



Snohomish County
Planning and Development
Services

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PERMIT SUBMITTAL
Appointment
425.388.3311
Ext. 2790



This Assistance Bulletin only applies to property within unincorporated Snohomish County and does not apply to property within incorporated city limits.

Decks (Porches & Steps (Uncovered))

Assistance Bulletin

#21

Rev. March 2011

WWW.SNOCO.ORG

Keyword: Assistance Bulletins

Q: Do I need a building permit to build my deck, porch, or steps?

A: Permits are required for Residential uncovered decks, associated platforms and steps only if any of the following apply:

- The walking surface is more than 30 inches above grade at any point
- The deck, porch, or step is over any basement or story below
- The deck, porch, or step is part of a required accessible route of travel serving a facility such as an Adult Family Home

Q: How do I get a building permit?

A: An appointment is required to submit a building permit application. You may request a submittal appointment by calling 425 388-3311, ext 2790 or by going online to www.snoco.org/App/pds/appts/.

The following three items are required to apply for a building permit:

1. A completed Residential Building Permit Application. You can download a copy at <http://www.co.snohomish.wa.us/documents/Departments/PDS/Forms/residentialapplication.pdf>.
2. A Base Site Plan including items 1-13 noted at <http://www.co.snohomish.wa.us/documents/Departments/PDS/Checklists/ResidentialSitePlanSubmittalChecklist.pdf>. Site plans must be drawn to any engineering scale such as 1" = 10', 20', 30', 100', or 200'. Maximum paper size shall be 11"x 17".
3. Structural plans drawn to scale (1/4" = 1' is preferred) which include at least one plan view and one elevation view. If the deck is connected to a structure, it is important to show details for the connection.

Q: How much does the permit cost?

A: The fees for deck building permits vary depending on the site. The **minimum** fee for any size uncovered deck is \$171.88. Additional fees may include Health District (office review \$105, field review \$210), Site Review \$50, Critical Area Review \$250 - \$1600 depending upon type of review, and Drainage Residential Targeted Base Fee \$100 (minimum, all structures may be subject to additional drainage fees as determined during the review process). If the site is located in a Flood Hazard Zone, a Flood Hazard Permit is required.

This bulletin is intended only as an information guide. The information may not be complete and is subject to change. For complete legal information, refer to Snohomish County Code.

Q: What about required setback distances to property lines?

A: Setback distances to property lines depend on the zoning for the property and if the property line is adjacent to a public right-of-way or an easement. The Snohomish County Zoning Code provides that uncovered decks, porches, and steps may project into a required setback, provided they are not higher than 4 feet above the finished grade level, that they are no closer than 30 inches to any property line and that they do not project more than 6 feet into the setback required from a street.

Uncovered decks, porches, and steps more than 4 feet in height, or any covered deck, porch, or steps must meet all building setback requirements.

“Construction Tip Sheets” are available at www.mybuildingpermit.com. The 2006 IRC version is acceptable with the addition of minimum 1,500 pound hold-down tension devices installed in not less than two locations for lateral bracing as required by Section R502.2.2.3, 2009 IRC.

You may also contact us if you have any questions via:

Email: PermitTech@snoco.org

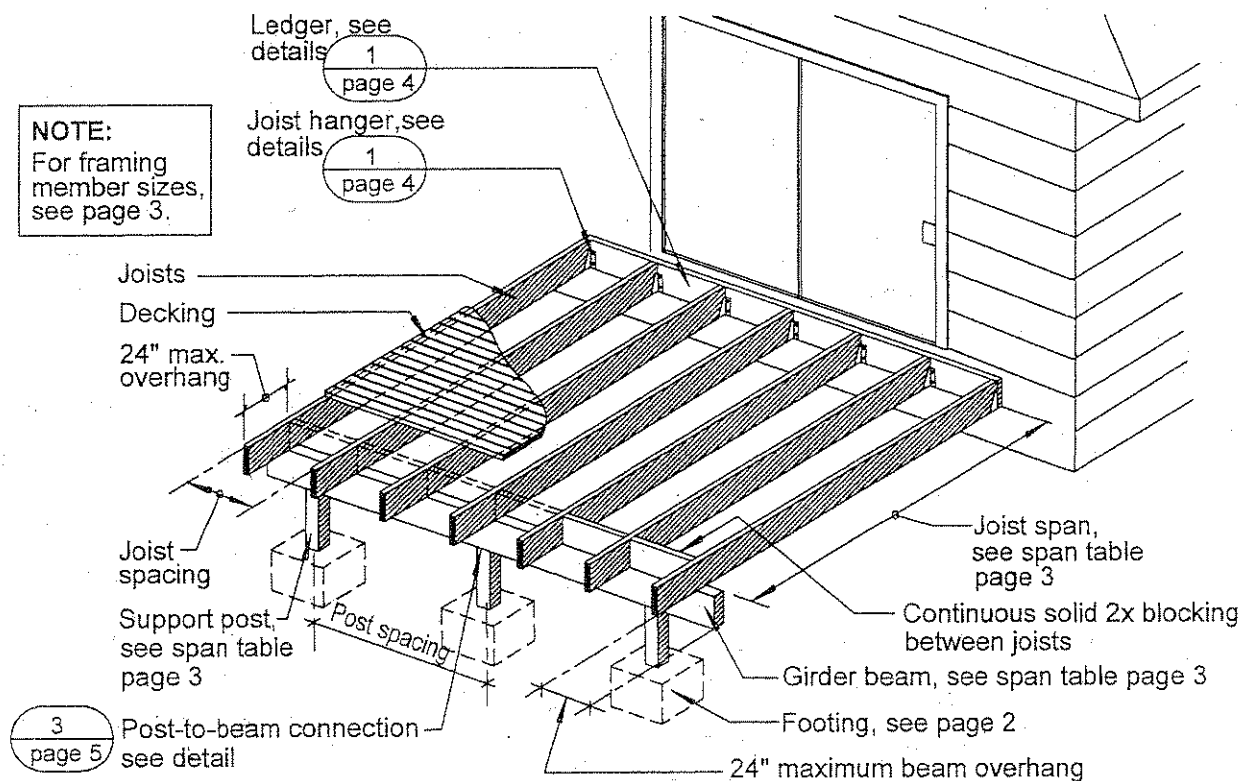
Telephone: 425-388-3311

Visit us at: 2nd Floor, Robert J. Drewel Building, 3000 Rockefeller Avenue, Everett

2009 Codes

This tip sheet or prescriptive deck construction guide from American Wood Council may be used as a guide for single-family residential uncovered deck permits. Follow the link below to download pdf file from American Wood Council web site.

<http://www.awc.org/Publications/DCA/DCA6/DCA6-09.pdf>



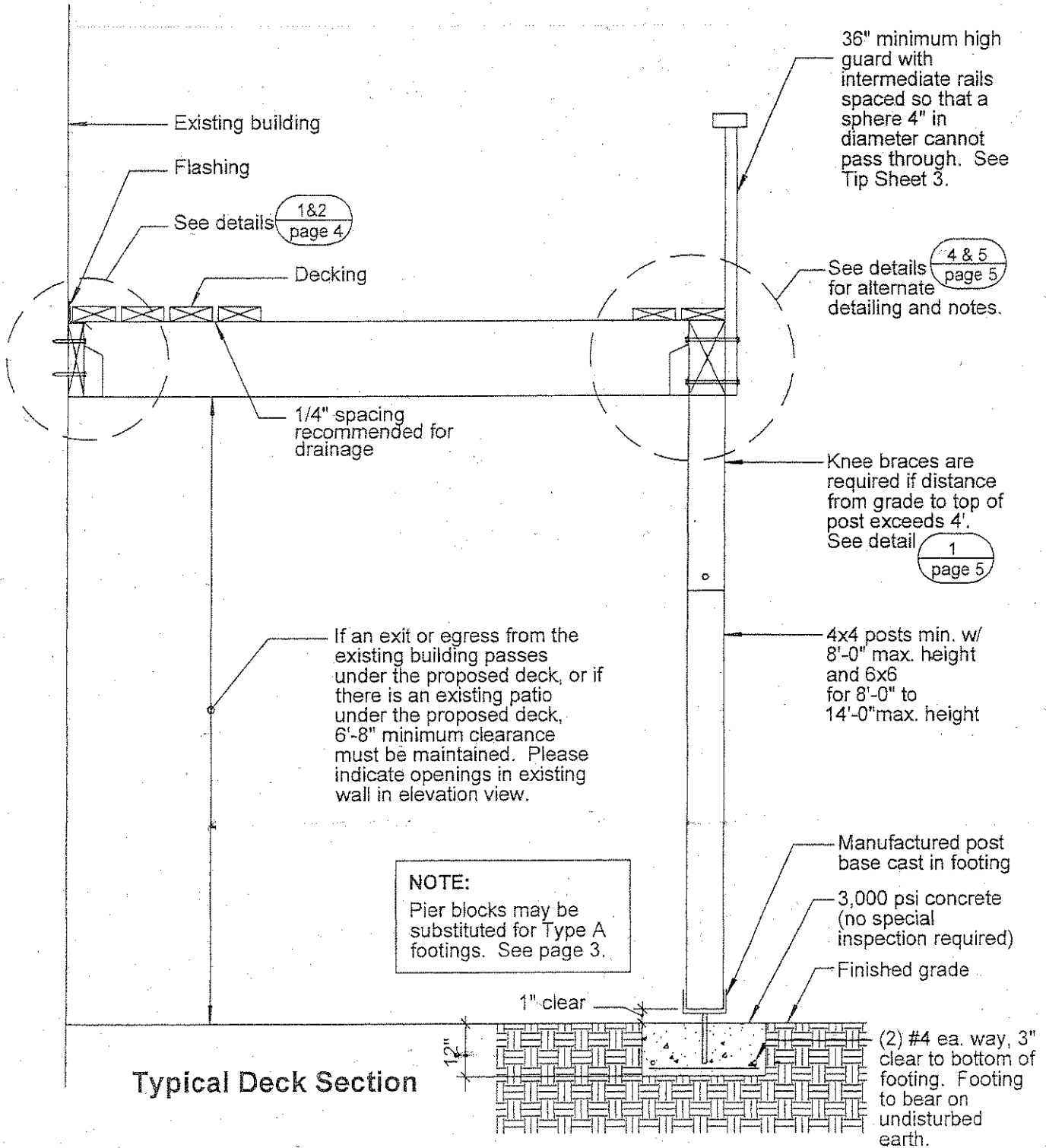
Typical Deck

Deck Construction Notes:

1. The illustrations and information in this tip sheet may be used for decks whether or not they require a permit. See Tip Sheet 0 for permit requirements.
2. All wood must be pressure treated or naturally resistant to decay. Treat all cut ends with end-cut solution. Use ground-contact treated wood.
3. Fasteners, hangers, nails, etc., must be stainless steel, hot-dipped galvanized, or as specifically required for the specified wood preservative used. The coating weights for zinc-coated fasteners to be in accordance with ASTM A 153. Provide documentation in the field showing the required fastener protection considering the wood chosen for your deck.
4. You may modify any components of this tip sheet with justification by analysis or calculation. Any modifications must be reviewed prior to permit issuance.
5. See Tip Sheet 1 for stairs, 2 for handrails, and 3 for guards.
6. This tip sheet is intended to represent good construction practices for deck construction and related IRC requirements.
7. All wood assumed to be Hem-Fir #2 or better.

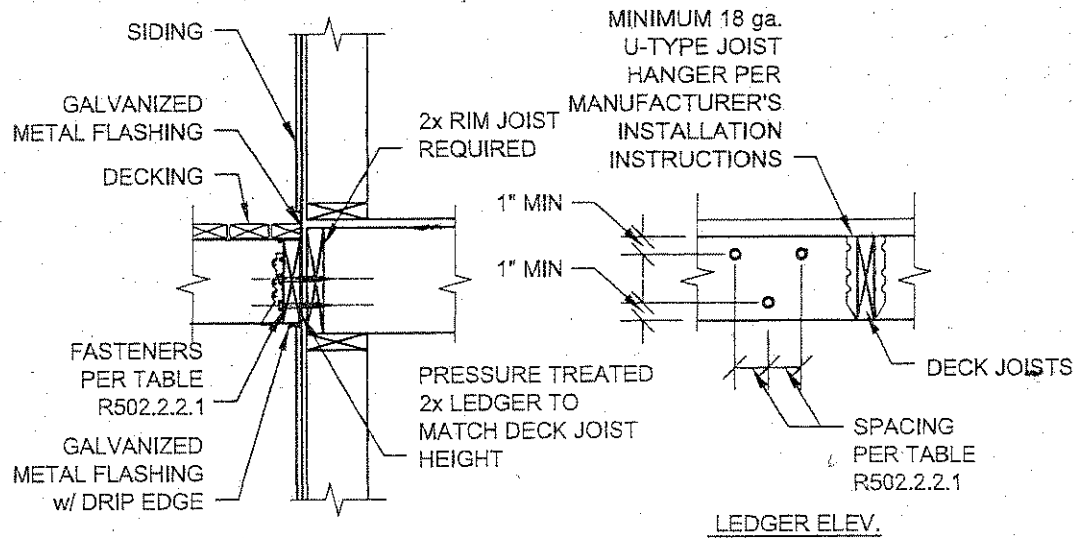
GENERAL INFORMATION:

- Consult with your local planning department regarding required setbacks.
- Obtain a building permit before starting construction.
- The intent of this tip sheet is to address the basics of private residential deck construction only and does not address the subject in great detail. Additional information can be found at your local building department, home improvement store, or library.



Span Table Footing Schedule For Outside Decks								
Spans based on use of No.2 Hem-Fir or better								
50 p.s.f. loading (10 p.s.f. Dead Load + 40 p.s.f. Live Load)								
Beam spans and footings assume maximum 24" overhang								
Joist size	Spacing of joists	Max. span of joists	Max. span of girder beams between posts / footing type					
			4x6	Footing	4x8	Footing	4x10	Footing
2X6	@ 12 in	9 ft - 10 in	5 ft - 5 in	B	7 ft - 2 in	B	8 ft - 10 in	C
	@ 16 in	8 ft - 9 in	5 ft - 8 in	B	7 ft - 6 in	B	9 ft - 2 in	B
	@ 24 in	7 ft - 1 in	6 ft - 1 in	B	8 ft - 0 in	B	9 ft - 10 in	B
2X8	@ 12 in	12 ft - 9 in	4 ft - 11 in	B	6 ft - 6 in	B	8 ft - 0 in	B
	@ 16 in	11 ft - 1 in	5 ft - 2 in	A	6 ft - 11 in	B	8 ft - 5 in	C
	@ 24 in	9 ft - 0 in	5 ft - 7 in	B	7 ft - 5 in	B	9 ft - 1 in	B
2X10	@ 12 in	15 ft - 7 in	4 ft - 7 in	B	6 ft - 0 in	B	7 ft - 5 in	C
	@ 16 in	13 ft - 6 in	4 ft - 10 in	B	6 ft - 5 in	B	7 ft - 10 in	C
	@ 24 in	11 ft - 0 in	5 ft - 3 in	A	6 ft - 11 in	B	8 ft - 5 in	B
FOOTING TYPES								
TYPE	SIZE	NOTE:						
A	12" X 12" X 12"	Pier blocks may be substituted for Type A footings						
B	16" X 16" X 12"							
C	18" x 18" x 12"							
*Footing sizes based on assumed soil bearing pressure of 2000 p.s.f. Contact your jurisdiction for additional restrictions.								

Deck Construction Connections	
All fasteners, nails, bolts, screws, etc. must be corrosion resistant. See Deck Construction Note 3, page 1.	
Follow manufacturer's instructions for timber connectors.	
Connections	Nailing
1 Joist on deck beam; toenail each end	(3) 8d
2 Bridging or blocking to joist; toenail ea. side, ea. end	(3) 8d
3 2x decking to joist or deck beam; blind and face nail	(2) 16d



1 EXTERIOR DECK LEDGER
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Table R502.2.2.1

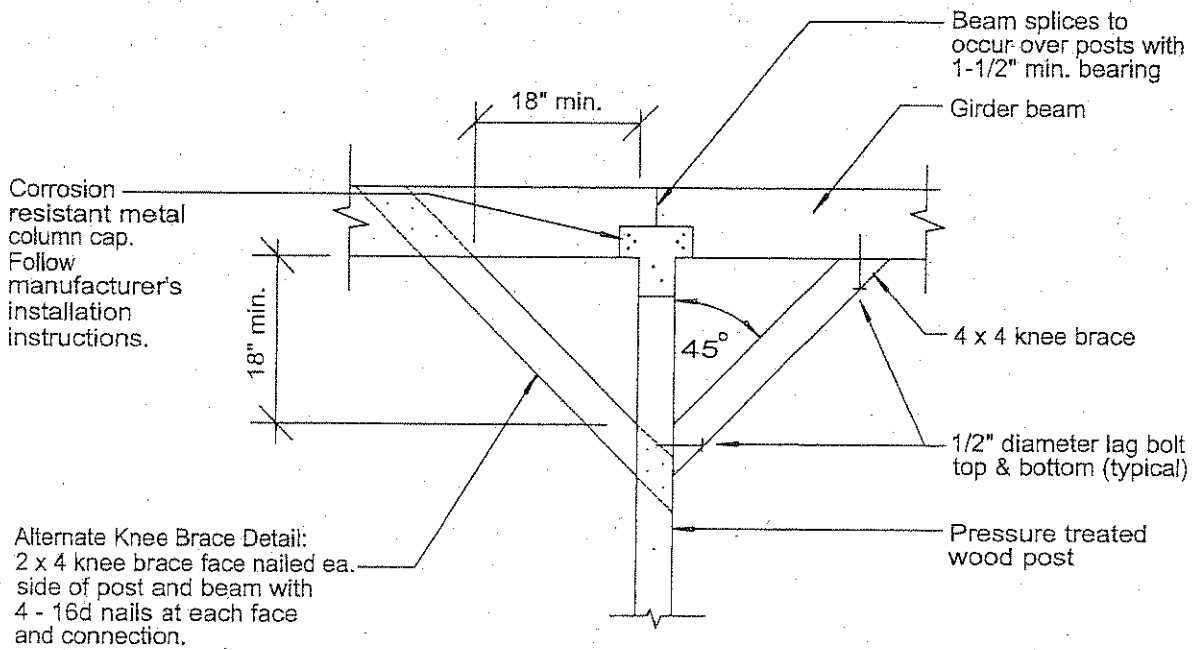
FASTENER SPACING FOR A SOUTHERN PINE OR HEM-FIR DECK LEDGER AND A 2 INCH NOMINAL SOLID-SAWN SPRUCE-PINE-FIR BAND JOIST. SEE NOTE C,F,G.

(Deck live load = 40 psf, deck dead load = 10 psf)

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'
Connection Details	On-center spacing of fastners. Note d and e.						
1/2 inch diameter screw with 15/32 inch maximum sheathing. Note a	30	23	18	15	13	11	10
1/2 inch diameter bolt with 15/32 inch maximum sheathing.	36	36	34	29	24	21	19
1/2 inch diameter screw with 15/32 inch maximum sheathing & stacked washers. Note b&h.	36	36	29	24	21	18	16

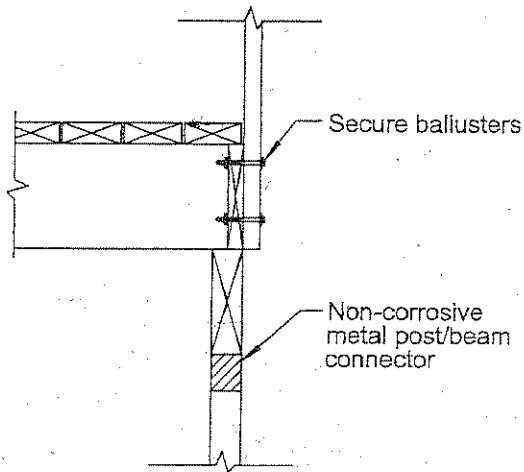
For SI: 1 inch = 25.4mm, 1 foot = 304.8mm. 1pound per square foot=0.04479kPa.

- a. The tip of the lag screw shall fully extend beyond the inside face of band joist.
- b. The maximum gap between face of the ledger board and face of wall sheathing shall be 1/2".
- c. Ledgers shall be flashed to prevent water from contacting the house band joist.
- d. Lag screws and bolts shall be staggered in accordance with Section R502.2.2.1.1.
- e. Deck ledger shall be minimum 2x8 pressure-preservative-treated No.2 grade lumber or other approved materials as established by standard engineering practice.
- f. When solid-sawn pressure-preservative-treated-deck ledgers are attached to a minimum 1 inch thick engineered wood product (structural composite lumber laminated veneer lumber or wood structural panel band joist) the ledger attachment shall be designed in accordance of engineering practice.
- g. A minimum 1x 9 1/2 Douglas Fir laminated veneer lumber rimboard shall be permitted in lieu of the 2-inch nominal band joist.
- h. Wood structural panel sheathing, gypsum board sheathing or foam sheathing not exceeding 1 inch in thickness shall be permitted. The maximum distance between the face of the ledger board and face of the band joist shall be 1 inch.

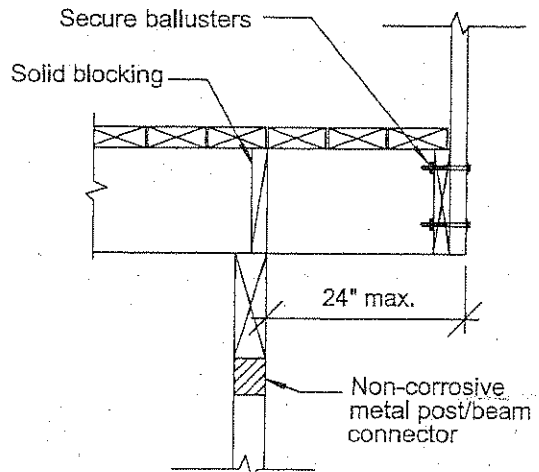


3 **Knee Brace Detail**
page 5

NOTE:
Knee braces are required if distance from grade to top of post exceeds 4 feet.



4 **Alternate Joist-to-Beam Condition**
page 5



5 **Alternate Joist-to-Beam Condition**
page 5

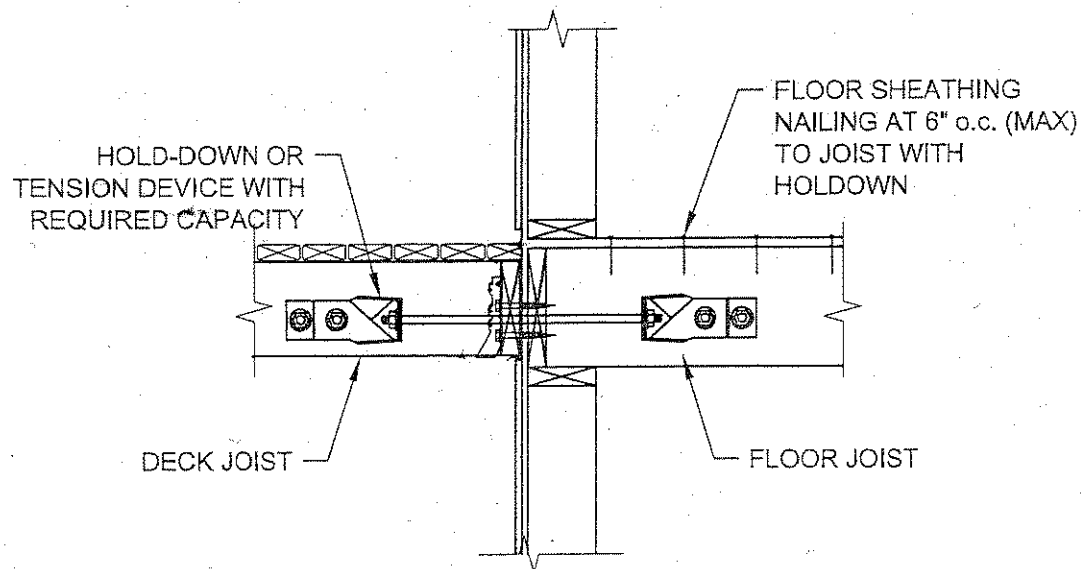
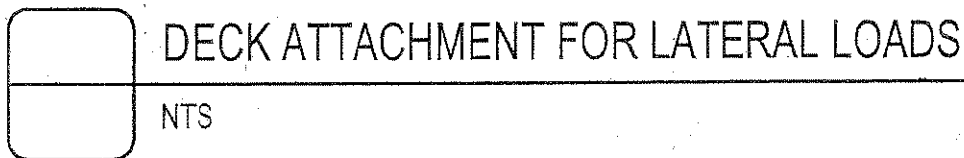
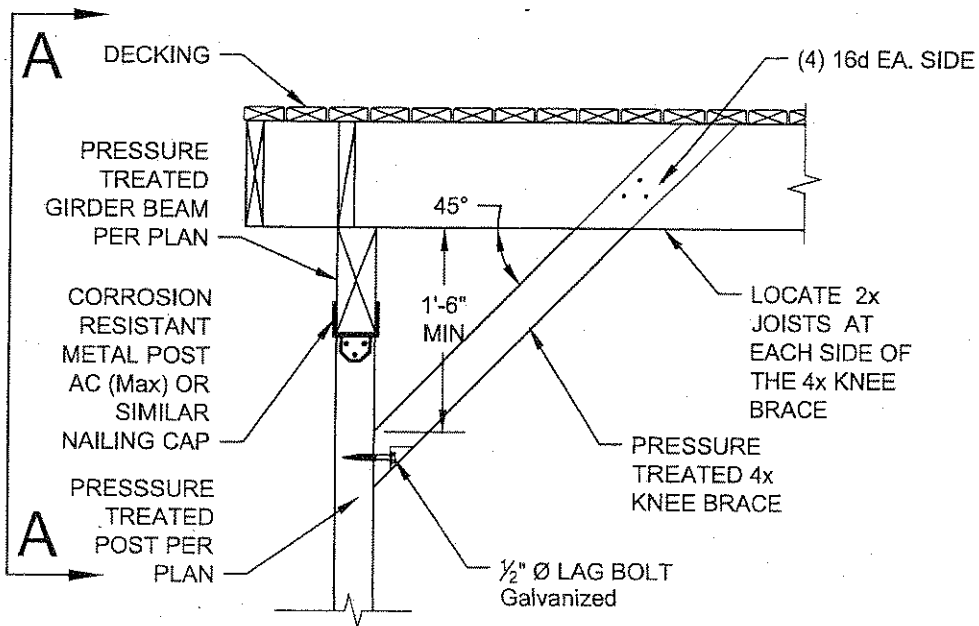


FIGURE 502.2.2.3

**R502.2.2.3 Deck Lateral Load Connections.**

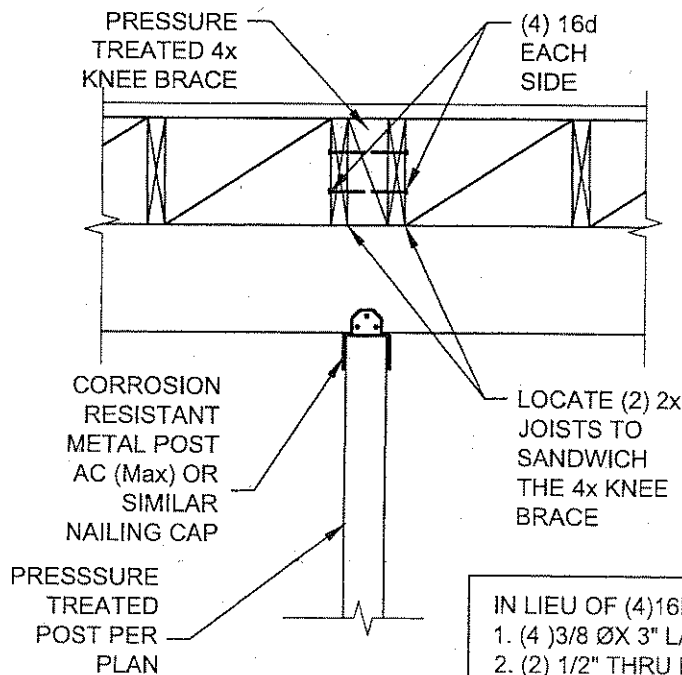
The lateral load connection required by Section R502.2.2 shall be permitted to be in accordance with Figure R502.2.2.3. Hold-down tension devices shall be installed in not less than two locations per deck, and each device shall have an allowable stress design capacity of not less than 1500 pounds.

Note: See Alternate Knee Brace Details On Sheet 7 & 8 In Lieu Of Figure R502.2.2.3.



ALTERNATE LATERAL KNEE BRACE DETAIL (A)

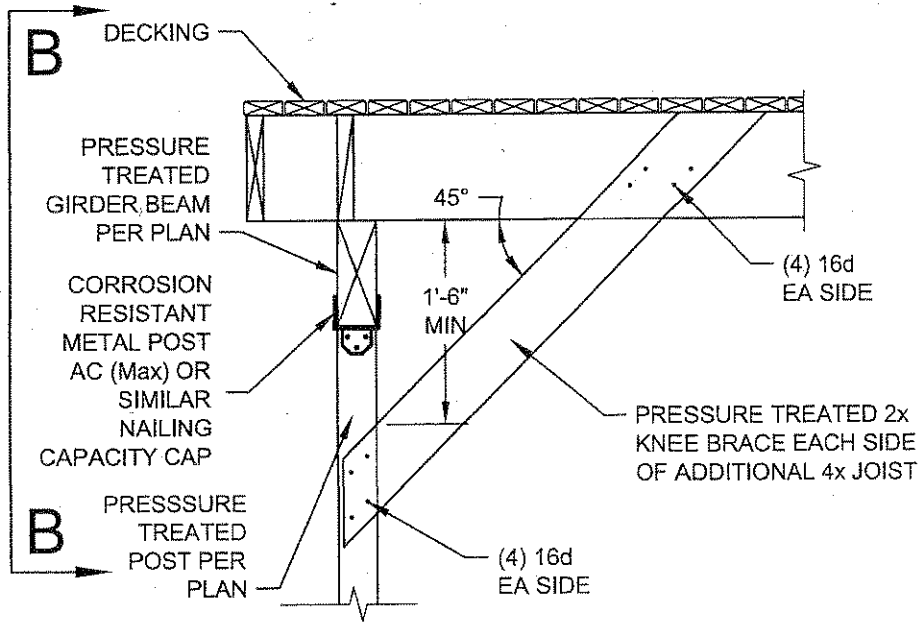
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- IN LIEU OF (4)16D USE:
1. (4) 3/8" Ø X 3" LAG SCREWS.
 2. (2) 1/2" THRU BOLTS.
 3. (3) 1/4" X 3" SDS SCREWS.

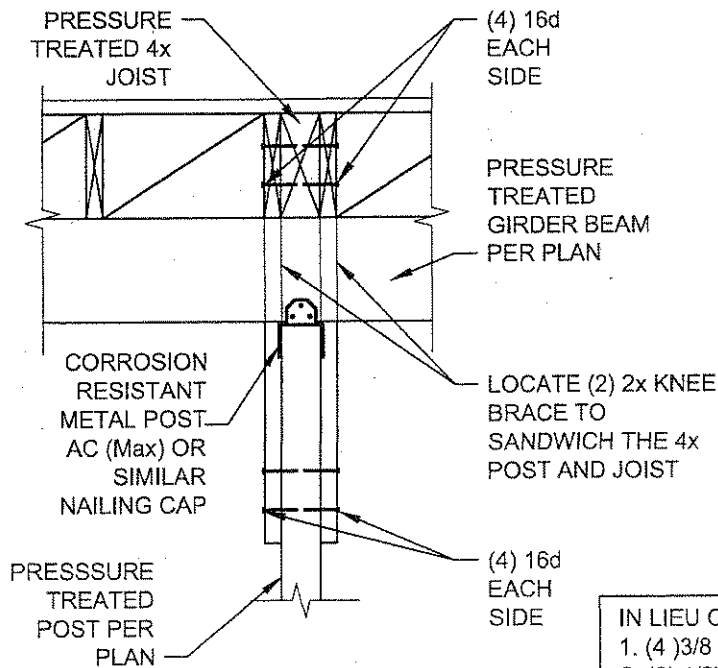
A-A SECTION VIEW

NTS



B ALTERNATE LATERAL KNEE BRACE DETAIL (B)

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IN LIEU OF (4)16D USE:
 1. (4) 3/8 Ø X 3" LAG SCREWS.
 2. (2) 1/2" THRU BOLTS.
 3. (3) 1/4 X 3" SDS SCREWS.

B-B SECTION VIEW

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