

Decks

IMPORTANT- FOOTING IS NOT SHOWN IN SUBMITTED DOCUMENTS. POSTS SHOWN IN MATERIAL LIST CANNOT BE BURIED IN THE FOOTING! THEY ARE NOT RATED FOR BURIAL OR PERMANENT WOOD FOUNDATIONS!

To obtain a permit for a deck, a sketch of the deck showing all lumber dimensions and spans, footing sizes, depth and placement, the ledger connection, railings, guards and handrails is required. Completing the deck design handout from the website ILLOWAICC.org or the American Wood Council deck design guide meets this requirement. The following items are required when applicable. Many will be noted on the sketch plan and returned with the permit. The persons doing the work are responsible for ensuring all code requirements are met. This is a partial list of requirements common to deck construction. **Spa's, hot tubs and pools will potentially collapse a standard designed deck!**

1. **Electrical Lines** over or within 3 feet of the edge of the deck must be 10 above the walking surface.
2. **Footings**- Footings must be 42 inches deep. Footings for a deck only may be a 12" pier. Footings carrying a deck load AND a roof load or a walled structure must be a 12" wide trench footing or a standard 8x16 spread footing that extends 8" past the end posts, or use engineer designed piers.
3. **Lumber**- Lumber must be treated for exterior use or naturally resistant to decay.
4. **Beam Support**- All Beams must have bottom support from the posts. Beam splices should be offset when possible and located over the supports.
5. **Ledger**- must be at least the same size lumber as the floor joists but may not be smaller than 2 x 8. **Ledger cannot be connected to a cantilever on house.**
6. **Ledger Connection**- may be ½ lag bolts with ½ washers (or equivalent) long enough to penetrate the rim Joist placed 2" from the top and bottom.
7. **Handrails** must be graspable, are required on stairs with 4 or more risers, must return to a post or wall, and be 34" to 38" high from the nose of the stairs.
8. **Stairs width** must be 36" wide not counting the handrail.
9. **Rise and Runs**- Maximum rise is 7 ¾ inches, minimum run is 10 inches and All rise/runs must be consistent to within 3/8".
10. Floor joists may **cantilever 24"**. Beams may cantilever 12".
11. **Lateral load** connections are required near the ends of each deck section.
12. **Flashing**- Ledgers must be flashed to prevent rim joist damage.
13. **Guard** openings may not be larger than 4".
14. **Joists hangers** must be properly sized for the joists being supported.
15. **Joist hangers** require proper fasteners. **Screws/standard nails are not proper fasteners!**
16. **Guards**- Guards are required on all decks over 30" above the ground meas 36" out from the edge of the deck. Guards must be able to withstand 200 lbs of applied pressure in any direction.
17. **4x4** posts used for guards may not be notched more than 7/8 of an inch.
18. **4x4** posts may require blocking or brackets to withstand 200 lb load.
19. **Spans** for residential decks when joists are SPF 16" on center is 8'8" for 2x6, 11'1" for 2x8, 13'7" for 2x10 and 15'9" for 2x12.
20. **Egress windows** under a deck require 36" clear height/width to the yard.

