

# PLAN REQUIREMENTS FOR DECKS AND PORCHES

(ALL PLANS MUST BE FULLY DIMENSIONED)

1. **PLOT /SITE PLAN:** A plot plan shows all existing structures on your property, the new proposed structure, and the distance to all adjacent lot lines. (IRC R106.2, IBC 107.2.6)
2. **FLOOR PLAN:** A floor plan illustrates an overhead view of the proposed deck or porch and how it relates to the existing structure. It needs to be fully dimensioned. (IRC R106.1.1, IBC 107.2.1)
3. **FRAMING PLAN:** A framing plan illustrates how the deck will be constructed, and must have all of the following information, showing compliance with Connecticut State Building Code. (IRC R106.1.1 & R507.1, IBC 107.2.1)

## **FRAMING PLAN MUST ILLUSTRATE THE FOLLOWING INFORMATION:**

### **FOOTING DETAILS:**

Diameter, depth, anchor bolts, manufactured connection to post  
*IRC R507.3, table R507.3.1*

### **POSTS DETAILS:**

Dimensional size of posts, spans between posts, connection between post and beam, post bearing  
*IRC R507.4, R507.4.1, table R507.4, R507.5.1*

### **POST BRACING DETAILS:**

45 degree bracing between posts and beam that resists horizontal movement.  
*IRC R507.8*

### **BEAM DETAILS:**

Dimensional size of beam, span, connection details between beam and joists, bearing requirements  
*IRC R507.5, R507.5.1, R507.1, R507.5*

### **JOIST DETAILS:**

Dimensional size, span, and o.c. spacing of joists, band joists at ends / blocking over bearing points  
*IRC 507.6, R507.6.1, R507.7, R507.6.1, R507.6.2, R507.9.1.2*

### **DECKING DETAILS:**

Dimensional size and material of decking  
*IRC R507.7, R507.2, R507.2.1, R507.2.2, table R507.7*

### **LEDGER DETAILS:**

Dimensional size of ledger (*min. 2" x 8"*), ledger flashing, ledger bolt diameter, length, o.c. spacing, two staggered rows, lateral restraints, joist hangers  
*IRC R507.2.4, R507.9.1.1, R507.9.1.3, R507.9.2*

### **GUARDRAIL DETAILS:** required when deck is 30" off of grade

Dimensional Size of guardrail posts, height off of finished deck (36" 1 & 2 family, 42" all other), connection details between post and deck framing, O.C. spacing of posts, spindle spacing < 4"  
*IRC R301.5, R312, R507.10, R507.2.2*

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### STAIR DETAILS:

**LANDINGS:** A level landing shall be provided at all exterior doors and stairways  
36" X WIDTH OF STAIRS (1& 2 family) *IRC R311.1, R311.2, R311.7.6*  
48" min. *IBC 1011.6*

**HEADROOM:** Minimum headroom shall be as follows  
6'8" min. (1 & 2 family) *IRC R311.7.2*  
6'8" min. *IBC 1011.3*

**WIDTH:** Stairway minimum width shall be as follows  
36" min. clear width (1& 2 family) *IRC R311.7.1*  
44" min. clear width, but varies based on occupant load *IBC 1011.2*

**RISE:** Riser heights shall be as follows  
8 ¼" max. (1 & 2 family) *IRC R311.7.5.1*  
7" max, 4" min. *IBC 1011.5.2*

**TREAD DEPTH:** Tread run depth shall be as follows  
9" min. *IRC R311.7.5.2*  
11" min. *IBC 1011.5.2*

**NOSING:** Nosing at treads, landings, and floors shall be as follows  
½" radius & project between ¾" to 1 ¼" past riser *IRC 311.7.5.3*

**ILLUMINATION:** Stairways shall be provided with lighting at the top of landing of the stairway.  
*IRC R303.8*

**WEATHER PROTECTION:** Exterior stairways and approaches shall be designed so that water will not accumulate on walking surfaces (other than 1 & 2 family) *IBC 1011.7.2*

**ENCLOSURES UNDER EXTERIOR STAIRS:** The open space under exterior stairways shall not be used for any purpose (other than 1 & 2 family) *IBC 1011.7.4*

**HANDRAILS:** Handrails shall be provided as follows *IRC R311.7.8, IBC 1011.11, 1014, 1607.9*

#### 1 & 2 Family

Required for stairways with 4 or more risers, on one side  
36" – 38" high, measured vertically from slope plane of tread nosings  
<4" projection into stairs  
1 ½" clearance between wall and handrail  
1 ¼" - 2" diameter  
Continuous for full length of flight  
Return to wall or post

#### OTHER THAN 1 & 2 Family

Required on each side of stairway  
34" – 38" high, measured vertically from slope plane of tread nosings  
<4" projection into stairs  
1 ½" clearance between wall and handrail  
1 ¼" - 2" diameter  
Continuous, without interruption by newel post or other obstruction  
Extend 12" horizontally past top and bottom tread  
Return to a wall, guard, post

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### IMPORTANT NOTES:

Deck ledgers shall not support concentrated loads from beams or girders *IRC R507.9.1.1*

Deck ledgers shall not be supported on stone or masonry veneers *IRC 507.9.1.1*

Decking screws are not allowed to be used to fasten framing components together or for installation of joist hangers. They are heat treated and have no shear strength. The only place they are to be used is when fastening decking boards to joists. *IRC R507.2.3, R317.3, table R507.2.3*