

2006 IBC Amendments

(effective 2/27/08)

Sec. 43-126. 2006 International Building Code

The 2006 International Building Code is hereby amended, altered, modified and changed in the following respects:

Pages 11-21

Section 202, Definitions. Add the following definitions:

ELECTRICAL CODE: The electrical code for this jurisdiction shall be Chapter 44 of the Omaha Municipal Code and all codes adopted therein.

FIRE CODE: The fire code for this jurisdiction shall be Chapter 46 of the Omaha Municipal Code and all codes adopted therein.

FUEL GAS CODE: The fuel gas code for this jurisdiction shall be NFPA 54 as adopted in Chapter 40 of the Omaha Municipal Code.

ICC ELECTRICAL CODE: Wherever reference is made to the ICC Electrical Code it shall mean “Electrical Code”. See definition for “Electrical Code”.

INTERNATIONAL ENERGY CONSERVATION CODE: Whenever reference is made to the International Energy Conservation Code, it shall mean the International Energy Conservation Code as adopted and amended by this jurisdiction.

INTERNATIONAL FIRE CODE: Wherever reference is made to the International Fire Code it shall mean “Fire Code”. See definition for “Fire Code”.

INTERNATIONAL FUEL GAS CODE: Wherever reference is made to the International Fuel Gas Code it shall mean NFPA 54, as adopted in Chapter 40 of the Omaha Municipal Code. See definition for “Fuel Gas Code”.

INTERNATIONAL MECHANICAL CODE: Wherever reference is made to the International Mechanical Code it shall mean “Mechanical Code”. See definition for “Mechanical Code”.

INTERNATIONAL PLUMBING CODE: Wherever reference is made to the International Plumbing Code it shall mean “Plumbing Code”. See definition for “Plumbing Code”.

INTERNATIONAL PROPERTY MAINTENANCE CODE: Wherever reference is made to the International Property Maintenance Code it shall mean “Property Maintenance Code”. See definition for “Property Maintenance Code”.

MECHANICAL CODE: The mechanical code for this jurisdiction shall be Chapter 40 of the Omaha Municipal Code.

PLUMBING CODE: The plumbing code for this jurisdiction shall be Chapter 49 of the Omaha Municipal Code.

PROPERTY MAINTENANCE CODE: The property maintenance code for this jurisdiction shall be Chapter 48 of the Omaha Municipal Code and all codes adopted therein.

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Section 202, Definitions. Change the definition of Townhouse to read: Townhouse. A single-family dwelling unit constructed in a group of ~~three~~ two or more attached units in which each unit extends from the foundation to roof and with open space on at least two sides.

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Section 1007.3, Exit stairways.

Add exception number 6 as follows:

6. Areas of refuge are not required at exit stairways in buildings or facilities equipped throughout by an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2.

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Section 1007.4, Elevators.

Change the single exception to read as exception number 1, and add exception number 2 to read as follows:

Exceptions:

1. Elevators are not required to be accessed from an area of refuge or horizontal exit in open parking garages.
2. Elevators are not required to be accessed from an area of refuge or horizontal exit in buildings and facilities equipped throughout by an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2.

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Add exception 6 to **Section 1009.3 Stair treads and risers**, to read as follows:

Exceptions:

6. Stairways to spaces that are not normally occupied may have a maximum riser height of 7.75 inches (197 mm), and a minimum tread depth of 10 inches (254 mm). The flight of stairs shall not have a vertical rise greater than 18 feet (5486 mm) between floor levels or landings.

Section 1104.4, Multilevel buildings and facilities. Add a 5th exception to read as follows:

5. As allowed in the Nebraska Administrative Code , an elevator is not required in facilities less than 3 stories in height, or in facilities having less than 3,000 square feet per story. This exception does not apply to shopping centers or malls, spaces containing professional health care providers, or buildings used for public transportation or airport passenger terminals.

Change this section to read as follows:

Section 1209.3 Mechanical appliances. Access to mechanical appliances installed in under-floor areas, in attic spaces and on roofs or elevated structures shall be in accordance with the International Mechanical Code.

Where mechanical equipment or appliances requiring periodic inspections, service, or maintenance are installed on roofs or elevated structures, a permanent stair shall be provided for access.

Exception: A portable ladder may be used for dwellings, replacement equipment on existing buildings, and exterior roof access points not exceeding 16 feet (4877 mm) above grade.

Section 1209, Access To Unoccupied Spaces, Add a new subsection to read as follows:

Section 1209.4, Service and Maintenance. Unless otherwise required by this code, access to normally unoccupied spaces for the purposes of building or equipment service or maintenance is permitted to be a fixed ladder or alternating tread device.

Section 1301.1.1. Criteria. Add the following sentence to read as follows:

Exception: Single family dwellings, two family dwellings and townhomes with a window to wall ratio greater than 15% must conform to the State of Nebraska energy code.

Section 1405.12.2, Window sills, Delete this section in its entirety.

~~Section 1405.12.2, Window sills. In Occupancy Groups R-2 and R-3, one- and two-family and multiple-family dwellings, where the opening of the sill portion of an operable window is located more than 72 inches (1829 mm) above the finished grade or other surface below, the lowest part of the clear opening of the window shall be a minimum of 24 inches (610 mm) above the finished floor surface of the room in which the window is located. Glazing between the floor and a height of 24 inches (610 mm) shall be fixed or have openings such that a 4-inch (102 mm) diameter sphere cannot pass through.~~

~~Exception: Openings that are provided with window guards that comply with ASTM F 2006 or F 2090.~~

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Add a new subsection as follows:

Section 1503.6, Rain Water. When roofs are sloped to drain over the edge, scuppers or gutters and downspouts, adequately sized, pitched and supported, shall be installed to conduct rain water to ground level. Rain water shall be discharged at least three feet away from the building foundation in a direction parallel to the adjoining property line when the discharge point is within 20 feet of the adjoining property line.

Exception: Structures with no sub-grade spaces.

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Table 1507.2.9.2, Valley Lining Material. In the Gage column, for Galvanized steel, delete the number 26, and replace it with 28.

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Add a new subsection as follows:

Section 1509.6, Occupied roofs: Any roof top decks, patios, platforms or similar structures, intended for human occupancy shall be of a type of construction not less in fire-resistance rating than required for the building to which it is attached. Occupied roofs shall be provided with exits as required for stories. Any such structure that is covered shall be provided with all fire protection systems required for the building to which it is attached. All such structures intended for human occupancy shall have guardrails that comply with Section 1013, regardless of their height above the plane of the roof.

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Section 1603.1.4 Wind design data. Delete items number 4 and 5.

- ~~4. The applicable internal pressure coefficient.~~
- ~~5. Components and cladding. The design wind pressures in terms of psf (kN/m²) to be used for the design of exterior component and cladding materials not specifically designed by the registered design professional.~~

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Section 1603.2 Restrictions on loading. Delete this section in it's entirety.

Section 1603.3 Live loads posted. Delete this section in it's entirety.

Section 1603.4 Occupancy permits for changed loads. Delete this section in it's entirety.

Section 1604.8.1 General. Add a second paragraph to this section as follows:

Buildings intended for temporary use or occupancy need not be anchored to permanent footings and foundations provided all of the following conditions are met:

1. The building or structure meets all other requirements of this code, particularly those for wind, snow, live and dead loads, means of egress and handicap accessibility;
2. The building or structure is located in accordance with the City's zoning ordinance;
3. The building or structure is otherwise anchored sufficiently to resist the wind loads of this jurisdiction and in accordance with the manufacturer's recommendations;
4. The building or structure will be used or occupied no more than 1 year; and
5. A temporary Certificate of Occupancy is issued for the building or structure.

Add a new section to read as follows:

Section 1607.6.2 Top level of parking garages. Where top levels of parking garages are exposed to snow loading, the structural design of the top level structural elements shall be based upon a specific snow storage or removal plan. The snow removal plan shall be included in the construction documents that are submitted for building permits, and shall include provisions for snow removal, temporary storage in specific areas, maximum snow heights, and other parameters to clearly indicate to the building official and building owner the necessary means of snow removal.

Table 1607.1. Minimum Uniformly Distributed Live Loads and Minimum Concentrated Live Loads

Add the following sentence to footnote "a" to read as follows:

Access to floors designed for passenger cars only shall be restricted by an appropriate overhead barrier located not more than 7'-6" above the floor at the point of entry.

Section 1607.11.2.1 Flat, pitched and curved roofs.

Delete (Equation 16-27) in it's entirety and replace it with: $L_r = 25 \text{ psf}$

Section 1609.1 Applications. Add the following sentences to read as follows:

Buildings, structures, and parts thereof intended for use as a tornado shelter shall be designed and constructed in accordance with Section 55-787 of the Omaha Municipal Code, and recommendations of the Federal Emergency Management Agency.

Table 1610.1 Soil Lateral Load. Change the values for Active pressure and At-rest pressure to read as follows:

| DESCRIPTION OF BACKFILL MATERIAL | UNIFIED SOIL CLASSIFICATION | DESIGN LATERAL SOIL LOAD (pounds per square foot per foot of depth) | |
|---|-----------------------------|--|-------------------|
| | | Active pressure | At-rest pressure |
| Well-graded, clean gravels; gravel-sand mixes | GW | 30 | 60 |
| Poorly graded clean gravels; gravel-sand mixes | GP | 30 | 60 |
| Silty gravels, poorly graded gravel-sand mixes | GM | 40 45 | 60 |
| Clayey gravels, poorly graded gravel-and-clay mixes | GC | 45 | 60 |
| Well-graded, clean sands; gravelly sand mixes | SW | 30 | 60 |
| Poorly graded clean sands; sand-gravel mixes | SP | 30 | 60 |
| Silty sands, poorly graded sand-silt mixes | SM | 45 | 60 |
| Sand-silt clay mix with plastic fines | SM-SC | 45 | 100 60 |
| Clayey sands, poorly graded sand-clay mixes | SC | 60 45 | 100 60 |
| Inorganic silts and clayey silts | ML | 45 | 100 60 |
| Mixture of inorganic silt and clay | ML-CL | 60 45 | 100 60 |
| Inorganic clays of low to medium plasticity | CL | 60 45 | 100 60 |
| Organic silts and silt clays, low plasticity | OL | Note b | Note b |
| Inorganic clayey silts, elastic silts | MH | Note b | Note b |
| Inorganic clays of high plasticity | CH | Note b | Note b |
| Organic clays and silty clays | OH | Note b | Note b |

Section 1613.1 Scope. Add the following sentence to read as follows:

When applying section 11.7 of ASCE7, change equation 11.7-1 to read $F_x = 0.02 W_x$

Section 1613.5.1 Mapped acceleration parameters. Add the following sentence to read as follows:

For all applications of the provisions of Section 1613, use values of 0.125 for S_s and 0.041 for S_1 .

Section 1704.2.2 Fabricator approval. Add a second paragraph to read as follows:

The following are considered approved fabricators:

Steel fabricators holding an appropriate certificate from the American Institute of Steel Construction, Steel Joist Manufacturers holding membership in the Steel Joist Institute, Precast/Prestressed Concrete suppliers holding membership in the Prestressed Concrete Institute (PCI) together with plant certification in the appropriate products group and categories in the PCI Plant Certification Program.

Section 1802.1 General. Change the second sentence to read as follows:

~~Where required by the building official, the~~ The classification and investigation of the soil shall be made by a registered design professional.

Section 1802.2 Where required. Delete the sentence and replace it with:

The owner or applicant shall submit a foundation and soils investigation to the building official addressing pertinent items in sections 1802.2.1 through 1802.2.6.

Exception: Delete the exception and replace it with:

Foundations of one story buildings covering less than 5,000 square feet of area may be designed using the presumptive bearing capacities given in Table 1804.2. All limitations and restrictions to the use of Table 1804.2 given elsewhere apply to this exception.

Section 1802.6 Reports. Add the following items to the required information list:

10. A description of the project for which the investigation was made.
11. Evaluation of the presence and extent of collapse-susceptible soils and the assessment of measures to minimize the effects of any collapsible soils on the performance of the structure.
12. Recommendations concerning the potential effect of new fill loads.

Add a new section to read as follows:

Section 1804.4 Collapsible soils. Portions of the Omaha Metropolitan Area are underlain by low-unit weight soils that can collapse when saturated. Additional studies shall be made to evaluate the presence and extent of collapse-susceptible soils and to assess the effects of any collapsible soils identified at the site on the performance of the structure.

Section 1805.1 General. Add the following to the end of this section:

Footings shall be constructed of concrete.

Table 1804.2 Allowable Foundation and Lateral Pressure

Change the sliding resistance for class 5 materials from ~~130~~ psf to 250 psf.

Delete the reference to footnote “c” on the number 1,500 under Allowable Foundation Pressure.

Delete footnote “c” and replace it with the following:

c. Whenever the bearing capacity of a soil is in doubt, the building official may require an evaluation of the soil conditions by a qualified engineer specializing in soil investigations at the expense of the owner of the proposed structure. Foundations and/or earthwork shall be redesigned as required to comply with the recommendations of the engineer. A complete record of the investigation shall be filed with the building official.

Add the following footnotes:

e. Values given in this table are not to be used for submerged soil.

f. Loads given in the table used in the design of isolated poles for use such as flagpoles or signs, and poles used to support buildings which are not adversely affected by one half inch motion at the ground surface to short term lateral loads may be increased by 50%.

g. The use of this table is restricted to cases in which the weight of existing or added fill within lines 15 feet outside the building does not exceed 250 psf.

h. No continuous footing designed using values from the table shall be less than 16 inches wide or 8 inches thick, and no individual footing shall be less than 2.5 feet square.

i. Organic soils and fills that have not been prepared with soils of known properties and have not been compacted as the soils have been placed shall be presumed to have no bearing capacity and shall not be considered acceptable for the support of buildings or structures other than temporary buildings.

Section 1805.2.1 Frost protection. Delete this section and the exceptions in their entirety and replace them with:

Except where erected on solid rock or otherwise protected from frost, foundation walls, piers, and other permanent supports of buildings and structures larger than 750 square feet in area or 10 feet in height shall extend below the established frost line. The established frost line shall be 3 feet below the exterior grade for heated structures, and 3.5 feet for unheated structures.

Exceptions:

1. The bottom surface of footings for unattached garages and unattached storage buildings of wood or metal not more than 750 square feet in area shall not be less than 1 foot below grade.
2. The bottom surface of foundations that bear on rock surfaces is not required to be below the established frost line provided the rock does not have seams or cracks or contain disintegrated material that could serve as reservoirs for water which could be subject to freezing.
3. The support of buildings by posts embedded in the earth shall be designed as specified in Section 1808. Wood posts or poles embedded in soil or concrete shall be pressure treated with an approved preservative.

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Section 1805.4.1.1 Design loads. Change the last sentence to read as follows:

Reduced live loads, as specified in Sections 1607.9, and ~~1607.11~~ are permitted to be used in the design of footings.

Section 1805.4.2 Concrete footings. Add the following sentence to read as follows:

No gravel or sand fill shall be placed underneath any footing unless evidence is submitted to the building official which shows that the soil below the footing will not be adversely affected by water.

Delete the exception to Section 1805.4.2 in its entirety.

Table 1805.4.2 Footings Supporting Walls of Light-frame Construction.

Delete this table in its entirety.

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Section 1805.4.2.3 Plain concrete footings. Delete this section in its entirety.

Section 1805.4.3 Masonry-unit footings. Delete this section, and all subsections to this section in their entirety.

Section 1805.4.5 Timber footings. Delete this section in its entirety.

Section 1805.4.6 Wood foundations. Delete this section in its entirety.

Section 1805.5 Foundation walls. Delete the last sentence in this section.

Pages 349 thru 353

Table 1805.5(1), Table 1805.5(2), Table 1805.5(3), Table 1805.5(4), Table 1805.5(5)

Delete these tables in their entirety, and all references made throughout this chapter to these tables.

Page 354

Section 1805.5.3 Alternative foundation wall reinforcement. Delete this section in its entirety.

Section 1805.5.5 Seismic requirements. Delete this section in its entirety.

Section 1805.5.5.1 Seismic requirements for concrete foundation walls. Delete this section in its entirety.

Section 1805.5.5.2 Seismic requirements for masonry foundation walls. Delete this section in its entirety.

Page 358

Section 1807.4.1 Floor base course. Delete this section in its entirety.

Section 1807.4.2 Foundation drain. Delete this section in its entirety and replace it with:

An effective drainage system of pervious backfill or a manufactured drainage mat and a perforated collector pipe shall be placed around the perimeter of a foundation unless specifically deleted by the registered design professional experienced in soil and foundation engineering.

Page 361

Section 1808.2.13 Preexcavation. Change the first sentence to read as follows:

The use of jetting, augering or other methods of preexcavation shall ~~be subject to the approval of the building official~~ not be allowed except where specifically approved by the design engineer.

Page 363

Section 1809.2.1.2 Minimum dimension. Change this section to read as follows:

The minimum lateral dimension shall be ~~8 12 inches (203 mm)~~ (304 mm). Corners of square piles shall be chamfered.

Page 366

Section 1809.3.4 Dimensions of steel pipe piles. Change the first sentence to read as follows:

Steel pipe piles driven open ended shall have a nominal outside diameter of not less than ~~8 7 inches (203 mm)~~ (178 mm).

Page 367

Section 1810.3.1 Allowable stresses. Change the first sentence to read as follows, and add the following exception:

The allowable design stress in the concrete of drilled or augered uncased piles shall not exceed ~~33~~ 25 percent of the 28-day specified compressive strength. (f'_c).

Exception: If the shaft can be inspected prior to concrete placement, the design professional may use a maximum allowable design stress in the concrete of 33 percent or the 28-day specified compressive strength.

Page 369

Section 1810.6.3 Minimum dimensions. Change the first sentence to read as follows:

Piles shall have a nominal outside diameter of not less than ~~8 7 inches (203 mm)~~ (178 mm) and a minimum wall thickness in accordance with Section 1809.3.4.

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Table 1904.2.2 Minimum Specified Compressive Strength

Delete footnote "a" as it applies to, Basement slabs and interior slabs on grade, except garage floor slabs.

Section 1905.6.2 Frequency of testing. Change the exception to read as follows:

Exception: When the total volume of a given class of concrete is less than 50 cubic yards (38m³), strength tests are not required when evidence of satisfactory strength is submitted to and approved by the ~~building official.~~ registered design professional.

Section 2206.1 General. Add an exception to this section to read as follows:

Exception: Unless otherwise approved by the registered design professional.

Section 2206.4 Steel joist drawings. Change number 5 to read as follows:

5. Size, spacing, location and connections for all bridging components supplied by the joist manufacturer.

Delete the last sentence of this section:

~~Steel joist placement plans do not require the seal and signature of the joist manufacturer's registered design professional.~~

Section 2303.4.1.2 Truss design drawings. Change number 18 to read as follows:

18. Required permanent individual truss member bracing and method per Section 2303.4.1.5, including all specific details. ~~unless a specific truss member permanent bracing plan for the roof or floor structural system is provided by a registered design professional.~~

Change the second paragraph to read as follows, and delete items 1, 2, and 3.

~~Where required by one of the following, each~~ Each individual truss design drawing shall bear the seal and signature of the truss designer:

- ~~1. Registered design professional; or~~
- ~~2. Building official; or~~
- ~~3. Statutes of the jurisdiction in which the project is to be constructed.~~

Section 2308.10 Cutting and notching. Add the following sentence to this paragraph.

All studs in exterior walls or bearing partitions that are notched more than 10 percent shall be doubled.

Page 488

Section 2308.10.4.2 Notches and holes. Delete the first paragraph and replace with:

Notches shall not be allowed in rafters or ceiling joists unless the Design Professional has accounted for the notches in the design.

Add a second sentence to the second paragraph to read as follows:

The holes shall be in the middle one-half of the span.

Pages 521-524

Chapter 29, Plumbing Systems. Delete this chapter in its entirety and change to read as follows: Plumbing systems shall be installed in accordance with Chapter 49 of the Omaha Municipal Code.

Page 526

Section 3004.2, Location of vents. Change to read as follows: Vents shall be located below the floor or floors at the top of the hoistway and shall open either directly to the outer air or through noncombustible ducts to the outer air. Noncombustible ducts shall be permitted to pass through the elevator machine room, ~~provided that portions of the located outside the hoistway or machine room are enclosed by construction having not less than the fire protection rating required for the hoistway.~~ when approved by the State Office of Elevator Safety. Holes in the machine room floors for the passage of ropes, cables or other moving elevator equipment shall be limited so as not to provide greater than 2 inches (51 mm) of clearance on all sides.

Page 532

Section 3109.1, General. Change to read as follows: Swimming pools shall comply with the requirements of ~~this section and other applicable sections of this code.~~ Chapter 54 of the Omaha Municipal Code.

Pages 532-534

Section 3109.2, Definition, through 3109.5.4 Pool Cleaner Fittings. Delete these sections in their entirety.

Page 535

Add a new section as follows:

Section 3202.5, Lease required. No portion of any existing or proposed new building, which extends over the property line on or above property belonging to the City of Omaha, shall be constructed until a lease is negotiated with the City of Omaha. The lease shall be negotiated and approved as required in the Omaha Municipal Code before any permanent construction commences.

Section 3401.3, Compliance with other codes. Change to read as follows: Alterations, repairs, additions and changes of occupancy to existing structures shall comply with the provisions for alterations, repairs, additions and changes of occupancy ~~in the International Fire Code, International Fuel Gas Code, International Mechanical Code, International Plumbing Code, International Property Maintenance Code, International Private Sewage Disposal Code, International Residential Code and ICC Electrical Code.~~ of all applicable codes adopted and enforced by the City of Omaha.

Section 3410.2, Applicability. Change the first sentence to read as follows: Structures existing prior to the effective adoption date of this code, in which there is work involving additions, alterations or changes of occupancy shall be made to conform to the requirements of this section or the provisions of Sections 3403 through 3407. ~~The provisions in Sections 3410.2.1 through 3410.2.5 shall apply to existing occupancies that will continue to be, or are proposed to be, in Groups A, B, E, F, M, R, S, and U. These provisions shall not apply to buildings with occupancies in Group H or I.~~