



Building Services Department

1695 Emsdale Road, P.O. Box 70, Emsdale ON P0A 1J0

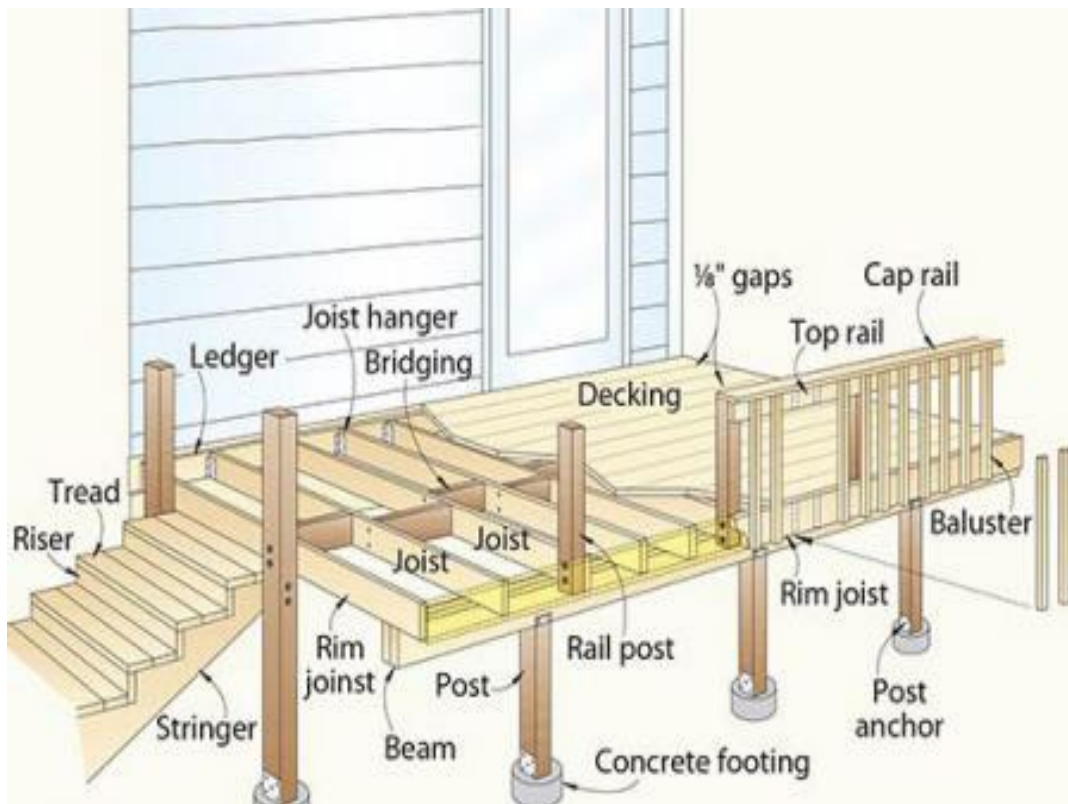
Phone: 705-636-5941

Fax: 705-636-5759

www.townshipofperry.ca

Deck Construction Guide

For detached and semi-detached dwellings



General Requirements

A building permit **is** required for all decks where:

- The deck is more than 60 cm (24 inches) above grade;
- The deck is supporting a roof;
- The deck is attached or adjacent to another building

General Zoning Restrictions:

Township of Perry Zoning By-law #2014-21 Section 3.2.4. Permitted Encroachments Table 3.1 (Deck provisions indicated). **Please contact the Township Office to determine the zoning of your property to assist with the following table.**

Permitted Structure	Applicable Required Yard(s)	Permitted Encroachment
Uncovered Decks (0.3 to 1.2 m in height above finished grade)	Interior, Front and Exterior Side Yard	May encroach 1.2 m into the required yard but no closer than 1.2 m to the interior side lot line.
	Rear Yard	No closer than 1.2 m to the rear lot line.
Uncovered Decks (greater than 1.2 m in height above finished grade)	Interior Side Yard	May encroach 1.2 m into the required yard but no closer than 1.2 m to the interior side lot line.
	Front & Exterior Side Yard	May encroach 2.4 m into the required yard.
	Rear Yard	May encroach 3.6 m into the required rear yard but not closer than 3.0 m to the rear.

Note: All accessory structures must comply with the Township of Perry's Zoning By-law. If you are unsure whether the accessory structure complies or not, please contact the Building Department at 705-636-5941.

Application Requirements

- Completed building permit application forms.
- Two copies of construction drawings including floor plans, elevations, and sections drawn to scale. The attached template drawings and details could be used, providing all dimensions and information are shown on the "Deck Framing Plan" (page 5).
- Two copies of the most recent survey **or** detailed site sketch for the property showing dimensions of all existing buildings and structures, and their setbacks, drawn to scale. The proposed deck is to be plotted on the site plan and setback dimensions to all property lines are to be shown. (See attached sample site plan on page 6).
- The current permit fee, payable at time of application by cheque, cash, debit, credit card (2.5% additional fee) or electronic payment. Cheques are made payable to "The Township of Perry". If choosing to make an online banking payment, please contact the municipality to obtain the online banking number.

Call before you dig:

It is the owner(s) / contractor(s) responsibility to call the utility companies to locate any underground utility lines within the construction zone to avoid damaging them during construction.

- ONTARIO ONE CALL – Call before you dig 1-800-400-2255

Step by Step Application Instructions

1. Site Plan - Refer to the sample "Site Plan" on page 6.

Create or modify a copy of your own survey or site plan. Include all the dimensions and information as shown on the sample.

2. Deck Framing Plan - Refer to the sample "Deck Framing Plan" on page 5.

Create your own or modify the sample to show all of your structural information. Refer to pages 7-13 for structural detail and pages 14-19 for guard detail as per (OBC SB-7 guide) to assist you with framing construction.

3. Building Section - Refer to the "Building Section" on page 7.

4. Foundation Design

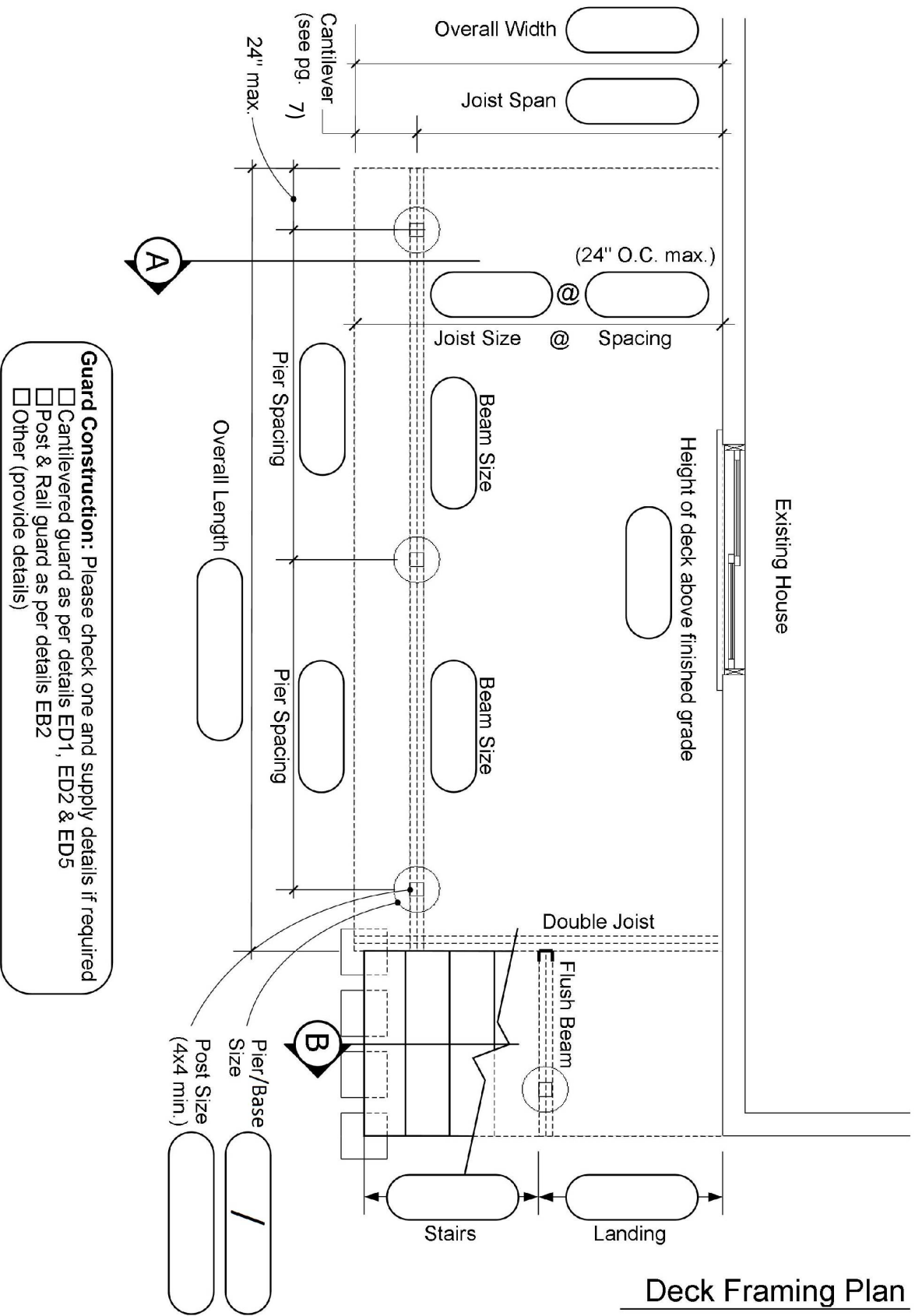
There are a number of foundation options to choose from based on site conditions, cost, and use. Select the foundation you wish to use for your building and provide the construction detail with your drawing. 'Pier Type' foundations consist of either poured concrete footing base (square base) or BigFoot tubes (circular base). Pier Type foundations may also be at grade provided the deck walking surface is no more than 24" off finished grade and the native soil is a good granular material that is non-frost susceptible.

"Helical Piles" are also acceptable but require an engineered design and must be installed by a qualified installer. Pile torque reports must be provided to the Township prior to the framing inspection.

Note: Please provide your own deck plan if your deck is different from what is shown in this package (use the same concept and provide the same information). You will also need to provide your own details if the proposed construction methods differ from those provided. Any proposed prefabricated guard/railing system must have a set of stamped details provided by a licensed Engineer with the Province of Ontario (the manufacturer or building supply store would supply you with these details at your request).

- Deck construction packages purchased from a building supply store or from a qualified designer require a Schedule 1: Designer Information Form to accompany the building application. Structures designed by the property owner require a Schedule 1: Designer Information Form as well. As the property owner, you are exempt from designer qualification. The form must still be filled in and property owner to check off last check box indicating "property owner" as reason for exemption.

Final Note: As the building owner, you are ultimately responsible for complying with all building requirements. Failure to obtain building permits can result in costly construction delays, legal action and/or the removal of work already completed.

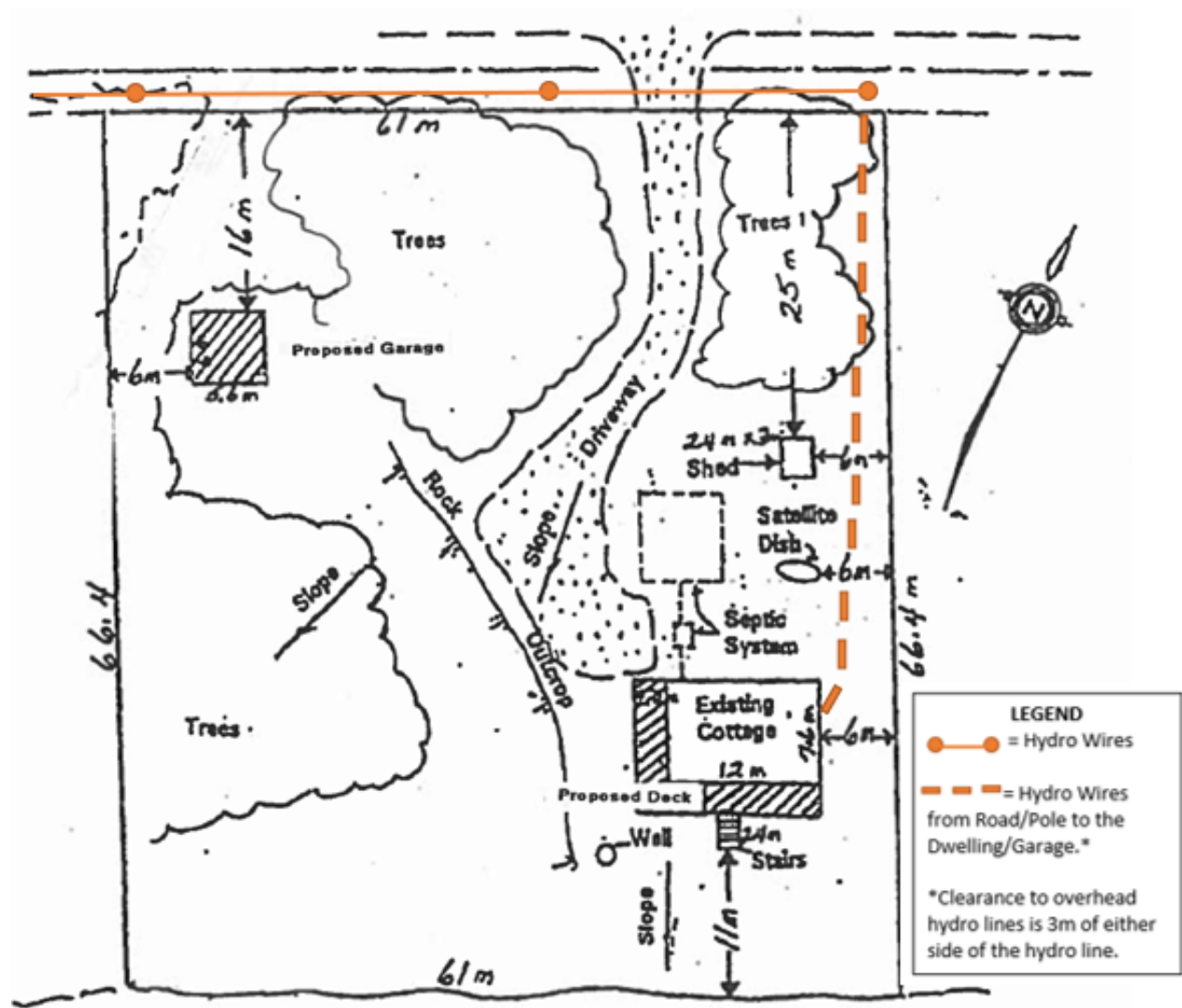


Deck Framing Plan

Scale: NTS

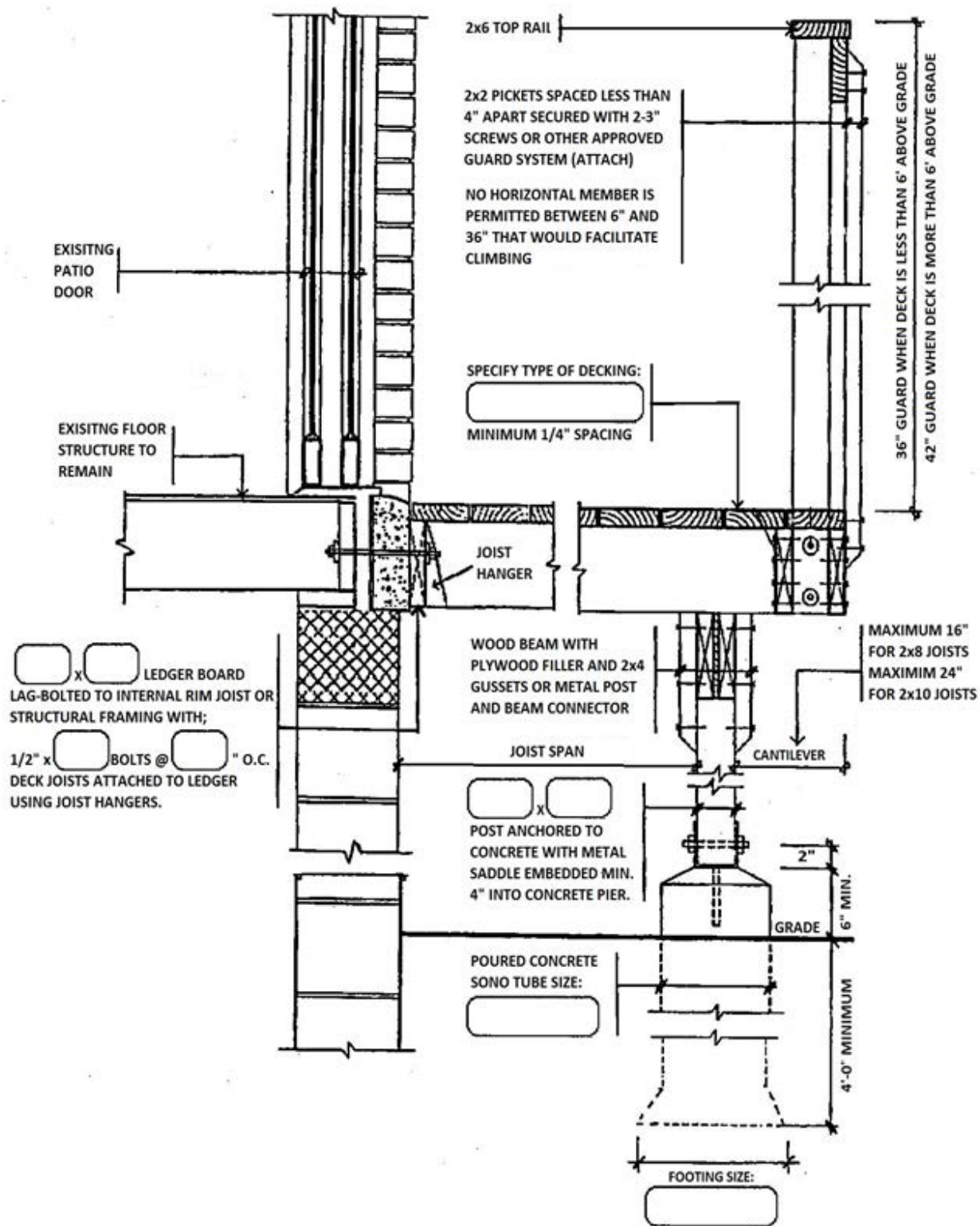
Sample Site Plan Sketch

Dimension your own site plan similar to the one below and include the required information as set out in 'Site Information' table.



SITE INFORMATION	
Site Features	Area (ft ² /m ²)
Area of lot:	
Footprint of house:	
Footprint of existing accessory buildings:	
Footprint of proposed deck:	
Length of shoreline:	

Building Section



Structural Requirements

Concrete Pier Sizing

Note: This table is based on OBC min. 75kPa (1570 psf) soil bearing capacity

JOIST SPAN	PIER SPACING			
	1.2m (4')	1.8m (6')	2.4m (8')	3.0m (10')
1.8m (6')	200mm (8")	250mm (10")	300mm (12")	350mm (14")
2.4m (8')	250mm (10")	300mm (12")	350mm (14")	400mm (16")
3.0m (10')	300mm (12")	350mm (14")	400mm (16")	460mm (18")
3.6m (12')	300mm (12")	350mm (14")	400mm (16")	460mm (18")

Floor Joist Span

JOIST SPACING (on center)	JOIST SPAN			
	1.8m (6')	2.4m (8')	3.0m (10')	3.6m (12')
300 mm (12")	38 x 184 (2"x8")	38 x 184 (2"x8")	38 x 184 (2"x8")	38 x 184 (2"x8")
400 mm (16")	38 x 184 (2"x8")	38 x 184 (2"x8")	38 x 184 (2"x8")	38 x 235 (2"x10")
600 mm (24")	38 x 184 (2"x8")	38 x 184 (2"x8")	38 x 235 (2"x10")	38 x 235 (2"x10")

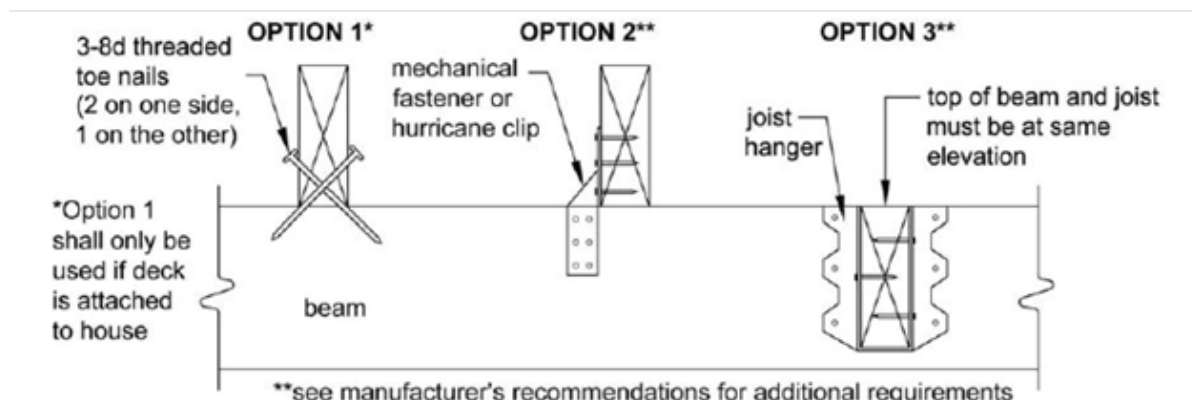
Beam Sizing

JOIST SIZE	JOIST SPAN	PIER SPACING			
		1.2m (4')	1.8m (6')	2.4m (8')	3.0m (10')
38 x 184 (2"x8")	1.8m (6')	2 - 38mm x 184mm (2 - 2"x8")	2 - 38mm x 184mm (2 - 2"x8")	2 - 38mm x 235mm (2 - 2"x10")	2 - 38mm x 235mm (2 - 2"x10")
	2.4m (8')	2 - 38mm x 184mm (2 - 2"x8")	2 - 38mm x 184mm (2 - 2"x8")	2 - 38mm x 235mm (2 - 2"x10")	2 - 38mm x 235mm (2 - 2"x10")
	3.0m (10')	2 - 38mm x 184mm (2 - 2"x8")	2 - 38mm x 184mm (2 - 2"x8")	2 - 38mm x 235mm (2 - 2"x10")	2 - 38mm x 235mm (2 - 2"x10")
38 x 235 (2"x10")	3.6m (12')	2 - 38mm x 184mm (2 - 2"x8")	2 - 38mm x 184mm (2 - 2"x8")	2 - 38mm x 286mm (2 - 2"x12")	2 - 38mm x 286mm (2 - 2"x12")

*2x8 joists required for wood railing (guards) support as per SB-7 of the Ontario Building Code

Note: Screws are not permitted with the assemble of beams or the fastening of mechanical fasteners (i.e. joist hanger, hurricane clip, hold down, etc.)

Connection of Floor Joists to Beam Support



Ledger Board Attachment

- Decks are usually supported on one side by a ledger attached to the dwelling. This ledger attachment is critical to ensure the deck is safely and securely supported at this point. When the ledger is attached to the house, there are very specific requirements that must be met. Follow the diagrams closely for the proper attachment of the ledger.
- The deck ledger shall NOT be nailed to the dwelling – it must be lagged or bolted to the structure of the dwelling.
- The size and spacing of the lag bolts are based on their capacity. Lag bolt values are assumed to be 325 pounds for 1/2 inch lag bolts and 190 pounds for 3/8 lag bolts. The span of the floor joists determines how much load is being transferred to the ledger and thus to the lag bolts.

Deck Ledger to House Attachment (lag bolt spacing)

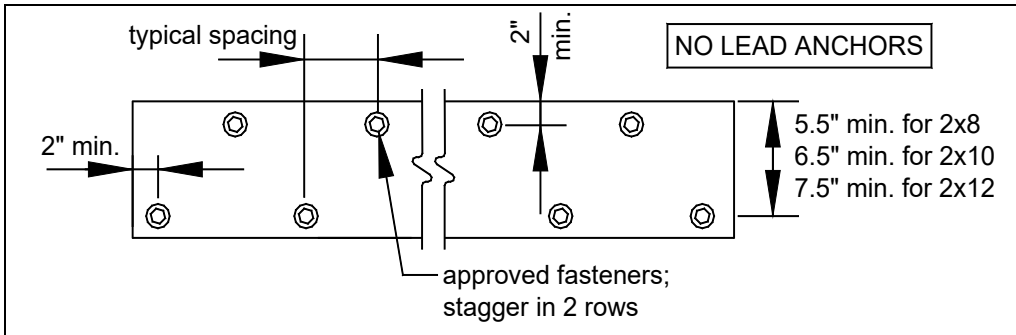
LAG BOLT SIZE	JOIST SPAN			
	Up to 1.8m (6')	2.4m (8')	3.0m (10')	3.6m (12')
12.7mm (1/2")	812mm (32" o.c.)	400mm (16" o.c.)	400mm (16" o.c.)	300mm (12" o.c.)
Equivalent 16" o.c. Joist Spacing	Every Other Joist Space	Every Joist Space	Every Joist Space	Each Joist Space with Two Every Other Space
9.5mm (3/8")	610mm (24" o.c.)	300mm (12" o.c.)	300mm (12" o.c.)	200mm (8" o.c.)
Equivalent 16" o.c. Joist Spacing	Two Every Third Joist Space	Each Joist Space with Two Every Other Space	Each Joist Space with Two Every Other Space	Two Each Joist Space Three Every Other Space

- Deck ledgers shall be minimum 2x8 pressure-preservative-treated No. 2 grade lumber or other approved materials as determined by good engineering practices.
- When solid-sawn pressures-preservative-treated deck ledgers are attached to engineered wood products (structural composite lumber rimboard or laminated veneer lumber), the ledger board attachment shall be designed in accordance with the manufacturer's recommendations or good engineering practices.
- Pilot holes shall be pre-drilled with a size between 17/32" to 9/16".
- Lag screws are only permitted where existing site conditions can be confirmed.

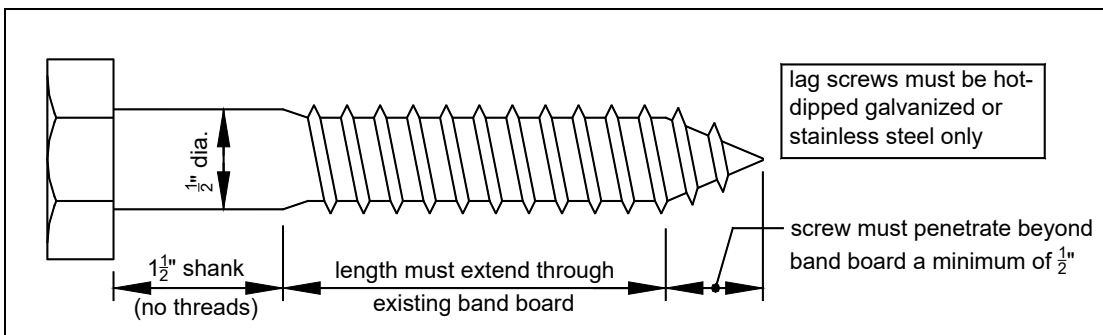
Structure Requirements

****Refer to Lag Bolt Spacing Table****

Ledger Board Fastener Spacing and Attachment

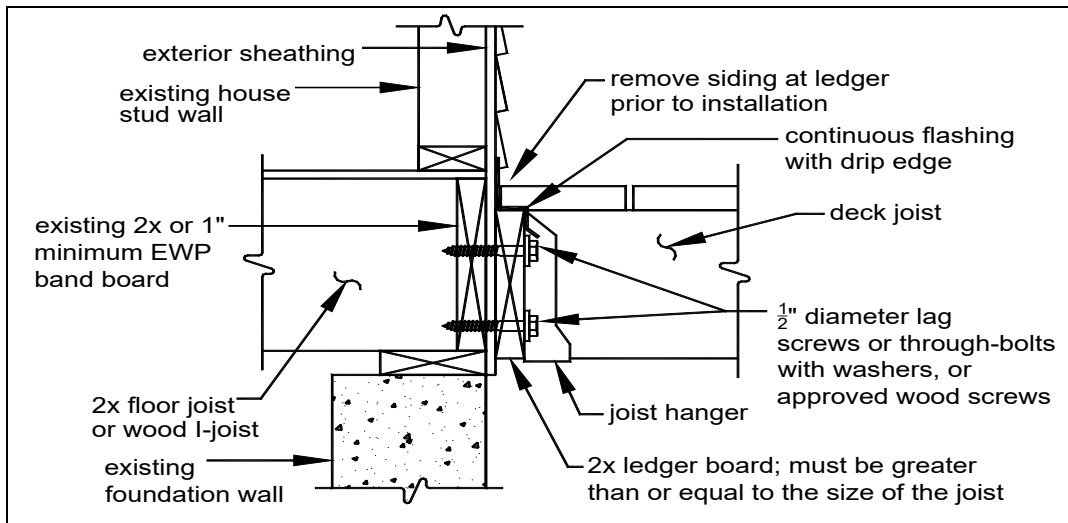


Lag Screw (Bolt)

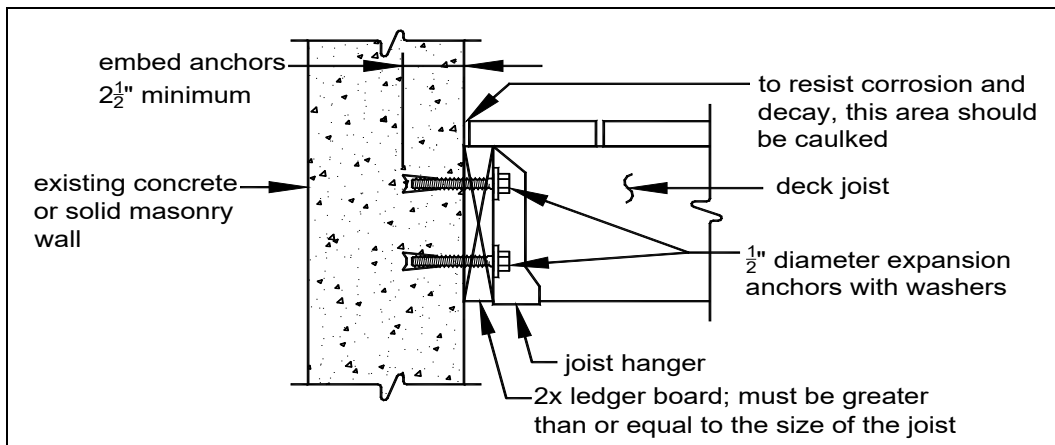


- Each lag screw bolt shall have pilot holes drilled as follows:
 - Drill a 1/2" diameter hole in the ledger board.
 - Drill a 5/16" diameter hole into the band board of the existing house.
- DO NOT DRILL A 1/2" DIAMETER HOLE INTO THE BAND BOARD.
 - The threaded portion of the lag screw shall be inserted into the pilot hole by turning.
- DO NOT DRIVE LAG SCREWS WITH A HAMMER.
 - Use soap or a wood-compatible lubricant as required to facilitate tightening. Each lag screw shall be thoroughly tightened (snug but not over-tightened to avoid wood damage).

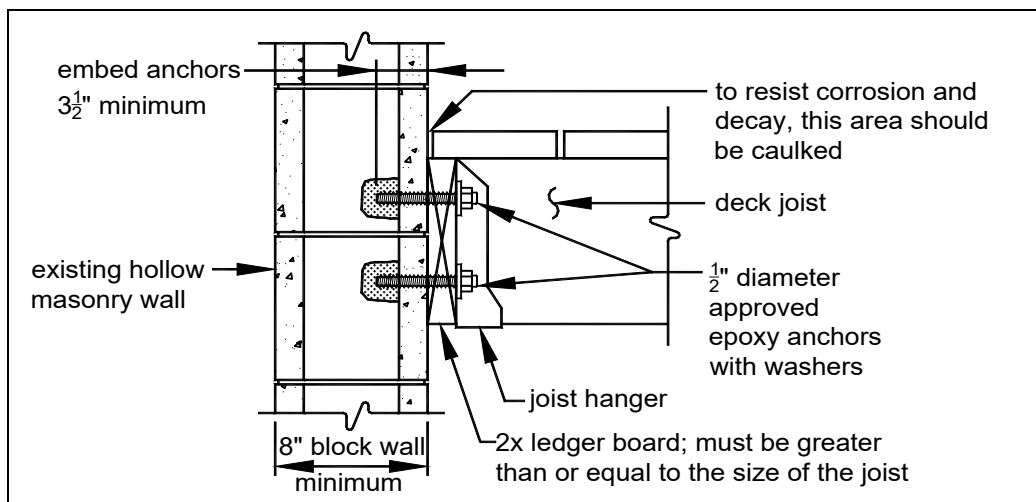
Ledger Board Attachment to House Structure



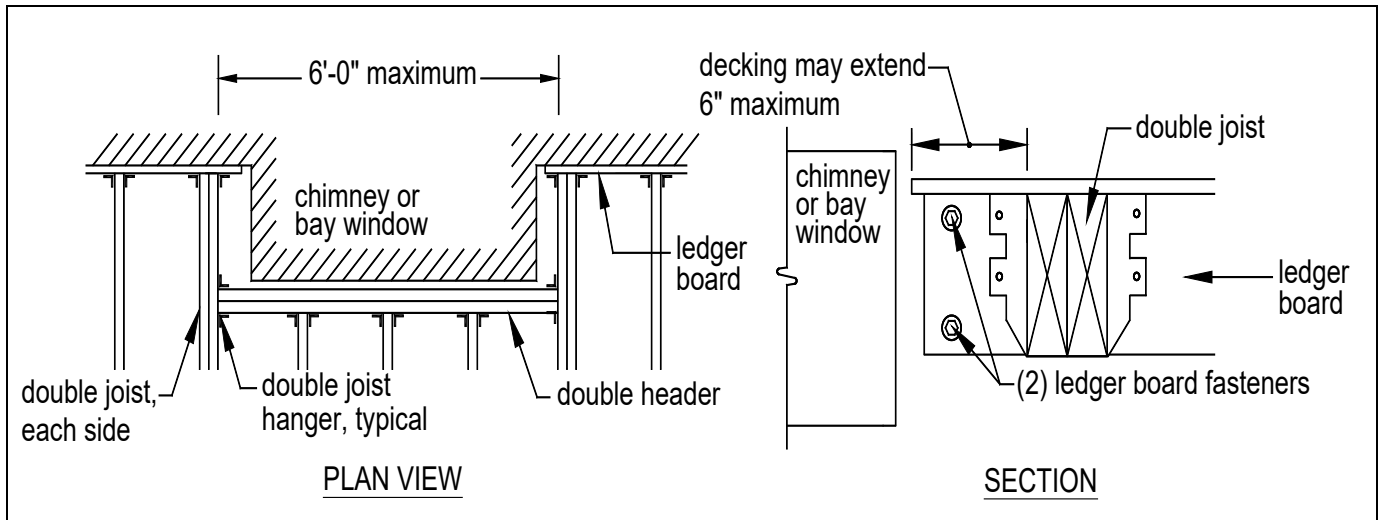
Attachment of Ledger Board to Foundation Wall (Concrete or Solid Masonry)



Attachment of Ledger Board to Foundation Wall (Hollow Masonry)

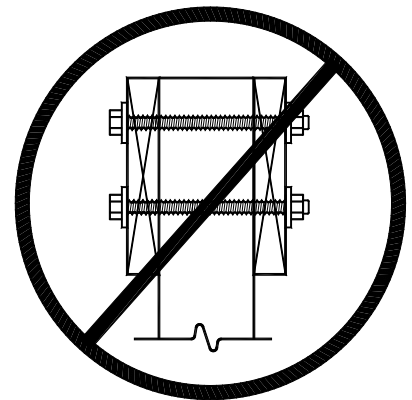


Detail for Framing Around a Chimney or a Bay Window



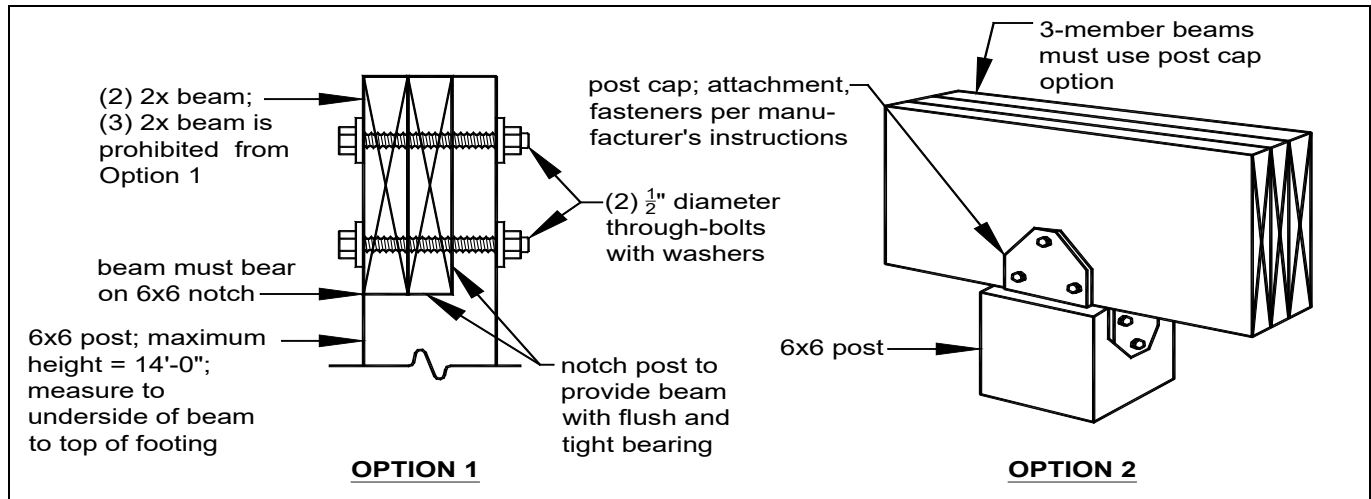
Deck Supports: Post Sizing

TRIBUTARY LOAD: SUPPORTED DECK AREA m ²		
TOWNSHIP OF PERRY SNOW LOAD = 1.9 kPa (40lbs/ft ²) Deck supporting HOT TUBS must be designed by a qualified person (e.g. engineer)		
POST SIZE	MAXIMUM HEIGHT	AREAm ² (ft ²)
89mm x 89mm (4"x4")	1.0m (3'-3")	8.09 (87)
	1.5m (5'-0")	4.42 (48)
	2.0m (6'-7")	2.35 (25.3)
140mm x 140mm (6"x6")	2.0m (6'-7")	10.2 (110)
	2.5m (8'-2")	6.95 (74.8)
	3.0m (10'-0")	4.74(51)
	3.5m (11'-6")	3.29 (35.4)

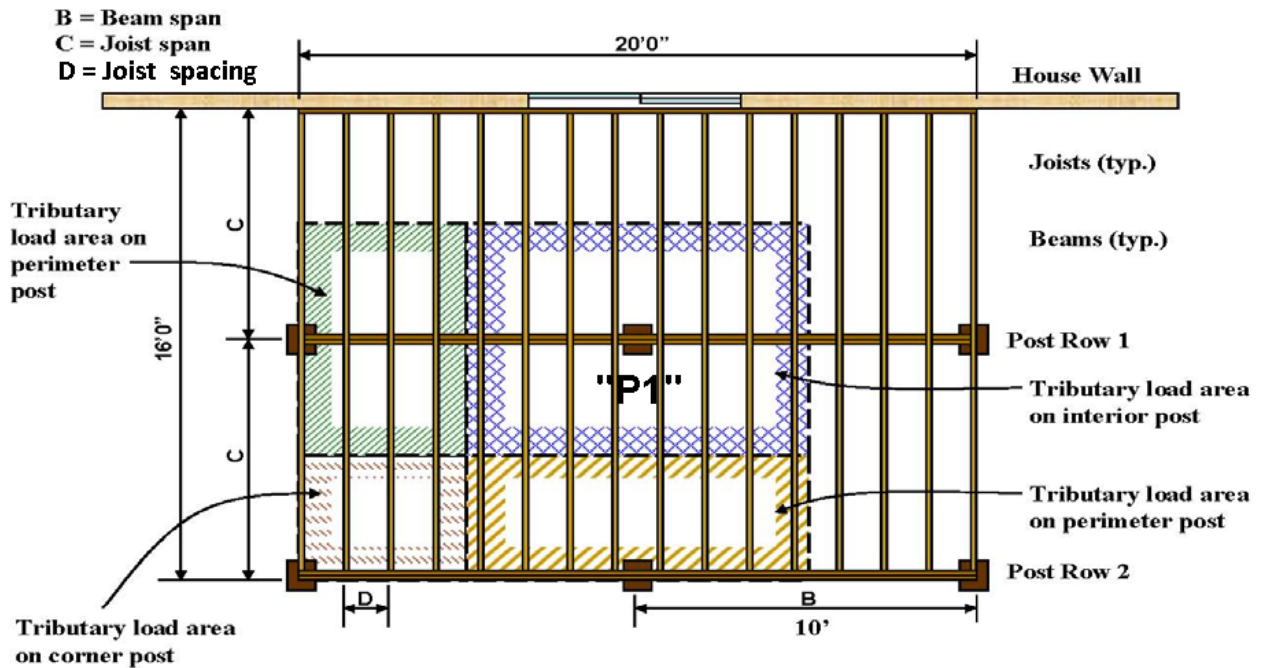


Prohibited Connection

Post to Beam Options



Tributary Load Area for Posts



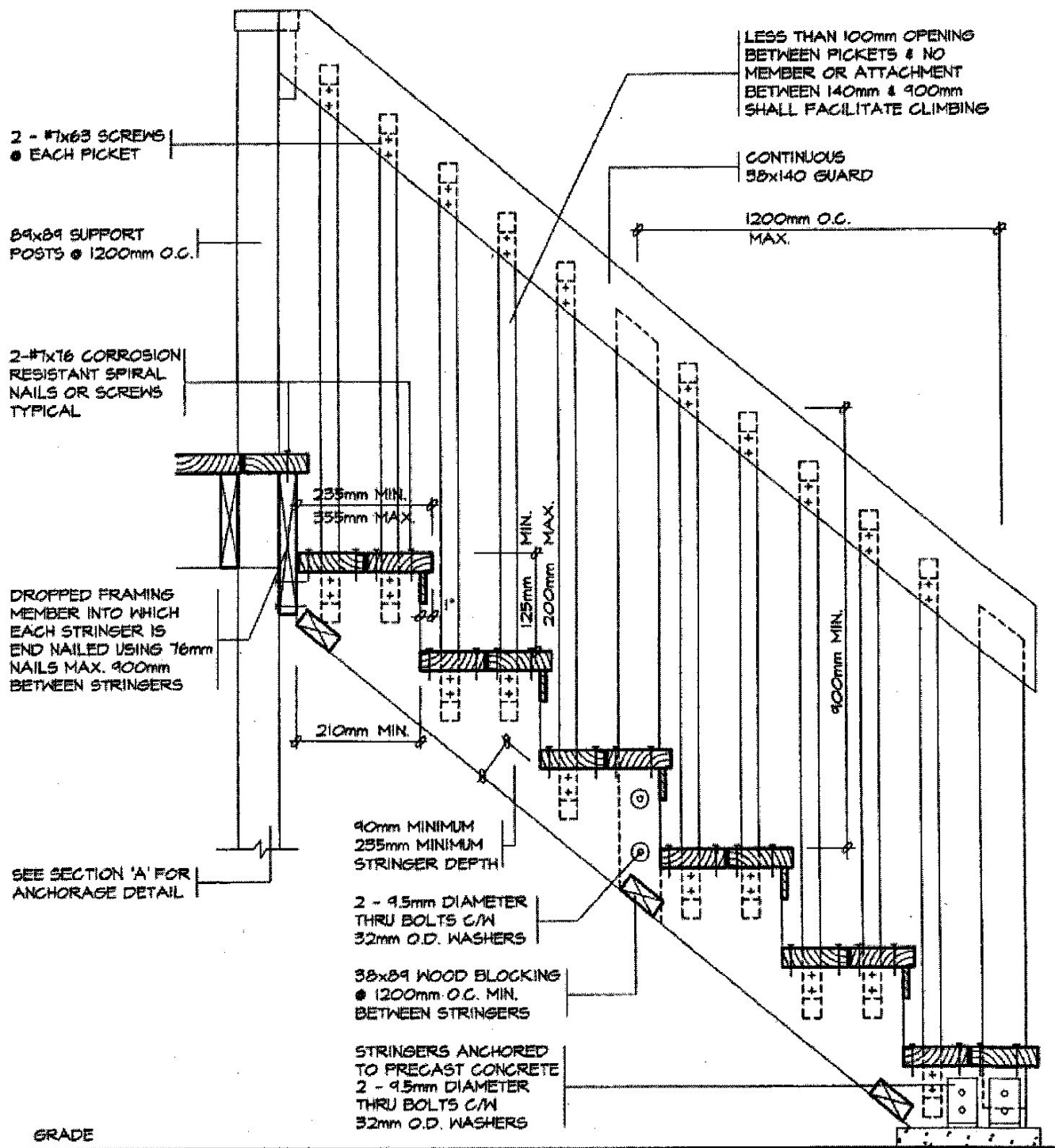
Example for loading on "P1":

Tributary Area

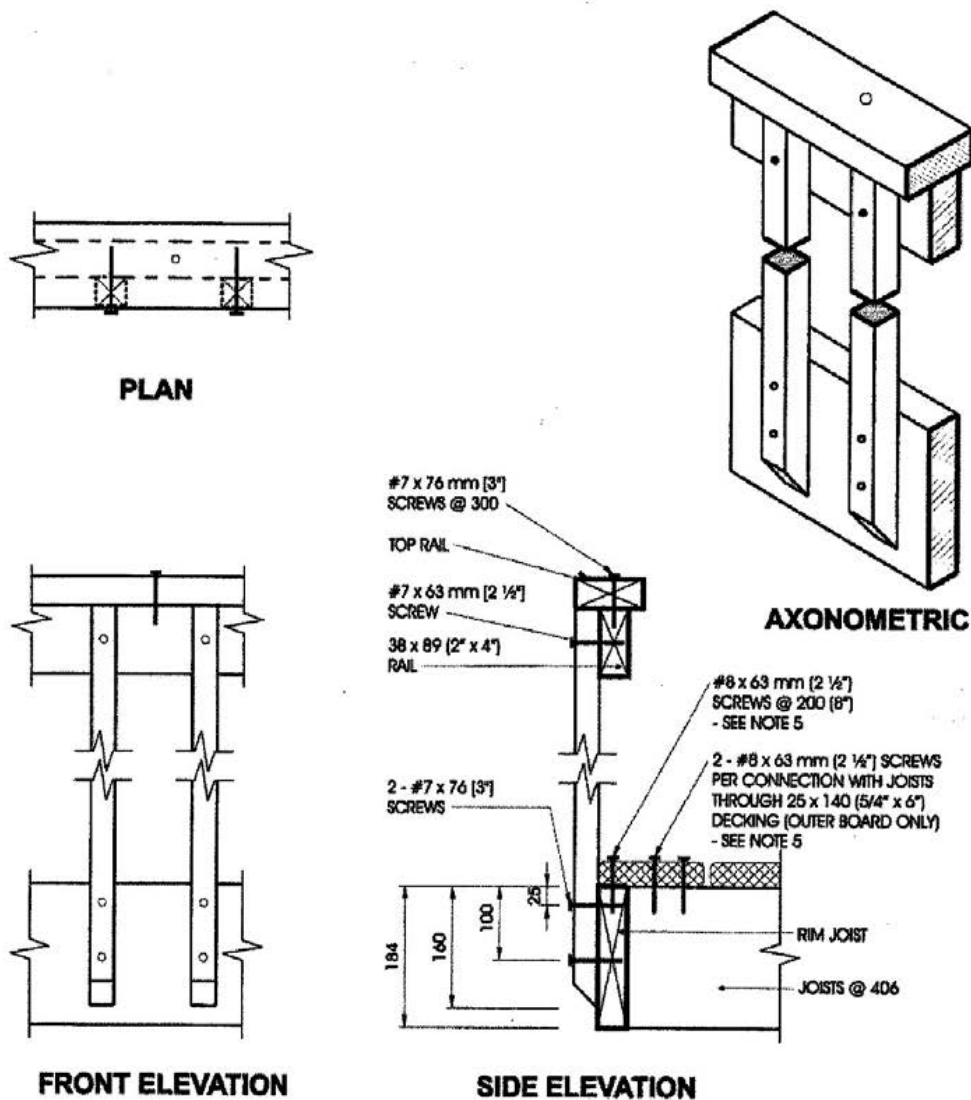
$$\begin{aligned}
 &= [(8/2) + (8/2)] \times [(10/2) + (10/2)] \\
 &= [(4 + 4)] \times [(5 + 5)] \\
 &= 8 \times 10 \\
 &= 80 \text{ ft}^2
 \end{aligned}$$

From the table; a 6 x 6 post with a maximum height of 12' is permitted.

Stair and Guard Construction Detail



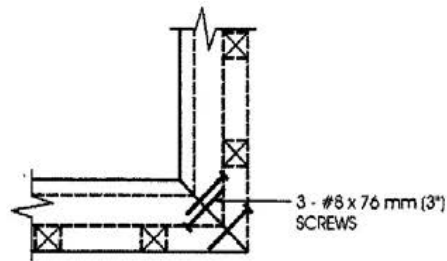
Detail ED-1 of SB7 Guide – Exterior Connection: Cantilevered Picket Screwed to Rim Joist



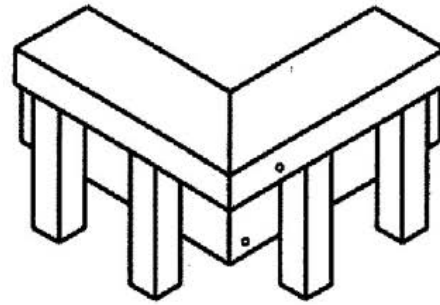
Note:

1. Provide a suitable post, return, or solid support at each end of the guard.
2. Wood for cantilevered pickets shall be Douglas Fir, Spruce-Pine-Fir, or Hem-Fir Species.
3. Fasten rim joist to each floor joist with 3 – 82 mm (3 1/4") nails.
4. Dimensions shown are in mm unless otherwise specified.
5. The outer deck board shall not be less than 140 mm, (6" nominal) wide. Where 38 mm (2" nominal) thick boards are used, the length of the wood screws shall be not less than 76 mm (3").

Detail ED-5 of SB7 Guide – Exterior Connection: Corner Joist

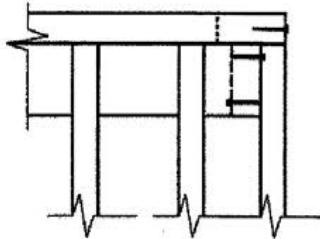


PLAN TOP RAIL

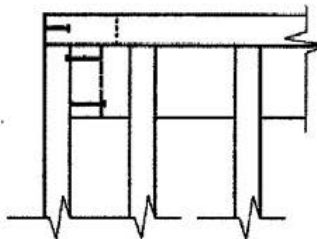


AXONOMETRIC

ONE FASTENER IN HORIZONTALLY ORIENTATED PORTION OF TOP RAIL
AND TWO IN VERTICALLY ORIENTATED PORTION.



FRONT TOP RAIL

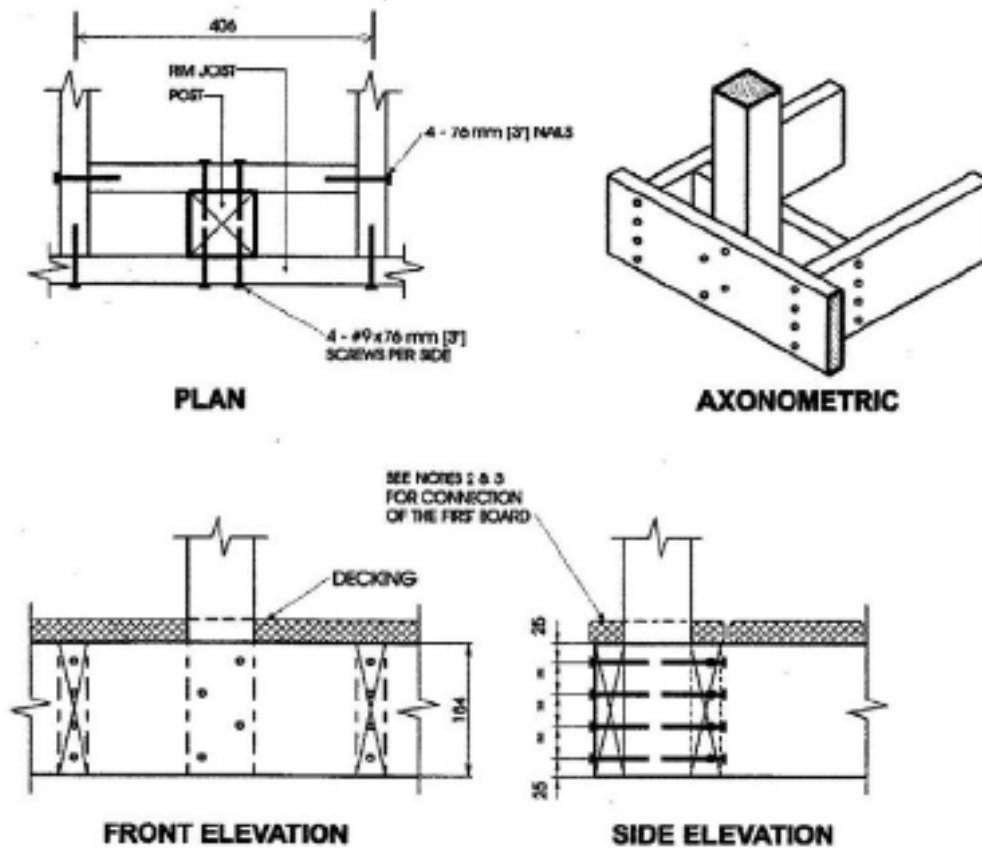


SIDE TOP RAIL

Note:

1. Screws fastening pickets are omitted for clarity.
2. Provide a minimum of 10 pickets beyond the return if end restraint of the guard is provided by this return detail only.

Detail EB-2 of SB7 Guide – Exterior Connection: Post Screwed to Rim Joist



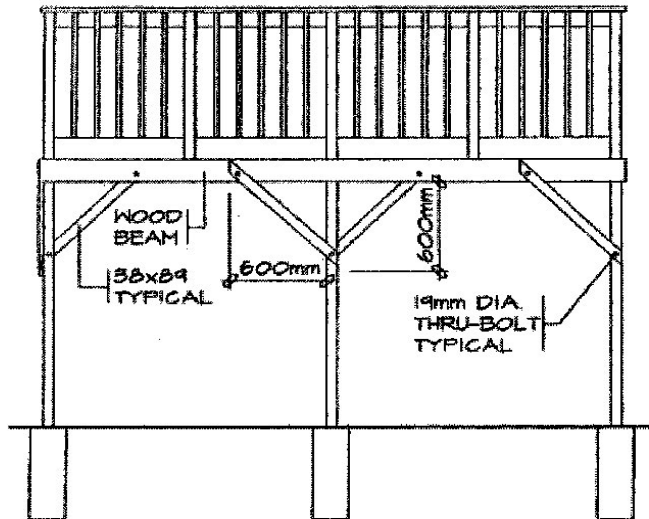
Note:

1. Decking is omitted from the plan view and the axonometric view for clarity.
2. Fasten 25mm x 140mm (5/4" x 6" nominal) outer deck board to rim/joist with 63mm (2 1/2") nails at 300 mm (12").
3. Fasten 25mm x 140mm (5/4" x 6" nominal) outer deck board to floor joist with 1-63mm (2 1/2") nail at each joist.
4. The post may be positioned anywhere between the joists.
5. #9 screws may be replaced by #8 screws if the maximum spacing between posts is not more than 1.20m (3'-11").
6. Dimensions shown are in mm unless otherwise specified.

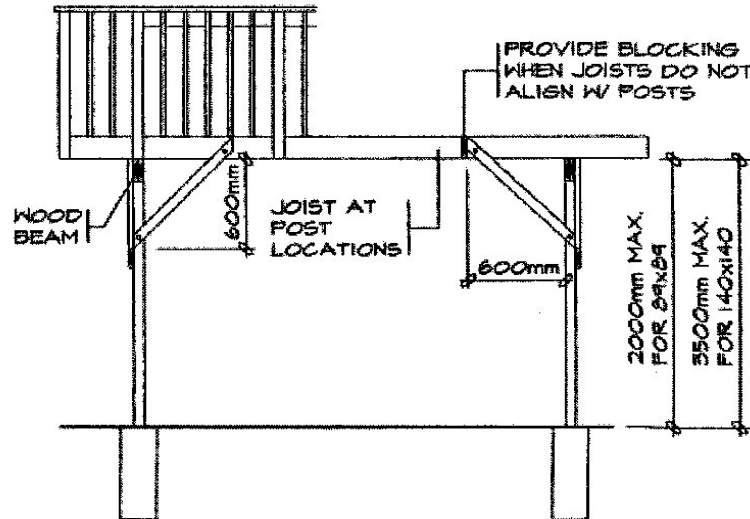
Maximum Spacing Between Posts	
Species	Maximum Spacing, m (ft-in)
Douglas Fir-Larch, Hem-Fir, Spruce-Pine-Fir	1.56 (5'-1")
Northern Species	1.20 (3'-11")

Bracing Support

Bracing Parallel to Beam



Bracing Perpendicular to Beam

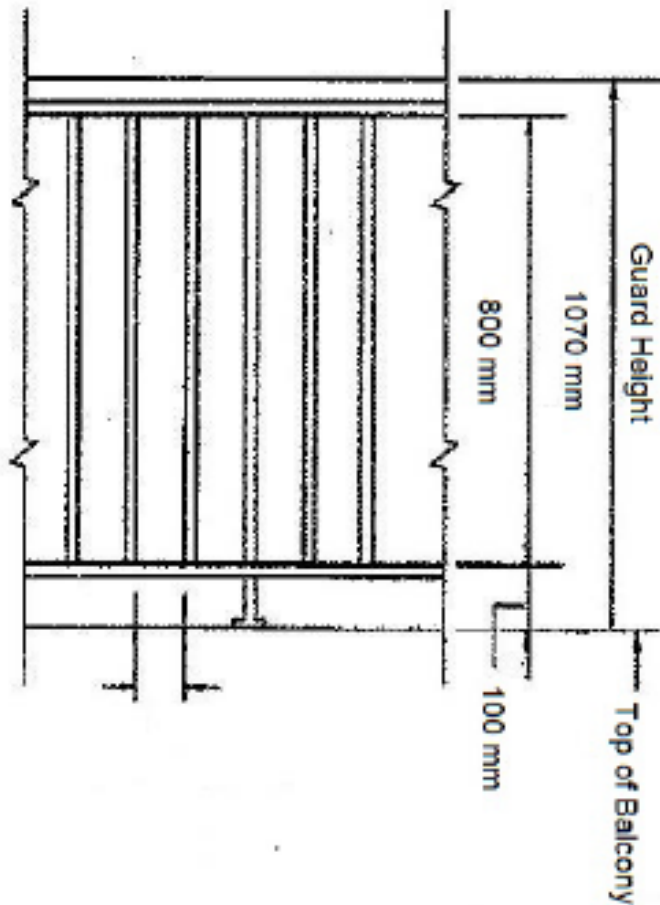


Free standing decks greater than 600mm (23.5") above grade shall resist lateral loading and movement. All posts must be braced where the deck walking surface to finish grade exceeds 5' (5 feet).

Note:

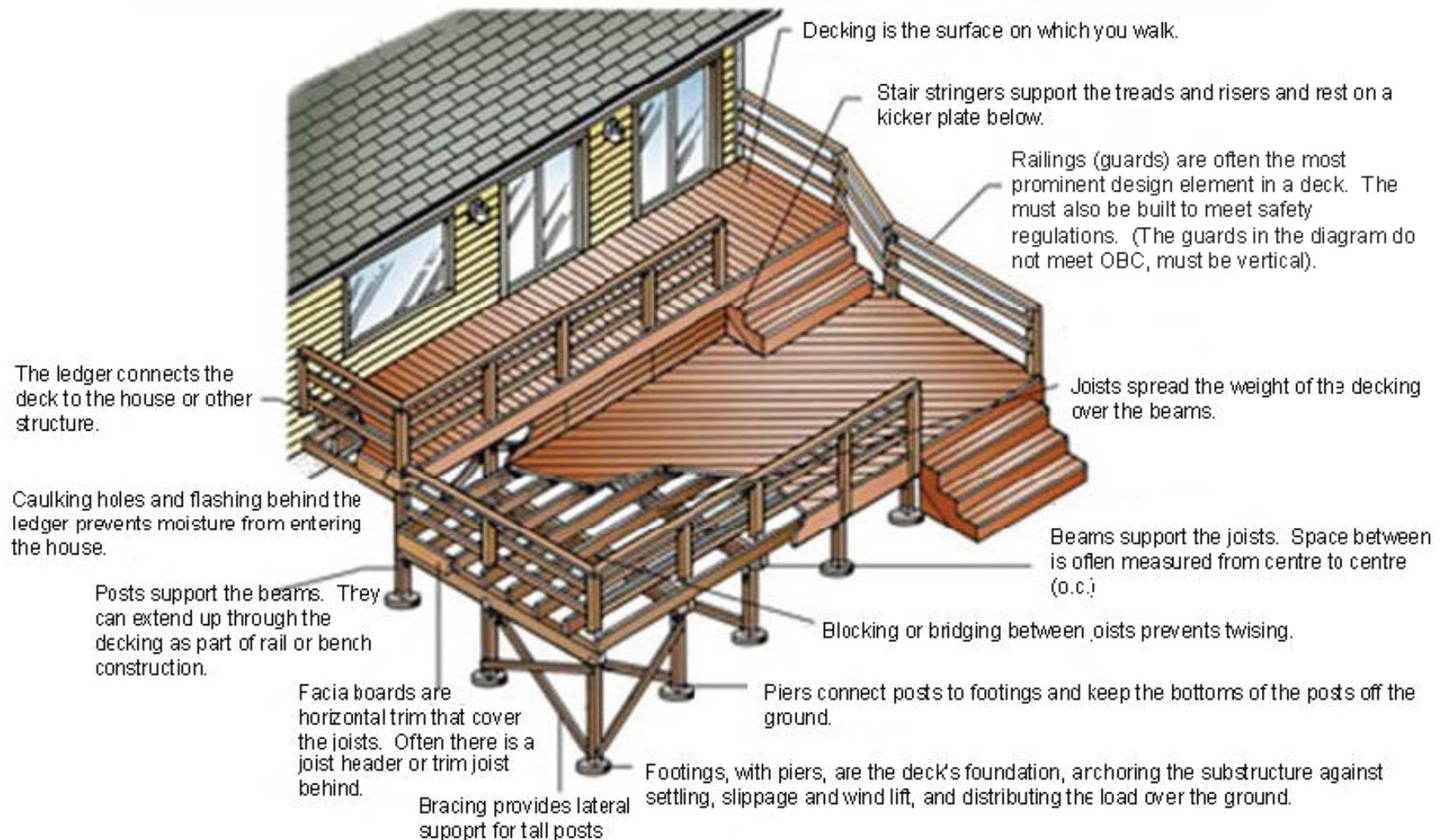
1. Lumber No. 2 SPF or better wood posts min. 89mm x 89mm (solid). Use corrosion resistant spiral nails or screws.
2. Deck is not permitted to be supported on brick veneer.
3. Concrete piers shall bear on undisturbed soil or bedrock. The bearing capacity of the soil shall be determined prior to construction.
4. Provide a handrail 900mm (35.5") high on stairs if more than three risers.
5. Maximum height refers to the height of the post from the top of the pier to the deck surface.

Picket Construction Detail



- Exterior guards serving residential occupancies shall be designed in accordance with this Article to prevent climbing by unattended children.
- Horizontal, diagonal or decorative grill work, upturned curbs exposing ledges and similar constructions are not permitted within an area located between 100mm (3.75") and 900mm (35.5") above the floor or walking surface.

Cut Away Deck Diagram (for information purposes only)





THE CORPORATION OF THE TOWNSHIP OF PERRY

SUBJECT:	Code of Conduct for Building Officials	POLICY #: 2019-01	PAGE 1 of 2
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Purpose:

The purpose of this Code of Conduct is to promote appropriate standards of behaviour and enforcement actions to ensure Building Officials apply standards of honesty and integrity, and to prevent practices constituting abuse of power including unethical or illegal practices.

The Code of Conduct applies to the Chief Building Official and Inspectors appointed under the Building Code Act in the exercise of a power or the performance of a duty under the Building Code Act or the Building Code.

Standards of Conduct for Building Officials:

Building Officials undertake at all times to:

1. Maintain accreditation to perform the functions assigned to them;
2. Maintain their knowledge and understanding of the best current building practice, the building laws and regulations relevant to their building certifying functions;
3. Commit themselves to a process of continuous education so as to constantly be aware of developments in building design, practice and the law relevant to their duties;
4. Comply with the provisions of the Building Code Act, the Building Code and any other Act or Law that regulates or governs Building Officials or their functions;
5. Perform their duties impartially and in accordance with the highest professional standards;
6. Not act beyond their level of competence or outside their area of expertise;
7. Apply all relevant building laws, regulations and standards justly and without favour of the influence of interested parties;
8. Exemplify compliance with all regulations and standards that govern building construction, health and safety or other matters related to their status as a building official;
9. Act in the public interest, particularly with regard to the safety of building works and structures;
10. Take all reasonable steps to ascertain and document all available facts relevant to the performance of their duties;
11. Avoid situations where there may be, or where there appears to be, a conflict between their duties to their clients, their profession, their peers, the public at large or their personal interests;

APPROVED BY:	Council	DATE: February 20, 2019	RESOLUTION: 2019-63
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THE CORPORATION OF THE TOWNSHIP OF PERRY

SUBJECT:	Code of Conduct for Building Officials	POLICY #: 2019-01	PAGE 2 of 2
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12. Not divulge any confidential or sensitive information or material, that they became privy to in the performance of their duties, except in accordance with the laws governing freedom of information and protection of privacy;
13. To avoid any conduct that could bring Building Officials or the Township of Perry into disrepute;
14. Accept responsibility for the conduct of their subordinate employees; and
15. Extend professional courtesy to all.

Guideline for Responding to Misconduct Allegations

The Building Code Act provides that the performance of Building Officials will be measured against this Code of Conduct. In response to any allegation of a breach of this code by an Inspector, the Chief Building Official shall direct an investigation and where appropriate, recommend disciplinary action against any Inspector who fails to comply with this Code of Conduct. Where the allegation is against the Chief Building Official, the Clerk/Administrator shall direct the investigation and take such disciplinary action as is reasonable in the circumstances and report such action to Council.

In determining the appropriate discipline, the Chief Building Official or Clerk/Administrator will have regard to the relevance of the conduct to the Official's powers and responsibilities as well as the severity of any misconduct.

Disciplinary action arising from violations of this Code of Conduct is the responsibility of the Clerk/Administrator and is subject to relevant employment laws and standards.

Public Notification Practice

This Code of Conduct shall be posted on the Township's website and inserted in all Building Permit Guide hand-outs to ensure it has been brought to the public's attention.

Policies/ Legislation

Sections 7.1(1) & 7.1(4) Building Code Act, 1992

APPROVED BY:	Council	DATE: February 20, 2019	RESOLUTION: 2019-63
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