

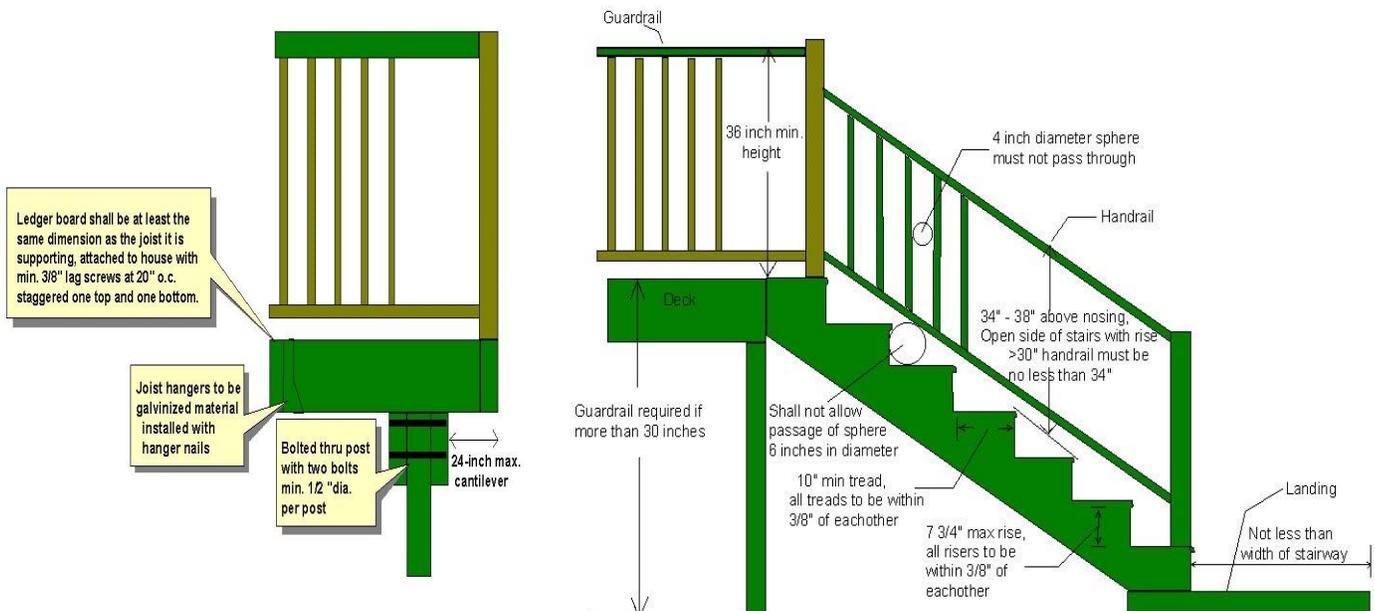
## Permit Procedure

All applicants must submit completed permit application, including the estimated cost of construction. The submittal must include a site plan sketch showing the size and location of all existing structures (house, sheds, pool, fencing etc) and the deck with dimensions from the property lines. A detailed framing plan must also be included and show;

1. If attached to house show method of attaching deck to house and how flashing will be installed.
2. Specify overall dimensions of the deck, including post and beam locations with dimensions indicating beam spans between posts and clear span of joists.
3. Call out spacing, size and show direction of layout for floor joists, decking, ceiling joists, rafters and/or trusses.
4. Indicate the location of basement window wells, hose bibs, electric and gas meters. Specify height of floor deck above grade.
5. Provide detail of the stair width; tread depth, and riser height. Provide handrail and guardrail details.
6. Provide Illinois roofing license number for any contractor hired to do roofing on the project.
7. Before digging call J.U.L.I.E. at 1 800 892 0123.
8. Building permit fees for decks, ramps, porches are .10 cents per square feet.

## Inspection Requirements

Inspections must be scheduled for three separate intervals: 1) PIERS-After holes for the piers are dug and prior to pouring concrete; 2) ROUGH-After deck is framed and prior to installing decking, handrail and guardrail; 3) FINAL-After deck completion.



# Decks

Specifications –PLEASE NOTE: This handout is only standard deck information and other requirements of the currently adopted residential code may apply for specific deck projects. Please contact the Building Inspector for any additional code requirements.

- Piers** Minimum depth is 36 inches.
- Posts** Shall be water resistant or pressure treated lumber.
- Beams** Splices in beams shall be made over a post or pier; splices in beams mid-span are prohibited. All beams must be fastened together and bear directly on a post or installed to either side of a post with minimum of two 1/2" diameter bolts per post.
- Floor Joists** Maximum 16 inches on center joists spacing when using 5/4 nominal lumber for decking. Shall bear on both halves of the beam when beam is attached to either side of the post. Joists bear directly on beam or hang from beam with approved galvanized framing connectors. Must be rated at 40 psf live-load using pressure-treated lumber.

Beam Size	Beam span between posts
2- 2x6	5'
2- 2x8	7'
2- 2x10	8'
2-2x12	9'

Joist Size	Max. Span at 16" o.c.	Max Span at 24" o.c.
2x6	9'4"	8'1"
2x8	12'3"	10'3"
2x10	15'5"	12'7"

**Ledger Boards** For residential applications and total design load of 40 psf, the connection between the pressure treated deck ledger and band joist shall be with 1/2" lag screws or bolts with washers. The placement shall be 2 inches in from the bottom, top and ends and be staggered from top to bottom.

Joist Span (ft)	≤6'	6'1" to 8'	8'1" to 10'	10'1" to 12'	12'1" to 14'	14'1" to 16'	16'1" to 18'
	On-Center Spacing of Fasteners						
1/2" Lag Screw*	30	23	18	15	13	11	10
1/2" Bolt with washers	36	36	34	29	24	21	19
Source: Building Safety Journal, Dec. 2005      *The tip of lag screw shall fully extend beyond the inside face of the band joist							

- Stairs** 7 3/4" max riser height and 10" minimum tread width .  
The greatest riser may not exceed the smallest by more than 3/8-inch.
- Handrails** Handrails are required on at least one side of stairs when there are four or more risers.
- Guardrails** Maximum spacing of balusters and intermediate rails is 4 inches.  
Guardrails, at least 36" in height are required around decks 30 inches or more above grade.  
Open sides of stairs with a total rise of more than 30" above the floor or grade below shall have guards not less than 34" in height measured vertically from the nosing of the treads.
- Connectors** Call out size and location of connectors used for beam to beam, post to beam, joists, rafters, etc.  
Joist hangers shall be installed by the use of approved joist hanger nails or 8D nails.
- Misc.** Deck must be designed to support a 40-pound per sq. ft. live load.  
The location of the deck on the property must meet all zoning requirements and setbacks.  
Structures must be kept out of easements designated for utilities or drainage as indicated on a plat of survey or subdivision plat for the property.