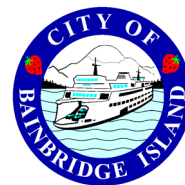


City of Bainbridge Island
Building Division

2006 Residential Deck Requirements



PLANNING AND COMMUNITY DEVELOPMENT ● 280 Madison Ave. N ●
Bainbridge Island, WA 98110 ● (206) 842-2552 ● Fax: (206)780-0955
Email: pcd@ci.bainbridge-isl.wa.us

WHEN IS A PERMIT REQUIRED FOR A RESIDENTIAL DECK? A building permit is required for **ALL** decks.

R105.1 Required. Any owner or authorized agent who intends to construct, enlarge, alter, repair, move, demolish or change the occupancy of a building or structure, or to erect, install, enlarge, alter, repair, remove, convert or replace any electrical, gas, mechanical or plumbing system, the installation of which is regulated by this code, or to cause any such work to be done, shall first make application to the building official and obtain the required permit.

DEFINITION: 2006 IBC: [B] DECK. An exterior floor supported on at least two opposing sides by an adjacent structure, and/or posts, piers or other independent supports.

R502.2.2 Decks. Where supported by attachment to an exterior wall, decks shall be positively anchored to the primary structure and designed for both vertical and lateral loads as applicable. Such attachment shall not be accomplished by the use of toenails or nails subject to withdrawal. Where positive connection to the primary building structure cannot be verified during inspection, decks shall be self-supporting. For decks with cantilevered framing members, connections to exterior walls or other framing members, shall be designed and constructed to resist uplift resulting from the full live load specified in Table R301.5 acting on the cantilevered portion of the deck.

Submittal Requirements:

1. Building permit application

2. Two sets of complete drawings (Including method of attachment, size of posts, beams, footing and/or pier blocks, size of all materials used.) Please note that **pressure treated** or **naturally decay-resistant** wood must be used in the construction of exposed wooden decks.

3. Two site plans

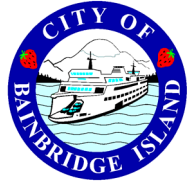
Show location, dimension and existing structures on the site; show distances to property lines from the eave line of the structure. Further information may need to be obtained for your specific project. Please consult the Department of Planning and Community Development if you have any questions.

4. Building Site Clearance

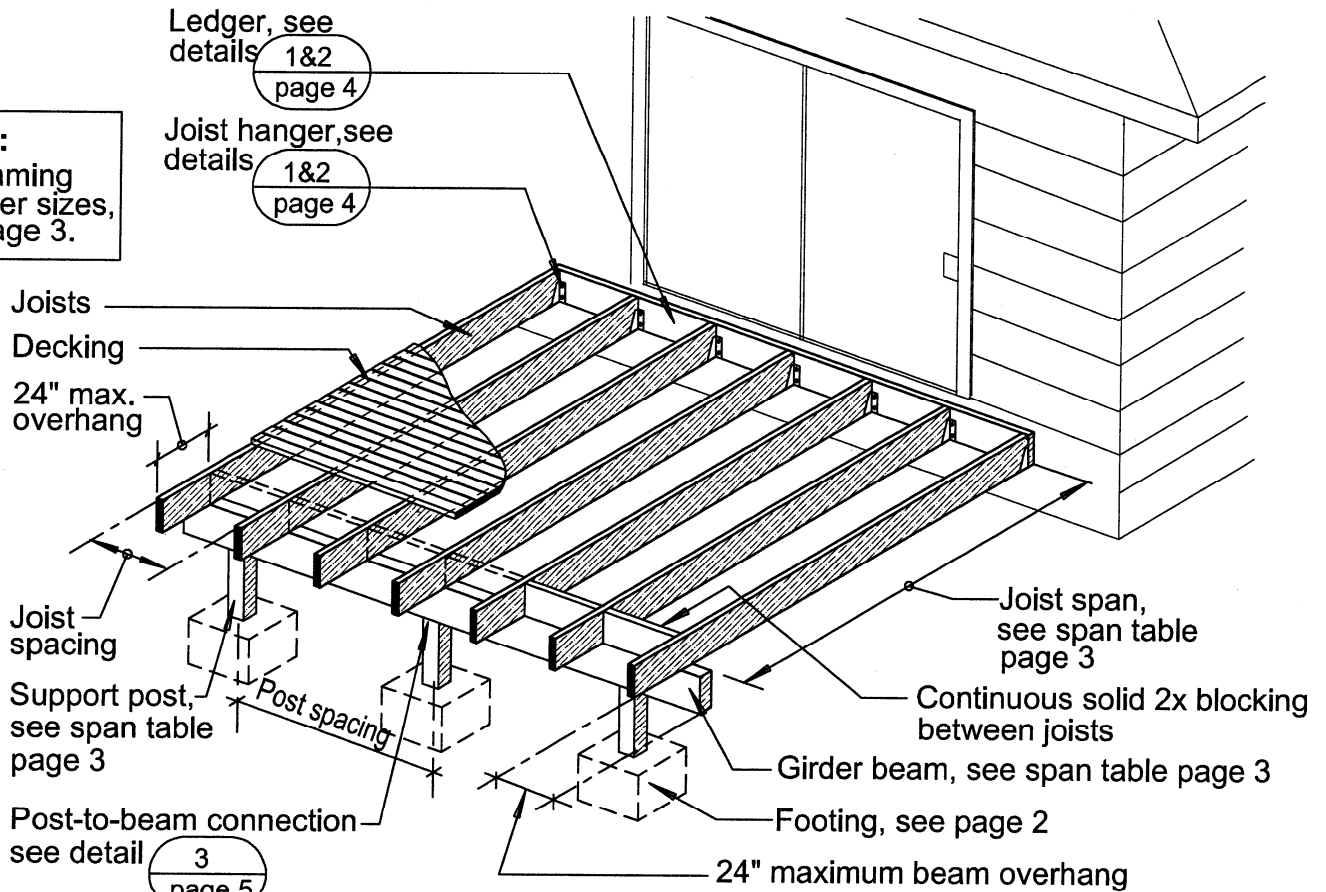
All properties that are served by a septic system, require a building site clearance by the Kitsap County Health Department when a permit is obtained for a addition of a deck. (360) 337-5285. The permit cannot be accepted without preliminary or accepted approval from the Health Department. Please call the Building Division (206) 842-2552 if you have any questions regarding this requirement.

- **Plans must be fully dimensioned or to scale**
- **Provide a site plan showing deck (s) in relation to property lines**
- **Provide elevation drawing showing final grade of surrounding ground**
- **Show height of deck above finish grade**
- **Show deck-flooring type (wood, vinyl, etc.)**
- **Show direction, size and spacing of all floor joists, posts and beams**
- **Show connections: post to beam, post to pier block, pad or foundation**
- **Indicate method of attachment to house**
- **Show roof framing detail, roof covering (if applicable)**
- **Provide stair detail (rise, run, width, and handrails) and guardrail details (stair detail handout available)**
- **Show all wood as being treated or of natural resistance to decay**
- **Corrosion resistant fasteners with Pressure Treated lumber**

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Drawing - page 1

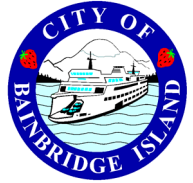


NOTE:
 For framing member sizes,
 see page 3.

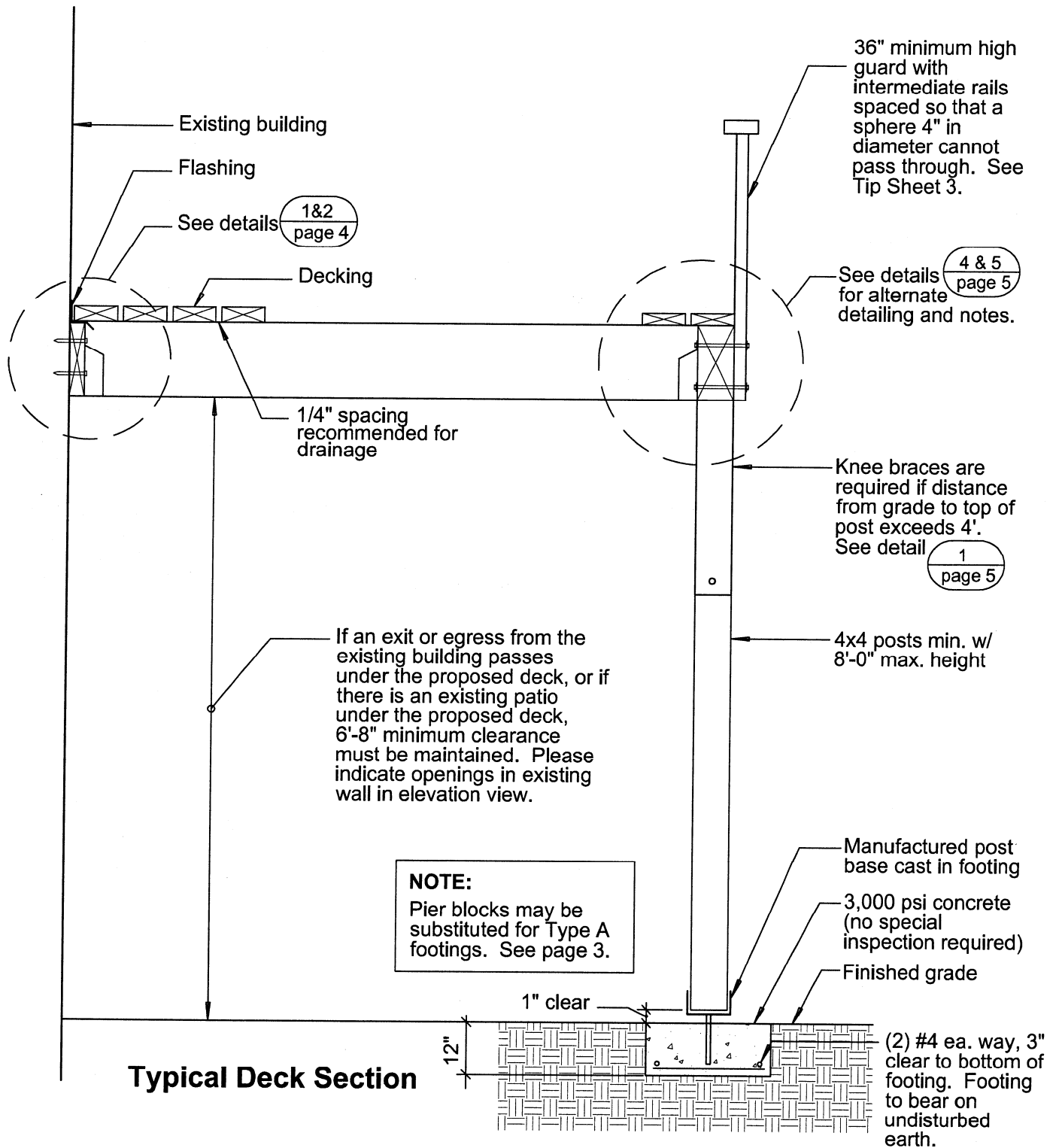


Typical Deck

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Drawing - page 2



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Drawing - page 3



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	3/8" x 4 1/2" lag screw max. spacing on 2x ledger	Max. span of girder beams between posts / footing type					
				4x6	Footing	4x8	Footing	4x10	Footing
2X6	@ 12 in	9 ft - 10 in	5 in	5 ft - 5 in	B	7 ft - 2 in	B	8 ft - 10 in	C
	@ 16 in	8 ft - 9 in	6 in	5 ft - 8 in	B	7 ft - 6 in	B	9 ft - 2 in	B
	@ 24 in	7 ft - 1 in	7 in	6 ft - 1 in	B	8 ft - 0 in	B	9 ft - 10 in	B
2X8	@ 12 in	12 ft - 9 in	4 in	4 ft - 11 in	B	6 ft - 6 in	B	8 ft - 0 in	B
	@ 16 in	11 ft - 1 in	4 in	5 ft - 2 in	A	6 ft - 11 in	B	8 ft - 5 in	C
	@ 24 in	9 ft - 0 in	5 in	5 ft - 7 in	B	7 ft - 5 in	B	9 ft - 1 in	B
2X10	@ 12 in	15 ft - 7 in	3 in	4 ft - 7 in	B	6 ft - 0 in	B	7 ft - 5 in	C
	@ 16 in	13 ft - 6 in	3 in	4 ft - 10 in	B	6 ft - 5 in	B	7 ft - 10 in	C
	@ 24 in	11 ft - 0 in	4 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

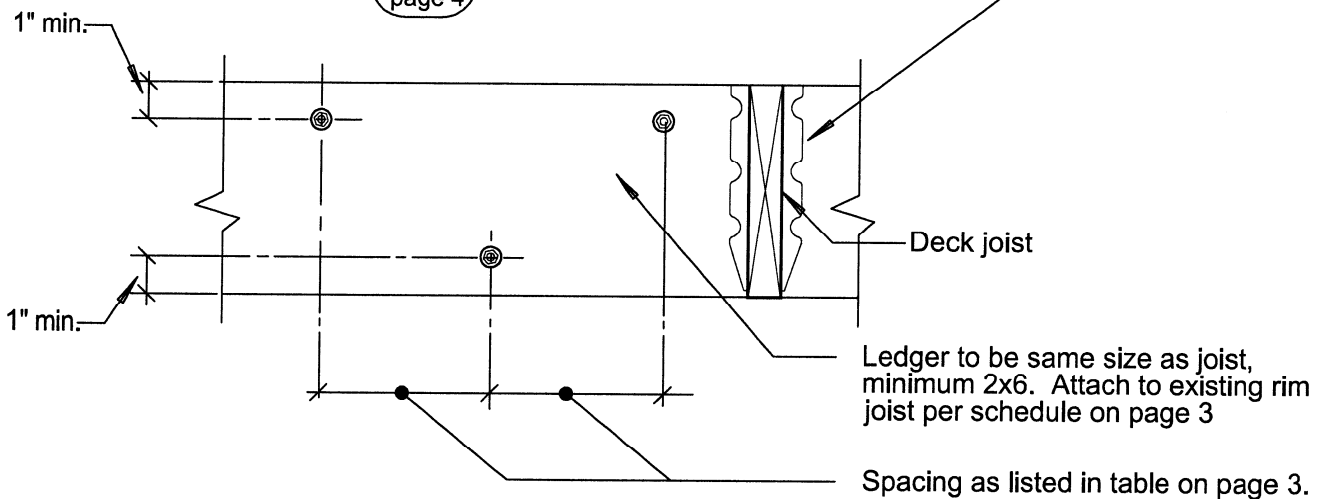
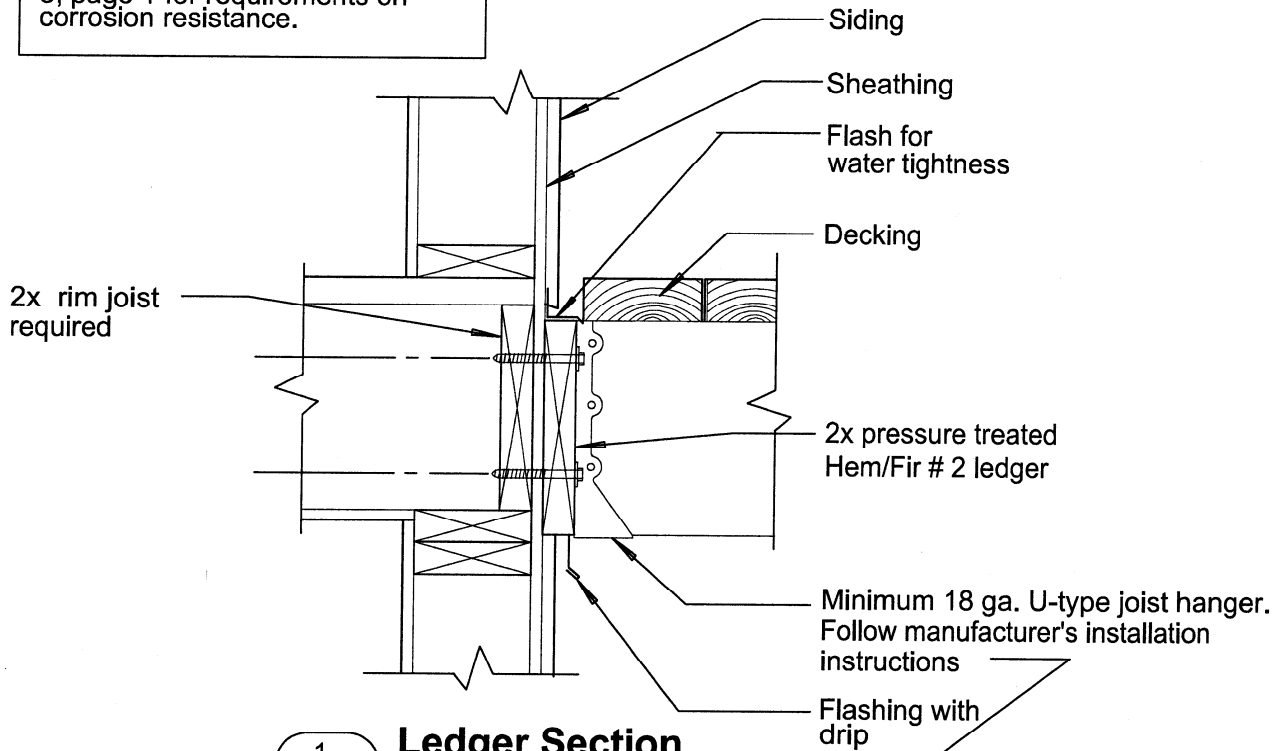
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Drawing - page 4

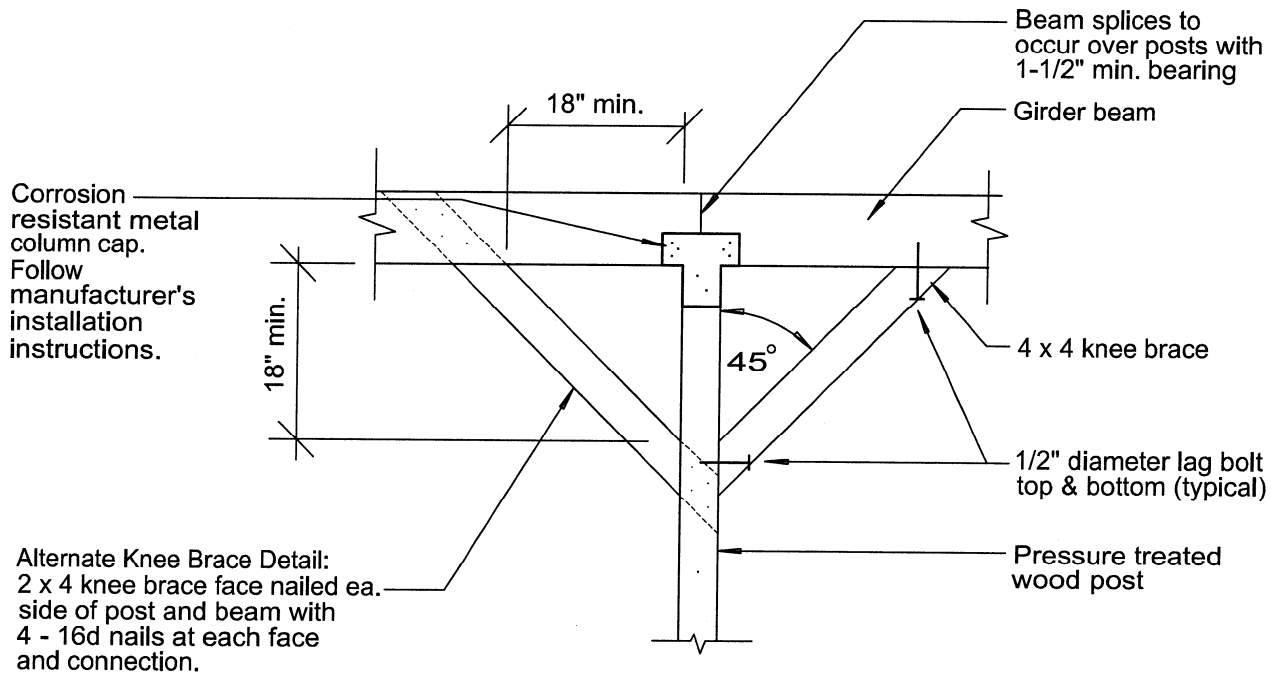
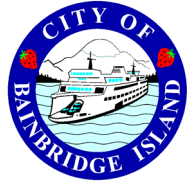


NOTE:

Refer to Deck Construction Note 3, page 1 for requirements on corrosion resistance.

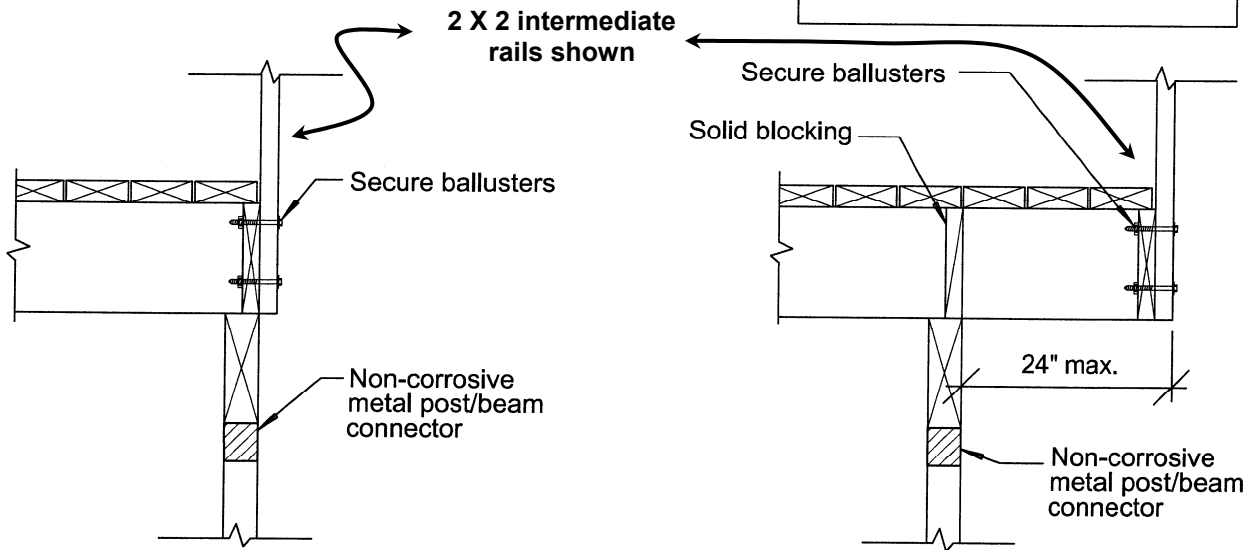


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Drawing - page 5



3
page 5 **Knee Brace Detail**

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



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

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