



City of El Cajon
Building & Fire Safety
200 Civic Center Way
El Cajon, CA 92020
(619) 441-1726

RESIDENTIAL DECK DETAIL

When is a permit required for my residential deck?

If the deck is over 30 inches above grade at any point a permit will be required for the deck. When utilizing the City of El Cajon's standard for residential decks a permit can be obtained over the counter.

Are there any setbacks for my deck?

A deck is required to maintain a five foot setback from all property lines.

How do I obtain a permit for my deck?

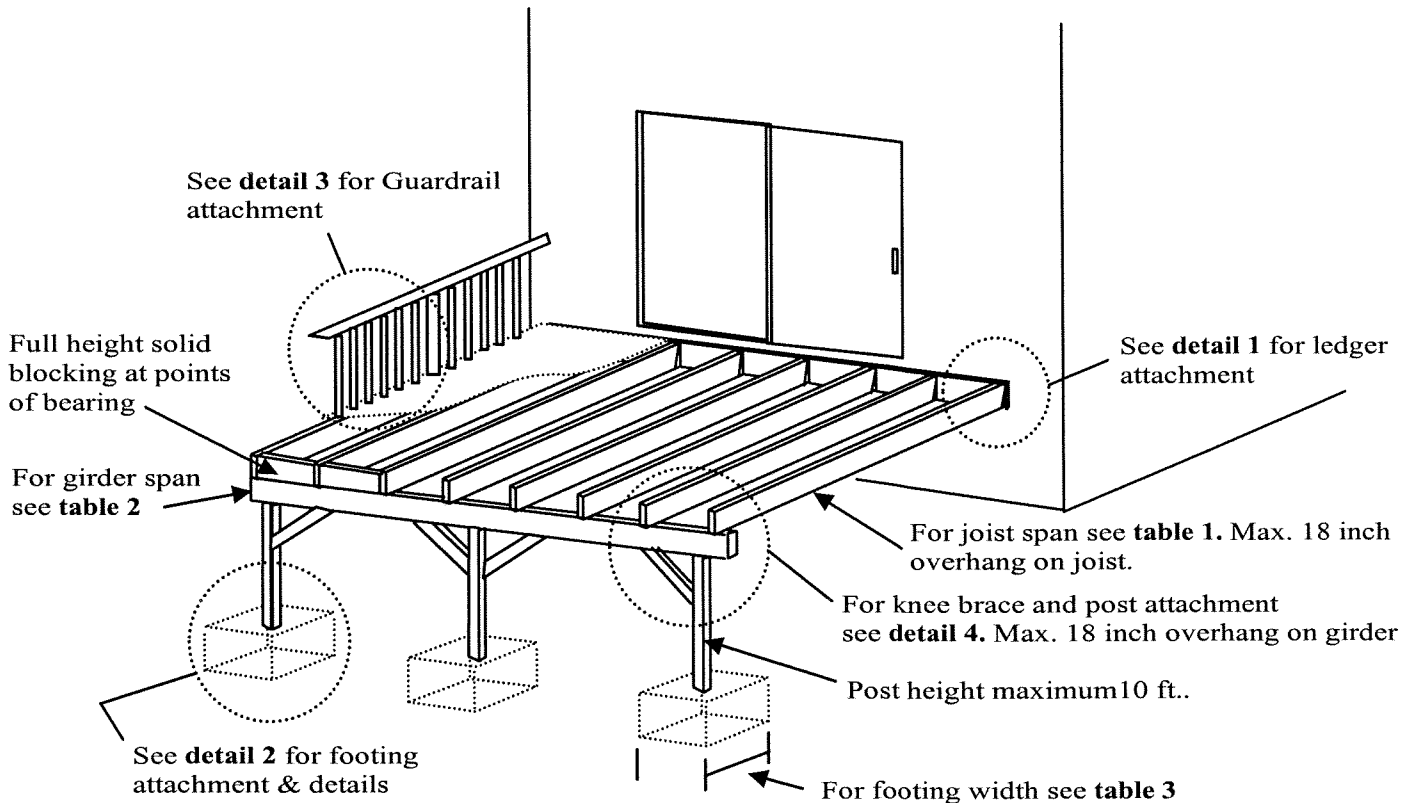
Step 1. Draw a plot plan showing the dimensions of the property, all structures on the property, the proposed deck and distances to property lines (an example of a plot plan is available upon request).

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 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.



Nailing schedule for decks:

Joist to girder, toenail 3-8d
1x6 subfloor to joist (joist 16" o.c.) 2-8d
2 inch subfloor 2-16d
3/4 inch exterior grade plywood 8d @ 6" o.c. edge & 12" o.c. field

Size (inches)	Spacing (inches)	Allowable Span (feet and inches)	
		DF/L #2	Redwood
2x4	12	6'-9"	6'-2"
	16	6'-2"	5'-7"
	24	5'-4"	4'-11"
2x6	12	10'-9"	9'-8"
	16	9'-9"	8'-10"
	24	8'-1"	7'-8"
2x8	12	14'-2"	13'-3"
	16	12'-7"	12'-0"
	24	10'-3"	9'-11"
2x10	12	17'-9"	16'-9"
	16	15'-5"	15'-3"
	24	12'-7"	12'-7"
2x12	12	20'-7"	20'-4"
	16	17'-10"	17'-9"
	24	14'-7"	14'-6"
2x14	12	23'-3"	23'-5"
	16	20'-2"	20'-5"
	24	16'-6"	16'-8"

1. If joist are within 18 inches of grade, use pressure treated Douglas fir/larch or foundation grade redwood.
2. Assume live load of 40 psf and dead load of 8 psf.

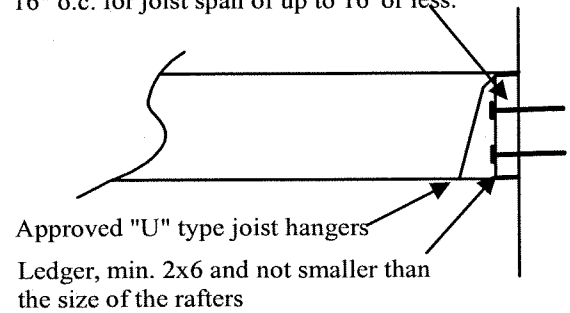
Post Spacing	Joist Span in feet					
	4	6	8	10	12	14
4'	4x4	4x4	4x4	4x4	4x4	4x6
6'	4x4	4x6	4x6	4x6	4x6	4x8
8'	4x6	4x6	4x8	4x8	4x8	4x10
10'	4x8	4x8	4x10	4x10	4x12	4x12
12'	4x8	4x10	4x12	4x12	4x14	4x14
14'	4x10	4x12	4x14	4x16	4x16	

Post Spacing	Joist Span in feet					
	4	6	8	10	12	14
4'	12	12	12	13	14	15
6'	12	13	15	16	17	18
8'	12	14	17	18	20	21
10'	14	16	18	20	22	24
12'	15	18	20	22	24	26
14'	16	19	22	24	26	28

1. Assume 1,000 psf soil bearing capacity. 2000 psi concrete min.
2. The minimum depth for all footings is 12 inches into natural grade..

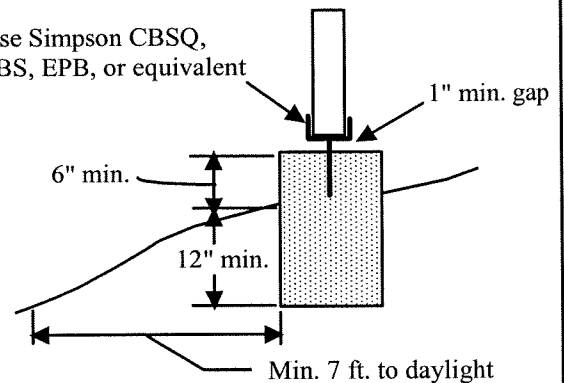
Detail 1 - Ledger attachment

Stagger 1/2x5 inch lag bolts into structural frame at 16" o.c. for joist spans of up to 8 foot, and 2 at 16" o.c. for joist span of up to 16' or less.

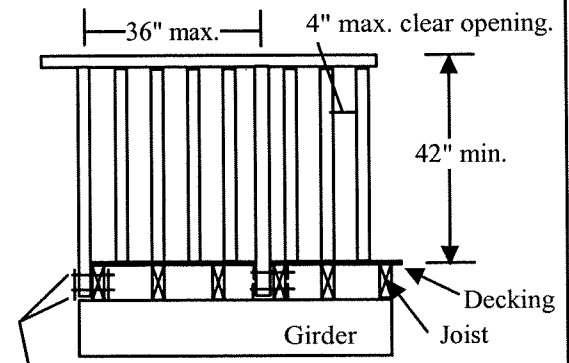


Detail 2 - Footing attachment & detail (For footing width see table 3)

Use Simpson CBSQ, PBS, EPB, or equivalent



Detail 3 - Guardrail attachment



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

Detail 4 - Knee brace and post attachment

Approved post cap installed in accordance manufacturer's installation instructions

