



Deck Specs

These specifications are intended to be a helpful resource for homeowners and can be used to streamline the permit process for residential deck installations.

Note: If you are proposing to construct a deck that does not follow the specifications provided, an engineer may be required to review your proposed design and provide their seal and signature to confirm that the proposed design meets Ontario Building Code requirements.



Specifications

In this guide:

Deck Attached to Foundation Wall

Deck Not Attached to House

Section Through Stair Post and Rail Guard

Guardrail Picket Elevation Detail

Cross Section Detail - Deck Not Attached to House

Lateral Bracing Details

Bracing Parallel to Beam

Bracing Perpendicular to Beam

Wall Connection Through Siding Wall

Wall Connection Through Solid Concrete

Cross Section Detail - Alternate Footing Layout

DECK ATTACHED TO FOUNDATION WALL

Use appropriate nails as per joist hanger manufacturer recommendations. Ensure min. 3" common galv. nails for double shear hangers. Wood screws, deck screws or drywall screws are not permitted for use with joist hangers

- Line of house

Solid masonry or
concrete foundation wall
(attachment to brick
veneer not permitted)

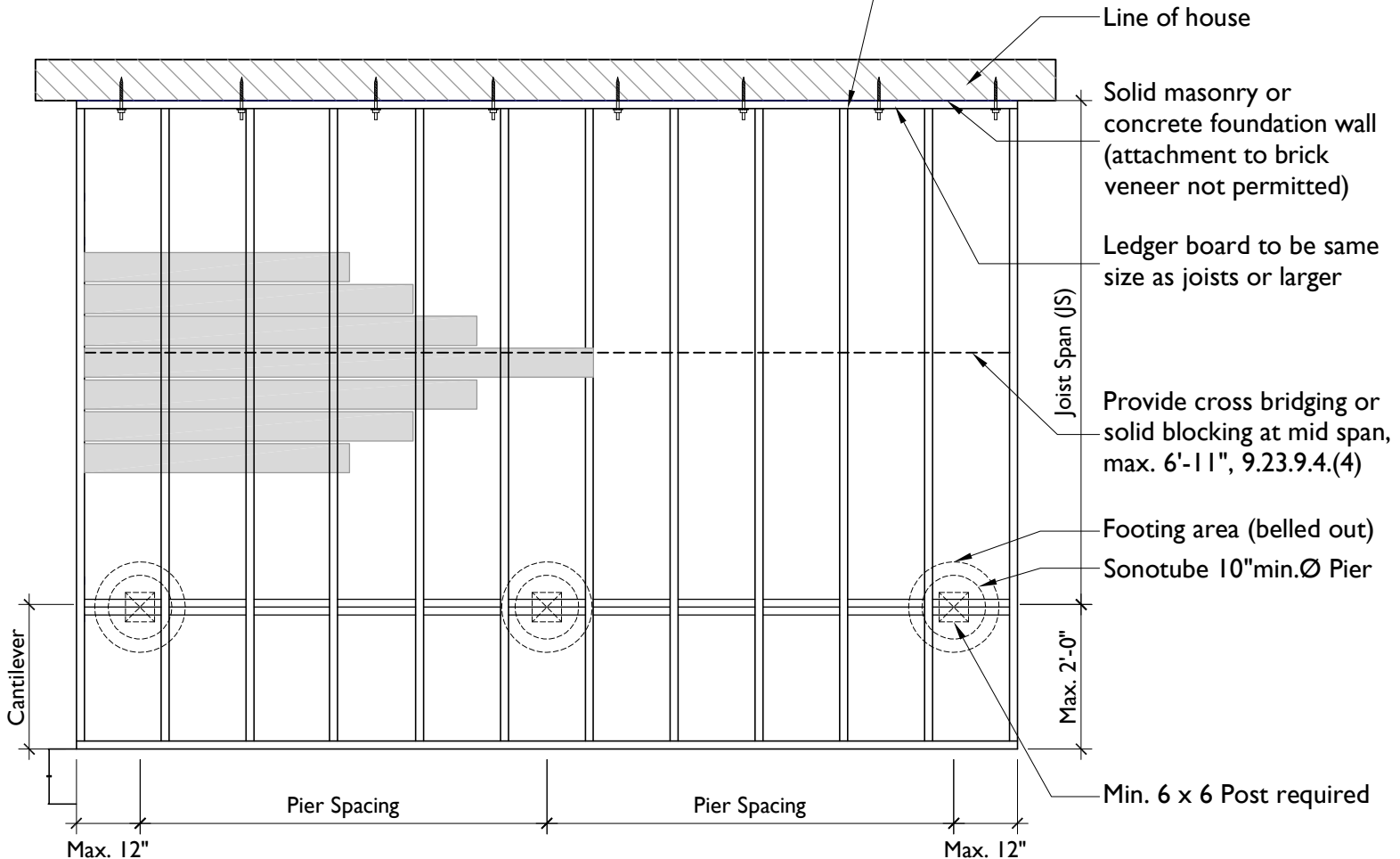
Ledger board to be same size as joists or larger

Provide cross bridging or solid blocking at mid span, max. 6'-11", 9.23.9.4.(4)

- Footing area (belled out)

- Sonotube 10" min. Ø Pier

- Min. 6 x 6 Post required



Joist Sizing

Maximum Span			
Spacing (o.c.)	2x8	2x10	2x12
12"	12'-6"	14'-6"	16'-5"
16"	11'-9"	13'-8"	15'-6"
24"	10'-8"	12'-10"	14'-6"

All joist sizes shall be spaced not more than 16" o.c. where the deck is more than 2'-0" above adjacent grade

Minimum Base Diameter for Pier Footing (Belled Out)

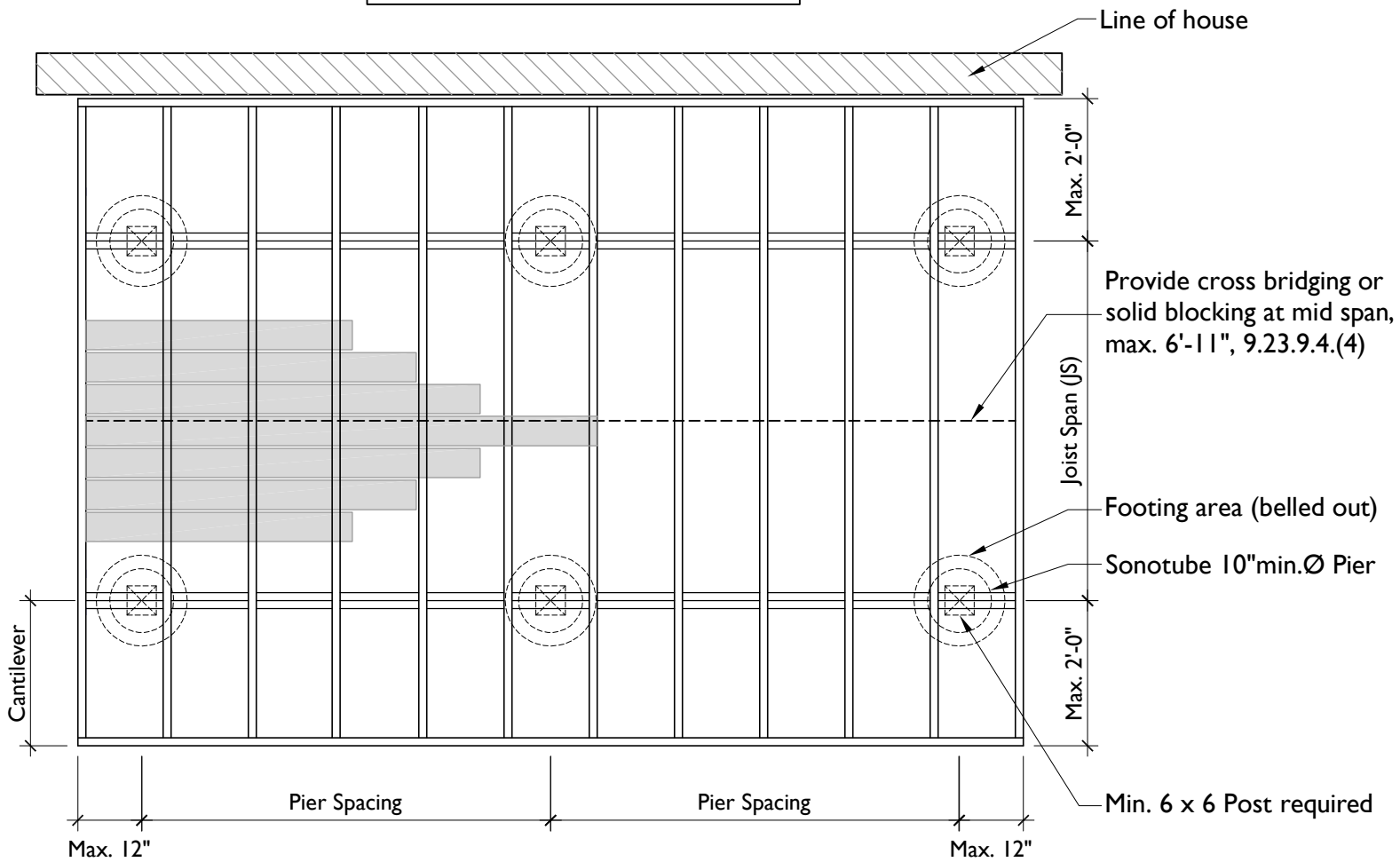
*Supported Joist Length	Pier Spacing (updated Oct 2023)			
	6'	8'	10'	12'
3'	10"	10"	10"	10"
4'	10"	10"	10"	10"
5'	10"	10"	10"	11"
6'	10"	10"	11"	12"
7'	10"	10"	11"	12"
8'	10"	10"	12"	13"

Beam Sizing

	Pier Spacing			
	6'	8'	10'	12'
2 PLY	2 - 2 x 8	2 - 2 x 10	2 - 2 x 12	-
3 PLY	3 - 2 x 6	3 - 2 x 8	3 - 2 x 10	3 - 2 x 12

* Supported joist length = half of joist span + cantilever

DECK NOT ATTACHED TO HOUSE



Joist Sizing

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4 x 4 Support posts
@3'-11" o.c.

Handrail construction to match post and rail construction

2 ½" Corrosion resistant spiral nails or screws, typical

No member or attachment between 5 1/2" and 36" shall facilitate climbing

—Top Rail

3 Rows of 3" nails @12"o.c.

Secure stringers at top and bottom with framing connector

2 x 10 min. stringer size

2-3/8"Ø Thru/ Bolts with 1 1/4"
outside diameter washers

2 x 4 Wood blocking @4'-0" o.c.
minimum between stringers

Concrete pad or
patio stones

Steps shall not be in direct contact with the ground unless treated to prevent decay (9.8.9.3)

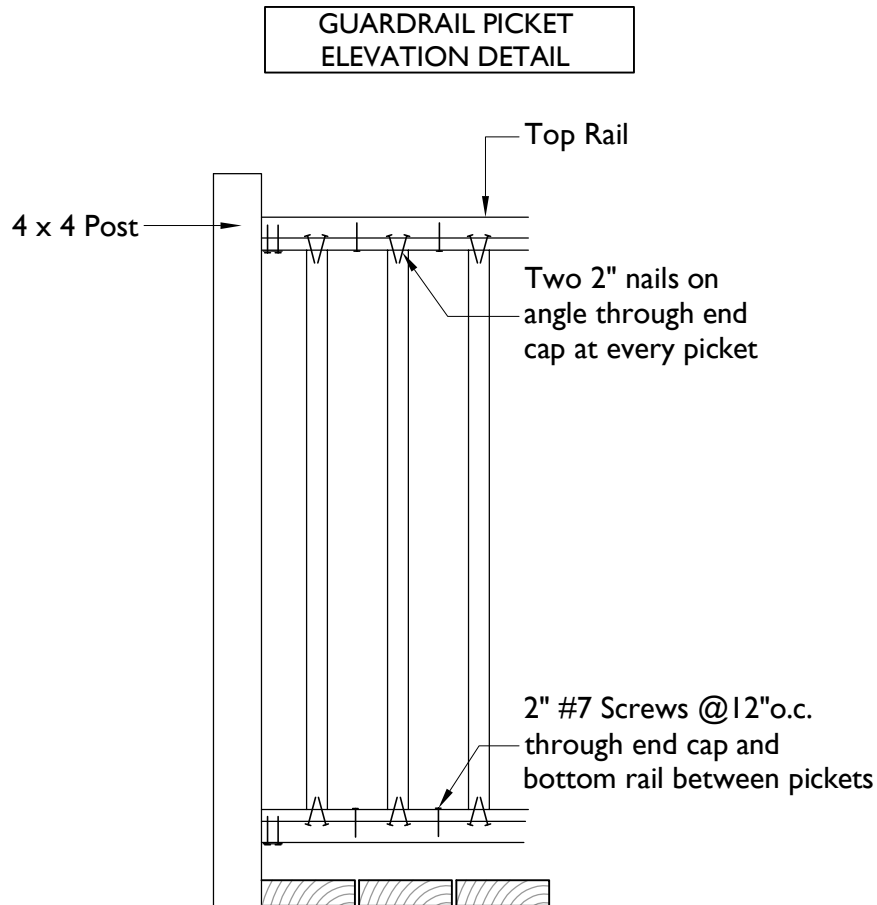
Stringer anchored to precast concrete

Stringer anchored to precast concrete

* Example Only - Guards shall comply with OBC. 9.8.8. and SB-7

* Handrail required on stairs if more than 3 risers

* Wood stringers shall have min. effective depth of 90mm(3 ½") and overall min. size of 235mm(10"). Stringers to be max. 900mm(35") apart or 1200mm(47") where risers support tread, OBC. 9.8.9.4.

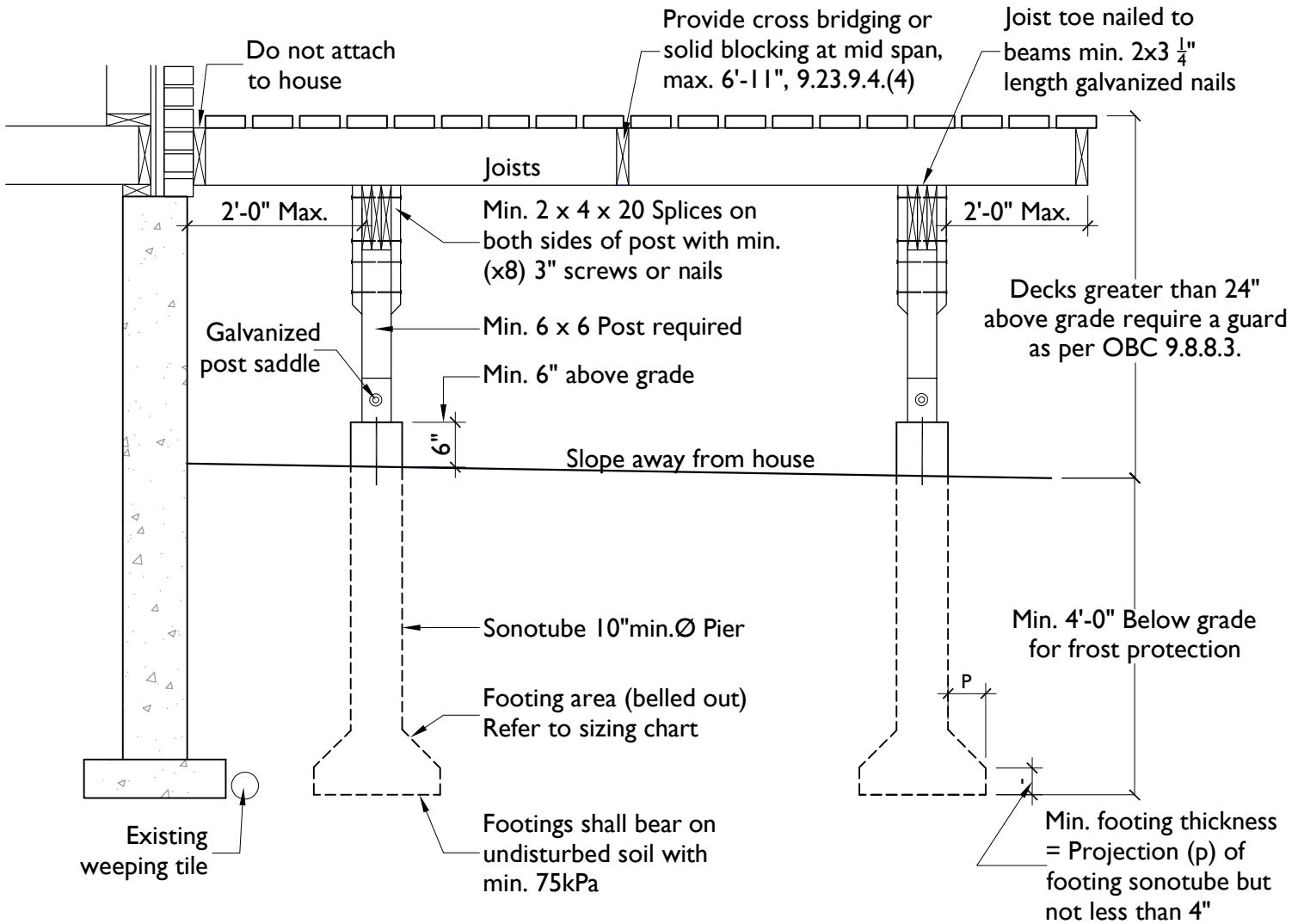


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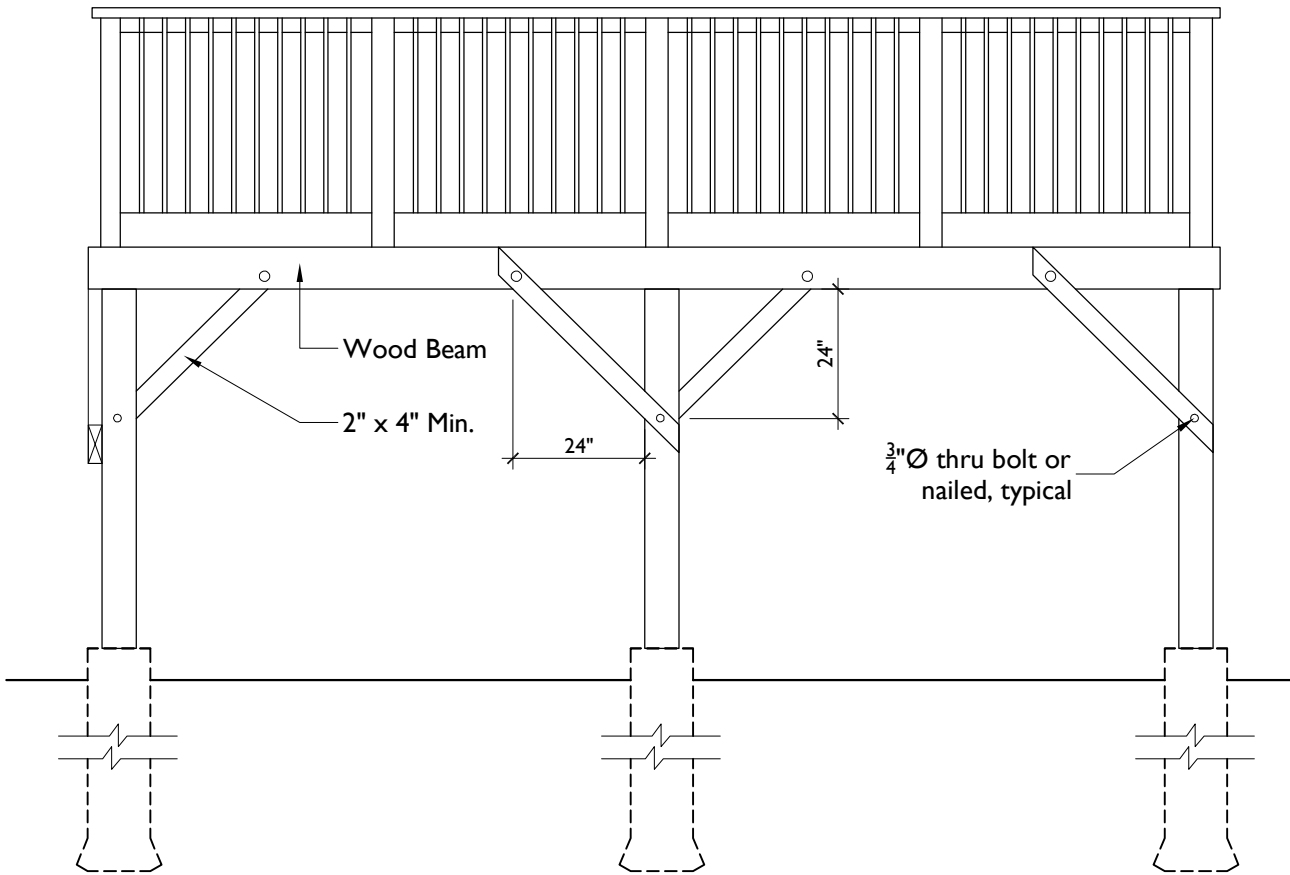
* 36" Guard height for decks 5'-11" or less above grade

42" Guard height for decks greater than 5'-11" above grade

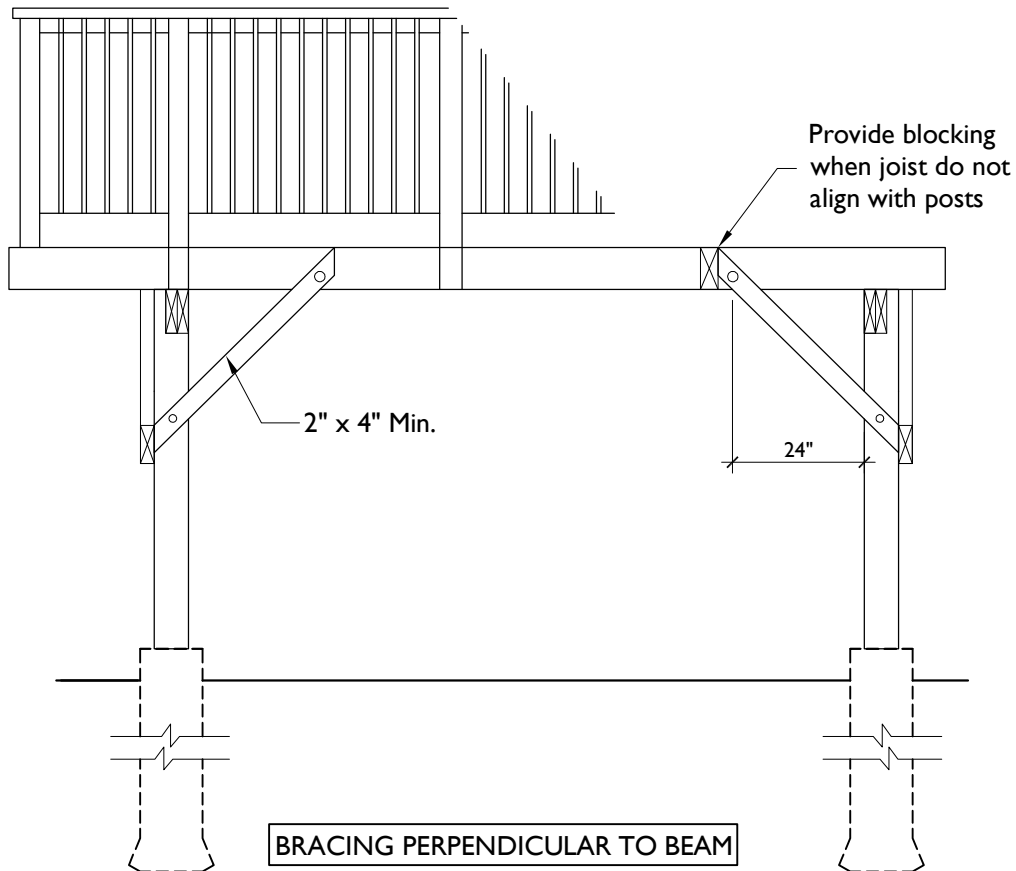
**CROSS SECTION DETAIL
DECK NOT ATTACHED TO HOUSE**



LATERAL BRACING DETAILS EXAMPLE



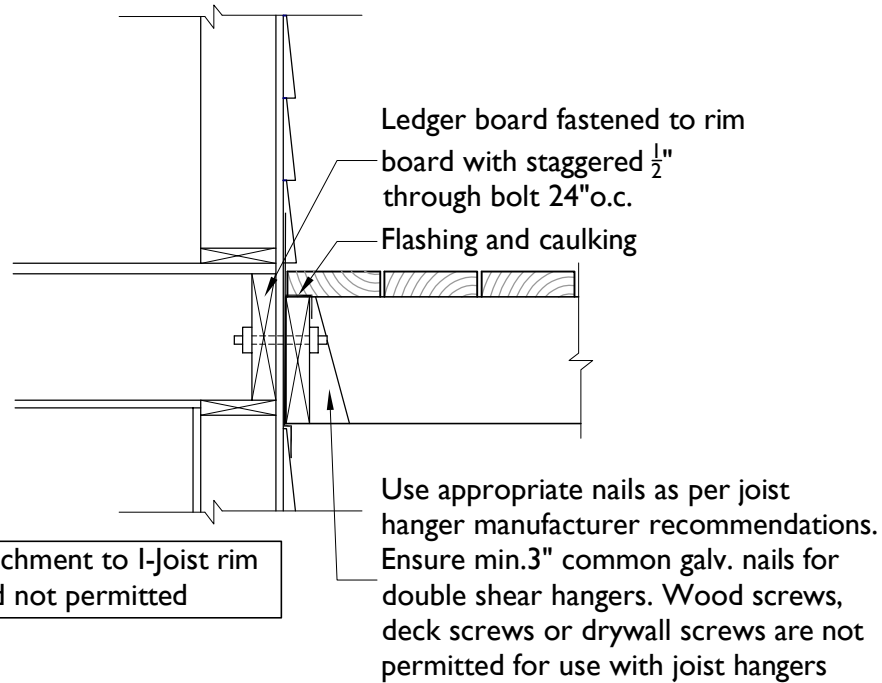
BRACING PARALLEL TO BEAM



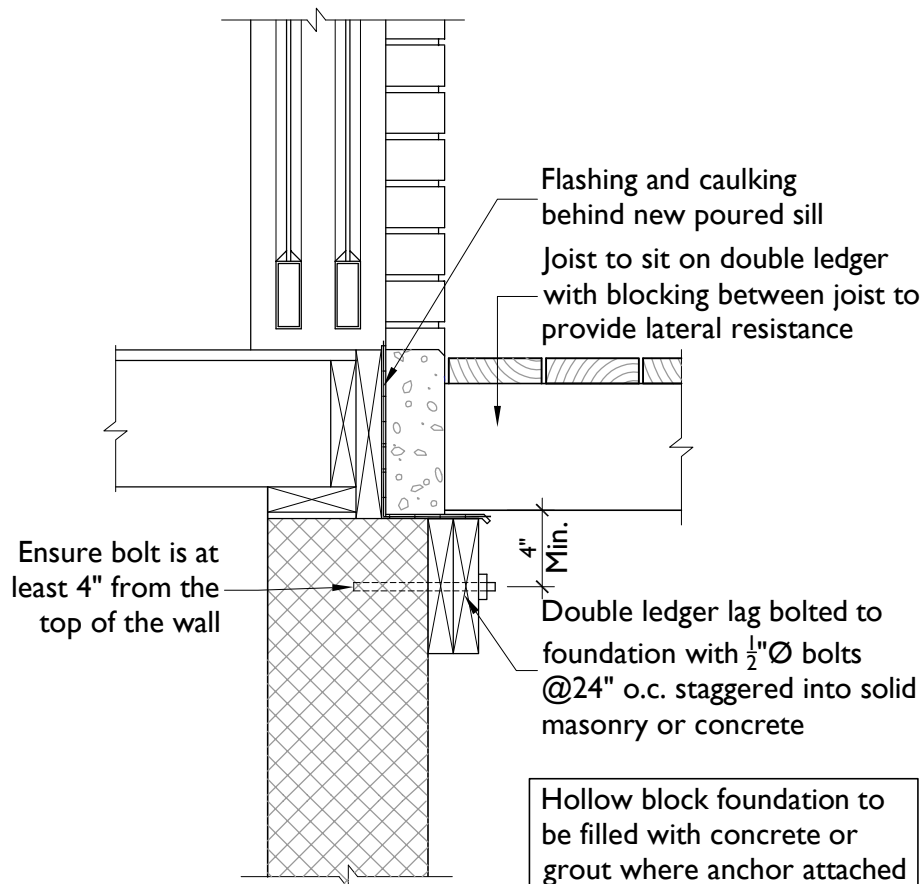
BRACING PERPENDICULAR TO BEAM

DECKS GREATER THEN 24" ABOVE GRADE SHALL BE PROVIDED WITH LATERAL BRACING TO ENSURE DECK STABILITY AS PER OBC ARTICLE 9.17.2.2.

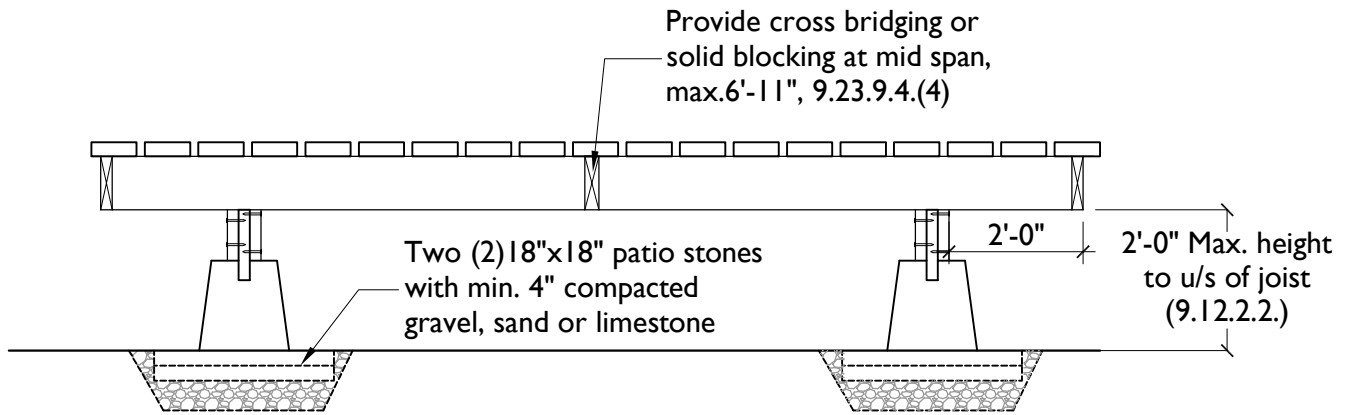
WALL CONNECTION THROUGH SIDING WALL



WALL CONNECTION THROUGH SOLID CONCRETE



CROSS SECTION DETAIL ALTERNATE FOOTING LAYOUT



- * Decks must not be attached to any other structure
- * Any lumber material within 6" from grade requires to be rated for below grade use.
- * Differential movement may occur and needs to be adjusted by the owner as necessary



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