Construction Guidelines

- All load bearing posts must be anchored to footings with stirrup, bolt, or other approved fastener.
- All wood that comes in contact with the ground must be termite and decay resistant. Examples: Cedar, Redwood, or pressure treated.
- Joist hangers are required to be secured with an approved fastener at band board and ledger connections.
- Attach band boards to houses with approved fastener Per included table
- Guard rails are required when deck surface to grade exceeds 30" at any point within 36" from deck.
- Stairs shall have minimum 10" treads and maximum 7 3/4" risers with 4" maximum openings.
- Stairs with four (4) or more risers require a graspable handrail. Graspable handrails shall start at the nose of the first tread and be continuous to the nose of the last tread and shall be installed between 34" to 38" vertically above the nosing of the treads and shall have a return.
- All overhead electrical wires must be at least 12' above the deck floor.
- Minimum height of guard is 36"

center

at r 24" on o

joists a 16", or

2x 12",

LB/4 max.

overhand

=

"

overhang

joist span (LJ)

Lu/4 max.

- Deck cantilever depends on type of construction
- All balconies, decks, and porches shall have at least one receptacle outlet installed within their perimeter

6x6

post





Typical types of footings, may be belled at bottom



The City of O'Fallon's Building and Code

Enforcement Division supports and encourages every resident's decision to improve their home. Approval of plans and inspection of work being done helps ensure your home improvement project meets minimum code requirements while improving your property.

Inspections: The City may conduct Framing inspections as required by your specific project and Pier and Final Inspections of all decks. Check your approved plans from the City for a list of required inspections for your project. Schedule inspections: (636) 379-5595 or

www2.citizenserve.com/ople Inspections called in by 4:00 p.m. will be on the next business day's schedule.

City permit approval does not constitute subdivision approval. The City recommends you contact trustees in your subdivision for any subdivision requirements.

This is a general guide for the construction of a deck within the City of O'Fallon, Mo. All code requirements are too extensive to list. For specific questions or further information, please contact the

Building and Code Enforcement Division at (636) 379-5660





Deck Guide

City of O'Fallon, Missouri **Building and Code Enforcement Division 100 North Main Street O'Fallon**, **MO**, 63366 (636) 379-5660 www.ofallon.mo.us

Apply and schedule online www2.citizenserve.com/ople

Obtaining a Permit

One copy of your plans with the below information is necessary for obtaining a deck permit:

SITE PLANS

Provide a scaled copy of your Plot Plan or Survey with the deck indicated as proposed. Show cantilevers on house and all easements and set backs. Rear setbacks: deck must be a minimum ten feet from the rear property line. Side setbacks: deck must remain out of the approved side yard setback. No portion of the deck shall extend into an easement, including stairs and cantilevers.



CONSTRUCTION PLANS

General: All plans must be drawn to scale and must include the following to be considered for review, see illustrations for examples

- Deck dimensions and elevation
- Lumber size and type of house joists/bandboard
- □ Joist spans (length of joist to beams or supports)
- Joist spacing (distance between joist)
- Pier/footing depth and size
- Post size, post length, detail of post to beam and post to pier attachment, beam size

Guardrail detail, fastening to deck, materials and spacing, minimum height 36"

Existing or new electric receptacle location

Deck Attachment to House:

- Approved fastener diameter, length, and spacing
- Detail of ledger attachment and method of at
 - tachment at cantilevers

A Stair Detail:

- Tread and rise measurement
- Guard rail height and respective spacing
- Spindle spacing
- Hand rail height and diameter

Important Framing Requirements

All beams, girders, and trimmer joists used to frame around bays or cantilevers or other construction methods MUST bear on the existing house wall and MAY NOT be supported on the deck ledger with hangers or fasteners. Alternatively, they may be attached directly to the house bandboard with approved hangers or supported by posts and piers. Deck joists at cantilevers may be independently run inside and rest on the existing wall plate, "H" framed with headers and trimmers or be constructed as a freestanding deck by post and beam construction. All decks will be required to be laterally braced. Opposing lateral bracing can be achieved by installing decking at a 45 degrees or installing diagonal (X or K) bracing at each post. Additionally decks may be laterally braced with approved tension devices. See manufacturer documentation for installation instructions.



Table 5. Fastener Spacing for a Southern Pine, Douglas Fir-Larch, or Hem-Fir Deck Ledger and a 2-inch Nominal Solid-Sawn Spruce-Pine-Fir^{7,9} Band Joist or EWP Rim Board⁶ (Deck Live Load = 40 psf, Deck Dead Load = 10 psf)^{3,6}

Joist Span	Rim Board	6'-0" and	6'-1"	8'-1"	10'-1"	12'-1"	14'-1"	16'-1"
	Band Joist	less	8'-0"	10'-0"	12'-0"	14'-0"	16'-0"	18'-0"
Connection Details	On-Center Spacing of Fasteners ^{4,5}							
¹ ⁄ ₂ " diameter lag screw with ¹⁵ / ₃₂ " maximum sheathing ¹	1" EWP ⁶ 1- ¹ / ₈ " EWP ⁶ 1-½" Lumber ^{7,9}	24" 28" 30"	18" 21" 23"	14" 16" 18"	12" 14" 15"	10" 12" 13"	9" 10" 11"	8" 9" 10"
12 diameter bolt with $^{15}\!\!/_{32}$ maximum sheathing	1" EWP ⁶ 1- ¹ / ₈ " EWP ⁶ 1- ¹ ⁄ ₂ " Lumber ^{7,9}	24" 28" 36"	18" 21" 36"	14" 16" 34"	12" 14" 29"	10" 12" 24"	9" 10" 21"	8" 9" 19"
¹ ⁄ ₂ " diameter bolt with ¹⁵ ⁄ ₃₂ " maximum sheathing and ¹ ⁄ ₂ " stacked washers ^{2,8}	1" EWP ⁶ 1- ¹ / ₈ " EWP ⁶ 1-½" Lumber ^{7,9}	24" 28" 36"	18" 21" 36"	14" 16" 29"	12" 14" 24"	10" 12" 21"	9" 10" 18"	8" 9" 16"
The tip of the lag screw shall fully e The maximum gap between the fact Ledgers shall be flashed and calked Lag screws and bolts shall be stagg Deck ledgers shall be minimum 2x8 by standard engineering practice. When solid-sawn pressure-preserva structural panel band joist or structured designed in accordance with accept rim board, respectively.	xtend beyond the in e of the ledger board to prevent water fro ered. pressure-preservati tive-treated deck le ural composite lumb ed engineering pract h laminated veneer.	side face I and face m contact ive-treate dgers are er includii tice. Tabu	of the ban of the wa ting the ho d No.2 gra attached t ng laminat lated value m board el	d joist. Il sheathing buse band jo ade lumber, to engineere red veneer l es based on	shall be ½ pist or other ap ed wood pro umber), the 300 lbs an	pproved ma oducts (min e ledger att d 350 lbs fo	terials as e imum 1" th achment sh or 1" and 1-	stablished ick wood iall be ¹ / ₈ " EWP

- A minimum 1"x9%" Douglas fir-larch laminated veneer lumber rim board shall be permitted in lieu of the 2" nominal band joist. Wood structural panel sheathing, gypsum board sheathing, or foam sheathing not exceeding one inch thickness shall be permitted. The maximum distance between the face of the ledger board and the face of the band joist shall be one inch.
- ⁹ Fastener spacing also applies to southern pine, Douglas fir-larch, and hem-fir band joists.

