



Village of Mount Prospect
Community Development Department
50 S. Emerson Street
Mount Prospect, Illinois 60056
Phone: (847) 870-5675

Email: permit@mountprospect.org

Deck Supplement

PERMIT SUBMITTAL REQUIREMENTS- ONLINE OR IN PERSON:

Decks must be reviewed to verify code compliance.

This takes 10 business days.

- ☐ **APPLY ONLINE** go to www.mountprospect.org/permits upload the documents listed below
- ☐ **IN PERSON** bring our permit application completed & signed by homeowner plus
- ☐ Copy of the Plat of Survey with the location of the deck indicated w/dimensions.
- ☐ Copy of signed estimate by property owner if hiring a contractor to do the work.
- ☐ A set of plans indicating framing sizes and spacing, pier locations, and details on railings and stairs. [Free plans can be obtained from kiosks in various Home Center Stores] Refer to attached deck tables and diagrams for more information.
- ☐ Indicate the overall deck dimensions and the distances from the lot lines and other buildings on the property. Decks are not allowed in Public utility/drainage easements.

DECK REGULATIONS (Sec. 14.306, Chapter 14)

- Overhead electrical service lines must be a minimum of 10' clear vertically (11' for ComEd requirements) from the deck floor and not within reach horizontally (5' for ComEd requirements).
- Pier holes shall be a minimum of 42" deep and sized according to the provided chart.
- The minimum post size is 4" x 4" when beams bear on top. If a deck is over 8' above grade, or if beams are notched into the posts, then posts shall be a minimum of 6"x6".
- Galvanized post brackets are required to connect all posts to concrete piers.
- Decks over 30" high require railings; minimum railing height is 36".
- Stairs with 4 or more risers, shall have handrails & guardrails to enclose the stairway.
- NO OPEN STAIR RISERS PERMITTED. All stair stringers shall be supported on a frost depth pier or foundation.



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- Railing posts shall be mounted inside of rim joists and blocked for stability.
- Joist spans over 8' require solid blocking. Blocking shall be a minimum of 60% of the joist height.
- Ledger boards may not be connected to, or through, a masonry veneer wall in general. Contact staff for options if this is desired.
- Additional regulations may be required depending on the specific project design

REQUIRED INSPECTIONS [Not in all-inclusive list]

- ☐ Pre-pour pier and/or footing
- ☐ Rough Structural
- ☐ Final Structural [Hand Rails and or railings must be installed for Final inspection]



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MAXIMUM JOIST SPACING (ON CENTER)

DECKING MATERIAL	PERPENDICULAR TO JOIST	DIAGONAL TO JOIST
1-1/4" THICK WOOD	16" O.C.	12" O.C.
2" THICK WOOD	24" O.C.	16" O.C.
COMPOSITE	PER MANUFACTURER'S SPECIFICATIONS	

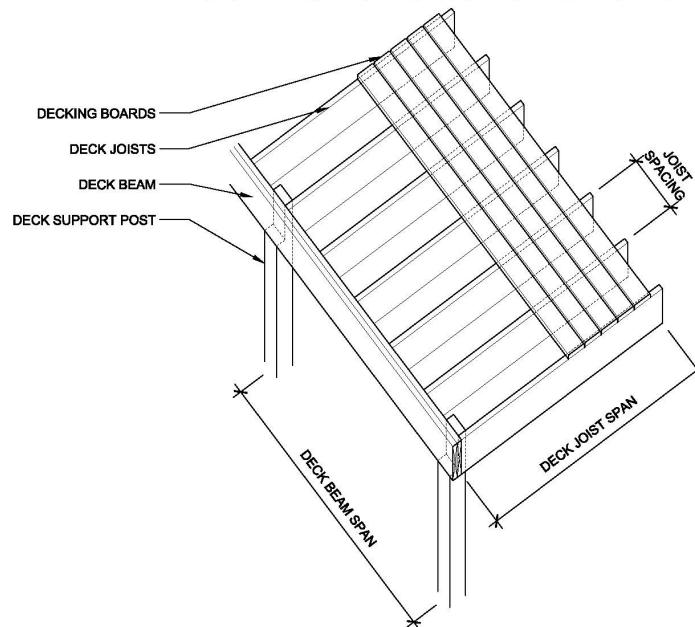
TYPICAL MAXIMUM JOIST SPAN FOR WOOD DECKS

JOIST SIZE	NO CANTILEVER			MAXIMUM CANTILEVER PER FEET OF BACKSPAN							
	12" O.C.	16" O.C.	24" O.C.	4'	6'	8'	10'	12'	14'	16'	18'
2 X 6	9'-2"	8'-4"	7'-4"	1'-0"	1'-6"	1'-5"	NP	NP	NP	NP	NP
2 X 8	12'-1"	11'-0"	9'-5"	1'-0"	1'-6"	2'-0"	2'-5"	2'-3"	NP	NP	NP
2 X 10	15'-5"	13'-9"	11'-3"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	3'-1"	NP	NP
2 X 12	18'-0"	16'-2"	13'-2"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	3'-6"	3'-10"	3'-10"

NP = NOT PERMITTED

TYPICAL DECK BEAM SPANS

		SPAN OF JOISTS BEARING ON BEAM						
		6'	8'	10'	12'	14'	16'	18'
DOUBLE	BEAM SIZE							
	(2) 2 X 6	6'-8"	5'-9"	5'-2"	4'-9"	4'-4"	4'-1"	3'-10"
	(2) 2 X 8	8'-6"	7'-4"	6'-7"	6'-0"	5'-7"	5'-2"	4'-11"
	(2) 2 X 10	10'-1"	8'-9"	7'-10"	7'-1"	6'-7"	6'-2"	5'-10"
TRIPLE	(2) 2 X 12	11'-11"	10'-3"	9'-2"	8'-5"	7'-9"	7'-3"	6'-10"
	(3) 2 X 6	7'-11"	7'-2"	6'-6"	5'-11"	5'-6"	5'-1"	4'-10"
	(3) 2 X 8	10'-5"	9'-3"	8'-3"	7'-6"	6'-11"	6'-6"	6'-2"
	(3) 2 X 10	12'-8"	10'-11"	9'-9"	8'-11"	8'-3"	7'-8"	7'-3"
	(3) 2 X 12	14'-11"	12'-11"	11'-6"	10'-6"	9'-9"	9'-1"	8'-7"





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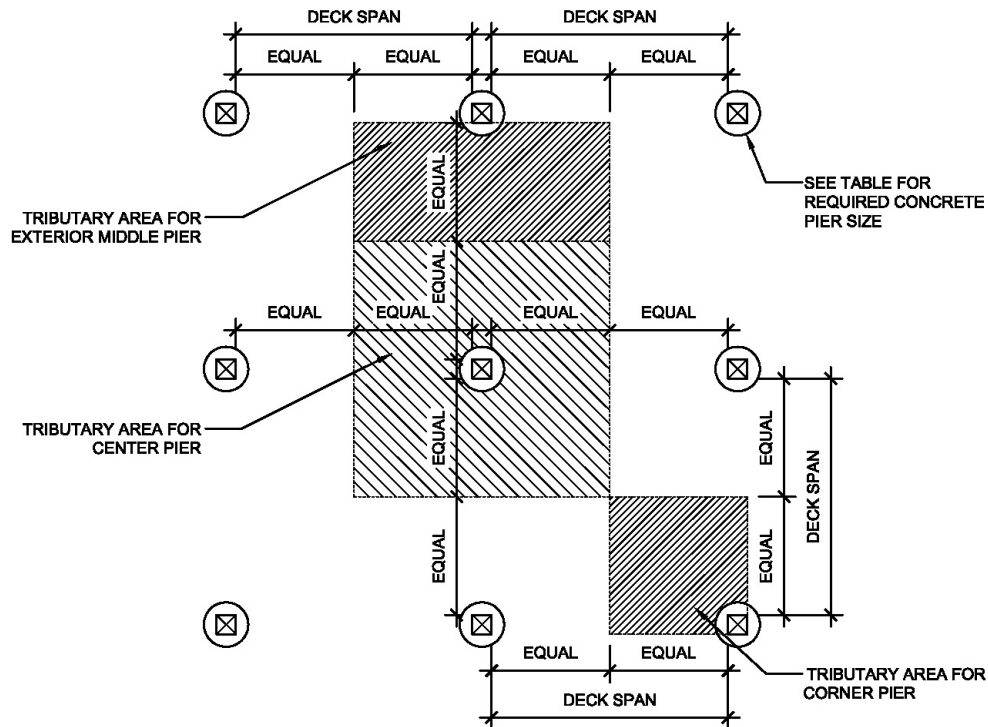
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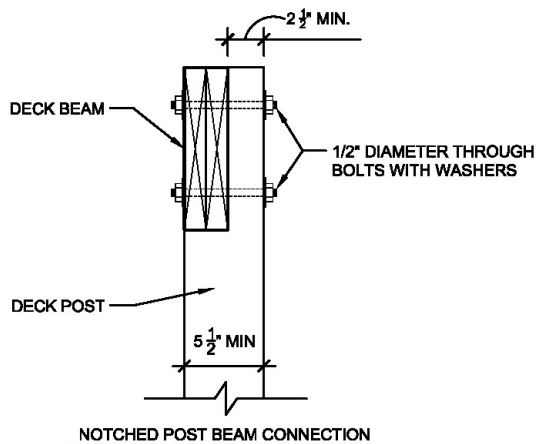
CONCRETE PIER SIZING TABLE

PIER SIZE	BEARING AREA	BEARING CAPACITY*	MAX. TRIBUTARY AREA (XxY)
10" DIAMETER	0.545 SQ.FT.	1,363 LBS	27 SQ.FT. (5'x5')
12" DIAMETER	0.785 SQ.FT.	1,962 LBS	39 SQ.FT. (6'x6')
14" DIAMETER	1.068 SQ.FT.	2,670 LBS	53 SQ.FT. (7'x7')
16" DIAMETER	1.395 SQ.FT.	3,488 LBS	70 SQ.FT. (8'x8')
18" DIAMETER	1.766 SQ.FT.	4,415 LBS	88 SQ.FT. (9'x9')

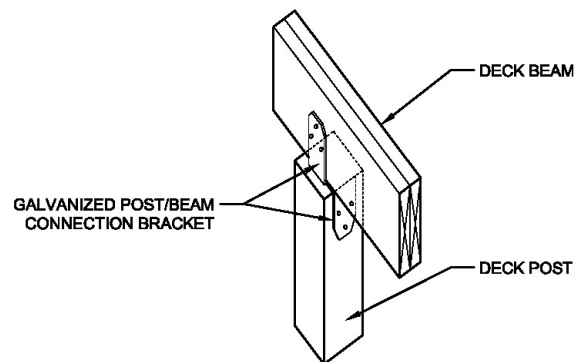
* BEARING CAPACITY BASED ON ASSUMED 2,500 PSF SOIL



POST BEAM BEARING DETAILS



NOTCHED POST BEAM CONNECTION



POST CAP BEAM CONNECTION



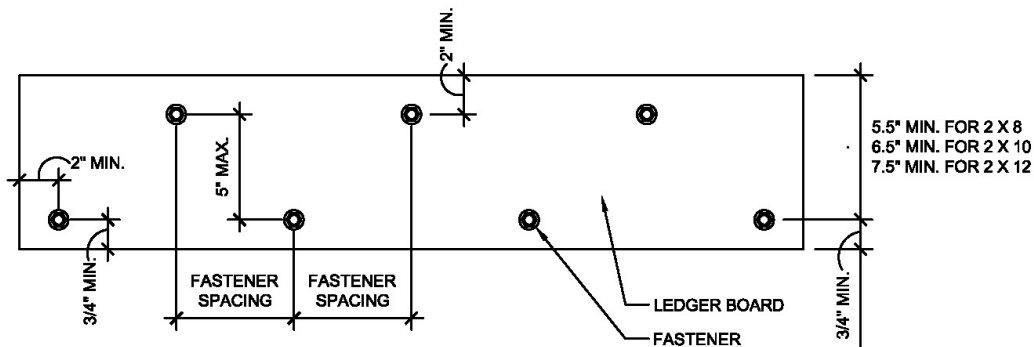
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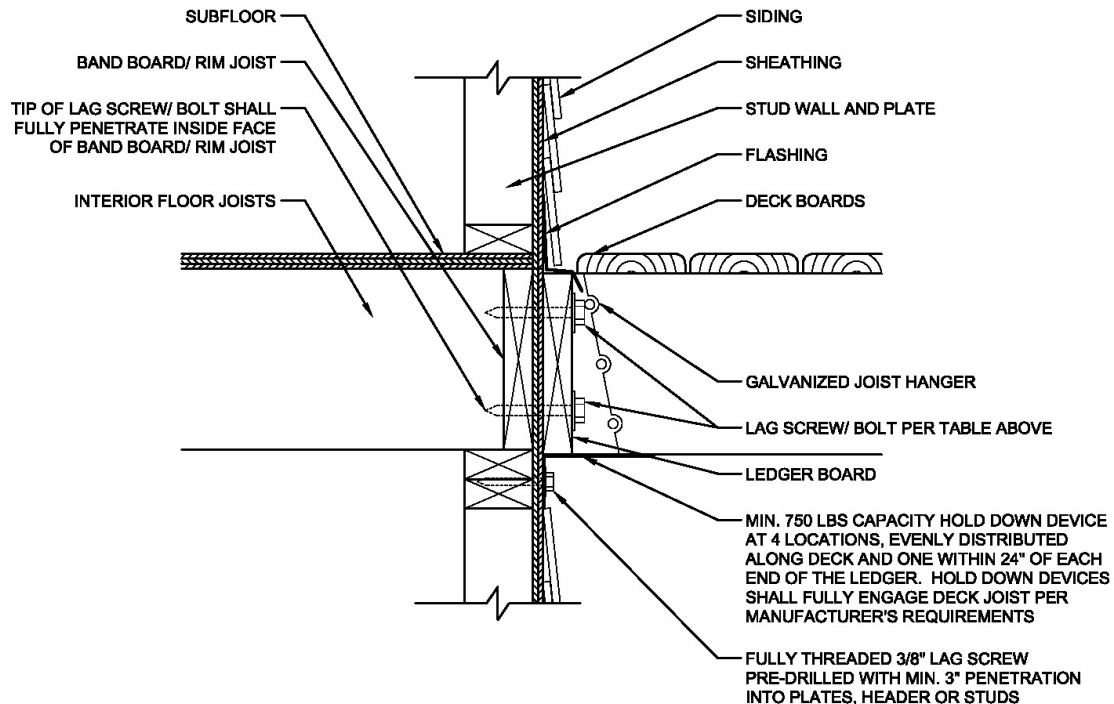
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DECK LEDGER CONNECTION

CONNECTION TYPE	JOIST SPAN BEARING ON LEDGER						
	UNDER 6'	6' - 8'	8' - 10'	10' - 12'	12' - 14'	14' - 16'	16' - 18'
	ON CENTER SPACING OF FASTENERS (INCHES)						
1/2" DIA. LAG SCREW	30	23	18	15	13	11	10
1/2" DIA. LAG BOLT	36	36	34	29	24	21	19
1/2" DIA. THRU-BOLT WITH SHEATHING OVER 1/2", BUT LESS THAN 1" THICK	36	36	29	24	21	18	16



LEDGER CONNECTION LOCATIONS



LEDGER CONNECTION AND HOLD DOWN DEVICE DETAILS