



Single Family Residential



Deck - Building Guide

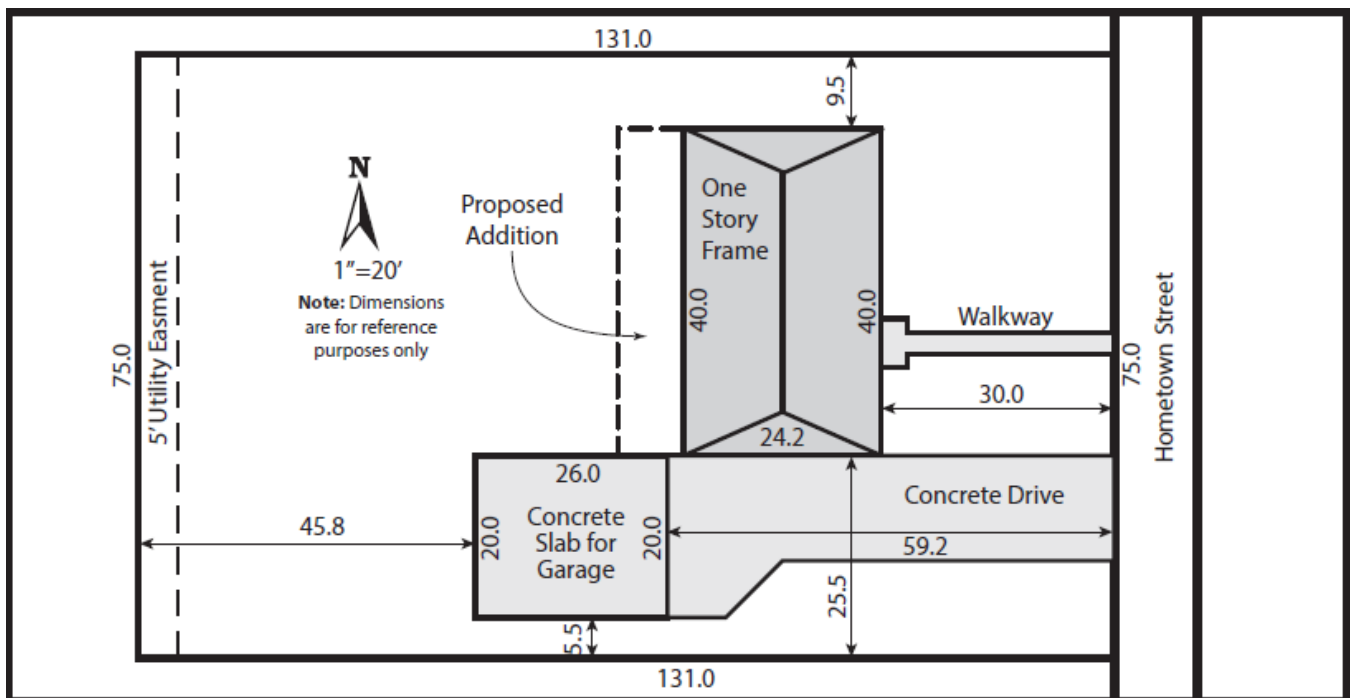
Requirements for Permit Submittal:

1. **Complete this Building Guide**
2. **Provide 1 plot plan, electronic or on 8.5 x 11in paper** (example below)
3. **Fill out Building Permit Application**
4. **Provide Plan and Elevation views of Deck with Dimensions**

The City of Loveland processes all permit submittals electronically. Submittals can be emailed in to eplan-res@cityofloveland.org. Once a full submittal is received and accepted through the check in process, the review time is 5 business days.

The documents submitted help determine if the project is compliant with the International Residential Code, City of Loveland Municipal Codes, zoning ordinances, and other applicable laws.

Plot Plan Example:



The plot plan must include:

1. Dimensions of the home and the detached garage.
2. Dimensions of the entire lot, showing any easements.
3. Distances from each edge of proposed structure to each lot line.

Directions:

1. Fill in the blanks in the worksheet below and include dimensions and materials used.
2. Use the check boxes in the worksheet to specify which details (page 3) will be used.

Deck Section

Size and Spacing of Lags
(example: Two 1/2"x 4 1/2" lags @ 16" O.C.)

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

2x _____ joists spaced _____" apart
(example: 2 x 10" spaced 24" apart)

Beam Span _____

() x _____ beam
(example: (2) 2 x 10 - see detail B)

2x _____ rim joist
(example: 2 x 10 - see Alternate B1 & B2)

_____ x _____ posts spaced _____ apart
(example: 4 x 4 posts spaced 8' apart)

Span _____
(example: 13' - 4")

Type of siding (existing) _____

Joist Span _____

Height of Deck (above grade) _____

Diameter of Pier _____

Check one

☐ Detail B

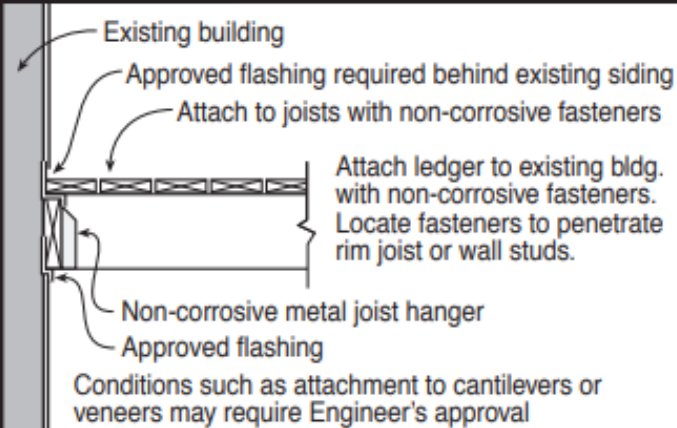
☐ Alternate Detail B1

☐ Alternate Detail B2

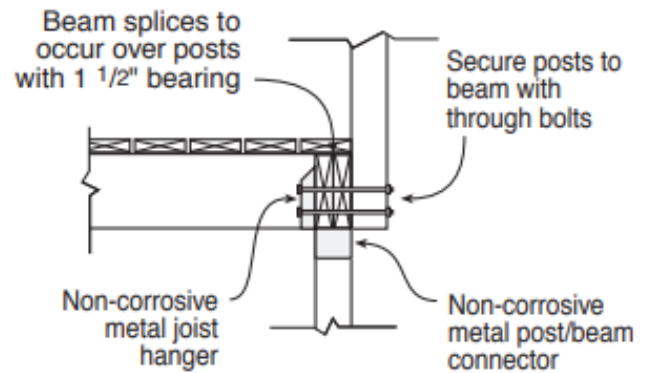
(see page 3)

*charts for deck beam span lengths and deck joist spans are available for reference on page 5

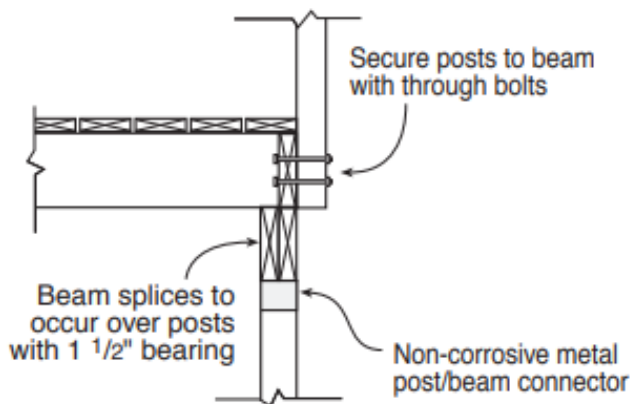
Detail A



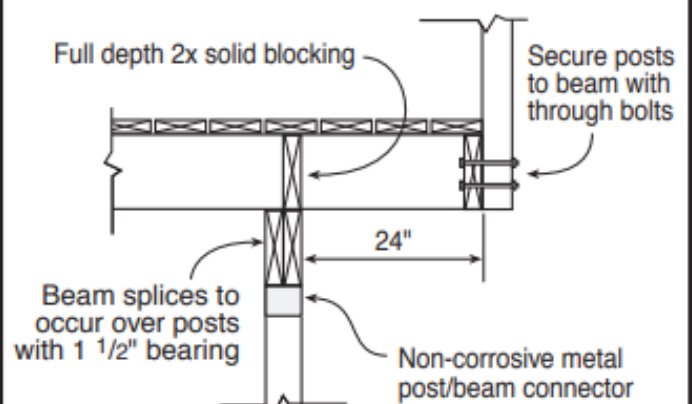
Detail B



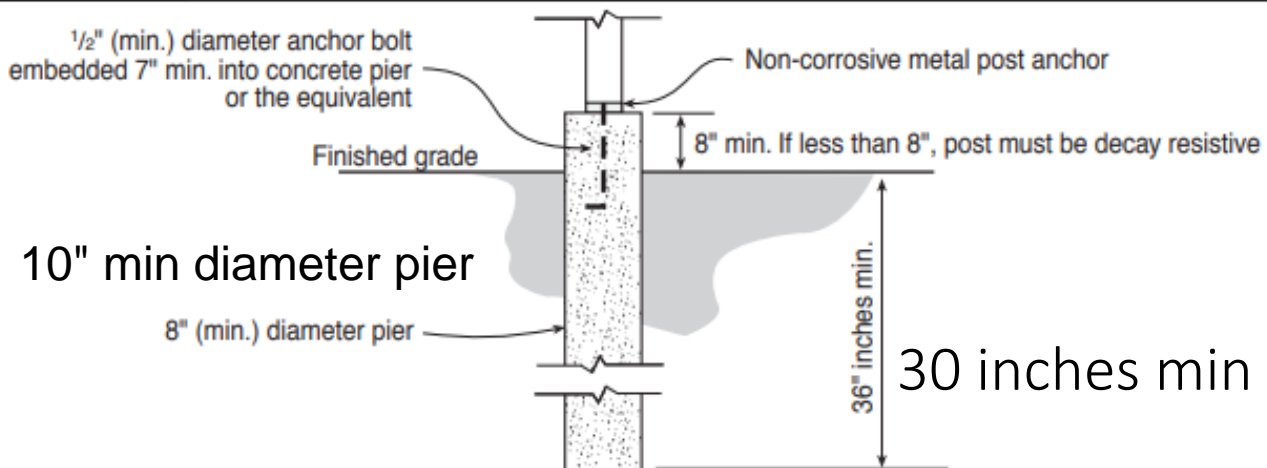
Alternate Detail B1



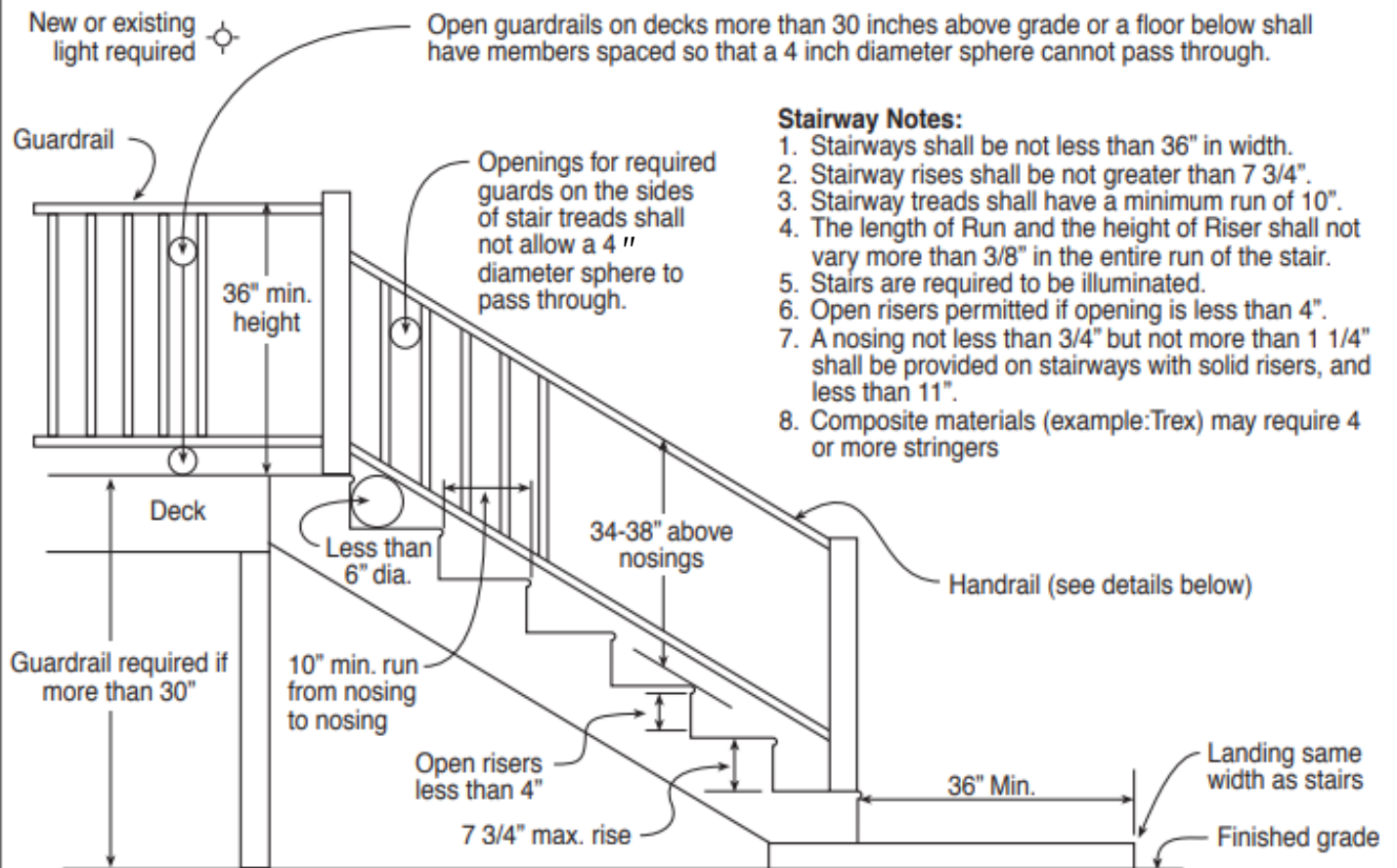
Alternate Detail B2



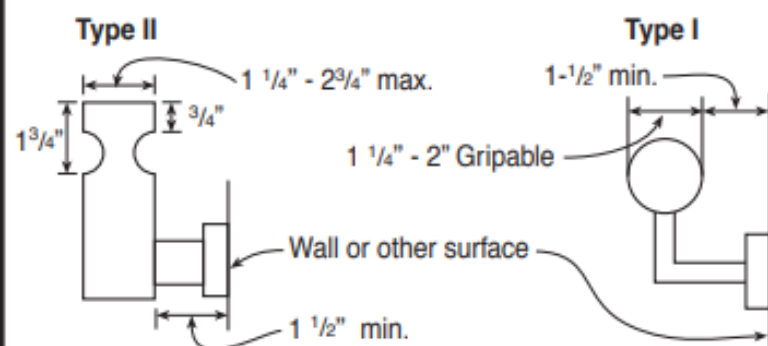
Detail C



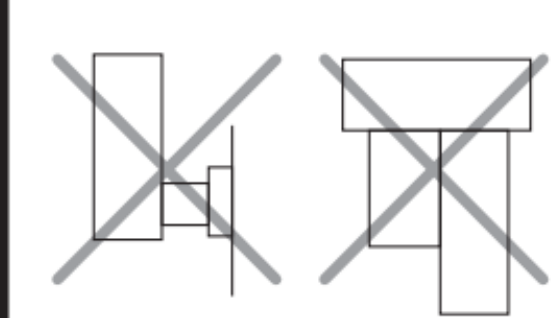
Stair & Handrail Specifications



Acceptable Handrail Details



Unacceptable Handrails



NOTE:

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 hand-grip 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 311.8.2 IRC).

TABLE R507.6
DECK BEAM SPAN LENGTHS^{a, b} (ft. - in.)

SPECIES ^a	SIZE ^a	DECK JOIST SPAN LESS THAN OR EQUAL TO: (feet)						
		6	8	10	12	14	16	18
Southern pine	2 - 2 × 6	6-11	5-11	5-4	4-10	4-6	4-3	4-0
	2 - 2 × 8	8-9	7-7	6-9	6-2	5-9	5-4	5-0
	2 - 2 × 10	10-4	9-0	8-0	7-4	6-9	6-4	6-0
	2 - 2 × 12	12-2	10-7	9-5	8-7	8-0	7-6	7-0
	3 - 2 × 6	8-2	7-5	6-8	6-1	5-8	5-3	5-0
	3 - 2 × 8	10-10	9-6	8-6	7-9	7-2	6-8	6-4
	3 - 2 × 10	13-0	11-3	10-0	9-2	8-6	7-11	7-6
	3 - 2 × 12	15-3	13-3	11-10	10-9	10-0	9-4	8-10
Douglas fir-larch ^d , hem-fir ^d , spruce-pine-fir ^d , redwood, western cedars, ponderosa pine ^f , red pine ^f	3 × 6 or 2 - 2 × 6	5-5	4-8	4-2	3-10	3-6	3-1	2-9
	3 × 8 or 2 - 2 × 8	6-10	5-11	5-4	4-10	4-6	4-1	3-8
	3 × 10 or 2 - 2 × 10	8-4	7-3	6-6	5-11	5-6	5-1	4-8
	3 × 12 or 2 - 2 × 12	9-8	8-5	7-6	6-10	6-4	5-11	5-7
	4 × 6	6-5	5-6	4-11	4-6	4-2	3-11	3-8
	4 × 8	8-5	7-3	6-6	5-11	5-6	5-2	4-10
	4 × 10	9-11	8-7	7-8	7-0	6-6	6-1	5-8
	4 × 12	11-5	9-11	8-10	8-1	7-6	7-0	6-7
	3 - 2 × 6	7-4	6-8	6-0	5-6	5-1	4-9	4-6
	3 - 2 × 8	9-8	8-6	7-7	6-11	6-5	6-0	5-8
	3 - 2 × 10	12-0	10-5	9-4	8-6	7-10	7-4	6-11
	3 - 2 × 12	13-11	12-1	10-9	9-10	9-1	8-6	8-1

TABLE R507.5
DECK JOIST SPANS FOR COMMON LUMBER SPECIES^f (ft. - in.)

SPECIES ^a	SIZE	SPACING OF DECK JOISTS WITH NO CANTILEVER ^b (Inches)			SPACING OF DECK JOISTS WITH CANTILEVERS ^b (Inches)		
		12	16	24	12	16	24
Southern pine	2 × 6	9-11	9-0	7-7	6-8	6-8	6-8
	2 × 8	13-1	11-10	9-8	10-1	10-1	9-8
	2 × 10	16-2	14-0	11-5	14-6	14-0	11-5
	2 × 12	18-0	16-6	13-6	18-0	16-6	13-6
Douglas fir-larch ^d , hem-fir ^d , spruce-pine-fir ^d	2 × 6	9-6	8-8	7-2	6-3	6-3	6-3
	2 × 8	12-6	11-1	9-1	9-5	9-5	9-1
	2 × 10	15-8	13-7	11-1	13-7	13-7	11-1
	2 × 12	18-0	15-9	12-10	18-0	15-9	12-10
Redwood, western cedars, ponderosa pine ^e , red pine ^e	2 × 6	8-10	8-0	7-0	5-7	5-7	5-7
	2 × 8	11-8	10-7	8-8	8-6	8-6	8-6
	2 × 10	14-11	13-0	10-7	12-3	12-3	10-7
	2 × 12	17-5	15-1	12-4	16-5	15-1	12-4

*This handout is based on the Building Guides developed by the Colorado Chapter of the International Code Council.



City of Loveland Building
Permit Application Residential
Deck or Porch



Items in **red** are REQUIRED for permit submittal

Please submit completed application and supporting documents to eplan-res@cityofloveland.org

Application type: _____

Address: _____

Owner Name: _____ Address: _____

Owner Phone: _____ Owner Email: _____

Contact Name: _____ Business: _____

Contact Phone: _____ Contact Email: _____

Will homeowner do work? (If yes, a homeowner's affidavit is needed)

Yes

No

Owner/General Contractor Name: _____ Valuation: _____

Electrical Contractor: _____ Sub-valuation: _____

Mechanical Contractor: _____ Sub-valuation: _____

Plumbing Contractor: _____ Sub-valuation: _____

Fireplace: Yes	No	If yes, fuel type:
Fire Pits: Yes	No	If yes, fuel type:
Porch sf:		Is there a roof on porch? If yes, sf:
Deck sf:		Is there a roof on deck? If yes, sf:
Patio sf:		Is there a roof on patio? If yes, sf:

Work Description:

I certify this application is correct. I agree to perform the work described according to plans and Specifications submitted and approved. I agree to comply with all city ordinances, state laws and building codes. Additionally, **I UNDERSTAND THAT I AM RESPONSIBLE FOR ANY FEES OR EXPENSES INCURRED FOR**

PLAN REVIEW, PERMITS, INSPECTIONS AND OTHER FEES ASSOCIATED WITH THIS APPLICATION. FAILURE TO PICK UP AND PAY FOR THIS PERMIT WITHIN 90 DAYS OF APPROVAL WILL RESULT IN THE APPLICATION BEING CLOSED AND THE PLAN CHECK FEES BEING ASSESSED. ALL FEES UNDER THIS APPLICATION THEN BECOME NULL AND VOID. This application does not authorize any work within the right-of-way or curb cuts; contact Public Works at 970-962-2516.

Signature

Date