

ORDINANCE NO. 642

AN ORDINANCE OF THE CITY OF GARRETSON, SD, AMENDING THE CODE OF ORDINANCES OF THE CITY BY ADOPTING THE 2018 *INTERNATIONAL BUILDING CODE* AND AMENDMENTS THERETO. BE IT ORDAINED BY THE CITY OF GARRETSON, SD:

*The Code of Ordinances of Garretson, SD, is hereby amended to read:*

**ADOPTED.**

(a) The *International Building Code*, 2018 edition, including Appendix C and Appendix I as published by the International Code Council Inc., and amendments and additions thereto as provided in this article are hereby adopted as the building code by the city for regulating the erection, construction, enlargement, alteration, repair, moving, removal, demolition, conversion, occupancy, equipment, use, height, area, and maintenance of all buildings and structures in the city providing for the issuance of permits and collection of fees therefor.

(b) The adoption of the *International Building Code*, 2018 edition, will become effective July 1, 2019. The minimum building standards in the 2018 edition of the *International Building Code* and amendments thereto shall be applied to any building permit issued after July 1, 2019.

(c) The city shall publish this ordinance, without attachments, after its passage. The attachments are on file and available for inspection at the office of the city clerk.

**AMENDMENTS, ADDITIONS, AND DELETIONS TO THE 2018 INTERNATIONAL BUILDING CODE.**

The following sections and subsections of the 2018 *International Building Code* adopted in this subchapter shall be amended, added, or not adopted by the city as follows. All other sections or subsections of the 2018 *International Building Code* as published shall remain the same.

**[A] 101.1 Title.** These regulations shall be known as the building code of the city of Garretson, hereinafter referred to as “this code.”

**[A] 101.4.1 Gas.** The provisions of the *International Fuel Gas Code* or the plumbing code shall apply to the installation of gas piping from the point of delivery, gas appliances and related accessories as covered in this code. These requirements apply to gas piping systems extending from the point of delivery to the inlet connections of appliances and the installation and operation of residential and commercial gas appliances and related accessories. As to State code.

**[A] 101.4.3 Plumbing.** The provisions of the plumbing code shall apply to the installation, alteration, repair, and replacement of plumbing systems, including equipment, appliances, fixtures, fittings, and appurtenances, and where connected to a water or sewage system and all aspects of a medical gas system. As to State code.

**101.4.8 Electrical.** The provisions of the NFPA 70 shall apply to the installation of electrical systems, including alterations, repairs, replacement, equipment, appliances, fixtures, fittings, and appurtenances thereto. A to State code

**[A] 103.1 Creation of enforcement agency.** Building services is hereby created and the official in charge thereof shall be known as the building official.

**[A] 103.2 Appointment.** By the local Governing Board of the Jurisdiction.

**[A] 104.8 Liability.** The *building official*, member of the board of appeals or employee charged with the enforcement of this code, while acting for the jurisdiction in good faith and without malice in the discharge of the duties required by this code or other pertinent law or ordinance, shall not thereby be civilly or criminally rendered liable personally and is hereby relieved from personal liability for any damage accruing to persons or property as a result of any act or by reason of an act or omission in the discharge of official duties. This code shall not be construed to relieve or lessen the responsibility of any person owning, operating, or controlling any building or structure for any damages to persons or property caused by defects, nor shall the city, or its officers and employees, be held as assuming any such liability by reason of the inspections authorized by this code or any permits or certificates issued under this code.

**[A] 104.8.1 Legal defense.** Any suit or criminal complaint instituted against an officer or employee because of an act performed by that officer or employee in the lawful discharge of duties and under the provisions of this code shall be afforded all the protection provided by the city's insurance pool and any immunities and defenses provided by other applicable state and federal law and defended by legal representatives of the jurisdiction until the final termination of the proceedings. The building official or any subordinate shall not be liable for cost in any action, suit, or proceeding that is instituted in pursuance of the provisions of this code.

**[A] 104.10.1 Flood hazard areas.** The floodplain administrator shall not grant modifications to any provision required in flood hazard areas as established by FEMA Floodplain Management, unless a determination has been made that:

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1. A showing of good and sufficient cause that the unique characteristics of the size, configuration, or topography of the site render the elevation standards of FEMA Floodplain Management, inappropriate.
2. A determination that failure to grant the variance would result in exceptional hardship by rendering the lot undevelopable.
3. A determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, cause fraud on or victimization of the public, or conflict with existing laws or ordinances.
4. A determination that the variance is the minimum necessary to afford relief, considering the flood hazard.

5. Submission to the applicant of written notice specifying the difference between the design flood elevation and the elevation to which the building is to be built, stating that the cost of flood insurance will be commensurate with the increased risk resulting from the reduced floor elevation, and stating that construction below the design flood elevation increases risks to life and property.

**[A] 105.1 Required.** Any owner or owner's authorized agent who intends to construct, enlarge, alter, repair, move, demolish, or change the occupancy of a building or structure, or to erect, install, enlarge, alter, repair, remove, convert, or replace any electrical, gas, mechanical, or plumbing system, the installation of which is regulated by this code, or to cause any such work to be performed, shall first make application to the building official and obtain the required permit. The building official may exempt permits for minor work.

**[A] 105.2 Work exempt from permit.** Exemptions from permit requirements of this code shall not be deemed to grant authorization for any work to be done in any manner in violation of the provisions of this code or any other laws or ordinances of this jurisdiction. Permits shall not be required for the following

**Building:**

1. One-story detached accessory structures used as tool and storage sheds, playhouses, and similar uses, provided the floor area is not greater than 200 square feet (18.6 m<sup>2</sup>). A placement permit is required by the zoning division.
2. Fences not over 7 feet (2,134 mm) high. A fence is required to meet zoning rules.
3. Oil derricks.
4. Retaining walls that are not over 4 feet (1,219 mm) in height measured from the bottom grade elevation to the top of the wall, unless supporting a surcharge or impounding Class I, II, or IIIA liquids.
5. Water tanks supported directly on grade if the capacity is not greater than 5,000 gallons (18,927 L) and the ratio of height to diameter or width is not greater than 2:1.
6. Sidewalks and driveways not more than 30 inches (762 mm) above adjacent grade, and not over any basement or story below and are not part of an accessible route. A driveway permit is required by the zoning division. A sidewalk permit is required by the engineering division.
7. Painting, papering, tiling, carpeting, cabinets, countertops, and similar finish work.
8. Temporary motion picture, television, and theater stage sets and scenery.
9. Prefabricated swimming pools accessory to a Group R-3 occupancy that are less than 18 inches (457 mm) deep.

10. Shade cloth structures constructed for nursery or agricultural purposes, not including service systems.

11. Swings and other playground equipment accessory to detached one- and two-family dwellings.

12. Window awnings in Group R-3 and U occupancies, supported by an exterior wall that do not project more than 54 inches (1,372 mm) from the exterior wall and do not require additional support.

13. Non fixed and movable fixtures, cases, racks, counters, and partitions not over 5 feet 9 inches (1,753 mm) in height.

**Electrical:**

**1. Repairs and maintenance:** Minor repair work, including the replacement of lamps or the connection of approved portable electrical equipment to approved permanently installed receptacles.

**2. Radio and television transmitting stations:** The provisions of this code shall not apply to electrical equipment used for radio and television transmissions, but do apply to equipment and wiring for a power supply and the installations of towers and antennas.

**3. Temporary testing systems:** A permit shall not be required for the installation of any temporary system required for the testing or servicing of electrical equipment or apparatus.

**Gas:**

1. Portable heating appliance.

2. Replacement of any minor part that does not alter approval of equipment or make such equipment unsafe.

**Mechanical:**

1. Portable heating appliance.

2. Portable ventilation equipment.

3. Portable cooling unit.

4. Steam, hot, or chilled water piping within any heating or cooling equipment regulated by this code.

5. Replacement of any part that does not alter its approval or make it unsafe.

6. Portable evaporative cooler.

7. Self-contained refrigeration system containing 10 pounds (4.54 kg) or less of refrigerant and actuated by motors of 1 horsepower (0.75 kW) or less.

**Plumbing:**

1. The stopping of leaks in drains, water, soil, waste or vent pipe, provided, however, that if any concealed trap, drain pipe, water, soil, waste or vent pipe becomes defective and it becomes necessary to remove and replace the same with new material, such work shall be considered as new work and a permit shall be obtained and inspection made as provided in this code under State code.

2. The clearing of stoppages or the repairing of leaks in pipes, valves, or fixtures and the removal and reinstallation of water closets, provided such repairs do not involve or require the replacement or rearrangement of valves, pipes, or fixtures.

**105.3 Application for permit.** To obtain a *permit*, the applicant shall first file an application therefor in writing on a form for that purpose. Such application shall:

1. Identify and describe the work to be covered by the *permit* for which application is made.

2. Describe the land on which the proposed work is to be done by legal description, street address, or similar description that will readily identify and definitely locate the proposed building or work.

3. Indicate the use and occupancy for which the proposed work is intended.

4. Be accompanied by *construction documents* and other information as required in Section 107.

5. State the valuation of the proposed work.

6. Be signed by the applicant, or the applicant's authorized agent.

7. Give such other data and information as required by the *building official*.

**[A] 107.1 General.** Submittal documents consisting of one complete set of plans in an electronic submittal in PDF format along with other construction documents, statement of special inspections, geotechnical report, and other data shall be submitted with each permit application. The construction documents shall be prepared by a registered design professional where required by the statutes of the jurisdiction in which the project is to be constructed. Where special conditions exist, the building official is authorized to require additional construction documents to be prepared by a registered design professional.

**Exception:** The building official is authorized to waive the submission of construction

documents and other data not required to be prepared by a registered design professional if it is found that the nature of the work applied for is such that review of construction documents is not necessary to obtain compliance with this code.

**[A] 107.3.1 Approval of construction documents.** When the building official issues a permit, the construction documents shall be reviewed for compliance. One set of construction documents so reviewed shall be retained by the building official.

**[A] 109.2 Schedule of permit fees.** On buildings, structures, electrical, gas, mechanical, and plumbing systems or alterations requiring a permit, a fee for each permit shall be paid as required in accordance with the schedule as established by the applicable governing authority. The fee schedules for the issuance of a building permit shall be as follows: SET BY RESOLUTION NO. 2019-02.

TABLE NO. 1-C. OTHER INSECTIONS AND FEES.

Inspections outside of normal business hours*(minimum charge one hour)	\$70.00
Reinspection fee, per hour* (minimum charge one hour)	\$70.00
Inspections for which no fee is specifically, per hour* (minimum charge one-half Hour*)	\$70.00
Additional plan review required by charges, additions, or revisions to approved plans, per hour* ( minimum charged one-half hour)	\$70.00

\* Or the total hourly cost to the jurisdictions, whichever is the greater. This cost shall include supervision, overhead, equipment, hourly wage, and fringe benefits of the employees involved.

Wrecking (razing) permit	\$40.00
Swimming pool fence enclosure.	\$40.00
Residential reshingle	\$30.00
Residential reside(Group R and U occupancies)	\$30.00
Residential window replacement with no structural modifications (Group R and U Occupancies)	\$40.00

10. Board of appeals fees. Before the board takes any action, the party or parties requesting such hearing shall deposit with the secretary of the board, or authorized agent, \$65.00 to cover the approximate cost of the procedure. Under no condition shall said sum or any part thereof be refunded for failure of said request to be approved.

**Exception.** Appeals referred to the board from the *International Property Maintenance Code*.

11. A mileage fee based on the current rate per mile authorized by the Internal Revenue Service shall be charged for any inspection occurring outside city limits.

13. When submittal documents are required by Section 106, a plan review fee shall be paid when it is deemed that a plan review is required. Said plan review fee shall be 25 percent of the building permit fee as specified on Table 1-B. The plan review fee specified herein is a separate fee from the building permit fee and is in addition to the building permit fee. When submittal documents are incomplete or changed so as to require additional plan review or when a project involves deferred submittals as defined in Section 106.3.4.2, an additional plan review fee may be charged at 25 percent of the building permit fee specified on Table 1-B.

**Exception:** Group R Division 3 and Group U occupancies.

14. Fee for late corrections. A \$100.00 administrative fee may be charged for failure to correct violations within the time specified on a contractor's correction report.

15. Fee for failure to request a required inspection. Where building construction work is completed without a request for an inspection, an administrative fee of \$250.00 may be charged.

**109.7 Delinquent accounts.** The city may refuse to issue permits or conduct inspections for any person or business whose account is delinquent.

**[A] 110.3.1 Footing inspection.** Footing inspections shall be made after excavations for footings are complete and required reinforcing steel is in place (two number 4 s). If an inspection is required for concrete foundations, any required forms shall be in place prior to inspection. Materials for the foundation shall be on the job, except where concrete is ready mixed in accordance with ASTM C 94, the concrete need not be on the job. And hurricane straps are required on garage portals three feet or less and 5/8" anchor bolts.

**[A] 111.2 Certificate issued.** After the building official inspects the building or structure and does not find violations of the provisions of this code or other laws that are enforced by the department of building safety, the building official shall issue a certificate of occupancy that contains the following:

1. The building permit number.
2. The address of the structure.
3. A statement that the described portion of the structure has been inspected for compliance with the requirements of this code for the occupancy and division of occupancy and the use for which the proposed occupancy is classified.
4. The name of the building official.
5. The edition of the code under which the permit was issued.
6. The use and occupancy, in accordance with the provisions of Chapter 3.
7. The type of construction as defined in Chapter 6.

8. The design occupant load.
9. If an automatic sprinkler system is provided, whether the sprinkler system is required.
10. Any special stipulations and conditions of the building permit.

**[A] 113.1 General.** In order to hear and decide appeals of orders, decisions, or determinations made by the building official relative to the application and interpretation of this code and the fire code, to review all prospective changes to the respective codes and to submit recommendations to the responsible official and the city council, to review requests for house moves, and to examine applicants for licensing and to investigate matters brought before the council. The council shall adopt rules of procedure for conducting its business and shall render all decisions in writing to the appellant with a duplicate copy to the building and/or fire official.

**[A] 113.2 Limitations on authority.** An application for appeal shall be based on a claim that the true intent of this code or the rules legally adopted thereunder have been incorrectly interpreted, the provisions of this code do not fully apply, or an equally good or better form of construction is proposed. The council shall not have authority relative to the administrative provisions of this code nor shall the council be empowered to waive requirements of this code.

**[A] 114.3 Prosecution of violation.** If the notice of violation is not complied with promptly, the building official is authorized to request the legal counsel of the jurisdiction to deem the violation as a strict liability offense and institute the appropriate proceeding at law or in equity to restrain, correct, or abate such violation, or to require the removal or termination of the unlawful occupancy of the building or structure in violation of the provisions of this code or of the order or direction made pursuant thereto.

**201.1 Scope.** Unless otherwise expressly stated, the following words and terms shall, for the purposes of this code, have the meanings shown in this chapter. In addition, the following words and terms are being added and/or modified to the defined terms already incorporated by reference of this code.

**FIRE AREA.** The aggregate floor area enclosed and bounded by fire walls, fire barriers, exterior walls, or horizontal assemblies of a building.

**STRICT LIABILITY OFFENSE.** An offense in which the prosecution in a legal proceeding is not required to prove criminal intent as a part of its case. It is enough to prove that the defendant either did an act which was prohibited or failed to do an act which the defendant was legally required to do.

**SWIMMING POOL.** Any structure intended for swimming, recreational bathing, or wading that contains water over 18 inches (457 mm) deep. This includes in-ground, aboveground, and on-ground pools; hot tubs; spas; and fixed-in place wading pools.

**305.2.2 Twelve or fewer children.** A facility having twelve or fewer children receiving such day care shall be classified as part of the primary occupancy.



**305.2.3 Twelve or fewer children in a dwelling unit.** A facility such as the above within a dwelling unit and having twelve or fewer children receiving such day care shall be classified as a Group R-3 occupancy or shall comply with the *International Residential Code*.

**308.5.4 Twelve or fewer persons receiving care in a dwelling unit.** A facility such as the above within a dwelling unit and having twelve or fewer persons receiving custodial care shall be classified as a Group R-3 occupancy or shall comply with the *International Residential Code*.

**423.4 Group E occupancies.** All Group E occupancies with an occupant load of 50 or more shall have a storm shelter constructed to withstand a wind of 200 mph.

**Exceptions:**

1. Group E day care facilities.
2. Group E occupancies accessory to places of religious worship.
3. Buildings meeting the requirements for shelter design in ICC 500.

**[F] 501.2 Address identification.** New and existing buildings shall be provided with approved address identification. The address identification shall be legible and placed in a position that is visible from the street or road fronting the property. Address identification characters shall contrast with their background. Address numbers shall be Arabic numbers or alphabetical letters. Numbers shall not be spelled out. Each character shall be a minimum of 4 inches (102 mm) high with a minimum stroke width of 1/2 inch (12.7 mm). Where required by the fire code official, address identification shall be provided in additional approved locations to facilitate emergency response. Multi-building campus/complex developments addressed on private or public streets shall be provided with signage at the entrance to the campus/complex indicative of the address ranges within. Where access is by means of a private road and the building address cannot be viewed from the public way, a monument, pole, or other approved sign or means shall be used to identify the structure. Address identification shall be maintained.

**507.2.2 Property lines.** Portions of an unlimited area building may be divided by platted property lines without requiring the construction of party walls if the whole building has:

1. Permanent open space on all sides as required by Sections 507.3, 507.4, 507.5; and
2. Proper legal agreements are submitted and approved by the building official and are recorded with the deed for each of the separate properties. These recorded agreements shall require that the buildings, as divided by property lines, be in conformance with the applicable provisions of the building and fire codes, as if the buildings were a single building on a single piece of property. In addition, the agreement must state that no individual building or property owner may modify any portion of the building in any way that would not be in compliance with the building and fire codes.

**706.6.2 Buildings with sloped roofs.** Where a fire wall serves as an interior wall for a building, and the roof on one side or both sides of the fire wall slopes toward the fire wall at a slope greater than 2 units vertical in 12 units horizontal (2:12), the fire wall shall extend to a height equal to the height of the roof located 4 feet (1,219 mm) from the fire wall plus 30 inches (762 mm). In no case shall the extension of the fire wall be less than 30 inches (762 mm).

**Exception:** The fire wall may terminate at the underside of the roof sheathing, deck, or slab of the lower roof, provided:

1. The roof assemblies within 10 feet (3,048 mm) of the wall has not less than a 1-hour fire resistance rating and the entire length and span of supporting elements for the rated roof assembly has a fire-resistance rating of not less than 1 hour.
2. Openings in the roof on each side of the fire wall shall not be located within 10 feet (3,048 mm) of the fire wall.

**714.5.1.2 Through-penetration firestop system.** Through penetrations of the fire-resistive membrane shall be protected by an approved through-penetration fire-stop system installed and tested in accordance with ASTM E 814 or UL 1479, with a minimum positive pressure differential of 0.01 inch of water (2.49 Pa). The system shall have an F rating/T rating of not less than 1 hour but not less than the required rating of the floor penetrated.

**Exceptions:**

1. Floor penetrations contained and located within the cavity of a wall above the floor or below the floor do not require a T rating.
2. Floor penetrations by floor drains, tub drains, or shower drains contained and located within the concealed space of a horizontal assembly do not require a T rating.
3. Floor penetrations of maximum 4-inch (102 mm) nominal diameter penetrating directly into metal-enclosed electrical power switchgear do not require a T rating.

**716.2.6.1 Door closing.** Fire doors shall be latching and self- or automatic-closing in accordance with this section.

**Exceptions:**

1. Fire doors located in common walls separating sleeping units in Group R-1 shall be permitted without automatic- or self-closing devices.
2. The elevator car doors and the associated hoist way enclosure doors at the floor level designated for recall in accordance with Section 3003.2 shall be permitted to remain open during Phase I emergency recall operation.
3. Interior doors located in exit enclosures, smoke proof enclosures, and exit passageways in Group R and I-1 occupancies shall be automatic closing fire door assemblies in accordance with NFPA 80 and controlled in accordance with NFPA 72.

**[F] 903.2.6 Group I.** An automatic sprinkler system shall be provided throughout buildings with a Group I fire area.

**Exceptions:**

1. An automatic sprinkler system installed in accordance with Section 903.3.1.1 is required in Group I-1 Condition 1 or 2 facilities.
2. An automatic sprinkler system is not required where Group I-4 day care facilities are at the level of exit discharge and where every room where care is provided has not fewer than one exterior exit door.
3. In buildings where Group I-4 day care is provided on levels other than the level of exit discharge, an automatic sprinkler system in accordance with Section 903.3.1.1 shall be installed on the entire floor where care is provided, all floors between the level of care and the level of exit discharge, and all floors below the level of exit discharge other than areas classified as an open parking garage.

**[F] 903.2.8 Group R.** An automatic sprinkler system installed in accordance with Section 903.3 shall be provided throughout all buildings with Groups R-1 and R-4 fire areas and Group R-2 multifamily residences having six or more dwelling units.

**[F] 903.3.1.1.1 Exempt locations.** Automatic sprinklers shall not be required in the following rooms or areas where such rooms or areas are protected with an approved automatic fire detection system in accordance with Section 907.2 that will respond to visible or invisible particles of combustion. Sprinklers shall not be omitted from a room merely because it is damp, of fire-resistance-rated construction, or contains electrical equipment.

1. A room where the application of water, or flame and water, constitutes a serious life or fire hazard.
2. A room or space where sprinklers are considered undesirable because of the nature of the contents, where approved by the fire code official. Such rooms shall be separated from the remainder of the building by fire barrier walls and horizontal assemblies having a fire resistance rating of not less than two hours.
3. Generator and transformer rooms separated from the remainder of the building by walls and floor/ceiling or roof/ceiling assemblies having a fire-resistance rating of not less than two hours.
4. Rooms or areas that are of noncombustible construction with wholly noncombustible contents.
5. Fire service access elevator machine rooms and machinery spaces.
6. Machine rooms, machinery spaces, control rooms, and control spaces associated with occupant evacuation elevators designed in accordance with Section 3008.

**[F] 904.12.2 System interconnection.** The actuation of the fire suppression system shall automatically shut down the fuel and/or electrical power supply to the cooking equipment and all electrical receptacles located beneath the hood. The fuel and electrical supply reset shall be manual.

**[F] 907.2.1.1 System initiation in Group A occupancies with an occupant load of 1,000 or more.** Activation of the fire alarm in Group A occupancies with an occupant load of 1,000 or more shall initiate a signal using an emergency voice/alarm communications system in accordance with Section 907.5.2.2.

**Exceptions:**

1. Group A-3 occupancies used for religious worship.
2. Where approved, the prerecorded announcement is allowed to be manually deactivated for a period of time, not to exceed three minutes, for the sole purpose of allowing a live voice announcement from an approved, constantly attended location.

**[F] 907.2.2 Group B.** A manual fire alarm system shall be installed in Group B occupancies where one of the following conditions exists:

1. The combined Group B occupant load of all floors is 500 or more.
2. The Group B occupant load is more than 100 persons above or below the lowest level of exit discharge.
3. The fire area contains an ambulatory care facility.
4. The Group B occupancy has more than two occupied levels.

**Exception:** Manual fire alarm boxes are not required where the building is equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1 and the occupant notification appliances will activate throughout the notification zones upon sprinkler water flow.

**[F] 907.2.6.2 Group I-2.** An automatic smoke detection system shall be installed in corridors in Group I-2 Condition 1 facilities and spaces permitted to be open to the corridors by Section 407.2. The system shall be activated in accordance with Section 907.4. Group I-2 Condition 2 occupancies shall be equipped with an automatic smoke detection system as required in Section 407.

**Exception:** Corridor smoke detection is not required in smoke compartments that contain sleeping units where such units are provided with smoke detectors that comply with UL 268. Such detectors shall provide a visual display on the corridor side of each sleeping unit and shall provide an audible and visual alarm at the care providers' station attending each unit. Smoke detectors installed as part of an intelligent or addressable fire alarm system capable of annunciation of room origin at a constantly attended location shall be acceptable.

**[F] 907.2.8.2 Automatic smoke detection system.** An automatic smoke detection system that activates the occupant notification system in accordance with Section 907.5 shall be installed throughout all interior corridors serving sleeping units and at the top of each stairwell.

**Exception:** An automatic smoke detection system is not required in buildings that do not have interior corridors serving sleeping units and where each sleeping unit has a means of egress door opening directly to an exit or to an exterior exit access that leads directly to an exit.

**[F] 907.2.8.4 Heat detectors.** Heat detectors shall be installed in each attic subdivision or similar areas not otherwise covered by an automatic fire-extinguishing system.

**Exceptions:**

1. Heat detection is not required in areas protected by an automatic fire-extinguishing system installed in accordance with Section 903.3.1.1 or in addition to the requirements of Section 903.3.1.2.
2. Heat detectors are not required where the fire partitions extend into and through the interstitial attic space.

**[F] 907.2.9 Group R-2.** Fire alarm systems and smoke alarms shall be installed in Group R-2 occupancies as required in Sections 907.2.9.1 through 907.2.9.5.

**[F] 907.2.9.1 Manual fire alarm system.** A manual fire alarm system that activates the occupant notification system in accordance with Section 907.5 shall be installed in Group R-2 occupancies where any of the following conditions apply:

1. Any dwelling unit or sleeping unit is located three or more stories above the lowest level of exit discharge.
2. Any dwelling unit or sleeping unit is located more than one story below the highest level of exit discharge of exits serving the dwelling unit or sleeping unit.
3. The building contains more than 16 dwelling units or sleeping units.

4. The building contains four or more dwelling units or sleeping units above the level of exit discharge.

**Exceptions:**

1. A fire alarm system is not required in buildings not more than two stories in height where all dwelling units or sleeping units and contiguous attic and crawl spaces are separated from each other and public or common areas by not less than 1-hour fire partitions and each dwelling unit or sleeping unit has an exit directly to a public way, egress court, or yard.
2. Manual fire alarm boxes are not required where the building is equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2 and the occupant notification appliances will automatically activate throughout the notification zones upon a sprinkler water flow.
3. A fire alarm system is not required in buildings that do not have interior corridors serving dwelling units and are protected by an approved automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2, provided that dwelling units either have a means of egress door opening directly to an exterior exit access that leads directly to the exits or are served by open-ended corridors designed in accordance with Section 1027.6, Exception 3.

**907.2.9.4 Smoke detectors.** Automatic smoke detection shall be provided in each stairway and all exit corridors.

**907.2.9.5 Heat detectors.** Automatic heat detectors shall be installed in each attic subdivision, any attached garages, and similar areas not otherwise covered by an automatic fire-extinguishing system.

**Exceptions:**

1. Automatic heat detection is not required in areas protected by an automatic fire-extinguishing system installed in accordance with Section 903.3.1.1 or in addition to the requirements of Section 903.3.1.2.
2. Automatic heat detectors are not required where the fire partitions extend into and through the interstitial attic space.

**[F] 907.2.12.1.2 Duct smoke detection.** Duct smoke detectors complying with Section 907.3.1 shall be located as follows:

1. In the main return air and exhaust air plenum of each air-conditioning system having a capacity greater than 2,000 cubic feet per minute (cfm) (0.94 m<sup>3</sup>/s). Such detectors shall be located in a serviceable area downstream of the last duct inlet.
2. At each connection to a vertical duct or riser serving two or more stories from a return air duct or plenum of an air-conditioning system. In Group R-1 and R-2 occupancies, a smoke detector is allowed to be used in each return air riser carrying not more than 5,000 cfm (2.4 m<sup>3</sup>/s) and serving not more than 10 air-inlet openings.

3. Duct smoke detectors installed more than 10 feet above a finished floor, above a ceiling, or on a rooftop shall be installed with remote test/indicators in an approved location below and in proximity to the unit served.

**[F] 912.2.1 Visible location.** Fire department connections shall be located on the street side of buildings or facing approved fire apparatus access roads, fully visible and recognizable from the street, fire apparatus access road or nearest point of fire department vehicle access, or as otherwise approved by the fire code official. A weather-rated horn/strobe connected to the fire detection or sprinkler system shall be located not lower than 8 feet above the fire department connection and within 10 feet horizontally of the connection. The weather-rated horn/strobe must be visible from the fire lane or street.

**TABLE 1004.5  
MAXIMUM FLOOR AREA ALLOWANCES PER OCCUPANT  
FUNCTION OF SPACE OCCUPANT  
LOAD FACTOR a**

Accessory storage areas, mechanical equipment room _____	300 gross
Agricultural building _____	300 gross
Aircraft hangars _____	500 gross
Airport terminal Baggage claim Baggage handling _____	20gross
Concourse Waiting areas _____	300 gross 100 gross 15 gross
Assembly Gaming floors (keno, slots, _____ etc.) Exhibit gallery and _____ museum	11 gross 30 gross
Assembly with fixed seats _____	See Section 1004.6
Assembly without fixed seats Concentrated _____	7 net
(chairs only—not fixed) _____	5 net
Standing space _____	15 net
Un concentrated (tables and chairs)	

Bowling centers, allow 5 persons for each lane including 15 feet of runway, and for additional areas	_____	7 net
Business areas	_____	150 gross
Concentrated business use areas	_____	See Section 1004.8
Courtrooms—other than fixed seating areas	_____	40 net
Day care	_____	35 net
Dormitories	_____	50 gross
Educational Classroom area	_____	25 net
Shops and other vocational room areas	_____	50 net\
Exercise rooms	-----	50 gross
Group H-5 fabrication and manufacturing areas	_____	200 gross
Industrial areas	_____	100 gross
Institutional areas	_____	240 gross
Inpatient treatment areas	_____	100 gross
Outpatient areas sleeping areas	_____	120 gross
Kitchens, commercial	_____	200 gross
Library	_____	50 net
Reading rooms Stack area	_____	100 gross
Locker rooms	_____	50 gross
Mall buildings—covered and open	_____	See Section 402.8.2
Mercantile	_____	60 gross
Storage, stock, shipping areas	_____	300 gross
Parking garages	_____	200 gross
Residential	_____	200 gross
Skating rinks, swimming pools	_____	50 gross
Rink and pool Decks	_____	15 gross

Stages and platforms \_\_\_\_\_ 15 net

Warehouses \_\_\_\_\_ 500 gross

For SI: 1 foot = 304.8 mm, 1 square foot = 0.0929 m<sup>2</sup>.

a. Floor area in square feet per occupant.

**1007.1.1 Two exits or exit access doorways.** Where two exits, exit access doorways, exit access stairways or ramps, or any combination thereof including the exit access, are required from any portion of the exit access, they shall be placed a distance apart equal to not less than one-half of the length of the maximum overall diagonal dimension of the building or area to be served measured in a straight line between them. Interlocking or scissor stairways shall be counted as one exit stairway.

**Exceptions:**

1. Where interior exit stairways or ramps are interconnected by a 1-hour fire- resistance rated corridor conforming to the requirements of Section 1020, the required exit separation shall be measured along the shortest direct line of travel within the corridor.
2. Where a building is equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2, the separation distance shall be not less than one-third of the length of the maximum overall diagonal dimension of the area served.

**1007.1.2 Three or more exits or exit access doorways.** Where access to three or more exits is required, not less than two exit or exit access doorways including the exit access shall be arranged in accordance with the provisions of Section 1007.1.1. Additional required exit or exit access doorways shall be arranged a reasonable distance apart so that if one becomes blocked, the others will be available.

**1010.1.7 Thresholds.** Thresholds at doorways shall not exceed 3/4 inch (19.1 mm) in height above the finished floor or landing for sliding doors serving dwelling units or 1/2 inch (12.7 mm) above the finished floor or landing for other doors. Raised thresholds and floor level change greater than 1/4 inch (6.4 mm) at doorways shall be beveled with a slope not greater than one unit vertical in two units horizontal (50 percent slope).

**Exceptions:**

1. In occupancy Group R-2 or R-3, threshold heights for sliding and side hinged exterior doors shall be permitted to be up to 8 inches (203 mm) in height if all of the following apply:
  - 1.1. The door is not part of the required means of egress.
  - 1.2. The door is not part of an accessible route as required by Chapter 11.
  - 1.3. The door is not part of an accessible unit, Type A unit or Type B unit.
2. In Type B units, where Exception 5 to Section 1010.1.5 permits a 4-inch (102 mm) elevation change at the door, the threshold height on the exterior side of the door shall not exceed 43/4 inches (120 mm) in height above the exterior deck, patio or balcony for sliding doors or 41/2 inches (114 mm) above the exterior deck, patio or balcony for other doors.

**1010.1.9.4 Locks and latches.** Locks and latches shall be permitted to prevent operation of doors where any of the following exist:



1. Places of detention or restraint.
2. In buildings in occupancy Group A having an occupant load of 300 or less, Groups B, F, M, and S, in places of religious worship, and exterior decks allowed to have one exit where the exit access from the deck extends back into the building, the main door or doors are permitted to be equipped with key-operated locking devices from the egress side provided:
  - 2.1. The locking device is readily distinguishable as locked.
  - 2.2. A readily visible durable sign is posted on the egress side on or adjacent to the door stating: THIS DOOR TO REMAIN UNLOCKED WHEN THIS SPACE IS OCCUPIED. The sign shall be in letters 1 inch (25 mm) high on a contrasting background.
  - 2.3. The use of the key-operated locking device is revocable by the building official for due cause.
3. Where egress doors are used in pairs, approved automatic flush bolts shall be permitted to be used, provided that the door leaf having the automatic flush bolts does not have a doorknob or surface-mounted hardware.
4. Doors from individual dwelling or sleeping units of Group R occupancies having an occupant load of 10 or less are permitted to be equipped with a night latch, dead bolt, or security chain, provided such devices are openable from the inside without the use of a key or tool.
5. Fire doors after the minimum elevated temperature has disabled the unlatching mechanism in accordance with listed fire door test procedures.
6. Doors serving roofs not intended to be occupied shall be permitted to be locked preventing entry to the building from the roof.

**1011.5.2 Riser height and tread depth.** Stair riser heights shall be 7 inches (178 mm) maximum and 4 inches (102 mm) minimum. The riser height shall be measured vertically between the nosing of adjacent treads. Rectangular tread depths shall be 11 inches (279 mm) minimum measured horizontally between the vertical planes of the foremost projection of adjacent treads and at a right angle to the tread's nosing. Winder treads shall have a minimum tread depth of 11 inches (279 mm) between the vertical planes of the foremost projection of adjacent treads at the intersections with the walk line and a minimum tread depth of 10 inches (254 mm) within the clear width of the stair.

**Exceptions:**

1. Spiral stairways in accordance with Section 1011.10.
2. Stairways connecting stepped aisles to cross aisles or concourses shall be permitted to use the riser/tread dimension in Section 1029.14.2.

3. In Group R-3 occupancies, within dwelling units in Group R-2 occupancies, and in Group U occupancies that are accessory to a Group R-3 occupancy or accessory to individual dwelling units in Group R-2 occupancies, the maximum riser height shall be 8 inches (203 mm), the minimum tread depth shall be 10 inches (254 mm); the minimum winder tread depth at the walk line shall be 10 inches (254 mm), and the minimum winder tread depth shall be 6 inches (152 mm). A nosing projection not less than 3/4 inch (19.1 mm) but not more than 1 1/4 inches (32 mm) shall be provided on stairways with solid risers where the tread depth is less than 11 inches (279 mm).

4. See Section 503.1 of the *International Existing Building Code* for the replacement of existing stairways.

5. In Group I-3 facilities, stairways providing access to guard towers, observation stations, and control rooms, not more than 250 square feet (23 m<sup>2</sup>) in area, shall be permitted to have a maximum riser height of 8 inches (203 mm) and a minimum tread depth of 9 inches (229 mm).

**1015.4 Opening limitations.** Required guards shall not have openings that allow passage of a sphere 5 inches (127 mm) in diameter from the walking surface to the required guard height.

**Exceptions:**

1. The triangular openings at the open sides of a stair, formed by the riser, tread, and bottom rail shall not allow passage of a sphere 6 inches (152 mm) in diameter.

2. At elevated walking surfaces for access to and use of electrical, mechanical, or plumbing systems or equipment, guards shall not have openings that allow passage of a sphere 21 inches (533 mm) in diameter.

3. In areas that are not open to the public within occupancies in Group B, I-3, F, H, M, or S, and for alternating tread devices and ships ladders, guards shall not have openings that allow passage of a sphere 21 inches (533 mm) in diameter.

4. In assembly seating areas, guards required at the end of aisles in accordance with Section 1029.17.4 shall not have openings that allow passage of a sphere 5 inches (127 mm) in diameter up to a height of 26 inches (660 mm). From a height of 26 inches (660 mm) to 42 inches (1,067 mm) above the adjacent walking surfaces, guards shall not have openings that allow passage of a sphere 8 inches (203 mm) in diameter.

5. Within individual dwelling units and sleeping units in Group R-2 and R-3 occupancies, guards on the open sides of stairs shall not have openings that allow passage of a sphere 5 inches (127 mm) in diameter.

**1020.4 Dead ends.** Where more than one exit or exit access doorway is required, the exit access shall be arranged such that dead-end corridors do not exceed 20 feet (6,096 mm) in length.

**Exceptions:**

1. In in Group I-3, Condition 2, 3, or 4, occupancies, the dead end in a corridor shall not exceed 50 feet (15,240 mm).

2. In occupancies in Groups B, E, F, M, R-1, R-2, S, and U, where the building is equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1, the length of the dead-end corridors shall not exceed 50 feet (15,240 mm).

3. A dead-end corridor shall not be limited in length where the length of the dead-end corridor is less than 2.5 times the least width of the dead-end corridor.

**1023.8 Discharge identification.** An interior exit stairway and ramp shall not continue below its level of exit discharge unless an approved barrier or a directional exit sign is provided at the level of exit discharge to prevent persons from unintentionally continuing into levels below. Directional exit signs shall be provided as specified in Section 1013.

**1030.2 Minimum size.** Emergency escape and rescue openings shall have a minimum net clear opening of 5.0 square feet (0.46 m<sup>2</sup>).

**1030.3 Maximum height from floor.** Emergency escape and rescue openings shall have the bottom of the clear opening not greater than 48 inches (1,219 mm) measured from the floor.

**1030.4.2 Ladders or steps.** Window wells with a vertical depth of more than 48 inches (1,219 mm) shall be equipped with an approved permanently affixed ladder or steps. Ladders or rungs shall have an inside width of at least 12 inches (305 mm), shall project at least 3 inches (76 mm) from the wall, and shall be spaced not more than 18 inches (457 mm) on center (o.c.) vertically for the full height of the window well. The ladder or steps shall not encroach into the required dimensions of the window well by more than 6 inches (152 mm). The ladder or steps shall not be obstructed by the emergency escape and rescue opening. Ladders or steps required by this section are exempt from the stairway requirements of Section 1011.

**1104.4 Multistory buildings and facilities.** At least one accessible route shall connect each accessible story, mezzanine and occupied roofs in multilevel buildings and facilities.

**Exceptions:**

1. An accessible route from an accessible level is not required in facilities that are less than three stories in height or have less than 3,000 square feet (279 m<sup>2</sup>) per story. This exception shall not apply to:

1.1. Multiple tenant facilities of Group M occupancies containing five or more tenant spaces used for the sales or rental of goods and where at least one such tenant space is located on a floor level above or below the accessible levels;

1.2. Stories or mezzanines containing offices of health care providers (Group B or I);

1.3. Passenger transportation facilities and airports (Group A-3 or B); or

1.4. Government buildings.

2. Stories, mezzanines or occupied roofs that do not contain accessible elements or other spaces as determined by Section 1107 or 1108 are not required to be served by an accessible route from an accessible level.

3. In air traffic control towers, an accessible route is not required to serve the cab and the floor immediately below the cab.

4. Where a two-story building or facility has one story or mezzanine with an occupant load of five or fewer persons that does not contain public use space, that story or mezzanine shall not be required to be connected by an accessible route to the story above or below.

**1106.8 Signage.** Accessible parking spaces and access aisles are required to be identified by signs. Signs shall be located at the head of accessible parking stalls and access aisles. The bottom of the lowest signs shall be located at least 60 inches above the pavement. As referenced below, standard and van accessible parking space signs shall state, "RESERVED PARKING" and include the International Symbol of Accessibility; supplemental signage must additionally state, "STATE PERMIT OR LICENSE REQUIRED. \$100 MINIMUM FINE AND CLASS 2 MISDEMEANOR FOR VIOLATORS." A van accessible parking space must have additional signage stating, "VAN ACCESSIBLE." A van accessible access aisle must be provided with signage including the International Symbol of Accessibility which states, "WHEELCHAIR ACCESS AISLE. ABSOLUTELY NO PARKING."

**1106.9 Access aisles and markings.** Each access that is part of an accessible route shall extend the full length of the parking space it serves. The aisle must have diagonally striped markings spaced every 4 feet (1,219 mm). Boundaries of the access aisle must be marked. The end may be a squared or curved shape. Two parking spaces may share an access aisle. Access aisles shall be placed on a level surface with a slope not to exceed 1:48. Where an access aisle is located immediately adjacent to a sidewalk that provides the closest accessible route, the sidewalk must be provided with a curb ramp access to serve the access aisle.



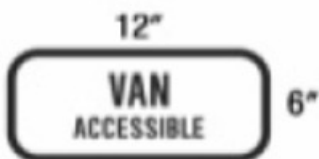
PRIMARY  
SIGN

**COLOR:** Legend and border are GREEN on a White background - White symbol on a Blue background.

**HEIGHT:** When placing a single sign with no supplementary plaques (i.e., access aisle sign or incorporated sign), bottom edge of sign must be a minimum of 5 ft. from ground. If supplementary plaques are used, bottom edge of lowest sign must be a minimum of 5 ft. from ground.

**SIZE:** Primary sign is 12" x 18". Van Accessible sign is 12" x 6". State Permit sign is 12" x 9".

Supplementary messages may be incorporated on the primary signs; this requires sign size of 12" x 31".



SUPPLEMENTARY  
PLAQUE  
(IF NEEDED)



SUPPLEMENTARY  
PLAQUE



ACCESS AISLE  
SIGN

**COLOR:** Legend and border are RED on a White background - White symbol on a Blue background.

**1107.6.2.2.1 Type A units.** In Group R-2 occupancies containing more than 20 dwelling units or sleeping units, at least 2 percent but not less than one of the units shall be a Type A unit. All Group R-2 units on a site shall be considered to determine the total number of units and the required number of Type A units. Type A units shall be dispersed among the various classes of units.

**Exceptions:**

1. The number of Type A units is permitted to be reduced in accordance with Section 1107.7.
2. Existing structures on a site shall not contribute to the total number of units on a site.
3. The following provisions of the 2009 ICC/ANSI A117.1-2009 referenced in Section 1003 Type A Dwelling are applicable.
  - 3.1 A work surface in the kitchen referenced in Section 1003.12.3 Clear Floor Space of ICC/ANSI A117.1-2009 is not required.
  - 3.2 The reduced work height of the kitchen sink at 34 inches referenced in Section 1003.12.4.2 ICC/ANSI A117.1-2009 is not required.
  - 3.3 Appliances referenced in Section 1003.12.5 Appliances ICC/ANSI A117.1-2009 and Laundry Equipment requires only the clear floor space referenced in Section 305 Clear Floor Space of ICC/ANSI A117.1-2009.

**1205.3.3 Court drainage.** The bottom of every court shall be properly graded and drained to a public sewer or other approved disposal system complying with the plumbing code.

**[E] 1301.1.1 Criteria.** Buildings shall be designed and constructed in accordance with the 2009 International Energy Conservation Code.

**[P] 1502.1 General.** Design and installation of roof drainage systems shall comply with Section 1502 of this code, shall be sized, and discharge in accordance with the Plumbing Code. Unless roofs are sloped to drain over roof edges, roof drains or scuppers shall be installed at each low point of the roof.

Roofs shall be sloped a minimum of 1 unit vertical in 48 units horizontal (2 percent slope) for drainage unless designed for water accumulation in accordance with Section 1611.2 Ponding instability. Roof drainage water from a building shall not be allowed to flow over public property.

**[P] 1502.2 Secondary (emergency overflow) drains or scuppers.** Where roof drains are required, secondary (emergency overflow) roof drains or scuppers shall be provided where the roof perimeter construction extends above the roof in such a manner that water will be entrapped if the primary drains allow buildup for any reason. The installation and sizing of secondary emergency overflow drains, leaders and conductors shall comply with the *Plumbing Code*.

**1601.1 Scope.** The provisions of this chapter shall govern the structural design of buildings, structures, and portions thereof regulated by this code. It shall not be the responsibility of the building official to determine engineering requirements of this code. Exclusive of conventional light-frame wood construction provisions referenced in Section 2308, the method to resist loads as referenced in this chapter is the responsibility of a structural engineer or other qualified design professional.

**1612.3 Establishment of flood hazard areas.** To establish flood hazard areas, the applicable governing authority shall adopt the Federal Emergency Management Agency flood hazard map and supporting data.

**1703.1 Approved agency.** An approved agency or the design professional of record shall provide all information as necessary for the building official to determine that the agency meets the applicable requirements specified in Sections 1703.1.1 through 1703.1.3.

**1704.2 Special inspections and tests.** Where application is made to the building official for construction as specified in Section 105, the owner or the owner's authorized agent, other than the contractor, shall employ one or more approved agencies to provide special inspections and tests during construction on the types of work specified in Section 1705 and identify the approved agencies to the building official. These special inspections and tests are in addition to the inspections by the building official that are identified in Section 110.

**Exceptions:**

1. Special inspections and tests are not required for construction of a minor nature or as warranted by conditions in the jurisdiction as approved by the building official.
2. Unless otherwise required by the building official, special inspections and tests are not required for Group U occupancies that are accessory to a residential occupancy including, but not limited to, those listed in Section 312.1.
3. Special inspections and tests are not required for portions of structures designed and constructed in accordance with the cold-formed steel light-frame construction provisions of Section 2211.1.2 or the conventional light-frame construction provisions of Section 2308.
4. The contractor is permitted to employ the approved agencies where the contractor is also the owner.
5. The frequency and amount of special inspections shall be as determined by the design professional of record. The continuous and periodic inspections referenced in Tables 1705.2.3, 1705.3, 1705.6, 1705.7, and 1705.8 are considered as guidelines.

**1705.3 Concrete construction.** Special inspections and tests of concrete construction shall be performed in accordance with this section and Table 1705.3.

**Exception:** Special inspections and tests shall not be required for:

1. Isolated spread concrete footings of buildings three stories or less above grade plane that are fully supported on earth or rock.
2. Continuous concrete footings supporting walls of buildings three stories or less above grade plane that are fully supported on earth or rock where:
  - 2.1. The footings and foundation walls support walls of light-frame construction.
  - 2.2. The footings are designed in accordance with Table 1809.7.
  - 2.3. The structural design of the footing is based on a specified compressive strength,  $f'_c$ , not more than 3,000 pounds per square inch (psi) (20.6 MPa), regardless of the compressive strength specified in the approved construction documents or used in the footing construction.
3. Nonstructural concrete slabs supported directly on the ground, including pre stressed slabs on grade, where the effective pre stress in the concrete is less than 150 psi (1.0 MPa).
4. Concrete foundation walls constructed in accordance with Table 1807.1.6.2.
5. Concrete patios, driveways, and sidewalks on grade.

**1804.8 Grading permits required.** No person shall excavate or grade without first obtaining permission in writing from the city engineer. If a building permit is not obtained, a written permission must be obtained from the city engineer for each site and may cover both excavations and fills.

**Exceptions:**

1. A separate grading permit is not required from the city engineer where a site plan for a new building, structure, or addition is submitted for plan review where an excavation below finished grade for basements, footings, and foundations of a building, retaining wall, or other structure is authorized by a valid building permit.
2. A fill of less than 1 foot in depth and placed on natural terrain with a slope flatter than one unit vertical to five units horizontal (20 percent slope), or less than 3 feet (914 mm) in depth not intended to support structures, which does not exceed 300 cubic yards (229 m<sup>3</sup>) on any one lot and does not obstruct a drainage course.
3. Excavation, removal, or stockpiling of rock, sand, dirt, clay, or other like material as may be required by the state, county, or city authorities in connection with the construction or



maintenance of roads and highways. This shall not exempt work for street construction when such work is performed by private developers. When the private developer has obtained a permit to perform site grading, a second permit will not be required for street grading.

4. When approved by the city engineer, grading in an isolated, self-contained area if there is no danger to public or private property.

5. Cemetery graves.

6. Refuse disposal sites controlled by other regulations.

7. Excavations for wells, tunnels, or utilities.

8. Mining, quarrying, excavating, processing, or stockpiling of rock, sand, gravel, aggregate, or clay where established and provided for by law, provided such operations do not affect the lateral support or increase the stresses in or pressure upon any adjacent or contiguous property.

9. Exploratory excavations under the direction of soils engineers or engineering geologists.

10. An excavation that (1) is less than 2 feet (610 mm) in depth; or (2) does not create a cut slope of less than 5 feet (1,524 mm) in height and steeper than 1 unit vertical in 1 1/2 units horizontal (66.7 percent slope). Exemptions from the permit requirements of this chapter shall not be deemed to grant authorization for any work to be done in any manner in violation of the provisions of this chapter or any other laws or ordinances of this jurisdiction.

**1804.8.1 Grading requirements.** Grading shall be performed in accordance with a grading plan approved by the city engineer. Submitted plans shall indicate existing elevations, proposed elevations, method of erosion control, and shall include the legal description.

**1806.2 Presumptive load-bearing values.** The load-bearing values used in design for supporting soils near the surface shall not exceed the values specified in Table 1806.2 unless data to substantiate the use of higher values are submitted and approved. Where the building official has reason to doubt the classification, strength, or compressibility of the soil, the requirements of Section 1803.5.2 shall be satisfied.

Presumptive load-bearing values shall apply to materials with similar physical characteristics and dispositions. Where a presumed soil-bearing capacity is in excess of 3,000 psf (471 kPa/m), data to substantiate the use of the presumed higher value must be submitted from a soils engineer for approval from the building official. Mud, organic silt, organic clays, peat, or unprepared fill shall not be assumed to have a presumptive load-bearing capacity unless data to substantiate the use of such a value are submitted.

**Exception:** A presumptive load-bearing capacity shall be permitted to be used where the building official deems the load-bearing capacity of mud, organic silt, or unprepared fill is adequate for the support of lightweight or temporary structures.

**1809.5 Frost protection.** Except where otherwise protected from frost, foundations and other permanent supports of buildings and structures shall be protected from frost by one or more of the following methods:

1. Extending below the frost line of the locality.
2. Constructing in accordance with ASCE 32.
3. Erecting on solid rock.

**Exception:** Free-standing buildings meeting all of the following conditions shall not be required to be protected:

1. Assigned to Risk Category I.
2. Area of 1,500 square feet (139 m<sup>2</sup>) or less for light frame construction or 400 square feet (37 m<sup>2</sup>) or less for other than light-frame construction.
3. Eave height of 10 feet (3,048 mm) or less.

Shallow foundations shall not bear on frozen soil unless such frozen condition is of a permanent character

**[P] 2901.1 Scope.** The provisions of this chapter and the *Plumbing Code* shall govern the design, construction, erection and installation of plumbing components, appliances, equipment and systems used in *buildings* and structures covered by this code. Toilet and bathing rooms shall be constructed in accordance with Section 1209. Private sewage disposal systems shall conform to the *Plumbing Code*. The *International Fire Code*, the *International Property Maintenance Code* and the *Plumbing Code* shall govern the use and maintenance of plumbing components, appliances, equipment and systems. The *International Existing Building Code* and the *Plumbing Code* shall govern the *alteration, repair, relocation, replacement and addition* of plumbing components, *appliances, equipment* and systems.

- d. The occupant load for seasonal outdoor seating and entertainment areas shall be included when determining the minimum number of facilities required.
- e. For business and mercantile classifications with an occupant load of 15 or fewer, a service sink shall not be required.

**2902.1.4 Substitution for water closets.** In a toilet room or bathroom, urinals shall not be substituted for more than 67 percent of the required water closets.

**2902.1.5 Drinking fountains.** Where water is served in restaurants or where bottled water is served in other occupancies, drinking fountains shall not be required. Drinking fountains shall not be installed in public restrooms.

**3109.1 General.** Swimming pools shall comply with the requirements of Sections 3109.2 through 3109.5 and other applicable sections of this code. These requirements shall be applicable to all new swimming pools hereafter constructed and shall apply to all existing pools that have a depth of 18 inches or more of water. No person in possession of land within the city, either as an owner, purchaser, lessee, tenant, or a licensee, upon which is situated a swimming pool having a depth of 18 inches or more, shall fail to provide and maintain such a fence or wall as herein provided.

**3109.2 Public swimming pools.** Public swimming pools shall be completely enclosed by a fence not less than 4 feet (1290 mm) in height or a screen enclosure. Openings in the fence shall not permit the passage of a 4-inch-diameter (102 mm) sphere. The fence or screen enclosure shall be equipped with self-closing and self-latching gates.

**3109.3 Residential swimming pools.** Residential swimming pools shall be completely enclosed by a barrier complying with Sections 3109.3.1 through 3109.3.3.

**3109.3.1 Barrier height and clearances.** The top of the barrier shall be not less than 42 inches (1,066 mm) above grade measured on the side of the barrier that faces away from the swimming pool. The vertical clearance between grade and the bottom of the barrier shall be not greater than 2 inches (51 mm) measured on the side of the barrier that faces away from the swimming pool. Where the top of the pool structure is above grade, the barrier is authorized to be at ground level or mounted on top of the pool structure, and the vertical clearance between the top of the pool structure and the bottom of the barrier shall be not greater than 4 inches (102 mm).

**3109.3.1.1 Openings.** Openings in the barrier shall not allow passage of a 4-inch-diameter sphere.

**3109.3.1.2 Solid barrier surfaces.** Solid barriers which do not have openings shall not contain indentations or protrusions except for normal construction tolerances and tooled masonry joints.

**3109.3.1.3 Gates.** Access doors or gates shall comply with the requirements of Sections 3109.3.1.1 through 3109.3.1.2 and shall be equipped to accommodate a locking device. Pedestrian access doors or gates shall be self-closing gates other than pedestrian access doors or gates shall have a self-latching device.

**3109.3.1.4 Pool structure as barrier.** Where an above-ground pool structure is used as a barrier or where the barrier is mounted on top of the pool structure, and the means of access is a ladder or steps, then the ladder or steps either shall be capable of being secured, locked or removed to prevent access, or the ladder or steps shall be surrounded by a barrier that meets the requirements of Sections 3109.4.1.1 through 3109.4.1.3. Where the ladder or steps are secured, locked or removed, any opening created shall not allow the passage of a 4-inch-diameter (102 mm) sphere.

**3109.3.2 Prohibited Locations.** Barriers shall be located so as to prohibit permanent structures, equipment or similar objects from being used to climb the barriers.

**3109.3.3 Modifications.** Modification in individual cases, upon a showing of good cause with respect to height, nature, or location of a fence, wall, gates, or latches, or the necessity thereof, may be made by the building official, provided the protection as sought hereunder is not reduced thereby. The building official may grant permission for other protective devices or structures to be used as long as the degree of protection afforded by this substitute device or structure is not less than the protection afforded by the wall, fence, gate, or latch described herein. A reasonable period within which to comply with the requirements of this section for existing swimming pools shall be allowed, which period shall not exceed 90 days after notification by the building official.

**3109.4 Entrapment avoidance.** Suction outlets shall be designed and installed in accordance with ANSI/APSP-7.

## **Section 3114 Prefabricated construction.**

### **3114.1 General.**

**3114.1.1 Purpose.** The purpose of this section is to regulate materials and establish methods of safe construction where any structure or portion thereof is wholly or partially prefabricated.

**3114.1.2 Scope.** Unless otherwise specifically stated in this section, all prefabricated construction and materials used therein shall conform to all the requirements of this code.

#### **3114.1.3 Definitions.**

*Prefabricated assembly* is a structural unit, the integral parts of which have been built or assembled prior to incorporation in the building. *Prefabricated structures* are structures, the parts of which are fabricated and assembled in a central assembly point, where on-site building, electrical, plumbing, and mechanical rough-in inspections occur at the assembly location.

**3114.2 Tests of materials.** Every approval of a material not specifically mentioned in this code shall incorporate as a proviso the kind and number of nationally recognized tests to be made.

**3114.3 Tests of assemblies.** The building official may require special tests to be made on assemblies to determine their durability and weather resistance.

**3114.4 Connections.** Every device used to connect prefabricated assemblies shall be designed as required by this code and shall be capable of developing the strength of the members connected, except in the case of members forming part of a structural frame as specified in Chapter 16. Connections shall be capable of withstanding uplift forces as specified in this code and in Chapter 16.

**3114.5 Pipes and conduits.** In structural design, due allowance shall be made for any material to be removed for the installation of pipes, conduit, and other equipment.

### **3114.6 Permits, materials, plans, fees, certificate, and inspections.**

**3114.6.1 Materials.** Materials and the assembly thereof shall be inspected to determine

compliance with this code. Every material shall be graded, marked, or labeled as required elsewhere in this code.

**3114.6.2 Plans.** One complete set of plans and specifications shall be submitted to the building inspection division of planning and building services for approval prior to issuing a building permit for a prefabricated structure. Plans shall be of sufficient detail and clarity to indicate compliance with all applicable codes (electrical, plumbing, building, mechanical, and zoning).

**3114.6.3 Permits and fees.** Permit fees shall be as follows to be by resolution.

1. Electrical, plumbing, and mechanical permits and fees shall conform to the respective State code and office.

**3114.6.4 Certificate.** A certificate of approval shall be furnished with every prefabricated assembly and prefabricated structure, except where the assembly is readily accessible to inspection at the site. The certificate of approval shall certify that the assembly in question has been inspected and meets all the requirements of this code. When mechanical equipment is installed so that it cannot be inspected at the site, the certificate of approval shall certify that such equipment complies with the laws applying thereto.

**3114.6.5 Certifying agency.** To be acceptable under this code, every certificate of approval shall be made by the approved agency.

**3114.6.6 Field erection.** The building official shall inspect placement of prefabricated assemblies at the building site to determine compliance with this code. Installation and finishing work at the building site must be performed by locally licensed contractors where required. Final inspections are to be made after the installation and finishing work has been completed and the building is ready for occupancy.

**3114.6.7 Continuous inspection.** If continuous inspection is required for certain materials where construction takes place on the site, it shall also be required where the same materials are used in prefabricated construction.

**Exception:** Continuous inspection will not be required during prefabrication if the approved agency certifies to the construction and furnishes evidence of compliance.

**3114.6.8 Moving permits.** A moving permit shall be obtained for each prefabricated structure being moved within the city in accordance with Section 3404 Moved Buildings. No person except a building mover licensed shall move a prefabricated structure or part thereof across, along, or over public property.

**3303.1 Construction documents.** No person shall demolish or wreck a building or structure without first obtaining a razing permit. Permit fees shall be paid in accordance with It. Construction documents and a schedule for demolition shall be submitted where required by the building official. Where such information is required, work shall not be done until such construction documents or schedule, or both, are approved. The applicant shall secure insurance covering any possible liability that could incur during demolition.

**3303.6 Utility connections.** Service utility connections shall be discontinued and capped in accordance with the approved rules and the requirements of the applicable governing authority. Before a razing permit can be issued, the applicant must furnish approval from the city engineering division that applicable permits have been secured to ensure that all utilities will be properly disconnected and inspected as per city engineer's specifications. The applicant shall be responsible for notifying other utilities of such anticipated demolition.

1st Reading: \_\_\_\_\_  
2nd Reading: \_\_\_\_\_  
Date Adopted: \_\_\_\_\_  
Date Published: \_\_\_\_\_  
Effective Date: \_\_\_\_\_

\_\_\_\_\_  
Greg Beaner, Mayor

Attest:

\_\_\_\_\_  
Anna N. Uhl, Finance Officer