



CITY OF NEENAH  
Department of Community Development  
(Inspection Department)  
211 Walnut Street Phone (920) 886-6130  
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## **DECKS, PATIOS, PORCHES AND GAZEBOS**

### **BUILDING PERMITS ARE REQUIRED FOR ANY DECK OR PATIO 24" OR MORE ABOVE GRADE AND ALL COVERED DECKS, PATIOS OR GAZEBOS**

#### **Covered Decks, Porches, Patios and Gazebos**

If you plan on building a covered porch, gazebo or screen room that is attached to a principal structure, you must meet the following yard requirements:

- rear yard, 30' minimum (distance from deck to back lot line)
- side yard, 6' minimum (distance from deck to side lot line)
- setback, 25' minimum (distance from deck to front lot line)

If you plan on building a detached gazebo or screen room that is on or connected to an attached deck, you must meet the following yard requirements:

- rear yard, 8' minimum (distance from deck to back lot line)
- side yard, 6' minimum (distance from deck to side lot line)
- setback (not allowed in front setback)
- size limit, 300 sq. ft. gross area. Max. wall height of 10' and a max. overall height of 17'.

If you plan on building a detached freestanding gazebo or screen room, you must meet the following requirements:

- rear yard, 3' minimum
- side yard, 3' minimum
- setback (not allowed in front setback)
- size limit, 300 sq. ft. gross area. Max. wall height of 10' and a max. overall height of 17'.

#### **Uncovered Decks and Patios**

If you plan on building an uncovered deck or patio attached or within 8 feet of the principal structure, you must meet the following yard requirements:

- rear yard, 8' minimum (distance from deck to back lot line)
- side yard, 6' minimum (distance from deck to side lot line)
- setback, may extend maximum of 8' from front line of building

If you plan on building an uncovered deck or patio further than 8 feet from the principal structure, you must meet the following yard requirements:

- rear yard, 3' minimum
- side yard, 3' minimum
- setback (not allowed in front setback)

## **DECK PIERS, PADS AND FOUNDATIONS**

### **Decks attached to principal buildings:**

1. Concrete pads - The minimum depth of a pad shall be 48" below grade. The minimum dimensions of this pad shall be 4" in depth and 8" in diameter.
2. Piers - The minimum depth of concrete piers shall be 48" below grade. The minimum dimension of this pier shall be 8" in diameter. (The concrete pier(s) shall extend a minimum of 6" above grade).
3. Direct burial wood posts – Posts shall be placed on a minimum 8" round by 8 " thick concrete pad or other approved materials at a uniform minimum depth of 4 feet below established grade. Posts shall be treated for direct soil contact below grade.

### **Detached decks must meet these requirements:**

1. Concrete pads shall be provided at a uniform depth below grade with all loose or organic material removed from the pad area prior to placement of concrete. The pad shall have a minimum depth of 4" thick and 8" in diameter.
2. Piers - The minimum 8" diameter concrete piers shall be at a uniform depth below grade.
3. Direct burial wood posts - shall be placed on a concrete pad or other approved materials at a uniform depth below grade. Posts shall be treated for direct soil contact.

## **FRAMING**

### **General requirements:**

1. Decks shall be designed in accordance with the [2012 Residential Wood Deck Guide](#)
2. Materials. All wood framing, decking and railings used in deck construction shall be pressure treated against decay or shall be a species of wood or other material that is naturally decay resistant or shall be protected from the weather.
3. Design loading. Decks shall be designed for a minimum of a 40 pounds per square foot loading.

### **Column posts:**

1. Column spacing. Column spacing will depend on the beam selected and deck size and shall be spaced to carry the actual loads per the [2012 Residential Wood Deck Guide](#).
2. Column size:
  - a. All column posts not exceeding six (6) feet in height shall be a minimum of four (4) inches by four (4) inches (4 x 4) nominal thickness.
  - b. All column posts exceeding six (6) feet in height shall be a minimum of six inch by six inch (6 x 6) nominal thickness.
3. Lateral support. Column posts shall be constructed in such a manner or mechanically attached to the deck foundation to resist lateral movement.

### **Column beams:**

1. Beam size. All beams shall be sized per the [2012 Residential Wood Deck Guide](#).
  - a. Beams may be spaced on each side of the posts provided that blocking is installed a minimum of twenty-four (24) inches on center between the beams members and the beams are thru bolted to the posts.
2. Bearing. Beams bearing directly on the posts or notched into the posts shall be attached by means of approved metal anchors or other approved methods.
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. The ledger board shall be attached with bolts, lag bolts, or 16d nails, spaced no less than sixteen (16) inches on center, secured directly into the building structure.

### **Joists**

1. Joist size. All deck joists shall be sized and spaced per the 2012 Residential Wood Deck Guide.
2. Bearing. Deck joists shall bear a minimum of 1 ½" on the beam or ledger board. Joists fastened to the face of the beam or ledger shall be attached with approved metal joist hangers.
3. Overhanging of joists. Joists which are at right angles to the supporting beam shall not be cantilevered more than two (2) feet past the supporting beam, unless designed by structural analysis.

### **Decking**

1. Material. All decking material shall be a minimum of one and one quarter (1 1/4) inches thick, nominal thickness. One inch decking may be used provided that the joists are spaced no more than sixteen (16) inches on center.
2. Decking orientation
  - a. Decking shall be installed diagonally or at right angles to the joists.
  - b. Decking shall be centered over joists with cuts made parallel to joists. Not more than two adjacent boards may break joints on the same joist except at ends and at openings.

### **Guardrail and Handrails**

1. Guardrail. All decks, which are more than twenty four (24) inches above grade, shall be protected with guardrail.
2. Handrails. Every stairway of more than three (3) risers shall be provided with at least one handrail. Handrails shall be provided on the open sides of stairways.
  - a. Height - Handrails for stairs shall be located at least thirty (30) inches, but not more than thirty-eight (38) inches, above the nosing of the treads. Guardrails on decks shall be located at least thirty-six (36) inches above the surface of the deck.
  - b. Open railings - Open guardrail or handrails shall be provided with intermediate rails or an ornamental pattern to prevent the passage of a sphere with a diameter greater than four (4) inches.

Figure 32A. Handrail Mounting Examples

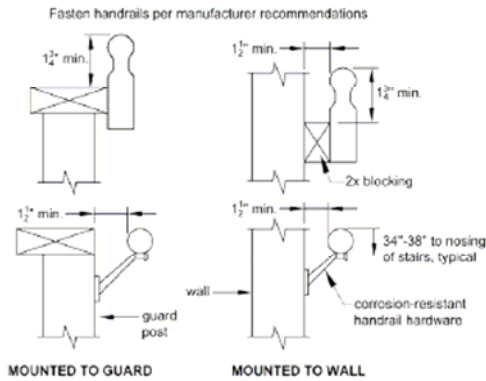
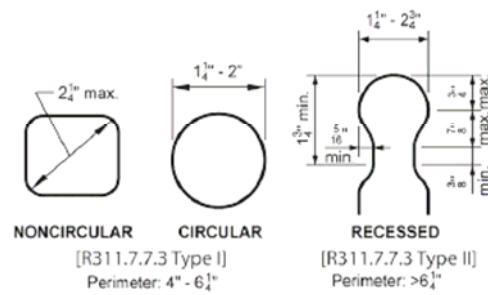


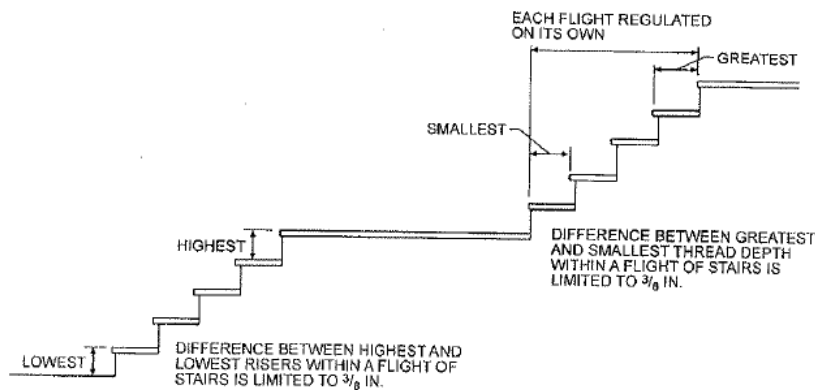
Figure 32B. Handrail Grip Size



American Wood Council

**Stairway - treads and risers:** [Online Stair Calculator](#)

1. Risers. Risers shall not exceed eight (8) inches in height measured from tread to tread.
2. Treads. Treads shall be at least nine (9) inches wide, measured horizontally from nose to nose.
3. Variation. There shall be no variation in uniformity exceeding three sixteenths (3/16) inch in the width of a tread or in the height of risers.
4. Stair stringers shall be supported in accordance to the same manner as used for the deck.
5. Stairways with open risers shall be constructed to prevent the through-passage of a sphere with a diameter of 4 inches or larger between any 2 adjacent treads.
6. The triangular area formed by the tread, riser and bottom rail shall have an opening size that prevents the through-passage of a sphere with a diameter of 6 inches or larger.



**Building Permits**

Building permit fees for decks, patios and freestanding gazebos or screen rooms are \$20.00. Permit fees for attached porches, screen rooms or gazebos are based on the square footage of the structure. Application for permits may be made at the Inspection Department, City Hall, Room 313, from 7:30 AM to 4:00 P.M. weekdays.