



Lincoln County Planning & Inspections

Single Family Residential 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.**

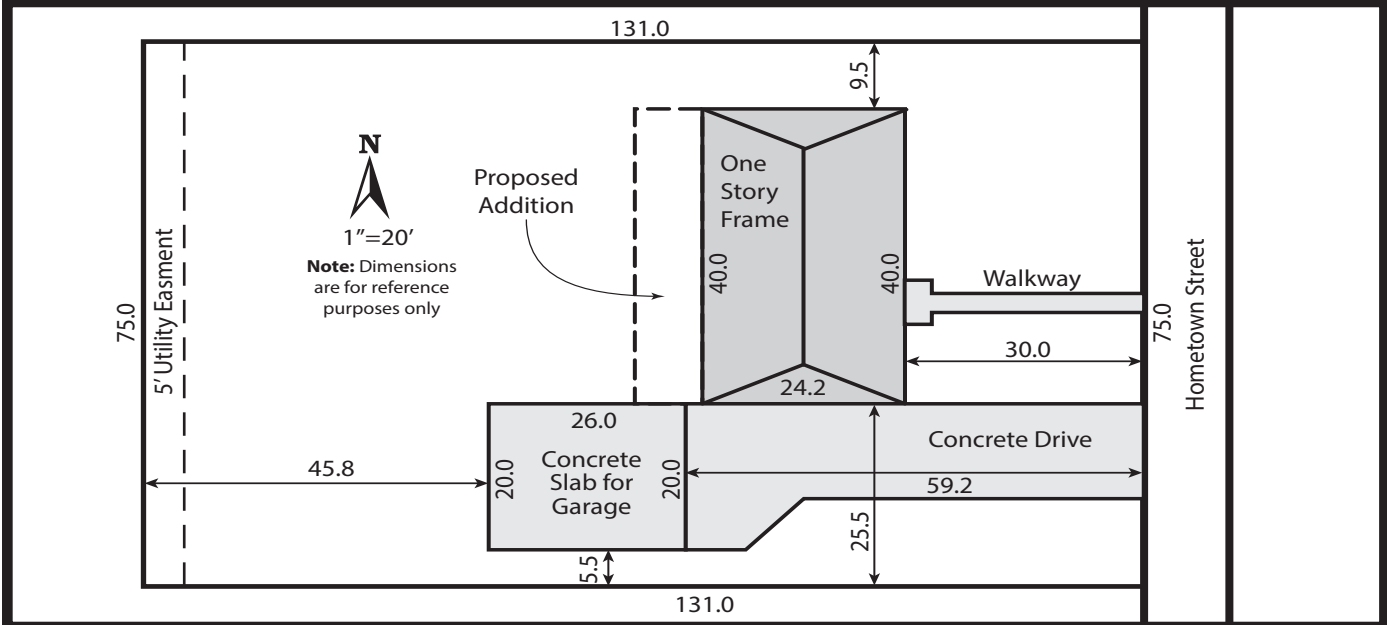
The majority of permit applications are processed with little delay. The submitted documents will help determine if the project is in compliance with building safety codes, zoning ordinances and other applicable laws.



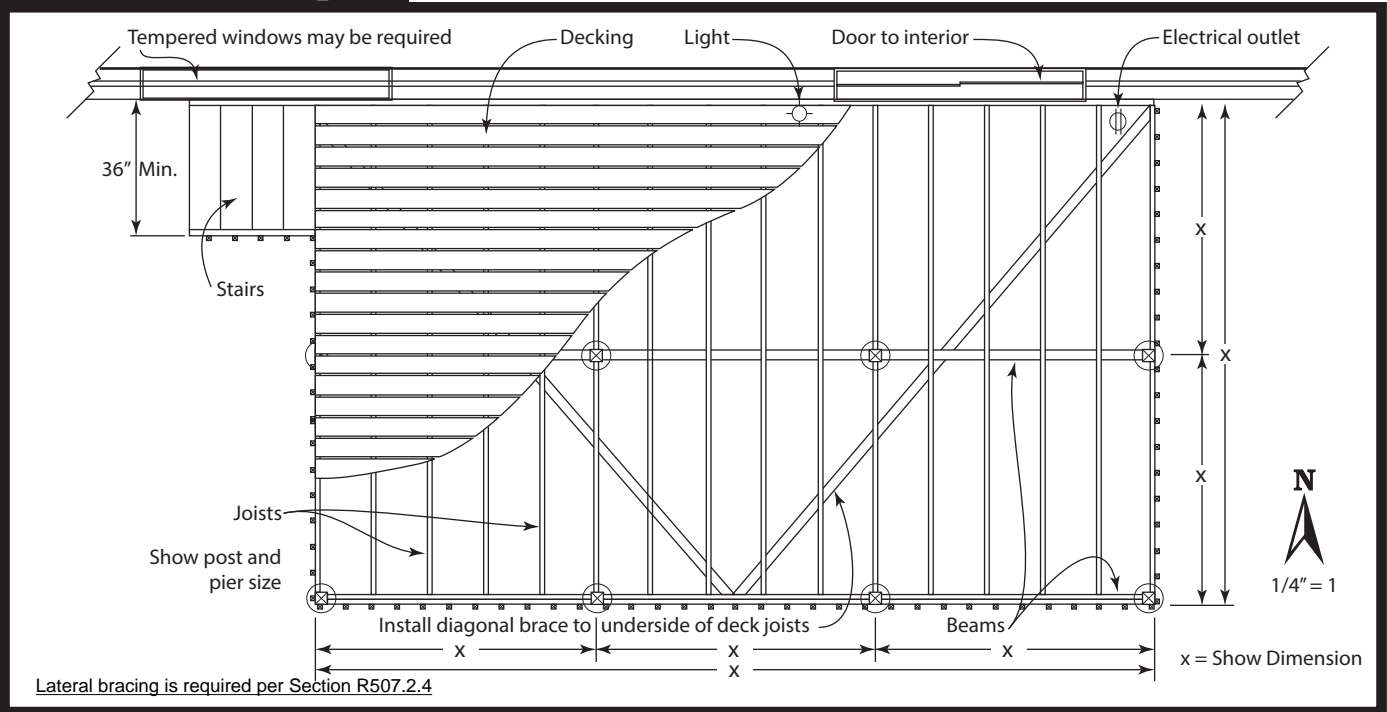
Single Family Residential Uncovered Decks and Porches

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



Single Family Residential Uncovered Decks and Porches

Directions

1. Fill in the blanks. Please print legibly.
2. Indicate in the check box which detail from page 4 will be used.

Address: _____

Size and Spacing of Lags

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

Deck Section

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

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

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

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

Span _____
(example: 13' - 4")

Type of exterior wall covering
(existing)

Existing bldg.

Electrical outlet
required on decks

Approved
flashing
required

Beam splices to occur over
posts with 1 1/2" bearing

Attach decking with non corrosive fasteners

36" high guard
with balusters
spaced so that a
4 inch diameter
sphere cannot
pass through

36 inches min.

6 Ft. 8 in. min. (see note)

36 Inches min
or below frost depth

✓ Check one

- ☐ Detail B
☐ Alternate Detail B1
☐ Alternate Detail B2

(see page 4)

Detail A
(see page 4)

Conditions such as attachment
to cantilevers or veneers may
require Engineer's approval

Span

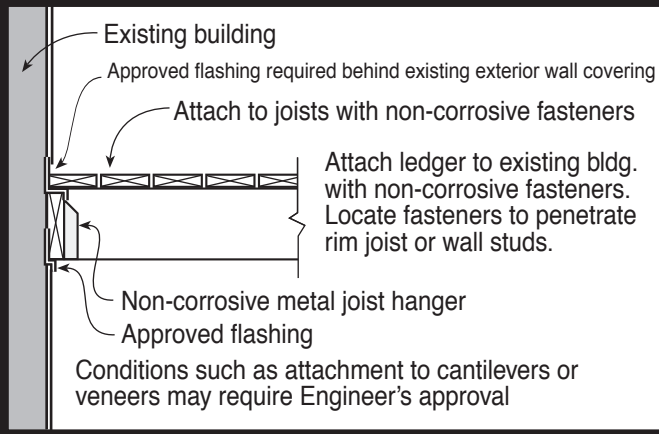
Finished grade

Detail C
(see page 4)

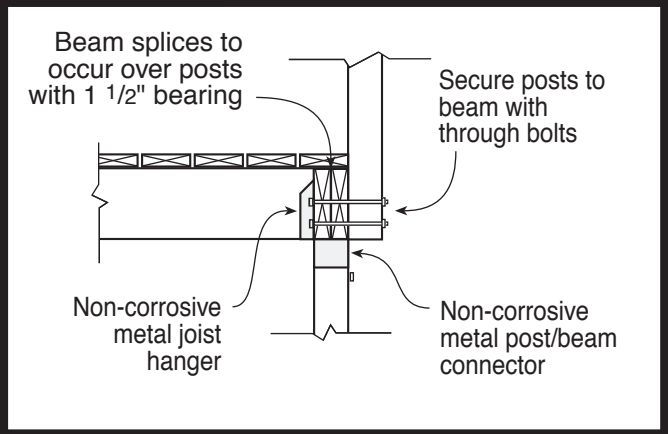
Note: Emergency escape windows are allowed to be installed under decks and porches provided the location of the deck allows the emergency escape window to be fully opened and provides a path not less than 36" in height to a yard or court. 6'8" required for walk out basements or patios.

Single Family Residential Uncovered Decks and Porches

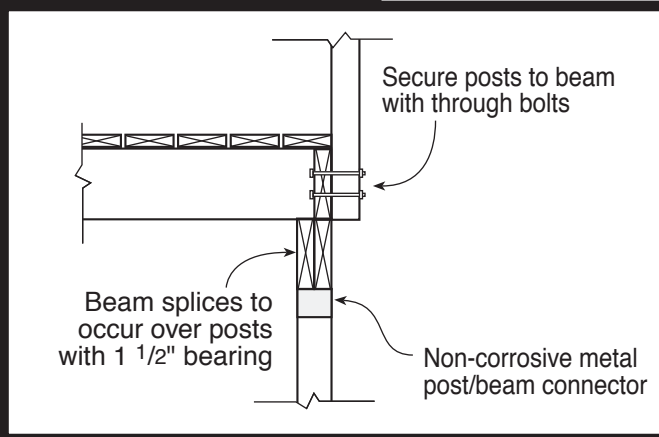
Detail A



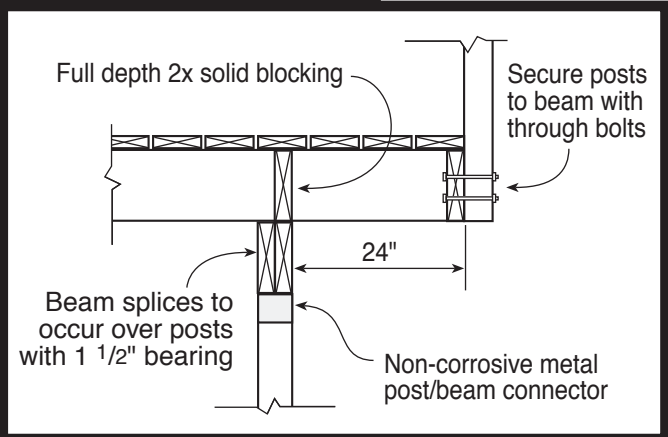
Detail B



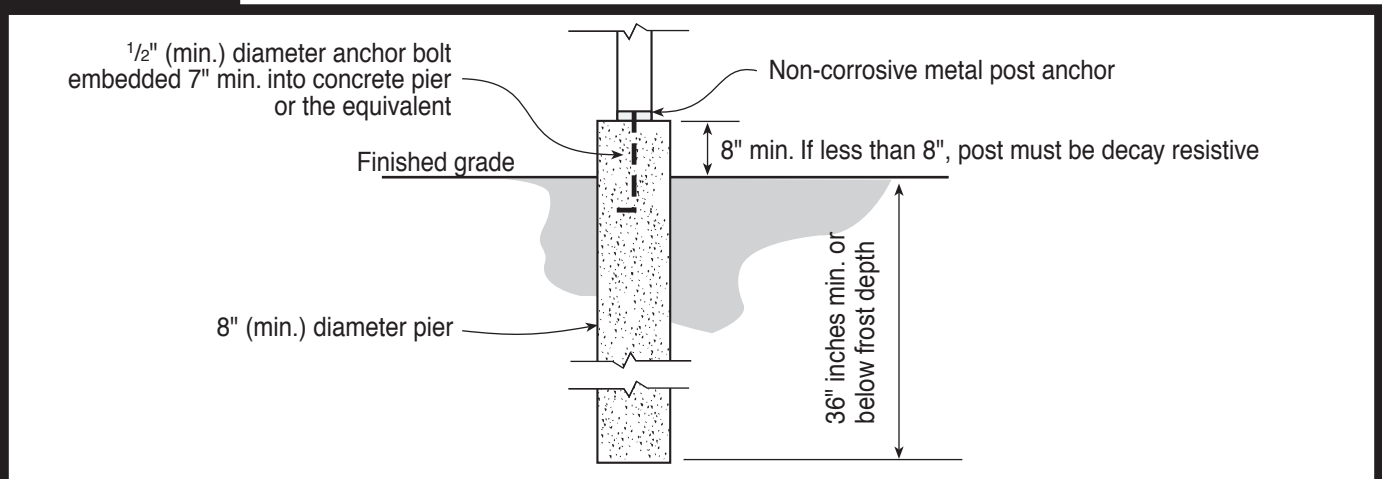
Alternate Detail B1



Alternate Detail B2

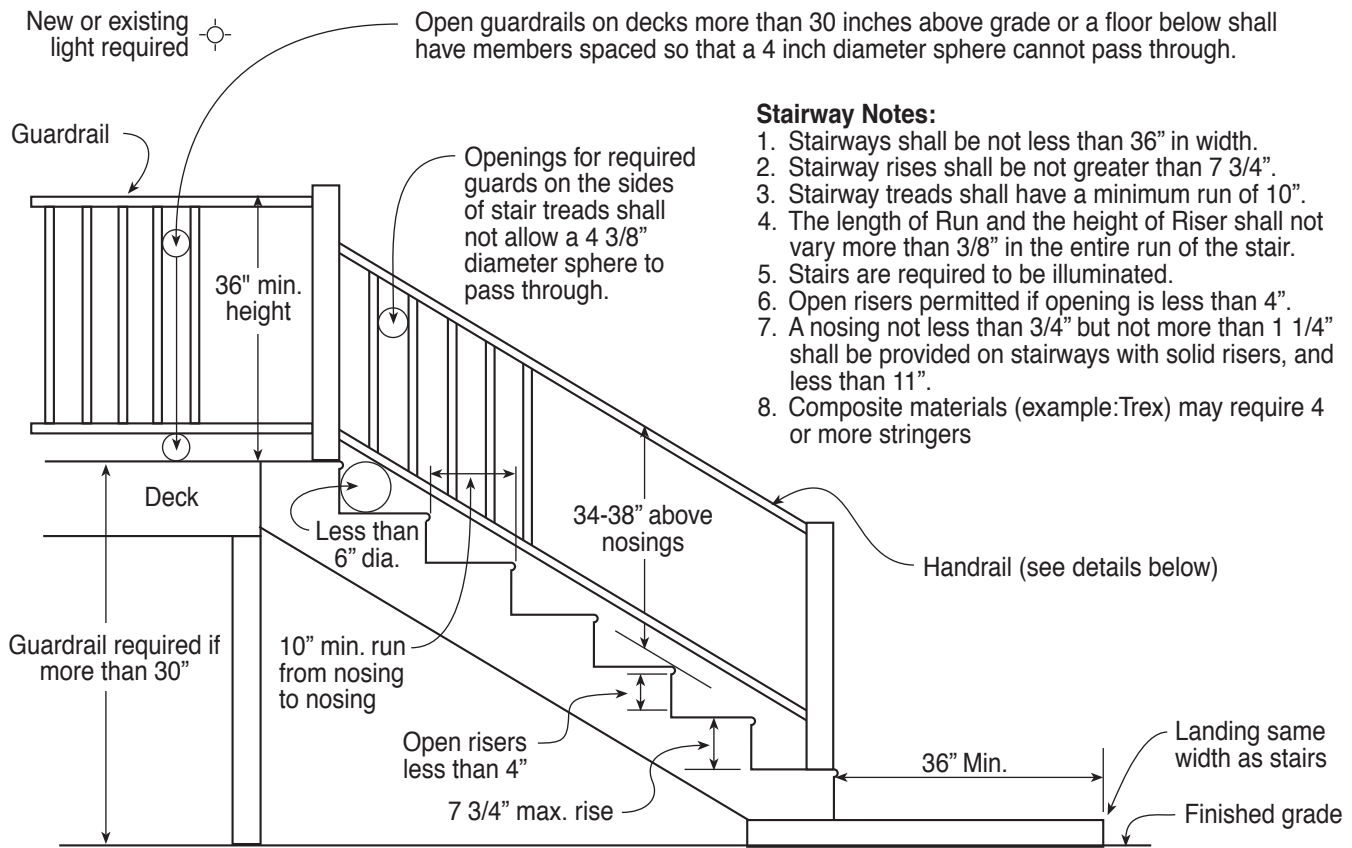


Detail C



Single Family Residential Uncovered Decks and Porches

Stair & Handrail Specifications



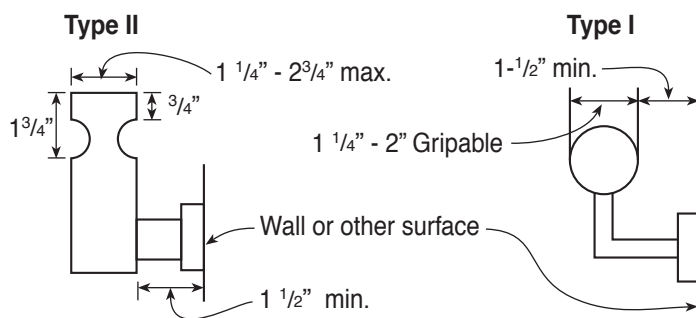
Stairway Notes:

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 311.7.8.2 IRC)

Acceptable Handrail Details



Unacceptable Handrails

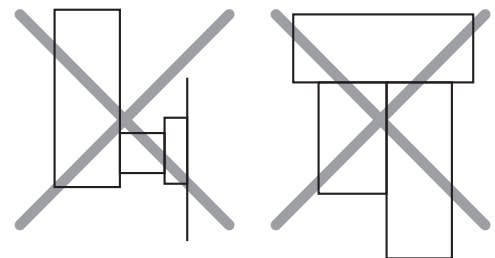


TABLE AM105.2
DECK GIRDER SPAN LENGTHS^{a, b}
(feet – inches)

SPECIES ^c	SIZE ^d	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
Douglas fir-larch ^e , hem-fir ^e , spruce-pine-fir ^e , 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

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 pound per square foot = 0.0479 kPa, 1 pound = 0.454 kg.

a. Ground snow load, live load = 40 psf, dead load = 10 psf, $L/\Delta = 360$ at main span, $L/\Delta = 180$ at cantilever with a 220-pound point load applied at the end.

b. Girders supporting deck joists from one side only.

c. No. 2 grade, wet service factor.

d. Girder depth shall be greater than or equal to depth of joists with a flush beam condition.

e. Includes incising factor.

f. Northern species. Incising factor not included.

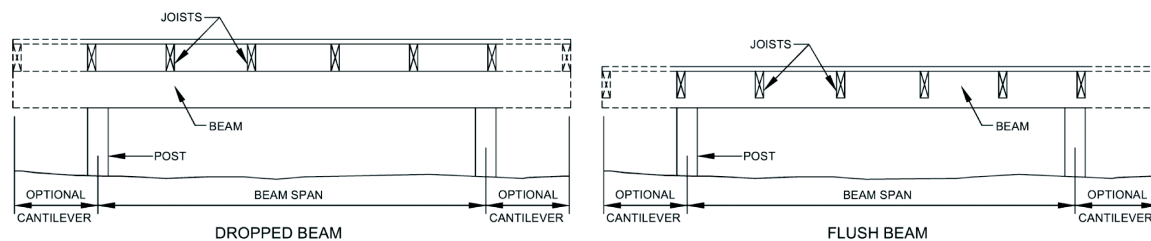


FIGURE AM105.2
TYPICAL DECK GIRDER SPANS

TABLE AM106.1
DECK JOIST SPANS FOR COMMON LUMBER SPECIES^f
(feet – inches)

SPECIES ^a	SIZE	SPACING OF DECK JOISTS WITH NO CANTILEVER ^b (inches)			SPACING OF DECK JOISTS WITH CANTILEVERS ^c (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

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 pound per square foot = 0.0479 kPa, 1 pound = 0.454 kg.

a. No. 2 grade with wet service factor.

b. Ground snow load, live load = 40 psf, dead load = 10 psf, $L/\Delta = 360$.

c. Ground snow load, live load = 40 psf, dead load = 10 psf, $L/\Delta = 360$ at main span, $L/\Delta = 180$ at cantilever with a 220-pound point load applied to end.

d. Includes incising factor.

e. Northern species with no incising factor.

f. Cantilevered spans not exceeding the nominal depth of the joist are permitted.

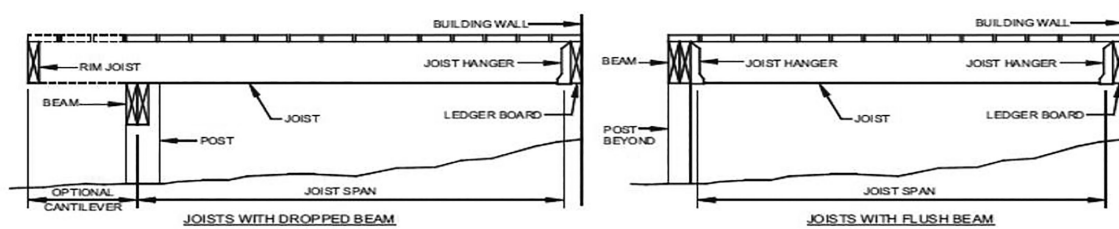


FIGURE AM106.1
TYPICAL DECK JOIST SPANS

SECTION AM107 FLOOR DECKING

AM107.1 Floor decking. Floor decking shall be No. 2 grade treated Southern Pine or equivalent. The minimum floor decking thickness shall be in accordance with Table AM107.1.

**TABLE AM107.1
FLOOR DECKING THICKNESS**

SPACING	DECKING (nominal)
12" o.c.	1" S4S
16" o.c.	1" T&G
19.2" o.c.	1 $\frac{1}{4}$ " S4S
24"-36" o.c.	2" S4S

For SI: 1 inch = 25.4, 1 foot = 304.8 mm.

SECTION AM108 POST HEIGHT

AM108.1 Post height. Maximum height of deck support posts shall be in accordance with Table AM108.1.

**TABLE AM108.1
DECK SUPPORT POST HEIGHT**

POST SIZE ^a	MAXIMUM POST HEIGHT ^{b, c}
4" × 4"	8'-0"
6" × 6"	20'-0"

For SI: 1 inch = 25.4, 1 foot = 304.8 mm.

a. This table is based on No. 2 Southern Pine posts.

b. From top of footing to bottom of girder.

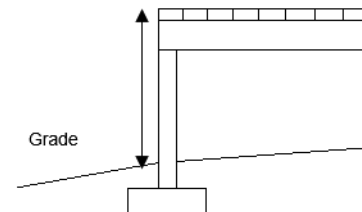
c. Decks with post heights exceeding these requirements shall be designed by a registered design professional.

AM109.1.3. Post embedment. For free standing decks without knee braces or diagonal bracing, lateral stability is permitted to be provided by embedding the post in accordance with Figure AM109.1(3) and Table AM109.1.

**TABLE AM109.1
POST EMBEDMENT FOR FREE STANDING DECKS**

POST SIZE	MAXIMUM TRIBUTARY AREA	MAXIMUM POST HEIGHT	EMBEDMENT DEPTH	CONCRETE DIAMETER
4" × 4"	48 SF	4'-0"	2'-6"	1'-0"
6" × 6"	120 SF	6'-0"	3'-6"	1'-8"

For SI: 1 inch = 25.4 mm, 1 square foot = 0.0929 m².



Less than 4' (decking to grade) and
attached to structure no bracing required

For SI: 1 inch = 25.4, 1 foot = 304.8 mm.

**FIGURE AM109.1(1)
NO LATERAL BRACING**