



City of Beatrice Community Development Department

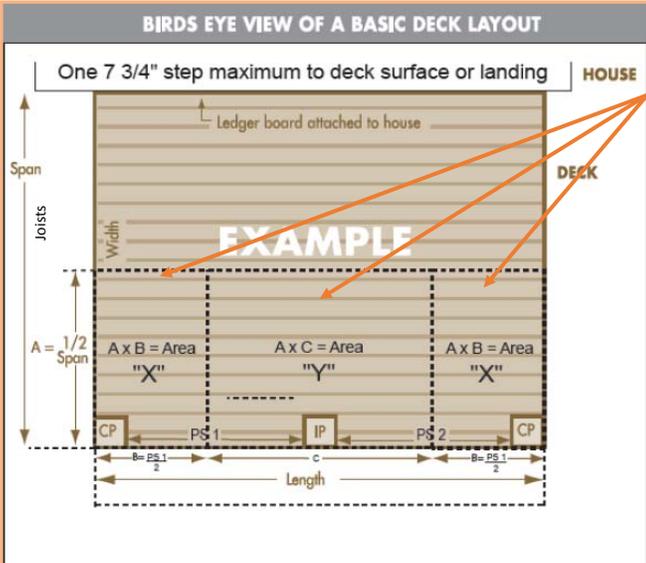
205 North 4th Street
Beatrice, NE 68310
402-228-5250

community@beatrice.ne.gov

Residential Decks



BEATRICE
CITY • BOARD OF PUBLIC WORKS



Sizing Deck Footings (Frost Depth 36 inches)

*Area "?" =

04-10	Square feet or less	use	8"	Pier
11-20	Square feet or less	use	12"	Pier
21-30	Square feet or less	use	14"	Pier
31-40	Square feet or less	use	16"	Pier
41-50	Square feet or less	use	18"	Pier
51-60	Square feet or less	use	20"	Pier

Deck Post Height

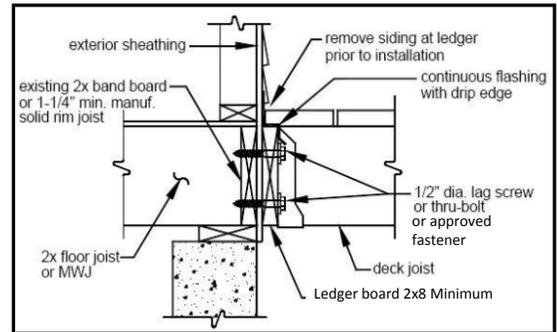
Deck Post Size	Maximum Height (feet)
4x4	8'
4x6	8'
6x6	14'



**AMERICAN WOOD
COUNCIL**
Based on 2015 IRC

Beam Spans (Distance Between Posts)

Size ⁴	Joist Spans (L) Less Than or Equal to:						
	6'	8'	10'	12'	14'	16'	18'
2-2x6	6' - 8"	5' - 8"	5' - 1"	4' - 7"	4' - 3"	4' - 0"	3' - 9"
2-2x8	8' - 6"	7' - 4"	6' - 6"	5' - 11"	5' - 6"	5' - 1"	4' - 9"
2-2x10	10' - 1"	8' - 9"	7' - 9"	7' - 1"	6' - 6"	6' - 1"	5' - 9"
2-2x12	11' - 11"	10' - 4"	9' - 2"	8' - 4"	7' - 9"	7' - 3"	6' - 9"
3-2x6	7' - 11"	7' - 2"	6' - 5"	5' - 10"	5' - 5"	5' - 0"	4' - 9"
3-2x8	10' - 7"	9' - 3"	8' - 3"	7' - 6"	6' - 11"	6' - 5"	6' - 1"
3-2x10	12' - 9"	11' - 0"	9' - 9"	8' - 9"	8' - 3"	7' - 8"	7' - 3"
3-2x12	15' - 0"	13' - 0"	11' - 7"	10' - 6"	9' - 9"	9' - 1"	8' - 7"

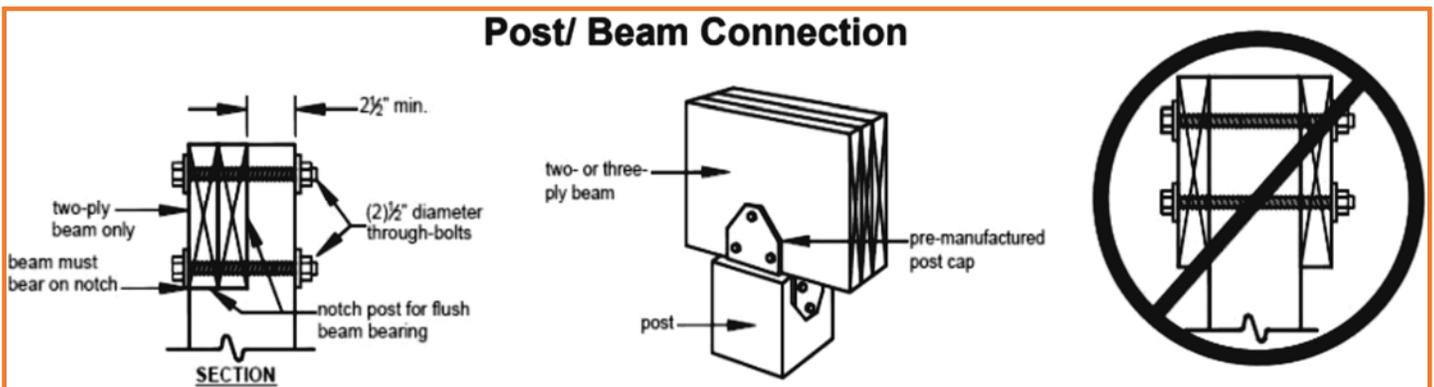


Decking Materials Spans

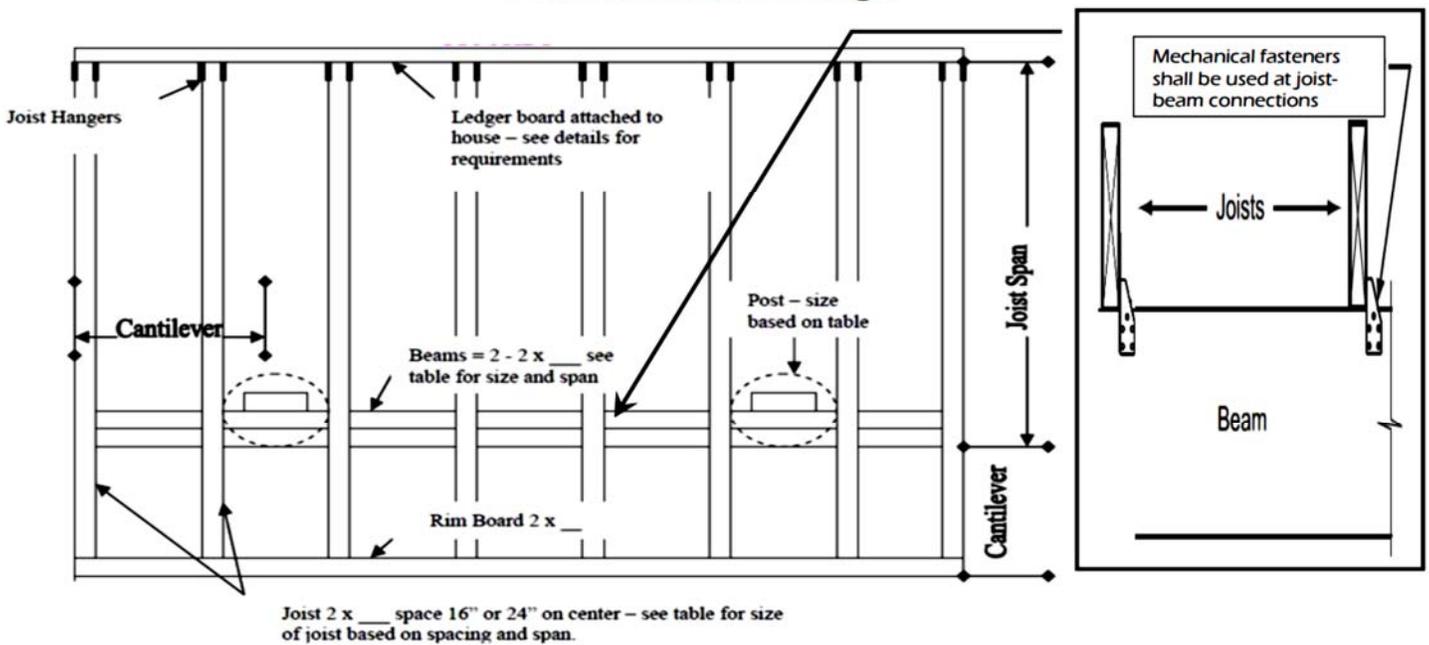
Material	Max Joist Spacing	
	Perpendicular	Diagonal
5/4 Decking	16"	12"
Nominal 2" Decking	24"	16"
Composite Decking	Follow Manufacturers Specs	

Joist Spacing

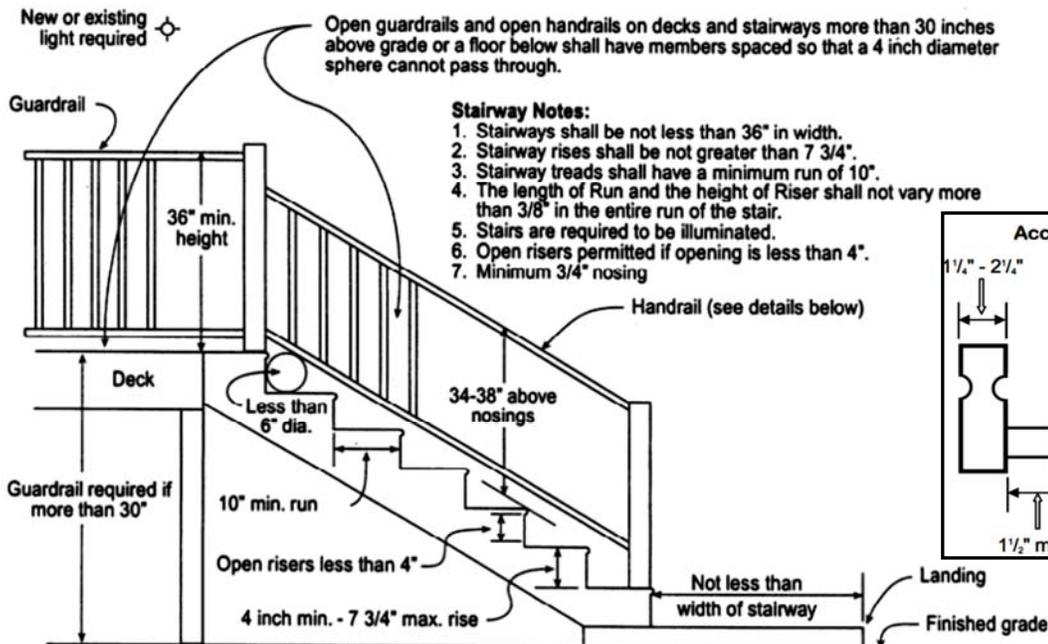
Size	Joist Spacing (o.c.)			Allowable Overhang ³ (Lo)		
	12"	16"	24"	12"	16"	24"
2x6 ⁵	9' - 11"	9' - 0"	7' - 7"	1' - 0"	1' - 1"	1' - 3"
2x8	13' - 1"	11' - 10"	9' - 8"	1' - 10"	2' - 0"	2' - 4"
2x10	16' - 2"	14' - 0"	11' - 5"	3' - 1"	3' - 5"	2' - 10"
2x12	18' - 0" ⁷	16' - 6"	13' - 6"	4' - 6"	4' - 2"	3' - 4"



Deck Structural Design



Stair and Handrail Specifications



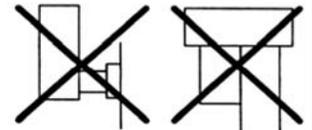
Stairway Notes:

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. Minimum 3/4" nosing

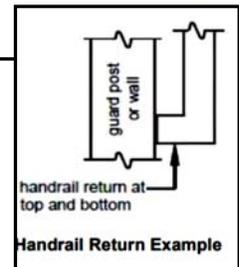
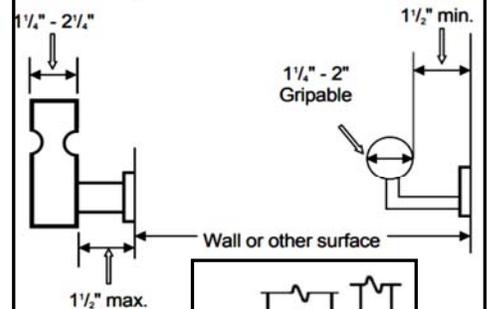
Handrail Notes:

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 311.5.6.2 IRC)

Unacceptable Handrails



Acceptable Handrail Details



When to Call for Inspections

1. **Footing/Post Holes**—Holes dug, clean and free from debris and prior to concrete placement
2. **Framing**—If deck is close to the ground and framing verification will be difficult
3. **Framing/Final**—Deck, stairs, guards, handrails, and landing all complete
4. **Other Inspections**— Separate electrical, plumbing, and mechanical inspections are required if those systems are included in your project

Name: _____

Project Address: _____

Phone No. _____

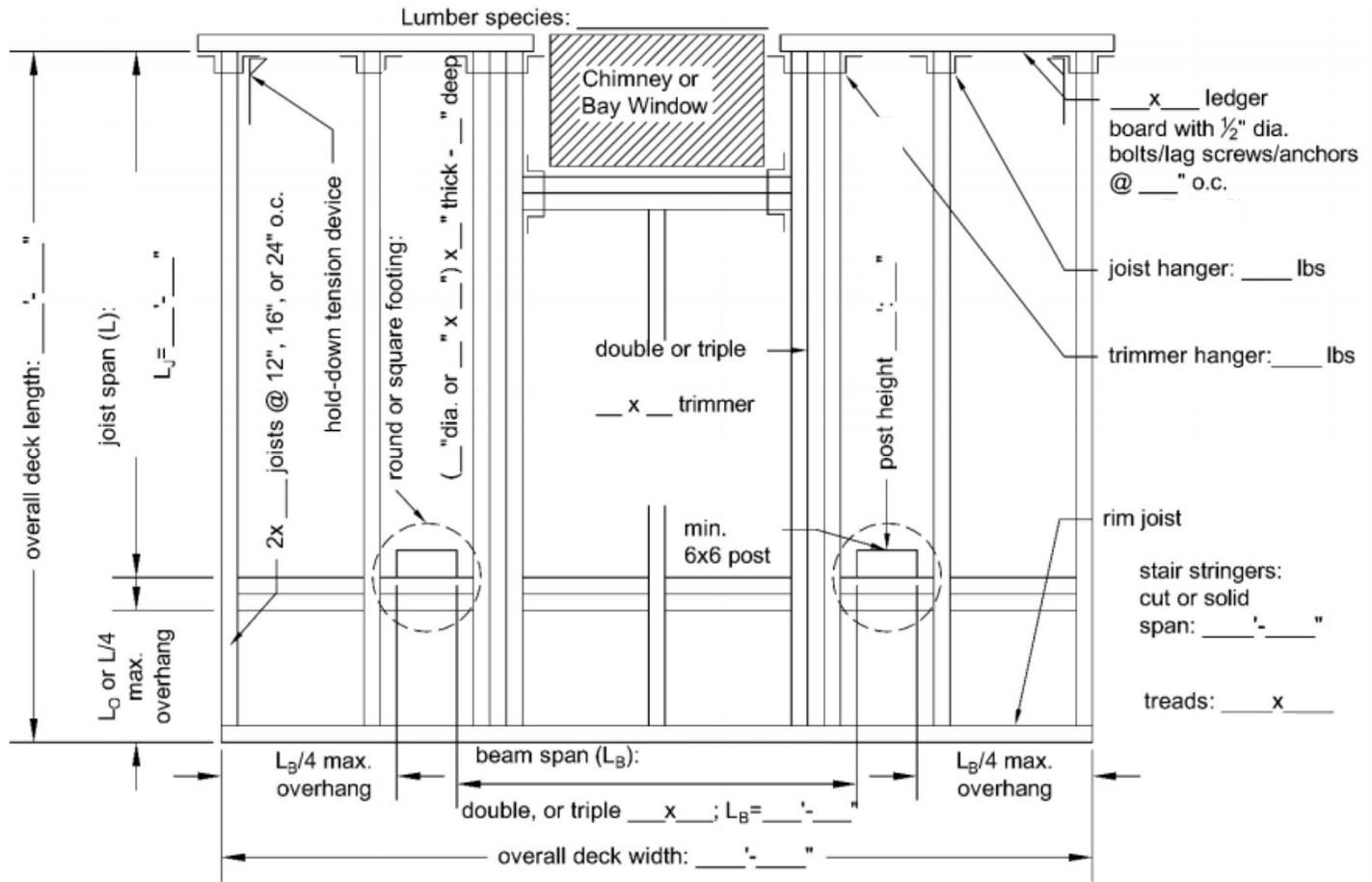
Email: _____

OFFICE USE ONLY

Permit No. _____

Date: _____

Reviewed By: _____



****Must attach site plan****

Notes: _____
