

TOWN OF
FARMINGTON



Permit Application for Decks, Porches & Railings

- This Application must be filled out completely and submitted to the building department.
- The permit will be issued when all review notes are addressed, insurances are on file, and permit fees are paid

Application Checklist

Incomplete applications will not be accepted

- | | | |
|--|--|------------------------------------|
| <input type="checkbox"/> Completed Application | <input type="checkbox"/> Plot plan showing proposed work | <input type="checkbox"/> Insurance |
| <input type="checkbox"/> Completed work sheet | <input type="checkbox"/> Drawing of proposed work | |

Address of Job Site _____ Work Start Date _____
Estimated Value of Work _____ Estimated End Date _____
Size (in sq. ft.): _____ Project Dimensions _____ X _____
Railing Height: _____

Applicant's Name _____ Best phone # _____
Applicant's Address _____
Applicant's Email _____
Owner's Name _____ Best phone # _____
Owner's Address _____
Owner's Email _____
Contractor's Name _____ Best phone # _____
Contractor's Address _____
Contractor's Email _____

PLEASE DOUBLE CHECK EMAIL ADDRESSES.

The Applicant Shall, as part of this application, agree to:

- Notify the Building Department of any change in the information contained in the application or approved plans and specifications.
- Prominently display on the premises the building permit issued and authorize the inspector access for the purpose of inspections during construction.
- Not use any portion of the project, in whole or in part, until the structure meets all applicable codes, conditions, all inspections have been made, approvals granted and a certificate of compliance has been issued.
- Abide by Planning Board, Zoning Board of Appeals, Town Board approval resolutions, if required, and all plan amendments made by the Building Department.
- At the time of the issuance of a permit, a copy of approved plans will be kept at the work site, available for inspection throughout the progress of the work.
- Work may NOT Commence prior to the issuance of a building permit.
- Must Notify the Building Department 24 hours in advance for all required inspections and must receive approval before any building element, equipment, or system is covered or enclosed.

Acceptance does not relieve the agent, applicant, architect, builder, engineer, or owner from complying with any of the provisions of the NYS Building Code, Energy Code, SEQR Act, Local Zoning, etc., whether stated, implied, or omitted in the plans and specifications submitted for the building permit. Incorrect information may result in revocation of permit.

Signature of Applicant: _____

Date _____

Deck Address:	Town of Farmington Deck Spec Sheet
Height of Deck from Grade <input style="width: 50px;" type="text"/> Inches Joist Size (2 x 8" min.) <input style="width: 50px;" type="text"/> Actual Joist Span <input style="width: 50px;" type="text"/> <small>Longest span from ledger to beam or beam to beam</small> Is the Joist going to cantilever <input type="checkbox"/> Yes <input type="checkbox"/> No	Spacing of Floor Joists (Check One) <input type="checkbox"/> 16" On-Center <input type="checkbox"/> 24" On-Center <input type="checkbox"/> Other: _____ If Yes how far is cantilever <input style="width: 50px;" type="text"/> Cantilever shall be 2 feet or less
Beam Size: <input style="width: 100px;" type="text"/> Beam Span <input style="width: 100px;" type="text"/> <small>(longest Span from post to post)</small>	Beam Is Check One: <input type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Triple
Check One: <input type="checkbox"/> 6 x 6" Post <input type="checkbox"/> 4x4" Post <input type="checkbox"/> 6 x 4" Post	Check One: <input type="checkbox"/> Notched Post <input type="checkbox"/> Post Cap Connectors
<input type="checkbox"/> Deck will be attached to the house/structure <input type="checkbox"/> Deck will NOT be attached to the house/structure	
Size of Ledger Board <input style="width: 100px;" type="text"/> Lag Screw Size <input style="width: 100px;" type="text"/> Lag Screw Spacing <input style="width: 100px;" type="text"/> Footer Depth <input style="width: 100px;" type="text"/> <small>If deck is attached to structure footers must extend a minimum of 42" below grade</small>	
Decking Board to be used (check One) <input type="checkbox"/> 5/4 P.T. Decking Board <input type="checkbox"/> 2 x 6 P.T. Decking Board <input type="checkbox"/> Composite Decking (All Types) <input type="checkbox"/> Other: _____	If 30" or more above adjacent grade/surface, the deck shall have guardrails Height of Deck Guardrails <input style="width: 50px;" type="text"/> Inches <small>(Min. height of guardrail is 36 inches from deck surfaces)</small>
Will the deck have stairs <input type="checkbox"/> Yes <input type="checkbox"/> No Gripable Handrail is required for all stairs that have a rise of more than 30" Gripable Handrail Height <input style="width: 50px;" type="text"/> <small>(34" to 38" from tread Rising)</small>	If Yes: Stairway Width <input style="width: 50px;" type="text"/> Tread Depth <input style="width: 50px;" type="text"/> <small>(9" Min)</small> Riser Height <input style="width: 50px;" type="text"/> <small>(8 1/4" Max)</small> Closed Risers required on all stairs

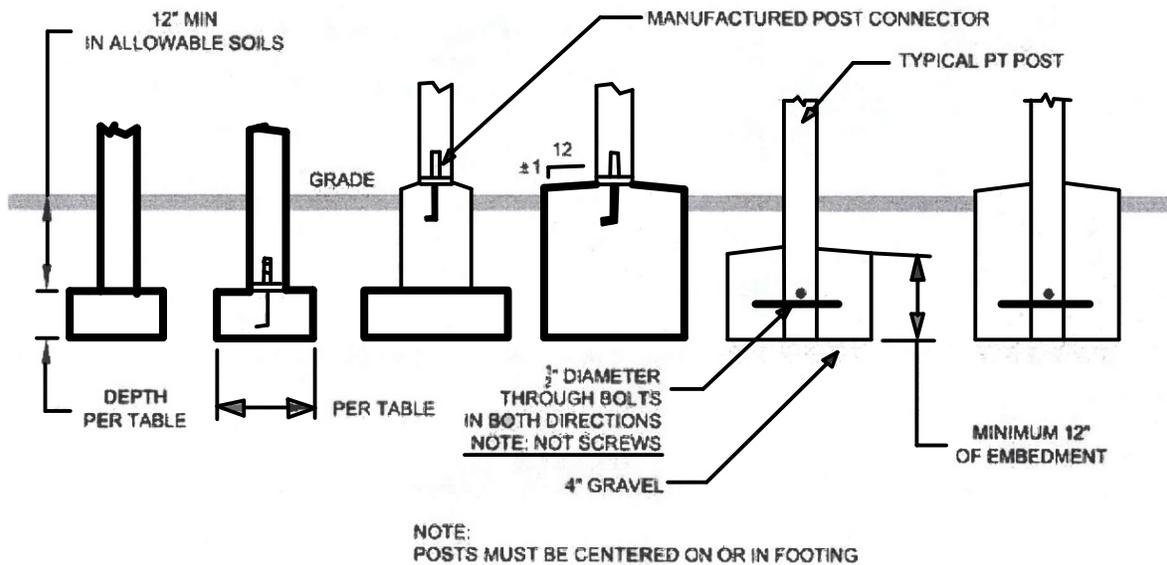


FIGURE R507.3
DECK POSTS TO DECK FOOTING CONNECTION

R507.3.2 Minimum depth. Deck footings shall extend below the frost line specified in Table R301.2(1) in accordance with Section R403.1.4.1.

Exceptions:

1. Free-standing decks that meet all of the following criteria:
 - 1.1. The joists bear directly on precast concrete pier blocks at grade without support by beams or posts.
 - 1.2. The area of the deck does not exceed 200 square feet (18.9 m²).
 - 1.3. The walking surface is not more than 20 inches (616 mm) above grade at any point within 36 inches (914 mm) measured horizontally from the edge.
2. Free-standing decks need not be provided with footings that extend below the frost line.

R507.4 Deck posts. For single-level wood-framed decks with beams sized in accordance with Table R507.5, deck post size shall be in accordance with Table R507.4.

TABLE R507.4
DECK POST HEIGHT^a

DECK POST SIZE	MAXIMUM HEIGHT ^{a, b} (feet-inches)
4 × 4	6-9 ^c
4 × 6	8
6 × 6	14
8 × 8	14

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

- a. Measured to the underside of the beam.
- b. Based on 40 psf live load.
- c. The maximum permitted height is 8 feet for one-ply and two-ply beams. The maximum permitted height for three-ply beams on post cap is 6 feet 9 inches.

R507.4.1 Deck post to deck footing connection. Where posts bear on concrete footings in accordance with Section R403 and Figure R507.4.1, lateral restraint shall be provided by manufactured connectors or a minimum post embedment of 12 inches (305 mm) in surrounding soils or concrete piers. Other footing systems shall be permitted.

Exception: Where expansive, compressible, shifting or other questionable soils are present, surrounding soils shall not be relied on for lateral support.

R507.5 Deck beams. Maximum allowable spans for wood deck beams, as shown in Figure R507.5, shall be in accordance with Table R507.5. Beam plies shall be fastened with two rows of 10d (3-inch × 0.128-inch) nails minimum at 16 inches (406 mm) on center along each edge. Beams shall be permitted to cantilever at each end up to one-fourth of the allowable beam span. Deck beams of other materials shall be permitted where designed in accordance with accepted engineering practices.

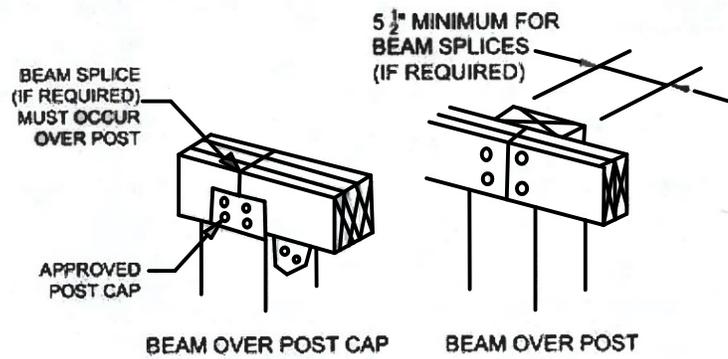


FIGURE R507.5.1(1)
DECK BEAM TO DECK POST

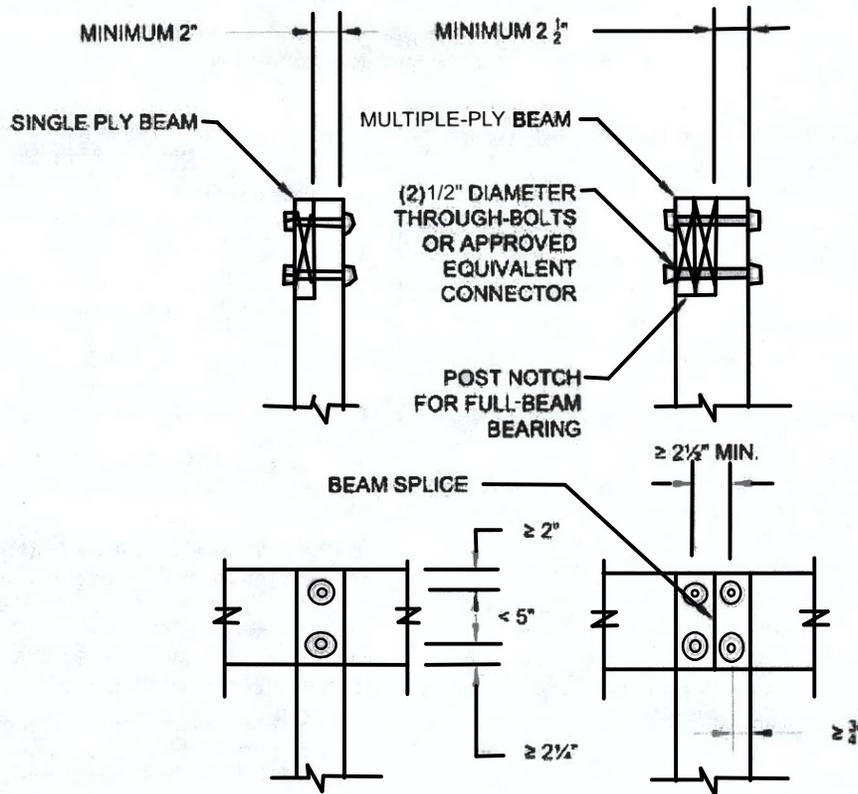


FIGURE R507.5.1(2)
NOTCHED POST-TO-BEAM CONNECTION

TABLE R507.9.1.3(1)
DECK LEDGER CONNECTION TO BAND JOIST^{a, b}
 (Deck live load = 40 psf, deck dead load = 10 psf, snow load ≤ 40 psf)

CONNECTION DETAILS	JOIST SPAN						
	6' and less	6'1" to 8'	8'1" to 10'	10'1" to 12'	12'1" to 14'	14'1" to 16'	16'1" to 18'
	On-center spacing of fasteners						
1/2-inch diameter lag screw with 1/2-inch maximum sheathing ^{c, d}	30	23	18	15	13	11	10
1/2-inch diameter bolt with 1/2-inch maximum sheathing ^d	36	36	34	29	24	21	19
1/2-inch diameter bolt with 1-inch maximum sheathing ^e	36	36	29	24	21	18	16

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

- Ledgers shall be flashed in accordance with Section R703.4 to prevent water from contacting the house band joist.
- Snow load shall not be assumed to act concurrently with live load.
- The tip of the lag screw shall fully extend beyond the inside face of the band joist.
- Sheathing shall be wood structural panel or solid sawn lumber.
- Sheathing shall be permitted to be wood structural panel, gypsum board, fiberboard, lumber or foam sheathing. Up to 1/2-inch thickness of stacked washers shall be permitted to substitute for up to 1/2 inch of allowable sheathing thickness where combined with wood structural panel or lumber sheathing.

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

For SI: 1 inch = 25.4 mm.

- Lag screws or bolts shall be staggered from the top to the bottom along the horizontal run of the deck ledger in accordance with Figure R507.9.1.3(1).
- Maximum 5 inches.
- For engineered rim joists, the manufacturer's recommendations shall govern.
- The minimum distance from bottom row of lag screws or bolts to the top edge of the ledger shall be in accordance with Figure R507.9.1.3(1).

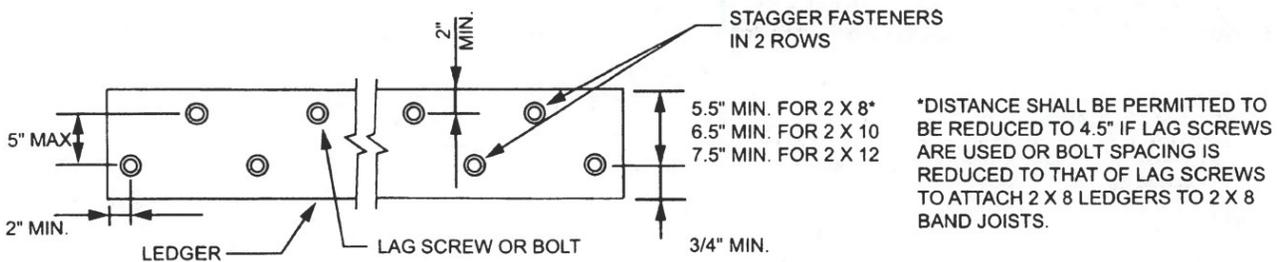


FIGURE R507.9.1.3(1)
PLACEMENT OF LAG SCREWS AND BOLTS IN LEDGERS

**TABLE R507.6
DECK JOIST SPANS FOR COMMON LUMBER SPECIES (ft. - in.)**

SPECIES ^a	SIZE	ALLOWABLE JOIST SPAN ^b			MAXIMUM CANTILEVER ^{c,1}		
		SPACING OF DECK JOISTS (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	1-3	1-4	1-6
	2 × 8	13-1	11-10	9-8	2-1	2-3	2-5
	2 × 10	16-2	14-0	11-5	3-4	3-6	2-10
	2 × 12	18-0	16-6	13-6	4-6	4-2	3-4
Douglas fir-larch ^d , hem-fir ^d , spruce-pine-fir ^d ,	2 × 6	9-6	8-8	7-2	1-2	1-3	1-5
	2 × 8	12-6	11-1	9-1	1-11	2-1	2-3
	2 × 10	15-8	13-7	11-1	3-1	3-5	2-9
	2 × 12	18-0	15-9	12-10	4-6	3-11	3-3
Redwood, western cedars, ponderosa pine ^e , red pine ^e	2 × 6	8-10	8-0	7-0	1-0	1-1	1-2
	2 × 8	11-8	10-7	8-8	1-8	1-10	2-0
	2 × 10	14-11	13-0	10-7	2-8	2-10	2-8
	2 × 12	17-5	15-1	12-4	3-10	3-9	3-1

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. 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.

**TABLE R507.7
MAXIMUM JOIST SPACING FOR DECKING**

DECKING MATERIAL TYPE AND NOMINAL SIZE	MAXIMUM ON-CENTER JOIST SPACING	
	Decking perpendicular to joist	Decking diagonal to joist ^a
1 1/4-inch-thick wood	16 inches	12 inches
2-inch-thick wood	24 inches	16 inches
Plastic composite	In accordance with Section R507.2	In accordance with Section R507.2

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 degree = 0.01745 rad.

a. Maximum angle of 45 degrees from perpendicular for wood deck boards.

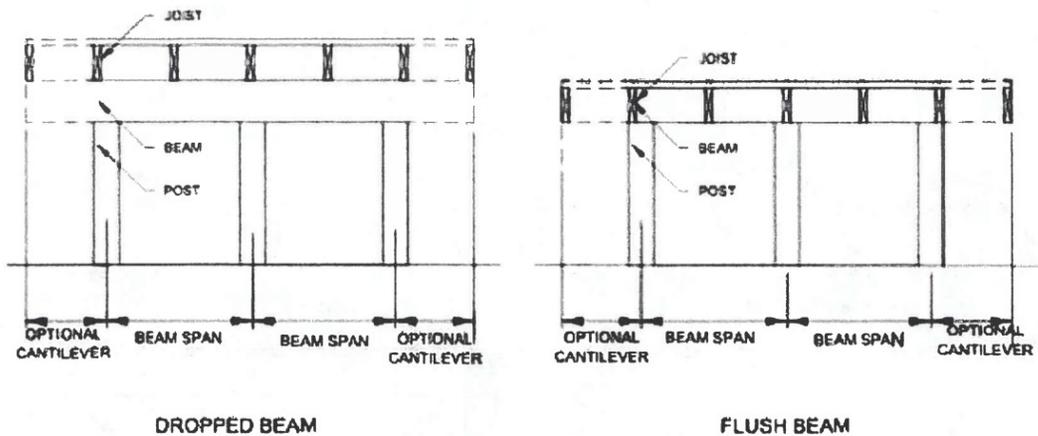


FIGURE R507.5
TYPICAL DECK JOIST SPANS

TABLE R507.5
DECK BEAM SPAN LENGTHS^{a, b, g} (feet - inches)

SPECIES ^c	SIZE ^d	DECK JOIST SPAN LESS THAN OR EQUAL TO: (feet)						
		6	8	10	12	14	16	18
Southern pine	1 - 2 x 6	4-11	4-0	3-7	3-3	3-0	2-10	2-8
	1 - 2 x 8	5-11	5-1	4-7	4-2	2-10	3-7	3-5
	1 - 2 x 10	7-0	6-0	5-5	4-11	4-7	4-3	4-0
	1 - 2 x 12	8-3	7-1	6-4	5-10	5-5	5-0	4-9
	2 - 2 x 6	6-11	5-11	5-4	4-10	4-6	4-3	4-0
	2 - 2 x 8	8-9	7-7	6-9	6-2	5-9	5-4	5-0
	2 - 2 x 10	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	7-6	7-0
	3 - 2 x 6	8-2	7-5	6-8	6-1	5-8	5-3	5-0
	3 - 2 x 8	10-10	9-6	8-6	7-9	7-2	6-8	6-4
	3 - 2 x 10	13-0	11-3	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 ^e , hem-fir ^e , spruce-pine-fir ^e , redwood, western cedars, ponderosa pine ^f , red pine ^f	3 x 6 or 2 - 2 x 6	5-5	4-8	4-2	3-10	3-6	3-1	2-9
	3 x 8 or 2 - 2 x 8	6-10	5-11	5-4	4-10	4-6	4-1	3-8
	3 x 10 or 2 - 2 x 10	8-4	7-3	6-6	5-11	5-6	5-1	4-8
	3 x 12 or 2 - 2 x 12	9-8	8-5	7-6	6-10	6-4	5-11	5-7
	4 x 6	6-5	5-6	4-11	4-6	4-2	3-11	3-8
	4 x 8	8-5	7-3	6-6	5-11	5-6	5-2	4-10
	4 x 10	9-11	8-7	7-8	7-0	6-6	6-1	5-8
	4 x 12	11-5	9-11	8-10	8-1	7-6	7-0	6-7
	3 - 2 x 6	7-4	6-8	6-0	5-6	5-1	4-9	4-6
	3 - 2 x 8	9-8	8-6	7-7	6-11	6-5	6-0	5-8
	3 - 2 x 10	12-0	10-5	9-4	8-6	7-10	7-4	6-11
	3 - 2 x 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/Δ = 360 at main span, L/Δ = 180 at cantilever with a 220-pound point load applied at the end.

b. Beams supporting deck joists from one side only.

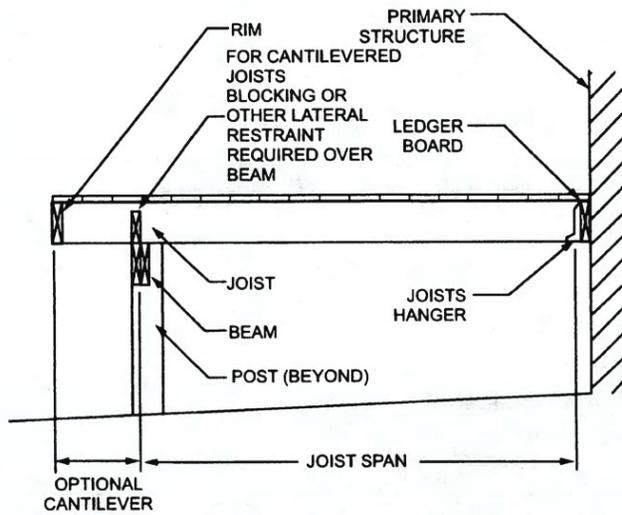
c. No. 2 grade, wet service factor.

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

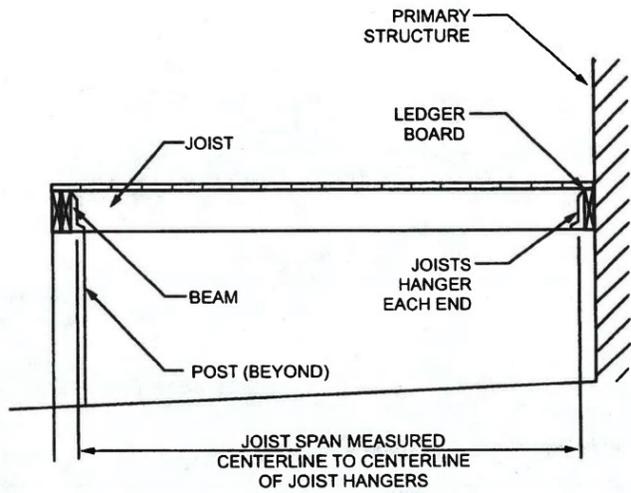
e. Includes incising factor.

f. Northern species. Incising factor not included.

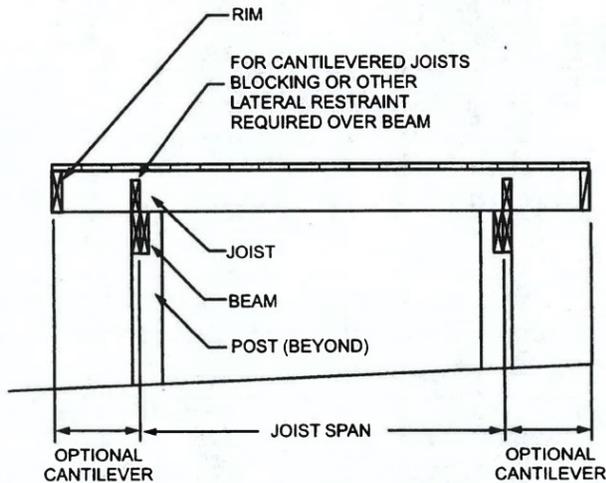
g. Beam cantilevers are limited to the adjacent beam's span divided by 4.



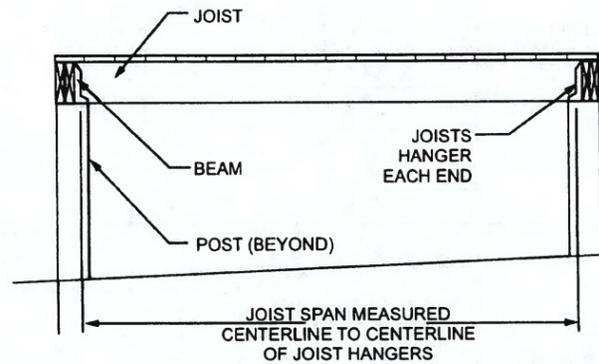
CANTILEVERED JOISTS WITH DROPPED BEAM



JOISTS WITH FLUSH BEAM

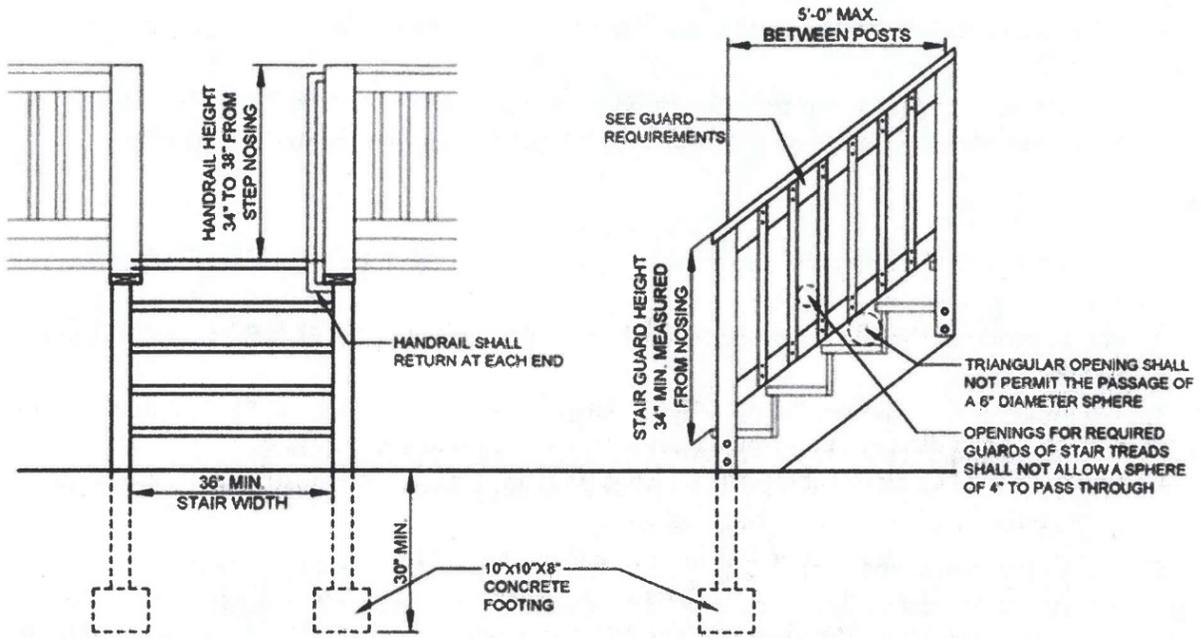


JOISTS ON FREE-STANDING DECK WITH DROPPED BEAM

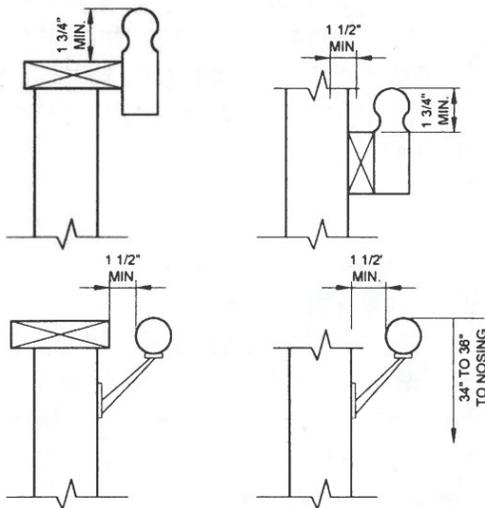


JOISTS ON FREE-STANDING DECK WITH FLUSH BEAM

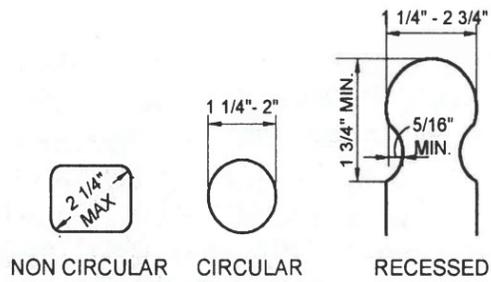
FIGURE R507.6
TYPICAL DECK JOIST SPANS



STAIR AND GUARDRAIL REQUIREMENTS



HANDRAIL MOUNTING EXAMPLES



HANDRAIL GRIP SIZE

Guidelines for Handrails & Guards

Handrails and guards are two different components.

- A handrail is a horizontal or sloping rail intended for grasping by the hand for guidance or support.
- A guardrail is a building component located at the open sides of elevated walking surfaces and stairs that minimizes the possibility of a fall from the walking surface to the level below.

Handrails:

1. Handrails shall be continuous on at least one side of each continuous run of stairs with 4 or more risers.
2. Top of handrails shall be placed no less than 34 inches or more than 38 inches above the stair nosing
3. Handrails must be continuous the entire length of the stairs, from a point directly above the top riser to a point directly above the lowest riser, and return to a wall or post.
4. Handrails shall be placed at least 1- ½ inches from any wall or other obstruction and cannot project more than 4- ½ inches over the stairs.
5. The handgrip area shall not be less the 1- ¼ inches or more than 2- ¾ inches in width
 - a. Type I: handrails with a circular cross section shall have an outside diameter of at least 1- ¼ inches and not greater than 2 inches. If the handrail is not circular it shall have a perimeter dimension of at least 4 inches and not greater than 6- ¼ inches with a maximum cross section dimension of 2- ¼ inches.
 - b. Type II: handrails with a perimeter greater than 6- ¼ inches shall provide a graspable finger recess area on both sides of the rail. The finger recess shall begin within a distance of ¾ inch measured vertically from the tallest portion of the profile and achieve a depth of at least 5/16 inch within 7/8 inch below the widest portion of the profile. This required depth shall continue for at least 3/8 inch to a level that is not less than 1- ¼ inches to a maximum of 2- ¾ inches. Edge shall have a minimum radius of 0.01 inch.

Guards:

1. Decks, porches, balconies, ramps or raised floor surfaces located 30 inches or more above the floor or grade below shall have guards not less than 36 inches in height.
2. Porches and decks which are enclosed with insect screening shall be equipped with guards where the walking surface is located more than 30 inches above the floor or grade below.
3. Open sides of stairs with a total rise of more than 30 inches above the floor or grade below shall have guards not less than 34 inches in height measured vertically from the nosing of the treads
4. The requirement for guards along open sides of stairs not only applies to the portion of a stairway that is more than 30 inches above the adjacent floor, but it also applies to any portion of a flight of stairs less than 30 inches above the floor.
5. All guards shall have intermediate rails or ornamental closures that prohibit the passage of a sphere 4 inches or more in diameter. The triangular openings formed by the riser, tread and bottom rail of a guard at the open side of a stairway are permitted to be of such a size that a 6-inch sphere cannot pass through.
6. When designed properly, the top rail of a guard can also serve as the required handrail.