

PERMIT APPLICATION REQUIREMENTS FOR DECKS

A Signed, completed Building Permit Application form.

Two copies of a survey or plot plan showing the deck as it relates to the house and the distance to the property lines.

Two copies of a framing plan showing the following:

- *Proposed Footing sizes
- *Floor Joist sizes and spacing
- *Beam sizes and locations
- *Height of the deck above grade
- *Guard Rail heights
- *Spindle spacing
- *Ledger size and connection
- *Stair details

The Building Inspection Division will not accept computer generated plans that are often available from local Home Improvement Centers. Those plans lack sufficient detail for the plan reviewer to conduct a proper review.

If you submit a generic plan from a Home Improvement Center with your application, your permit will be delayed because your application cannot be processed and will be returned to you.

City of Waukesha—Building Inspection

201 Delafield Street, Room 200
Waukesha, WI 53188-3690

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DECKS — General Requirements

City of Waukesha—Building Inspection



A Division of the Community Development Department

262-524-3530

**City of Waukesha—
Building Inspection**

DECKS — Zoning Requirements

Decks which are constructed twelve (12) inches or more above lot grade, and which are attached to or closer than ten (10) feet to a permitted principal structure, shall be located no closer to a side lot line than the required side yard requirements for the district in which they are located and shall require the issuance of a building permit. Decks may project a distance not to exceed ten (10) feet into any required rear yard. Freestanding decks or decks surrounding private swimming pools separated from the principal structure shall be located at least ten (10) feet from the permitted principal structure and shall be located not closer than three (3) feet to a lot line. All decks, which are constructed less than twelve (12) inches above yard grade shall be located not closer than three (3) feet to a lot line.

22.56(1)a. Uncovered Stairs, landings, and fire escapes may project into any yard but shall not exceed six (6) feet nor be closer than three (3) feet to any lot line.

DECKS — Code Requirements

DEFINITION:

- Any structure which serves as a raised horizontal platform on floor constructed of wood or other materials, without enclosing walls or roof.
- Attached Deck: any deck which is physically connected to the principal building or accessory structure.
- Detached Deck: any deck which is not physically attached to the principal building or accessory structure.

Detached decks must also be properly set back from the principal building in accordance with zoning code.

SOIL & EXCAVATION REQUIREMENTS FOR DECK FOOTINGS OR FOUNDATIONS.

- No foundation shall be placed on soil with a bearing capacity of less than 2,000 lbs. Per square foot unless the pad support is designed through structural analysis.
- All organic material (roots, etc.) shall be cut off at the sidewalls of the boring or trench. All loose organic and loose material must be removed from the cavity prior to pouring concrete.

DECKS — Code Requirements

DECK FOOTINGS & FOUNDATIONS.

- (a) Type and size of footings and foundations:
1. Depth—The minimum depth of a footing, pier or direct burial post shall be 48" below grade. If the edge of the deck footing is closer than 5 feet to an existing house wall, the footing must bear at the same elevation as the existing footing for that wall.
 2. Piers—The minimum dimension of a pier shall be sized per SPS 320-325 Appendix B & C or SPS 321.225 .
 3. Direct burial wood posts- The posts shall be placed on an properly sized pad of approved material. Posts shall be treated to the requirements of the American Wood Preserver's Association (AWPA) standards for direct soil contact.

FRAMING

(a) General Requirements.

1. Materials. All wood framing used in deck construction shall be pressure treated against decay or shall be a species of wood that is naturally decay resistant or shall be protected from weather (paint or stain).



FRAMING cont.

2. Design Loading. Decks shall be designed for a minimum of a 40 pound per square foot loading.
- (b) Column or Posts.
1. Column size - wood posts or columns shall be sized per SPS 320-325 Appendix B & C or SPS 321.225 .
 2. Each Column or post must bear over the middle one-third of the footing.
 3. Lateral support.— A deck that is more that 24 inches above grade must resist lateral loads in accordance with SPS 320 -325 Appendix B & C or SPS 321.225
- (c) Beams.
1. Beam Size - All beams shall be sized per SPS 320-325 Appendix B & C or SPS 321.225.
- (d) Joists.
1. Joist Size. All joists shall be sized per SPS 320-325 Appendix B & C or SPS 321.225
 2. Bearing. Beams bearing directly on the posts shall be attached by means of approved metal anchors or other approved methods. See SPS 320-325 Appendix B & C for Attachment Requirements
 3. Ledger boards. Ledger boards attached directly to the house or other structure may be used to replace a beam or beams. A single member of equal depth to the required size beam shall be used. See Ledger Board Fastener Schedule SPS 320-325 Appendix B—Table 6. Flashing shall be installed between the ledger and building structure.
 4. Fasteners. All fasteners shall be galvanized steel, stainless steel, or approved for use with preservative treated wood (SPS 321.02-2-Minimum fastener schedule table).
 5. Hardware, including joist hangers or post anchors must be galvanized or stainless steel.

6. Guard Rails-All decks that are located 24" above grade shall be protected with guard rails. Guard rails shall be located on all open sides of stairways
Minimum Height— 36"
Maximum Spindle Spacing— 4-3/8"
Guardrails shall be designed and constructed to withstand a 200lb load applied from any direction



7. Hand Rails— Every stairway of more than 3 risers shall be provided with at least 1 handrail. The handrail to be located at least 30" but not more than 38" above the nosing of the treads.
Handrails should be graspable and shall be composed of decay resistant and/or corrosion resistant materials.
8. Stairs-All risers and treads shall not vary in uniformity by more than 3/8" for the entire length of the stairway. All stairways shall be constructed with closed risers or meet the same maximum opening/spindle spacing requirements as guardrails.
Minimum Width— 36"
Maximum Riser Height- 8"
Minimum Tread Depth— 9"(measured horizontally from nosing to nosing)
Minimum Landing— 3 feet in the direction of travel

9. Every deck must have an electrical outlet along the perimeter of the deck and within 6.5 feet of the floor in accordance with NEC section 210.52(3).

For complete code information

See SPS 320 to 325

“Appendix B & C”

https://docs.legis.wisconsin.gov/code/admin_code/sps/safety_and_buildings_and_environment/320_325/325_b.pdf

See back page for permit application requirements.

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