# The Kentucky Building Code

### Ninth Edition 2007 Revised November 2011



### As Adopted by:

KENTUCKY BOARD OF HOUSING, BUILDINGS AND CONSTRUCTION

Department of Housing, Buildings and Construction Administered by Jerry Lunsford, Commissioner

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### **Kentucky Information on Code Enforcement**

The Kentucky Building Code, now in its 27<sup>th</sup> year, is essentially the 2006 International Building Code published by the International Code Council, Inc., with the specific Kentucky code. Amendments to the code will be published as a separate document. It provides minimum standards to ensure the public safety, health and welfare insofar as they are affected by building construction and to secure safety to life and property from all hazards incident to the occupancy of buildings, structures or premises. This edition presents the code with changes approved by the Kentucky Board of Housing, Buildings and Construction through August 2009.

The Kentucky Building Code may be amended from time to time by proposals from code enforcement officials, industry and design professionals, and other interested persons and organizations. Changes are discussed in an open meeting of the board. Changes approved are printed in the Kentucky Administrative Register and posted on the OHBC website.

The Kentucky Building Code is a "mini/maxi" code, meaning that it is a statewide uniform mandatory building code and no local government shall adopt or enforce any other building code; except that the Kentucky Residential Code shall govern detached single family dwellings, two-family dwellings and townhouses.

### ADOPTION INFORMATION

The Kentucky Building Code 2007 is a uniform statewide mandatory building code and applies to all buildings to be constructed, altered or remodeled with the exception of farm dwellings or farm buildings and manufactured houses. The following sample adoption ordinance addresses several key elements of a code adoption ordinance, including the information required for insertion into the code text.

## SAMPLE ORDINANCE FOR ADOPTION OF THE UNIFORM STATEWIDE MANDATORY BUILDING CODE (CITY/COUNTY) ORDINANCE

Ordinance Number
AN ORDINANCE RELATING TO THE ADOPTION OF THE UNIFORM STATEWIDE BUILDING CODE AS PROMULGATED IN 815 KAR 7:120 and 815 KAR 7:125 BY THE BOARD OF HOUSING, BUILDINGS AND CONSTRUCTION OF THE COMMONWEALTH OF KENTUCKY
Be it ordained by the (Governing Board) of the (Name of Jurisdiction) as follows:
WHEREAS, KRS 198B.060(1), requires that all buildings constructed in
WHEREAS, KRS 198B.060(1) authorizes any city, county or urban county government to require, by ordinance, permits, inspections and certificates of occupancy for single family dwellings; and
WHEREAS, KRS 198B.060(11) requires the local government to employ or contract for or with electrical inspection services; and
WHEREAS, KRS 198B.060(18) authorizes each local government to establish a schedule of fees which are designed to cover the cost of the service performed but not to exceed it;
Now, therefore, BE IT ORDAINED by the Fiscal County and/or legislative body of(City/County), COMMONWEALTH OF KENTUCKY:
SECTION 1. ADOPTION OF THE KENTUCKY BUILDING CODE.
THAT, the KENTUCKY BUILDING CODE, promulgated in 815 KAR 7:120 and the KENTUCKY RESIDENTIAL CODE promulgated in 815 KAR 7:125 by the Board of Housing, Buildings and Construction, Commonwealth of Kentucky, are hereby adopted in full as an Ordinance of(CitylCounty)of the Commonwealth of Kentucky as if set out at length herein;
THAT, a copy of said Kentucky Building Code is on file in the Office of the County Clerk, and the Clerk shall at all times keep a copy of said building code for reference:
THAT, an attested copy of this Ordinance shall be transmitted to the Office of Housing,

Buildings and Construction of the Commonwealth of Kentucky.

SECTION 2. DESIGNATED ENFORCEMENT OFFICER.
THAT, (Officer), shall be designated as the local enforcement agent/agency for said Kentucky Building Code. All building code inspections shall be performed by persons certified by the Kentucky Office of Housing, Buildings and Construction. All electrical inspections shall be performed by a state certified electrical inspector specifically approved by this jurisdiction.
SECTION 3. BUILDING INSPECTION PROGRAM.
THAT, pursuant to KRS 198B.060(8), a building inspection program is hereby established in(City-County) for application to all buildings. Local jurisdictions may adopt by ordinance detached single family dwellings as provided in the adopted codes.
SECTION 4. PERMITS AND FEES.
THAT, the fees for permits and inspections shall be as provided for in the attached schedule.
SECTION 5. INCONSISTENT ORDINANCES REPEALED.
THAT, all ordinances or parts of ordinances in conflict herewith are, to the extent of such conflict, hereby repealed.
SECTION 6. EFFECTIVE DATE.
THAT, this resolution shall take effect and be in full force when passed, published and recorded according to law.
COUNTY JUDGE/EXECUTIVE OR MAYOR
ATTEST:
CITY/COUNTY CLERK
DATE PASSED

### **ACKNOWLEDGEMENTS**

The Commonwealth of Kentucky gratefully acknowledges the contribution of time, expertise and diligent effort generously given by members of the Kentucky Board of Housing, Buildings and Construction in the continuing development of the *Kentucky Building Code*. Current Board members are as follows:

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# CHAPTER 1 ADMINISTRATION SECTION 101 GENERAL

- **101.1 Title.** These regulations shall be known as the *Kentucky Building Code*, hereinafter referred to as "this code." This edition of the Kentucky Building Code (KBC) is essentially the 2006 International Building Code (IBC) and shall be utilized in conjunction with the 2006 IBC except where specifically amended in these regulations.
- **101.2 Scope.** The provisions of the *Kentucky Building Code* shall apply to the construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, maintenance and removal of every building or structure or any appurtenances connected or attached to such buildings or structures, whether hereafter erected or, where expressly stated in this code, existing; and whether on land, over water, or on water, permanently moored to land, and substantially a land structure.

### **Exceptions:**

- Farm dwellings and other buildings. Farm
  dwellings and other buildings and structures
  located on farms which are incident to the
  operation of the farm and located outside the
  boundary of a municipality; but only if they are
  not used in the business of retail trade, as a
  regular place of work for 10 or more people or
  for the processing or storage of timber products
- Manufactured homes. Manufactured homes constructed under federal HUD standards. However, the exterior electric, water and sewer connections and additions to the home are not exempt.
- 3. Single-family dwellings. Detached single-family dwellings shall comply with Section 101.4.7, except that, permits, inspections and certificates of occupancy are required only as set forth in local ordinances.
- **4. Swimming pools.** Swimming Pools constructed completely above grade.
- 101.2.1 Special religious use group. Upon application by a religious group whose religious beliefs would be violated by the application of the Kentucky Building Code, Kentucky Residential Code, Kentucky Plumbing Code or any of the standards referenced therein, the Board of Housing, Building and Construction may place the affected building into the "Special Religious Use" group and waive any requirement of the Kentucky Building Code, the Kentucky Residential Code, the Kentucky Plumbing Code or any referenced standard. The Board of Housing, Buildings and Construction may place a project into the Special Religious Use Group only if it finds after a hearing that:

- 1. The religious group applying for the waiver exists for spiritual and religious purposes and was not formed solely to request this waiver;
- The religious group's belief system conflicts with a requirement of the Kentucky Building Code, Kentucky Residential Code, Kentucky Plumbing Code or referenced standard;
- 3. The religious group can demonstrate that the portion of its belief system which conflicts with the Kentucky Building Code, Kentucky Residential Code, Kentucky Plumbing Code, or referenced standard is historical and not created solely in response to the project for which the waiver is being requested:
- 4. The waiver is not being requested solely for economic, aesthetic or convenience reasons:
- 5. The waiver would not create a situation so unsafe that there is an overriding interest in protecting the health and safety of the general public; and
- The religious group has taken adequate steps to ensure the project will be brought up to code in the event the religious group no longer owns the building or otherwise no longer qualifies for the waiver.
- 101.3 Purpose. The purpose of this code is to establish the minimum and maximum requirements to safeguard the public health, safety and general welfare through structural strength, means of egress facilities, stability, sanitation, adequate light and ventilation, energy conservation, and safety to life and property from fire and other hazards attributed to the built environment. No local government shall adopt or enforce any other building code; except that the Kentucky Residential Code shall govern detached single family dwellings, two-family dwellings and townhouses. (change effective July 29, 2009)
- **101.4 Referenced codes.** The other codes listed in Sections 101.4.1 through 101.4.7 and referenced elsewhere in this code shall be considered part of the requirements of this code to the prescribed extent of each such reference.
  - 101.4.1 Electrical. In every instance in which the ICC Electrical Code is listed, it shall be replaced with NFPA 70, National Electrical Code. The provisions of NFPA 70 shall apply to the installation of electrical systems, including alterations, repairs, replacement, equipment, appliances, fixtures, fittings and appurtenances thereto. The inspection of electrical installations shall be performed by a Certified Electrical Inspector pursuant to 815 KAR 35:015.
  - **101.4.2 Gas.** The provisions of NFPA 54, *National Fuel Gas 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.

- **101.4.3 Mechanical.** The provisions of the *International Mechanical Code* shall apply to the installation, alterations, repairs, and replacement of mechanical systems, including equipment, appliances, fixtures, fittings and/or appurtenances, including ventilating, heating, cooling, airconditioning and refrigeration systems, incinerators, and other energy-related systems.
- **101.4.4 Plumbing.** The provisions of the *Kentucky State 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. All plumbing installations shall be installed under the supervision of a Kentucky Licensed Master Plumber, and inspected and approved by the state plumbing inspector prior to usage.
- **101.4.5 Fire protection.** The provisions of the *International Fire Code* shall apply to matters affecting or relating to new construction in buildings where specifically referenced in this code, only.
- **101.4.6 Energy.** The provisions of the *International Energy Conservation Code* as referenced in Chapter 13 of this code shall apply to all matters governing the design and construction of buildings for energy efficiency.
- 101.4.7 One- and two-family dwellings. Detached one- and two-family dwellings and multiple single-family dwellings (townhouses) not more than three stories high with separate means of egress and their accessory structures shall comply with the Kentucky Residential Code.
- **101.5** Fire safety authority. The State Fire Marshal and the local fire code official shall continue to be the authority having jurisdiction for enforcement of the *Kentucky Standards of Safety (Fire Prevention Code)* in existing buildings not regulated by this code, and for continued fire safety maintenance in buildings constructed and approved under this code.
- **101.6** Accepted engineering practice. In the absence of provisions not specifically contained in this code or final decisions of the appeals board, the specifications and standards listed in Chapter 35 shall be deemed to represent accepted engineering practice with respect to materials, equipment, system or method of construction as specified and shall be acceptable.

#### **SECTION 102**

#### **APPLICABILITY**

- **102.1 General.** Where, in any specific case, different sections of this code specify different materials, methods of construction or other requirements, the most restrictive shall govern. Where there is a conflict between a general requirement and a specific requirement, the specific requirement shall be applicable.
- **102.2 Other laws.** Other local or state law shall be consulted to determine the existence of other powers given to the code official, such as those related to demolition or authority over unsafe structures unless a change of occupancy as required by Chapter 34 is made or proposed. Otherwise, this code shall not be cited as authority for upgrading existing structures which are not under construction.
- **102.3 Application of references.** References to chapter or section numbers, or to provisions not specifically identified by number, shall be construed to refer to such chapter, section or provision of this code.
- **102.4 Referenced codes and standards.** The codes and standards referenced in this code shall be considered part of the requirements of this code to the prescribed extent of each such reference. Where differences occur between provisions of this code and referenced codes and standards, the provisions of this code shall apply; and newer editions of any standards may be used to meet the intent of the code in lieu of the adopted edition.
- **102.5 Partial invalidity.** In the event any part or provision of this code is held to be illegal or void, this shall not have the effect of making void or illegal any of the other parts or provisions.
- **102.6 Existing structures.** The legal occupancy of any structure existing on the date of adoption of this code shall be permitted to continue without change, except as is specifically covered in this code, the *Kentucky Fire Code*, or as is deemed necessary by the building official for the general safety and welfare of the occupants and the public. Application of this code to existing buildings shall apply as required by Section 3401 when alterations, additions or changes of occupancy as set forth in Chapter 34 of this code are proposed or occur.
  - **102.6.1 Moved structures.** Buildings and structures moved into or within the Commonwealth shall comply with the provisions of this code for new buildings and structures and shall not be used or occupied until the certificate of occupancy, if required, has been issued by the code official. This provision does not apply to manufactured homes.

### SECTION 103 DEPARTMENT OF BUILDING INSPECTION

**103.1 Creation of enforcement agency.** The department of building inspection is hereby created and the official in charge thereof shall be known as the building official.

- **103.2 Appointment.** The building official shall be appointed by the chief appointing authority of the jurisdiction and the official shall be certified as required by law.
- 103.3 Enforcement personnel. In accordance with the prescribed procedures of this jurisdiction and with the concurrence of the appointing authority, the building official shall have the authority to appoint trainees and other certified inspectors as necessary. Such employees shall have powers as allowed by law and delegated by the building official.
- 103.4 Certified inspectors. The local government shall provide at least one Kentucky Certified Building Inspector, Level I, pursuant to 815 KAR 7:070 and employ or contract with a certified electrical inspector in accordance with KRS 198B.060 (1) and (11). The local government shall report the name of all inspectors to the Office and the Office shall be notified of any changes in inspector personnel.
- **103.5 General authority.** The building official is hereby authorized and directed to enforce the provisions of this code. The building official shall have the authority to render interpretations of this code and to adopt policies and procedures in order to clarify the application of its provisions. Such interpretations, policies and procedures shall be in compliance with the intent and purpose of this code. Such policies and procedures shall not have the effect of waiving requirements specifically provided for in this code.
- **103.6 Applications and permits.** The building official shall receive applications; review construction documents and issue permits for the erection, alteration and moving of buildings and structures; inspect the premises for which such permits have been issued; and enforce compliance with the provisions of this code.
- **103.7 Notices and orders.** The building official shall issue all necessary notices or orders to ensure compliance with this code.
- 103.8 Inspections. The building official shall make all of the required inspections, or the building official shall have the authority to accept reports of inspection by approved agencies or individuals. Reports of such inspections shall be in writing and be certified by a responsible officer of such approved agency or by the responsible individual. The building official is authorized to engage such expert opinion as deemed necessary to report upon unusual technical issues that arise, subject to the approval of the appointing authority.
- **103.9 Identification.** The building official shall carry proper identification when inspecting structures or premises in the performance of duties under this code.
- **103.10 Right of entry.** Where it is necessary to make an inspection to enforce the provisions of this code, or where the building official has reasonable cause to believe that there exists in a structure or upon a premises a condition which is contrary to or in violation of this code which makes the structure or premises

- unsafe, dangerous or hazardous, the building official is authorized to enter the structure or premises at reasonable times to inspect or to perform the duties imposed by this code, provided that if such structure or premises be occupied that credentials be presented to the occupant and entry requested. If such structure or premises be unoccupied, the building official shall first make a reasonable effort to locate the owner or other person having charge or control of the structure or premises and request entry. If entry is refused, the building official shall have recourse to the remedies provided by law to secure entry.
- **103.11 Department records.** The building official shall keep official records of applications received, permits and certificates issued, fees collected, reports of inspections, and notices and orders issued. Such records shall be retained in the official records for the period required for retention of public records as promulgated by the Kentucky Department of Libraries and Archives pursuant to KRS 171.450.
- 103.12 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 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. Any suit 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 defended by legal representative 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.
- **103.13** Approved materials and equipment. Materials, equipment and devices approved by the building official shall be constructed and installed in accordance with such approval.
- **103.14 Used materials and equipment.** The use of used materials that meet the requirements of this code for new materials is permitted. Used equipment and devices shall not be reused unless approved by the building official.
- difficulties involved in carrying out the provisions of this code, the building official shall have the authority to grant modifications for individual cases, upon application of the owner or owner's representative, provided the building official shall first find that special individual reason makes the strict letter of this code impractical and the modification is in compliance with the intent and purpose of this code, and that such modification does not lessen health, accessibility, life and fire safety, or structural requirements. The details of

action granting modifications shall be recorded and entered in the files of the department of building safety.

- 103.16 Alternative materials, design and methods of construction and equipment. The provisions of this code are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by this code, provided that any such alternative has been approved. An alternative material, design or method of construction shall be approved where the building official finds that the proposed design is satisfactory and complies with the intent of the provisions of this code, and that the material, method or work offered is, for the purpose intended, at least the equivalent of that prescribed in this code in quality, strength, effectiveness, fire resistance, durability and safety.
- 103.17 Tests. Whenever there is insufficient evidence of compliance with the provisions of this code, or evidence that a material or method does not conform to the requirements of this code, or in order to substantiate claims for alternative materials or methods, the building official shall have the authority to require tests as evidence of compliance to be made at no expense to the jurisdiction. Test methods shall be as specified in this code or by other recognized test standards. In the absence of recognized and accepted test methods, the building official shall approve the testing procedures. Tests shall be performed by an approved agency. Reports of such tests shall be retained by the building official for the period required for retention of public records as promulgated by the Kentucky Department of Libraries and Archives pursuant to KRS 171.450.
- **103.18 Rule-making-authority.** By means of the board's appeals procedures, the board may issue interpretations which shall be binding upon the Appellee and the code official, and the code official shall implement the provisions of this code to secure its intent as determined by the board.
- **103.19 Nonstructural repairs.** Nonstructural alterations or repairs, which do not adversely affect a structural member having a required fire-resistance rating, may be made with the same materials of which the structure was constructed.
- **103.20 Building size includes fire wall.** To determine plan review jurisdiction and the necessity for design professionals, the calculation of the total square footage and occupant load for any project shall include areas on both sides of fire walls.

## SECTION 104 JURISDICTION FOR PLAN REVIEW AND INSPECTION

**104.1 Local jurisdiction.** The local code official, having minimum Kentucky Building Inspector Certification of Level I, shall be responsible for the examination and approval of plans and specifications and the inspections necessary to determine compliance for buildings as listed in this section. The determination of jurisdiction shall be based upon occupant load calculations in

accordance with Section 1004 of this code.

- **104.1.1 Assembly occupancies.** All buildings classified as assembly occupancies, except churches as indicated in Section 104.1.3, having a capacity which does not exceed 100 persons. (change effective 07/29/2009)
- **104.1.2 Business occupancies.** All buildings classified as business occupancies having a capacity that does not exceed 100 persons. except for ambulatory surgical centers regulated by 902 KAR 20:101 which shall be under the jurisdiction of the Department of Housing, Buildings and Construction. (change effective 07/29/2009)
- **104.1.3 Churches.** All church buildings having a capacity of 400 or less persons and all church buildings having 6,000 square feet (558 m<sup>2</sup>) or less of total floor area.
- **104.1.4 Factory or industrial occupancies.** All buildings classified as factory or industrial occupancies having a capacity that does not exceed 100 persons. (change effective 07/29/2009)
- **104.1.5 Mercantile occupancies.** All mercantile occupancies having a capacity that does not exceed 100 persons. (change effective 07/29/2009)
- **104.1.6 Residential, storage or utility occupancies.** All buildings classified as residential, storage or utility occupancies as long as the buildings do not exceed three stories in height or 20,000 square feet (1860 m²) or less of total floor area.
- **104.1.7 State buildings exempt.** Buildings owned by the Commonwealth shall not be subject to local plan review, inspection or approval, regardless of size, occupant load or occupancy classification.
- **104.2 State jurisdiction.** The Office shall have jurisdiction to review construction documents, issue permits, and make inspections to determine compliance with this code for the buildings listed in Sections 104.2.1 through 104.2.8 and all buildings except single-family dwellings where no local building inspection program exists as required by Section\_103.4 of this code.
  - **104.2.1 Assembly occupancies.** All buildings classified as assembly occupancies having a capacity in excess of 100 persons, except church buildings having a capacity of 400 or less persons and church buildings having 6,000 square feet (558 m²) or less of total floor area. (change effective 07/29/2009)
  - **104.2.2 Business occupancies.** All buildings classified as business occupancies having a capacity in excess of 100 personsand all ambulatory surgical centers regulated by 902 KAR 20:101. (change effective 07/29/2009)
  - **104.2.3 Educational, high-hazard or institutional occupancies.** All buildings classified as educational, high-hazard or institutional occupancies regardless

of occupant capacity or building size.

- **104.2.4 Factory or industrial occupancies.** All buildings classified as factory or industrial occupancies having a capacity in excess of 100 persons. (change effective 07/29/2009)
- **104.2.5 Industrialized building systems.** All buildings classified as industrialized building systems regardless of occupancy size or occupancy classification.
- **104.2.6 Mercantile occupancies.** All buildings classified as mercantile occupancies having a capacity in excess of 100 persons. (change effective 07/29/2009)
- **104.2.7 Other buildings.** All other buildings containing in excess of three stories or 20,000 square feet (1858 m<sup>2</sup>) of total floor area.
- **104.2.8 State-owned buildings.** All buildings owned by the Commonwealth regardless of occupancy classification or size.

### SECTION 105 PERMITS

- **105.1** Required. Any owner or authorized agent who intends to construct, enlarge, remodel or change the occupancy of a building, 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 done, shall first make application to the building official and obtain the required permit.
  - **105.1.1 Annual permit.** In lieu of an individual permit for each alteration to an already approved electrical, gas, mechanical or plumbing installation, the building official is authorized to issue an annual permit upon application therefore to any person, firm or corporation regularly employing one or more qualified trade persons in the building, structure or on the premises owned or operated by the applicant for the permit.
  - **105.1.2 Annual permit records.** The person to whom an annual permit is issued shall keep a detailed record of alterations made under such annual permits. The building official shall have access to such records at all times or such records shall be filed with the building official as designated.
- **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:**

 One-story detached accessory structures used as tool and storage sheds, playhouses and similar uses, provided the floor area does not exceed 120 square feet (11.15 m²).

- 2. Fences not over 6 feet (1829 mm) high.
- 3. Oil derricks.
- 4. Retaining walls which are not over 4 feet (1219 mm) in height measured from the bottom of the footing to the top of the wall, unless supporting a surcharge or impounding Class I, II or IIIA liquids.
- Water tanks supported directly upon grade if the capacity does not exceed 5,000 gallons (18 930 L) and the ratio of height to diameter or width does not exceed 2 to 1.
- 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.
- 7. Painting, papering, tiling, carpeting, cabinets, counter tops 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, as applicable in Section 101.2, which are installed entirely above ground.
- Shade cloth structures constructed for nursery or agricultural purposes and not including service systems.
- 11. Swings and other playground equipment accessory to detached one- and two-family dwellings.
- 12. Window awnings supported by an exterior wall which do not project more than 54 inches (1372 mm) from the exterior wall and do not require additional support of Group R-3 and Group U occupancies.
- 13. Nonfixed and movable fixtures, cases, racks, counters and partitions not over 5 feet 9 inches (1753 mm) in height.

#### Electrical:

- 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.
- 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 which does not alter its approval or make it unsafe.
- 6. Portable evaporative cooler.
- Self-contained refrigeration system containing 10 pounds (4.54 kg) or less of refrigerant and actuated by motors of 1 horsepower (746 W) or less.

**Plumbing:** The stopping of leaks in drains, water, soil, waste or vent. If any concealed trap, drainpipe, 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.

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.

**105.2.1 Emergency repairs.** Where equipment replacements and repairs must be performed in an emergency situation, the permit application shall be submitted within the next working business day to the building official.

105.2.2 Repairs. Application or notice to the building official is not required for ordinary repairs to structures, replacement of lamps or the connection of approved portable electrical equipment to approved permanently installed receptacles. Such repairs shall not include the cutting away of any wall, partition or portion thereof, the removal or cutting of any structural beam or load-bearing support, or the removal or change of any required means of egress, or emergency escape windows, or rearrangement of parts of a structure affecting the egress requirements; nor shall ordinary repair include addition to, alteration of, replacement or relocation of any standpipe, water supply, sewer, drainage, drain leader, gas, soil, waste, vent or similar piping, electric wiring or mechanical or other work affecting public health or general safety.

**105.2.3 Public service agencies.** A permit shall not be required for the installation, alteration or repair of generation, transmission, distribution or metering or other related equipment that is under the ownership and control of public service agencies by established right.

**105.3 Application for permit.** To obtain a permit, the applicant shall first file an application therefore in writing on a form furnished by the department of building inspection 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. New buildings or additions shall be accompanied by a copy of the current site survey bearing the seal and signature of a Kentucky Registered Land

Surveyor, except the code official may, at the official's discretion, accept other proof of location.

- 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 106.3.
- 5. Give such other data and information as required by the building official.

105.3.1 Action on application. The building official shall examine or cause to be examined applications for permits and amendments thereto within a reasonable time after filing. If the application or the construction documents do not conform to the requirements of pertinent laws, the building official shall reject such application in writing, stating the reasons therefore. If the building official is satisfied that the proposed work conforms to the requirements of this code and laws and ordinances applicable thereto, the building official shall issue a permit therefore as soon as practicable.

**105.3.2 Time limitation of application.** An application for a permit for any proposed work shall be deemed to have been abandoned 180 days after the date of filing, unless such application has been pursued in good faith or a permit has been issued; except that the building official is authorized to grant one or more extensions of time for additional periods not exceeding 90 days each. The extension shall be requested in writing and justifiable cause demonstrated.

105.4 Validity of permit. The issuance or granting of a permit shall not be construed to be a permit for, or an approval of, any violation of any of the provisions of this code or of any other ordinance of the jurisdiction. Permits presuming to give authority to violate or cancel the provisions of this code or other ordinances of the jurisdiction shall not be valid. The issuance of a permit based on construction documents and other data shall not prevent the building official from requiring the correction of efforts in the construction documents and other data. The building official is also authorized to prevent occupancy or use of a structure where in violation of this code or of any other ordinances of this

jurisdiction.

**105.5 Expiration.** Every permit issued shall become invalid unless the work on the site authorized by such permit is commenced within 180 days after its issuance, or if the work authorized on the site by such permit is suspended or abandoned for a period of 180 days after the time the work is commenced. The building official is authorized to grant, in writing, one or more extensions of time, for periods not more than 180 days each. The extension shall be requested in writing and justifiable cause demonstrated.

**105.6 Suspension or revocation.** The building official is authorized to suspend or revoke a permit issued under the provisions of this code wherever the permit is issued in error or on the basis of incorrect, inaccurate or incomplete information, or in violation of any ordinance or regulation or any of the provisions of this code.

**105.7 Placement of permit.** The building permit or copy shall be kept on the site of the work until the completion of the project.

**105.8 Local permit limitation.** Local permits shall not be issued for buildings subject to state plan review jurisdiction in accordance with Section 104.2 until the Office has approved construction to begin.

### SECTION 106 CONSTRUCTION DOCUMENTS

106.1 Submittal documents. One set of construction documents, statement of special inspections and other data shall be submitted with each application for a permit. Additional plans and documents may be required by the Kentucky Division of Plumbing or by local ordinance for buildings under local plan review jurisdiction. Construction documents involving the practice of professional architecture or engineering, as defined by KRS Chapters 322 and 323, shall be prepared by a Kentucky-licensed design professional and all construction documents required for a building permit application for the work shall bear the required signature and seals of the professionals as required by Section 122 of this chapter. Where special conditions exist, the building official is authorized to require additional construction documents to be prepared by a registered design professional.

#### **Exceptions:**

- Seals of design professionals shall not be required for tenant space alterations unless the space itself is of a size that would require the design professional seals if it were a new building.
- 2. 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 reviewing of

construction documents is not necessary to obtain compliance with this code.

106.1.1 Information on construction documents. Construction documents shall be dimensioned upon suitable material. Electronic media documents are permitted to be submitted when approved by the building official. Construction documents shall be of sufficient clarity to indicate the location, nature and extent of the work proposed and show in detail that it will conform to the provisions of this code and relevant laws, ordinances, rules and regulations, as determined by the building official.

106.1.1.1 Fire protection system shop drawings. Shop drawings for the fire protection system(s) shall be submitted to indicate conformance to this code and the construction documents and shall be approved prior to the start of system installation. Shop drawings shall contain all information as required by the referenced installation standards in Chapter 9.

106.1.2 Means of egress. The construction documents shall show in sufficient detail the location, construction, size and character of all portions of the means of egress in compliance with the provisions of this code. In other than occupancies in Groups R-2 and R-3 as applicable in Section 101.2 and I-1, the construction documents shall designate the number of occupants to be accommodated on every floor, and in all rooms and spaces.

106.1.3 Exterior wall envelope. Construction documents for all buildings shall describe the exterior wall envelope in sufficient detail to determine compliance with this code. The construction documents shall provide details of the exterior wall envelope as required, including flashing, intersections with dissimilar materials, corners, end details, control joints, intersections at roof, eaves, or parapets, means of drainage, water-resistive membrane, and details around openings.

The construction documents shall include manufacturer's installation instructions that provide supporting documentation that the proposed penetration and opening details described in the construction documents maintain the weather resistance of the exterior wall envelope. The supporting documentation shall fully describe the exterior wall system which was tested, where applicable, as well as the test procedure used.

106.2 Site plan. The construction documents submitted with the application for permit shall be accompanied by a site plan showing to scale the size and location of new construction and existing structures on the site, distances from lot lines, the established street grades and the proposed finished grades and, as applicable, flood hazard areas, floodways, and design flood elevations; and it shall be drawn in accordance with an accurate boundary line survey. In the case of

demolition, the site plan shall show the construction to be demolished, the location and size of existing structures, and any construction that is to remain on the site or plot. The building official is authorized to waive or modify the requirement for a site plan when the application for permit is for alteration or repair or when otherwise warranted.

**106.3 Examination of documents.** The building official shall examine or cause to be examined the accompanying construction documents and shall ascertain by such examinations whether the construction indicated and described is in accordance with the requirements of this code.

106.3.1 Approval of construction documents. Construction documents shall be approved, in writing or by stamp, as "Reviewed for Code Compliance" or "Released for Construction." The construction documents that have been approved or released for construction shall be kept at the site of work and shall be open to inspection by the building official or his or her authorized representative.

106.3.2 Previous approvals. This code shall not require changes in the construction documents, construction or designated occupancy of a structure for which a lawful permit has been heretofore issued or otherwise lawfully authorized, and the construction of which has been pursued in good faith within 180 days after the effective date of this code and has not been abandoned.

106.3.3 Phased approval. The building official is authorized to issue a permit for the construction of foundations or any other part of a building or structure before the construction documents for the whole building or structure have been submitted, provided that adequate information and detailed statements have been filed complying with pertinent requirements of this code. The holder of such permit for the foundation or other parts of a building or structure shall proceed at the holder's own risk with the building operation and without assurance that a permit for the entire structure will be granted.

### 106.3.4 Design professional in responsible charge.

106.3.4.1 General. When Section 106.1 requires that documents be prepared by a registered design professional, the building official shall be authorized to require the owner to engage and designate on the building permit application a registered design professional who shall act as the registered design professional in responsible charge. If the circumstances require, the owner shall designate a substitute registered design professional in responsible charge who shall perform the duties required of the official registered design professional in responsible charge. The building official shall be notified in writing by the owner if the registered design

professional in responsible charge is changed or is unable to continue to perform the duties.

The registered design professional in responsible charge shall be responsible for reviewing and coordinating submittal documents prepared by others, including phased and deferred submittal items for compatibility with the design of the building.

Where structural observation is required by Section 1709, the statement of special inspections shall name the individual or firms who are to perform structural observation and describe the stages of construction at which structural observation is to occur. See also duties specified in Section 1704.

**106.3.4.2 Deferred submittals.** For the purposes of this section, deferred submittals are defined as those portions of the design that are not submitted at the time of the application and that are to be submitted to the building official within a specified period.

Deferral of any submittal items shall have the prior approval of the building official. The registered design professional in responsible charge shall list the deferred submittals on the construction documents for review by the building official.

Submittal documents for deferred submittal items shall be submitted to the registered design professional in responsible charge who shall review them and forward them to the building official with a notation indicating that the deferred submittal documents have been reviewed and that they have been found to be in general compliance with the design of the building. The deferred submittal items shall not be installed until their design and submittal documents have been approved by the building official.

106.3.4.3 Seismic design professional responsible charge. When Sections 106.1 and 122.1 require construction documents to be prepared by a registered design professional, the design professional in responsible charge shall provide on or with the initial application documents presented to the building official having jurisdiction. the seismic design category, design loads and other information pertinent to the structural design required by Section 1603 and 1621. If the design professional determines that the building or any component part thereof is exempt from any of the seismic construction provisions of this code, a statement to that effect shall be included with the initial application documents presented to the building official having jurisdiction. (EFFECTIVE 02-01-2008)

**106.4 Amended construction documents.** Work shall be installed in accordance with the approved construction documents, and any changes made during

construction that are not in compliance with the approved construction documents shall be resubmitted for approval as an amended set of construction documents.

**106.5 Retention of construction documents.** The building official shall retain approved construction documents as required by the Kentucky Department of Libraries and Archives administrative regulations.

### SECTION 107 TEMPORARY STRUCTURES AND USES

- **107.1 General.** The building official is authorized to issue a permit for temporary structures and temporary uses. Such permits shall be limited as to time of service, but shall not be permitted for more than 180 days. The building official is authorized to grant extensions for demonstrated cause.
- **107.2 Conformance.** Temporary structures and uses shall conform to the structural strength, fire safety, means of egress, accessibility, light, ventilation and sanitary requirements of this code as necessary to ensure the public health, safety and general welfare.
- **107.3 Temporary power.** The building official with the agreement of the certified electrical inspector is authorized to give permission to supply and use power temporarily in part of an electric installation before such installation has been fully completed and the final certificate of completion has been issued. The part covered by the temporary certificate shall comply with the requirements specified for temporary lighting, heat or power in the *National Electrical Code*.
- **107.4 Termination of approval.** The building official is authorized to terminate such permit for a temporary structure or use and to order the temporary structure or use to be discontinued.

#### SECTION 108 FEES

- **108.1 Payment of fees.** A permit or letter of permission to begin construction shall not be valid until the applicable fees prescribed by local ordinance and Section 121 has been paid. Nor shall an amendment to a permit be released until the additional fee, if any, has been paid.
- 108.2 Work commencing before permit issuance. Any person who commences any work on a building, structure, electrical, gas, mechanical or plumbing system before obtaining the necessary permits may be subject to an additional fee established by the building official. The additional fee shall be in addition to and equal to the amount of the original fee but not less than \$500. (change effective 07/29/2009)
- **108.3 Related fees.** The payment of the fee for the construction, alteration, removal or demolition for work done in connection with or concurrently with the work authorized by a building permit shall not relieve the applicant or holder of the permit from the payment of other fees that are prescribed by law.

**108.4 Refunds.** The building official is authorized to establish a refund policy.

### SECTION 109 INSPECTIONS

- 109.1 General. Construction or work for which a permit is required shall be subject to inspection by the building official and such construction or work shall remain accessible and exposed for inspection purposes until approved. Approval as a result of an inspection shall not be construed to be an approval of a violation of the provisions of this code or of other ordinances of the jurisdiction. Inspections presuming to give authority to violate or cancel the provisions of this code or of other ordinances of the jurisdiction shall not be valid. It shall be the duty of the permit applicant to cause the work to remain accessible and exposed for inspection purposes. Neither the building official nor the jurisdiction shall be liable for expense entailed in the removal or replacement of any material required to allow inspection.
- **109.2 Preliminary inspection.** Before issuing a permit, the building official is authorized to examine, or cause to be examined, buildings, structures and sites for which an application has been filed.
- **109.3 Construction phases.** The building official is allowed to make periodic inspections in accordance with Sections 109.3.1 through 109.3.10.
  - **109.3.1 Footing or foundation inspection.** Footing and foundation inspections are appropriate after excavations for footings are complete and any required reinforcing steel is in place. For concrete foundations, any required forms shall be in place prior to inspection approval. Materials for the foundation shall be on the job.

**Exception:** Where concrete is ready mixed in accordance with ASTM C 94, the concrete need not be on the job.

- 109.3.2 Concrete slab or under-floor inspection. Concrete slab and under-floor inspections shall be made after in-slab or under-floor reinforcing steel and building service equipment, conduit, piping accessories and other ancillary equipment items are in place, but before any concrete is placed or floor sheathing installed, including the subfloor.
- **109.3.3 Lowest floor elevation.** In flood hazard areas, upon placement of the lowest floor, including the basement, and prior to further vertical construction, the elevation certification required in Section 1612.5 shall be submitted to the building official.
- **109.3.4 Frame inspection.** Framing inspections shall be made after the roof deck or sheathing, all framing, fire blocking and bracing are in place; pipes, chimneys and vents to be concealed are complete; and the rough electrical, plumbing, heating wires, pipes and ducts are approved.

**109.3.5 Lath or gypsum board inspection.** Lath and gypsum board inspections shall be made after lath and gypsum board, interior and exterior, is in place, but before any plastering is applied or before gypsum board joints and fasteners are taped and finished.

**Exception:** Gypsum board that is not part of a fire-resistance-rated assembly or a shear assembly.

- **109.3.6 Fire-resistant penetrations.** Protection of joints and penetrations in fire-resistance-rated assemblies shall not be concealed from view until inspected and approved.
- **109.3.7 Energy-efficiency inspections.** Inspections may be made to determine compliance with Chapter 13 for envelope insulation R and U value, fenestration U value, duct system R value, and HVAC and water heating equipment efficiency.
- **109.3.8 Other inspections.** In addition to the inspections specified above, the building official is authorized to make or require other inspections of any construction work to ascertain compliance with the provisions of this code and other laws that are enforced by the department of building safety.
- **109.3.9 Special inspections.** For special inspections, see Section 1704.
- **109.3.10 Final inspection.** The final inspection shall be made after all work required by the building permit is completed.
- **109.4 Inspection agencies.** The building official is authorized to accept reports of approved inspection agencies, provided such agencies satisfy the requirements for qualifications and reliability.
- **109.5** Inspection requests. It shall be the duty of the holder of the building permit or their duly authorized agent to notify the building official when work is ready for inspection at the various stages. It shall be the duty of the permit holder to provide access to and means for inspection of such work for the inspections.
- 109.6 Approval required. Work shall not be done beyond the point indicated in each successive inspection without the approval of the building official. The building official, upon notification, shall make the requested inspections and shall either indicate the portion of the construction that is satisfactory as completed, or shall notify the permit holder or an agent of the permit holder wherein the same fails to comply with this code. Any portions that do not comply shall be corrected and such portion shall not be covered or concealed until authorized by the building official.
- **109.7** Industrialized building system inspections. The inspection of all buildings classified as industrialized building systems, regardless of size or occupancy classification shall be in accordance with this section.
  - **109.7.1 Off-site construction:** In-plant inspections in production and manufacturing facilities for

industrialized building systems as well as on-site inspection for all industrialized building systems, except those classified as detached one- and two-family dwellings as indicated in Section 109.7.2, shall be conducted by the Office or its authorized agent. The local code official shall be responsible for inspection of these systems for zoning, water supply and sewage disposal, and other applicable local ordinance purposes.

- **109.7.2 On-site construction:** On-site construction related to modular homes or one- and two-family dwelling installations may be permitted and inspected by the local code official having jurisdiction. The local code official having jurisdiction shall be responsible for the inspection of foundation system, placement of the building, connections of the units, final set-up of the unit and the issuance of the certificate of occupancy.
- 109.8 Fire code official inspections. The code official shall cooperate with the fire code official by allowing the fire code official to inspect all buildings during construction. Recommendations made by the fire code official relating to fire safety in construction of a building shall be considered by the code official, and if a certificate of occupancy is issued contrary to the written recommendations, the code official shall give written notification of the decision to the fire code official at once.
- 109.9 Final inspections. Upon completion of the building, the owner or agent of the facility shall request a final inspection. The code official shall set a time for the inspection and notify the owner or agent. If substantial compliance with the approved construction documents and permit has been achieved, a certificate of occupancy shall be issued, as described in Section 110. If compliance has not been achieved, violations of the approved construction documents and permit shall be noted and immediately communicated to the owner, agency or other person holding the permit and the fire code official. It shall be the owner's responsibility and the responsibility of the person of company responsible for the construction work to fulfill any compliance deficiencies noted.

### SECTION 110 CERTIFICATE OF OCCUPANCY

- **110.1 Use and occupancy.** No building or structure shall be used or occupied, and no change in the existing occupancy classification of a building or structure or portion thereof shall be made until the building official has issued a certificate of occupancy therefore as provided herein. Issuance of a certificate of occupancy shall not be construed as an approval of a violation of the provisions of this code or of other ordinances of the jurisdiction.
- **110.2 Change in use.** Changes in the character or use of an existing structure shall not be made except as specified in Chapter 34.

- **110.3 Certificate issued.** After the building official inspects the building or structure and finds no 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. The name and address of the owner.
  - 4. A description of that portion of the structure for which the certificate is issued.
  - 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.
  - 6. The name of the building official.
  - 7. The edition of the code under which the permit was issued.
  - 8. The use and occupancy, in accordance with the provisions of Chapter 3.
  - 9. The type of construction as defined in Chapter 6.
  - 10. The design occupant load.
  - 11. If an automatic sprinkler system is provided, whether the sprinkler system is required.
  - 12. Any special stipulations and conditions of the building permit.
- **110.4 Temporary occupancy.** The building official is authorized to issue a temporary certificate of occupancy before the completion of the entire work covered by the permit, provided that such portion or portions shall be occupied safely. The building official shall set a time period during which the temporary certificate of occupancy is valid.

### SECTION 111 SERVICE UTILITIES

- **111.1 Connection of service utilities.** No person shall make connections from a utility, source of energy, fuel or power to any building or system that is regulated by this code for which a permit is required, until released by the applicable licensed and certified persons listed in Section 111.4.
- **111.2 Temporary connection.** The authority to authorize the temporary connection of the building or system to the utility source of energy, fuel or power shall be by the applicable licensed and certified persons listed in Section 111.4.
- 111.3 Authority to disconnect service utilities. The building official shall have the authority to authorize disconnection of utility service to the building, structure or system regulated by this code and the codes referenced in case of emergency where necessary to eliminate an immediate hazard to life or property. The

building official shall notify the serving utility, and wherever possible the owner and occupant of the building, structure or service system of the decision to disconnect prior to taking such action. If not notified prior to disconnecting, the owner or occupant of the building, structure or service system shall be notified in writing, as soon as practical thereafter.

**111.4 Enforcement by local government.** The electrical system shall be inspected and approved by a certified electrical inspector pursuant to KRS 227.489 and 815 KAR 35:015. The plumbing system shall be inspected and approve pursuant to KRS Chapter 318 of the *Kentucky Revised Statutes* and the *Kentucky State Plumbing Code* as set out in Title 815, Chapter 20, Kentucky Administrative Regulations.

### SECTION 112 VIOLATIONS

- **112.1 Unlawful acts.** It shall be unlawful for any person, firm or corporation to erect, construct, alter, extend, repair, move, remove, or occupy any building, structure or equipment regulated by this code, or cause same to be done, in conflict with or in violation of any of the provisions of this code.
- 112.2 Notice of violation. The building official is authorized to serve a notice of violation or order on the person responsible for the erection, construction, alteration, extension, repair, moving, removal, or occupancy of a building or structure in violation of the provisions of this code, or in violation of a permit or certificate issued under the provisions of this code. Such order shall direct the discontinuance of the illegal action or condition and the abatement of the violation.
- 112.3 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 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.
- **112.4 Violation penalties.** Any person who violates a provision of this code or fails to comply with any of the requirements thereof or who erects, constructs, alters or repairs a building or structure in violation of the approved construction documents or directive of the building official, or of a permit or certificate issued under the provisions of this code, shall be subject to penalties provided by KRS 198B.990 and other applicable law.

### SECTION 113 STOP WORK ORDER

**113.1 Authority.** Whenever the building official finds any work regulated by this code being performed in a manner contrary to the provisions of this code or in a dangerous or unsafe manner, the building official is

authorized to issue a stop work order.

**113.2 Issuance.** The stop work order shall be in writing and shall be given to the owner of the property involved, or to the owner's agent, or to the person doing the work. Upon issuance of a stop work order, the cited work shall immediately cease according to the time limitation on the order. The stop work order shall state the reason for the order, and the conditions under which the cited work will be permitted to resume.

**113.3 Unlawful continuance.** Any person who shall continue any work after having been served with a stop work order, except such work as that person is directed to perform to remove a violation or unsafe condition, shall be subject to penalties as prescribed by law.

113.4 Limitation on changes. No inspector shall be authorized to require changes on-site which are contrary to the approved construction documents. If an inspector finds a code discrepancy in an on-site inspection, the inspector shall refer the matter to the official having construction document review responsibility who shall require corrections if the code so requires.

### SECTION 114 UNSAFE STRUCTURES AND EQUIPMENT

114.1 Discovery of unsafe conditions. If a building is under construction or alteration as regulated by this code, and during the construction any structure or equipment is or becomes unsafe, unsanitary or deficient because of inadequate means of egress facilities, inadequate light and ventilation, or which constitutes a fire hazard, or is otherwise dangerous to human life or the public welfare, or which involves illegal or improper occupancy or inadequate maintenance, it shall be deemed an unsafe condition. Unsafe structures shall be taken down and removed or made safe, as the building official deems necessary and as provided for in this section. A vacant structure that is not secured against entry shall be deemed unsafe.

**114.2 Record.** The building official shall cause a report to be filed on an unsafe condition. The report shall state the occupancy of the structure and the nature of the unsafe condition.

114.3 Notice. If an unsafe condition is found as described in Section 114.1, the building official shall serve on the owner, agent or person in control of the structure, a written notice that describes the condition deemed unsafe and that specifies the required repairs or improvements to be made to abate the unsafe condition, or that requires the unsafe structure to be demolished within a stipulated time. Such notice shall require the person thus notified to declare immediately to the building official acceptance or rejection of the terms of the order.

**114.4 Method of service.** Such notice shall be deemed properly served if a copy thereof is (a) delivered to the owner personally; (b) sent by certified or registered mail

addressed to the owner at the last known address with the return receipt requested; or (c) delivered in any other manner as prescribed by local law. If the certified or registered letter is returned showing that the letter was not delivered, a copy thereof shall be posted in a conspicuous place in or about the structure affected by such notice. Service of such notice in the foregoing manner upon the owner's agent or upon the person responsible for the structure shall constitute service of notice upon the owner.

**114.5 Restoration.** The structure or equipment determined to be unsafe by the building official is permitted to be restored to a safe condition. To the extent that repairs, alterations or additions are made or a change of occupancy occurs during the restoration of the structure, such repairs, alterations, additions or change of occupancy shall comply with the requirements of Section 105.2.2 and Chapter 34.

**114.6 Unsafe conditions in existing buildings.** In buildings or portions which are not under construction or under the jurisdiction of the building official, unsafe conditions shall be referred to the fire official for complaints regarding unsafe conditions.

## SECTION 115 CABINET FOR HEALTH AND FAMILY SERVICES (CHFS) REGULATED BUILDINGS

115.1 Hospitals, nursing homes and institutional (Groups I-1 & I-2) facilities. Hospitals, nursing homes and other institutional (Groups I-1 & I-2) facilities licensed by the Cabinet for Health and Family Services (CHFS) shall comply with the institutional group requirements specified in Chapter 4, including specific references to other sections of this code, and the applicable provisions of NFPA 101. (EFFECTIVE 02-01-2008)

**115.2 Day care centers.** Day care centers that comply with the provisions of NFPA 101 and as approved by the State Fire Marshal shall be deemed to satisfy the life safety requirements of this code.

**Exception:** Day care centers governed by Section 420 and other similar care facilities licensed by the Cabinet for Health and Family Services.

### SECTION 116 PROOF OF INSURANCE

**116.1 Compliance with law.** The issuance of a building permit shall be contingent upon presentation of proof to the effect that all contractors and subcontractors employed or that will be employed in the construction, alteration or repair under the permit are in compliance with the Kentucky law relating to worker's compensation and unemployment insurance.

**116.2 General applicability.** Compliance with this section shall be achieved by presenting certificates or other forms approved by law to the code official issuing the permit.

### SECTION 117 LOCAL BOARD OF APPEAL

- **117.1 Local appeals board.** Local appeals boards may be appointed to hear appeals from the decisions of the local code official in accordance with the provisions of Sections 117.1.1 through 117.5.
  - **117.1.1 Appointment.** The mayor or county judge executive of a local government which is enforcing the *Kentucky Building Code* may, upon approval of the local legislative body, appoint a local appeals board, consisting of at least five technically qualified persons with professional experience related to the building industry, three of which shall not be employees of the local government, to hear appeals from the decisions of the local code official regarding building code requirements.
  - 117.1.2 Cooperative agreements. Local governments which are enforcing the *Kentucky Building Code* may cooperate with each other and provide a local appeals board and shall adhere to the provisions of KRS Chapter 65 when entering into a cooperative agreement.
  - 117.1.3 Disqualification of member. Local code officials or employees of a local inspection department shall not sit on a local appeals board if the board is hearing an appeal to a decision rendered by the local department. A member of a local appeals board shall not hear an appeal in a case in which the member has a financial interest.
  - **117.1.4 Right to appeal.** Any party to a decision by the local code official may appeal that decision to the local appeals board. Upon receipt of an appeal from a qualified party, the local appeals board shall convene a hearing to consider the appeal within 15 days of receipt.
- **117.2 Notice of meeting.** All parties to the appeal shall be notified of the time and place of the hearing by letter sent by certified mail not later than 10 days prior to the date of the hearing.
- 117.3 Board decision. The local appeals board shall render a decision within five working days after the hearing. The board may uphold, amend or reverse the decision of the local code official, and there shall be no appeal from the decision of the local appeals board other than by appeal to the Board of Housing, Buildings and Construction.
- **117.4 Open hearing.** All hearings before the board shall be open to the public. The appellant, the appellant's representative, the code official and any all persons whose interests are affected shall be given an opportunity to be heard.
  - **117.4.1 Procedure.** The board shall adopt and make available to the public through the secretary procedures under which a hearing will be conducted. The procedures shall not require compliance with strict rules of evidence but shall mandate that only relevant information be received.

**117.5 Board decision.** The board shall modify or reverse the decision of the code official by a concurring vote of three members.

### SECTION 118 STATE BOARD OF APPEALS

- 118.1 General. All appeals from the decisions of code officials shall be conducted in accordance with the appeals provisions of KRS 198B.070. Where a local appeals board exists, a party must first appeal to the local board when aggrieved by a decision of the local code official. The board shall further hear appeals directly from a party aggrieved by the decision of an agent of the Office.
- **118.2** Appeal by fire code official. Decisions rendered by the code official with respect to enforcement of the *Kentucky Building Code* on any building may be appealed by the local fire code official of the jurisdiction if the fire code official is aggrieved by that decision.
- 118.3 Method of appeal. Application for appeal by a property owner may be made when it is claimed in writing 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 can be used, or that the code official has refused to grant a modification to the provisions of this code covering the manner of construction or material to be used in the erection, alteration or repair of a building or structure.
- 118.4 Application procedure. Appeals to the board shall be in writing and shall be addressed to the Executive Director of the Office of Housing, Buildings and Construction, 101 Sea Hero Road, Suite 100, Frankfort, Kentucky 40601-5405; Attention: Appeals Board. The appeal shall include citations of those provisions of the *Kentucky Building Code* which are at issue, an explanation of why the decision of the state code official or local code official relative to those provisions is being contested and a copy of the decision rendered by the local appeals board, if any.
- 118.5 Investigation of appeal. The executive director shall immediately notify the board or the five-member committee authorized by the board when an appeal is received. The executive director or a designated employee of the Office shall then investigate the evidence pertaining to the appeal and, based on the results of the investigation, make written recommendations to the board or committee on the disposition of the case in question, within 30 days.
- **118.6 Employee deferral.** Employees of the Office shall not investigate or make recommendations on an appeal to his or her decision, but shall defer in this case to employees who are not party to the decision which led to the appeal.
- **118.7 Investigative authority.** In conducting an investigation, the executive director or the designated representatives, acting for the Office, shall have the

authority to administer oaths and affirmations, issue subpoenas authorized by law, rule upon offers of proof and receive relevant evidence, take or cause depositions to be taken, regulate the course of any hearings they may schedule, and hold conferences for the settlement or simplification of the issue by consent of the parties.

118.8 Administrative hearing. Pursuant to KRS Chapter 13B, if the issue has not been settled by agreement of the parties within limitations set by Section 118.5, the Board shall schedule an administrative hearing on the matter. The cost of any appeal forwarded to the Office because there is no local appeals board shall be borne by the local government. The Office shall calculate the actual cost of processing the appeal and bill the local government at the conclusion of all proceedings.

**118.9 Judicial appeals.** Final orders of the Board are appealable to the Circuit Court in the county in which the property is located.

### SECTION 119 POSTING STRUCTURES

**119.1 Posting.** All signs required by this code to be posted shall be furnished by the owner and shall be of a permanent design. The signs shall not be removed or defaced and, if lost, removed or defaced, shall be immediately replaced.

### SECTION 120 EFFECTIVE DATES

**120.1 General.** The building official shall accept plans in compliance with the requirements of either the 2002 or 2007 edition of the *Kentucky Building Code*. Effective July 1, 2007, all plans shall be designed and submitted to conform to this code.

## SECTION 121 PLAN REVIEW AND INSPECTION FEES FOR THE OFFICE OF HOUSING, BUILDINGS AND CONSTRUCTION

**121.1 General.** A permit to begin work for new construction, alteration, removal or other building operations shall not be issued until the fees prescribed by law shall have been paid to the Office, if applicable, and to the local building department. If an amendment to a permit necessitates an additional fee because of an increase in the estimated cost of the work involved, the permit shall not be approved until the additional fee has been paid.

**121.2 Special fees.** Payment of fees for construction, alteration or removal, and for all work done in connection with or concurrently with the work contemplated by a building permit shall not relieve the applicant or holder of the permit from the payment of other fees that may be prescribed by law or ordinance

for water taps, sewer connections, electrical permits, erection of signs and display structures, marquees or other appurtenant structures, or fees of inspections or certificates of occupancy or other privileges or requirements established by law.

**121.3 State jurisdiction.** The fees for plan examination and inspection functions required by the Department of Housing, Buildings and Construction shall be as prescribed in Sections 121.3.1 through 121.3.17, as applicable.

**121.3.1 Fee schedule.** The fees shall be paid in accordance with Table 121.3.1.

121.3.1.1 Fast-track elective. For permit applicants seeking early site and foundation approval prior to full review of complete set of construction documents, the fee shall be that as calculated from Table 121.3.1 plus 50 percent of the full fee. The additional 50-percent fee shall not be less than \$400 and not more than \$3,000. The entire fee shall be paid at the time of the initial plan submission.

TABLE 121.3.1

DEPARTMENT OF HOUSING, BUILDINGS AND CONSTRUCTION FEE SCHEDULE (effective October 1, 2009)

Occupancy type	Cost per square foot
Assembly	14 cents
Business	13 cents
Day Care Centers	13 cents
Educational	13 cents
High Hazard	12 cents
Factory/Industrial	12 cents
Institutional	14 cents
Mercantile	13 cents
Residential	13 cents
Storage	11 cents
Utility and Miscellaneous	11 cents

**121.3.2 Submission of plans and fees.** All plans and specifications required to be submitted to the Office by this code shall be accompanied by the applicable fee as set forth herein, rounded to the nearest dollar.

**121.3.3 Method of payment.** All fees required herein shall be in check form payable to the Kentucky State Treasurer.

**121.3.4 Construction approval.** Approval for construction shall not be issued by the Office until all required fees have been paid.

**121.3.5 New construction.** Departmental plan review fees for new buildings shall be calculated by multiplying the total building area under construction by the cost per square foot of each occupancy type as listed in Table 121.3.1. Total square footage shall

be determined by the outside dimensions of the building. The minimum fee for review of plans under this section shall be \$250. The fee for buildings with multiple or mixed occupancies may be calculated using the cost per square foot multiplier of the predominant use. (effective date October 1, 2010)

**121.3.6** Additions to existing buildings. Plan review fees for additions to existing buildings, which shall not require the entire building to conform to the *Kentucky Building Code*, shall be calculated in accordance with Table 121.3.1 by the measurement of the square footage of the addition, as determined by the outside dimensions of the addition. Minimum fee for review of plans under this section shall be \$250.

**121.3.7 Change in use.** Plan review fees for existing buildings in which the group or occupancy type is changed shall be calculated in accordance with Table 121.3.1 by using the total square footage of the entire building or structure under the new occupancy type as determined by the outside dimensions. Minimum fee for review of plans under this section shall be \$250. (effective date Oct. 1, 2010)

121.3.8 Alterations and repairs. Plan review fees for alterations and repairs not otherwise covered by this fee schedule shall be calculated by multiplying the cost for the alterations or repairs by 0.0025; or calculated by multiplying the total area being altered or repaired by the cost per square foot of each occupancy type as listed in Table 121.3.1, whichever is less. The total square footage shall be determined by the outside dimensions of the area being altered or repaired. The minimum fee for review of plans under this section shall be \$250. (effective date October 1, 2010)

**121.3.9 Specialized fees.** In addition to the above fees, the fees in Table 121.3.9 shall be applied for the specialized plan reviews listed.

# TABLE 121.3.9 AUTOMATIC SPRINKLER PLAN REVIEW FEE SCHEDULE (effective date May 7, 2010)

(011001110 uuto 111u) 1, 2010,			
Number Of Sprinklers	Fee		
004 - 025	\$150		
026 – 100	\$200		
101 - 200	\$250		
201 – 300	\$275		
301 – 400	\$325		
401 – 750	\$375		
OVER 750	\$375 plus 30 cents per sprinkler over 750		

**121.3.10 Fire detection system review fee.** Zero to 20,000 square feet shall be \$275 over 20,000 square feet shall be \$275 plus \$30 for each additional 10,000 square feet in excess of 20,000

square feet. (effective date October 1, 2010)

**121.3.11 Standpipe plan review fee.** \$275 (combination standpipe and riser plans shall be reviewed under the automatic sprinkler review fee schedule). (effective date October 1, 2010)

**121.3.12** Carbon dioxide suppression system review fee. One to 200 pounds of agent shall be \$275, over 200 pounds of agent shall be \$275 plus 5 cents per pound in excess of 200 pounds. (effective date October 1, 2010)

**121.3.13 Clean agent suppression system review fee.** Up to 35 pounds of agent shall be \$275; over 35 pounds shall be \$275 plus 10 cents per pound in excess of 35 pounds. The fee for gaseous systems shall be 10 cents per cubic foot and not less than \$200. (effective date October 1, 2010)

121.3.14 Foam suppression system review fee. \$0.50 per gallon of foam concentrates where the system is not part of an automatic sprinkler system. Foam suppression system plans that are submitted as part of an automatic sprinkler system shall be reviewed under the automatic sprinkler review fee schedule. The fee for review of plans under this section shall not be less than \$275 or more than \$1,500. (effective date October 10, 2010)

**121.3.15 Commercial range hood review fee.** \$225 per hood. Includes range hood and suppression system plans. (effective date Oct 1, 2010)

**121.3.15.1** Commercial range hood extinguishing system review fee. \$150 per system when the range hood extinguishing system is submitted separate from the range hood system.

**121.3.16** Dry chemical systems review fee (except range hoods). One to 30 pounds of agent shall be \$275: over 30 pounds of agent shall be \$275 plus 25 cents per pound in excess of 30 pounds. (effective date October 1, 2010)

**121.3.17** Spectator seating system review fee. Seating systems having 1 to 1,000 seats shall be \$275; over 1,000 seats shall be \$275 plus \$20 for each additional 200 seats in excess of 1,000 seats. The total number of seats in seating systems without dividing arms shall be calculated at 18 inches per seat as required by Section 1004.1.1 of this code.

Effective date October 1, 2010)

**121.4 Local jurisdiction.** Each local government shall adopt its own schedule of reasonable fees for building permits and the performance of functions under this code. The fees shall be designed to cover fully the cost of the service performed but shall not exceed the cost of the service performed.

**121.5 Accounting.** The code official shall keep an accurate account of all fees collected and such collected fees shall be deposited monthly in the jurisdiction treasury, or otherwise disposed of as required by law.

### SECTION 122 DESIGN PROFESSIONALS

**122.1 General.** All construction documents required by Section 106.1 are to be prepared by a design professional, and bear the required signature and seals as indicated in Table 122.1.

**Exception:** Seals of design professionals shall not be required for tenant space alterations unless the space itself is of a size that would require the seal if it were a new building.

**122.2 Special inspections.** Special inspections shall be made as required by and in accordance with Section 1704.

**122.2.1 Code assurances.** If construction on a building began prior to approval by the code official or the construction does not conform to the approved construction documents or the standards required by the code, the code official may require

special inspections and reports if necessary to ensure safety.

**122.2.2 Fees and costs.** Fees and costs related to the performance of special inspections by professional services shall be borne by the owner.

**122.3 Licensed HVAC contractors.** All work involving HVAC as defined and required by KRS Chapter 198B shall be provided by a licensed Journeyman HVAC Mechanic working under the supervision of a licensed Master HVAC Contractor. The code official may require proof of licensure when making inspections.

**122.4 Quality work.** All work shall be conducted, installed and completed in a workmanlike and acceptable manner so as to secure the results intended by this code.

### TABLE 122.1 DESIGN PROFESSIONAL SEALS

NOTE: Projects involving new structures, additions or renovations require design professional services when the building size or calculated occupant load exceeds the limits indicated by Table 122.1.

GROUP CLASSIFICATION OR SPECIAL USE	BUILDING SIZE <sup>e</sup> (square feet)	CALCULATED <sup>e</sup> OCCUPANT LOAD	ARCHITECT	ENGINEER	EITHER	NONE
Assembly	_	100 <sup>a</sup>	X	X		_
Business	10,000	100	Х	X	_	_
Educational	Any size	Any size	Х	Х	_	_
Factory & industrial	20,000	_	_	_	Х	_
High hazard	Any size	Any size	_	_	Х	_
Institutional	Any size	Any size	Х	Х	_	_
Mercantile	_	100	Х	Х	_	_
Residential	12 dwelling units <sup>9</sup>	50 <sup>g</sup>	Х	Х	_	_
Storage <sup>e</sup>	20,000	_	_	_	Х	_
Special Uses		•				
Church buildings f	6,000	400	Х	Х	_	_
Day care	3,500 <sup>b</sup>	100 <sup>b</sup>	Х	Х	_	_
Farm Structures	Any size	Any size	_	_	_	Х
Mixed uses	Note c	Note c	Х	Х	_	_
Smaller buildings	Note d	Note d	_	_	_	Х
Nonbuilding structures	_	_	_	_	_	Х

For SI: 1 square foot =  $0.093 \text{ m}^2$ .

- Assembly uses having 700 square feet to 1,500 square feet may actually have calculated occupant load exceeding 100 persons depending on the specific use of assembly areas.
- b. Net floor area occupied by clients is 35 square feet per client and calculated occupant load is actually client load.
- c. Buildings having two or more different uses require both architect and engineer when the combined calculated occupant loads exceed 100 persons unless the mixed uses are exclusively used for factory, high hazard or storage.
- d. Smaller buildings of any use having total area or calculated occupant load less than specified for that use do not require design professional services.
- e. Projects involving additions to existing buildings shall include existing building areas and/or calculated occupant loads when determining requirements for design professional services. Use the actual occupant load if it is greater than the calculated occupant load.
- f. No architect or engineer is required unless the church building size reaches 6,000 total square feet and a calculated occupant load of 400 persons.
- g. The number of dwelling units shall be the determining factor except where dormitories or boarding homes are concerned. In these cases, the occupant load shall be determined by area or actual occupant load.

### CHAPTER 2 DEFINITIONS

The following definitions are added or replaced definitions in Chapter 2 of the International Building Code:

**201.3 Terms defined in other codes.** Where terms are not defined in this code and are defined in the NFPA 54, National Fuel Gas Code, International Mechanical Code or Kentucky Plumbing Code, such terms shall have the meanings ascribed to them as in those codes. (effective date May 7, 2010)

### SECTION 202 DEFINITIONS

- AGRICULTURAL, BUILDING. A building or structure, other than one exempt from the code as a building or structure incident to the operation of a farm under Section 101.2, utilized to store farm implements, hay, feed, grain or other agricultural or horticultural products or to house poultry, livestock or other farm animals. Such structure shall not include habitable or occupiable spaces, spaces in which agricultural products are processed, treated or packages, nor shall an agricultural building be a place of occupancy by the general public.
- 2. **BOARD OF HOUSING OR BOARD.** The Kentucky Board of Housing, Buildings and Construction.
- 3. **BUILDING.** Any combination of materials, whether portable or fixed, which comprises a structure or non-mine underground area affording facilities or shelter for any human occupancy, whether infrequent or regular. The word "building" shall be construed wherever used herein as if followed by the words "or part or parts thereof, and all equipment therein," unless the context clearly requires a different meaning. "Building" shall also mean swimming pools constructed below grade on site, but not swimming pools assembled above grade on site. "Building" shall not mean a mobile home, manufactured home, farm dwelling or other farm buildings and structures incident to the operation and maintenance of the farm, if such farm structures are located outside the boundary of a municipality and are not used in the business of retail trade or used as a place of regular employment for ten (10) or more people or structures used in the storage or processing of timber products. For application of this code, each portion of a building which is completely separated from other portions by fire walls complying with Section 705 of this code shall be considered as a separate building.

- CODE OFFICIAL OR OFFICIAL. A building inspector certified by the Office in accordance with 815 KAR 7:070 and designated by the Office or by a local government as an enforcement official for the Kentucky Building Code pursuant to KRS Chapter 198B.
- 5. **EXECUTIVE DIRECTOR.** The Executive Director of the Office of Housing, Buildings and Construction.
- 6. **OFFICE.** The Office of Housing, Buildings and Construction.
- 7. **DEVELOPED SPACE.** Subterranean space that has been altered for the use of advanced industrial capability, technological sophistication, or economic productivity.
- 8. **FARM.** Property located outside the corporate limits of a municipality on at least 10 acres and having a bona fide agricultural or horticultural use as defined by KRS 132.010(9) and (10) and qualified by and registered with the property valuation administrator in that county.
- 9. **FIRE CODE OFFICIAL.** The State Fire Marshal, fire chief or other enforcement officer designated by the appointing authority of the jurisdiction for the enforcement of the provisions of KRS 227.300 and the Kentucky Standards of Safety (Fire Prevention Code) as set forth in Title 815, Chapter 10, of the Kentucky Administrative Regulations.
- 10. INDUSTRIALIZED BUILDING SYSTEM OR BUILDING SYSTEM. As defined in KRS 198B.010(18) and shall apply to buildings of any size or use, all or any component parts of which are of closed construction made from precast concrete panels or precut wood sections fabricated individual specifications in an off-site manufacturing facility assembled and in accordance with manufacturer's instructions.
- 11. KAR. Kentucky Administrative Regulation.
- 12. **KENTUCKY STANDARDS OF SAFETY.** The Kentucky Administrative Regulations established by the Executive Director of the Office of Housing, Buildings and Construction pursuant to KRS 227.300 to serve as the fire prevention code for existing buildings as well as a supplement to this code, where applicable.
- 13. KRS. Kentucky Revised Statutes.

- 14. **MANUFACTURED HOME.** A factory built structure on a permanent chassis designed to be used as a dwelling and which is regulated by the federal government and the State Fire Marshal. These homes are required to carry a "HUD" seal applied by the manufacturer.
- 15. MODULAR HOME. An industrialized building system which is designed to be used as a residence which is not a manufactured or mobile home.
- 16. **ORDINARY** REPAIR. Any nonstructural reconstruction or renewal of any part of an existing building for the purpose of its maintenance or decoration, and shall include, but not be limited to, the replacement or installation of nonstructural components of the building such as roofing, siding, windows, storm windows, insulation, drywall or lath and plaster, or any other replacement, in kind, that does not alter the structural integrity or alter the occupancy or use of the building, or affect, by rearrangement, exits and means of egress; but shall not include additions to, or alterations of, or relocation of any standpipe, water supply, sewer, drainage, gas, soil, waste, vent or similar piping, electric wiring or mechanical equipment including furnaces and hot water heaters or other work affecting public health and safety.
- 17. SINGLE-FAMILY DWELLING. A single unit providing complete independent living facilities for one or more persons including permanent provisions for living, sleeping, eating, cooking and sanitation, and which shall not be connected to any other unit or building.
- 18, **SPECTATOR SEATING.** A single section or sections of permanent, temporary or portable tiered or stepped seating facilities, such as bleachers, grand stands or folding and telescoping seating, having an aggregate capacity of more than fifty (50).
- 19. SUBTERRANEAN SPACE. A cavern resulting from the extraction of subsurface-located material from underground areas in a manner that the surface area of the property is not disturbed except in the vicinity of the entrances and ventilation openings.
- 20. UNDEVELOPED SPACE. Subterranean space that has been mined but has not been altered for the use of advanced industrial capability, technological sophistication, or economic productivity.

### CHAPTER 3 USE AND OCCUPANCY CLASSIFICATION

The following use and occupancy classifications are added or replaced in Chapter 3 of the International Building Code:

#### SECTION 303 ASSEMBLY GROUP A

- A-2 Assembly uses intended for food and/or drink consumption including, but not limited to:
  - Banquet halls
  - Dance halls
  - Night clubs
  - Restaurant
  - Taverns and bars
- A-3 Assembly uses intended for worship, recreation or amusement and other assembly uses not classified elsewhere in Group A, including, but not limited to:
  - Amusement arcades
  - Art galleries
  - Auction houses
  - Auditoriums
  - Bowling alleys
  - Churches including fellowship halls, religious education classrooms, recreation and family life centers
  - Community halls
  - Courtrooms
  - Dance halls not including food or drink consumption
  - Exhibition halls
  - Fitness clubs
  - Funeral parlors
  - · Gymnasiums without spectator seating
  - Gymnastic centers without spectator seating
  - Health clubs
  - Indoor swimming pools without spectator seating
  - Indoor tennis courts without spectator seating
  - Lecture halls
  - Libraries
  - Museums
  - Passenger Stations (waiting areas)
  - Places of religious worship, including fellowship halls, religious education classrooms, recreation and family life centers
  - Pool and billiard parlors

A-4 Assembly uses intended for viewing of indoor sporting events and activities with spectator seating, including, but not limited to:

- Arenas
- Gymnasiums
- Skating rinks
- Swimming pools
- Tennis courts

### SECTION 304 BUSINESS GROUP B

**304.1 Business Group B.** Business Group B occupancy includes, among others, the use of a building or structure, or a portion thereof, for office, professional or service-type transactions, including storage of records and accounts. Business occupancies shall include, but not be limited to, the following:

Airport traffic control towers

Ambulatory surgical centers regulated by 902 KAR 20:101

(Ambulatory surgical facilities as regulated by 902 KAR 20:101 shall comply with the provisions of this code and Chapter 20 of NFPA 101, as referenced in Chapter 35, whichever is more restrictive).

Animal hospitals, kennels and pounds

Banks

Barber and beauty shops

Car wash

Civic administration

Clinic – outpatient

Dry cleaning and laundries: pick-up and delivery

stations and self-service

Electronic data processing

Laboratories: testing and research

Motor vehicle showrooms

Post offices Print shops

Professional services (architects, attorneys,

dentists, physicians, engineers, etc.)

Radio and television stations

Telephone exchanges

### SECTION 305 EDUCATIONAL GROUP E

**305.1 Educational Group E.** Educational Group E occupancy includes the use of a building or structure, or a portion thereof, other than those occupied for business training or vocational training, by six or more persons at any one time for educational purposes including, among others, schools, academies, colleges and universities.

**Exception:** A room or space occupied for educational purposes by less than 50 persons, 5 years of age or more, and which is accessory to another group shall be classified as part of the main group.

**305.2 Day care.** Any licensed facility which is not classified as Group I-1 or I-2 and provides care for 13 or more children or other persons for less than 24 hours per day shall be classified as Group E. Licensed facility providing for care of less than 13 persons shall be inspected by the State Fire Marshal in accordance with NFPA 101.

**305.3 Business or vocational training.** Structures occupied for business training shall be classified in the same group as the business or vocation taught.

#### SECTION 307 HIGH-HAZARD GROUP H

### SECTION 307 HIGH-HAZARD GROUP H

[F] Table 307.1(1) Maximum Allowable Quantity per Control, Area of Hazardous Materials Posing a Physical Hazard

Table 307.1(1) in the 2006 International Building Code will remain as is with the exception of footnote "p" which will read as follows⊗effective date May 7, 2010

- p. The following shall not be included in determining the maximum allowable quantities:
  - Liquid or gaseous fuel in fuel tanks on vehicles.
  - 2. Liquid or gaseous fuel in fuel tanks on motorized equipment operated in accordance with this code.
  - Gaseous fuels in piping systems and fixed appliances regulated by the NFPA 54, National Fuel Gas Code.
  - 4, Liquid fuels in piping systems and fixed appliances regulated by the International Mechanical Code.

**307.1.2 Referenced codes.** The fire code official shall have exclusive jurisdiction for code enforcement of the storage, handling, processing and transportation of flammable and combustible liquids and other hazardous materials pursuant to 815 KAR 10:060 (Kentucky Standards of Safety); and fees for the installation and alteration of tanks and piping systems shall be paid in accordance with Section 307.1.2.

**307.1.3 Flammable, combustible liquids or gases and hazardous materials plan review fee:** \$100 per tank, plus \$50 for each additional tank and \$100 per piping system including valves, fill pipes, vents, leak detection, spill and overfill detection, cathodic protection or associated components.

### SECTION 308 INSTITUTIONAL GROUP I

**308.2 Group I-1.** This occupancy shall include a building or part thereof housing persons, on a 24-hour basis, who because of age, mental disability or other reasons, live in a supervised residential environment that provides personal care services. The occupants are capable of responding to an emergency situation without physical assistance from staff. This group shall include, but not be limited to, the following: residential board and care facilities, half-way houses, group homes, congregate care facilities, social rehabilitation facilities, alcohol and drug centers and convalescent facilities. A facility such as the above with five or fewer persons shall be classified as Group R-3.

**308.5 Group I-4, day care facilities. DELETE** section 308.5 in its entirety including subsections 308.5.1 and 308.5.2.

#### SECTION 310 RESIDENTIAL GROUP R

**310.1 Residential Group R**. Residential Group R includes, among others, the use of a building or structure, or portion thereof, for sleeping purposes when not classified as an Institutional Group I or not regulated by the International Residential Code in accordance with Section 101.2. Residential occupancies shall include the following:

**R-1** Residential occupancies containing sleeping units where the occupants are primarily transient in nature, including:

Boarding houses (transient) Hotels (transient) Motels (transient)

**R-2** Residential occupancies containing more than two dwelling units where the occupants are primarily permanent in nature, including:

Apartment houses
Assisted living facilities
Boarding houses (not transient)
Convents
Dormitories
Fraternities and sororities
Hotels (non transient)
Monasteries
Motels (nontransient)

Vacation time share properties

Congregate living facilities with 16 or fewer occupants are permitted to comply with the construction requirements for Group R-3.

**R-3** Residential occupancies where the occupants are primarily permanent in nature and not classified as Group R-1, R-2, R-4 or I, including:

Buildings that do not contain more than two dwelling units and exceed 3 stories in height.

Congregate living facilities with 16 or fewer persons.

**R-4** Residential occupancies shall include buildings arranged for occupancy as non-licensed Residential Care Facilities including more than five occupants, excluding staff. Group R-4 occupancies shall meet the requirements for construction as defined for Group R-3 except for the height and area limitations provided in Section 503. (EFFECTIVE 02-01-2008)

#### 310.2. Definitions.

**BED-AND-BREAKFAST ESTABLISHMENT.** A building occupied as a one-family dwelling unit, but which also has guestrooms or suites, which are used, rented or hired out to be occupied or which are occupied for sleeping purposes by persons not members of the single-family unit. The building shall be known as either a bed-and-breakfast inn or a bed-and-breakfast home.

RESIDENTIAL CARE FACILITIES. A building or part thereof housing persons on a 24-hour basis, who because of age, mental disability or other reasons, live in a supervised residential environment which provides personal care services. The occupants are capable of responding to an emergency situation without physical assistance from staff. This classification shall include, but not be limited to, the following: residential board and care facilities, halfway houses, group homes, congregate care facilities, social rehabilitation facilities, alcohol and drug abuse centers and convalescent facilities.

**BED-AND-BREAKFAST HOME.** A bed-and-breakfast establishment having five or less guestrooms or suites shall comply with the requirements of this code applicable to Use Group R-3 and with Section 421.1. (change effective 07/29/2009)

**BED-AND-BREAKFAST INN.** A bed-and-breakfast establishment having six or more guestrooms or suites shall comply with the requirements of this code applicable to Use Group R-1.

# CHAPTER 4 SPECIAL DETAILED REQUIREMENTS BASED ON USE AND OCCUPANCY

The following special detailed requirements based on use and occupancy are added or replaced in Chapter 4 of the International Building Code:

### SECTION 405 UNDERGROUND BUILDINGS

**405.1 General.** The provisions of this section apply to building spaces having a floor level used for human occupancy more than 30 feet (9144) below the lowest level of exit discharge.

#### Exceptions:

- 1. One-and two-family dwellings, sprinkled in accordance with Section 903.3.1.3.
- 2. Parking garages with automatic sprinkler systems in compliance with Section 405.3.
- 3. Fixed guideway transit systems.
- 4. Grandstands, bleachers, stadiums, arenas and similar facilities.
- 5. Where the lowest story is the only story that would qualify the building as an underground building and has an area not exceeding 1,500 square feet (139 m²) and has an occupant load less than 10.
- 6. Developed subterranean spaces in compliance with Section 423 of this code and NFPA 520.

### SECTION 407 GROUP 1-2

**407.1 General.** All occupancies in Group I-2 shall comply with the provisions of NFPA 101. In addition, the following sections of this code shall apply: Table 503 (Area Limitations Only), Sections 106.1.1.1, 410, 412.5, 506, 507, Chapter 6, 704, 705, 707.11, 707.12, 711, 712, 715, 717, 718, 805, 806, 1009.11, 1017.4, 1024.3, Chapter 11, 1209.2, Chapter 13, Chapter 14, 2406.3, and Chapters 16 through 34."

407.2 Deleted.

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SECTION 408 GROUP 1-3

408.1.1 Definitions.

**STATE JAILS.** Any Use Group I-3 facility under the direct supervision and operation of the Commonwealth of Kentucky. State jails shall comply with Sections 408.2 through 408.8 of this code.

**LOCAL JAILS.** Any Use Group I-3 facility under the supervision of a county, regional jail authority, city or urban county government. Local jails shall comply with the special requirements of Section 408.9 in addition to the requirements of Sections 408.2 through 408.8 of this code.

**408.1.1.1 Local jails terminology.** For the purpose of applying the special requirements of Section 408.9 for local jails the following definitions shall be applicable:

**INMATE LIVING AREA.** Those areas where inmates are normally confined and where their movement is restricted by penal doors, including cells, dayrooms, dormitories, detoxification cells, isolation cells and temporary holding cells.

**PENAL DOOR.** A door required by the Kentucky Jail Standards to enclose inmate living area or restrict inmate movement through other areas of a local jail.

**408.9 Local jails.** Local jails shall comply with the requirements of this section and where conflicts exist with other requirements of this code, this section shall take precedent. Local jails shall be further classified as one of the following:

**JAIL.** Jail means county jails and correctional or detention facilities, including correctional facilities defined in KRS 67B.020 which are operated under 501 KAR 3:010 by and under the supervision of any county, regional jail authority, city or urban county government.

**RESTRICTED CUSTODY CENTER.** Restricted custody center means a facility or

area separate from the jail used for the housing of sentenced inmates who have been approved for educational, work or program participation release and pretrial inmates who have been approved by the court for educational, work or program

participation release and operated under 501 KAR 7:010.

**LIFE SAFETY JAIL.** Life Safety Jail means county jails and correctional or detention facilities, including correctional facilities defined in KRS 67B.020 which are operated under 501 KAR 13:010 by and under the supervision of any county government which does not house state prisoners as defined by KRS 532.100.

**408.9.1 Emergency smoke control**/ **evacuation.** In all areas of Jails and Life Safety Jails where an inmate may be confined, shall be provided with an emergency smoke control/ evacuation system meeting the requirements of this section. The system shall be activated by smoke detectors and shall be connected to an emergency power supply. The system shall be engineered as an independent system or may be engineered to work in conjunction with the building HVAC system.

408.9.1.1. Design. All floors which house inmates shall be designed to have a minimum of two smoke compartments of approximately equal size and separated by a smoke barrier wall constructed in accordance with Section 709 of this code. The smoke control system shall be capable of maintaining a negative pressure in the contaminated smoke compartment. The smoke control system shall be capable of six- (6) air changes per hour. The plan review of the system; the operation of the system and the final operational test shall be subject to approval by the Department of Corrections.

408.9.2 Automatic sprinkler system. In all areas of Jails and Life Safety Jails where inmates will not be confined, including but not limited to corridors, storage areas, laundry rooms, mechanical rooms, closets and office areas shall be equipped with an automatic sprinkler system installed in accordance with Section 903.3.1.1. Facilities that are equipped with an automatic sprinkler system as required by this section and an emergency smoke control/evacuation system as required by Section 408.9.1 are entitled to all height or area increases; and other reductions of code requirements normally allowed for fully sprinkled buildings.

**408.9.3 Mixed use buildings.** Where a Jail or Life Safety Jail is attached to; located above or below another occupancy or is otherwise a part of a building not of the I-3 occupancy, the building shall comply with Section 508.3.3 or

Section 705.1 of this code. The Jail or Life Safety Jail shall be separated from all other occupancies with fire-resistant construction of not less than 2-hours.

**408.9.4 Doors and glazing.** The Department of corrections shall approve penal doors in Jails and Life Safety Jails. Glass-clad polycarbonate glazing shall be an acceptable alternate to wired glazing. All door openings that do not require a penal door and hardware shall be protected by opening protectives as required by other sections of this code.

**408.9.5 Restricted Custody Centers.** All restricted custody centers attached to or separate from a jail shall be considered as **Occupancy Condition 1** and shall have free egress or automatic time delayed emergency release doors with a maximum time delay of thirty- (30) seconds.

**408.9.5.1 Automatic sprinkler system.** All restricted custody centers attached to or separated from a jail shall be equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1.

**408.9.6 Existing facilities.** All existing Jails, Life Safety Jails and Restricted Custody Centers, which are in operation and have prior approval from the Department of Corrections shall be exempt from these requirements until such time the facilities are renovated.

### SECTION 412 AIRCRAFT-RELATED OCCUPANCIES

**412.5.5 Rooftop heliports and helistops.** Rooftop heliports and helistops shall comply with NFPA 418. Heliports and helistops may be erected on buildings or other locations if they are approved by the Federal Aviation Administration and are constructed in accordance with this chapter.

### SECTION 415 GROUPS H-1, H-2, H-3, H-4 AND H-5

**415.6.1 Combustible dusts, grain processing and storage.** The provisions of Sections 415.6.1.1 through 415.6.1.6 shall apply to buildings in which materials that produce combustible dusts are stored or handled. Buildings that store or handle combustible dusts shall comply with the applicable provisions of NFPA 61, NFPA 120, NFPA 484, NFPA 651, NFPA 654, NFPA 655, NFPA 664, NFPA 85, the Kentucky Standards of Safety and the International Fire Code. (EFFECTIVE 02-01-2008)

**415.6.2.3 Tanks.** Storage tanks shall be approved tanks conforming to the requirements of the Kentucky Standards of Safety.

**415.6.2.5 Leakage containment.** A liquid-tight containment area compatible with the stored liquid shall be provided. The method of spill control, drainage control and secondary containment shall be in accordance with the International Fire Code.

**Exception:** In rooms where only double-wall storage tanks are used to store Class 1, 2 and 3 liquids, flammable and combustible liquids shall not be required to have a leakage containment area.

415.6.3 Liquefied petroleum gas distribution facilities. The design and construction of propane, butane, propylene, butylene and other liquefied petroleum gas distribution facilities shall conform to the applicable provisions of Sections 415.6.3.1 through 415.6.3.5.2. The storage and handling of liquefied petroleum gas systems shall conform to the Kentucky Standards of Safety and NFPA 58 listed in Chapter 35. The design and installation of piping, equipment and systems that utilize liquefied petroleum gas shall be in accordance with the applicable provisions of NFPA 54 listed in Chapter 35. Liquefied petroleum gas distribution facilities shall be ventilated in accordance with the

International Mechanical Code and Section 415.6.3.1.

**415.8.2.8.1 General.** Electrical equipment and devices within the fabrication area shall comply with NFPA 70.

### Create the following Section:

### SECTION 421 DAY CARE CENTERS

**421.1 Scope.** The provisions of this section shall apply to buildings or structures or portions thereof, required to be licensed as a day care center, which are classified in Chapter 3 under Use Group E. Except as specifically modified by Sections 421.1 through 421.12, day care centers shall meet all applicable provisions of this code.

**Exception:** After school programs that are also licensed day care centers and are located in schools, shall not be made to comply with the requirements of this section where all clients of the day care and after school program are also students of that school.

**421.2 Location and construction.** Day care centers shall be limited to the location/construction types specified in Table 421.2.

TABLE 421.2 LOCATION/CONSTRUCTION TYPE LIMITATIONS

Location of day care	Sprinkled building	Construction type permitted
1 story below LED Story of exit discharge 1 story above LED 2 or 3 stories above LED >3 stories above LED but not high rise High Rise	Yes No Yes No Yes Yes	Any type other than 3B & 5B Any type Any type 1A, 1B Any type other than 3B, 4, & 5B 1A, 1B, 2A  1A, 1B

**421.2.1 Smoke barriers.** Where day care centers with clients 24 months or less in age or incapable of self-preservation are located one or more stories above the level of exit discharge or where day care centers are located two or more stories above the level of exit discharge, smoke barriers shall be provided to divide such stories into a minimum of two smoke compartments. The smoke barriers shall be constructed in accordance with section 709 but shall not be required to have a fire-resistance rating.

**421.3 Mixed use.** Where centers are located in a building containing another occupancy, the occupancy shall be completely separated from the day care center by fire barriers having a fire-resistance-rating not less than 1-hour.

#### **Exceptions:**

- In assembly occupancies used primarily for worship.
- 2. Centers in apartment buildings.
  - 2.1 If the two exit accesses from the center enter the same corridor as the apartment occupancy, the *exit accesses* shall be

- separated in the *corridor* by a smoke barrier having not less than a 1-hour fireresistance rating constructed in accordance with Section 709. The smoke barrier shall be so located that there is an *exit* on each side of it.
- 2.2 The door in the smoke barrier shall be not less than 36 inches (914 mm) wide.
- **421.3.1 Accessory uses.** Any heating equipment in spaces occupied by children shall be provided with partitions, screens, or other means to protect children under 6 years of age from hot surfaces and open flames.
- **421.4 Client load.** The client load established for any floor or floors shall be computed at a rate of 1 person for each 35 square feet (3.25 m<sup>2</sup>) of net floor area occupied by the persons being cared for who shall otherwise be referred to in this code as clients.
- **421.5 Egress:** Each floor occupied by clients shall have not less than two remote *exits*. A *mezzanine* shall be considered a floor for the purpose of this Section.

### **421.5.1 Length of travel (travel distance).** Travel distances shall be as follows:

- 1. The travel distance between any room door intended as *exit access* and an exit shall not exceed 100 feet (30480 mm).
- 2. The travel distance between any point in a room and an *exit* shall not exceed 150 feet (45720 mm).
- The travel distance between any point in a sleeping room and an exit access door of that room shall not exceed 50 feet (15240 mm).

**Exception:** The travel distance in Item Nos. 1 and 2 of this section may be increased by 50 feet (15240 mm) in buildings protected throughout by an approved, supervised *automatic sprinkler system*.

**421.5.2 Corridor width.** The minimum width of *exit access corridors* shall be 44 inches (1118 mm).

### **Exceptions:**

- 1. Thirty-six inches (914 mm) where serving an occupant load of 50 or less.
- 2. The width required for capacity as determined by Section 1005.1.

**421.5.3 Interior corridors.** All *corridors* shall be 1-hour fire-resistance rated. The *corridor* walls shall comply with Section 708.

### **Exceptions:**

- 1. This *corridor* protection shall not be required when all classrooms served by the *corridors* have at least one door directly to the outside or to an exterior balcony constructed in accordance with Section 1014.5.
- 2. As allowed by Section 1017.1.
- Toilet rooms need not be separated from the corridors, provided they are separated from all other spaces by fire partitions having not less than a 1-hour fire-resistance rating in accordance with Section 708.

### 421.5.4 Special features.

- Every closet door latch shall be such that children can open the door from inside the closet.
- 2. Every bathroom door lock shall be designed to permit opening of the locked door from the outside in an emergency.
- **421.6 Protection from hazards.** Cooking appliances and food preparation areas shall be protected in accordance with Sections 421.6.1 through 421.6.3.
  - **421.6.1 Commercial cooking appliance.** When a day care center has commercial cooking appliances such as ranges, deep fryers and/or a griddle, both of the following shall apply:
    - The kitchen or room in which the appliance(s) is located shall be enclosed by non-fire-resistance rated walls and ceiling designed to resist the passage of smoke. Pass-through openings and door openings shall be equipped with an assembly, which will screen possible flash fires from view.
    - 2. All cooking appliances shall be protected by a commercial exhaust system designed and installed in accordance with the mechanical code listed in Chapter 35.
    - **421.6.2 Domestic cooking appliance.** When a day care center has a domestic range with food preparation which does not produce grease-laden vapors, one of the following shall apply:
      - 1. The kitchen or room in which the appliance is located shall be enclosed by a 1 -hour fire *partition* constructed in accordance with Section 708. A range hood exhaust and suppression system is not required in this situation; or

- 2. The kitchen or room in which the appliance is located shall comply with Section 421.6.1, Item Nos. 1 and 2.
- **421.6.3 Non-grease-producing cooking applicances.** Day care centers using non-greasegenerating cooking appliances such as microwave ovens, wall ovens and crock pots, shall locate these appliances so as not to be accessible to the clients.
- **421.7 Interior finish.** All walls and ceilings shall have a Class I or Class II finish rating in accordance with ASTM E84 listed in Chapter 35.
  - **421.7.1 Floor finish.** All floor coverings within a *corridor* and *exit* shall be Class I or Class II in accordance with NFPA 253 listed in Chapter 35. (EFFECTIVE 02-01-2008)
- **421.8 Fire protective signaling system.** A manual fire alarm system shall be provided throughout the center.

### **Exceptions:**

- 1. Day care centers housed in one room.
- 2. Day care centers with a calculated client occupant load less than 50.
- **421.9 Automatic fire detection system.** Automatic smoke detection systems shall be provided throughout all the day care centers regulated by Section 421.1. The automatic smoke detectors shall be provided in the following locations:
  - On the ceiling in front of the doors to stairways;
  - 2. At no greater spacing than 30-feet (9144 mm) in the corridors of all floors containing the center; and
  - In all rooms within the center that are classified as a habitable space or an occupiable space in accordance with Section 202 of this code.

#### **Exceptions:**

- 1. Centers housed in one room.
- Hard-wired, single-station smoke detectors may be installed in day care centers with a calculated client occupant load of less than 50, provided the detectors can be heard throughout the center.
- **421.10** Engineers/architects law. Plans for the construction or redesign of centers having a client load calculated pursuant to Section 421.4 which exceeds 100 shall bear the seal and signature of a Kentucky licensed architect and engineer.

**421.11 Barrier-free design.** All new work shall comply with the applicable provisions of Chapter 11.

**Exception:** Church-operated day care centers.

### SECTION 422 BED AND BREAKFAST ESTABLISHMENTS

- **422.1 Bed-and-breakfast homes.** In addition to the requirements of Section 310.2, bed-and-breakfast homes shall comply with the following conditions:
  - 1. All hallways and *means of egress* serving guestrooms shall be permanently illuminated and emergency lighting shall be provided.
  - 2. The maximum overnight guest occupant load shall be 10 and it shall be posted.
  - 3. Interconnected smoke alarms shall be provided in accordance with Sections 907.2.10.1.2, 907.2.10.2 and 907.2.10.3.
  - 4. Each door between guest sleeping rooms and the main egress hallway or *corridor* shall be equipped with an approved self-closing device.
  - 5. There shall be two remote *exits* to the outside from the ground floor.
- **422.2 Bed-and-breakfast inns.** Bed-and-breakfast inns shall comply with Section 310.2.

### SECTION 423 SUBTERRANEAN SPACES

**423.1 General.** The provisions of this section shall apply to developed subterranean spaces of any occupancy except Group H for the use of advanced industrial capability, technological sophistication, or economic productivity.

#### Exception:

- 1. Tourist caverns.
- 2. Wine storage caverns.
- 3. Gas and oil storage reservoirs.
- 4. Hazardous waste repositories.
- 5. Utility installations such as pumping stations.
- 6. Working mines.
- 7. Transportation and pedestrian tunnels.
- 8. Aboveground buildings with belowground stories.
- Cut and cover underground buildings specifically addressed in Section 405.
- **423.2 Referenced standards.** Developed subterranean spaces shall comply with the requirements of this section and NFPA 520 as referenced in Chapter 35. Where NFPA 520 references other NFPA standards, those standards shall not be applicable unless specifically referenced in this code.

#### Create a new section as follows:

## SECTION 424 BARRELED SPIRIT STORAGE BUILDINGS (new section effective date May 7, 2010)

- **424.1 Scope.** Barreled spirit storage buildings shall comply with the Kentucky Building Code or shall comply with the provisions of this section. The provisions of this section shall apply to buildings and structures utilized solely for the purpose of storing barreled spirits after manufacture during the aging process. Except as specifically modified by Sections 424.1 through 424.15, barreled spirit storage buildings shall meet all applicable provisions of the Kentucky Building Code.
- **424.2 Type of construction.** Barreled spirit storage buildings shall be constructed of the following materials:
  - Non-sprinkled and sprinkled rack supported structures shall be constructed of any approved materials.
  - Pallet storage buildings shall be constructed of Type IIB construction. Pallet storage buildings shall be sprinkled in accordance with Section 903.1 of the Kentucky Building Code.
    - **424.2.1 Design professional.** The structural design shall bear the seal and signature of an engineer licensed in Kentucky.
    - **424.2.2 Earthquake loads.** Rack supported barreled spirit storage buildings shall be exempt from seismic design and Section 1613.1 of the Kentucky Building Code.
    - **424.3.1 Emergency alarms**. An audible alarm will be provided at the sprinkler valve house, which will be automatically activated in the event of water flow.
- **424.4 Building area.** Barreled spirit storage buildings shall not exceed the following areas:
  - 1. Non-sprinkled rack supported structures shall not exceed 20,000 square feet.
  - Rack supported structures protected throughout by an automatic fire suppression system shall not exceed 40,000 square feet.
  - 3. Pallet storage buildings protected throughout by an automatic fire suppression system shall not exceed 55.000 square feet.
- **424.5 Building height.** Barreled spirit storage buildings shall be a one story, not to exceed the following heights:

- Non-sprinkled rack supported structures shall not exceed 55'-0" in height.
- 2. Sprinkled rack supported structures shall not exceed 60'-0" in height.
- 3. Sprinkled pallet storage buildings shall not exceed 27'-0" in height.
- **424.6 Building location on property.** The following fire separation distances shall be maintained between the barreled spirit storage buildings and any other buildings on the property and to the opposite edge of a street, alley or other public way.
  - Non-sprinkled rack supported structures shall have a minimum separation distance of 200 feet
  - 2. Sprinkled pallet storage and sprinkled rack supported structures shall have a minimum separation distance of 100 feet.
    - **Exception:** The fire separation distance may be reduced to not less than 100 feet to an adjacent sprinkled barreled spirit storage warehouse when the exposed exterior wall of the non-sprinkled barreled spirit storage warehouse is protected by an exterior watercurtain.
- **424.7 Spill and runoff protection.** Earthen dykes and/or containment trenches shall surround each barreled spirit storage building to contain spills and any fire protection water run-off.
- **424.8 Mezzanines.** The number of mezzanine levels shall not exceed the following:
  - 1. Non-sprinkled rack supported structures shall not exceed five (5) mezzanine levels.
  - 2. Sprinkled rack supported structures shall not exceed six (6) mezzanine levels.
  - 3. Sprinkled pallet storage buildings shall not have mezzanine levels.
  - **424.8.1 Aggregate area of mezzanines.** Rack supported barreled spirit storage buildings shall be exempt from Section 505.2 of the Kentucky Building Code.
- **424.9 Portable fire extinguishers.** Pallet storage buildings shall have fire extinguishers installed at each exit door and on the forklifts used within the pallet storage building.
- **424.10 Means of egress.** Each rack supported barreled spirit storage buildings shall have means of egress as required by this section and Chapter 10 of the Kentucky Building Code.
  - **424.10.1 Number of exits.** The first story and all mezzanine levels shall be provided with a

minimum of two exits. Exits shall be located at each end of the building on each level and shall be enclosed or separated from the building interior by fire barriers having not less than a one hour fire resistance rating.

**424.10.2 Egress doors and hardware.** All egress doors shall swing in the direction of egress travel.

**424.10.3** Locks and latches. Section 1008.1.8.3 shall not apply for all barreled spirit storage buildings when documentation from the owner is filed with the permit application confirming compliance with Federal Alcohol and Tobacco Tax and Trade Bureau requirements for security locking on barreled spirit warehouses and documenting all padlocks required by the TTB are removed from all exterior doors while the building is occupied.

**424.10.4 Means of egress illumination.** The means of egress in rack supported barreled spirit storage buildings shall be illuminated by the buildings electrical system if the building is to be constantly energized or natural lighting if an electrical system is not provided. The illumination level shall not be less than one (1) foot candle at the walking surface. Pallet storage buildings shall comply with Section 1006 of this code.

**424.10.5 Exit signs.** Rack supported barreled spirit storage buildings shall not be required to have illuminated exit signs, only placards and shall be exempt from Section 1011.2 of the Kentucky Building Code. Directional exit signs shall point the way to the exit itself. Exit doors shall have signs with no arrows that simply read EXIT.

Pallet storage building exit signs shall comply with Section 1011.

**424.11 Travel distance.** The exit access travel distance shall not exceed the following:

- 1. Non-sprinkled rack supported buildings shall have an exit access travel distance not to exceed 150 feet.
- Sprinkled pallet storage and rack supported buildings shall have an exit access travel distance not to exceed 200 feet.

**424.12 Roof covering.** The roof covering of all barreled spirit storage buildings shall not consist of a tar based material and shall have a Class A rating.

**424.13 Automatic sprinkler system.** An automatic fire sprinkler system shall not be required for rack supported barreled spirit storage buildings when they comply with Section 424 of this code.

**424.14 Building ventilation and illumination.** Mechanical ventilation and artificial illumination shall not be required, but shall not be prohibited.

**424.14.1 Artificial illumination and ventilation.** Artificial illumination and ventilation inside the barreled spirit storage buildings shall be listed for Class I, Group D and Division II hazardous locations when located within the restricted proximity of barreled bourbon.

**424.15 Electrical wiring and equipment.** Electrical wiring and equipment within the building shall be listed for Class II, Group D and Division II hazardous locations throughout, with the exception of ordinary electrics which are attached to the underside of the room or are located in a penthouse above the roof line.

### CHAPTER 5 GENERAL BUILDING HEIGHTS AND AREAS

The following general building heights and areas are added or replaced in Chapter 5 of the International Building Code:

### SECTION 503 GENERAL HEIGHT AND AREA LIMITATIONS

**503.1.4 Day care centers.** Day care center location and construction type shall be further limited in accordance with Table 421.2 in addition to compliance with the height and area limitations of Table 503 for the building construction type."

### SECTION 506 AREA MODIFICATIONS

**506.2.2 Open space limits.** Such open space shall be either on the same lot or dedicated for public use and shall be accessed from a street or approved fire lane constructed in accordance with the *Specifications* of the International Fire Code.

### SECTION 507 UNLIMITED AREA BUILDINGS

**507.3 Sprinkled, one story.** The area of a one-story, Group B, F, M or S building or a one-story Group A-4 building, of other than Type V construction, shall not be limited when the building is provided with an automatic sprinkler system throughout in accordance with Section 903.3.1.1 and is surrounded and adjoined by public ways or yards not less than 60 feet (18288) in width. (EFFECTIVE 02-01-2008)

### **Exceptions:**

- Buildings and structures of Types I and II construction for rack storage facilities, which do not have access by the public, shall not be limited in height provided that such buildings conform to the requirements of Section 507.1 and NFPA 13. (EFFECTIVE 02-01-2008)
- 2. The automatic sprinkler system shall not be required over the spectator seating area or in areas occupied for indoor participant sports, such as tennis, skating, swimming and equestrian activities, in occupancies in Group A-4, provided that:
  - 2.1. Exit doors directly to the outside are provided for occupants of the participant sports areas;
  - 2.2 The building is equipped with a fire alarm system with manual fire alarm

- boxes installed in accordance with Section 907; and
- 2.3 All other areas of the building shall be protected with an automatic sprinkler system.
- 3. Group A-1 and A-2 occupancies of other than Type V construction shall be permitted, provided:
  - 3.1 All assembly occupancies are separated from other spaces as required for separated uses in Section 508.3.3.4 with no reduction allowed in the fire-resistance rating of the separation based upon the installation of an automatic sprinkler system;
  - 3.2 Each Group A occupancy shall not exceed the maximum allowable area permitted in Section 503.1; and
  - 3.3 All required exits shall discharge directly to the exterior. (EFFECTIVE 02-01-2008)

### SECTION 508 MIXED USE AND OCCUPANCY

**508.3.1.1 Occupancy classification.** Accessory occupancies shall be individually classified in accordance with Section 302.1. Code requirements shall apply to each portion of the building based on the occupancy classification of that accessory space.

### SECTION 509 SPECIAL PROVISIONS

509.9 Use Group R. In buildings of Type 2B, 3B or 5B construction with an occupancy of R, the first floor shall not be occupied for any other occupancy classification unless the R occupancy is separated from the other occupancies, whether along side or below the R occupancy, by a horizontal assembly and fire barrier constructed to afford a 1-hour fire resistance rating and the exits from the residential floors are separately enclosed in accordance with the requirements of Chapter 10. (EFFECTIVE 02-01-2008)

**Exception**: Buildings protected throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2 where allowed. (EFFECTIVE 02-01-2008)

## CHAPTER 7 FIRE-RESISTANCE-RATED CONSTRUCTION

The following fire-resistance-rated construction areas are added or replaced in Chapter 7 of the International Building Code:

#### **SECTION 703**

### FIRE-RESISTANCE RATINGS AND FIRE TESTS

**703.3** Alternative methods of determining fire resistance. The application of any of the alternative methods listed in this section shall be based on the fire exposure and acceptance criteria specified in ASTME 119. The required fire resistance of a building element shall be permitted to be established by any of the following methods or procedures:

- Fire-resistance designs documented in approved sources.
- 2. Prescriptive designs of fire-resistance-rated building elements as prescribed in Section 720.
- 3. Calculations in accordance with Section 721.
- Engineering analysis based on a comparison of building element designs having fire-resistance ratings as determined by the test procedures set forth in ASTME 119.
- Alternative protection methods as allowed by Section 103.16.

### SECTION 705 FIRE WALLS

**705.3 Materials.** Fire walls shall be constructed of approved masonry or concrete materials that provide the strength and fire-resistance rating as specified by this code.

### SECTION 717 CONCEALED SPACES

717.4.2 Groups R-1 and R-2: Draftstopping shall be provided in attics, mansards, overhangs or other concealed roof spaces of Group R-2 buildings with three or more dwelling units and in all Group R buildings. Draftstopping shall be installed above, and in line with, sleeping unit and dwelling unit separation walls that do not extend to the underside of the roof sheathing above.

### **Exceptions:**

 Where corridor walls provide a sleeping unit or dwelling unit separation, draftstopping

- shall only be required above one of the corridor walls.
- Draftstopping is not required in buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1.
- In occupancies in Group R-2 that do not exceed four stories in height, the attic space shall be subdivided by draftstops into areas not exceeding 3.000 square feet (279 m²) or above every two dwelling units, whichever is smaller.
- 4. Draftstopping in not required in buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.2, provided that automatic sprinklers are also installed in the combustible concealed spaces.
- 5. When tenant, guestroom and dwelling unit separation walls are constructed to the underside of a fire-resistance-rated floor/ceiling assembly or to a ceiling with a 60-minute finish rating, the attic draftstopping complying with Section 717.4.3 shall be deemed equivalent.

**717.5 Combustible materials in concealed spaces in Type I or II construction.** Combustible materials shall not be permitted in concealed spaces of buildings of type I or II construction.

### **Exceptions:**

- Combustible materials in accordance with Section 603.
- Combustible material exposed within plenums complying with Section 602 of the International Mechanical Code.
- 3. Class A interior finish materials classified in accordance with Section 803.
- 4. Combustible piping within partitions or shaft enclosures installed in accordance with the provisions of this code.
- 5. Combustible piping within concealed ceiling spaces installed in accordance with the International Mechanical Code and the Kentucky Plumbing Code.
- 6. Combustible insulation and covering on pipe and tubing, installed in concealed spaces other than plenums, complying with Section 719.7

## CHAPTER 9 FIRE PROTECTION SYSTEMS

The following fire protection system areas are added or replaced in Chapter 9 of the International Building Code:

### SECTION 901 GENERAL

**901.2 Fire protection systems.** Fire protection systems shall be installed, repaired, operated and maintained in accordance with this code and the Kentucky Standards of Safety. (EFFECTIVE 02-01-2008)

Any fire protection system for which an exception or reduction to the provisions of this code has been granted shall be considered to be a required system.

Exception: Any fire protection system or portion thereof not required by this code shall be permitted to be installed for partial or complete protection provided that such system meets the requirements of this code. (EFFECTIVE 02-01-2008)

**901.6.2 Fire alarm systems.** Fire alarm systems shall be monitored by an approved supervising station.

### **Exceptions:**

- 1. Single and multiple-station smoke alarms required by Section 907.2.10.
- 2. Smoke detectors in Group I-3 occupancies.
- Supervisory service is not required for automatic sprinkler systems in one- and two-family dwellings.
- 4. Day care centers with 100 or less clients.
- 5. Churches or other similar religious facilities.

**901.6.3 Group H.** Manual fire alarm, automatic fire extinguishing and emergency alarm systems in Group H occupancies shall be monitored by an approved supervising station.

### SECTION 902 DEFINITIONS

**902.1 Definitions**: The following words and terms shall, for the purpose of this chapter, and as used elsewhere in this code, have the meanings shown herein.

### [F] CONSTANTLY ATTENDED LOCATION. Delete this definition.

### SECTION 903 AUTOMATIC SPRINKLER SYSTEMS

- **903.1.1 Alternative protection.** Alternative automatic fire-extinguishing systems complying with 904 shall be permitted in lieu of automatic sprinkler protection where recognized by the applicable standard and approved by the building official.
  - **903.2.1.1 Group A-1.** An automatic sprinkler system shall be provided throughout a fire area containing a Group A-1 occupancy where one of the following conditions exists:
    - 1. The fire area exceeds 12,000 square feet (1115 m<sup>2</sup>).
    - 2. The fire area is located on a floor other than the level of exit discharge.
  - **903.2.1.2 Group A-2.** An automatic sprinkler system shall be provided throughout a fire area containing Group A-2 occupancy where one of the following conditions exists:
    - 1. The fire area exceeds 5,000 square feet (465 m<sup>2</sup>).
    - 2. The fire area has an occupant load of 300 or more.
    - 3. The fire area is located on a floor other than the level of exit discharge.
  - **903.2.1.3 Group A-3.** An automatic sprinkler system shall be provided throughout a fire area containing a Group A-3 occupancy where one of the following conditions exists:
    - The fire area exceeds 12,000 square feet.
    - 2. The fire area is located on a floor other than the level of exit discharge."

### Exception:

- Churches buildings and similar religious facilities / buildings utilized for worship or religious fellowship.
- 2. Areas used exclusively as participant sports areas where the main floor area is located at the same level as the level of exit discharge of the main entrance and exit. (EFFECTIVE 02-01-2008)
- **903.2.1.4 Group A-4.** An automatic sprinkler system shall be provided throughout a fire area

containing a Group A-4 occupancy where one of the following conditions exists:

- 1. The fire area exceeds 12,000 square feet (1115 m<sup>2</sup>).
- 2. The fire area is located on a floor other than the level of exit discharge.

**Exception:** Areas used exclusively as participant sports areas where the main floor area is located at the same level as the level of exit discharge of the main entrance and exit. (EFFECTIVE 02-01-2008)

**903.2.7 Group R.** An automatic sprinkler system installed in accordance with Section 903.3 shall be provided throughout all buildings with a Group R fire area.

**903.2.7.1 Group R-1.** An automatic sprinkler system shall be provided throughout buildings with a Group R-1 fire area.

### **Exceptions:**

- Where guestrooms are not more than three stories above the lowest level of exit discharge and each guestroom has at least one door leading directly to an exterior exit access that leads directly to approved exits.
- A residential sprinkler system installed in accordance with Section 903.3.1.2 shall be allowed in buildings, or portions thereof, of Group R-1.

**903.2.7.2 Group R-2 and R-3.** An automatic sprinkler system shall be provided throughout all buildings with a Group R-2 and R-3 fire area where more than two stories in height, including basements.

### **EXCEPTION:**

- A residential sprinkler system installed in accordance with Section 903.3.1.2 shall be allowed in buildings, or portions thereof, of Group R-2 and R-3.
- 2. Bed-and-breakfast homes as defined in Section 310.2 (change effective 07/29/2009)

**903.2.7.3 Group R-4.** An automatic sprinkler system shall be provided throughout all buildings with a Group R-4 fire area with more than eight occupants.

**Exception:** An automatic sprinkler system installed in accordance with 903.3.1.2 or

903.3.1.3 shall be allowed in Group R-4 facilities.

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 907.2 that will respond to visible or invisible particles of combustion. Sprinklers shall not be omitted from any room merely because it is damp, of fire-resistance-rated construction or contains electrical equipment.

- Any room where the application of water, or flame and water, constitutes a serious life or fire hazard.
- 2. Any room or space where sprinklers are considered undesirable because of the nature of the contents, when approved by the building official.
- 3. Generator and transformer rooms separated from the remainder of the building by walls and floor/ceiling assemblies having a fire-resistance rating of not less than 2 hours.
- 4. In rooms or areas that are of noncombustible construction with wholly noncombustible contents.
- 5. Spaces or areas in telecommunications buildings used exclusively for telecommunications equipment, associated electrical power distribution equipment. batteries and standby engines. provided those spaces or areas are throughout equipped with automatic fire alarm system and are separated from the remainder of the building by a wall with a fireresistance rating of not less than 1 hour and a floor/ceiling assembly with a fire resistance rating of not less than 2 hours.
- In elevator machine rooms fully enclosed with 2-hour fire-resistancerated construction and where signs are posted on the entry door and within the room to prohibit storage of any king.

903.3.5 Water supplies. Water supplies for automatic sprinkler systems shall comply with this section and the standards referenced in 903.3.1. The potable water supply shall be protected against backflow by two (one-way) check valves, one of which may be an alarm check valve, installed at the point where the

automatic sprinkler system piping is connected to the domestic water piping.

**903.4.1 Signals.** Alarm, supervisory and trouble signals shall be distinctly different and shall be automatically transmitted to an approved central station, remote supervising station or proprietary supervising station as defined in NFPA 72.

### **Exceptions:**

- 1. Underground key or hub valves in roadway boxes provided by the municipality or public utility are not required to be monitored.
- 2. Backflow prevention device test valves, located in limited area sprinkler system supply piping, shall be locked in the open position. In occupancies required to be equipped with a fire alarm system, the backflow preventer valves shall be electrically supervised by a tamper switch installed in accordance with NFPA 72 and separately annunciated.

# SECTION 904 ALTERNATIVE AUTOMATIC FIRE-EXTINGUISHING SYSTEMS

**904.3.1 Electrical wiring.** Electrical wiring shall be in accordance with the NFPA 70 National Electrical Code.

**904.12 Water mist systems.** Water mist fire-extinguishing systems shall be installed, maintained, periodically inspected and tested in accordance with NFPA 750 and their listing.

### SECTION 905 STANDPIPE SYSTEMS

**905.2 Installation standards.** Standpipe systems required by this code shall be installed in accordance with this section and NFPA 14 as referenced in Chapter 35 of this code.

905.2.1 Piping design. The riser piping, supply piping and the water service piping shall be hydraulically designed or pipe scheduled in accordance with NFPA 14 as referenced in Chapter 35 of this code. The system piping shall be sized to maintain the minimum residual pressure of 100 psi (6.9 bar) at the outlet of the hydraulically most remote 2 ½-inch (63.5-mm) hose connection and 65 psi (4.5 bar) at the outlet of the hydraulically most remote 1 ½-inch (38.1-mm) hose station.

**Exception:** The residual pressures of 100 psi (6.9 bar) and 65 psi (4.5 bar) are not required in buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 and where the highest floor level is not more than 150 feet (45720-mm) above the lowest level of fire department vehicle access.

**905.3.4 Stages.** Stages greater than 1,000 square feet in area (93 m<sup>2</sup>) and having a stage height greater than 50 feet shall be equipped with a Class III wet standpipe system with 1.5-inch and 2.5-inch (38 mm and 64 mm) hose connections on each side of the stage.

**Exception:** Where the building or area is equipped throughout with an automatic sprinkler system, the hose connections are allowed to be supplied from the automatic sprinkler system and shall have a flow rate of not less than that required by NFPA 14 for Class III standpipes.

### SECTION 907 FIRE ALARM AND DETECTION SYSTEMS

**907.2.3 Group E.** A manual fire alarm system shall be installed in Group E occupancies. When automatic sprinkler systems or smoke detectors are installed, such systems or detectors shall be connected to the building fire alarm system.

### **Exceptions:**

- 1. Group E occupancies with an occupant load of less than 50.
- 2. Manual fire alarm boxes are not required in Group E occupancies where all the following apply:
  - 2.1 Interior corridors are protected by smoke detectors with alarm verification.
  - 2.2 Auditoriums, cafeterias, gymnasiums and the like are protected by heat detectors or other approved detection devices.
  - 2.3 Shops and laboratories involving dusts or vapors are protected by heat detectors or other approved detection devices.
  - 2.4 Off-premises monitoring is provided.
  - 2.5 The capability to activate the evacuation signal from a central point is provided.
  - 2.6 In buildings where normally occupied spaces are provided with a two-way communication system between such

spaces and a constantly attended receiving station from where a general evacuation alarm can be sounded, except in locations specifically designated by the fire code official.

- Manual fire alarm boxes shall not be required in Group E occupancies where the building is equipped throughout with an approved automatic sprinkler system, the notification appliances will activate on sprinkler water flow and manual activation is provided from a normally occupies location.
- 4. Modular or portable educational buildings or clusters of such buildings in which the main building fire alarm is extended to the buildings or in which single-station smoke detectors are installed under the following conditions:
  - 4.1 Individual buildings or cluster of buildings with a total aggregate floor area of not more than 7200 square feet (672 m<sup>2</sup>).
  - 4.2 Each modular or portable building is separated from all other school buildings on the campus by a minimum horizontal distance of 10 feet (3048 mm).
  - 4.3 Smoke alarms are installed in each classroom and wired in series so as to sound an alarm in each classroom of the building or cluster of buildings. Spacing shall be 30 feet (9144mm) on center in corridors and 900 square feet (84m²) per detector in open spaces, or in accordance with the manufacturer specifications.

**907.2.6.2 Group I-2.** Corridors in nursing homes (both intermediate care and skilled nursing facilities), detoxification facilities and permitted to be open to the corridors by section 407.1 shall be equipped with an automatic fire detection system. Hospitals shall be equipped with smoke detection as required in section 407.1.

907.2.10.2 Power source. In new construction, required smoke alarms shall receive their primary power from the building wiring where such wiring is served from a commercial source and shall be equipped with a battery backup. Smoke alarms shall emit a signal when the batteries are low. Wiring shall be permanent and without a disconnecting switch other than as required for overcurrent protection.

### **Exception:**

- Smoke alarms are not required to be equipped with battery backup in Group R-1 where they are connected to an emergency electrical system.
- 2. Smoke alarms are permitted to be solely battery operated in existing buildings, buildings not served from a commercial power source and in existing areas where alterations or repairs regulated by 907.2.10.1.4 do not result in the removal of interior wall or ceiling finishes exposing the structure, unless there is an attic, crawl space or basement available which could provide access for building wiring without the removal of interior finishes.

907.2.10.3 Interconnection. Where more than one smoke alarm is required to be installed within an individual dwelling unit in Group R-2, R-3 or R-4, or within an individual guestroom or suite in Group R-1, the smoke alarms shall be interconnected in such a manner that the activation of one alarm will activate all of the alarms in the individual unit. The alarm shall be clearly audible in all bedrooms over background noise levels with all intervening doors closed.

### **Exceptions:**

- 1. Smoke alarms that are permitted to be solely battery operated in accordance with 907.2.10.2 are not required to be interconnected.
- 2. Smoke alarms in existing areas not required to are interconnected where alterations regulated repairs 907.2.10.1.4 do not result in the removal of interior wall or ceiling finishes exposing the structure, unless there is an attic, crawl space or basement available which could provide access for interconnection without the removal of interior finishes.

907.2.12.3 Fire department communication system. An approved two-way, fire department communication system designed and installed in accordance with NFPA 72 shall be provided for fire department use. It shall operate between a fire command center complying with 911 and elevators, elevator

machine rooms not located on the top of the floor of a building, elevator lobbies, emergency and standby power rooms, fire pump rooms, areas of refuge and inside enclosed exit stairways. The fire department communication device shall be provided at each floor level within the enclosed stairway.

**Exception:** Fire department radio systems where approved by the fire department.

907.3.5.1 Use Group I-3. In all occupancies in Group I-3, the manual fire alarm boxes shall be permitted to be locked in areas where staff is present whenever such areas are occupied and keys are readily available to unlock the boxes, or the boxes shall be located in a manned staff location which has direct supervision of the sleeping area.

907.5 Wiring. Wiring shall comply with the requirements of the National Electrical Code and NFPA Wireless protection systems utilizing radiofrequency transmitting devices shall comply with the special requirements for supervision of low-power wireless system in NFPA 72.

### **SECTION 909 SMOKE CONTROL SYSTEMS**

909.8 Exhaust method. When approved by the building official, mechanical smoke control for large enclosed volumes, such as in atriums or malls, shall be permitted to utilize the exhaust method. The design exhaust volumes shall be in accordance with this section.

909.8.1 Exhaust rate. The height of the lowest horizontal surface of the accumulating smoke layer maintained at least 10 feet (3048 mm) above any walking surface which forms a portion of a required egress system within the smoke zone. The required exhaust rate for the zone shall be the largest of the calculated plume mass flow rates for the possible plume configurations. Provisions shall be made for natural or mechanical supply of air from outside or adjacent smoke zones to make up for the air exhausted. Makeup airflow rates, when measured at the potential fire location, shall not exceed 200 feet per minute (60960 mm per minute) toward the fire. The temperature of the makeup air shall be such that it does not expose temperature-sensitive fire protection systems beyond their limits.

909.8.1.1 Exhaust rate alternative. Where the design exhaust rate of 909.8.1 would require excessive air changes per hour, the smoke control system shall be capable of exhausting not less than the following

quantities of air unless the engineered design complies with 909.8.1 and allows for a lesser air change rate, but in no case shall the rate be less than two air changes per hour:

- 1. For atriums and malls having a volume of not more than 600,000 cubic feet (16800 m<sup>3</sup>), including the volume of any levels not physically separated from the atrium or mall, not less than 40,000 cubic feet per minute (18.88 m<sup>3</sup>/s) nor less than six air changes per hour.
- 2. For atriums and malls having a volume of more than 600,000 cubic feet (16800 m<sup>3</sup>), including the volume of any levels not physically separated from the atrium or mall, not less than four air changes per hour.

909.11 Power systems. The smoke control system shall be supplied with two sources of power. Primary power shall be the normal building power systems. Secondary power shall be from an approved source complying with the National Electrical Code as referenced in Chapter 35 of this code. The standby power source and its transfer switches shall be in a separate room from the normal power transformers and switch gear and shall be enclosed in a room of not less than 1-hour fire-resistance-rated construction ventilated directly to and from the exterior, unless the standby power system and equipment is approved and listed for exterior installation. Power distribution from the two sources shall be by independent routes. Transfer to full standby power shall be automatic and within 60 seconds of failure of the primary power. The systems shall comply with the National Electrical Code of this code.

> 909.12.1 Wiring. In addition to meeting the requirements of the National Electric Code, all wiring, regardless of voltage, shall be fully enclosed in continuous raceways.

> 909.16.3 Control action and priorities. The fire-fighter's control panel actions shall be as follows:

1. ON-OFF and OPEN-CLOSE control actions shall have the highest priority of any control point within the building. Once issued from the fire-fighter's control panel, no automatic or manual control from any other control point with the building shall contradict the control action. Where automatic means are provided to interrupt normal, nonemergency equipment operation or produce a specific result to safeguard the building or equipment (i.e., duct freezestats, duct smoke detectors, high-

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temperature cutouts, temperatureactuated linkage and similar devices), such means shall be capable of being overridden by the fire-fighter's control pane. The last control panel switch position shall prevail. In no case shall control actions require the smoke control system to assume more than one configuration at any one time.

**Exception:** Power disconnects required by the National Electric Code.

2. Only the AUTO position of each treeposition fire-fighter's control panel switch shall allow automatic or manual control action from other control points within the building. The AUTO position shall be the NORMAL, nonemergency, building control position. Where a fire-fighter's control panel is in the AUTO position, the actual status of the device (on, off, open, closed) shall continue to be indicated by the status indicator described above. When directed by an automatic signal to assume an emergency condition, the NORMAL position shall become the emergency condition for that device or group of devices within the zone. In no case shall control require the smoke control system to assume more than one configuration at any one time.

### SECTION 910 SMOKE AND HEAT VENTS

**910.2 Where required.** Approved smoke and heat vents shall be installed in the roofs of one-story buildings or portions thereof occupied for the uses set forth in 910.2.1 through 910.2.3.

**910.2.1 Deleted in its entirety.** (EFFECTIVE 02-01-2008)

910.2.2 High-piled combustible storage. Buildings and portions thereof containing high-piled combustible stock or rack storage in any occupancy group in accordance with Section 413 and the *International Fire Code*. (EFFECTIVE 02-01-2008)

910.2.3 Exit access travel distance increase. Buildings and portions thereof used as Group F-1 or S-1 occupancy where the maximum exit access travel distance is increased in accordance with 1016.2. (EFFECTIVE 02-01-2008)

## SECTION 912 FIRE DEPARTMENT CONNECTIONS

**912.5 BACKFLOW PREVENTION.** The potable water supply to an automatic sprinkler and standpipe system shall be protected against backflow by two (one-way) check valves, one of which may be an alarm check valve, installed at the point where the automatic sprinkler system piping is connected to the domestic water piping.

Create a new section as follows:

### SECTION 913 YARD HYDRANTS

913.1 Private hydrants. Fire hydrants installed on private property as part of a private fire protection system shall be located so as to meet the requirements of National Fire Protection Association (NFPA) Pamphlet #24 listed in Chapter 35, except that hydrants shall be spaced so that the hose line does not exceed 500 feet (152m). Yard hydrant installation shall be coordinated with the local fire code officials who shall not make recommendations which exceed the requirements of National Fire Protection Association (NFPA) Pamphlet #24. Yard hydrants shall not be installed on a water main less than 6 inches (152mm) in diameter.

**913.2 Public hydrants.** Public hydrants not covered by National Fire Protection Association (NFPA) Pamphlet #24 listed in Chapter 35 shall conform to the standards of the administrative authority of the jurisdiction as provided by local government.

Create a new section as follows: (effective 03-06-2011 mandatory enforcement 06-01-2011)

### SECTION 914 CARBON MONOXIDE ALARMS

**914.1 Carbon monoxide alarms.** For new construction, an approved carbon monoxide alarm shall be installed in the immediate vicinity of all bedrooms in dwelling units and sleeping units of occupancies R-2, R-3 and R-4 in which fuel-fired appliances are installed or have attached garages.

**914.2** Where required in existing dwellings. Where work requiring a permit occurs within an existing dwelling of an R-2, R-3 or R-4 occupancy equipped with fuel-fired appliance(s) or an existing dwelling that has an attached garage(s), the permitting authority shall inform the owner/occupant that carbon monoxide alarms are required to be installed in accordance with Section 914.3 of the code.

**914.3 Alarm requirements.** Single station carbon monoxide alarms shall be listed as complying with UL 2034. Carbon monoxide alarms shall be installed in accordance with this code and the manufacturer's installation instructions.

### CHAPTER 10 MEANS OF EGRESS

### SECTION 1004 OCCUPANT LOAD

**1004.1.1** Areas without fixed seating. The number of occupants shall be computed at the rate of one occupant per unit of area as prescribed in Table 1004.1.1. For areas without fixed seating,

the occupant load shall not be less than that number determined by dividing the floor area under consideration by the occupant as set forth in Table 1004.1.1. Where an intended use in not listed in Table 1004.1.1, the building official shall establish a use based on a listed use that most nearly resembles the intended use.

Table 1004.1.1

Maximum Floor Area Allowances Per Occupant.

maximum ricor Area Anovances rer Georgiant.						
OCCUPANCY	FLOOR AREA IN SQ. FT. PER OCCUPANT					
Agricultural building	300 gross					
Aircraft hangars	500 gross					
Airport terminal						
Baggage claim	20 gross					
Baggage handling	300 gross					
Concourse	100 gross					
Waiting areas	15 gross					
Assembly						
Gaming floors (keno, slots, etc.)	11 gross					
Assembly with fixed seats	See Section 1004.7					
Assembly without fixed seats						
Concentrated (chairs only not fixed)	7 net					
Standing space	5 net					
Unconcentrated (tables and chairs)	15 net					
Doubling contare allow E narroons for each lone						
Bowling centers, allow 5 persons for each lane including 15 feet of runway, and for additional						
areas	7 net					
Business areas	100 gross					
Courtrooms other than fixed seating areas	40 net					
Dormitories	50 gross					
Educational						
Classroom area	20 net					
Shops and other vocational room areas	50 net					
Exercise rooms	50 gross					
H-5 Fabrication and manufacturing areas	200 gross					
Industrial areas <sup>a</sup>	100 gross					
Institutional areas						
Inpatient treatment areas	240 gross					
Outpatient areas	100 gross					
Sleeping areas	120 gross					
Kitchens, commercial	200 gross					
Library						
Reading rooms	50 net					
Stack area	100 gross					
Locker rooms	50 gross					
Mercantile						
Areas on other floors	60 gross					
Basements and grade floor areas	30 gross					
Storage, stock and shipping areas	300 gross					
Parking garages	200 gross					
Residential	200 gross					
Skating rinks, swimming pools						
Rinks and pools	50 gross					
Decks	15 gross					
Stages and platforms	15 net					
Accessory storage areas, mechanical						
equipment room	300 gross					
Warehouses	500 gross					

For SI: 1 square foot =  $0.0929 \text{ m}^2$ .

a. Use a value of 200 gross for purposes of determining jurisdiction under Section 104.1 and 104.2 and design professional seal requirements in Section 122.1.

### SECTION 1007 ACCESSIBLE MEANS OF EGRESS

1007.3 Exit Stairways. In order to be considered part of an accessible means of egress, an exit stairway shall have a clear width of 48 inches (1219 mm) minimum between handrails and shall either incorporate an area of refuge within an enlarged floor-level landing or shall be accessed from either an area of refuge complying with Section 1007.6 or a horizontal exit.

### Exceptions:

- 1. The area of refuge is not required at unenclosed exit stairways as permitted by section 1020.1 in buildings or facilities that are equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2.
- 2. The clear width of 48 inches (1219 mm) between handrails is not required at exit stairways I buildings or facilities equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2.
- 3. Areas of refuge are not required at exit stairways in buildings of facilities equipped throughout by an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2.
- 4. The clear width of 48 inches (1219 mm) between handrails is not required for exit stairways accessed from a horizontal exit.
- 5. Areas of refuge are not required at exit stairways serving open parking garages.
- 6. Areas of refuge are not required for smoke protected seating areas complying with Section 1025.6.2.
- 7. The areas of refuge are not required in Group R-2 occupancies.

(changes effective 07/29/2009)

**1007.4 Elevators.** In order to be considered part of an accessible means of egress, an elevator shall comply with emergency operation and signaling device requirements of Section 2.27 of ASME A17.1. Standby power shall be provided in accordance with Section 2702 and 3003. The elevator shall be accessed from either an area of refuge complying with Section 1007.6 or a horizontal exit.

### Exception:

- Elevators are not required to be access from an area of refuge or horizontal exit in open parking garages.
- 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
- 3. Elevators not required to be located in a shaft in accordance with Section 707.2 are not required to be accessed from an area of refuge or horizontal exit.
- Elevators are not required to be accessed from an area of refuge or horizontal exit for smoke protected seating areas complying with Section 1025.6.2.

(Change effective 07/29/2009)

1007.6 Areas of refuge. Every required area of refuge shall be accessible from the space it serves by an accessible means of egress. The maximum travel distance from any accessible space to an area of refuge shall not exceed the travel distance permitted for the occupancy in accordance with Section 1016.1. Every required area of refuge shall have direct access to an enclosed stairway complying with Sections 1007.3 and 1020.1 or an elevator complying with Section 1007.4. Where an elevator lobby is used as an area of refuge, the shaft and lobby shall comply with Section 1020.1.7 for smokeproof enclosures except where the elevators are in an area of refuge formed by a horizontal exit or smoke barrier.

### Exceptions:

- 1. A stairway serving an area of refuge is not required to be enclosed where permitted in Section 1020.1.
- 2. Smokeproof enclosure is not required for an elevator lobby used as an area of refuge not required to be enclosed. (change effective 07/29/2009)

**1007.6.2 Separation.** Each area of refuge shall be separated from the remainder of the story by a smoke barrier complying with Section 709 or a horizontal exit complying with Section 1022. Each area of refuge shall be designed to minimize the intrusion of smoke. (change effective 07/29/2008)

Exception: Areas of refuge located within an exit enclosure. (change effective 07/29/2008)

### SECTION 1008 DOORS, GATES AND TURNSTILES

1008.1.5 Landings at doors. Landings shall have a width not less than the width of the stairway or the door, whichever is greater. Doors in the fully open position shall not reduce a required dimension by more than 7 inches (178 mm). When a landing serves an occupant load of 50 or more, doors in any position shall not reduce the landing to less than one-half its required width. Landings shall have a length measured in the direction of travel of not less than 44 inches (1118 mm).

**Exception:** Landing length in the direction of travel in Group R-3 as applicable in Section 101.2 and Group U and within individual units of Group R-2 as applicable in Section 101.2 need not exceed 36 inches (914 mm). The floor or landing shall not be greater than 1.5 inches (38 mm) lower than the top of the threshold.

### 1008.1.3.4 Access-controlled egress doors.

The entrance doors in a means of egress in buildings with an occupancy in Group A, B, E, M, R-1 or R-2 and entrance doors to tenant spaces in occupancies in Groups A, B, E, M, R-1 or R-2 are permitted to be equipped with an approved entrance and egress access control system which shall be installed in accordance with all of the following criteria:

**Exception:** The requirements of this section shall not be applicable to egress doors where only the entrance access is controlled and the operation of the door unlatching hardware unlocks the door and permits immediate egress.

- A sensor shall be provided on the egress side arranged to detect an occupant approaching the doors. The doors shall be arranged to unlock by a signal from or loss of power to the sensor.
- Loss of power to that part of the access control system which locks the doors shall automatically unlock the doors.
- 3. The doors shall be arranged to unlock from manual unlocking device located 40 inches to 48 inches (1016 mm t 1219 mm) vertically above the floor and within 5 feet (1524 mm) of the secured Ready access shall be doors. provided to the manual unlocking device and the device shall be clearly identified by a sign that reads "PUSH TO EXIT." When operated, the manual unlocking device shall result in direct interruption of power to the lock - and the doors shall remain unlocked for a minimum of 30 seconds.
- Activation of the building fire alarm system, if provided, shall automatically unlock the doors, and the doors shall remain unlocked until the fire alarm system has been reset.
- Activation of the building automatic sprinkler or fire detection system, if provided, shall automatically unlock

- the doors. The doors shall remain unlocked until the fire alarm system has been reset.
- Entrance doors in building with an occupancy in Group A, B, E or m shall not be secured from the egress side during periods that the building is open to the general public.

**1008.1.6 Thresholds.** Thresholds at doorways shall not exceed 1 inch (25 mm) in height for exterior sliding doors serving dwelling units or 0.5 inch (12.7 mm) for other doors. Raised thresholds and floor level changes greater than 0.25 inch (6.5 mm) at doorways shall be beveled with a slope not greater than one unit vertical in two units horizontal (50-percent slope)."

### SECTION 1009 STAIRWAYS

1009.3 Stair treads and risers. Stair riser heights shall be 7 inches (178 mm) maximum and 4 inches (102 mm) minimum. Stair tread depths shall be 11 inches (279 mm) minimum. The riser height shall be measured vertically between the leading edges of adjacent treads. The tread depth shall be measured horizontally between the vertical planes of the foremost projection of adjacent treads and at a right angle to the tread's leading edge. Winder treads shall have a minimum tread depth of 11 inches (279 mm) measured at right angle to the tread's leading edge at a point 12 inches (305 mm) from the side where the treads are narrower and a minimum tread depth of 10 inches (254 mm).

### **Exceptions:**

- Alternating tread devices in accordance with Section 1009.9.
- 2. Spiral stairways in accordance with Section 1009.8
- 3. Aisle stairs in assembly seating areas where the stair pitch or slope is set, for sightline reasons, by the slope of the adjacent seating area in accordance with Section 1025.11.2.

- 4. 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 1/4 inches (210 mm); the minimum tread depth shall be 9 inches (229 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 not less than 0.75 inch (19.1 mm) but not more than 1.25 inches (32 mm) shall be provided on stairways with solid risers where the tread depth is less than 11 inches (279 mm).
- 5. See the Section 3403.4 for the replacement of existing stairways.
- Existing stairways not scheduled for replacement during renovation of an existing building.
- 7. Stairways providing access into or from swimming pools, spas or baptisteries with the tread surface entirely below water shall have treads and risers that conform to the following:
  - 7.1. Step treads shall have a minimum unobstructed horizontal depth of 10 inches (254 mm) and a minimum unobstructed surface area of 240 square inches (0.15 m<sup>2</sup>).
  - 7.2 Risers shall have a maximum uniform height of 12 inches (305 mm) as measured at the centerline of the tread. The height of the bottom riser shall not vary more than plus or minus 2 inches (51 mm) from the uniform riser height.

### SECTION 1012 HARDRAILS

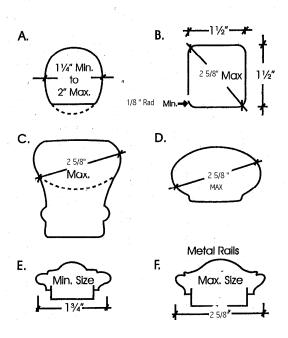
**1012.3 Handrail graspability.** Handrails with a circular cross section shall have an outside diameter of at least 1.25 inches (32 mm) and not greater than 2 inches (51 mm) or shall provide equivalent graspability as detailed by Figure 1012.3. If the handrail is not circular, it shall have a perimeter dimension of at least 4 inches (102 mm) and not greater than 6.25 inches (159 mm) with a maximum cross-section dimension of 2.625 inches (57 mm). Edges shall have a minimum radius of 0.125 inch (3.2 mm).

**1012.4 Continuity.** Handrail-gripping surfaces shall be continuous, without interruption by newel posts or other obstructions.

### **Exceptions:**

- Handrails within dwelling units are permitted to be interrupted by a newel post at a stair landing.
- Within a dwelling unit, the use of a volute, turnout or starting easing is allowed on the lowest tread.
- 3. Handrail brackets or balusters attached to the bottom surface of the handrail that do not project horizontally beyond the sides of the handrail within 1.5 inches (38 mm) of the bottom of the handrail shall not be considered obstructions. For each 0.5 inch (12.7 mm) of additional handrail perimeter dimension above 4 inches (102 mm), the vertical clearance dimension of 1.5 inches (38 mm) shall be permitted to be reduced by 0.125 inch (3 mm).
- 4. Stair handrails within dwelling units shall be permitted to be discontinuous between the top and bottom of a flight of stairs where the ends of the discontinued rails are returned to a wall or post and the maximum distance between the discontinued rails is not greater than 4 inches (102 mm).

# Figure 1012.3 HANDRAIL PROFILES



### SECTION 1013 GUARDS

1013.1 Where required. Guards shall be located along open-sided walking surfaces, mezzanines, industrial equipment platforms, stairways, ramps and landings that are located more than 30 inches (762 mm) above the floor or grade below. Guards shall be adequate in strength and attachment in accordance with Section 1607.7. Where glass is used to provide a guard or as a portion of the guard system, the guard shall also comply with Section 2407. Guards shall also be located along glazed sides of stairways, ramps and landings that are located more than 30 inches (792 mm) above the floor or grade below where the glazing provided does not meet the strength and attachment requirements in Section 1607.7.

### **Exception:**

- 1. On the loading side of loading docks or piers.
- 2. On the audience side of stages and raised platforms, including steps leading up to the stage raised platforms.
- On raised stage and platform floor areas such as runways, ramps, altar platforms for religious purposes and side stages used for entertainment or presentations.
- 4. At vertical openings in the performance area of stages and platforms.
- 5. At elevated walking surfaces appurtenant to stages and platforms for access to and utilization of special lighting or equipment.
- 6. Along vehicle service pits not accessible to the public.

7. In assembly seating where guards in accordance with Section 1025.14 are permitted and provided.

### SECTION 1014 EXIT ACCESS

## Modify section 1014.3, Exception 4 to read as follows:

4. The length of a common path of egress travel in a Group R-2 occupancy shall not be more that 125 feet (38 100 mm), provided that the building is protected throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.1 and 903.3.1.2

Table 1015.1 SPACES WITH ONE MEANS OF EGRESS

OCCUPANCY	MAXIMUM OCCUPANT LOAD
A, B, E <sup>a</sup> , F, M, U	49
H-1, H-2, H-3	3
H-4, H-5, I-1, I-3, I-4, R	10
S	29

Delete footnote "a". (change effective 2/01/2008)

### SECTION 1017 CORRIDORS

### TABLE 1017.1 CORRIDOR FIRE-RESISTANCE RATING

OCCUPANCY	OCCUPANT LOAD SERVED BY CORRIDOR	REQUIRED FIRE-RESISTANCE RATING (hours)	
		Without sprinkler system	With sprinkler system <sup>c</sup>
H-1, H-2, H-3	All	Not Permitted	1
H-4, H-5	Greater than 30	Not Permitted	1
A, B, E, F, M, S, U	Greater than 30	1	0
R	Greater than 10	1	0.5
I-2 <sup>a</sup>	All	Not Permitted	0
I-1, I-3, I-4	All	Not Permitted	1 <sub>b</sub>

- a. For requirements for occupancies in Group I-2, see Section 407.3.
- b. For a reduction in the fire-resistance rating for occupancies in Group I-3, see Section 408.7.
- c. Buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2 where allowed.

### SECTION 1019 EXITS

Amend the following table to create an additional note (f).

Table 1019.2 Buildings with One Exit.

OCCUPANCY	MAXIMUM HEIGHT OF BUILDING AVOVE GRADE PLANE	MAXIMUM OCCUPANTS (OR DWELLING UNITS) PER FLOOR AND TRAVEL DISTANCE
$A,B^d,E^e,F,M,U$	1 Story	49 occupants and 75 feet travel distance
H-2, H-3	1 Story	3 occupants and 25 feet travel distance
H-4, H-5, I, R	1 Story	10 occupants and 75 feet travel distance
Sª	1 Story	29 occupants and 100 feet travel distance
B <sup>d</sup> , F, M, S <sup>a</sup>	2 Stories	30 occupants and 75 feet travel distance
R-2 <sup>f</sup>	2 Stories <sup>C</sup>	4 dwelling units and 50 feet travel distance

- a. For the required number of exits for open parking structures, see Section 1019.1.1.
- b. For the required number of exits for air traffic control tower, see Section 412.1.
- c. Buildings classified as Group R-2 equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 of 903.3.1.2 and provided with emergency escape and rescue openings in accordance with Section 1026 shall have a maximum height of three stories above grade plane.
- d. Buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 with an occupancy in Group B shall have a maximum travel distance of 100 feet.
- e. Day care maximum occupant load is 10.
- f. The number of dwelling units that share a single exit may exceed 4 per floor where each 4 dwelling units sharing a single exit are separated from other groups of 4 dwelling units sharing a single exit by not less than a 2-hour fire barrier wall constructed in accordance with Section 706 of this code. A 2-hour fire wall is not required unless it is needed to reduce building areas to within the limits of Table 503 for the type of construction.

### SECTION 1020 VERTICAL EXIT ENCLOSURES

1020.1.2 Penetrations. Penetrations into and openings through an exit enclosure are prohibited except for required exit doors, noncombustible refrigerant or hydronic piping necessary for heating or cooling the exit enclosure, equipment and ductwork necessary for independent pressurization, sprinkler standpipes, electrical raceway for fire department communication systems and electrical raceway serving the exit enclosure and terminating at a steel box not exceeding 16 square inches (0.010 m<sup>2</sup>). Such penetrations shall be protected in accordance with Section 712. There shall be no penetrations or communication openings, whether protected or not, between adjacent exit enclosures.

**1020.1.3 Ventilation.** Equipment and ductwork for exit enclosure ventilation as permitted by Section 1020.1.2 shall comply with one of the following items:

- 1. Such equipment and ductwork shall be located exterior to the building and shall be directly connected to the exit enclosure by ductwork enclosed in construction as required for shafts.
- Where such equipment and ductwork is located within the exit enclosure, the intake air shall be taken directly from the outdoors and the exhaust air shall be discharged directly to the outdoors, or such air shall be conveyed through ducts enclosed in construction as required for shafts.
- Where located within the building, such equipment and ductwork shall be separated from the remainder of the building, including other mechanical equipment, with construction as required for shafts.
- 4. Unitary HVAC equipment utilizing refrigerant or chilled and hot water for cooling and heating, such as fan coil units, shall be permitted to be installed within the exit enclosure. Noncombustible supply, return and condensate piping required for the operation of the fan coil unit, shall be allowed to penetrate the exit enclosure at one location each.

In each case, openings into the fire-resistance-rated construction shall be limited to those needed for maintenance and operation and shall be protected by opening protectives in accordance with Section 715 for shaft enclosures.

Exit enclosure ventilation systems shall be independent of other building ventilation systems.

### SECTION 1024 EXIT DISCHARGE

**1024.7 Exit discharge protection.** A required means of egress shall not discharge directly into a vehicular path unless guards are provided to prevent vehicles from hitting the exit door in its outward opened position and to direct pedestrians in a path running parallel to the vehicular path. The guards shall prevent the exit discharge door from being blocked by movable objects such as dumpsters or parked vehicles.

### SECTION 1025 ASSEMBLY

1025.13.1 Discontinuous rails. Where there is seating on both sides of the aisle, the handrails shall be discontinuous with gaps or breaks at intervals not less than three rows and not exceeding five rows to facilitate access to seating and to permit crossing from one side of the aisle to the other. These gaps or breaks shall have a clear width of at least 22 inches (559 mm) and not greater than 36 inches (914 mm), measured horizontally. Where handrails are not a continuous single rail between cross-over gaps or breaks, multiple shorter handrails shall be allowed with the horizontal spacing between the rails measured parallel to the rail support, being less than or equal to 10 ½ inches. The handrail shall have rounded terminations or bends. (effective date 03-06-2011 mandatory enforcement 06-01-2011)

**1025.13.1.1 Handrail extensions.** Within aisle stairs, the horizontal extension is not required beyond the bottom or top riser, provided the handrail begins at the first riser and is continuous, except where gaps or breaks are permitted in Section 1025.13.1 to the top row of seats.

### SECTION 1026 EMERGENCY ESCAPE AND RESCUE

1026.1 General. In addition to the means of egress required by this chapter, provisions shall be made for emergency escape and rescue in Group R and I-1 occupancies. Sleeping rooms below the fourth story above grade plane shall have at least one exterior emergency escape and rescue opening in accordance with this section. Where basements contain one or more sleeping rooms, emergency egress and rescue openings shall be required in each sleeping room, but shall not be required in adjoining areas of the basement. Such openings shall open directly into a public way or to a yard or court that opens to a public way.

### **Exceptions:**

- 1. In other than Group R-3 occupancies, buildings equipped throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2.
- In other than Group R-3 occupancies, sleeping rooms provided with a door to a fire-resistance-rated corridor having access to two remote exits in opposite directions.
- 3. The emergency escape and rescue opening is permitted to open onto a balcony within an atrium in accordance with the requirements of Section 404, provided the balcony provides access to an exit and the dwelling unit or sleeping unit has a means of egress that is not open to the atrium.
- Basements with a ceiling height of less than 80 inches (2032 mm) shall not be required to have emergency escape and rescue windows.
- 5. High-rise buildings in accordance with Section 403.
- Emergency escape and rescue openings are not required from basements or sleeping rooms that have an exit door or exit access door that opens directly into a public way or to a yard, court or exterior exit balcony that opens to a public way.
- Basements without habitable spaces and having no more than 200 square feet (18.6 m²) in floor area shall not be required t have emergency escape windows.
- 8. Replacement of emergency escape and rescue windows which meet or exceed the provisions of the applicable code at the time the facility was originally constructed.

# CHAPTER 11 ACCESSIBILITY

### SECTION 1103 SCOPING REQUIREMENTS

### Create new sections as follows:

**1103.2.16 Church buildings.** Buildings or portions thereof used as a church are not required to be accessible.

1103.2.17 Child day care facilities. Buildings or portions thereof used as a child day care facility are not required to comply with the provisions found in this chapter for children. Those areas of child day care facilities used by staff or parents of the children shall be made accessible. This would include, but not be limited to, accessible parking, accessible route to the building/facility entrance, accessible route within the facility to all occupiable rooms and spaces.

### SECTION 1104 ACCESSIBLE ROUTE

**1104.4 Multilevel building and facilities.** At least one accessible route shall connect each accessible level, including mezzanines, in multilevel buildings and facilities.

### Exceptions:

- 1. An accessible route is not required to levels located above or below the accessible level in private buildings or facilities that are less than three stories or that have less than 3000 square feet per story unless the building or facility is a shopping center, a shopping mall, the professional office of a health care provider, or another type of facility as determined by the Attorney General. In addition, Exception 1 shall not apply to a terminal, depot or other station used for specified public transportation or to an airport passenger terminal.
- 2. An accessible route is not required to levels located above or below the accessible level in public buildings or facilities that are less than three stories and that are not open to the public if the level above or below the accessible level houses no more than five persons and is less than 500 square feet.
- 3. An accessible route is not required to levels located above or below the accessible level in detention and correctional facilities where accessible cells or rooms provided in accordance with this code, all common use areas serving such cells or rooms, and all public use areas are on an accessible route.

- 4. An accessible route is not required to levels located above or below the accessible level in residential facilities where accessible dwelling units complying with this code, all common use areas serving such dwelling units, and all public use areas are on an accessible route.
- 5. An accessible route is not required to levels located above or below the accessible level in multi-story transient lodging guest rooms provided that spaces complying with this code are on an accessible route and are suitable for dual occupancy.
- In assembly areas required to comply with this code, an accessible route is not required to serve seating where wheelchair spaces or designated aisle seats required to be on an accessible route are not provided.
- 7. In air traffic control towers, an accessible route is not required to serve the cab and the floor immediately below the cab.

#### Create a new section as follows:

1104.7 Public toilet facilities. An accessible route shall be provided to all public toilet facilities when provided or otherwise required by the Kentucky Plumbing Code. The accessible route shall be accessible to the general public and shall not be located in areas of the building that are restricted or noted as restricted to "Employees Only".

## SECTION 1106 PARKING AND PASSENGER LOADING FACILITIES

### Create a new section as follows:

**1106.5.1 Parking lots.** A parking lot that contains over one thousand (1000) parking spaces shall maintain at least one (1) additional disabled-accessible parking space designated as a van-accessible parking space. (effective date May 7, 2010)

## SECTION 1109 OTHER FEATURES AND FACILITIES

**1109.2 TOILET AND BATHING FACILITIES.** Toilet and bathing facilities shall be accessible. Where a floor level is not required to be connected by an accessible route, the only toilet rooms or bathing facilities provided within the facility shall not be located

on an inaccessible floor. At least one of each type of fixture, element, control or dispenser in each accessible toilet room and bathing facility shall be accessible.

### **Exceptions:**

- In toilet rooms or bathing facilities accessed only through a private office, not for common or public use, and intended for use by a single occupant, any of the following alternatives are allowed:
  - 1.1. Doors are permitted to swing into the clear floor space provided the door swing can be reversed to meet the requirements in ICC A117.1.
  - 1.2. The height requirements for the water closet in ICC A117.1 are not applicable,
  - 1.3. Grab bars are not required to be installed in a toilet room, provided that the reinforcement has been installed in the walls and located so as to permit the installation of such grab bars,
  - 1.4. The requirement for height, knee and toe clearance shall not apply to a lavatory.
- This section is not applicable to toilet and bathing facilities that serve dwelling units or sleeping accommodations that are not required to be accessible by Section 1107.
- Where multiple single-user toilet rooms or bathing facilities are clustered at a single location, at least 50% but not less than one room for each use at each cluster, shall be accessible.
- 4. Where no more than one urinal is provided in a toilet room or bathing facility, the urinal is not required to be accessible.
- 5. Toilet rooms that are part of a critical care or intensive care patient sleeping rooms are not required to be accessible.
- Toilet room fixtures that are in excess of those required by the plumbing code and that are designated for use by children in day care occupancies.

**1109.3 Sinks.** Where sinks are provided, at least 5 percent but not less than one provided in accessible spaces shall comply with ICC A117.1.

### **Exception:**

- Mop and service sinks are not required to be accessible.
- Sinks designated for use by children in day care occupancies.

## CHAPTER 12 INTERIOR ENVIRONMENT

### SECTION 1203 VENTILATION

#### Create a new section as follows:

**1203.6 Alternative mechanical system.** "Heating, ventilating and air conditioning (HVAC) systems in occupancies reviewed under NFPA 101 pursuant to Section 115.1 of this code shall be installed in accordance with NFPA 90A or NFPA 90B in lieu of the mechanical code listed in Chapter 35."

### SECTION 1205 LIGHTING

**1205.4.1 Controls.** The control for activation of the required stairway lighting shall be in accordance with the NFPA 70.

### SECTION 1206 YARDS OR COURTS

**1206.3.3 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 Kentucky Plumbing Code.

## SECTION 1209 ACCESS TO UNOCCUPIED SPACES

**1209.2 Attic spaces**. A clear opening not less than 20 inches by 30 inches (559 mm by 762 mm) shall be provided to any attic area having a clear height of over 30 inches (762 mm). A 30-inch (762 mm) minimum clear headroom shall be provided in the attic space at or directly above the access opening.

### CHAPTER 14 EXTERIOR WALLS

### SECTION 1405 INSTALLATION OF WALL COVERINGS

**1405.10.4 Grounding.** Grounding of metal veneers on buildings shall comply with the requirements of Chapter 27 of this code or the National Electrical Code.

**1405.12.2 Window sills.** Delete Subsection 1405.12.2 regarding window sill height in Group R occupancies in its entirety.

Create a new section as follows:

### SECTION 1408 WINDOW-CLEANING SAFEGUARDS

1408 General. All buildings and structures over 50 feet (15240 mm) or four stories in height, in which the windows are cleaned from the outside, shall be provided with anchors, belt terminals or other approved safety devices for all window openings. Such devices shall be of an approved design, and shall be constructed of corrosion-resistant materials securely attached to the window frames or anchored in the enclosure walls of the building. Cast-iron or cast-bronze anchors shall be prohibited.

## CHAPTER 15 ROOF ASSEMBLIES AND ROOFTOP STRUCTURES

### SECTION 1503 WEATHER PROTECTION

**1503.4 Roof drainage.** Design and installation of roof drainage systems shall comply with the Kentucky Plumbing code.

### Create new sections as follows:

**1503.4.2 Roof drains**. Primary and secondary roof drains shall comply with the requirements of this section.

1503.4.2.1 Strainers. Roof drains shall have strainers extending not less than 4 inches (102 mm) above the surface of the roof immediately adjacent to the roof drain. Strainers shall have an available inlet area, above roof level, of not less than one and one-half times the area of the conductor or leader to which the drain is connected.

1503.4.2.2 Flat decks. Roof drain strainers for use on sun decks, parking decks and similar areas that are normally serviced and maintained shall comply with Section 1503.4.1 or shall be of the flat surface type, installed level with the deck, with an available inlet area not less than two times the area of the conductor or leader to which the drain is connected.

**1503.4.2.3 Drain Flashings**. The connection between roofs and roof drains which pass through the roof and into the interior of the building shall be made water tight by the use of approved flashing material.

**1503.4.3 Secondary (emergency) roof drains.** Secondary roof drains shall comply with the requirements of this section in addition to the requirements of Section 1503.4.1 and 1503.4.2.

**1503.4.3.1 Secondary (emergency) roof drains**. Secondary (emergency) 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.

1503.4.3.2 Separate systems required. Secondary roof drain systems shall have piping and point of discharge separate from the primary system. Discharge shall be above grade in a location which would normally be observed by the building occupants or maintenance personnel.

1503.4.3.3 Sizing of secondary drains. Secondary (emergency) roof drain systems shall be sized in accordance with the Kentucky Plumbing Code based on the rainfall rate for which the primary system is designed. The secondary drain system shall be equal in size to the primary drain system. Scuppers shall be sized to prevent the depth of ponding water from exceeding that for which the roof was designed as determined by Section 1611.1. Scuppers shall not have an opening dimension of less than 4 inches (102 mm). The flow through the primary system shall not be considered when sizing the secondary roof drain system.

### SECTION 1507 REQUIREMENTS FOR ROOF COVERINGS

#### Create a new section as follows:

**1507.4.5 Snow and ice guards.** Structures with roofs constructed of metal panels with slopes equal to or greater than four units vertical in twelve units horizontal (33% or 4:12 slope) shall be provided with permanently attached guards sufficient to prevent large ice or snow slides.

### CHAPTER 16 STRUCTURAL DESIGN

### SECTION 1602 DEFINITIONS AND NOTATIONS

**RATIONAL ANALYSIS**. Alternative analytical calculations, experimental data, or reference citations that have been approved for use by the building official.

### SECTION 1601 GENERAL

**1601.2 Certificate of compliance.** Design compliance with the provisions of this Chapter and Chapter 18 shall be satisfied when certification of an architect or engineer registered in Kentucky to that affect is placed on the drawings submitted to the code official, unless the code official shall notify the designer that a specific code violation exists. (change effective 07/29/2009)

### SECTION 1604 GENERAL DESIGN REQUIREMENTS

**1604.3 Serviceability.** Structural systems and members thereof shall be designed to have adequate stiffness to limit deflections and lateral drift. See section 12.12.1 of ASCE 7 for drift limits applicable to earthquake loading. The maximum story drift for wind loading shall be 0.005 time the story height, unless structural and architectural elements have been designed to account for larger displacements.

### SECTION 1605 LOAD COMBINATIONS

1605.3.2 Alternative basic load combinations. In lieu of the basic load combinations specified in Section 1605.3.1, structures and portions thereof shall be permitted to be designed for the most critical effects resulting from the following combinations. When using these alternative basic load combinations that include wind or seismic loads, allowable stresses are permitted to be increased or load combinations reduced where permitted by the material chapter of this code or the referenced standards. For load combinations that include the counteracting effects of dead and wind loads, only two-thirds of the minimum dead load likely to be in place during a design wind event shall be used. Where wind loads are calculated in accordance with Chapter 6 of ASCE 7, the coefficient  $\omega$  in the following equations shall be taken as 1.3. For other wind loads,  $\omega$  shall be taken as 1. For horizontal diaphragms and nonloadbearing structural elements the coefficient ω shall be taken as 0.9, otherwise the coefficient  $\omega$ 

shall be 0.7. When using these alternative load combinations to evaluate sliding, overturning and soil bearing at the soil-structure interface, the reduction of foundation overturning from Section 12.13.4 in ASCE 7 shall not be used. When using these alternative basic load combinations for proportioning foundations for loadings, which include seismic loads, the vertical seismic load effect,  $E_{\nu}$ , in Equation 12.4-4 of ASCE 7 is permitted to be taken equal to zero.

Revise Equation 16-20 as follows:

 $D+L+S+ \underline{a}E$  (Formula 16-20)

Revise Equation 16-21 as follows:

0.9D + aE (Formula 16-21)

Add Equation 16-21a as follows:

 $0.9D + \omega W$  (Formula 16-21a)

### SECTION 1608 SNOW LOADS

1608.2 Ground snow loads. The ground snow loads to be used in determining the design snow loads for roofs shall be determined in accordance with Table 1608.2. Site-specific case studies shall be made in areas designated "CS" in Figure 1608.2. Ground snow loads for sites at elevations above the limits indicated in the Table 1608.2 notes shall be approved. Ground snow load determination for such sites shall be based on an extreme value statistical analysis of data available in the vicinity of the site using a value with a 2-percent annual probability of being exceeded (50-year mean recurrence interval).

TABLE 1608.2
DESIGN ENVIRONMENTAL LOADS FOR KENTUCKY COUNTIES

		ICE LOADS			SPECTRAL RESPONSE			
	GROUND	NOMINAL ICE   CONCURRENT		ACCELERATION COEFFICIENTS  (percent) <sup>i</sup>				
COUNTY	SNOW LOAD, $p_g (psf)^a$	THICKNESS, t (in) <sup>b</sup>	WIND SPEED, $V_c$ , (MPH) <sup>c</sup>	$S_S^{}$	$S_{S,0}^{e}$	$S_1^{d}$	$S_{1,0}^{\mathrm{e}}$	
Adair	15	0.75	30	24.3	22.9	10.5	9.9	
Allen	15	0.75	30	42.6	32.3	15.2	12.8	
Anderson	15	0.75	30	21.9	21.7	9.5	9.0	
Ballard	15	1.00	30	337.7	187.3	129.5	60.0	
Barren	15	0.75	30	30.0	25.7	12.1	10.9	
Bath	15	0.75	30	25.4	24.3	8.4	8.1	
Bell	15 <sup>g</sup>	$0.50^{\rm h}$	30	42.3	33.1	10.7	9.7	
Boone	20	0.75	40	26.0	17.6	9.8	7.7	
Bourbon	15	0.75	30	24.9	22.7	8.5	8.5	
Boyd	20	0.75	30	20.5	19.2	7.4	7.1	
Boyle	15	0.75	30	22.1	22.0	9.6	9.1	
Bracken	20	0.75	30	22.5	19.7	7.9	7.7	
Breathitt	15	0.75	30	26.5	23.7	8.9	8.2	
Breckenridge	15	0.75	30	39.4	30.1	14.0	11.8	
Bullitt	15	0.75	30	27.1	22.6	10.9	9.7	
Butler	15	0.75	30	46.0	33.8	15.8	13.0	
Caldwell	15	0.75	30	95.7	74.1	26.2	22.0	
Calloway	15	1.00	30	121.8	81.9	33.0	23.2	
Campbell	20	0.75	40	19.4	17.8	7.8	7.5	
Carlisle	15	1.00	30	326.0	150.0	95.5	49.9	
Carroll	20	0.75	30	20.4	19.3	8.9	8.4	
Carter	20	0.75	30	23.2	20.1	7.8	7.3	
Casey	15	0.75	30	22.7	21.9	9.7	9.3	
Christian	15	0.75	30	76.2	53.7	22.4	17.6	
Clark	15	0.75	30	25.0	23.4	8.8	8.6	
Clay	15	0.75	30	33.7	25.8	9.7	9.0	
Clinton	15	0.75	30	24.6	23.8	10.3	10.0	
Crittenden	15	1.00	30	108.4	79.2	29.5	22.9	
Cumberland	15	0.75	30	24.9	23.5	10.7	10.1	
Daviess	15	0.75	30	61.5	43.1	18.7	14.8	
Edmonson	15	0.75	30	35.4	29.0	13.3	11.8	
Elliott	15	0.75	30	23.2	21.2	7.9	7.5	
Estill	15	0.75	30	24.6	24.6	8.6	8.5	
Fayette	15	0.75	30	23.9	23.3	8.7	8.6	
Fleming	15	0.75	30	25.0	23.1	8.2	7.8	
Floyd	20	0.50 <sup>h</sup>	30	27.4	22.5	8.6	7.9	
Franklin	15	0.75	30	21.5	21.0	9.1	8.7	
Fulton	15	1.00	30	335.1	138.2	129.1	36.8	
Gallatin	20	0.75	30	19.7	18.7	8.4	8.1	
Garrard	15	0.75	30	23.0	22.1	9.0	9.0	
Grant	20	0.75	30	21.3	19.1	8.3	8.0	
Graves	15	1.00	30	182.5	104.2	60.0	28.0	
Grayson	15	0.75	30	39.7	28.6	14.3	11.6	
Green	15	0.75	30	25.2	23.2	10.8	10.1	
Greenup	20	0.75	30	21.1	18.6	7.4	6.9	
Hancock	15	0.75	30	47.0	38.5	15.5	13.7	
Hardin	15 20 <sup>f</sup>	0.75 0.50 <sup>h</sup>	30	32.0	24.8	12.4	10.5	
Harlan			30	40.9	31.7	10.4	9.4	
Harrison	15	0.75	30	23.4	21.2	8.4	8.1	

	ICE LOADS		SPECTRAL RESPONSE				
I	GROUND	NOMINAL ICE	CONCURRENT	ACCELERATION COEFFICE		FFICIENTS	
	SNOW LOAD,	THICKNESS, t	WIND SPEED,			percent) <sup>1</sup>	
COUNTY	$p_g (\mathbf{psf})^{\mathrm{a}}$	(in) <sup>b</sup>	$V_c$ , $(MPH)^c$	${S_S}^{ m d}$	$S_{S,0}^{,0}$	$S_1^{d}$	$S_{1,0}^{\mathrm{e}}$
Hart	15	0.75	30	30.4	24.8	12.1	10.6
Henderson	15	0.75	30	79.7	56.3	22.4	17.5
Henry	20	0.75	30	21.4	20.0	9.2	8.6
Hickman	15	1.00	30	251.3	135.2	64.5	36.1
Hopkins	15	0.75	30	81.8	57.7	23.4	18.2
Jackson	15	0.75	30	26.2	23.6	9.1	8.9
Jefferson	15	0.75	30	27.2	22.2	11.0	9.6
Jessamine	15	0.75	30	22.7	22.2	8.9	8.9
Johnson	15	0.75	30	23.1	21.8	8.0	7.7
Kenton	20	0.75	40	22.6	19.3	8.8	7.9
Knott	20	0.50 <sup>h</sup>	30	28.7	24.5	8.9	8.4
Knox	15	0.75	30	37.5	29.3	10.3	9.5
Larue	15	0.75	30	27.1	23.5	11.2	10.2
Laurel	15	0.75	30	29.8	24.5	9.6	9.1
Lawrence	15	0.75	30	27.9	21.7	8.7	7.7
Lee	15	0.75	30	25.0	24.6	8.7	8.5
Leslie	20	$0.50^{\rm h}$	30	35.2	26.8	9.8	8.9
Letcher	$20^{\rm f}$	$0.50^{\rm h}$	30	33.1	27.5	9.5	8.7
Lewis	20	0.75	30	23.7	19.2	7.9	7.0
Lincoln	15	0.75	30	23.1	22.8	9.5	9.2
Livingston	15	1.00	30	150.0	103.0	43.9	28.0
Logan	15	0.75	30	48.5	36.7	16.4	13.9
Lyon	15	1.00	30	107.3	82.9	29.2	23.6
McCracken	15	1.00	30	281.3	138.3	87.5	37.3
McCreary	15	0.75	30	34.1	25.7	10.3	9.7
McLean	15	0.75	30	65.7	49.3	19.7	16.3
Madison	15	0.75	30	23.8	23.2	8.8	8.8
Magoffin	15	0.75	30	24.8	22.5	8.4	7.9
Marion	15	0.75	30	23.8	22.2	10.3	9.7
Marshall	15	1.00	30	140.5	92.6	37.9	25.4
Martin	20	$0.50^{\rm h}$	30	23.8	22.2	10.3	9.7
Mason	20	0.75	30	23.9	20.8	8.0	7.6
Meade	15	0.75	30	34.6	27.7	12.7	11.1
Menifee	15	0.75	30	25.3	24.2	8.4	8.1
Mercer	15	0.75	30	22.1	21.9	9.5	9.0
Metcalfe	15	0.75	30	25.9	24.1	11.0	10.4
Monroe	15	0.75	30	27.7	24.6	11.5	10.5
Montgomery	15	0.75	30	25.4	24.9	8.6	8.4
Morgan	15	0.75	30	23.8	22.1	8.3	7.8
Muhlenberg	15	0.75	30	61.6	44.5	19.2	15.5
Nelson	15	0.75	30	25.4	21.9	10.6	9.5
Nicholas	15	0.75	30	25.3	23.3	8.4	8.2
Ohio	15	0.75	30	52.3	37.5	17.1	13.7
Oldham	15	0.75	30	23.3	21.1	9.9	9.1
Owen	20	0.75	30	21.2	19.4	8.4	8.2
Owsley	15	0.75	30	27.4	24.5	9.0	8.8
Pendleton	20	0.75	30	21.9	19.3	8.0	7.6
Perry	20	0.50 <sup>h</sup>	30	32.1	25.3	9.4	8.6
Pike	20 <sup>f</sup>	0.75 <sup>h</sup>	30	27.7	23.3	8.7	8.0
Powell	15	0.75	30	25.0	24.6	8.6	8.5
Pulaski	15	0.75	30	26.6	23.2	9.7	9.6
Robertson	15	0.75	30	24.1	22.0	8.2	7.9
Rockcastle	15	0.75	30	25.1	22.8	9.4	9.1
Rowan	15	0.75	30	25.1	23.2	8.2	7.8
	-	0.75	30	23.6	22.9	9.9	9.7

		ICE LOADS		SPECTRAL RESPONSE			
	GROUND SNOW LOAD,	NOMINAL ICE THICKNESS, t	CONCURRENT WIND SPEED,	ACCELERATION COEFFICIE (percent) <sup>i</sup>		FFICIENTS	
COUNTY	$p_g (psf)^a$	(in) <sup>b</sup>	$V_c$ , (MPH) <sup>c</sup>	$S_S^{^{ m d}}$	$S_{S,0}^{,0}$	$S_1^{\mathrm{d}}$	$S_{1,0}^{0}$
Scott	15	0.75	30	23.2	21.1	8.6	8.3
Shelby	15	0.75	30	22.5	21.1	9.6	8.9
Simpson	15	0.75	30	38.2	32.3	14.3	12.8
Spencer	15	0.75	30	23.4	21.8	10.0	9.3
Taylor	15	0.75	30	24.3	22.7	10.5	9.9
Todd	15	0.75	30	55.7	45.3	18.0	15.8
Trigg	15	0.75	30	98.9	69.4	26.9	20.9
Trimble	20	0.75	30	21.4	20.2	9.3	8.8
Union	15	1.00	30	91.2	75.1	25.1	21.8
Warren	15	0.75	30	38.5	29.6	14.3	12.0
Washington	15	0.75	30	22.9	21.9	10.0	9.5
Wayne	15	0.75	30	26.6	23.5	10.0	9.8
Webster	15	0.75	30	85.1	60.6	24.0	18.7
Whitley	15	0.75	30	39.3	27.2	10.5	9.6
Wolfe	15	0.75	30	24.5	24.4	8.5	8.3
Woodford	15	0.75	30	22.3	21.9	8.8	8.8

For SI: 1 pound per square foot (psf) =  $0.0479 \text{ kN/m}^2$ ; 1 inch = 25.4 mm; 1 mile per hour (MPH) = 0.444 meters per second.

- a. Listed values of ground snow load,  $p_g$ , shall be used in accordance to Section 1608.2 of this code.
- b. Listed values of nominal ice thickness, *t*, shall be used in accordance to Section 1614 of this code. Ice loads shall be evaluated separately from snow load.
- c. Listed values of concurrent wind speed,  $V_c$ , shall be used in accordance to Section 1614 of this code. Concurrent wind speeds shall be used *only* in conjunction with ice loads. For other wind load conditions Section 1609.3 of this code shall apply.
- d. Listed values of spectral response coefficients,  $S_S$  and  $S_1$ , shall be used in accordance to Section 1613.5.1 of this code.
- e. Listed values of minimum spectral response coefficients,  $S_{S,0}$  and  $S_{1,0}$ , are the *minimum* values that can be used by an approved means of *rational analysis* in accordance to the limitations in Section 1613.5.1.1 of this code. In the absence of substantiating data by means of analysis, the maximum values of  $S_S$  and  $S_1$  shall be used for that county.
- f. Ground snow loads above 2500 feet (762 m) in this county shall be based on site-specific case studies or by other approved means of approved rational analysis.
- g. Ground snow loads above 2600 feet (792.48 m) in this county shall be based on site-specific case studies or by other approved means of approved rational analysis.
- h. Nominal ice thicknesses in mountainous regions may vary significantly. Ice thicknesses shall be verified with local meteorological data for ice loads.
- i. The long-period transition period,  $T_L$ , used in ASCE 7 shall be 12 sec for all Kentucky counties.

### SECTION 1609 WIND LOADS

1609.1.1 Determination of wind loads. Wind loads on every building or structure shall be determined in accordance with Chapter 6 of ASCE 7. The type of opening protection required, the basic wind speed and the exposure category for a site is permitted to be determined in accordance with Section 1609 or ASCE 7. Wind shall be assumed to come from any horizontal direction and wind pressures shall be

assumed to act normal to the surface considered. Buildings having a mean roof height not exceeding the least horizontal dimension or 60 feet (18 288 mm), whichever is less, that do not meet the conditions of ASCE7-05, Section 6.5.1, may be designed in accordance to the ASCE7-05 Method 2 without the limitations specified in Section 6.5.2 of ASCE 7-98, provided that windward and side wall pressures are increased for the following conditions:

- Inside faces of plan penetrations (cul-desacs) open to the windward side; and courtyards having an along-wind dimension greater than 2 times the crosswind dimension shall be increased 5 percent (0.05).
- Inside faces of re-entrant corners shall be increased 10 percent (0.10).

Alternatively, the building official may waive wind tunnel tests when the design can be substantiated by dynamic or modal analysis.

### Exceptions:

- Subject to the limitations of Section 1609.1.1.1, the provisions of SBCCI SSTD 10 shall be permitted for applicable Group R-2 and R-3 buildings.
- Subject to the limitations of Section 1609.1.1.1, the residential structures using the provisions of the AF&PA WFCM.
- 3. Designs using NAAMMFP 1001.
- 4. Designs using TIA/EIA-222 for antennasupporting structures and antennas.

**1609.3 Basic wind speed.** The basic wind speed for the determination of the wind loads shall be 90 miles per hour (40 meters per second) when using the provisions of ASCE7-05.

### SECTION 1613 EARTHQUAKE LOADS

1613.5.1 Mapped acceleration parameters. The parameters  $S_S$  and  $S_1$  shall be determined from the 0.2 and 1-second spectral response accelerations shown Table 1608.2. Documented electronic data values for Ss (0.2 sec spectral acceleration, 2% probability of exceedance in 50 years) and SI (1.0 sec spectral acceleration, 2% probability of exceedance in 50 years) obtained through the 2002 US Geological Survey National Seismic Hazard Mapping Project database, or other means of approved rational analysis may be used instead of the table. In no case will the calculated values be less than Ss,0 for Ss, or S1,0 for S1 in that county. Where  $S_1$  is less than or equal to 0.04 and  $S_S$  is less than or equal to 0.15, the structure is permitted to be assigned to Seismic Design Category A.

1613.5.3 Site coefficients and adjusted maximum considered earthquake spectral response acceleration parameters. The maximum considered earthquake spectoral response acceleration for short periods,  $S_{ms}$ , and at 1-second period,  $S_{m1}$ , adjusted for site class effects shall be determined by Equations

16-37 and 16-38, respectively: For Occupancy Categories I and II,  $S_s$  need not exceed 1.5 (150%) and  $S_1$  need not exceed 0.6 for irregular structures.

 $S_{ms} = F_a S_s$  (Equation 16-37)

 $S_{m1} = F_v S_1$  (Equation 16-38)

#### Where:

F<sub>a</sub> = Site coefficient defined in Table 1613.5.3(1)

 $F_v$  = Site coefficient defined in Table 1613.5.3(2)

S<sub>s</sub> = The mapped spectral accelerations for short periods as determined in Section 1613.5.1

S<sub>1</sub> = The mapped spectral accelerations for a 1-second period as determined in Section 1613.5.1.

1613.5.6 Determination of seismic design category. Occupancy Category III structures located where the mapped spectral response acceleration parameter at 1-second period,  $S_1$ , is greater than or equal to 0.75 shall be assigned to Seismic Design Category E. Occupancy Category IV structures located where the mapped spectral response acceleration parameter at 1-second period,  $S_1$ , is greater than or equal to 0.75 shall be assigned to Seismic Design Category F. All other structures shall be assigned to a seismic design category based on their occupancy category and design spectral response acceleration coefficients,  $S_{DS}$  and  $S_{D1}$ , determined accordance with Section 1613.5.4 or the sitespecific procedures of ASCE 7. Each building and structure shall be assigned to the more severe seismic design category in accordance with Table 1613.5.6(1) or 1613.5.6(2), irrespective of the fundamental period of vibration of the structure, T.

**1613.5.6.1** Alternative seismic design category determination. The seismic design category is permitted to be determined from Table 1613.5.6(1) alone when all of the following apply:

- 1. In each of the two orthogonal directions, the approximate fundamental period of the structure,  $T_a$ , each of the two orthogonal directions determined in accordance with Section 12.8.2.1 of ASCE 7, is less than 0.8  $T_s$  determined in accordance with Section 11.4.5 of ASCE 7.
- 2. In each of the two orthogonal directions, the fundamental period of the structure used to calculate the story drift is less than  $T_s$ .
- 3. Equation 12.8-2 of ASCE 7 is used to determine the seismic response coefficient,  $C_s$ .

 The diaphragms are rigid as defined in Section 12.3.1 in ASCE 7 of for diaphragms that are flexible, the distance between vertical elements of the seismicforce-resisting system does not exceed 40 feet (12 192 mm).

### Create a new section as follows:

### SECTION 1614 ICE LOADS

**1614.1 General.** Open structures, as defined by Section 6.2 of ASCE 7-05, and not having a weather-tight roof system shall be designed for ice loads in accordance to ASCE 7-05, Chapter 10 and commentary. The values for nominal ice thickness, t and concurrent wind speed,  $V_c$  shall be taken from Table 1608.2.

**1614.2 Load Combinations.** Load combinations that include ice loads shall be in accordance to Sections 2.3.4 or 2.4.3 of ASCE 7-05.

## CHAPTER 17 STRUCTURAL TESTS AND SPECIAL INSPECTIONS

Add the following definitions to section 1702 of the IBC:

### SECTION 1702 DEFINITIONS

**1702.1 General.** The following words and terms shall, for the purpose of this chapter and as used elsewhere in this code, have the meanings shown herein.

**Approved Agency.** An established and qualified person, firm or corporation regularly engaged in conducting tests or furnishing inspection services, when such qualified person, firm or corporation has been approved by the building official or the registered design professional in responsible charge, pursuant to Chapter 17 of this code.

**Approved Fabricator.** An established and qualified person, firm or corporation approved by the building official or the registered design professional in responsible charge, pursuant to Chapter 17 of this code.

**Lateral Force Resisting System.** The structural elements designed to resist effects of lateral forces, such as the Main Wind–Force Resisting System and the Seismic Force Resisting System.

**Pier Foundation.** A structural foundation member with large cross-sectional area compared to its length.

**Pile Foundation.** A structural foundation member with small cross-sectional area compared to its length.

**Qualified Certification Authority.** A nationally recognized organization, with the capability to observe, assess, document and monitor the professional, technical and production activities of the fabricator or special inspector.

Seismic Force Resisting System. The structural elements and structural systems designed to resist earthquake-induced force and deformation effects.

**Special Inspector.** A qualified person, firm or corporation who can demonstrate competence, experience and education, to the satisfaction of the building official and design professional in responsible charge, for inspection of the particular type of construction or operation requiring special inspection(s).

### SECTION 1704 SPECIAL INSPECTIONS

1704.1 General. Special inspections are required for all buildings and structures that require the services of a registered design professional per Section 106, Section 122 and Table 122.1. Where application is made for construction as described in this section, the owner or the registered design professional in responsible charge acting as the owner's agent, shall employ one or more special inspectors, as defined in 1702, to provide inspections during construction on the types of work listed under Section 1704. These inspections are in addition to the inspections specified in section 109.

### **Exceptions:**

- 1. Special inspections are not required for work for which a design professional is not required by Section 122.1.
- Special inspections are not required for building components unless the design involves the practice of professional engineering or architecture as defined by applicable state statues and regulations governing the professional registration and certification of engineers or architects.
- 3. Unless otherwise required by the building official, special inspections are not required for occupancies in Group R-3 as applicable in Section 101.2 and occupancies in Group U that are accessory to a residential occupancy including, but not limited to, those listed in Section 312.1.
- Unless otherwise required by the building official, special inspections are not required for buildings assigned to Category I per Table 1604.5.

1704.1.1 Statement of Special Inspections. At the time of application for permit, the permit applicant shall submit a statement of special inspections prepared by the registered design professional(s) in responsible charge in accordance with Section 106.1, as a condition for permit issuance. This statement shall be in accordance with Section 1705, and shall be included on the drawings submitted for permit.

The exceptions are deleted.

1704.1.2 Report Requirement. Special inspectors shall keep records of inspections. The special inspector shall furnish inspection reports to the registered design professional in responsible charge. Reports shall indicate that work inspected was done in conformance to construction approved documents. Discrepancies shall be brought to the immediate attention of the contractor for correction. If the discrepancies are not corrected, the discrepancies shall be brought to the attention of the building official and to registered design professional the responsible charge prior to the completion of that phase of work. Discrepancies that are not corrected may be grounds for denial of the certificate of occupancy. A final report documenting completion of all required special inspections and correction of discrepancies noted in the inspections shall be submitted to the building official by the registered design professional in responsible charge prior to issuance of a certificate of occupancy by the building official. This final report shall not be considered a certification by the registered design professional for any inspections, tests or structural observations performed by others not under the direct supervision of the registered design professional.

1704.2.2 Fabricator approval. Special inspections required by this code are not required where the work is done on the premises of a fabricator registered and approved to perform such work without special inspection. Approval shall be based upon review of the fabricator's written procedural and quality control manuals and periodic auditing of fabrication practices by qualified certification authority. At completion of fabrication, the approved fabricator shall submit a certificate of compliance to the registered design professional in responsible charge stating that the work was performed in accordance with the approved construction documents.

**1704.3 Steel construction.** The special inspections for steel elements of buildings and structures shall be s required by Section 1704.3 and Table 1704.3.

### **Exceptions:**

 Special inspections of the steel fabrication process shall not be required where the fabricator does not perform any welding, thermal cutting or heating operation of any kind as part of the fabrication process. In such cases, the fabricator shall be required to submit a detailed procedure for material control that demonstrates the fabricator's ability to maintain suitable records and procedures such that, at any time during the fabrication process, the material specification, grade and mill test reports for the main stress-carrying elements are capable of being determined.

- 2. The special inspector need not be continuously present during welding of the following items, provided the materials, welding procedures and qualifications of welders are verified prior to the start of the work; periodic inspections are made of the work in progress; and visual inspection of all welds is made prior to completion or prior to shipment of shop welding.
  - 2.1 Single-pass fillet welds not exceeding 5/16 inch (7.9 mm) in size.
  - 2.2 Floor and roof deck welding.
  - 2.3 Welded shear studs when used for structural diaphragm.
  - 2.4 Welded sheet steel for cold-formed steel framing members such as studs and joist.
  - 2.5 Welding of stairs and railing systems.

1704.3.3.1 General. While the work is in progress, the special inspector shall determine that the requirements for bolts, nuts, washers, weld filler and paint; bolted parts and installation and tightening in such standards are met. For bolts requiring pretensioning, the shall observe special inspector the preinstallation testina and calibration procedures when such procedures when such procedures are required by the installation method or by project plans or specifications; determine that all plies of connected materials have been drawn together and properly snugged and monitor the installation of bolts to verify that the selected procedure for installation is properly used to tighten bolts. For joints required to be tightened only to the snug-tight condition, the special inspector need only verify that the connected material have been drawn tighter and properly snugged.

**1704.4 Concrete construction.** The special inspections and verifications for concrete construction shall be as required by this section and Table 1704.4 for all buildings and structures

designated to Seismic Design Category C, D, E or F and for any structure, of any size, assigned to Category III or IV per Table 1604.5.

**Exception**: Special inspections shall not be required for the following when designated to Seismic Design Category A or B:

- 1. Isolated spread concrete footing of buildings three stories or less in height that are fully supported on earth or rock.
- Continuous concrete footing supporting walls of buildings three stories or less in height that are fully supported on earth or rock where:
  - 2.1 The footings support walls of light-frame construction:
  - 2.2 The footings are designed in accordance with table 1 805.4.2; or
- Nonstructural concrete slabs supported directly on the ground, including prestressed slabs on grade, where the effective prestress in the concrete is less than 150 psi (1.03 MPa).
- 4. Concrete foundation walls constructed in accordance with Table 1805.5(5).
- 5. Concrete patios, driveways and sidewalks, on grade.

1704.6.1 High-load diaphragms and shear walls. High-load diaphragms and shear walls designed in accordance with Table 2306.3.2 and Table 2306.4.1, respectively, shall be installed with special inspections as indicated in Section 1704.1. The special inspector shall inspect the wood structural panel sheathing to ascertain whether it is of the grade and thickness shown on the approved building plans. Additionally, the special inspector must verify the nominal size of framing members at adjoining panel edges, the nail or staple diameter and length, the number of fastener lines, the number, size and fastening of holddowns and that the spacing between fasteners in each line and at edge margins agrees with the approved building plans.

### SECTION 1705 STATEMENT OF SPECIAL INSPECTIONS

**1705.1 General**. Where special inspection or testing is required by Section 1704, 1707 or 1708, the registered design professional in responsible charge shall prepare a statement of special inspections in accordance with

Section 1705 for submittal by the permit applicant (see Section 1704.1.1). The statement of special inspections shall be included on the drawings submitted for permit.

# **1705.2 Content of statement of special inspections.** The statement of special inspections shall identify the following:

- The materials, systems, components and work required to have special inspection or testing by the building official or by the registered design professional responsible for each portion of the work.
- 2. The type and extent of each special inspection.
- 3. The type and extent of each test.
- Additional requirements for special inspection or testing for seismic resistance as specified in Section 1705.3, 1707 or 1708.
- 5. For each type of special inspection, identification as to whether it will be continuous special inspection or periodic special inspection.

**1705.3 Seismic resistance.** The statement of special inspections shall include seismic requirements for the following cases:

- 1. The seismic-force-resisting systems in structures assigned to Seismic Design Category C, D, E of F in accordance with Section 1613.
- Designated seismic systems in structures assigned to Seismic Design Category D, E or F.
- 3. The following additional systems and components in structures assigned to Seismic Design Category C:
  - 3.1 Heating, ventilating and air-conditioning (HVAC) ductwork containing hazardous materials and anchorage of such ductwork.
  - 3.2 Piping systems and mechanical units containing flammable, combustible or highly toxic materials.
  - 3.3 Anchorage of electrical equipment used for emergency or standby power systems.

- The following additional systems and components in structures assigned to Seismic Design Category D:
  - 4.1 Systems required for Seismic Design Category C.
  - 4.2 Exterior wall panels and their anchorage.
  - 4.3 Suspended ceiling systems and their anchorage.
  - 4.4 Access floors and their anchorage.
  - 4.5 Steel storage racks and their anchorage, where the importance factor is equal to 1.5 in accordance with Section 15.5.3 of ASCE 7.
- 5. The following additional systems and components in structures assigned to Seismic Design Category E or F:
  - 5.1 Systems required for Seismic Design Categories C and D.
  - 5.2 Electrical equipment.

**Exception:** Seismic requirements are permitted to be excluded from the statement of special inspections for structures designed and constructed in accordance with the following:

- The structure consists of conventional light-frame construction per Section 2308; the design spectral response acceleration at short periods, SDS, as determined in Section 1613.5.4, does not exceed 0.5g; and the height of the structure does not exceed two stories or 25 feet (7620 mm) above grade plane; or
- The structure is constructed using a reinforced masonry structural system or reinforced concrete structural system; the design spectral response acceleration at short periods, Sd<sub>s</sub>, as determined in Section 1613.5.4, does not exceed 0.5g; and the height of the structure does not exceed 25 feet (7620 mm) above grade plane; or
- 3. Detached one-or two-family dwellings not exceeding two stories in height, and having a total area not greater than 4,000 square feet per residential unit, provided the structure does not have any of the following plan or vertical irregularities in accordance with Section 12.3.2 of ASCE 7:

- 3.1 Torsional irregularity.
- 3.2 Nonparallel systems.
- 3.3 Stiffness irregularity-extreme soft story and soft story.
- 3.4 Discontinuity in capacity-weak story.
- 1706.1 Contractor responsibility. Each contractor responsible for the construction of a main wind- or seismic-force-resisting system, designated seismic system or a wind-or seismic-resisting component listed in the statement of special inspections shall submit a written statement of responsibility to the building official and the owner or registered design professional in responsible charge acting as the owner's agent, prior to the commencement of work on the system or component. The contractor's statement of responsibility shall contain the following:
  - Acknowledgment of awareness of the special requirements contained in the statement of special inspections;
  - Acknowledgment that control will be exercised to obtain conformance with the construction documents approved by the building official;
  - Procedures for exercising control within the contractor's organization, the method and frequency of reporting and the distribution of the reports; and
  - 4. Identification and qualifications of the person(s) exercising such control and their position(s) in the organization.

**1707.3 Structural wood:** Delete the Exception in its entirety.

**1707.7 Architectural components.** Periodic special inspection is required during the erection and fastening of exterior cladding, interior and exterior nonbearing walls and interior and exterior veneer in structures assigned to Seismic Design Category D, E of F.

### **Exceptions:**

- 1. Special inspection is not required of architectural components in structures 25 (7620 mm) feet or less in height.
- special inspection is not required for cladding and veneer weighing 5 psf (24.5 N/m²) or less.

 Special inspection is not required for interior nonbearing walls weighing 15 psf (73.5 N/m²) or less.

### SECTION 1709 STRUCTURAL OBSERVATIONS

**1709.2** Structural observations for seismic resistance. Structural observations shall be provided for those structures included in Seismic Design Category D, E, or F, as determined in Section 1613, where one or more of the following conditions exist:

- 1. The structure is classified as Occupancy Category III of IV in accordance with Section 1604.5.
- 2. The height of the structure is greater than 50 feet (15 240 mm) above the base.
- The structure is assigned to Seismic Design Category E, is classified as Occupancy Category I or II in accordance with Section 1604.5 and is greater than two stories in height.
- 4. When so designated by the registered design professional in responsible charge of the design.
- 5. When such observation is specifically required by the building official.

**1709.3 Structural observations for wind requirements.** Delete this section in it entirety:

### CHAPTER 18 SOILS AND FOUNDATIONS

### SECTION 1801 GENERAL

**1801.1.1 Certificate of compliance.** Design compliance with the provisions of this chapter and Chapter 16 shall be satisfied when certification of an architect or engineer registered in Kentucky to that affect is placed on the drawings submitted to the code official, unless the code official shall notify the designer that a specific code violation exists.

### SECTION 1805 FOOTINGS AND FOUNDATIONS

**1805.2 Depth of Footings.** The minimum depth of footings below undisturbed ground surface, except as excluded in Section 1805.2.1, shall be 24 inches (610 mm). (EFFECTIVE 02-01-2008)

**1805.2.1 Frost protection.** Except where otherwise protected from frost, foundation walls, piers and other permanent supports of building and structures shall be protected by one or more of the following methods:

- 1. Extending below the frost line as identified in Table 1805.2.1.
- 2. Constructing in accordance with ASCE 32; or
- 3. Erecting on solid rock.

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

- Classified in Occupancy Category 1, in accordance with Section 1604.4;
- 2. Area of 600 square feet (56 m2) or less for light-frame construction or 400 square feet (37 m2) or less for other than light-frame construction; or
- 3. Eave height of 10 feet (3048) or less.

## SECTION 1806 RETAINING WALLS

**1806.2 Guards.** Where retaining walls with differences in grade level on each side of the wall in excess of 4 feet are located closer than 2 feet (610 mm) to a walk, path, parking lot or driveway on the high side, such retaining walls shall be provided with guards that are constructed in accordance with Section 1013.0. (EFFECTIVE 02-01-2008)

Table 1805.2.1. Create a new table to read as follows:

TABLE 1805.2.1

MINIMUM FROST PROTECTION DEPTH FOR KENTUCKY

MINIMOMITACST PROTECTION DEPTITE OR RENTOCKT							
County	Frost Depth d <sub>f</sub> (in)	County	Frost Depth d <sub>f</sub> (in)	County	Frost Depth d <sub>f</sub> (in)		
Bell	27	Johnson	30	Magoffin	30		
Boone	30	Kenton	30	Martin	33		
Breathitt	30	Knott	33	Owsley	27		
Campbell	30	Knox	27	Perry	30		
Clay	27	Lawrence	27	Pike	33		
Floyd	33	Leslie	30	All other KY	24		
Harlan	30	Letcher	33	counties	24		

For SI: 1 inch = 25.4 mm

## Chapter 21 Masonry

### SECTION 2113 MASONRY CHIMNEYS

Sections 2113.11.1.2 and 2113.15 of the International Building Code is amended as follows:

**2113.11.1.2 Gas appliances.** Flue lining systems for gas appliances shall be in accordance with the NFPA 54, National Fuel Gas Code. (effective date May 7, 2010)

2113.15 Flue area (appliance). Chimney flues shall not be smaller in area than the area of the connector from the appliance. Chimney flues connected to more than one appliance shall not be less than the area of the largest connector plus 50 percent of the areas of additional chimney connectors.

### Exceptions:

- 1. Chimney flues serving oil-fired appliances sized in accordance with NFPA 31.
- Chimney flues serving gas-fired appliances sized in accordance with the NFPA 54, National Fuel Gas Code. (effective date May 7, 2010)

### CHAPTER 22 STEEL

### SECTION 2208 STEEL STORAGE RACKS

Section 2208.1 Storage racks. The design, testing and utilization of industrial steel storage racks shall be in accordance with the RMI Specification for the Design, testing and Utilization of Industrial Steel Storage Racks. Racks in the scope of this specification include industrial pallet racks, movable shelf racks and stacker racks and does not apply to other types of racks, such as drive-in and drive-through racks, cantilever racks, portable racks or rack Where required, the seismic design of buildings. storage racks shall be in accordance with the provisions of Section 15.5.3 of ASCE 7, or in locations where the steel storage racks are in public areas, the provisions of FEMA 460, Seismic Considerations for Steel Storage Racks Located in Areas Accessible to the Public.

### CHAPTER 23 WOOD

2308.10.4.1 Ceiling joist and rafter connections. Ceiling joists and rafters shall be nailed to each other and the assembly shall be nailed to the top wall plate in accordance with Tables 2304.9 and 2308.10.1 and the rafter shall be fastened to the top plate by the use of approved connectors having a resistance to uplift of not less than 175 pounds (79.45 kg) and shall be installed in accordance with the manufacturer's specifications. Ceiling joists shall be continuous or securely hoined where they meet over interior partitions and fastened to adhacent rafters in accordance with Tables 23010.4.1 and 2304.9.1 to provide a continuous rafter tie across the building where such joists are parallel to the rafters. Ceiling joists shall have a bearing surface of not less than 1 ½ inches (38 mm) on the top plate of each end.

Where ceiling joists ar not parallel to rafters, an equivalent rafter tie shall be installed in a manner to provide a continuous tie across the building, at a spacing of not more than 4 feet (1219mm) o.c. The connections shall be in accordance with Tables 2308.10.4.1 and 2304.9.1. or connections of equivalent capacities shall be provided. Where ceiling joists or rafter ties are not provided at the top of the rafter support walls, the ridge formed by these rafters shall also be supported by a girder conforming to Section 2308.4

Rafter ties shall be spaced not more than 4 feet (1219 mm) o.c. Rafter tie connections shall be based on the equivalent farfter spacing in Table 2308.10.4.1. Where rafter ties are spaced at 32 inches (813 mm) o.c., the number of 16d common nails shall be two times the number specified for rafters spaced 24 inches (610 mm) o.c. with a minimum of 6-16d common nails where no snow loads are indicated. Rafter/ceiling joist connections and rafter/tie connections shall be of sufficient size and number to prevent splitting from nailing. (change effective 07/29/2009)

## **CHAPTER 27 ELECTRICAL**

- **2701.1 Scope.** The provisions of this chapter shall control the design and construction of all new installations of electrical conductors, equipment and systems in buildings or structures; and all alterations to existing wiring systems therein to ensure safety. All such installations shall conform to the provisions of the National Electrical Code (NFPA 70) as referenced in Chapter 35 of this code. Tentative Interim Amendments issued to and accepted by the department shall be permitted to be used for interpretations of the NFPA 70.
- **[F] 2701.2 Exceptions.** Electrical wiring shall not be installed in a building or structure, nor shall an alteration of an existing electrical wiring system be made, until a permit has been issued therefore as required in Section 2703, except as provided for in Sections 2701.2.1 through 2701.2.3."
  - **[F] 2701.2.1 Public service agencies.** The provisions of this code shall not apply to installations for electric supply or communication agencies in the generation, transmission or distribution of electricity, or the operation of signals, or the transmission of intelligence, or to installations located within or on buildings or premises occupied exclusively by such agency, or on public thoroughfares.
  - **[F] 2701.2.2 Railway utilities.** The provisions of this code shall not apply to installations or equipment which are employed by a railway utility in the exercise of said railway utility's function as a public carrier, and which are located outdoors or in buildings occupied exclusively for that purpose.
  - **[F] 2701.2.3 Radio and television transmitting stations.** The provisions of this code shall not apply to electrical equipment used for radio and television transmissions, except equipment and wiring for power supply and the installations of towers and antennas, whether erected on buildings or on the ground."
- **[F] 2701.3 Electrical inspections:** Inspections conducted to determine compliance with National Electrical Code (NFPA 70), shall be conducted by certified inspectors in accordance with Kentucky Administrative Regulations 815 KAR 35:015."
- **[F] 2701.4 Electrical machinery**: Electrical machinery shall comply with NFPA 79.

## [F] SECTION 2702 EMERGENCY AND STANDBY POWER SYSTEMS

- **[F] 2702.1 Installation**. Emergency and standby power systems shall be installed in accordance with the National Electrical Code (NFPA 70), NFPA 110 and NFPA 111.
- **[F] 2702.3 Maintenance.** Emergency and standby power systems shall be maintained and tested in accordance with the Kentucky Standards of Safety as referenced in Chapter 35 of this code.

#### Create new Sections as follows:

## SECTION 2703 PERMIT AND CERTIFICATE OF INSPECTION

- **2703.1 General.** Electrical wiring or equipment shall not be installed within or on any building, structure or premises, nor shall any alteration be made in any such existing installation, without first securing approval and a permit from the code official except as provided for in Section 2703.2. It shall be unlawful to use or allow the use of, or to supply current for, an electrical system in a building or structure, unless the required certificate of inspection and permit have been issued by the code official.
- **2703.2 Exemptions.** A permit shall not be required for the execution and use of the classes of work specified in Sections 2703.2.1 through 2703.2.4.
  - **2703.2.1 Repairs and maintenance.** A permit shall not be required for minor repair work, including the replacement of lamps or the connection of approved portable electrical equipment to approved permanently installed receptacles.
  - **2703.2.2 Public service agencies.** A permit shall not be required for the installation, alteration or repair of electrical equipment for the operation of communications and signals or the transmission of intelligence by wire by public service agencies, except as provided in Chapter 9 for fire alarm systems.
  - **2703.2.3 Power companies.** A permit shall not be required for the installation, alteration or repair of electrical equipment of a power or public service

company for its use in the generation, transmission, distribution or metering of electricity.

**2703.2.4 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.

## SECTION 2704 INSPECTIONS AND TESTS

**2704.1 During installation.** During the installation of electric systems and equipment, the certified electrical inspector shall make inspections to insure compliance with the provisions of this chapter, except as provided for in Section 2703.

**2704.2 Concealing work.** Work in connection with an electric system shall not be covered or concealed until such work has been inspected and permission to conceal such work has been approved.

**2704.3 Final inspection and test**. On completion of the work, the certified electrical inspector shall inspect the work and cause tests to be made of the operation of the entire system to insure compliance with all requirements.

### SECTION 2705 TEMPORARY USE

**2705.1 Permission.** The certified electrical inspector is authorized to give temporary permission for a reasonable time to supply and use current in part of an electric installation before such installation has been fully completed and the final certificate of approval has been issued. The part covered by the temporary certificate shall comply with all of the requirements specified for temporary lighting, heat or power in the National Electrical Code as referenced in Chapter 35 of this code.

## CHAPTER 28 MECHANICAL SYSTEMS

### SECTION 2801 GENERAL

**2801.1 Scope.** Mechanical appliances, equipment and systems shall be constructed, installed and maintained in accordance with the *International Mechanical Code* and the *NFPA 54*, *National Fuel Gas Code*. Masonry chimneys, fireplaces and barbecues shall comply with the *International Mechanical Code* and Chapter 21 of this code. (effective date May 7, 2010)

**Exception**: Mechanical ventilating systems may be designed in accordance with the provisions of ASHRAE 62 listed in Chapter 35.

**2801.2 Boilers**. All boilers, pressure vessels and associated pressure piping shall meet the standards for construction, installation and inspection as set forth in Title 815, Chapter 15, Kentucky Administrative Regulations in KRS 236.

**2801.3 Unfired pressure vessels.** All unfired pressure vessels shall meet the standards set forth in Section VIII of the ASME Boiler and Pressure Vessel Code listed in chapter 35.

**2801.4 Design of mechanical systems.** The code official shall allow the use of the actual occupant load in lieu of Table 1004.1.1 in the design of mechanical ventilating systems. This applies to the mechanical code and ASHRAE 62 Standard listed in Chapter 35 of this code."

# CHAPTER 29 PLUMBING SYSTEMS

The following will replace chapter 29 of the IBC in its entirety:

#### SECTION 2901 GENERAL

2901.1 Kentucky State Plumbing Code. The provisions of this chapter and the Kentucky State Plumbing Code shall govern the erection, installation, alteration, repairs, relocation, replacement addition to, use or maintenance of plumbing equipment and systems. Plumbing systems and equipment shall be constructed, installed and maintained in accordance with the Kentucky State Plumbing code, including all fees and licensing requirements. Private Sewage disposal systems shall conform to 902 KAR 10:081 and 10:085.

### SECTION 2902 MINIMUM PLUMBING FACILITIES

**2902.1 Minimum Fixture Requirements.** In a building accommodating males and females, it shall be presumed that the occupants will be equally divided between males and females, unless otherwise denoted. Each building shall have the minimum fixture requirements established by 815 KAR 20:191.

# CHAPTER 30 ELEVATORS AND CONVEYING SYSTEMS

### SECTION 3001 GENERAL

**3001.2 Referenced Standards:** Except as otherwise provided for in this code, the design, construction, installation, alteration, repair and maintenance of elevators and conveying systems and their components shall conform to ASME A17.1 with the exception of rules 6.1.3.3.9 and 8.11.1.1.2; ASME A17.2; ASME A17.3 with the exception of rule 5.1.11; ASME A17.4; ASME A17.5; ASME A17.6; ASME Q18.1 with the exception of rules 10.1.2.1 and 10.1.2.2; ASME; ASME B20.1, and ASCE 24 for construction in flood hazard areas established in Section 1612.3, (EFFECTIVE 02/01/2011)

3001.2.1 Personnel and material hoists shall be designed utilizing an approved method that accounts for the conditions imposed during the intended operation of the hoist device. The design shall include, but is not limited to, anticipated loads. structural stability, impact, vibration. stresses and seismic restraint. The design shall account for the construction, installation, operation and inspection of the hoist tower, car, machinery and control equipment, guide members and hoisting mechanism. Additionally, the design of personnel hoists shall include provisions for fieldtesting and maintenance that will demonstrate that the hoist device functions in accordance with the design. Field tests shall be conducted upon the completion of an installation or following a major alteration of a personnel hoist.

### SECTION 3002 HOISTWAY ENCLOSURES

3002.9 Access to hoistway machinery spaces. Where a governor is located in the top of a single hoistway, a permanent, fixed, noncombustible, vertical ladder shall be provided for access from building floors to the hoistway machinery spaces containing governors. The access ladder shall be located on the outside of the hoistway. Where complete bodily entry is not necessary for maintenance, testing, and inspection of components, the access openings in elevator hoistway enclosures shall be of adequate size and located to permit the required maintenance, testing, inspection, and shall have a minimum clear opening width and height of 2 feet (610 mm) and be provided with doors which shall be kept closed and locked. Keys to unlock the access doors to governors located in the top of the hoistways shall be kept on the premises in a location readily accessible to authorized personnel, but inaccessible to the general public.

**Exception**: The access door shall not be required for hoistways with multiple elevators, provided the governors are accessible from a minimum of two elevator tops. (Delete effect. 02/01/2011)

3002.9.1 Stop switch: A stop switch conforming to the requirements of ASME A17.1, 1996 Edition, Rule 210.2(e), shall be provided for a governor located inside a single hoistway. The stop switch shall be located adjacent to the lock jamb side of the access door and inside the hoistway. For hoistways with multiple elevators, the access door will not be required as long as the governors can be accessible from at least two car tops. (Delete effect. 02/01/2011)

201010 011001. 02/01/2011)

### [F] SECTION 3003 EMERGENCY OPREATIONS

**3003.2 Fire-fighters' Emergency Operation.** Elevators shall be provided with Phase I emergency recall operation and Phase II emergency in-car operation in accordance with ASME A17.1 and A17.3.

### SECTION 3006 MACHINE ROOMS

**3006.4 Machine Rooms and Machinery Spaces.** Elevator machine rooms and machinery spaces shall be enclosed with construction having a fire resistance rating not less than the required rating of the hoistway enclosure served by the machinery. Openings shall be protected with assemblies having a fire resistance rating not less than that required for the hoistway enclosure doors. Machine rooms that are not located adjacent to elevator shafts shall be enclosed with construction having a fire resistance rating of not less than 1-hour.

3006.4.1 Machine roomless elevators: Machine room enclosures for elevators with drive systems located inside the heistway shall be of adequate size to maintain all electrical and working clearances in front of the controllers and related electrical equipment as required by NFPA 70. Measurements shall be conducted inside the enclosure and the door openings to machine room enclosures shall not be considered as part of the required clear space. (Delete effect. 02/01/2011)

Create new sections as follows:

### SECTION 3007 CONSTRUCTION DOCUMENTS AND PERMITS

**3007.1 Application**: The application for a permit shall be accompanied by construction documents in sufficient detail and indicating the location of the machinery room and equipment to be installed, relocated or altered; and all supporting structural members, including foundations. The construction documents shall indicate all materials to be used and all loads to be supported or conveyed.

**3007.2 Permits**: Equipment or devices subject to the provisions of this code shall not be constructed, installed, relocated or altered unless a permit has been received from the state elevator inspector before the work is commenced. A copy of such permit shall be kept at the construction site at all times while the work is in progress.

**3007.3 Identification of equipment**: In buildings containing more than one elevator or device and where such devices are subject to periodic inspections, each such elevator or device shall be identified by a serial number, in figures not less than 1 inch (25 mm) high, attached to, painted, stenciled or otherwise registered on the crosshead of the elevator car and on the motor or machine; and on devices other than elevators, on the motor or machine. After such devices have been so designated, the serial numbers shall not be changed, except where approved by the state elevator inspector and all correspondence in regard to such device shall refer to said number.

### SECTION 3008 CERTIFICATE OF COMPLIANCE

**3008.1 General**: The operation of all equipment governed by the provisions of this chapter and hereafter installed, relocated or altered shall be unlawful by persons other than the installer thereof until such equipment has been inspected and tested as herein required and a final or limited certificate of compliance has been issued therefore by the state elevator inspector.

**3008.2 Final certificate of compliance**: The state elevator inspector shall issue a final certificate of compliance for each unit of equipment which has satisfactorily met all of the inspections and tests required by this chapter. Such final certificate shall bear the signature of the person who made the inspection and tests, and shall designate the rated load and speed, the date of the acceptance tests and inspections, and the name of the state elevator inspections. The final certificate shall also include the necessary space for inserting the name of the person who made the periodic inspection and witnessed the periodic and maintenance tests and the date of the periodic inspection and the maintenance test.

**3008.3 Construction use permit.** The state elevator inspector is authorized to issue a construction use permit for any equipment covered by this chapter,

which is hereafter installed, relocated or altered, to permit limited use by the person designated therein during the period of such installation, relocation or alteration. Such certificate shall be signed by the state elevator inspector shall bear the dates of issue, and shall designate the class of service allowed.

3008.3.1 Tests and minimum safeguards required: A construction use permit shall not be issued for an elevator until such elevator has satisfactorily passed tests for rated load, car and counterweight safety, and terminal stopping devices. Permanent or temporary guards and enclosures shall be installed on the car, around the hoistway and at the landing entrances. Equipment other than elevators shall be tested and protectives shall be provided as deemed necessary by the code official to ensure safe operation for the limited service specified.

**3008.3.2 Special conditions**: Automatic and continuous-pressure operation elevators shall not be placed in temporary operation from the landing pushbuttons unless the door-locking device and interlocks required by ASME A17.I listed in Chapter 35 are installed and operative. Where the car is operable only from the inside, landing entrance guards shall be provided with locks that are releasable from the hoistway side only.

**3008.3.3 Time limitation**: Construction use permits shall be issued for periods of not more than 90 days. The state elevator inspector is authorized to renew the construction use permits for additional periods of not more than 90 days each.

**3008.4 Posting certificates of compliance**: The owner or lessee shall post the last-issued certificate of compliance in a conspicuous place on the elevator, available to the state elevator inspector.

#### SECTION 3009 POWER ELEVATOR OPERATION

**3009.1 Designated operator**: Every power elevator, except automatic and continuous-pressure operation types and sidewalk elevators, shall be in the charge of a competent designated operator.

**3009.2 Emergency operation**: All elevators shall conform to the requirements of ASME A 17.1 and ASME A17.3 listed in Chapter 35. (effect. 02/01/2011)

**3009.2.1 Smoke detectors**: Smoke detectors shall be installed in accordance with NFPA 72 and ASME A17.I and ASME A17.3 listed in Chapter 35. (effect. 02/01/2011)

**3009.2.2 Activation**: The emergency operation shall be activated by smoke detectors installed in accordance with ASME AI7.I, NFPA 72, and ASME A17.3 listed in Chapter 35. (effect. 02/01/2011)

3009.2.3 Automatic sprinklers: Where an automatic sprinkler is installed in elevator hoistways or elevator equipment rooms, means shall be provided to automatically disconnect the main line power supply to the affected elevator upon or prior to the application of water from sprinklers located in the machine room or elevator hoistway. This means shall be independent of the elevator control and shall not be self-resetting. The activation of sprinklers outside of the hoistway or machine room shall not disconnect the main line power supply. Smoke detectors shall not be used to activate sprinklers in these spaces or to disconnect the main line power supply.

**Exception #1**: NFPA 13, Chapter 8, Rule 8.14.5.5: The sprinkler required at the top of the elevator hoistway by 8.14.5.4 shall not be required where the hoistway for passenger elevators is noncombustible and the car enclosure materials meet the requirements of ASME A17.1, Safety Code for Elevators and Escalators.

**Exception #2**: KBC, Rule 903.3.1.1.1: In elevator machine rooms fully enclosed with 2 hour fire-resistance-rated construction and where signs are posted on the entry door and within the room to prohibit storage of any kind, the sprinkler shall not be required.

**3009.3 Accessible elevators**: See Chapter 11 for buildings and facilities required to be accessible to persons with physical disabilities.

### SECTION 3010 STAIRWAY CHAIR-LIFTS AND WHEELCHAIR LIFTS

**3010.1 General:** Inclined stairway chairlifts and inclined and vertical wheelchair lifts shall conform to the requirements of ASME A18.1 listed in Chapter 35.

#### **SECTION 3011**

**3011.1** Owner responsibility: The owner or the owner's legal agent for the building in which the equipment is located shall be responsible for the care, maintenance and safe operation of all equipment covered by this chapter after the installation thereof and acceptance by such owner or agent. The owner or legal agent shall make or cause to be made all periodic tests and inspections, and shall maintain all equipment in a safe operating condition, as required by this chapter.

#### MAINTENANCE AND ACCIDENTS

**3011.2 Contractor responsibility**: The person installing any device covered by this chapter shall make all acceptance tests and shall be responsible for the care and safe operation of such equipment during its construction and until temporarily or finally accepted by the building owner or the owner's legal agent.

**3011.3 Maintenance items**: All operating and electrical parts and accessory equipment or devices subject to this chapter shall be maintained in a safe operating condition. The maintenance of all equipment covered by this chapter shall conform to ASME A17.1, ASME B20, or ANSI AIO.5 listed in Chapter 35.

3011.4 Incidents reported and recorded: The owner of the building shall immediately notify the state elevator inspector of every incident involving personal injury, and each incident where passenger(s) is removed or assisted from a stalled elevator by maintenance or emergency personnel or damage to apparatus on, about or in connection with any equipment covered by this chapter, and shall afford the state elevator inspector every facility for investigating such incident. When an incident involves the failure. breakage, malfunction, damage or destruction of any part of the apparatus or mechanism, it shall be unlawful to use such device until after an examination by the state elevator inspector is made and approval of the equipment for continued use is granted. It shall be the duty of the state elevator inspector to make a prompt examination into the cause of the incident and to enter a full and complete report thereof in the records of the state elevator inspector's office. Such records shall be open for public inspection at all reasonable hours."

**3011.5 Removal of damaged parts**: It shall be unlawful to remove from the premises any part of the damaged construction, malfunctioning, or operating mechanism of elevators, or other equipment subject to the provisions of this chapter, until permission to do so has been granted by the state elevator inspector.

## CHAPTER 31 SPECIAL CONSTRUCTION

SECTION 3107 SIGNS

Delete this section in its entirety.

SECTION 3108

RADIO AND TELEVISION TOWERS

3108.6 Radio and television antennas on buildings, permits not required. A building permit is not required for roof installation of antennal structures not more than 12 feet (3658 mm) in height for private radio or television reception. Such a structure shall not be erected so as to injure the roof covering, and when removed from the roof, the roof covering shall be repaired to maintain weather and water tightness. The installation of any antennal structure mounted on the roof of a building shall not be erected nearer to the lot line than the total height of the antennal structure above the roof, nor shall such structure be erected near electric power lines or encroach upon any street or other public space.

3108.7 Radio and television antennas on buildings, permits required. Approval shall be secured for all roof-mounted antennal structures more than 12 feet (3658mm) in height above the roof. The application shall be accompanied by detailed drawings of the structure and methods of anchorage. All connections to the roof structure shall be properly flashed to maintain water tightness. The design and materials of construction shall comply with the requirements of Section 3108.3 for character, quality and minimum dimension.

**3108.8 Dish antennas**. An antenna consisting of a radiation element which transmits or receives radiation signals generated as electrical, light or sound energy, and supported by a structure with or without a reflective component to the radiating dish, usually in a circular shape with a parabolic curve design constructed of a solid or open mesh surface, shall be known as a dish antenna.

**3108.8.1 Permits**. The approval of the code official shall be secured for all dish antennal structures more than 2 feet (610mm) in diameter erected on the roof of or attached to any building or structure. A permit is not required for dish antennas not more than 2 feet (610mm) in diameter erected and maintained on the roof of any building.

**3108.8.2 Structural provisions.** Dish antennas larger than 2 feet (610mm) in diameter shall be subject to the structural provisions of Sections 1608, 1609 and 3108.4. The snow load provisions of Section 1608 shall not apply where the antenna

has a heater to melt falling snow.

Delete section 3109 of the 2006 IBC in its entirety and replace with the following:

#### SECTION 3109 SWIMMING POOLS

3109.1 General. Swimming and bathing pools shall conform to the requirements of this section, provided that these regulations shall not be applicable to any such pool less than 24 inches (610 mm) deep or having a surface area less than 250 square feet (23.25 m2), except where such pools are permanently equipped with a water-recirculating system or involve structural materials. For the purpose of this code, pools are classified as private swimming pools or public swimming pools, as defined in Section 3109.2. Materials and constructions used in swimming pools shall comply with the applicable requirements of this code.

**3109.2 Definitions.** The following words and terms shall, for the purposes of this section and as used elsewhere in this code, have the meanings shown herein.

**BARRIER.** A fence, a wall, a building wall, or combination thereof, which completely surrounds the swimming pool and obstructs access to the swimming pool.

**HOT TUB.** See definition of private swimming pool.

**IN-GROUND POOL.** See definition of private swimming pool.

**POWER SAFETY COVER.** A pool cover, which is placed over the water area, and is opened and closed with a motorized mechanism, activated by a control switch.

PRIVATE SWIMMING POOL. Any structure that contains water over 24 inches (610 mm) deep and which is used, or intended to be used, for swimming or recreational bathing in connection with an occupancy in Use Group R-3 and which is available only to the family and guests of the householder. This includes swimming pools constructed below grade on site, but not those assembled above grade on site.

**PRIVATE SWIMMING POOL, INDOOR.** Any private swimming pool that is totally contained within a private structure and surrounded on all four sides by walls of said structure.

**PRIVATE SWIMMING POOL, OUTDOOR.** Any private swimming pool that is not an indoor pool.

**PUBLIC SWIMMING POOL.** Any swimming pool constructed below grade on site, which is not a private swimming pool.

**SPA.** See definition of private swimming pool.

3109.3 Permits, pool occupant load calculations and construction documents. A swimming pool or appurtenances thereto shall not be constructed. installed, enlarged or altered until construction documents have been submitted and a permit has been obtained from the code official having jurisdiction in accordance with Sections 117.1 and 118.1 of this code. The occupant load calculations of Section 3109.3.1 shall be used for the purpose of determining the jurisdiction and design professional seal requirements. The approval of all city, county and state authorities having jurisdiction over swimming pools shall be obtained before applying to the code official for a permit. Certified copies of these approvals shall be filed as part of the supporting data for the permit application.

**3109.3.1 Pool occupant load calculations.** The occupant load of the swimming pool, appurtenances and accessory structures shall be computed at a rate of one occupant per unit of area as prescribed by this section.

Table 3109.3.1
POOL OCCUPANT LOAD

Occupancy	Net area in square feet Per occupant
Nonswimmer area	10
(5 feet or less water depth)	
Swimmer area	24
(Greater than 5 feet of water depth Note: Subtract 300 square feet for each diving area.	
Bathhouse & sunbather area	25
(In excess of 8 feet wide deck)	

3109.3.2 Construction documents. Construction documents shall accurately show dimensions and construction of the pool and appurtenances and properly established distances to lot lines, buildings, walks and fences, as well as details of the water supply system, drainage and water disposal systems, and all appurtenances pertaining to the swimming pool. Detailed construction documents of structures, vertical elevations and sections through the pool showing depth shall be included.

**3109.4 Locations.** Private swimming pools shall not encroach on any front or side yard required by this code or by the governing zoning law, unless in accordance with specific rules of the jurisdiction in which the pool is located. A wall of a swimming pool shall not be located less than 6 feet (1829 mm) from any rear or side property line or 10 feet (3048 mm) from any street property line, unless in accordance with

the specific rules of the jurisdiction in which the pool is located.

**3109.5 Structural design:** The pool structure shall be engineered and designed to withstand the expected forces to which the pool will be subjected.

**3109.5.1 Wall slopes:** To a depth up to 2 feet 9 inches (838 mm) from the top, the wall slope shall not be more than one unit horizontal in five units vertical (1:5).

**3109.5.2 Floor slopes:** The slope of the floor on the shallow side of the transition point shall not exceed one unit vertical to seven units horizontal (1:7). For public pools greater than 1,200 square feet (111.6 m²), the slope of the floor on the shallow side of the transition point shall not exceed one unit vertical to ten units horizontal (1:10). The transition point between shallow and deep water shall not be more than 5 feet (1524 mm) deep.

**3109.5.3 Walkways:** All public swimming pools shall have walkways not less than 4 feet (1219 mm) in width extending entirely around the pool. Curbs or sidewalks around any swimming pool shall have a slip-resistant surface for a width of not less than 1 foot (305 mm) at the edge of the pool, and shall be so arranged as to prevent return of surface water to the pool.

3109.5.4 Steps and ladders. At least one *means* of egress shall be provided from private pools. Public pools shall provide ladders or other *means* of egress at both sides of the diving section and at least one *means* of egress at the shallow section; or at least one *means* of egress in the deep section and the shallow section if diving boards are not provided. Treads of steps and ladders shall have slip-resistant surfaces and handrails on both sides, except that handrails are not required where there are not more than four steps or where the steps extend the full width of the side or end of the pool. Treads and risers of the pool steps shall conform to the following:

- 1. Step treads shall have a minimum unobstructed horizontal depth of 10 inches (254 mm) and a minimum unobstructed surface area of 240 square inches (0.15m<sup>2</sup>).
- Risers shall have a maximum uniform height of 12 inches (305mm) as measured at the centerline of the tread. The height of the bottom riser shall not vary more than plus or minus 2 inches (51mm) from the uniform riser height.

**3109.6 Water supply:** All swimming pools shall be provided with a potable water supply, free of cross connections with the pool or its equipment.

3109.6.1 Water treatment: Public swimming pools are regulated by the Cabinet for Health Services, Department of Public Health, for purposes of water distribution and treatment systems the proper operation and and maintenance of all pool facilities (see 902 KAR 10:120, Kentucky Public Swimming and Bathing Facilities Regulation). Private swimming pools shall be designed and installed so that there is a pool water turnover at least once every 18 hours, Filters shall not filter water at a rate in excess of 5 gallons per minute per square foot (205L/min/m<sup>2</sup>) of surface area. The pool owner shall be instructed in the care of maintenance of the pool by the supplier or builder, including treatment with high-test calcium hypochlorite (dry chlorine), sodium hypochlorite (liquid chlorine) or equally effective germicide and algicide and the importance of proper pH (alkalinity and acidity) control.

**3109.7 Appurtenant structures:** All *appurtenant structures,* installations and equipment, such as showers, dressing rooms, equipment houses or other buildings and structures, including plumbing, heating and air conditioning systems, shall comply with all applicable requirements of this code.

**3109.7.1 Accessories:** All swimming pool accessories shall be designed, constructed and installed so as not to be a safety hazard. Installations or structures for diving purposes shall be properly anchored to insure stability.

**3109.8 Equipment installations:** Pumps, filters and other mechanical and electrical equipment for public swimming pools shall be enclosed in such a manner as to provide access only to authorized persons and not to bathers. Construction and drainage shall be arranged to avoid the entrance and accumulation of water in the vicinity of electrical equipment.

**3109.8.1 Protection of heating equipment**: Gas appliances located in rooms or spaces where corrosive or flammable chemicals are present shall be protected in accordance with the *NFPA 54 National Fuel Gas Code*. (effective date may7, 2010)

**3109.9 Enclosures for public and private swimming pools.** Public and private swimming pools shall be provided with an enclosure surrounding the pool area. The enclosure shall meet the provisions of Sections 3109.9.1 through 3109.9.3.

**3109.9.1 Enclosure.** The enclosure shall extend not less than 4 feet (1219 mm) above the ground. All gates shall be self-closing and self-latching with the latches placed at least 4 feet (1219 mm) above the ground.

**Exception.** The following shall be exempt from the provisions of this section:

- 1. A spa or hot tub with an approved safety cover.
- 2. Fixtures that are drained after each use.

**3109.9.2 Approved barriers.** Barriers shall be designed so as to prevent uninvited persons from intruding into the pool area. Enclosures shall be designed to withstand a horizontal concentrated force load of 200 pounds (896 mm) applied on a 1-square-foot (0.093 m²) area at any point of the fence enclosure. Compliance with the following criteria shall constitute a safe barrier:

- The top of the barrier shall be at least 48 inches (1219 mm) above grade measured on the side of the barrier, which faces away from the swimming pool. The maximum vertical clearance between the grade and the bottom of the barrier shall be 4 inches (102 mm) measured on the side of the barrier, which faces away from the swimming pool. (effective date May 7, 2010)
- 2. Openings in the barrier shall not allow the passage of a 4-inch (102-mm) diameter sphere.
- 3. Solid barriers shall not contain indentations or protrusions except for normal construction tolerances and tooled masonry joints.
- 4. Where the barrier is composed of horizontal and vertical members and the distance between the tops of the horizontal members is less than 24 inches (610mm), the horizontal members shall be located on the swimming pool side of the fence. Spacing between vertical members shall not exceed 1.75 inches (44 mm) in width. (Where there are decorative cutouts within vertical members, spacing within the cutouts shall not exceed 1 3/4 inches (44mm) in width. (effective date may 7, 2010)

Exception: When intermediate horizontal members are located 34 inches (864mm) or more above grade, the spacing between vertical members shall not exceed 4 inches (102mm) in width. (effective date May 7, 2010)

5. Where the barrier is composed of horizontal and vertical members and the distance between the tops of the horizontal members is more than 24 inches (610mm) or more, spacing between vertical members shall not exceed 4 inches (102mm). Where there are decorative cutouts within vertical

- members, spacing within the cutouts shall not exceed 1.75 inches (44 mm) in width. (effective date May 7, 2010)
- Maximum mesh size for chain link fences shall be 2 ¼ inches (75mm) square unless the fence is provided with slats fastened at the top or the bottom which reduce the openings to not less than 1 ¾ inches (44mm). (effective date may 7, 2010)
- 7. Where the barrier is composed of diagonal members, such as a lattice fence, the maximum opening formed by the diagonal members shall be not more than 1.75 inches (44 mm).

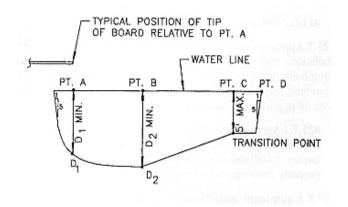
### 3109.9.3 Private swimming pool enclosures.

- An indoor private pool enclosure may consist
  of the walls of the house including any
  entrance and exit doors, screens or glass
  separations designed for the purpose of
  preventing uninvited persons from entering the
  pool.
- 2. An exterior private pool enclosure may surround the pool area only or it may surround a larger area if the barrier prevents uninvited persons from entering the pool.

**3109.10 Diving boards:** Minimum water depths and distances for diving hoppers for pools, based on board height above water, shall comply with Table 3109.10(1) for public pools and Table 3109.10(2) for private pools.

The maximum slope permitted between point  $D_2$  and the transition point shall not exceed one unit vertical to three units horizontal (1:3) in private and public pools.  $D_1$  is the point directly under the end of the diving boards  $D_2$  is the point at which the floor begins to slope upwards to the transition point (see Figure 3109.10).

Figure 3109.10
MINIMUM WATER DEPTHS AND DISTANCES
BASED ON BOARD HEIGHT FOR PUBLIC AND
PRIVATE POOLS



# Table 3109.10(1) MINIMUM WATER DEPTHS AND DISTANCES BASED ON BOARD HEIGHT FOR PRIVATE POOLS

Board Height	Minimum depth <sup>a</sup> at D₁ directly under end of board	<u>Distance<sup>a</sup></u> <u>Between</u> D <sub>1</sub> and D <sub>2</sub>	<u>Minimum</u> depth <sup>a</sup> at <u>D</u> <sub>2</sub>
2'2" (2/3 meter)	7 <u>'0"</u>	8'0"	8'6"
2'6" (3/4 meter)	7 <u>'6"</u>	9'0"	9'0"
1 meter	8 <u>'6"</u>	10'0"	10'0"
3 meter	11'0"	10'0"	12'0"

Note a. 1 foot = 304.8 mm.

# Table 3109.10(2) MINIMUM WATER DEPTHS AND DISTANCES BASED ON BOARD HEIGHT FOR PRIVATE POOLS

Board Height	Minimum depth <sup>a</sup> at D <sub>1</sub> directly under end of board	<u>Distance<sup>a</sup></u> <u>Between</u> <u>D₁ and D₂</u>	<u>Minimum</u> <u>depth<sup>a</sup> at</u> <u>D</u> <sub>2</sub>
1'8 (1/2 meter)	<u>6'0"</u>	<u>7'0"</u>	<u>7'6"</u>
2'2" (2/3 meter)	<u>6'10"</u>	<u>7'6"</u>	<u>8'0"</u>
2'6" (3/4 meter)	<u>7'5"</u>	<u>8'0"</u>	<u>8'0"</u>
3'4" (1 meter)	<u>8'6"</u>	<u>9'0"</u>	<u>9'0"</u>

Note a. 1 foot = 304.8 mm.

# CHAPTER 33 SAFEGUARDS DURING CONSTRUCTION

### SECTION 3305 SANITARY

**3305.1 IBC** Facilities required. Sanitary facilities shall be provided during construction, remodeling or demolition activities in accordance with the Kentucky State Plumbing Code.

# CHAPTER 34 EXISTING STRUCTURES

provisions in 3410.2.1 through 3410.2.5 shall apply to existing occupancies that will continue to be, or are

#### SECTION 3401 GENERAL

**3401.2 Maintenance.** Building and structures, and parts thereof, shall be maintained in a safe and sanitary condition. Devices or safeguards which are required by this code shall be maintained in conformance with the code edition under which installed. The owner or the owner's designated agent shall be responsible for the maintenance of buildings and structures. The requirements of this chapter shall not provide the basis for removal or abrogation of fire protection and safety systems and devices in existing structures.

**3401.3 Compliance with other codes.** 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, NFPA 54 National Fuel Gas Code, International Mechanical Code, Kentucky Plumbing Code, International Residential Code and NFPA 70.* (effective date May 7, 2010)

3403.1 Existing buildings or structures. Additions or alterations to any building or structure shall comply with the requirements of the code for new construction. Additions or alterations shall not be made to an existing building or structure that will cause the existing building or structure to be in violation of any provisions of this code. An existing building plus additions shall comply with the height and area provisions of Chapter 5. Portions of the structure not altered and not affected by the alteration are not required to comply with the code requirements for a new structure. If a fire wall separates the existing portion from the addition, both buildings shall comply with the height and area provisions of Chapter 5 as separate buildings.

**3407.1 Historic buildings.** The restoration or renovation of a building on a federal, state or local historic register solely to return the building to its original design shall not require the remainder of the building to comply with this code, except for alterations or changes of occupancy governed by Section 3403 or 3406.

**3410.2 Applicability.** Structures existing prior to August 15, 1982, 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 3403 through 3407. The

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.

### **CHAPTER 35 REFERENCED STANDARDS**

**ASHRAE** 

American Society of Heating, Refrigeration and Air-Conditioning Engineers, Inc. 1791 Tullie Circle, NE Atlanta, GA 30329-2305

<i>-</i> 10111171	Atlanta, GA 30329-2305
Standard Reference Number	Referenced in code Title section number
ASHRAE 62.1 – 2007 (change eff. 07/29/09)	Ventilation for Acceptable Indoor Air Quality
ASME	American Society of Mechanical Engineers Three Park Avenue New York, NY
Standard Reference Number	Referenced in code Title section number
A17.1 2007/CSA B44-07 and Addendas (effective 02-01-2012)	Safety Code for Elevators and Escalators,1007.4, 1607.8.1, 3001.4, 3002.5, 3002.8.1, 3003.2, 3009.2, 3009.2.1, 3009.2.2, 3009.2.3, 3011.3, 3409.8.2
À17.2-2007	Guide for Inspection of Elevators, Escalators, and Moving Walks
(effective 02-01-2012) A17.3-2008	Safety Code for Existing Elevators and Escalators
(effective 02-01-2012) A17.4-1999	Guide for Emergency Personnel
A17.5-2004	Elevator and Escalator Electrical Equipment
(effective 02-01-2012) A17.6-2010 (effective 02-01-2012)	Standard for Elevator Suspension, Compensations and Governor Systems (as deirected by ASME A1.1-2010)3001.2
A18.1-2008	Safety Standard for Platform Lifts and Stairway Chairlifts
A112.18.19.8M-1987	Suction Fittings for Use in Swimming Pools, Wading Pools, Spas, Hot Tubs and Whirlpool Bathing Appliances
A112.19.17-2002	Manufactured Safety Vacuum Release Systems (SVRS) for Residential and Commercial Swimming Pool, Spa, Hot Tub and Wading Pool
B16.18-2001	Cast Copper Alloy Solder Joint Pressure Fittings
B16.22-2001	Wrought Copper and Copper Alloy Solder Joint Pressure Fittings
B20.1-2009	Safety Standards for Conveyors and related Equipment
(effective 02-01-2012) B31.3-2002	Process Piping

## KY **CODES**

Standard		Referenced
Reference		in code
Number		Section
	Title	number
FEMA 460, 9/2005	Federal Emergency Management Assistance	
KPC-06	Kentucky State Plumbing Code	101.4.4, 201.3, 415.6.4, 717.5, 903.3.5, 912.5, 1206.3.3, 1503.4, 1807.4.3, 2901.1, 3305.1, 3401.3
KSOS	Kentucky Standards of Safety	815 KAR 10:060, 101.5, 202, 3410.3.2

### ICC

International Code Council 5203 Leesburg Pike, Suite 600 Falls Church, VA 22041

Standard		Referenced
Reference		in code
Number		Section
	Title	number
ICC/ANSI A117.1-03	Accessible and Usable Buildings and Facilities	406.2.2, 907.9.1 .
	1010.1, 1010.6.5, 10	010.9, 1011.3, 1101.2, 1102.1, 1103.2.14, 1106.7,
	1107.2, 1108	.2.2, 1109.1, 1109.2, 1109.2.1.1, 1109.2.2, 1109.3,
	1	1109.4, 1109.8, 3001.3, 3409.6, 3409.8.2, 3409.8.3
ICC 300-02	ICC Standard on Bleachers, Folding and Telescopic Seating and Grandsta	ands1025.1.1,3401.1
IECC-09 (Effective 3-6-2011 with	International Energy Conservation Code®	101.4.7,1203.3.2, 1301.1.1, 1403.2
mandatory compliance	100.00	
beginning 6-1-2011)	ICC Standard on Bleachers, Folding and Telescopic Seating and Grandsta	
IFČ-06	· · · · · · · · · · · · · · · · · · ·	1, 410.3.6, 411.1, 412.4.1, 413.1, 414.1.1, 414.1.2,
		114.2.5 (1), Table 414.2.5(2), 414.3, 414.5, 414.5.1,
		414.6, 415.1, 415.2, 415.3, 415.3.1, Table 415.3.1, 415.6.2, 415.6.2.3, 415.6.2.5, 415.6.2.7, 415.6.2.8,
		6.4, 415.7, 415.8.1, 415.8.2.7, 415.8.5.1, 415.8.7.2,
		8.2, 706.1, 901.2, 901.3, 901.5, 901.6.2, 903.2.6.1,
		05.1, 905.3.6, 906.1, 907.2.5, 907.2.12.2, 907.2.14,
		910.3, 1001.3, 1203.4.2, 1203.5, 2702.1, 2702.2.9,
	2702.2.11, 2702.2.12, 2702.2.13, 2702.3, 3102.1, 3103.1, 3309.2, 340	
	International Mechanical Code®101.4.3, 201.3, 307.	1, Table 307.1(1), 406.4.2, 406.6.3, 406.6.5, 409.6,
IMC-06	412.4.6, 414.1.2, 414.3, 415.6.1	.4, 415.6.2, 415.6.2.8, 415.6.3, 415.6.4, 415.8.11.1
IIVIC-06	416.3, 420.5, 603.1, 707.2, 716.2.2, 716.5.4, 716.6.1	, 716.6.2, 716.6.3, 717.5, 719.1, 719.7, 903.2.12.1,
		10.2, 1015.5, 1017.4.1, 1203.1, 1203.2.1, 1203.4.2,
	1203.4.2.1, 1203.5, 1209.3, 2304.5, 2801.1,	3004.3.1, 3401.3, 3410.6.7.1, 3410.6.8, 3410.6.8.1
	Test Standard for Determining Wind Resistance of Concrete or Clay Roof	Tiles1715.2.1, 1715.2.2
SBCCI SSTD 11-97		

# NFPA

National Fire Protection Association

1 Batterymarch Park Quincy MA 02269-9101

	Quincy MA 02269-9101	
Standard Reference Number	Title	Referenced in code section
Number	Title	number
11-02	Low Expansion Foam	904.7
12-00	Carbon Dioxide Extinguishing Systems.	904.8,904.11
12A-04	Halon 1301 Fire Extinguishing Systems	904.9
13-02	Installation of Sprinkler Systems	
13D-02		905.3.4, 907.8, 3104.5, 3104.9
	Installation of Sprinkler Systems in One- and Two-family Dwellings and Manufactured Hom-	es903.3.1.3, 903.3.5.1.1
13R-02	Installation of Sprinkler Systems in Residential Occupancies Up to and Including Four Stories	es in Height903.3.1.2, 903.3.5.1.1, 903.3.5.1.2, 903.4
14-03	Installation of Standpipe and Hose Systems	905.2, 905.3.4, 905.4.2, 905.8
16-03	Installation Foam-water Sprinkler and Foam-water Spray Systems	904.7, 904.11
17-02	Dry Chemical Extinguishing Systems	904.6, 904.11
17A.02	Wet Chemical Extinguishing Systems	904.5, 904.11
24-02	Installation of Private Fire Service Mains and Their Appurtenances	913.1, 913.2
30-03	Flammable and Combustible Liquids Code	415.3
31.01	Installation of Oil-burning Equipment	2113.15
	0.4	2007 Kantuaky Ruilding Coda

32-00	Dry Cleaning Plants
40-01	Storage and Handling of Cellulose Nitrate Film
54-09	National Fuel Gas Code
Effective 02/01/2011 58-04	Liquefied Petroleum Gas Code
61.99	Prevention of Fires and Dust Explosions in Agriculture and Food Product Facilities
70-2011 Effective 02/01/2011	National Electric Code
72-02	National Fire Alarm Code
80-99	Fire Doors and Fire Windows
85-04	Boiler and Combustion System Hazards Code
90A-99	Installation of Air-Conditioning and Ventilating Systems
90B-99	Installation of Warm Air Heating and Air-Conditioning Systems
92B-05	Smoke Management Systems in Malls, Atria and Large Spaces
101-00	Life Safety Code
105-03	Standard for the Installation of Smoke Door Assemblies
110-02	Emergency and Standby Power Systems2702.1
111-01	Stored Electrical Energy Emergency and Standby Power Systems
120-99	Coal Preparation Plants
211-03	Chimneys, Fireplaces, Vents and Solid Fuel-burning Appliances
230-03	Standard for the Fire Protection of Storage507.3
252-03	Standard Methods of Fire Tests of Door Assemblies
253-00	Test for Critical Radiant Flux of Floor Covering Systems Using a Radian Heat Energy Source
257-00	Standard for Fire Test for Window and Glass Block Assemblies
259-04	Test Method for Potential Heat of Building Materials
265-02	Method of Fire Tests for Evaluating Room Fire Growth Contribution of Textile  Wall Coverings on Full Height Panels and Walls
268-01	Standard Test Method for Determining Ignitibility of Exterior Wall Assemblies Using a Radiant Heat Energy Source
285-98	Standard Method of Test for the Evaluation of Flammability Characteristics of Exterior Nonload-bearing Wall Assemblies Containing Combustible Components
286-00	Standard Method of Fire Test for Evaluating Contribution of Wall and Ceiling Interior Finish to Room Fire Growth
288-01	Standard Methods of Fire Tests of Floor Fire Door Assemblies in Fire-resistance-rated Floor Systems711.8, 712.4.1.5
303-00	Fire Protection Standards for Marinas and Boatyards905.3.7
409-01	Aircraft Hangars
418-01	Standard for Heliports
651-98	Machining and Finishing of Aluminum and the Production and Handling of Aluminum Powders415.6.1

654-00	Prevention of Fire and Dust Explosions from the Manufacturing, Processing and Handling of Combustible Particulate Solids
655-01	Prevention of Sulfur Fires and Explosions
664.02	Prevention of Fires Explosions in Wood Processing and Woodworking Facilities
701.99	Standard Methods of Fire Tests for Flame-propagation of Textiles and Films
704.01	Standard System for the Identification of the Hazards of Materials for Emergency Response
484-02	Combustible Metals, Metal Powders, and Metal Dusts
520-99	Subterranean Spaces
1124-03	Manufacture, Transportation, and Storage of Fireworks and Pyrotechnic Articles415.3.1
2001-04	Clean Agent Fire Extinguishing Systems904.10