaces shall be supplied with heat to maintain a temperature of not less than 65°F (18°C) during all times the spaces are occupied.

Exceptions:

1. Processing, storage and operation areas that require cooling or special temperature conditions.
2. Areas in which persons are primarily engaged in vigorous physical activities.

602.5 Room temperature measurement. The required room temperatures shall be measured 3 feet (914 mm) above the floor near the center of the room and 2 feet (610 mm) inward from the center of each exterior wall.

**SECTION 603
MECHANICAL EQUIPMENT**

603.1 Mechanical appliances. All mechanical appliances, fireplaces, solid fuel-burning appliances, cooking appliances and water heating appliances shall be properly installed and maintained in a safe working condition, and shall be capable of performing the intended function.

603.2 Removal of combustion products. All fuel-burning equipment and appliances shall be connected to an approved chimney or vent.

Exception: Fuel-burning equipment and appliances which are labeled for unvented operation.

603.3 Clearances. All required clearances to combustible materials shall be maintained.

603.4 Safety controls. All safety controls for fuel-burning equipment shall be maintained in effective operation.

603.5 Combustion air. A supply of air for complete combustion of the fuel and for ventilation of the space containing the equipment shall be provided for the fuel-burning equipment.

603.6 Energy conservation devices. Devices intended to reduce fuel consumption by attachment to a fuel-burning appliance, to the fuel supply line thereto, or to the vent outlet or vent piping therefrom, shall not be installed unless labeled for such purpose and the installation is specifically approved.

**SECTION 604
ELECTRICAL FACILITIES**

604.1 Facilities required. Every occupied building shall be provided with an electrical system in compliance with the requirements of this section and Section 605.

604.2 Service. The size and usage of appliances and equipment shall serve as a basis for determining the need for additional facilities in accordance with the City Electrical Code. Dwelling units shall be served by a three-wire, 120/240 volt, single-phase electrical service having a rating of not less than 60 amperes.

604.3 Electrical system hazards. Where it is found that the electrical system in a structure constitutes a hazard to the occupants or the structure by reason of inadequate service, improper fusing, insufficient receptacle and lighting outlets, improper wiring or installation, deterioration or damage, or for similar reasons, the City Building Inspector shall require the defects to be corrected to eliminate the hazard.

SECTION 605 ELECTRICAL EQUIPMENT

605.1 Installation. All electrical equipment, wiring and appliances shall be properly installed and maintained in a safe and approved manner.

605.2 Receptacles. Every habitable space in a dwelling shall contain at least two separate and remote receptacle outlets. Every laundry area shall contain at least one grounded-type receptacle or a receptacle with a ground fault circuit interrupter. Every bathroom shall contain at least one receptacle. Any new bathroom receptacle outlet shall have ground fault circuit interrupter protection.

605.3 Luminaries. Every public hall, interior stairway, toilet room, kitchen, bathroom, laundry room, boiler room and furnace room shall contain at least one electric luminaire.

SECTION 606 ELEVATORS, ESCALATORS AND DUMBWAITERS

606.1 General. Elevators, dumbwaiters and escalators shall be maintained in compliance with ASME A17.1. The most current certification of inspection shall be on display at all times within the elevator or attached to the escalator or dumbwaiter, or the certificate shall be available for public inspection in the office of the building operator. The inspection and tests shall be performed at not less than the periodical intervals listed in ASME A17.1, Appendix N, except where otherwise specified by the authority having jurisdiction.

606.2 Elevators. In buildings equipped with passenger elevators, at least one elevator shall be maintained in operation at all times when the building is occupied.

Exception: Buildings equipped with only one elevator shall be permitted to have the elevator temporarily out of service for testing or servicing.

607.1 General. Duct systems shall be maintained free of obstructions and shall be capable of performing the required function.

CHAPTER 7

FIRE SAFETY REQUIREMENTS

701.1 Scope. The provisions of this chapter shall govern the minimum conditions and standards for fire safety relating to structures and exterior premises, including first safety facilities and equipment to be provided.

701.2 Responsibility. The owner of the premises shall provide and maintain such fire safety facilities and equipment in compliance with these requirements. A person shall not occupy as owner-occupant or permit another person to occupy any premises that do not comply with the requirements of this chapter.

SECTION 702

MEANS OF EGRESS

702.1 General. A safe, continuous and unobstructed path of travel shall be provided from any point in a building or structure to the public way. Means of egress shall comply with the City Fire Code.

702.2 Aisles. The required width of aisles in accordance with the City Fire Code shall be unobstructed.

702.3 Locked doors. All means of egress doors shall be readily openable from the side from which egress is to be made without the need for keys, special knowledge or effort, except where the door hardware conforms to that permitted by the City Building Code.

702.4 Emergency escape openings. Required emergency escape openings shall be maintained in accordance with the code in effect at the time of construction, and the following. Required emergency escape and rescue openings shall be operational from the inside of the room without the use of keys or tools. Bars, grilles, grates or similar devices are permitted to be placed over emergency escape and rescue openings provided the minimum net clear opening size complies with the code that was in effect at the time of construction and such devices shall be releasable or removable from the inside without the use of a key, tool or force greater than that which is required for normal operation of the escape and rescue opening.

SECTION 703

FIRE-RESISTANCE RATINGS

703.1 Fire-resistance-rated assemblies. The required fire-resistance rating of fire-resistance-rated walls, fire stops, shaft enclosures, partitions and floors shall be maintained.

703.2 Opening protectives. Required opening protectives shall be maintained in an operative condition. All fire and smokestop doors shall be maintained in operable condition. Fire doors and smoke barrier doors shall not be blocked or obstructed or otherwise made inoperable.

SECTION 704

FIRE PROTECTION SYSTEMS

704.1 General. All systems, devices and equipment to detect a fire, actuate an alarm, or suppress or control a fire or any combination thereof shall be maintained in an operable condition at all times in accordance with the City Fire Code.

704.2 Smoke alarms. Single or multiple-station smoke alarms shall be installed and maintained in all residentially zoned areas of the City as well as in all dwellings not otherwise located within areas with residential zoning designations, but otherwise located in the city limits and within the one-half mile extra territorial zoning jurisdiction of the City, regardless of occupant load at all of the following locations:

1. On the ceiling or wall outside of each separate sleeping area in the immediate
2. In each room used for sleeping purposes.
3. In each story within a dwelling unit, including basements and cellars but not including crawl spaces and uninhabitable attics. In dwellings or dwelling units with split levels and without an intervening door between the adjacent levels, a smoke alarm installed on the upper level shall suffice for the adjacent lower level provided that the lower level is less than one full story below the upper level. Single or multiple-station smoke alarms shall be installed in other groups in accordance with the City Fire Code.

704.3 Power source. In all residentially zoned areas of the City as well as in all dwellings otherwise located within the city limits and located within the one-half mile extra-territorial zoning jurisdiction of the City, single-station smoke alarm shall receive their primary power from the building wiring provided that such wiring is served from a commercial source and shall be equipped with a battery back-up. Smoke alarms shall emit a signal when the batteries are low. Wiring shall be permanent and without a disconnecting switch other than is required for over current protection.

Exception: Any and all solely battery operated smoke alarms installed prior to the effective date of this Ordinance may continue to be maintained without violating this Section. However, at such time as the property in question is being remodeled then new fire alarms shall be installed in accordance with this section. Also, smoke alarms are permitted to be solely battery operated in buildings that are not served from a commercial power source and in existing areas of buildings undergoing alterations or repairs that do not result in the removal of interior wall or ceiling finishes exposing the structure, unless

there is an attic, crawl space or basement available which could provide access for building wiring without the removal of interior finishes.

704.4 Interconnection. Where more than one smoke alarm is required to be installed within an individual dwelling unit in Group R-2, R-3, R-4 and in dwellings not regulated as Group R occupancies, the smoke alarms shall be interconnected in such a manner that the activation of one alarm will activate all of the alarms in the individual unit. The alarm shall be clearly audible in all bedrooms over background noise levels with all intervening doors closed.

Exceptions:

1. Interconnection is not required in buildings which are not undergoing alterations,
2. Smoke alarms in existing areas are not required to be interconnected where alterations or repairs do not result in the removal of interior wall or ceiling finishes exposing the structure, unless there is an attic, crawl space or basement available which could provide access for interconnection without the removal of interior finishes.

CHAPTER 8 REFERENCED STANDARDS

This chapter lists the standards that are referenced in various sections of this document. The standards are listed herein by the promulgating agency of the standard, the standard identification, the effective date and title and the section or sections of this document that reference the standard. The application of the referenced standards shall be as specified in Section 102.7.

ASME

American Society of Mechanical Engineers
Three Park Avenue
New York, New York 10016-5990

Standard Reference number	Title	Referenced in code section number
A17.1 - 2000	Safety Code for Elevators and Escalators with A17.1a 2002 Addenda	606.1