

## CHAPTER IX. BUILDINGS AND CONSTRUCTION

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### ARTICLE 1. GENERAL PROVISIONS

9-101

#### TITLE; SCOPE AND INTENT

(a) TITLE. Article 1 of this Chapter shall be known as the Miami County Building Code and shall include all codes and standards adopted herein. Any reference to Article 1 or any code or standard adopted by this Article, referred to as "the Miami County Building Code". "this code". Or like phrases may be considered to refer to Article 1, or any code or standard adopted by reference herein as if all volumes were published in a single document.

*(R01-05-046; Sec. 101)*

(b) SCOPE. The provisions of the Miami County Building Code shall apply to the construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, maintenance, removal and demolition of every building or structure or any appurtenances connected or attached to such buildings or structures.

(c) INTENT. The purpose of this code is to establish the minimum 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 and to provide safety to fire fighters and emergency responders during emergency operations.

(d) JURISDICTION. Article 1 of this Chapter shall apply to the unincorporated area of the County and to any incorporated city within Miami County that specifically incorporates Article 1 pursuant to Kansas Law.

*(R01-05-046; Sec. 102)*

(e) ADMINISTRATION AND ENFORCEMENT. The provisions contained in Articles 1 and 2 shall apply for the purpose of the issuing, suspension, and revocation of permits; the collection of fees; the making of inspections; the execution of plan reviews; the enforcement of this article and the model codes incorporated herein and the fixing of penalties for violations thereof.

*(R01-05-046; Sec. 103)*

(f) AMENDMENTS AND ADDITIONS. Articles 1 and 2 may be supplemented or its provisions may be amended by resolution duly adopted by the Board of County Commissioners and any such amendments or additions shall be incorporated within and codified as a part of Articles 1 and 2.

*(R01-05-046; Sec. 104)*

(g) SEVERABILITY. It is hereby declared the intention of the Board of County Commissioners that the sections, paragraphs, sentences, clauses and phrases of Articles

1 and 2 are to be severable, and should any section or provision of these regulations be declared unconstitutional or otherwise ruled to be invalid by any court of competent jurisdiction in a valid judgement or decree, then such decision or ruling shall not affect the validity of the regulations as a whole or any part of them other than the specific part declared to be unconstitutional or ruled to be invalid.

(R01-05-046; Sec. 105)

9-102

## APPLICABILITY

(a) 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.

(b) OTHER LAWS. The provisions of this code shall not be deemed to nullify any provisions of local, state or federal law.

(c) 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.

(d) 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.

(e) 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 or the *International Fire Code*, or as is deemed necessary by the code official for the general safety and welfare of the occupants and the public.

(f) EXISTING EQUIPMENT. Plumbing, electrical, mechanical or fuel gas systems lawfully in existence at the time of the adoption of this code shall be permitted to have their use and maintenance continued if the use, maintenance or repair is in accordance with the original design and no hazard to life, health or property is created by such system.

(g) MAINTENANCE. All plumbing, electrical, mechanical or fuel gas systems, materials and appurtenances, both existing and new, and all parts thereof, shall be maintained in proper operating condition in accordance with the original design in a safe and sanitary condition. All devices or safeguards required by this code shall be maintained in compliance with the code edition under which they were installed.

The owner or the owner's designated agent shall be responsible for maintenance of building systems. To determine compliance with this provision, the code official shall have the authority to require any system to be reinspected.

(h) ADDITIONS, ALTERATIONS OR REPAIRS. Additions, alterations, renovations or repairs to any building or building systems shall conform to that required for new construction without requiring the existing building or building systems to comply with all the requirements of this code. Additions, alterations or repairs shall not cause the existing building or building systems to become unsafe, insanitary or overloaded.

Minor additions, alterations, renovations and repairs to existing building systems shall be permitted in the same manner and arrangement as in the existing building system, provided that such repairs or replacement are not hazardous and are approved.

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#### DEPARTMENT OF BUILDING SAFETY

(a) CREATION OF ENFORCEMENT AGENCY. The department of building safety is hereby created and the official in charge thereof shall be known as the code official.

(b) APPOINTMENT. The code official shall be appointed by the chief appointing authority of the jurisdiction.

(c) DEPUTIES. In accordance with the prescribed procedures of this jurisdiction and with the concurrence of the appointing authority, the code official shall have the authority to appoint deputies, related technical officers, inspectors, plan examiners and other employees. Such employees shall have powers as delegated by the code official.

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#### DUTIES AND POWERS OF CODE OFFICIAL

(a) GENERAL. The code official is hereby authorized and directed to enforce the provisions of this code. The code 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.

(b) APPLICATIONS AND PERMITS. The code official shall receive applications, review construction documents and issue permits for the erection, and alteration, demolition 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.

(c) NOTICES AND ORDERS. The code official shall issue all necessary notices or orders to ensure compliance with this code.

(d) INSPECTIONS. The code official shall make all of the required inspections, or the code 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.

(e) IDENTIFICATION. The code official shall carry proper identification when inspecting structures or premises in the performance of duties under this code.

(f) RIGHT OF ENTRY. Where it is necessary to make an inspection to enforce the provisions of this code, or where the code 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 code 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 code official shall have recourse to the remedies provided by law to secure entry.

(g) DEPARTMENT RECORDS. The code 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.

(h) **LIABILITY.** The code 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 code 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.

(i) **APPROVED MATERIALS AND EQUIPMENT.** Materials, equipment and devices approved by the code official shall be constructed and installed in accordance with such approval.

(j) **USED MATERIALS AND EQUIPMENT.** The use of used materials which meet the requirements of this code for new materials is permitted. Used equipment and devices shall not be reused unless approved by the code official.

(k) **MODIFICATIONS.** Wherever there are practical difficulties involved in carrying out the provisions of this code, the code official shall have the authority to grant modifications for individual cases, upon application of the owner or owner's representative, provided the code 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.

(l) **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 code 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.

(m) **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 code 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 code official shall approve the testing procedures. Tests shall be performed by an approved agency. Reports of such tests shall be retained by the code official for the period required for retention of public records.

## PERMITS

(a) **REQUIRED.** Any owner or authorized agent who intends to construct, enlarge, alter, repair, move, demolish, or change the occupancy of a building or structure, or to erect, install, enlarge, alter, repair, remove, convert or replace any electrical, gas, mechanical or plumbing system, the installation of which is regulated by this code, or to cause any such work to be done, shall first make application to the code official and obtain the required permit.

(1) **ANNUAL PERMIT.** In lieu of an individual permit for each alteration to an already approved electrical, gas, mechanical or plumbing installation, the code official is authorized to issue an annual permit upon application therefor 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.

(2) **ANNUAL PERMIT RECORDS.** The person to whom an annual permit is issued shall keep a detailed record of alterations made under such annual permit. The code official shall have access to such records at all times or such records shall be filed with the code official as designated.

(b) **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. The following work shall be exempt from the requirement for a permit:

(1) **Building:**

- (A) One-story detached accessory structures used as tool and storage sheds, playhouses and similar uses, provided the floor area does not exceed 200 square feet (11.15 m<sup>2</sup>).
- (B) Fences not over 6 feet (1829 mm) high, except fences associated with an agricultural use regardless of height shall be exempt from permit requirements.
- (C) Oil derricks.
- (D) 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 III-A liquids.
- (E) Water tanks supported directly upon grade if the capacity does not exceed 5,000 gallons (18 927 L) and the ratio of height to diameter or width does not exceed 2 to 1.
- (F) Sidewalks and driveways not more than 30 inches (762 mm) above grade and not above any basement or story below and which are not part of an accessible route.
- (G) Painting, papering, tiling, carpeting, cabinets, counter tops and similar finish work.
- (H) Temporary motion picture, television and theater stage sets and scenery.
- (I) Prefabricated swimming pools accessory to a Group R-3 occupancy, as applicable in Section 101.2, which are less than 24 inches (610 mm) deep, do not exceed 5,000 gallons (19 000 L) and are installed entirely above ground.
- (J) Shade cloth structures constructed for nursery or agricultural purposes and not including service systems.
- (K) Swings and other playground equipment accessory to one- and two-family dwellings.

- (L) 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, as applicable in Section 101.2, and Group U occupancies.
- (M) Movable cases, counters and partitions not over 5 feet 9 inches (1753 mm) in height.

(2) Electrical:

- (A) Repairs and maintenance: Minor repair work, including the replacement of lamps or the connection of approved portable electrical equipment to approved permanently installed receptacles.
- (B) Radio and television transmitting stations: The provisions of this code shall not apply to electrical equipment used for radio and television transmissions, but does apply to equipment and wiring for power supply, the installations of towers and antennas.
- (C) 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.

(3) Gas:

- (A) Portable heating appliance.
- (B) Replacement of any minor part that does not alter approval of equipment or make such equipment unsafe.

(4) Mechanical:

- (A) Portable heating appliance;
- (B) Portable ventilation appliances and equipment;
- (C) Portable cooling units;
- (D) Steam, hot or chilled water piping within any heating or cooling equipment regulated by this code;
- (E) The replacement of any minor part that does not alter the approval of equipment or an appliance or make such equipment or appliance unsafe;
- (F) Portable evaporative cooler;
- (G) Self-contained refrigeration systems that contain 10 pound (4.54 kg) or less of refrigerant, or that are actuated by motors of 1 horsepower (746 W) or less.
- (H) Portable fuel cell appliances that are not connected to a fixed piping system and are not interconnected to a power grid.

(5) Plumbing:

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

(c) 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 code official.

(d) REPAIRS. Application or notice to the code 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 rearrangement of parts of a structure affecting the egress requirements; nor shall ordinary repairs 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.

(e) 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.

(f) APPLICATION FOR PERMIT.

(1) NEW CONSTRUCTION; ADDITIONS; ALTERATIONS; REPAIRS; REMODELS; OTHER MISC. To obtain a permit, the applicant shall first file an application therefor in writing on a form furnished by the Department of Building Safety for that purpose. Such application shall:

- (a) Identify and describe the work to be covered by the permit for which application is made.
- (b) 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.
- (c) Indicate the use and occupancy for which the proposed work is intended.
- (d) Be accompanied by construction documents and other information as required in Section 106.
- (e) State the valuation of the proposed work.
- (f) Be signed by the applicant, or the applicant's authorized agent.
- (g) Give such other data and information as required by the code official.

(2) APPLICATION FOR MOVING PERMIT. A permit shall be required to move any building into or within Miami County. Applications for permits to move a building shall be made to the Department of Building Safety.

Pre-Move Evaluation. An inspection to evaluate the general condition of the existing structure and to establish specific requirements needed to bring the existing building and its components into compliance with this code is required.

This inspection shall be performed either by the Department of Building Safety or by a Professional Architect or Engineer at the option of the code official. A copy of the evaluation report listing any conditions required to be corrected shall be entered into the projects permit file.

In addition to the information required by Section 105 (f) (1), every such application shall indicate:

- (a) A copy of the warranty deed for the present location of the building to be moved.

- (b) The name and address of the owner of the building.
- (c) A letter of authorization from the current owner of the building or property to conduct an evaluation inspection and granting the permit applicant permission to move the building from its existing location.
- (d) Documentation that all public utilities have been properly disconnected.
- (e) The length of time required to perform the proposed work.
- (f) Approved moving permit issued by the Office of the Miami County Clerk.
- (g) A pre-move evaluation inspection report..
- (h) Evidence of a completed foundation at the proposed location. The foundation permit will be issued only after receipt of a pre-move evaluation and approval of the Moving Permit required by subsection (k) of this section.
- (i) Approval of sewage disposal system for the proposed location by the Miami County Environmental Health Department.
- (j) Submittal of any plans, specifications or other documents required to obtain any permits for any addition, repair, remodel, or improvement of the building when placed upon the required foundation at the proposed location.

(3) DEMOLITION PERMITS. In addition to the information required by Section 105 (f) (1), every such application shall indicate:

- (a) The present location of the building to be demolished.
- (b) Documentation that all public utilities have been properly disconnected.
- (c) The length, width and height of the building.
- (d) The principal materials of construction of the building.
- (e) The length of time required to perform the proposed work.
- (f) Proof of permission from the property owner authorizing the building to be demolished.
- (g) The name, address and phone number of the demolition debris landfill where demolition debris will be disposed or a permit to burn the demolition debris issued by the fire department providing fire protection to the property.
- (h) A satisfactory pre-demolition evaluation inspection from the Department of Building Safety.
- (i) Approval for the abandonment of the on-site waste water system or approval for reuse of the on-site waste water system by the Miami County Environmental Health Department.

(g) ACTION ON APPLICATION. The code 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 code official shall reject such application in writing, stating the reasons therefor. If the code official is satisfied that the proposed work conforms to the requirements of this code and laws and ordinances applicable thereto, the code official shall issue a permit therefor as soon as practicable.

(h) 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 code 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.



(i) **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 code official from requiring the correction of errors in the construction documents and other data. The code 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.

(j) **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 unless an inspection has been requested by the permit applicant, or if the building or work authorized by such permit is suspended or abandoned at any time after the work is commenced for a period of 180 days. Every building permit issued by the code official under provisions of the technical codes shall expire by limitation and become null and void unless the building or work authorized by such permit is not completed and approved within one (1) year from the date such permit was issued.

Permits issued for the moving or demolition of a building or structure shall expire 60 days after the date the permit was issued. An extension of time to complete the moving or demolition of a building or structure shall not be granted. Before work may commence, recommence or continue after expiration, a new permit shall first be obtained by the permittee and a new full permit fee shall be paid therefor.

All work requiring a permit shall be suspended upon the expiration of a permit.

(k) **EXTENSIONS.** A permittee holding an unexpired permit may apply for an extension of the time within which work may be completed under that permit. Permit extensions shall be subject to the expiration periods specified by Section 105 (j). Fees as required by the fee schedule adopted by the jurisdiction, for the extension of a permit shall be paid prior to the expiration date of the permit.

(l) **RENEWAL OF EXPIRED PERMIT WHEN WORK HAS BEEN STARTED.** A permittee holding an expired permit may apply for a renewal of the permit to allow for the completion of the work started. Permit renewals shall be subject to the expiration periods specified by Section 105 (j). Fees as required by the fee schedule adopted by the jurisdiction, for the renewal of a permit shall be paid prior to the work authorized by the permit being started.

(m) **RENEWAL OF EXPIRED PERMIT WHEN NO WORK HAS STARTED.** Before work can be started, a new permit shall be first obtained to do so, provided no changes have been made or will be made in the original plans and specifications for such work. In order to renew action on a permit after expiration, the permittee shall pay a new full permit fee. Permits shall not be renewed when no work has begun if the codes or regulations adopted by the jurisdiction have been changed since the permit was originally issued.

(n) **SUSPENSION OR REVOCATION.** The code 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.

(o) **PLACEMENT OF PERMIT.** The building permit or copy shall be kept on the site of the work until the completion of the project.

The permit card shall be posted on the job site in a position to be clearly visible from the roadway prior to the start of any work authorized by the permit. Any posts or backing required to post the permit card shall be provided by the permit applicant.

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## CONSTRUCTION DOCUMENTS

(a) SUBMITTAL DOCUMENTS. Construction documents, special inspection and structural observation programs, and other data shall be submitted in two or more sets with each application for a permit. The construction documents shall be prepared by a registered design professional where required by the code official. Where special conditions exist, the code official is authorized to require additional construction documents to be prepared by a registered design professional.

EXCEPTION: The code 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.

(b) INFORMATION ON CONSTRUCTION DOCUMENTS. Construction documents shall be dimensioned and drawn upon suitable material. Electronic media documents are permitted to be submitted when approved by the code 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 code official.

(1) FIRE PROTECTION SYSTEM SHOP DRAWINGS. Shop drawings for the fire protection system(s) shall be submitted to indicate conformance with 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 of the International Building Code.

(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, R-3 and I-1, the construction documents shall designate the number of occupants to be accommodated on every floor, and in all rooms and spaces.

(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 manufacturing 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.

(c) 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 construction to be demolished and the location and size of existing structures and construction that are to remain on the site or plot. The code 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.

(d) EXAMINATION OF DOCUMENTS. The code 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 and other pertinent laws or ordinances.

(1) APPROVAL OF CONSTRUCTION DOCUMENTS. When the code official issues a permit, the construction documents shall be approved, in writing or by stamp, as "Reviewed for Code Compliance." One set of construction documents so reviewed shall be retained by the code official. The other set shall be returned to the applicant, shall be kept at the site of work and shall be open to inspection by the building official or his authorized representative.

(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.

(3) PHASED APPROVAL. The code 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.

(4) 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 code official within a specified period.

Deferral of any submittal items shall have the prior approval of the code official. The registered design professional in responsible charge shall list the deferred submittals on the construction documents for review by the code 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 code official with a notation indicating that the deferred submittal documents have been reviewed and that they have been found to be in general conformance with the design of the building. The deferred submittal items shall not be installed until the design and submittal documents have been approved by the code official.

(5) AMENDED CONSTRUCTION DOCUMENTS. Work shall be installed in accordance with the reviewed 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.

(6) DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE.

(A) GENERAL. When it is required that documents be prepared by a registered design professional, the code 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 original registered design professional in responsible charge. The code 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 of the International Building Code, the inspection program 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 of the International Building Code.

(B) R404.1.3 Design required. A design in accordance with accepted engineering practice shall be provided for concrete or masonry foundation walls when any of the conditions listed below are found to exist.

(1) Foundation walls are subject to hydrostatic pressure from ground-water.

(2) Foundation walls and retaining walls supporting more than 48 inches (1219 mm) of unbalanced backfill that do not have permanent lateral support at the top and bottom.

(3) Foundation walls exceeding 10 feet in height, measured from the top of the wall to the bottom of the slab.

(4) Footings and foundations placed on fill.

(5) Foundations installed on slopes steeper than 4:1 before grading.

(6) Foundations that bear partially on soil and partially on rock.

(7) Foundation walls with an unbroken line of greater than 25 feet.

(8) Masonry foundation walls with an unbalanced backfill height greater than 4 feet.

(9) ICF foundation walls.

(10) Concrete slabs located over accessible space that have a clear span greater than 4 feet in any direction.

(11) Concrete slabs where any portion of the slab is placed on more than 2 feet of fill material.

(12) Log Structures.

(13) Cold formed steel framing.

(14) Foundations and anchorage systems for manufactured homes.

Where applicable, a standard design approved by the code official may be used in lieu of a design from a design professional. For new single family dwellings where standard designs approved by the code official are used, the design professional sealing the plans shall specify the use of those designs on the approved plans or through a separate report.

(e) RETENTION OF CONSTRUCTION DOCUMENTS. One set of approved construction documents shall be retained by the code official for a period of not less than three years from date of completion of the permitted work, or as required by state or local laws.

9-107 TEMPORARY STRUCTURES AND USES

(a) GENERAL. The code 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 code official is authorized to grant extensions for demonstrated cause.

(b) 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.

(c) TEMPORARY POWER. The code official is authorized to give permission to temporarily supply and use power 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 NFPA 70, National Electrical Code, 2005 Edition.

(f) TERMINATION OF APPROVAL. The code official is authorized to terminate such permit for a temporary structure or use and to order the temporary structure or use to be discontinued or removed.

9-108 FEES.

(a) Fees for permits and other services required by this code shall be assessed in accordance with Article 3 of this chapter.  
(R01-05-046; Sec. 108)

9-109 INSPECTIONS

(a) GENERAL. Construction or work for which a permit is required shall be subject to inspection by the code 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 code official nor

the jurisdiction shall be liable for expense entailed in the removal or replacement of any material required to allow inspection.

(b) PRELIMINARY INSPECTION. Before issuing a permit, the code official is authorized to examine or cause to be examined buildings, structures and sites for which an application has been filed.

(c) REQUIRED INSPECTIONS. The code official, upon notification, shall make the inspections set forth in Sections 109 (c) (1) through 109 (c) (10) of this code.

- (1) FOOTING OR FOUNDATION INSPECTION. Footing and foundation inspections shall be made 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. Materials for the foundation shall be on the job, except where concrete is ready mixed in accordance with ASTM C 94, the concrete need not be on the job.
- (2) UNDERGROUND INSPECTION. Open trench inspections shall be made after ditches or trenches are excavated and bedded and water supply piping, waste water piping, electrical conduit or direct burial conductor assemblies, or other building service components are in place and before any backfill is put in place.
- (3) 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.
- (4) 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 of the International Building Code shall be submitted to the code official.
- (5) ROUGH-IN INSPECTION. Rough in inspection shall be approved prior to any work requiring inspection being concealed. Rough in includes all structural and nonstructural aspects of the building frame including the building envelope, fireblocking and firestopping and the installation of electrical, plumbing, mechanical, gas piping, fire protection piping and other building equipment that will be concealed by building finish material have been installed.
- (6) ROOF COVERING INSPECTION. Inspection of the roof covering installation shall be made prior to the installation with the inspection being performed while the installation of the roof covering is in progress.
- (7) GAS PIPING AND PRESSURE TESTING. Rough in inspection shall be made after all interior gas piping has been installed. A pressure test shall be performed in accordance with Section G2417 of the International Residential Code for One- and Two-Family Dwellings and Section 406 of the International Fuel Gas Code.

The requirements of this section shall not be considered to prohibit the operation of any heating equipment installed to replace existing heating equipment serving an occupied portion of a structure in the event a request for inspection of such heating equipment has been filed with the department not more than 48 hours after replacement work is completed, and before any portion of such equipment is concealed by any permanent portion of the structure.

(8) LATH OR GYPSUM BOARD INSPECTION. Lath and gypsum board inspections shall be made after lathing 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-resistive assembly or a shear assembly.

(9) FIRE-RESISTANT PENETRATIONS. Protection of joints and penetrations in fire-resistance-rated assemblies shall not be concealed from view until inspected and approved.

(10) OTHER INSPECTIONS. In addition to the inspections specified above, the code 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.

(11) SPECIAL INSPECTIONS. For special inspections, see Section 1704 of the International Building Code.

(12) FINAL INSPECTION. The final inspection shall be made after all work required by the building permit is completed and the structure is ready for occupancy.

(d) INSPECTION AGENCIES. The code official is authorized to accept reports of approved inspection agencies, provided such agencies satisfy the requirements as to qualifications and reliability.

(e) EQUIPMENT, MATERIAL AND LABOR FOR TESTS. All equipment, material and labor required for testing any building systems or part thereof shall be furnished by the permit holder.

(f) INSPECTION REQUESTS. It shall be the duty of the holder of the building permit or their duly authorized agent to notify the code official when work is ready for inspection. It shall be the duty of the permit holder to provide access to and means for inspection of such work for any inspections that are required by this code.

(g) APPROVAL REQUIRED. Work shall not be done beyond the point indicated in each successive inspection without first obtaining the approval of the code official. The code 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 code official.

9-110

#### CERTIFICATE OF OCCUPANCY

(a) 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 code official has issued a certificate of occupancy therefor 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.

(b) CHANGE IN USE. Changes in the character or use of an existing structure shall not be made except as specified in Chapter 34 of the International Building Code.

(c) CERTIFICATE ISSUED. After the code 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 code official shall issue a certificate of occupancy that shall contain 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.
- (5) 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 code 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 of the International Building Code.
- (9) The type of construction as defined in Chapter 6 of the International Building Code.
- (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.

(d) TEMPORARY OCCUPANCY. The code 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 code official shall set a time period during which the temporary certificate of occupancy is valid.

(e) REVOCATION. The code official is authorized to, in writing, suspend or revoke a certificate of occupancy or completion issued under the provisions of this code wherever the certificate is issued in error, or on the basis of incorrect information supplied, or where it is determined that the building or structure or portion thereof is in violation of any ordinance or regulation or any of the provisions of this code.

9-111

#### SERVICE UTILITIES

(a) 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 code official.

(b) TEMPORARY CONNECTION. The code official shall have the authority to authorize the temporary connection of the building or system to the utility source of energy, fuel or power.

(c) AUTHORITY TO DISCONNECT SERVICE UTILITIES. The code 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 code 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.

9-112.

#### VIOLATIONS AND PENALTIES.

(a) VIOLATION. Any person, company, corporation, institution, municipality or agency of the State of Kansas who violates any provision of the Miami County Building Code as adopted herein and amended hereafter shall be subject to the penalties and



remedies provided for in this Section. Each and every day that a violation is allowed to continue may be deemed to constitute a separate offence.

(b) PENALTIES. Unless otherwise specified elsewhere in this code, any violation of this chapter shall constitute a Class D violation of the Schedule of Fines for Violations of Codes and Resolutions of Miami County, Kansas and shall be prosecuted in the County Codes Court.

(c) OTHER REMEDIES. Whenever any building or structure is or is proposed to be erected, constructed, altered, converted or maintained in violation of any building code, the Board of County Commissioners, in addition to other remedies, may institute injunction, mandamus or other appropriate action or proceeding to prevent such unlawful activity or to correct or abate violation of this act.  
(R01-05-046; Sec. 106)

9-113.

#### CODE BOARD OF APPEALS.

(a) CODE BOARD OF APPEALS ESTABLISHED. In order to hear and decide appeals of orders, decisions or determinations made by the code official relative to the application and interpretation of this code, there shall be and is hereby created a Codes Board of Appeals (CBOA). The board of appeals shall be appointed by the Miami County Board of County Commissioners and shall hold office at its pleasure. The board shall adopt rules of procedure for conducting its business.

(b) SAME; AUTHORITY. An application for appeal shall be based on a claim that the true intent of this code or the rules legally adopted thereunder have been incorrectly interpreted; the provisions of this code do not fully apply; or an equally good or better form of construction is proposed. The CBOA shall have the power to act on issues and matters applicable to contractor licensing and discipline as specified in Section 9-109 of this code. The CBOA shall have no authority to waive requirements of this Articles 1 or 2 of this Chapter.

(c) SAME; APPEAL. Any person shall have the right to appeal a decision of the code official to the Code Board of Appeals. An application for appeal shall be based on a claim that the true intent of this code or the rules legally adopted thereunder have been incorrectly interpreted, the provisions of this code do not fully apply, or an equally good or better form of construction is proposed. The application shall be filed on a form obtained from the code official within 20 days after the notice was served.

(d) SAME; MEMBERSHIP AND TERMS OF BOARD. The Codes Board of Appeals shall consist of seven members and two alternates appointed by the Board of County Commissioners. Terms to the CBOA shall be for three years. Alternate members shall be called by the CBOA chairman to hear appeals during the absence or disqualification of a member. Individuals from the following professions or backgrounds shall be considered for appointment to the Codes Board of Appeals.

1. One member shall be a registered design professional who is a registered architect; or, registered engineer in the State of Kansas
2. Two members shall be general contractors holding current contractors licenses with Miami County.
3. One member shall be an electrical contractor holding a current contractors license with Miami County.
4. One member shall be a plumbing contractor holding a current contractors license with Miami County.
5. One member shall be a mechanical contractor holding a current contractors license with Miami County.
6. One member shall be a citizen residing within Miami County.

(e) CHAIRMAN. The board shall annually select one of its members to serve as chairman.

(f) DISQUALIFICATION OF MEMBER. A member shall not hear an appeal in which that member has any personal, professional or financial interest.

(g) SECRETARY. The code official shall designate a qualified clerk to serve as secretary to the board. The secretary shall file a detailed record of all proceedings in the office of the chief administrative officer.

(h) COMPENSATION OF MEMBERS. Members shall serve on the board without compensation.

(i) REGULAR MEETINGS. The CBOA shall meet for a regular meetings once annually, or at such other time as may be determined by the CBOA. The CBOA shall conduct its meetings in accordance with the Kansas Open Meetings Law.

(j) SPECIAL MEETINGS AND HEARINGS. Special meetings and matters that require a hearing may be called by the CBOA Chairman, the Vice-Chairman, or a majority of the CBOA members present and representing a quorum.

(k) NOTICE OF HEARING. The board shall meet upon notice from the chairman, within ten days of the filing of an appeal or at stated periodic meetings.

(l) OPEN HEARING. All hearings before the board shall be open to the public. The appellant, the appellant's representative, the code official and any person whose interests are affected shall be given an opportunity to be heard.

(m) 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.

(n) QUORUM. Five members of the Board shall constitute a quorum for the transaction of Board business, including hearings. Attendance at any meeting shall be in person.

(o) POSTPONED MEETING. When at least five members are not present to hear an appeal the hearing shall be postponed.

(q) BOARD DECISION. The board shall modify or reverse the decision of the code official by a concurring vote of and majority vote of members present.

(r) RESOLUTION. The decision of the board shall be by resolution. Certified copies shall be furnished to the appellant and to the code official.

(s) ADMINISTRATION. The code official shall take immediate action in accordance with the decision of the board.

*(R01-05-046; Sec. 107)*

9-114

#### STOP WORK ORDER

(a) 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.

(b) 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. The stop work order shall state the reason for the order, and the conditions under which the cited work will be permitted to resume.

(c) 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.

9-115

#### UNSAFE STRUCTURES AND EQUIPMENT

(a) CONDITIONS. Structures or existing equipment that are or hereafter become unsafe, insanitary or deficient because of inadequate means of egress facilities, inadequate light and ventilation, or which constitute a fire hazard, or are otherwise dangerous to human life or the public welfare, or that involve illegal or improper

occupancy or inadequate maintenance, 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.

(b) 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.

(c) Notice. If an unsafe condition is found, 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 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.

(d) 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.

(e) 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.

9-116

#### RURAL ADDRESSING STANDARDS.

(a) All residential or commercial use buildings shall have a permanently posted address, which shall be placed on the building or at each driveway entrance and shall be visible from both directions of travel along the road. In all cases, the address shall be posted at the beginning of construction and shall be maintained thereafter. The address shall be visible and legible from the road on which the address is located.

Address markers along one-way roads shall be visible in the intended direction of travel and the opposite direction.

Where a roadway provides access solely to a single commercial or industrial business, the address marker shall be placed at the nearest road entrance providing access to that site.

Address numbers shall contrast with their background. Address numbers shall be Arabic numerals or alphabet letters. Numbers shall be a minimum of 4 inches (102 mm) high with a minimum stroke width of 0.5 inch (12.7 mm) and shall be provided with an external source of illumination or shall be of a reflective material.

When multiple buildings are located on a single tract of land, each separate building shall have its individual address posted at a location that is plainly visible from its access road or drive in addition to the site address required by this Section.

(R01-05-046; Sec. 109)

(b) ADDRESS ASSIGNMENT. Addresses shall be assigned by the building official in accordance with the standards and procedures adopted by Miami County.

9-116

EFFECTIVE DATE. The provisions contained in Articles 1, 3, 4,5 and 6 of this Chapter will become effective upon adoption by the Board of County Commissioners and

publication of the adopting resolution in the official County newspaper. The model codes and amendments thereto, adopted by reference in Articles 2 and 4 will become effective on July 1, 2007 upon adoption by the Board of County Commissioners and publication of the adopting resolution in the official County newspaper.  
(R01-05-046; Sec. 110)

9-117

DEFINITIONS. For the purpose of this article the following meanings shall apply:

**AGRICULTURAL BUILDING.** A building or structure located on a tract of land twenty (20) contiguous acres or more in area, used for storage of equipment or produce or other commodities necessary for agricultural use, but not including buildings intended for residential uses or the parking or storage of private motor vehicles.  
(R01-05-046; Sec. 111)

**AGRICULTURAL USE.** The use of a tract of land twenty (20) contiguous acres or more in area for the raising of crops, animal husbandry, dairying, pasturage, general farming, truck farming, cultivation of field crops, orchards, groves, raising fish, birds or poultry, and accessory uses, necessary for the carrying out of farming operations, including structures for storage, processing and sale of products raised on the premises.  
(R01-05-046; Sec. 111)

**BEDROOM.** A room that meets the minimum dimension, area and height requirements for a habitable room as specified in Section R304 and that has an adjoining area or space that may be utilized as a closet whether or not the room is actually utilized for sleeping purposes. This definition is intended to be to clarify the applications for the requirements for emergency escape and rescue openings in accordance with Section R310 and smoke alarms in accordance with Section R317 of the International Residential Code for One- and Two-Family Dwellings.  
(R01-05-046; Sec. 202)

**CODE OFFICIAL.** The term "Code Official" contained in any reference in this resolution or in any of the model codes adopted in Article 2 to the may be used synonymously with the terms building official, chief building official, authority having jurisdiction, chief building inspector or any other similar terms.  
(R01-05-046; Sec. 111)

**ELECTRICAL CODE.** Any reference in this resolution or in any of the model codes adopted herein to the ICC Electrical Code may be deemed to refer to the NFPA 70, National Electrical Code, 1999 Edition.  
(R01-05-046; Sec. 111)

**PERMANENT FOUNDATION.** A foundation designed to support and transfer all imposed loads from a building including a manufactured home to the soil within the tolerances specified in this code and that provides means for attaching the building to the foundation.  
(R01-05-046; Sec. 202)

## ARTICLE 2. MODEL CODES ADOPTED; AMENDMENTS

9-201

(a) INCORPORATION OF INTERNATIONAL BUILDING CODE; AMENDMENTS AND DELETIONS. There is incorporated by reference, for the purpose of adopting regulations, provisions, terms, and specifications, for the control of buildings and structures within the unincorporated areas of Miami County; the 2006 International Building Code, dated January, 2006, as published by the International Code Council, Inc., excepting only such parts or portions thereof as are specifically deleted or amended by this Article and including such new and additional provisions added to said code by this Article. Not less than one (1) copy of said 2006 International Building Code shall be marked Official Copy as Adopted by Resolution No. R07-03-019, to which shall be attached a copy of the resolution codified herein, and filed with the County Clerk to be open to inspection and available to the public at all reasonable business hours. (R01-05-046; Sec. 201)

(1) INTERNATIONAL BUILDING CODE; APPENDICES ADOPTED.

The following appendices are adopted as part of the International Building Code.

- (a) Appendix C — Group U, Agricultural Buildings  
(R01-05-046, Sec. 201)
- (b) Appendix E — Supplementary Accessibility Requirements  
(R01-05-046, Sec. 201)
- (c) Appendix H — Signs

(b) INTERNATIONAL BUILDING CODE; DELETIONS. The following chapters, sections and subsections of the 2006 edition of the International Building Code are hereby deleted.

- (1) Chapter 1 in its entirety.

9-202

(a) INCORPORATION INTERNATIONAL RESIDENTIAL CODE FOR ONE- AND TWO FAMILY DWELLINGS. There is incorporated by reference, for the purpose of adopting regulations, provisions, terms, and specifications, for the control of buildings and structures within the unincorporated areas of Miami County; the 2006 International Residential Code, dated February, 2006, as published by the International Code Council, Inc., excepting only such parts or portions thereof as are specifically deleted or amended by this resolution and including such new and additional provisions added to said code by this resolution. Not less than one (1) copy of said 2006 International Residential Code shall be marked Official Copy as Adopted by Resolution No. R07-03-019, to which shall be attached a copy of the resolution codified herein, and filed with the County Clerk to be open to inspection and available to the public at all reasonable business hours.

(1) INTERNATIONAL RESIDENTIAL CODE FOR ONE- AND TWO FAMILY DWELLINGS; APPENDICES ADOPTED. The following appendices are adopted as part of the International Building Code.

- (a) Appendix G – Swimming Pools, Spas and Hot Tubs.
- (b) Appendix J – Existing Buildings and Structures.

(2) INTERNATIONAL RESIDENTIAL CODE FOR ONE- AND TWO FAMILY DWELLINGS; DELETIONS. The following chapters, sections and subsections of the 2006 edition of the International Residential Code for One- and Two-Family Dwellings are hereby deleted.

- (a) Sections R103, R104, R105, R106, R107, R108, R109, R110, R111, R112, R113 and R113
- (b) Table R302.1

- (c) Section R324.
- (d) Table R404.1 (1)
- (e) Table R404.1 (2)
- (f) Table R404.1 (3)
- (g) Subsection R404.1.3
- (h) Subsection R613.2
- (i) Subsection R907.3, item 4.
- (j) Chapter 11.
- (k) Subsection E 3801.4.2.
- (l) Subsection E3802.12

(3) INTERNATIONAL RESIDENTIAL CODE FOR ONE- AND TWO FAMILY DWELLINGS; AMENDMENTS. The following chapters, sections and subsections of the 2006 edition of the International Residential Code for One- and Two-Family Dwellings are hereby amended as follows.

(a) R101.1 Title. These provisions shall be known as the Residential Code for One-and Two-family Dwellings of Miami County, Kansas, and shall be cited as such and will be referred to herein as “this code.”

(b) Table R301.2. (1) is hereby amended to read as follows.

**TABLE R301.2 (1)**  
**CLIMATIC AND GEOGRAPHIC DESIGN CRITERIA**

GROUND SNOW LOAD	WIND SPEED <sup>d</sup> (mph)	SEISMIC DESIGN CATEGORY <sup>f</sup>	SUBJECT TO DAMAGE FROM			WINTER DESIGN TEMP <sup>e</sup>	AIR FREEZING INDEX <sup>g</sup>	MEAN ANNUAL TEMPERATURE <sup>h</sup>
			Weathering <sup>a</sup>	Frost Line Depth <sup>b</sup>	Termite <sup>c</sup>			
20 psf	90	A	Severe	36 inches	Moderate to Severe	6° F	1000	55° F

For SI: 1 pound per square foot = 0.0479 kN/m.0 2 , 1 mile per hour = 1.609 km/h.

(b) R302.1 Exterior walls. Construction, projections, openings and penetrations of exterior walls of dwellings and accessory buildings shall be of one-hour fire-resistive construction where located within 10 feet of a lot line or between another building located on the same lot.

(c) Subsection R303.3 Bathrooms. Bathrooms, water closet compartments and other similar rooms shall be provided with a mechanical ventilation system with a ventilation rate of 50 cfm (23.6 L/s) for intermittent ventilation or 20 cfm (9.4 L/s) for continuous ventilation. Ventilation air from the space shall be exhausted directly to the outside. Exhaust fans serving a space containing only a water closet and/or a lavatory may be of an approved charcoal filter recirculating type.

(d) Subsection R309.1.1 Duct penetration. Ducts in the garage and ducts penetrating the walls or ceilings separating the dwelling from the garage shall be constructed of a minimum No. 26 gage (0.48 mm) sheet steel or other approved material. Supply ducts with openings into a garage shall be provided with listed fire dampers installed in line with the wall, floor/ceiling or roof/ceiling assembly providing the separation required by Section R309.2.

(R01-05-046, Sec. 202)

(e) R401.4.1 Geotechnical evaluation. In lieu of a complete geotechnical evaluation, the load-bearing values of soils in Miami County

shall be assumed to be 1500 psf for typical clays and 4000 psf for sedimentary rock.  
(R01-05-046, Sec. 202)

(f) R403.1.4 Minimum depth. All exterior footings and foundation systems shall extend below the frost line specified in Table R301.2(1). All exterior footings shall be placed at least 36 inches (914 mm) below the undisturbed ground or shall bear directly on solid natural rock.  
(R01-05-046, Sec. 202)

(g) R403.1.5 Slope. The top surface of footings shall be level. The bottom surface of footings shall not have a slope exceeding one unit vertical in 10 units horizontal (10-percent slope). Footings shall be stepped where it is necessary to change the elevation of the top surface of the footings or where the slope of the bottom surface of the footings will exceed one unit vertical in ten units horizontal (10-percent slope). Vertical steps in footings shall be formed between levels with reinforcing required for footings run continuous and unspliced a minimum distance of 24 inches in the upper and lower levels of the step.  
(R01-05-046, Sec. 202)

(h) R403.1.6 Foundation anchorage. The sole plate at exterior walls shall be anchored to the foundation with anchor bolts spaced a maximum of three feet (3') on center. There shall be a minimum of two (2) bolts per plate section with one bolt located not more than 12 inches or less than seven bolt diameters from each end of the plate section. Bolts shall be at least ½ inch in diameter and shall extend a minimum of 7 inches into masonry or concrete and be capable of having washer and nut fully installed on bolt. Interior wall sole plates shall be positively anchored with approved fasteners. A nut and washer shall be tightened on each bolt of the plate. Sills and sole plates in contact with concrete shall be protected against decay and termites in accordance with Section R 319 and R320.

(i) Concrete and masonry foundation walls. Concrete and masonry foundation walls shall be selected and constructed in accordance with the provisions of this section or in accordance with ACI 318, ACI 332, NCMA- TR68-A or ACI 530/ASCE 5/TMS 402 or other approved structural standards.

(j) R404.1.1 Masonry foundation walls. Concrete masonry and clay masonry foundation shall be constructed as set forth in Table R404.1.1 (1), R404.1.1 (2), R404.1.1 (3) or R404.1.1 (4) and the applicable provisions of Sections R 606 , R607 and R608.

(k) R404.1.2 Concrete foundation walls. Concrete foundation walls shall be constructed as set forth in Table R404.1.1 (5).

(l) Table R404.1.1 (5) shall be amended as follows:

**Table R404.1.1 (5)  
Concrete Foundation Walls  
Minimum Vertical Reinforcement**

Maximum Wall Height (feet)	Wall Thickness (inches)		
	7.5	9.5	11.5
4	24	30	36
5	24	30	36
6	24	30	36
7	24	30	36
8	24	30	36
9	16	24	30
10	12	18	24

Notes to Table:

1. Reinforcing is based upon minimum yield strength of 60,000 psi. Reinforcement with a minimum yield strength of 40,000 psi or 50,000 psi is permitted, provided the same size bar is used and the spacing shown in the table is reduced by multiplying the spacing by 0.67 or 0.83, respectively.
2. Horizontal reinforcing shall be spaced at a maximum of 24 inches on center with one bar located within 12 inches of the top and bottom of the wall.
3. Spacing is based upon minimum #4 reinforcing bar. In lieu of #4 reinforcing bar, a larger bar size may be used provided, the bar spacing results in an equivalent cross-sectional area of reinforcement per linear foot of wall.
4. Reinforcement shall be placed nearest the inside face of the wall a distance  $d$  from the outside face (soil side) of the wall. The distance  $d$  is equal to the wall thickness,  $t$ , minus 1.25 inches plus one-half the bar diameter,  $db$  ( $d = t - (1.25 + db/2)$ ). The reinforcement shall be placed within a tolerance of  $\pm 3/8$  inch where  $d$  is less than or equal to 8 inches, or  $\pm 1/2$  inch where  $d$  is greater than 8 inches.
5. Concrete cover for reinforcement measured from the inside face of the wall shall not be less than  $3/4$  inch. Concrete cover for reinforcement measured from the outside face of the wall shall not be less than  $1\ 1/2$  inches for #5 bars and smaller, and not less than 2 inches for larger bars.
6. Concrete shall have a minimum compressive strength of not less than 3,000 psi at 28 days.
7. Walls with an unbroken wall line greater than 25 feet shall be provided with pilasters or shall be designed.
8. Walls exceeding 7 feet in height shall be restrained at bottom by floor slab.
9. Walls exceeding 10 feet in height require engineered design.
10. Foundations bearing on soils with different bearing capacities as established by Table R401.4.1 require an engineered design.

(m) R405.1 Foundation drains. Drains shall be provided around the exterior of all concrete or masonry foundations that retain earth and inside of the building perimeter under basement floor slabs. Drainage tiles, perforated pipe or other approved systems or materials shall be



installed below the area to be protected and shall discharge by gravity or mechanical means.

Drainage tiles or perforated pipe installed around the exterior perimeter shall have a minimum diameter of 4 inches. Drainage tiles or perforated installed on the inside of the foundation shall have a minimum diameter of 3 inches.

Drainage tiles or perforated pipe installed on the exterior perimeter of the building shall be placed on a minimum of 2 inches of washed gravel or crushed rock at least one sieve size larger than the tile joint or perforation and be covered with not less than 6 inches of the same material. The top and sides of the gravel or crushed stone encapsulating the drainage tile or perforated pipe shall be covered with an approved filter membrane material to prevent clogging of the foundation drainage system.

(n) R506.1 General. Concrete slab-on-ground floors shall be a minimum 3.5 inches (89 mm) thick. Slabs on natural undisturbed soils or rock shall be provided with reinforcing consisting of #4 rebar placed at not more than 24 inches (24") on center each way. The specified compressive strength of concrete shall be as set forth in Section R402.2. *(R01-05-046, Sec. 202)*

(o) R801.3 Roof drainage. In areas where expansive or collapsible soils are known to exist, all dwellings shall have a controlled method of water disposal from roofs that will collect and discharge all roof drainage to the ground surface at least 3 feet (914 mm) from foundation walls or to an approved drainage system. *(R01-05-046, Sec. 202)*

(p) P2503.4 Building sewer testing. The code official may require the building sewer to be tested by insertion of a test plug at the point of connection with the public sewer and filling the building sewer with water, testing with not less than a 10 foot (3048 mm) head of water and be able to maintain such pressure for 15 minutes. *(R01-05-046, Sec. 202)*

(q) P2503.5.1 Rough plumbing. The code official may require DWV systems to be tested on completion of the rough piping installation by water or air with no evidence of leakage. Either test shall be applied to the drainage system in its entirety or in sections after rough piping has been installed, as follows:

1. Water test. Each section shall be filled with water to a point not less than 10 feet (3048 mm) above the highest fitting connection in that section, or to the highest point in the completed system. Water shall be held in the section under test for 15 minutes before inspection. The system shall prove leak free by visual inspection.
2. Air test. The portion under test shall be maintained at a gauge pressure of 5 psi (34 kPa) or 10 inches of mercury column (2488 Pa). This pressure shall be held without introduction of additional air for a period of 15 minutes.

*(R01-05-046, Sec. 202)*

(r) P2504.6 Water-supply testing. The building official may require the water-supply system to be tested. Upon completion of the water-supply system or a section of it, the system or portion completed

shall be tested and proved tight under a water pressure of not less than the working pressure of the system or, for piping systems other than plastic, by an air test of not less than 50 psi. This pressure shall be held for not less than 15 minutes. The water used for tests shall be obtained from a potable water source. The contractor or individual responsible for the installation shall perform the required test. The building official may require that a report be submitted detailing the results of the test.

(s) P2603.3 Breakage and corrosion. Pipes passing through or under walls shall be protected from breakage. Pipes passing through concrete or cinder walls and floors, cold-formed steel framing or other corrosive material shall be protected against external corrosion by a protective sheathing or wrapping or other means that will withstand any reaction from lime and acid of concrete, cinder or other corrosive material. Sheathing or wrapping shall allow for expansion and contraction of piping to prevent any rubbing action. Minimum wall thickness of material shall be 0.025 inch (0.64 mm). Water service piping shall be galvanized steel or copper pipe or tubing from a point 15 feet outside of a building to a point no less than 12 inches inside of a building. *(R01-05-046, Sec. 202)*

(t) P2603.6 Freezing. A water, soil or waste pipe shall not be installed outside of a building, in exterior walls, in attics or crawl spaces, or in any other place subjected to freezing temperature unless adequate provision is made to protect it from freezing by insulation or heat or both. Water service pipe shall be installed not less than 36 Inches (914 mm) deep. *(R01-05-046, Sec. 202)*

(u) E3801.4.3 Peninsular counter space. At least one receptacle outlet shall be installed at each peninsular counter space with a long dimension of 24 inches (610 mm) or greater and a short dimension of 12 inches (305 mm) or greater. A peninsular countertop is measured from the connecting edge. A receptacle serving the main counter space to which a peninsular counter is attached may be considered as serving the peninsular counter. *(R01-05-046, Sec. 202)*

9-203

(a) INCORPORATION OF INTERNATIONAL PLUMBING CODE; AMENDMENTS AND DELETIONS. There is incorporated by reference, for the purpose of adopting regulations, provisions, terms, and specifications, for the control of buildings and structures within the unincorporated areas of Miami County; the 2006 International Plumbing Code, dated January, 2006, as published by the International Code Council, Inc., excepting only such parts or portions thereof as are specifically deleted or amended by this resolution and including such new and additional provisions added to said code by this resolution. Not less than one (1) copies of said 2006 International Plumbing Code shall be marked Official Copy as Adopted by Resolution No. R07-03-019, to which shall be attached a copy of the resolution codified herein, and filed with the County Clerk to be open to inspection and available to the public at all reasonable business hours.

(1) Reserved

(2) INTERNATIONAL PLUMBING CODE; DELETIONS. The following chapters, sections and subsections of the 2006 edition of the International Plumbing Code are hereby deleted.

(1) Sections 103, 104, 105, 106, 107, 108 and 109

(R01-05-048, Sec. 203)

(2) Subsection 602.3.3 is hereby deleted.

(R01-05-048, Sec. 203)

(3) INTERNATIONAL PLUMBING CODE; AMENDMENTS. The following chapters, sections and subsections of the 2006 edition of the International Plumbing Code are hereby amended as follows.

(A) 101.1 Title. These regulations shall be known as the *Miami County Plumbing Code* hereinafter referred to as "this code."  
(R01.05.048, Sec. 203)

(B) 305.6 Freezing. Water, soil and waste pipes shall not be installed outside of a building, in attics or crawl spaces, concealed in outside walls, or in any other place subjected to freezing temperature unless adequate provision is made to protect such pipes from freezing by insulation or heat or both. Exterior water supply system piping shall be installed not less than 36 inches below grade.  
(R01.05.048, Sec. 203)

(C) 305.6.1 Sewer depth. Building sewers shall be a minimum of 12 inches below grade.  
(R01.05.048, Sec. 203)

(D) 504.3 Shutdown. A means for disconnecting an electric hot water supply system from its energy supply shall be provided in accordance with the *NFPA 70, National Electrical Code, 2005 Edition*. A separate valve shall be provided to shut off the energy fuel supply to all other types of hot water supply systems.  
(R01.05.048, Sec. 203)

(E) 1003.4 Oil separators required. At repair garages; gasoline stations with grease racks, grease pits or work racks; car washing facilities with engine or undercarriage cleaning capability; and at factories where oily and flammable liquid wastes are produced, separators shall be installed into which all oil-bearing, grease-bearing or flammable wastes shall be discharged before emptying in the building drainage system or other point of disposal.

Oil separators shall not be connected to any private sewage disposal system unless first approved by the Miami County Director of Environmental Health.  
(R01.05.048, Sec. 203)

**9-204**

INCORPORATION OF INTERNATIONAL MECHANICAL CODE; AMENDMENTS AND DELETIONS. There is incorporated by reference, for the purpose of adopting regulations, provisions, terms, and specifications, for the control of buildings and structures within the unincorporated areas of Miami County; the 2006 International Mechanical Code, dated January, 2006, as published by the International Code Council, Inc., excepting only such parts or portions thereof as are specifically deleted or amended by this resolution and including such new and additional provisions added to said code by this resolution. Not less than one (1) copy of said 2006 International Mechanical Code shall be marked Official Copy as Adopted by Resolution No. R07-03-019, to which shall be attached a copy of the resolution codified herein, and filed with the County Clerk to be open to inspection and available to the public at all reasonable business hours.

(a) RESERVED

(b) INTERNATIONAL MECHANICAL CODE; DELETIONS. The following chapters, sections and subsections of the 2006 edition of the International Mechanical Code are hereby deleted.

(1) Sections 103, 104, 105, 106, 107, 108 and 109

(R01.05.048, Sec. 204)

(2) Section 602.3.3

(R01.05.048, Sec. 204)

(c) INTERNATIONAL MECHANICAL CODE; AMENDMENTS. The following chapters, sections and subsections of the 2006 edition of the International Mechanical Code are hereby amended as follows.

(1) 101.1 Title. These regulations shall be known as the Miami County *Mechanical Code*, hereinafter referred to as "this code."

(R01.05.048, Sec. 204)

(2) 102.10 State boiler Inspector. Where permits are issued and portions of the work require inspection and approval of boilers and pressure vessels by the State of Kansas, those portions of the work shall comply with the state requirements in lieu of compliance with the technical provisions of this code. Contact the State Boiler Inspector at the State Department of Human Resources for complete information regarding state requirements. State approval is generally required for all boilers that require permits.

EXCEPTIONS:

1. Boilers serving individual dwelling units and their accessory structures.
2. Boilers serving apartment houses with less than Five (5) families.
3. Pressure vessels that do not exceed 15 cubic feet and 250 psi.

(R01.05.048, Sec. 204)

**9-205**

INCORPORATION OF INTERNATIONAL FUEL GAS CODE; AMENDMENTS AND DELETIONS. There is incorporated by reference, for the purpose of adopting regulations, provisions, terms, and specifications, for the control of buildings and structures within the unincorporated areas of Miami County; the 2006 International Fuel Gas Code, dated January, 2006, as published by the International Code Council, Inc., excepting only such parts or portions thereof as are specifically deleted or amended by this resolution and including such new and additional provisions added to said code by this resolution. Not less than one (1) copy of said 2006 International Fuel Gas Code shall be marked Official Copy as Adopted by Resolution No. R07-03-019, to which shall be attached a copy of the resolution codified herein, and filed with the County Clerk to be open to inspection and available to the public at all reasonable business hours.

(a) INTERNATIONAL FUEL GAS CODE; APPENDICES ADOPTED.

The following appendices are adopted as part of the International Fuel Gas Code.

(1) Appendix A — Sizing and Capacities of Gas Piping

(R01.05.048, Sec. 205)

(2) Appendix B — Sizing of Venting Systems Serving Appliances Equipped with Draft Hoods, Category I Appliances, and Appliances Listed for Use and Type B Vents.

(R01.05.048, Sec. 205)

(3) Appendix C — Exit Terminals of Mechanical Draft and Direct-Vent Venting Systems.  
(R01.05.048, Sec. 205)

(4) Appendix D —Recommended Procedure for Safety Inspection of an Existing Appliance Installation.  
(R01.05.048, Sec. 205)

(b) INTERNATIONAL FUEL GAS CODE; DELETIONS. The following chapters, sections and subsections of the 2006 edition of the International Fuel Gas Code are hereby deleted.

(1) Sections 103, 104, 105, 106, 107, 108 and 109  
(R01-05-048, Sec. 205)

(c) INTERNATIONAL FUEL GAS CODE; AMENDMENTS. The following chapters, sections and subsections of the 2006 edition of the International Mechanical Code are hereby amended as follows.

(1) 101.1 Title. These regulations shall be known as the Miami County *Fuel Gas Code*, hereinafter referred to as "this code."  
(R01-05-048, Sec. 205)

**9-206**

INCORPORATION OF NATIONAL ELECTRICAL CODE; AMENDMENTS AND DELETIONS. There is incorporated by reference, for the purpose of adopting regulations, provisions, terms, and specifications, for the control of buildings and structures within the unincorporated areas of Miami County; the 2005 National Electrical Code, dated August 5, 2004, as published by the National Fire Protection Association, Inc., excepting only such parts or portions thereof as are specifically deleted or amended by this resolution and including such new and additional provisions added to said code by this resolution. Not less than one (1) copy of said 2005 National Electrical Code shall be marked Official Copy as Adopted by Resolution No. R07-03-019, to which shall be attached a copy of the resolution codified herein, and filed with the County Clerk to be open to inspection and available to the public at all reasonable business hours.

(a) RESERVED

(b) NATIONAL ELECTRICAL CODE; DELETIONS. The following chapters, sections and subsections of the 1999 edition of the National Electrical Code are hereby deleted.

(c) NATIONAL ELECTRICAL CODE; AMENDMENTS. The following chapters, sections and subsections of the 2005 edition of the National Electrical Code are hereby amended as follows.

(1) 90-2 (b) (6) Installations of electrical systems, equipment, and components indoors and outdoors that are within the scope of the provisions of Chapters 33 through 42 of the 2006 Edition of the International Residential Code.  
(R01-05-048, Sec. 207)

## POST FRAME BUILDING STANDARDS.

(a) TITLE. This section shall be known as the Miami County Post Frame Building Standard.

(b) SCOPE. The provisions of this section shall apply to the design and construction of post frame buildings or additions thereto, intended for agricultural or residential accessory uses on tracts of property that are zoned for residential or agricultural uses. The provisions of this article are deemed to comply with the spirit and intent of the minimum design and construction provisions of the 2006 Edition of the International Building Code. Miami County offers no warranty or guarantee on buildings utilizing these design specifications.

*(R05-01-048, Sec. K201.1)*

(c) LIMITATIONS. Buildings designed and constructed under these provisions shall not exceed limitations of this Section.

Buildings that exceed the limitations of Sections 9-207 (c) (1) through 9-207 (c) (7) shall be designed in accordance with requirements of the 2006 editions of the International Building Code by a professional licensed by the State of Kansas to practice in the design of buildings.

*(R01-05-048, Sec. K201.2)*

(1) AREA. Buildings shall not exceed 3,000 square feet in area  
EXCEPTION: Agricultural Buildings shall not be limited in area.

*(R01-05-048, Sec. K201.2.1)*

(2) USE. Buildings designed and constructed under these provisions shall be limited for use as storage or agricultural buildings.

Buildings designed and constructed under the provisions of this standard are not intended for residential or commercial purposes. Post frame buildings intended for residential or commercial use shall have structural and architectural plans prepared by a design professional licensed by the State of Kansas showing compliance with the applicable codes and standards for the proposed use and occupancy.

*(R01-05-048, Sec. K201.2.2)*

(3) HEIGHT. The sidewall height of buildings designed under these provisions shall not exceed 14 feet or one story in height.

*(R01-05-048, Sec. K201.2.3)*

(4) BUILDING DIMENSIONS. The maximum width dimension of a building designed under these provisions shall not exceed 40 feet.

*(R01-05-048, Sec. K201.2.4)*

(5) BRACED WALL. Buildings shall be provided with exterior braced walls. Bracing shall be located in the sidewalls at each corner by means of a nominal 2inch by 4 inch diagonal brace or other approved bracing.

*(R01-05-048, Sec. K201.2.5)*

(6) OPENINGS IN EXTERIOR WALLS. No single opening for doors, windows or other purposes that exceed 16 feet in width shall be placed in exterior walls.

Buildings that are open on one side shall have posts embedded 2 feet deeper than the depth required by Section 9-207 (f) (2) or shall be provided with an acceptable brace for wind resistance.

*(R01-05-048, Sec. K201.2.6)*

(7) EXIT REQUIRED. At least one exit door complying with this section shall be provided. Exit doors shall be of the pivoted or side hinged swinging type. The exit door opening shall be of a size to permit the installation of a door not less than 3 feet (914 mm) in width and not less than 6 feet 8 inches (2032 mm) in height. The exit door shall be openable from the inside without the use of a key or any special knowledge or special effort.

(R01-05-048, Sec. K201.2.7)

(d) DEFINITIONS:

AGRICULTURAL BUILDING is a building that is used solely for the storage of machinery, equipment, shelter for livestock or commodities that are raised on site, or other operations related to carrying on the farming operations on a tract of land of twenty (20) contiguous acres or more in area.

(R01-05-048, Sec. K201.3)

BRACED WALL is a wall that has been provided with diagonal bracing which meets the requirements of Section 9-207 (g) (5) of this code.

(R01-05-048, Sec. K201.3)

BUTT ENCASED is concrete encasement of a pole or post at the lower 12 inches of its embedment in the earth.

(R01-05-048, Sec. K201.3)

FOOTING is that portion of the foundation that spreads and transmits loads directly to the soil.

(R01-05-048, Sec. K201.3)

GIRT is the horizontal wall framing members that span between posts and are used to support the exterior wall covering.

(R01-05-048, Sec. K201.3)

POLE OR POST is a preservatively treated round, square or rectangular wood member, that is solid sawn or laminated, and is intended to be embedded in the ground to support building structural loads and transmit the loads to the footing.

(R01-05-048, Sec. K201.3)

PURLIN is the structural members that span between rafters or trusses used to attach and support metal roof coverings and transfer the roof loads to the rafters or trusses.

(R01-05-048, Sec. K201.3)

(e) DESIGN LOADS.

(1) LIVE LOAD. The roof snow load shall be 20 pounds per square foot.

EXCEPTION: Agricultural Buildings

(R01-05-048, Sec. K201.4.1)

(2) DEAD LOAD. The roof dead load shall be 4 lbs. per square foot for roofs that utilize a metal roof covering. Dead Loads of 7 lbs. per square foot shall be used if wood shakes, wood shingles or asphalt composition shingles are utilized. If other roof coverings are used the loading specified by the roof covering manufacturer shall apply.

EXCEPTION: Agricultural Buildings

(R01-05-048, Sec. K201.4.2)

(3) WIND LOAD. Buildings designed and constructed under these provisions shall be considered to be designed for a 90 mph wind located in an exposure C wind zone.

(R01-05-048, Sec. K201.4.3)

(4) FOUNDATION DESIGN. Foundations for buildings designed and constructed under provisions of these requirements shall be designed and installed in accordance with this section. Foundations shall be designed to support the imposed load and be capable of resisting wind uplift and overturning. The loading requirements that shall be applicable for buildings designed and constructed under these provisions shall be as specified in this section.

(R01-05-048, Sec. K201.5)

(f) FOUNDATION DESIGN

(1) Foundation Diameter. The diameter of holes for pole or post foundations and the required footing thickness shall be in accordance with Table

9-207.1 Footings shall be placed to a depth so that building loads are supported on natural undisturbed soils. Unless unusual site conditions exist soils bearing capacity shall be assumed to have a 1,500 p.s.f. bearing capacity.  
(R01-05-048, Sec. K201.5.1)

**TABLE 9-207.1  
MINIMUM FOOTING DIMENSIONS**

BUILDING WIDTH	POST SPACING	FOOTING THICKNESS	FOOTING DIAMETER
24	8 to 10 Feet	8 Inches	15 Inches
30	8 to 10 Feet	8 Inches	17 Inches
36	8 to 10 Feet	8 Inches	18 Inches
40	8 to 10 Feet	8 Inches	18 Inches

(R01-05-048, TABLE K201.5.1)

(2) POLE OR POST EMBEDMENT. Poles or posts shall be embedded in the earth to a minimum depth of 4 feet (1219 mm).  
(R01-05-048, Sec. K201.5.2)

(3) SHALLOW POLE OR POST EMBEDMENT. When it is necessary to use a pole or post embedment depth of less than 40 inches but not less than 30 inches due to rock or other local site conditions, knee bracing shall be provided and the post foundation hole shall be backfilled to grade with concrete. Embedment depth of less than 30 inches is not allowed under this standard.  
(R01-05-048, Sec. K201.5.2.1)

(4) BACKFILL. Footings of concrete, 1 inch or larger gravel or other approved materials shall be placed under poles or posts. Footings shall have a minimum thickness in accordance with Table 9-207.1. Posts shall be either butt encased with concrete, or be fully embedded with concrete, or be provided with other approved means to provide for resistance to wind uplift. If posts are provided with butt encasement or blocked anchors, the remaining annular space of the post foundation holes shall be backfilled by firmly tamping clean soil or sand in maximum 8-inch layers.

See Figure 9-207.1 (a) through (c) for examples of allowed methods of providing uplift resistance and backfilling post holes.  
(R01-05-048, Sec. K201.5.3)

(5) CONCRETE PLACEMENT. Concrete used for footings or post encasement shall be placed as wet mix.  
(R01-05-048, Sec. K201.5.4)

(6) POLE OR POST ANCHOR. Poles or posts shall be anchored to the encasing concrete whether butt encased or fully encased, with a minimum 1/2 inch reinforcing bar placed through a drilled hole in the pole or post. The rebar shall have a minimum one (1) inch of concrete cover from the bottom and top of the encasing concrete.

Blocked anchors shall be provided when the backfill of the annular space consists of earth, sand or gravel tamped in 8 inch layers. Blocked anchors shall be of the same dimension as the base of the post.  
(R01-05-048, Sec. K201.5.5)

**(g) WALL CONSTRUCTION**

(1) POLE OR POST SIZE AND SPACING. Poles or posts may be solid sawn or laminated. Poles or posts shall be of a minimum dimension as required by Table 9-207.2 based upon the building height and spacing of posts. The spacing of poles or posts shall not exceed the maximum shown in Table 9-207.2 for the dimension of post that will be used.  
(R01-05-048, Sec. K201.6.1)



(2) WOOD SUBJECT TO DECAY OR TERMITE DAMAGE.

(A) WOOD EMBEDDED IN GROUND OR CONCRETE. Wood embedded in the ground or in direct contact with the earth and used for the support of permanent structures shall be treated for ground contact. Wood supporting permanent structures that are embedded in concrete in direct contact with earth or embedded in concrete exposed to the weather shall be treated for ground contact. Wood which is in contact with the ground shall be treated for ground contact. All treated wood shall bear a stamp from an approved agency identifying the treatment retention of the member.

**NOTE:** It is recommended that any wood that is embedded in the earth or embedded in concrete that is in direct contact with the earth be pressure preservatively treated to a retention level of 0.6 lbs. per cubic foot in accordance with AWPA Standard C22.

(R01-05-048, Sec. K201.6.2.1)

(B) WOOD IN CONTACT WITH THE EARTH OR SUBJECT TO WATER SPLASH. Wood that is in contact with the ground or is located within 18 inches of the ground surface shall be pressure preservatively treated or wood of natural resistance to decay and termites.

(R01-05-048, Sec. K201.6.2.2)

**TABLE 9-207.2  
POST SIZE AND SPACING REQUIREMENTS**

	EFFECTIVE BUILDING HEIGHT IN FEET <sup>1</sup>			
	8	10	12	14
POST SIZE <sup>2</sup>	POLE OR POST SPACING IN FEET			
<b>Solid Sawn</b>				
4 X 4 Nominal	7	6	4	4
4 X 6 Nominal	15	12	9	8
6 X 6 Nominal	15	15	15	15
<b>Laminated</b>				
2-2X6 Laminated	7	6	4	4
3-2X6 Laminated	15	14	10.5	10
4-2X8 Laminated	16	16	16	16

<sup>1</sup> For roof slopes 4:12 or less, the effective height is the vertical distance from grade level to the eave. For roof slopes greater than 4:12 the effective building height is the vertical distance from grade level to the eave, plus one half of the roof height.

<sup>2</sup> The larger post dimension shall be in the same direction of the building width.

(R01-05-048, TABLE K201.5.1)

(3) GIRT FRAMING. When siding is to be attached to the exterior walls of pole or post framed buildings, wall girts shall be installed. Wall girts shall be of a minimum size for the span as required by Table 9-207.3

(R01-05-048, Sec. K201.6.3)

**Table 9- 207.3  
WALL GIRT SPANS**

Girt Span		
8 feet	10 feet	12 feet
2X4 24 inches O.C.	2X6 36 inches O.C.	2X6 36 inches O.C.
2X6 36 inches O.C.		

(4) GIRT NAILING. Girts shall be fastened to the posts using 16d ring shank hot dipped galvanized nails or other approved fasteners.

*(R01-05-048, Sec. K201.6.3.1)*

(5) BRACING. Exterior sidewalls shall be braced at building corners. Braces shall be minimum 2X4 nominal dimension lumber installed diagonally or be of other approved bracing materials.

*(R01-05-048, Sec. K201.6.4)*

(6) EXTERIOR WALL COVERING. Exterior wall coverings, when provided, shall be of an approved weather-resistant material. Steel panel exterior wall coverings shall be of minimum 29 gage.

*(R01-05-048, Sec. K201.6.5)*

(7) HEADERS AND BEAMS. Headers or beams required to support building loads shall be designed to safely carry the imposed loads.

*(R01-05-048, Sec. K201.6.6)*

(8) BEAM SUPPORT. Beams, headers or girders that are used to support roof framing shall be supported by notches in the poles or posts and shall be secured by ½ inch diameter bolts secured with washers and nuts or ½ inch by 4 ½ inch lags.

*(R01-05-048, Sec. K201.6.6.1)*

(9) FASTENERS. Fasteners for pressure-preservatively treated wood and fasteners used in locations exposed to weather shall be of hot-dipped zinc galvanized, aluminum alloy wire fasteners or stainless steel fasteners.

*(R01-05-048, Sec. K201.6.7)*

#### (h) ROOF CEILING CONSTRUCTION

(1) GENERAL. Roof framing may be of conventional light frame construction as allowed by Chapter 23 of the International Building Code, 2006 edition or may be of trusses as specified by Section 9-207 (h) (2) of this code or may be of other alternate designs that have been designed by a professional engineer licensed by the State of Kansas.

*(R01-05-048, Sec. K201.7.1)*

(2) TRUSSES. Trusses may be site built or be shop fabricated. Trusses shall be designed by a professional engineer licensed by the State of Kansas to practice in the design of buildings.

*(R01-05-048, Sec. K201.7.2)*

(3) CONVENTIONAL FRAMING. The framing details for conventional roof construction shall conform to the requirements of Chapter 23 of the International Building Code, 2006 edition.

*(R01-05-048, Sec. K201.7.3)*

(4) ROOF-MEMBERS-TO-BUILDING-FRAME TIE. Blocking, straps, approved framing anchors or mechanical fasteners shall be installed from the side of the roof framing member to the exterior posts or other supporting members.

Tie straps shall be 1 ⅛ -inch (28.6 mm) by 0.036-inch (0.91 mm) (No. 20 gage) sheet steel and shall be corrosion resistant.

*(R01-05-048, Sec. K201.7.4)*

(6) PURLINS. Purlins shall be installed with the wide dimension perpendicular to the load that it supports. Purlins shall be supported on top of the trusses or shall be provided with approved hangers. The span of purlins shall not exceed the values specified in Table 9-207.4.

*(R01-05-048, Sec. K201.7.5)*

7) ROOF COVERING. The roof covering shall be of an approved material as specified by Chapter 15 of the International Building Code, 2006 edition.

(R01-05-048, Sec. K201.7.6)

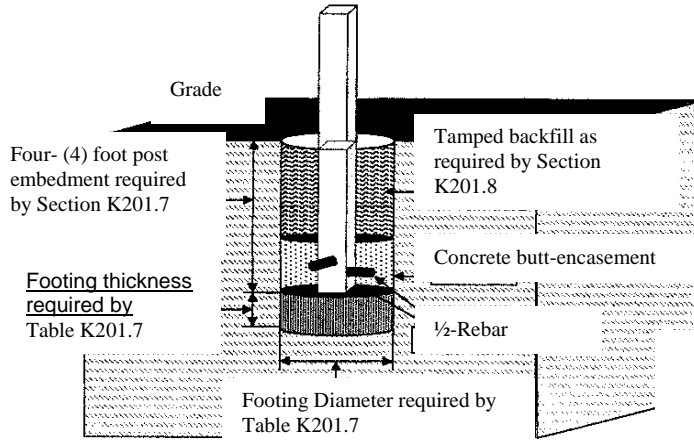
**TABLE 9-207.4**  
**PURLIN SPANS**

(Based on Purlin Spacing of 24 inches Center to Center)

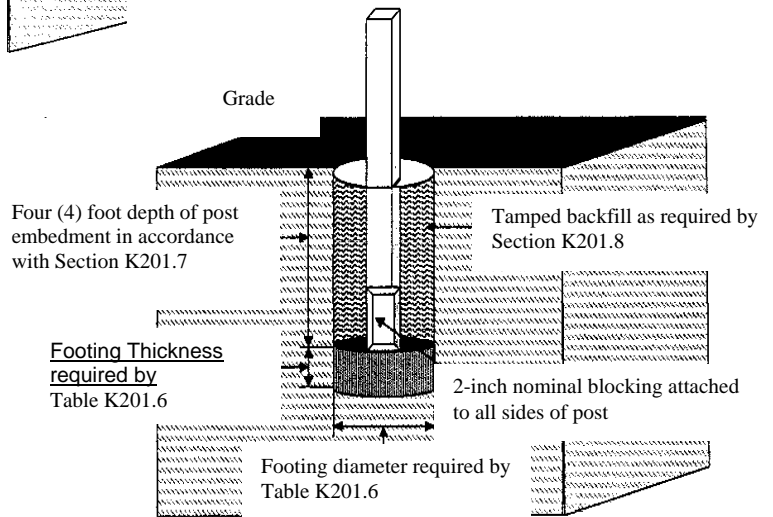
<b>GRADE</b>	<b>DIMENSION</b>	<b>MAXIMUM SPAN (feet)</b>
#1	2X4	8' 6"
	2X6	12' 3"
	2X8	15' 9"
#2	2X4	8'
	2X6	12'
	2X8	15'
#3	2X4	6'
	2X6	9'
	2X8	11'

**FPN:** The spans given in this table are based upon use of Spruce-Pine-Fir design values. Spans may vary depending on the lumber species which is used.

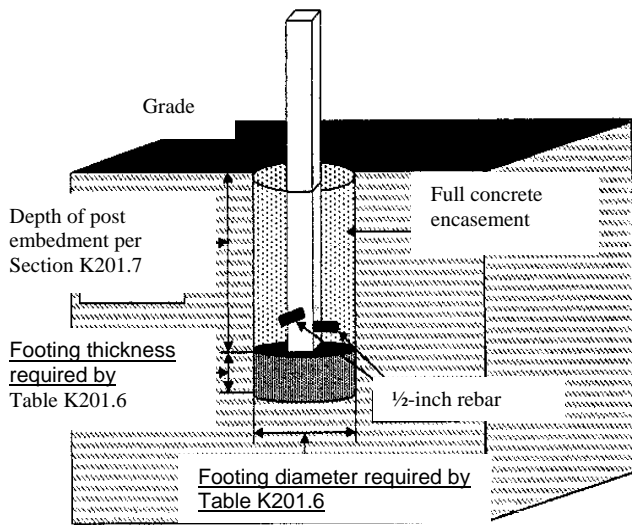
**FIGURE 9-207.1**  
**Examples of Post Embedment**



**FIGURE 9-207.1 (a)**  
**Butt-Cased**



**FIGURE 9-207(b)**  
**Blocked Anchor**



**FIGURE 9-207 (c)**  
**Full Concrete Casement**