



RESIDENTIAL DECKS

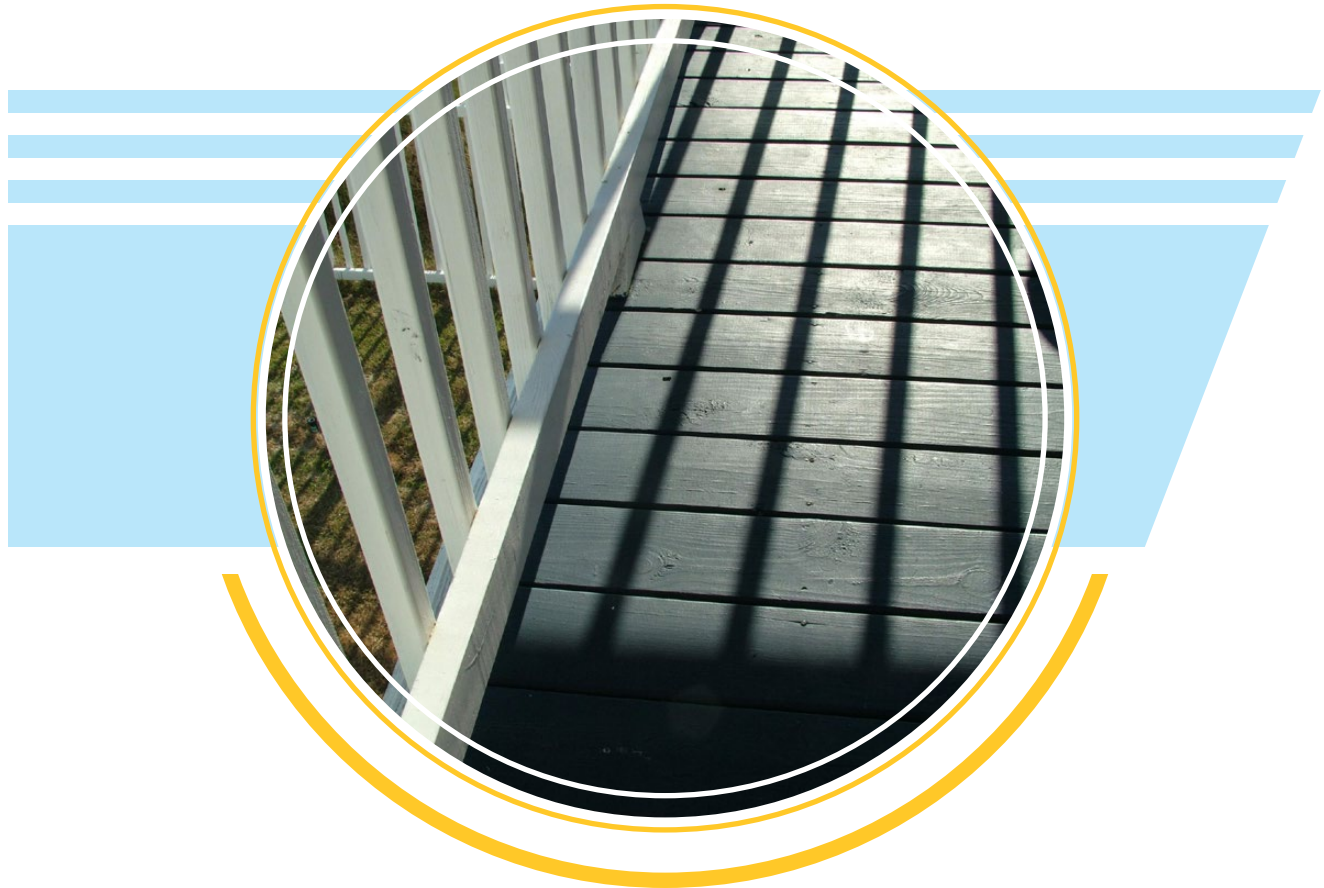


Construction and Maintenance Guidelines

Why should you obtain a building permit?

Your home is an investment. If your construction project doesn't comply with codes adopted by your community, the value of your investment may be effected. Property insurers may not cover work done without building permits and inspections. If you decide to sell and have done modifications to your home without the appropriate permits, you may be required to do costly repairs or alterations.

For more information on the benefits of building permits, visit the City of Merriam's website merriam.org or call the City's Community Development Department at 913-322-5520.




CITY OF MERRIAM, KANSAS
City Hall // 9001 W. 62nd St. // merriam.org
Community Development
ComDev@merriam.org // 913-322-5520





Residential Decks

This information is provided to assist in communicating City of Merriam's requirements for a building permit for the construction, repair or replacement of a deck. This is not a complete list of requirements. The property owner is responsible for full compliance with local ordinances and regulations as adopted by the City of Merriam.

The City recommends property owners read the Johnson County Deck Handout on deck construction which is available at the Community Development Department in Merriam City Hall.

Permits

A building permit is required to construct, repair, or replace a deck. You must provide a drawing that illustrates the deck's structural members as well as a site plan showing the location of the deck with respect to the property lines and the building. Permit applications may be obtained at the Community Development Department. Fees are based on the fair market value of labor and materials.

Setbacks

The following are the minimum setback requirements for R-1, R-2, R-3, and R-4 zoning districts and are measured from the property line:

- ▶ Front yard — 30 feet
- ▶ Rear yard — 25 feet
- ▶ Side yard — 7 feet

In the case of a corner lot, yards abutting a street as are defined as front yards by City ordinance and must meet front yard setbacks.

Building Code Requirements

- ▶ Decks must be constructed of a naturally decay-resistant material or a pressure-treated lumber (ACQ) and designed to support a live load of 40 psf.
- ▶ All overhead power lines must be located at least 10 feet above and 3 feet horizontally from the deck floor.
- ▶ Decks are required to bear on concrete footings or piers that extend 36 inches below ground level.
- ▶ Any deck surface, or the open side of any stairway, measuring 30 inches or more above the ground must have a guardrail no less than 36 inches in height. The width must be 36 inches minimum if there are steps. The maximum rise of each step is 7¾ inches and the minimum tread depth is 10 inches. The largest tread run within a single flight of stairs may not exceed the smallest by more than 3/8 inch. If a stairway includes 4 or more risers, a handrail placed 34 to 38 inches above the tread must be provided.
- ▶ Handrails and guardrails must conform to all Building Code requirements.



Inspections

Required inspections:

- ▶ Footings or piers — prior to concrete placement
- ▶ Framing and final — a separate framing inspection isn't necessary if the under-floor framing and connections can be easily inspected during the final inspection.

Inspections are scheduled with the Community Development Department at 913-322-5520.

Floor Joist Spans

Consult the current Johnson County Deck Handout for more complete guidelines.

Ledger Attachment to House Connections

Nails are not permitted without engineered design.

- ▶ 3/8" lag screws or bolts may be used at 16" o.c. with floor joist spans not exceeding 7'2".
- ▶ 3/8" lag screws or bolts may be used at 12" o.c. with floor joist spans not exceeding 9'7".
- ▶ 1/2" lag screws or bolts may be used at 16" o.c. with floor joist spans not exceeding 10'6".
- ▶ 1/2" lag screws or bolts may be used at 12" o.c. with floor joist spans not exceeding 14".
- ▶ Ledger boards shall be attached directly against the rim joist with spacer blocks or washers.
- ▶ Lag screws shall provide full penetration of the rim joist with a minimum length of 5 inches.
- ▶ Pilot holes 65-85 percent of the shank diameter required for lag screws larger than 3/8 inch.
- ▶ Minimum spacing between bolts and lag screws:
 - ▶ 4 diameters (D) from ends, 4D between fasteners in a row 1.5D between rows of fasteners, and 4D from edges.
 - ▶ Doubling the number of fasteners will double the allowable span.

Other Requirements

- ▶ Guardrail minimum height is 36 inches.
- ▶ Guardrails aren't required where the deck is less than 30 inches above the grade.
- ▶ A 6-inch diameter sphere shall not pass through the space between the guardrail and the stair stringer.
- ▶ Heights for stair handrails are 34 inches minimum to 38 inches maximum.
- ▶ Columns must be anchored to the pier (placing columns within the concrete may be accepted, but the wood won't last as long).

