

BUILDING INSPECTION RESIDENTIAL DECK REQUIREMENTS

This document is not intended to cover all aspects of Deck construction. A complete document is available on the internet at the following web address:

https://docs.legis.wisconsin.gov/code/admin_code/sps/safety_and_buildings_and_environment/320_325/321.pdf

SPS 321.225 Decks. Decks attached to dwellings and detached decks which serve an exit shall comply with the applicable provisions of this chapter, including but not limited to:

- (1)** Excavation requirements of s. SPS 321.14; **(Footings to be placed on undisturbed soil)**
- (2)** Footing requirements of s. SPS 321.15 (2) (f); **(Use the attached Round Footing Chart)**
- (3)** Frost penetration requirements of s. SPS 321.16; **(48" Footing Depth)**
- (4)** Load requirements of s. SPS 321.02; **(50 PSF for Decks; 40# PSF for Roofs)**
- (5)** Stair, handrail and guardrail requirements of s. SPS 321.04; **[STEP rise 8" Max. run 9" Min.; HANDRAIL (see attached chart) 30"-38" from the Nosing of the Stairs; GUARDRAIL < 4" Spindle Spacing, 36"min. Height]**
- (6)** Decay protection requirements of s. SPS 321.10. **(Treated or Decay Resistant Wood)**
- (7)** If the residential deck serves an exit, it must be lighted and an outlet must be provided.
[NEC210.70(A)(2)(b), NEC 210.52 (E)(3).]
- (8)** Deck steps may be built into any required building setback area but never closer than 3' to any lot line.
- (9)** Corner lots have two street (front) yards.
- (10) DECKS MAY NOT BE CONSTRUCTED WITHIN AN EASEMENT WITHOUT WRITTEN PERMISSION FROM THE EASEMENT HOLDER.**

Electrical Utilities Requirements:

1. *A minimum clear space of 3' x 3' is required in front of electric and gas meters. Meters located under decks must also have a minimum of 6 ½ feet of headroom at these meters.*
2. *A minimum of 3 feet must be maintained from the deck surface to the center of the electric meter. This may require having an electrician raise the electrical meter.*
3. *Vertical clearance to Overhead Service Drop Conductors (10 ft.) [NEC 230.24 (A), (B).]*
4. *Decks enclosing an underground electrical service must:*
 - a) *Maintain a minimum of 36" height from the deck surface to the center of the electric meter. This may require an extension meter pedestal.*
 - b) *Have a removable 36" X 36" hatch around the meter pedestal. This is measured from the front of the meter pedestal.*
 - c) *A minimum of a 4" conduit extending 5' beyond the deck framing is required for utility lateral wires.*

Submit the following to Building Inspection for Review and Processing:

- A survey showing property lines, easements and existing buildings.
- 3 sets of plans complete with calculated footing sizes, joist and beam sizes, stair, handrail and guardrail details.
- Completed Permit Application.
- Fees: \$35.00 Deck Permit , \$25.00 Plan Review

What framing material will you be using?

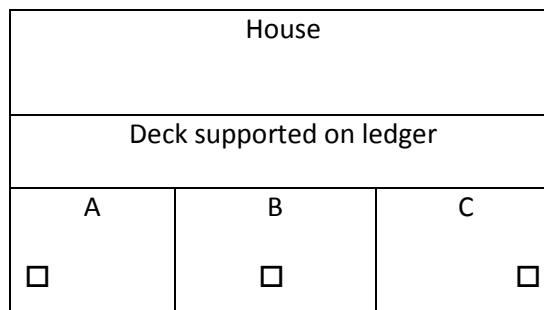
JOIST SPAN	8' OR LESS	9' OR LESS	10' OR LESS	11' OR LESS	12' OR LESS	13' OR LESS	14' OR LESS	15' OR LESS	16' OR LESS
JOIST SIZE	2x6 @ 16" O.C. OR 2x8 @ 24" O.C..	2x8 @ 16" O.C. OR 2x10 @ 24" O.C.	2x8 @ 16" O.C. OR 2x10 @ 24" O.C.	2x8 @ 16" O.C. OR 2x10 @ 24" O.C.	2x8 @ 12" O.C. OR 2x10 @ 16" O.C.	2x10 @ 16" O.C. OR 2x12 @ 24" O.C.	2x10 @ 16" O.C.	2x10 @ 12" O.C. OR 2x12 @ 16" O.C.	2x12 @ 16" O.C.

1. Use this chart to calculate beam size and post spacing.

The depth of the Beam Members must be equal to or greater than the depth of the Deck Joists.

POST SPACING	5' OR LESS	6' OR LESS	7' – 8'	9'-14'
# OF BEAM MEMBERS	1	2	3	4

2. Divide the distances **equally** between the posts. Measure the boxes and calculate the square footage of each box to find the square footage on each post. Example: A deck attached to the house with 3 posts. Length of box A, times the width of box A = the square footage of box A... etc.



3. Use the chart to determine footing diameter.
All footings are to be poured at least 12" thick.

MAX. SQ. FT.	14	22	32	43	56	71	87	105	126
ROUND FOOTING DIA.	8	10	12	14	16	18	20	22	24

A 24"x24"x12" square concrete footing requires no footing calculations.