



Address:

SINGLE FAMILY RESIDENTIAL FAMILY UNCOVERED DECKS AND PORCHES

How to Use this Guide

Check with your jurisdiction regarding type of submittal (paper or electronic) and for additional requirements. Draw to scale and complete the following (hint: use graph paper with $\frac{1}{4}$ " squares. Example: $\frac{1}{4}$ " = 1').

1. Complete this Building Guide by filling in the blanks on page three, and indicating which construction details will be used.

2. Provide Plot Plan (site plan) showing dimensions of your project or addition and its relationship to existing buildings or structures on the property and the distance to existing property lines drawn to scale. See page 2.

3. Fill out a building permit application.

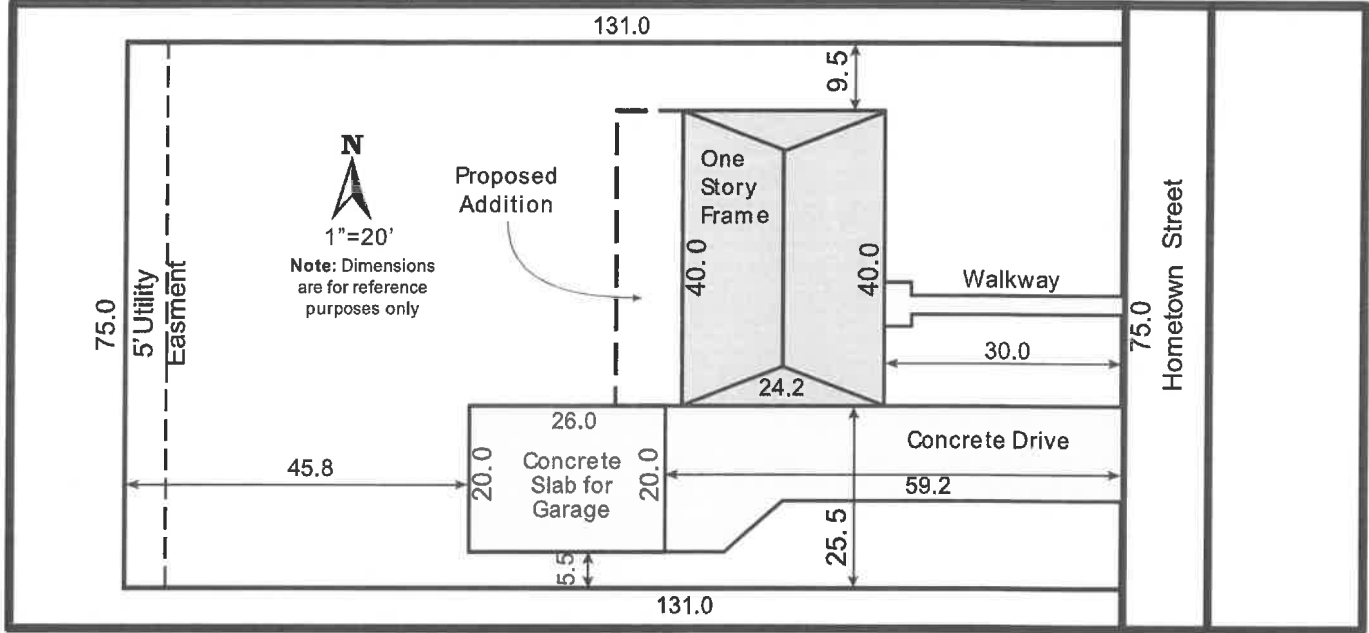
The majority of permit applications are processed with little delay. The submitted documents will help determine if the project is in compliance with building safety codes, zoning ordinances and other applicable laws.



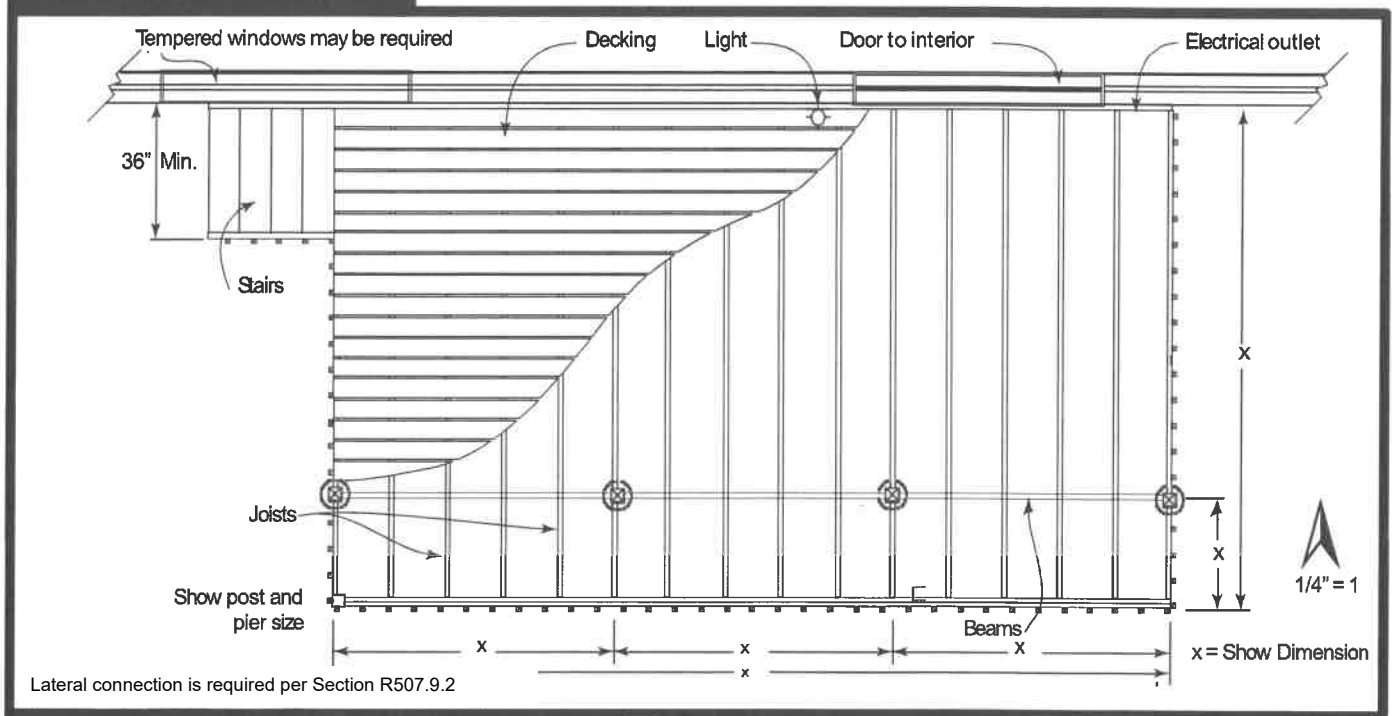
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Note: A plot plan (plan view) showing the dimensions of your project or additions and its relationships to existing buildings or structures on the property must be included. In addition to project dimensions, your plot plan must also show other details such as post locations and spacing, joist and beam spans, and any other pertinent information not shown on the section drawing.

Site Plan Example



Plan View Example



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Directions

1. Fill in the blanks. Please print legibly.
2. Indicate in the check box which detail from page 6 will be used.

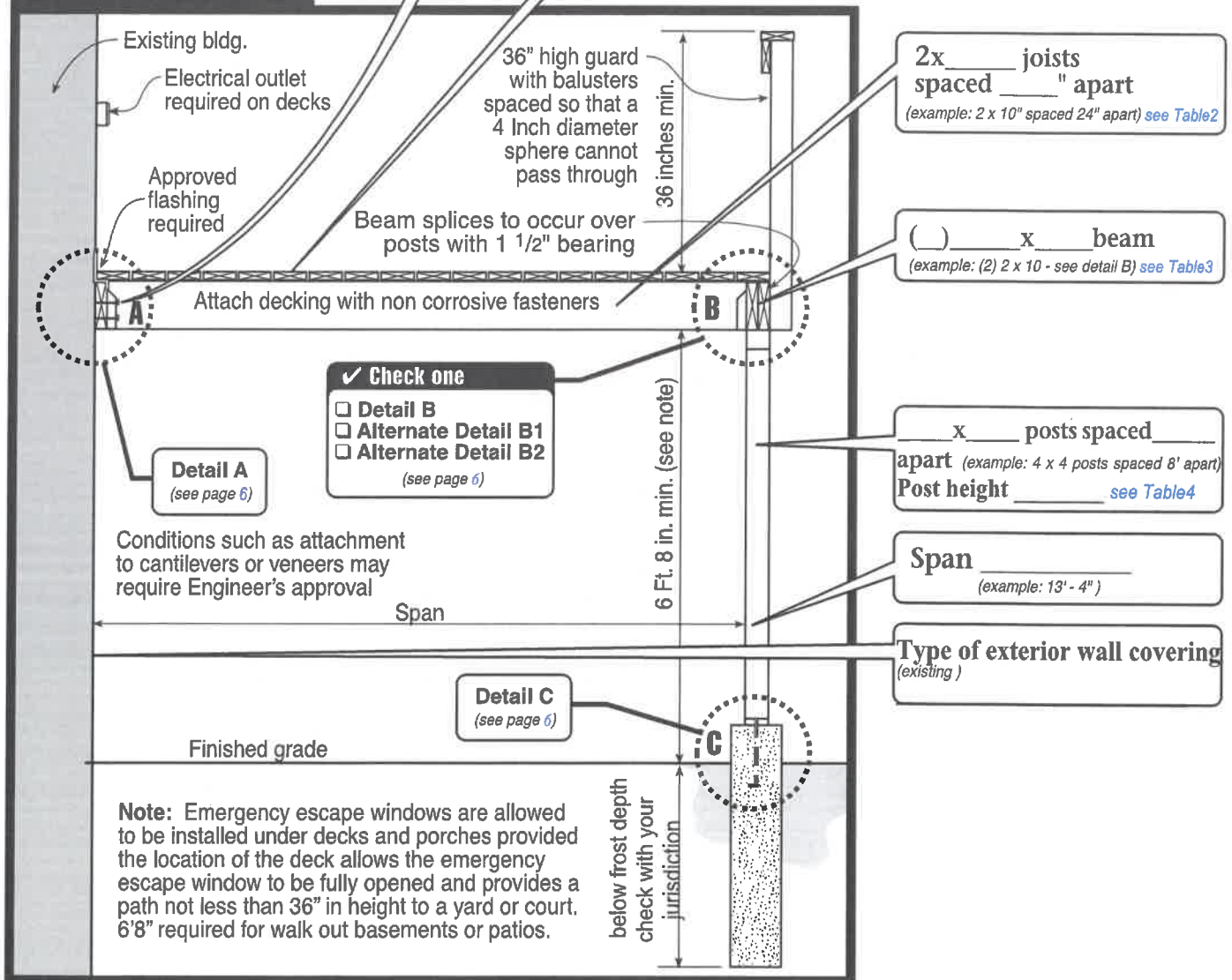
Address: _____

Size and Spacing of Lags

(example: Two rows 1/2" x 4 1/2" lags @ 16" O.C.)
see Table 1

Type of decking _____ x _____ - _____
(example: 1 x 4 or 2 x 6 - Trex)

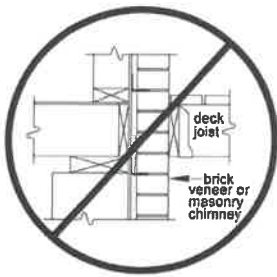
Deck Section



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TABLE R507.9.1.3(1) DECK LEDGER CONNECTION TO BAND JOIST

LOADC (psf)	JOIST SPAN (feet)	ON-CENTER SPACING OF FASTENERS* (inches)		
		1/2-inch diameter lag screw with 1/2-inch maximum sheathing d.e.	1/2-inch diameter bolt with 1/2-inch maximum sheathing®	1/2-inch diameter bolt with 1-inch maximum sheathing
40 live load	6	30	36	36
	8	23	36	36
	10	18	34	29
	12	15	29	24
	14	13	24	21
	16	11	21	18
	18	10	19	16



Ledger minimum size 2x8 presure treated HF, DF or SP #2 or better ;shall not be supported by stone or masonry veneer or be attached to a cantelivered floor R507.9.1.1

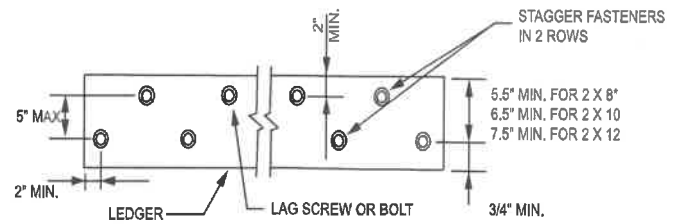
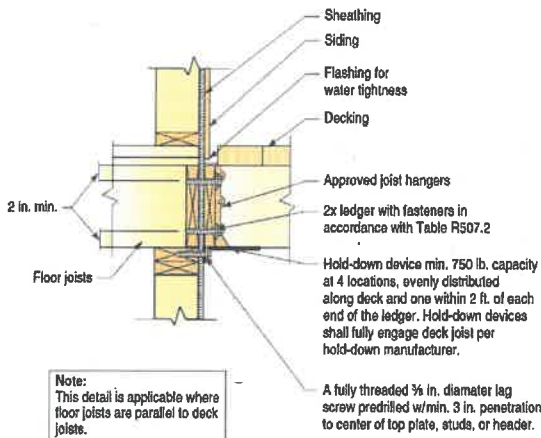
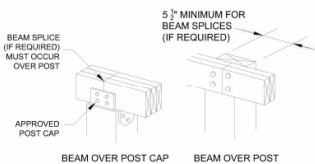


TABLE R507.9.1.3(2) PLACEMENT OF LAG SCREWS AND BOLTS IN DECK LEDGERS AND BAND JOISTS

MINIMUM END AND EDGE DISTANCES AND SPACING BETWEEN ROWS				
	TOP EDGE	BOTTOM EDGE	ENDS	ROW SPACING
Ledger ^a	2 inches ^d	3/4 inch	2 inches ^b	1 5/8 inches ^b
Band Joist ^c	3/4 inch	2 inches	2 inches ^b	1 5/8 inches ^b



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TABLE R507.6 MAXIMUM DECK JOIST SPANS

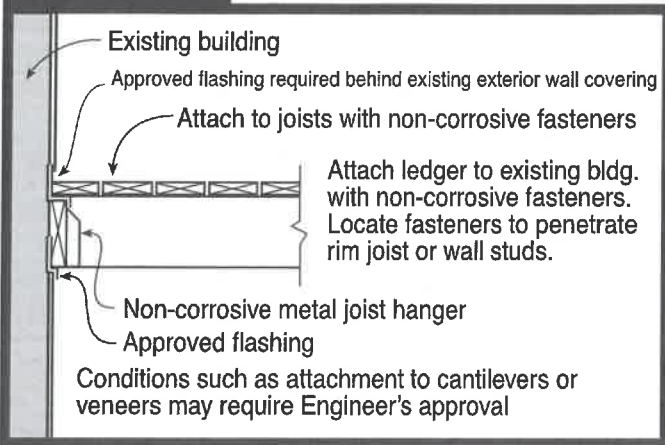
LOAD [®] (psf)	JOIST SPECIES [™]	JOIST SIZE	ALLOWABLE JOIST SPAN ^{D c} (feet-inches)			MAXIMUM CANTILEVER [®] (feet-inches)							
			Joist spacing (inches)			Joist Back Span (feet)							
			12	16	24	4	6	8	10	12	14	16	18
40 live load	Southern pine	2x6	9-11	9-0	7-7	1-0	1-6	1-5	NP	NP	NP	NP	NP
		2x8	13-1	11-10	9-8	1-0	1-6	2-0	2-6	2-3	NP	NP	NP
		2 x 10	16-2	14-0	11-5	1-0	1-6	2-0	2-6	3-0	3-4	3-4	NP
		2 x 12	18-0	16-6	13-6	1-0	1-6	2-0	2-6	3-0	3-6	4-0	4-1
	Douglas fir-larch	2x6	9-6	8-4	6-10	1-0	1-6	1-4	NP	NP	NP	NP	NP
		2x8	12-6	11-1	9-1	1-0	1-6	2-0	2-3	2-0	NP	NP	NP
	Hem-fir	2 x 10	15-8	13-7	11-1	1-0	1-6	2-0	2-6	3-0	3-3	NP	NP
		2 x 12	18-0	15-9	12-10	1-0	1-6	2-0	2-6	3-0	3-6	3-11	3-11
	Spruce-pine-fir	2 x 12	18-0	15-9	12-10	1-0	1-6	2-0	2-6	3-0	3-6	3-11	3-11
	Redwood [™]	2x6	8-10	8-0	6-10	1-0	1-4	1-1	NP	NP	NP	NP	NP
	Western cedars	2x8	11-8	10-7	8-8	1-0	1-6	2-0	1-11	NP	NP	NP	NP
	Ponderosa pine	2 x 10	14-11	13-0	10-7	1-0	1-6	2-0	2-6	3-0	2-9	NP	NP
Red pine	2 x 12	17-5	15-1	12-4	1-0	1-6	2-0	2-6	3-0	3-6	3-8	NP	

TABLE R507.5(1) MAXIMUM DECK BEAM SPAN—40 PSF LIVE LOAD

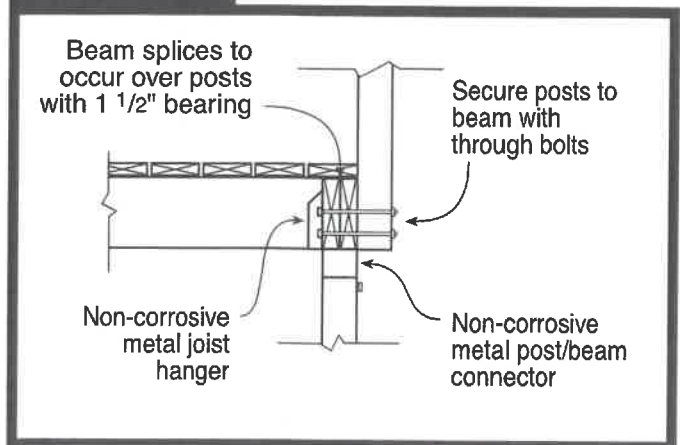
BEAM SPECIES	BEAM SIZE [®]	EFFECTIVE DECK JOIST SPAN LENGTH [®] (feet)							
		6	8	10	12	14	16	18	
		MAXIMUM DECK BEAM SPAN LENGTH (feet-inches) ^{®-B f}							
Southern pine	1-2x6	4-7	4-0	3-7	3-3	3-0	2-10	2-8	
	1-2x8	5-11	5-1	4-7	4-2	3-10	3-7	3-5	
	1-2x10	7-0	6-0	5-5	4-11	4-7	4-3	4-0	
	1-2x12	8-3	7-1	6-4	5-10	5-5	5-0	4-9	
	2-2x6	6-11	5-11	5-4	4-10	4-6	4-3	4-0	
	2-2x8	8-9	7-7	6-9	6-2	5-9	5-4	5-0	
	2-2x10	10-4	9-0	8-0	7-4	6-9	6-4	6-0	
	2-2 x 12	12-2	10-7	9-5	8-7	8-0	7-5	7-0	
	3-2x6	8-6	7-5	6-8	6-1	5-8	5-3	4-11	
	3-2x8	10-11	9-6	8-6	7-9	7-2	6-8	6-4	
	3-2x10	13-0	11-2	10-0	9-2	8-6	7-11	7-6	
	3-2 x 12	15-3	13-3	11-10	10-9	10-0	9-4	8-10	
Douglas fir-larch ⁹	1-2x6	4-1	3-6	3-0	2-8	2-5	2-3	2-1	
	1-2x8	5-6	4-8	4-0	3-6	3-2	2-11	2-9	
	1-2x10	6-8	5-10	5-1	4-6	4-1	3-9	3-6	
Hem-fir	1-2x12	7-9	6-9	6-0	5-6	5-0	3-9	3-6	
	2-2x6	6-1	5-3	4-9	4-4	3-11	3-7	3-3	
Spruce-pine-fir	2-2x8	8-2	7-1	6-4	5-9	5-2	4-8	4-4	
	2-2x10	10-0	8-7	7-9	7-0	6-6	6-0	5-6	
3-2 x 12	2-2 x 12	11-7	10-0	8-11	8-2	7-7	7-1	6-8	
	3-2x6	7-8	6-8	6-0	5-6	5-1	4-9	4-6	
	3-2x8	10-3	8-10	7-11	7-3	6-8	6-3	5-11	
	3-2x10	12-6	10-10	9-8	8-10	8-2	7-8	7-2	
	3-2 x 12	14-6	12-7	11-3	10-3	9-6	8-11	8-5	

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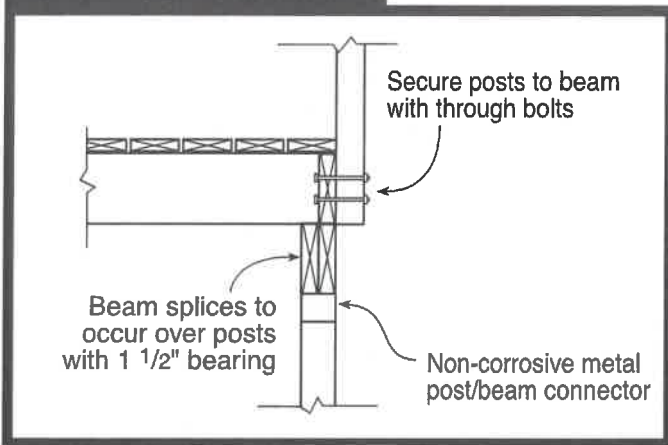
Detail A



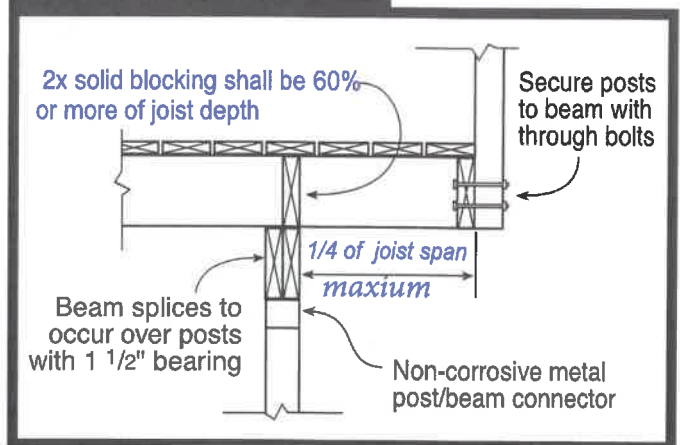
Detail B



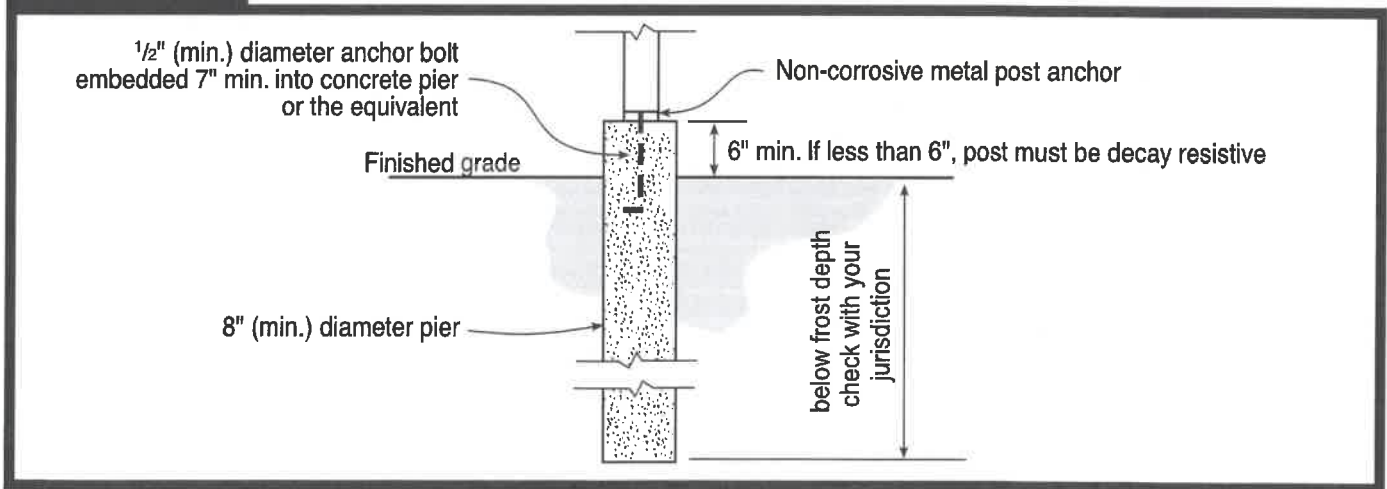
Alternate Detail B1



Alternate Detail B2

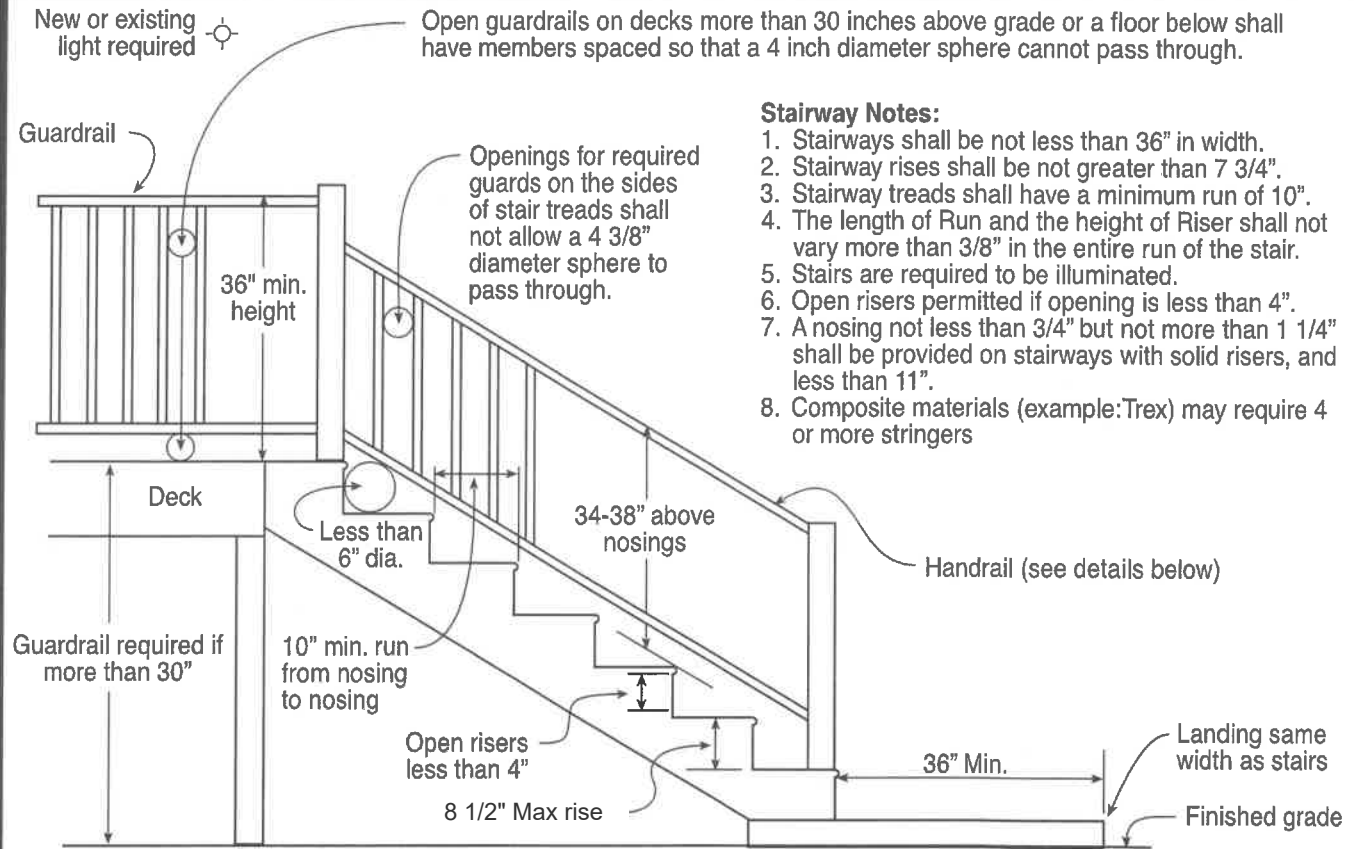


Detail C



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Stair & Handrail Specifications



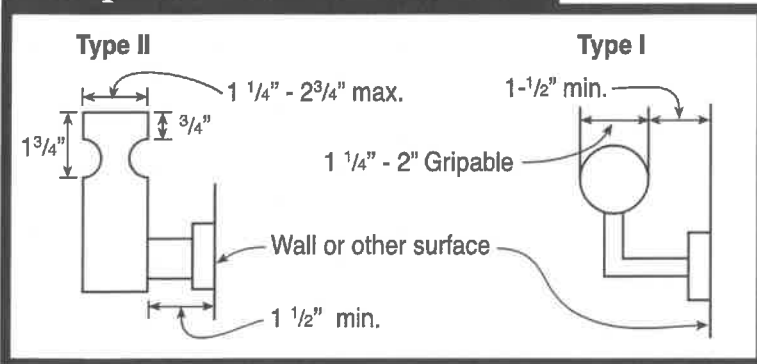
Stairway Notes:

1. Stairways shall be not less than 36" in width.
2. Stairway rises shall be not greater than 7 3/4".
3. Stairway treads shall have a minimum run of 10".
4. The length of Run and the height of Riser shall not vary more than 3/8" in the entire run of the stair.
5. Stairs are required to be illuminated.
6. Open risers permitted if opening is less than 4".
7. A nosing not less than 3/4" but not more than 1 1/4" shall be provided on stairways with solid risers, and less than 11".
8. Composite materials (example:Trex) may require 4 or more stringers

Handrail Notes:

1. Handrails shall be continuous on at least one side of stairs with 4 or more risers.
2. Top of the handrails shall be placed not less than 34 inches nor more than 38 inches above stair nosings.
3. The handgrip portion of handrails shall be not less than 1-1/4 inches nor more than 2 1/4 inches in cross section for non circular handrails.
4. Handrails shall be placed not less than 1-1/2 inches from any wall or other surface.
5. Handrails to be returned to wall, post or safety terminal (per 311.7.8.4 IRC)

Acceptable Handrail Details



Unacceptable Handrails

