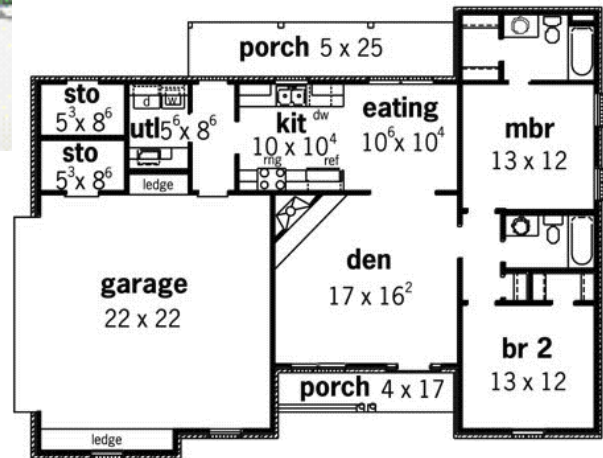


How to Obtain a Building Permit For

RESIDENTIAL CONSTRUCTION

◆ **New Dwellings and Additions**



MIAMI COUNTY, KANSAS

CODE SERVICES DEPARTMENT

201 South Pearl Street, Suite 201 • Paola, Kansas 66071- 1777

Phone: (913) 294-4145

Fax: (913) 294-9545

“This institution is an equal opportunity provider and employer.”

HOW DO I GET STARTED?

There are several preliminary questions that should be addressed prior to an application for a building permit being made.

- **Zoning:**

- **Is the property zoned for a new residence?**

- A zoning review is required to be completed for any new residential construction before applications for any permits will be accepted. To apply for a zoning review a copy of the deed, certificate of survey, plat, resolution for conditional use permit / rezoning, previous building permits, or any other documentation that may pertain to the legal description and /or zoning of the property shall be submitted with the application. Incomplete information will result in return of request and / or prolonged research before an accurate determination can be made. The Miami County Planning and Zoning Department may be contacted at (913) 294-9553 for more information.

- Please note: There is a \$50.00 fee for verifications not associated with a Building or Sanitation permit application.

- **Wastewater Treatment:**

- **What type of onsite wastewater system will be required?**

- The design of an individual onsite wastewater system (septic system) is based upon the results of a soil profile analysis conducted on your building lot.

- Contact the Miami County Code Services Department at (913) 294-4117 for information on how to apply for a soil profile analysis, how the inspection is conducted and to discuss what type of onsite wastewater system is best suited for your lot, and explanation of design and permitting guidelines.

- The fee for a soil profile analysis is \$350.00 and the permit fee for installing an individual onsite wastewater system is \$350.00. *If your project is in a subdivision that is served by a community sewage treatment system, a soil profile analysis is not necessary.*

- NOTE: A soil profile analysis must be completed prior to making application for a building permit. A building permit will not be issued until an individual onsite wastewater system design has been approved and an installation permit or connection permit has been issued by the Code Services Department.

- **Highway Entrance Permit:**

- **How do I get approval to install a driveway entrance into the property from the roadway?**

- The location and construction of a new or existing entrance to a property off of county roadways is required to be approved before a building permit will be issued or the construction of a new entrance is started.

- The fee to process a highway entrance permit is \$50.00 due at the time of application for the entrance permit. Application for a highway entrance permit can be made at the Code Services office in the Miami County Administration Building.

If it is determined that a new entrance is required, the Road and Bridge Department will provide an estimated cost of construction, and if an applicant chooses to let the Road and Bridge Department construct the new entrance, the construction costs shall be paid before installation will begin. Any questions related to the construction or location of a highway entrance may be answered by calling the Road and Bridge Department at 913-294-4377.

If applicants wish to construct the entrance themselves or contract with a private entity, a cash bond with the amount to be determined by the Road and Bridge Department shall be made prior to the start of construction. The Road and Bridge Department will refund the bond upon final approval of the installation of the highway entrance.

WHAT INFORMATION IS NEEDED TO APPLY FOR A BUILDING PERMIT?

In order for plans to be considered acceptable for review, permit applications shall contain the following information:

1. A completed building permit application form with all requested information provided.
2. Clearance from the Environmental Health Division documenting that a soil profile analysis has been performed and an application for a sewage disposal system has been made.
3. A copy of the deed to the property with a full legal description included.
4. A completed highway entrance permit application.
5. Signed letters, copies of contracts or affidavits from each contractor that is listed on the permit application questionnaire. If the property owner intends to perform any work for which a license is required, an affidavit on a form provided by our office shall be completed and submitted with the permit application.
6. Two (2) site plans prepared in accordance with enclosed standards.
7. Two (2) full sets of building plans prepared in accordance with the enclosed standards.

PREPARATION OF PLANS

Plans for new construction or additions are required to accurately represent the proposed construction. Plans shall be prepared to scale on standard sized paper of the same dimensions. Plan pages shall be numbered and be correlated into sets with each set bound or secured into complete sets. Plans will be reviewed for compliance with the codes and regulations of Miami County. The more complete the plans, the faster the plan review can be performed and the quicker a permit can be issued and construction started. Plans are not required to be prepared or to be sealed by a design professional unless the building contains features that are not covered by the specification provisions contained in the International Residential Code.

A plan review fee of \$50.00 will be assessed for the review of single family plans. Plans that are incomplete or that require more than one-hour of review time will have additional plan review fees charged at the rate of \$50.00 per hour with a minimum one-half hour charge. Plan review fees will be collected at the time that the permit is issued.

Upon approval of the submitted plans the plans will be stamped "APPROVED" and the permit will be authorized for issuance. One set of stamped "APPROVED" plans will be returned to the applicant with the permit. The permit applicant is responsible to have approved plans on the job site for all inspections. All site construction is required to be performed in accordance with the approved plans. Revisions to the approved plans must be reviewed and be approved by the Code Services Department prior to the revised work being performed.

A brief outline of the details and specifications that the plan reviewer will be checking follows this introduction. This outline may be utilized as a checklist to ensure that all the necessary information for submittal with the permit application is provided. If this information is not provided, the permit application will be deemed to be incomplete and the plans will be returned to the permit applicant for correction. Upon re-submittal the plans will be re-reviewed for compliance with the codes and regulations of Miami County.

A site plan is generally not required to be prepared by a registered surveyor; however, when a proposed building is planned to be within ten feet (10') of a setback required by regulations or a parcel is less than one-hundred feet (100') in width, a site plan and construction staking shall be required to be prepared by a registered surveyor. The county reserves the right to require a professionally prepared site plan and construction staking of a proposed building site whenever conditions warrant.

Site plans that do not show the information that is requested will be rejected during plan review and the site plan will be required to be prepared to acceptable standards, either by an individual or by a registered surveyor.

SITE PLAN

An acceptably prepared site plan will show the following:

- Site plans shall be drawn on paper adequate in size to accurately reflect the parcel and existing conditions and proposed construction as required;
- Site plans shall be drawn to scale and the scale shall be shown on the plans;
- North shall be indicated by an arrow on the drawing;
- Show all property lines, dimensions of property lines, and indicate the area or size of the property in acres or square feet;
- Indicate the location of public or private roads and show the name or number of the road;
- The location of any existing and proposed driveway entrances shall be shown, with the distance from a property line to the centerline of the driveway given and the width of the proposed driveway shown;
- The location of any creeks, streams or drainage ditches and the boundaries of any flood hazard zone;
- The location of any utilities and recorded easements if known;
- The location of all existing buildings with the distance shown between building and property lines. The use and dimensions of existing buildings shall be indicated on the site plan;
- The approximate location of a septic tank, lateral field, lagoon or other component of an onsite wastewater disposal system; (Buildings or access drives shall not be placed over septic tanks or disposal fields, and proposed buildings shall maintain the required minimum setbacks.)
- The location of proposed building with the distance between the proposed building and existing structures and property lines shown.

BUILDING PLAN

Building plans shall provide details and specifications on all of the following:

FLOOR PLAN:

- **Area:**
 - The floor area of each floor level shall be shown in square feet;
 - The floor area of finished basement space shall be shown in square feet.
- **The use of each room or area shall be shown.**
- **All room dimensions shall be shown.**
- **Ceiling heights shall be shown.**
- **Location of Exterior Doorways and Windows with Opening Dimensions:**
 - Show the location of all exterior doors and windows showing the finished opening dimensions.
 - Specify openings that require Safety Glazing.
- **Emergency Rescue or Escape Openings shall be shown with the following information specified:**
 - Specify the location, finished sill height and the finished clear openable dimensions of the opening;
 - Show window well dimensions when necessary.
 - Where required:
 - Minimum one from each bedroom;
 - Minimum one from every basement;

NOTE: For the purpose of determining whether a room is a bedroom the Miami County Building Code has defined a bedroom as “a room with a minimum floor area of at least 70 square feet with a minimum dimension of 7 feet that contains an adjacent room or space that may be utilized as a closet.” This definition will be applied for the purposes of determining the design of on-site wastewater systems, emergency rescue or escape openings and smoke detector location.

- **Interior stairways specifications and details shall be provided with the following information specified:**
 - Stairway width shall be shown;
 - Proposed rise and run of stairs shall be shown;
 - The clear headroom height shall be shown;
 - The dimensions of required landings shall be shown.
- **Location of required smoke detectors shall be shown:**
 - Where Required:
 - Inside of each bedroom;
 - Centrally located outside of each separate bedroom area;
 - Each floor level and basement.
- **Location of electrical service shall be shown with the following information provided:**
 - Show the location of the electrical service;
 - Specify amperage rating of service.
- **Location of Furnace and Water Heater shall be shown with the following information provided:**
 - Specify that a thermal expansion device will be provided for water heater.
- **Location of Plumbing Fixtures shall be shown.**
- **Garage:**
 - Show dimensions of garage;
 - Specify ½ inch gypsum board separating garage and residence;
 - Show all openings between the garage and dwelling;
 - Specify Door Type and thickness;
 - Show openings into attic; specify that one-hour protection will be maintained;
 - Overhead door location and opening sizes;
 - Specify concrete floor thickness and reinforcing size and spacing. If any part of floor slabs are to be placed on more than two feet of fill, the slab shall be designed as a structural slab.
- **Exterior porches, decks, landings and stairs:**
 - Show dimensions of exterior porches and decks.

STRUCTURAL DETAILS AND SPECIFICATIONS

- **Foundation Plans**
 - **Footings** — the following information for footings is required to be shown on the plans:
 - Width and thickness of footings;
 - Reinforcing specifications for footings;
 - Detail for footings at walkout walls — anchor bolt specifications and spacing and walkout foundation height specified that is a minimum of 6 inches above adjacent finished grade;
 - Footings with minimum 36-inch depth below finished grade;
 - Pier pad location and dimensions;
 - Detail for foundation drains;
 - Location of foundation drain sump pits;
 - Location of concrete encased grounding electrode for electrical service.
 - **Foundation Walls** — the following information is required for foundation walls:
 - Specify the maximum height of unbalanced fill;
 - Specify the height of foundation walls;
 - Specify the thickness of foundation walls;
 - Specify the reinforcing for walls in accordance with IRC Chapter 4 or Miami County Building Code Table R404.1.1 (5) (see attached to end of this guideline);

- Specify anchor bolt size and spacing (minimum ½ inch diameter anchor bolts, embedded 7 inches into foundation, spaced a maximum of three feet on center with an anchor located a maximum of 12" from the end of each piece of sill material is required);
 - Show crawl space ventilation opening location and opening size;
 - Show crawl space access (18" X 24" minimum required);
 - Specify use of Pressure Preservatively Treated Sill Plates when in contact with concrete.
- **Concrete Floors:**
 - Detail or note specifying that vapor barrier under slab or crawl space gravel is provided;
 - Detail or note specifying minimum 4 inches gravel under floor slab;
 - Specify reinforcing schedule of minimum #4 reinforcing bar at 24 inches on center each way;
 - Specification of Pressure Preservatively Treated lumber when in contact with slabs;
 - Detail or note specifying vapor barrier under floor slabs in basements or habitable spaces;
 - Specify any slabs that will be placed on more than 2 feet of fill and specify fill material and reinforcing schedule. If any part of floor slabs are to be placed on more than two feet of fill, the slab shall be designed as a structural slab. A standard design is available from our office or can be downloaded from our website or the slab design shall be sealed by a Kansas licensed design professional.
- **Floor Framing:**
 - Steel or wood beam locations and specifications;
 - Provide dimension, grade, species and spacing of floor framing if conventional framing methods will be employed;
 - Engineered or manufacturers layout plan for I joist system shall be provided with plans;
 - Specify direction of floor joists.
- **Wall Framing:**
 - Dimension and spacing of studs;
 - Show header dimensions;
 - Specify load-bearing walls.
- **Braced Wall Panels:**
 - Show the location of braced wall panels as required by IRC Section R602.10;
 - Braced wall panel construction methods as required by IRC Section R602.10.3 shall be shown by specification or detail on plans.
- **Ceiling Framing:**
 - Dimension, grade, species and spacing of ceiling framing if conventional framing methods will be employed;
 - Direction of ceiling joists;
 - Show location and specifications for any beams required for ceiling or roof support;
 - Attic access opening with opening dimensions shown.
- **Roof Framing:**
 - Dimension, grade, species and spacing of roof framing members framing if conventional framing methods will be employed;
 - Specify direction of rafters;
 - Specifications or details for vaulted ceiling support shall be shown.
- **Trusses:**
 - A truss design and layout plan sealed by design professional for roof or floor trusses shall be provided.

**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.