## Residential Decks

This information is made available to enhance construction uniformity and compliance with building codes, the Lawrence Land Development Code, and construction permitting and inspection procedures. This document is intended to assist contractors and homeowners in understanding the minimum code requirements for deck projects. It is also intended to provide guidance for obtaining permits and inspections. The information provided should not be considered a complete list of code requirements.

## BUILDING PERMITS AND PERMIT REQUIREMENTS

## Permits

A building permit is required to construct, alter or replace a deck.
Exempt Work - Uncovered decks (no roof or other similar structure above) not more than 30 inches above adjacent grade, and not located over any basement or story below are exempt from a permit.

## Contractors

The City of Lawrence allows homeowners to obtain permits to do work in a house they own and occupy for at least one year after project completion. If the homeowner is hiring a contractor to do the work, the contractor is required to be licensed with the City of Lawrence. Licensing assures that contractors have met the minimum requirements for code knowledge, and maintain workman's compensation and general liability insurance. Code deficiencies or failure to complete the work in compliance with code requirements is the responsibility of the contractor or person who obtained the permit. For additional contractor licensing information contact:
buildinginspections@lawrenceks.org or visit the City's website at
https://lawrenceks.org/pds/contractor licensing/.

## Codes

This document is based on the requirements of 2015 International Residential Code (IRC), as adopted by the City of Lawrence in Chapter 5, Article 3 of the Lawrence City Code, on accepted engineering and construction practices, and on the requirements of the City of Lawrence Land Development Code. The 2015 IRC code book referenced in Chapter 5, Article 3 is available for review at the Building Safety Division office at 1 Riverfront Plaza, Suite 110 or the local public library.

Additional references include the following:

- American Wood Council-DCA6-12

Based on the 2012 International Residential Code*
This document is subject to updates and revisions. To ensure you always have the latest version of this document, follow this link to download a free copy of the most current Prescriptive Residential Wood Deck Construction Guide: http://www.awc.org/Publications/DCA/DCA6/DCA6-12.pdf

- Johnson County Kansas Residential Decks

Published by the Johnson County Contractor Licensing Program
Residential Decks, Permit and Construction Guidelines under the 2012 International Residential Code* https://www.jocogov.org/sites/default/files/documents/BLD/Deck\ Construction\ Guidelines\ 2012 .pdf

* The above references based on the 2012 International Residential Code. The 2015 International Residential Code has provided additional information on exterior decks in section R507, as set forth in the table below.


## Design Criteria

| $\bullet$ | Floor Live load | $40 \quad \mathrm{lbs} . / \mathrm{ft2}$ |  |
| :--- | :--- | :---: | :--- |
| $\bullet$ | Floor dead load | $10 \quad \mathrm{lbs} . / \mathrm{ft} 2$ |  |
| $\bullet$ | Roof snow load | $20 \mathrm{lbs} . / \mathrm{ft} 2$ |  |
| $\bullet$ | Roof dead load | $10 \mathrm{lbs} . / \mathrm{ft} 2$ | or actual material weight |
| $\bullet$ | Guardrails and handrails | $200 \mathrm{lbs} . / \mathrm{ft2}$ | A single concentrated load applied in any <br> direction at any point along the top. |

## Required documents*

- Fully completed and signed building permit application (please contact Development Services at 785/832-7700 or buildinginspections@lawrenceks.org if you have fee questions or would like a copy of the application sent to you). Link to Application
- Owner/ Occupant Form, if applicable. Link to Form
- Plot Plan.
- Construction Plans.
* The information required may be submitted electronically or on minimum $81 / 2 \times 11$ paper. $1 / 8^{\prime \prime}$ scale graph paper is included with this document.

STEP 1: Provide a plot plan, drawn to scale indicating the following information:

## Street Address and/or legal description.*

$\square$ Lot dimensions.*
$\square$ Size/location of existing buildings and easements.* Provide an outline of the existing structures. Some properties have drainage, power, gas, cable, telephone or environmental easements that limit where a deck may be built. Decks are not allowed to be built on or over an easement.
$\square$ Distance from lot lines to proposed deck. Decks may not be constructed on or over any portion of a minimum building setback. A minimum building setback is the minimum distance from a property lot line (front, side and rear) that any building or structure (including decks) must be located, or "set back". Minimum building setbacks are governed by the zoning of a lot, in accordance with the Lawrence Land Development Code and the official zoning map of the City. Zoning information is available on the City's interactive map. The Land Development Code's Density and Dimensional Standards Chart for minimum setbacks is copied below. Zoning and setback information may also be obtained by contacting the Planning Department Planner Of the Day (POD) at 785-832-3150. An uncovered stair and/or landing may project into a minimum building setback if the landing and/or stair is at least $3^{\prime}-0^{\prime \prime}$ from all property line.

## Location and size of proposed deck.

## Locations of existing windows/doors abutting or near the proposed deck.

Plot Plans shall be drawn to a minimum scale of 1 -inch equals 40 feet or 1 -inch equals 20 feet (preferred). A blank graph paper sheet for a plot plan is available for download and printing here. The sample plot plan provided shows the information that is required to be submitted with your building permit application.


Figure 1
*The above information may be available on professional property survey documents that may have been included with your property purchase closing papers or on the City of Lawrence interactive map.

From Art. 20-601 of Land Development Code DENSITY AND DIMENSIONAL STANDARDS

| Standard | RS40 | RS20 | RS10 | RS7 | RS5 | RS3 | RSO | RM12 <br> RM12 <br> D [6] | $\begin{aligned} & \text { RMI } \\ & 5 \end{aligned}$ | RMO | $\begin{aligned} & \text { RMR } \\ & 4 \end{aligned}$ | $\begin{aligned} & \text { RNB } \\ & 2 \end{aligned}$ | RMG |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Min. Lot Area (sq. ft.) | 40,000 | 20,000 | 10,000 | 7,00 | 5,00 | 3,00 | 5,00 | 6,000 | 6,00 | 5,000 | 6,00 | 6,000 | 10,00 |
| Min. Lot Area per Dwelling Unit (sq. ft.) | 40,000 | 20,000 | 10,000 | $\begin{aligned} & 7,00 \\ & n \end{aligned}$ | $\begin{aligned} & 5,00 \\ & n \end{aligned}$ | $\begin{aligned} & 3,00 \\ & n \end{aligned}$ | -- | -- | -- | -- | -- | -- | - |
| Max. Dwelling Units per acre | -- | -- | -- | -- | -- | -- | 15 | 12 | 15 | 22 | 24 | 32 | 1 |
| Min. Lot Width (ft.) | 150 | 100 | 70 | 60 | 40 | 25 | 50 | 60 | 60 | 50 | 50 | 50 | 50 |
| Min. Lot Frontage | 40 | 40 | 40 | 40 | 40 | 25 | 40 | 60 | 60 | 40 | 50 | 50 | 50 |
| Min. Setbacks (ft.): |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Front [5] | 25 | 25 | 25 | 25 | 20 | 15 | 25 | 25 | 25 | 25 | 25 | 25 | 25 |
| Side (Exterior) [2][5] | 25/25 | 25/20 | 25/15 | 25/1 | 20/1 | 15/1 | 25/1 | 25/10 | 25/1 | 25/10 | 25/1 | 25/10 | 25/10 |
| Side (Interior) [5] | 20 | 20 | 10 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| Rear [3][5] | 30/35 | 30/35 | 30/25 | $30 / 2$ | $20 / 2$ | $20 / 2$ | $20 / 2$ | 20/25 | 25/2 | 20/25 | $20 / 2$ | 20/25 | 20/25 |
| Max. Bldg. Cover (\% of | 15 [4] | 30 [4] | 40 [4] | $\begin{aligned} & 45 \\ & \text { ז11 } \end{aligned}$ | $\begin{aligned} & 50 \\ & \text { 141 } \end{aligned}$ | $\begin{aligned} & 50 \\ & \text { 141 } \end{aligned}$ | $\begin{aligned} & 50 \\ & \text { ז1 } \end{aligned}$ | 50 [4] | $\begin{aligned} & 50 \\ & \text { ז1 } \end{aligned}$ | 50 [4] | $\begin{aligned} & 50 \\ & \text { ז11 } \end{aligned}$ | 60 [4] | 60 [4] |
| Max. Impervious Cover (\% of site) | 25 [4] | 50 [4] | 70 [4] | $\begin{aligned} & 70 \\ & \text { 14 } \end{aligned}$ | $\begin{aligned} & 75 \\ & \text { 141 } \end{aligned}$ | $\begin{aligned} & 75 \\ & \text { 141 } \end{aligned}$ | $\begin{aligned} & 75 \\ & \text { 141 } \end{aligned}$ | 75[4] | $\begin{aligned} & 75 \\ & \text { 141 } \end{aligned}$ | 75[4] | 75[4] | 80[4] | 80[4] |
| Min. Outdoor Area (per Dwelling): |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Area (sq. ft.) | None | None | None | None | 240 | 150 | None | 50 | 50 | 50 | 50 | 50 | None |
| Dimensions ( ft .) | N/A | N/A | N/A | N/A | 12 | 10 | N/A | 5 | 5 | 5 | 5 | 5 | NA |
| Max. Height ( t .) | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 45 | 45 | 45 | 45 | 35[4] |

[1] Minimum garage entrance Setback $=20$ feet
[2] First number represents minimum Exterior Side Setback when subject Lot is adjacent to an abutting interior Side Lot Line. Second number represents minimum Exterior Side Setback when subject Lot is adjacent to an abutting Rear Lot Line.
[3] First number represents minimum Rear Setback for Single Frontage Lot. Second number represents minimum Rear Setback for double Frontage (or through) Lot.
[4] Applies only to Lots platted after the Effective Date or any improvements on a property after the Effective Date which increase the Building coverage or impervious coverage.
[5] Additional Setback restrictions apply to properties developed adjacent to RS zoned properties where expressly required elsewhere in the Development Code.
[6] Density and Dimensional Standards for the RM12D District are the same as those for the RM12 District.

STEP 2: Provide a deck plan, drawn to scale indicating the following information:
Deck dimensions - include width $x$ length, post spacing, stair dimensions.
$\square \quad$ Height of deck above grade- a deck $30^{\prime \prime}$ or more above finished grade shall require a guardrail
$\square \quad$ Existing house edge with any door, window or window wells near the construction- Glazing adjacent to walking surfaces may require safety glass. Guards shall be located along open-sided walking surfaces, including stairs, ramps and landings, that are located more than 30 inches measured vertically to the floor or grade below at any point within 36 inches horizontally to the edge of the open side. Insect screening shall not be considered as a guard.
$\square \quad$ Footing locations, size (diameter and depth) and spacing- the minimum depth below finish grade for a frost footing is 30 ".
$\square \quad$ Post size and spacing
$\square \quad$ Beam size and span

## $\square \quad$ Ledger board size

$\square \quad$ Ledger board attachment- type, size and spacing
$\square$ Joist size, spacing and orientation - specify species and grade
$\square$ Decking material - composite decking may require additional structural support.
$\square \quad$ Location of stairs and number of risers- Handrails shall be provided on not less than one side of each continuous run of treads or flight with four or more risers.
$\square \quad$ Handrail/ guardrail details- list height and material
$\square$ Unusual conditions- common conditions are existing dwelling with a cantilevered floor or cantilevered deck joists
$\square$ Construction Plans shall be drawn to a scale of $1 / 4$-inch or $1 / 8$-inch equals 1 -foot (preferred).

The sample deck plan provided below shows information required on the plans submitted with your building permit application.

## Deck Plan



## Inspections:

Inspections at various stages of construction are required as the work progresses. The project is not considered complete until a satisfactory final inspection has been obtained. When the final inspection is approved the permit is closed and the space can be occupied. Inspections are generally required as follows:

- Footing- Inspection of the footing shall occur after the footing holes are excavated and any required reinforcing is in place.
- Framing- Typically this inspection occurs after all rough-in framing is complete. Do not cover any rough-in framing with decking materials if the structure is not visible from below.
- Rough-in electrical- This inspection is used to verify the stairs are illuminated, and an exterior receptacle has been provided. In most cases your exterior light beside your patio door will be sufficient to light the staircase. Decks that are accessible from inside of the dwelling unit shall have at least one receptacle outlet installed within the perimeter of the deck. The receptacle shall be located not more than 6 feet, 6 inches above the deck.
- Final - This inspection is scheduled when all framing, decking materials and handrails/ guardrails, electrical fixtures and receptacles have been installed so the deck is ready to occupy and use. Cosmetic items that are not regulated by the building code, such as trim, painting, and other finish work, do not have to be completed to obtain the final inspection.
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