

# City of El Cajon Building and Fire Safety Division

200 Civic Center Way El Cajon, CA 92020 Phone: (619) 441-1726

### Deck Detail

### Inspection request line: (619) 441-6210

#### When is a permit required for my residential deck?

When the decks 200 sq. ft. or more in area, or more than 30 inches above grade at any point, or attached to the dwelling and serving as part of the exit path.

#### Are there any setbacks for my deck?

A deck is required to maintain setbacks from the property line. Check with Planning Department personnel to determine the setback for your property.

#### How do I obtain a permit for my deck?

**Step 1** - Draw a plot plan showing the dimensions of the property, all structures on the property, the proposed deck and distances to property lines (an example of a plot plan is available on the City of El Cajon website).

**Step 2 -** Use this residential deck detail to determine the size of joist, girders, and footings for your deck structure.

**Step 3 -** Submit three copies of your plot plan along with this detail to the El Cajon Building and Fire Safety Division. The permit technician will help you through the rest of the permit process.

#### What inspections do I need?

You will need to call for three different inspections to complete your residential deck, (1) A footing inspection before concrete is placed, (2) a ledger inspection before the ledger is covered, and (3) a final inspection when the work is complete. The inspection card and permit must be kept on site for the inspector to sign.

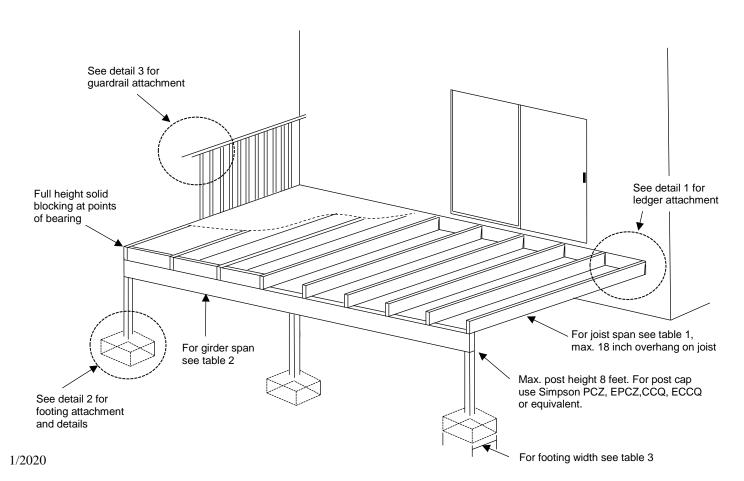


Table 1 – Minimum Joist Size (cantilever								
allowed up to the depth of the joist)								
Size	Spacing	Allowable Span						
(inches)	(inches)	(feet and inches)						
		DF/L #2	Redwood					
2x6	12	9'-6"	8'-10"					
	16	8'-8"	8'-0"					
	24	7'-2"	7'-0"					
2x8	12	12'-6"	11'-8"					
	16	11'-1"	10'-7"					
	24	9'-1"	8'-8"					
2x10	12	15'-8"	14'-11"					
	16	13-7"	13'-0"					
	24	11'-1"	10'-7"					
2x12	12	18'-0"	17'-5"					
	16	15'-9"	15'-1"					
	24	12'-10"	12'-4"					

 If joists are within 18 inches of grade use pressure treated Douglas Fir/larch or foundation grade redwood.

Table 2 – Minimum Girder Size							
Post	Joist Span in feet						
Spacing	6'	8'	10'	12'	14'		
4'	4x4	4x6	4x6	4x6	4x6		
6'	4x6	4x8	4x8	4x8	4x8		
8'	4x8	4x10	4x12	4x12	4x12		
10'	4x10	4x12					
12'	4x12						

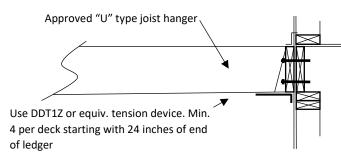
Table 3 – Minimum Footing Size.

Minimum footing size shall be in accordance with Table R507.3.1 of the CRC based on the formula for determining tributary area and soil bearing pressure. Footing style may vary due to soils, ground water, & typical construction practices. See figure 507.3.

- Assume 1,500 psf min. soil bearing capacity and 2500 psi Concrete.
- 2. 60 psf min. live load design.
- 3. Minimum depth for all footings is 12 inches into Natural grade.

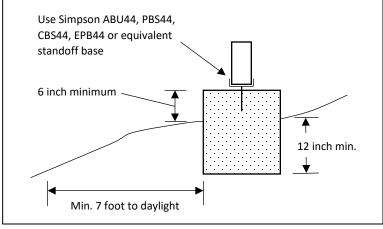
#### **Detail 1 – Ledger Attachment**

See section R507.9. Up to 10 foot joist span use 5x1/2 lag screw at 16 inches on center. Over 10 foot to 14 foot use 5x1/2 lag screw at 12 inches on center. Stagger lag screws.

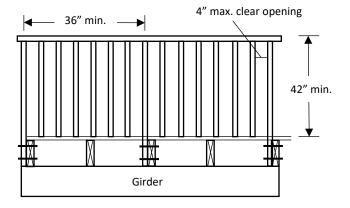


Ledger min. size equal to size of joist. Lags/bolts hot dipped or galvanized.

## **Detail 2 – Footing and Attachment Detail** (for footing width see table 3)



#### Detail 3 – Guardrail Attachment



Use 2-1/2 diameter through bolts. Bolts must be positioned 1-1/2" from edge of member.