

Deck Construction: Project Guide

Applicable to: construction of uncovered or covered decks

The following items must be included in your application package:

- Site Plan
 - Property lines
 - Roads and any drainage/irrigation ditches
 - Outline of garage, home, and other buildings on property
 - Dimensions of house and garage/accessory building
 - Dimensions from all property lines to garage/accessory building
 - Location and size of windows and doors
 - Label direction of roof trusses
- Submission Detail Form (refer to page 2)
- Deck Drawings (Required only for covered decks and non-simple decks)
 - *Required for all covered decks and decks outside tables in submission details page.
 - Plan View
 - Elevation View

Other requirements that may need to be included in your application package:

- Engineered drawings (stamped drawings)
 - All screw piles required to be designed by an engineer.
- Structural commitment letter for field review
 - Required for a structural design completed by an engineer.

Additional Resources

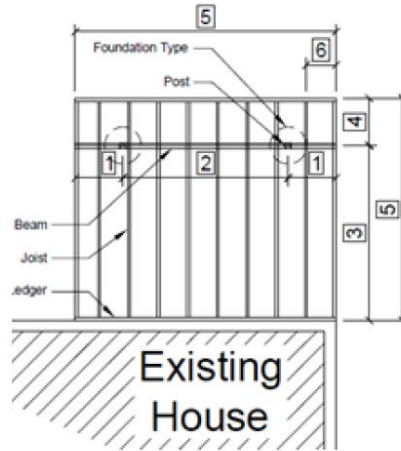
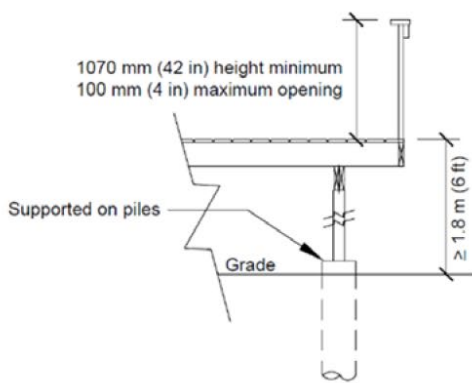
National Building Code (referred to as NBC) references are provided throughout the document.

Canadian Wood Council has developed a guide to help support designing exterior wood decks.

SUBMISSION DETAILS FORM

Complete the form below and submit with your application.

Deck Information		Foundation
Type of Deck: <input type="checkbox"/> Uncovered <input type="checkbox"/> Covered	Deck Information: Length (m) _____ Width (m) _____ Height (m) _____	<input type="checkbox"/> Concrete block and pad <input type="checkbox"/> Concrete Piles: Depth (m) _____ Diameter (mm) _____ <input type="checkbox"/> Screw piles <input type="checkbox"/> Other – please provide details on drawings
1) For multi-level, multiple beam and/or irregular shape decks, or decks of unconventional material, provide construction drawings for review. 2) Decks > 1.8m (6ft) require a foundation to be designed by Engineer. 3) Screw piles must be designed by Engineer.		



- 1 – Beam Cantilever
- 2 – Post Spacing
- 3 – Joist Span
- 4 – Joist Cantilever
- 5 – Maximum Total Joist Span
- 6 – On-center Joist Spacing

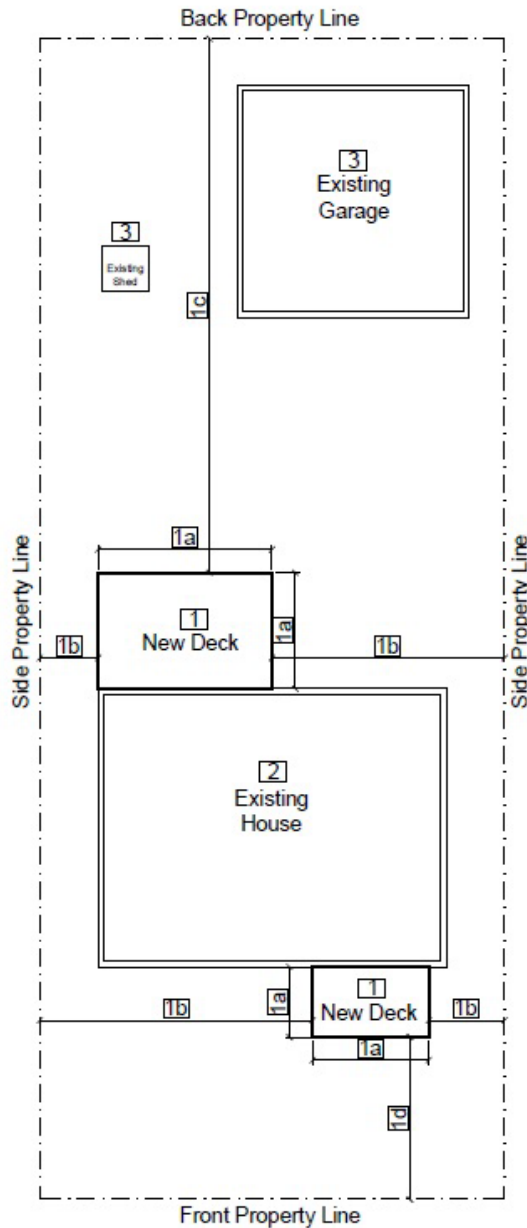
JOIST AND BEAM SPAN CHARTS

Joist span: _____ m (ft)	Cantilever: _____ m (ft)	Maximum Total joist span: _____ m (ft) <i>(add your joist span + cantilever)</i>
--------------------------	--------------------------	---

INFORMATION PACKAGE

To assist you in assembling your application, we have created a sample site plan to reference.

SAMPLE SITE PLAN



Details to be shown on plan:

- 1 Location of proposed decks
 - 1a Deck dimensions
 - 1b Distance to side property lines
 - 1c Distance to rear property line
 - 1d Distance to front property line
- 2 Location of existing house
- 3 Location of existing building / structures

BUILDING CODE REQUIREMENTS

To assist you, we have provided National Building Code (NBC) requirements that must be met and will be inspected. Please note that this is not an exhaustive list and exceptions may apply.

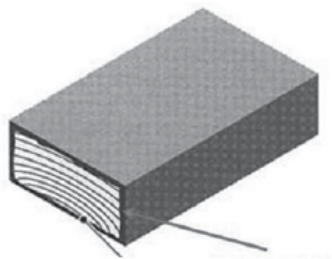
Bedroom Window Obstruction

If a deck covers a basement bedroom window, a minimum of 760mm (2' 6") of clearance is needed along the path of travel for a means of escape (Article 9.9.10.1)

Framing

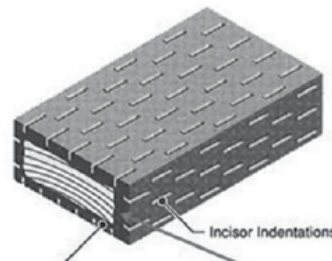
Wood Type

There are two types of pressure treated wood:



Non-incised lumber

Non-Incised Pressure Treated Lumber – wood product treated with a preservative using a pressure process.



Incised lumber

Incised Pressure Treated Lumber - Incising is the process of cutting many small slits into the surface of a piece of wood in order to increase the amount of preservative absorbed into the wood during treatment. This process does affect the structural integrity of the lumber.

PRO-TIP

Incised lumber has small regular piercings.

Decking

Lumber:

- 2" x 4", 2" x 6", may be supported on joists spaced up to 600 mm (24") o.c.
- 5/4" x 6" may be supported on joists spaced up to 400mm (16") o.c.

Composite Decking

- Refer to manufacturer's specifications for joist spacing to ensure adequate support.

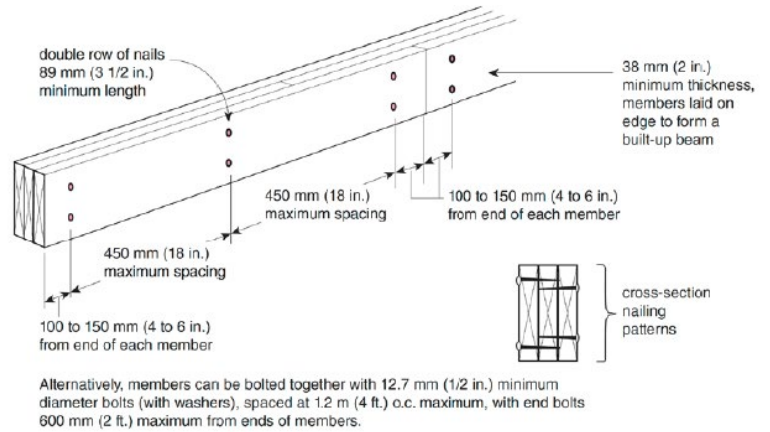
Columns/Posts (Section 9.17)

Wood columns/posts must be at least as wide as the member being supported.

Beams (Sentence 9.23.8.1)

Beams shall have even and level bearing and the bearing at end supports shall be not less than 89 mm (3 1/2") long, except as stated in the notes to Span Tables 9.23.4.2-H to 9.23.4.2-K.

Built-Up Beam (Article 9.23.8.3) nailing patterns and where splicing of members can occur are detailed below:



Clearance off ground (Sentence 9.3.2.9(3))

Wood elements less than 150 mm (6") to the ground must be pressure-treated.

If wood members are not pressure treated and are supported by concrete that is in contact with the ground, they must have a 2 mil (0.05mm) polyethylene film or Type S roll roofing in between the wood and the concrete support (Article 9.23.2.3).

Stairs, Railings and Guards

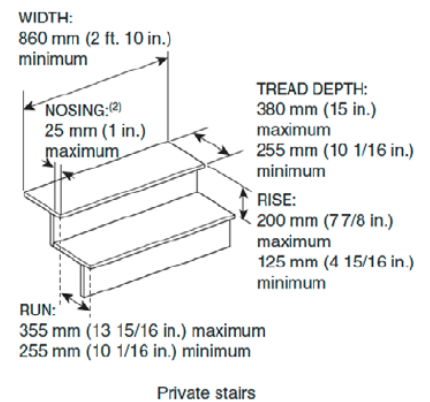
Width (Article 9.8.2.1)

Stairs shall be at least 860 mm (2' 10") wide.

Rise and run (Articles 9.4.4.1 – 9.8.4.8)

Treads and risers must have uniform rise and run in any flight, including top and bottom risers.

- Risers must be 125 mm (4 15/16") minimum to 200 mm (7 7/8") maximum.
- Runs must be 255 mm (10 1/16") minimum to 355 mm (15") maximum.



Landings (Subsection 9.8.6)

Landings are required at the top and bottom of each flight of stairs. In general, landings must be at least as wide and as long as the width of the stairs.

Handrails (Subsection 9.8.7)

Handrails are required on stairs with more than three risers.

Guards (Subsection 9.8.8)

Guardrail Height:

- Decks > 600 mm (2') above grade require 900 mm (36") guards.
- Decks > 1.8m (6') above grade require 1040 mm (42") guards.

Openings in guards shall not exceed 100 mm (4").

Roofing for Covered Decks

Pre-manufactured Trusses

Pre-manufactured trusses require shop drawings to be submitted to the on-site inspector.

Rafters (Article 9.23.4.2 and Subsection 9.23.14)

All rafters made on site will have to be drawn for the permit application and show how they meet the snow loads and spans from Part 9 of the NBC.

Roof sheathing (Table 9.23.16.7-A)

The roof sheathing type, grade, thickness, and edge support (H-clips) to conform to the requirements of this table.

Roof slope and roofing type/provisions (Section 9.26)

Roofing to be provided to protect the building from precipitation. The type of roofing and installation shall conform to Section 9.26. A summary of slopes and applicable roofing types is shown in Table 9.26.3.1 (e.g. where the slope of a roof with asphalt shingles is less than 1 in 3, the low slope requirements of Subsection 9.26.8 would apply).

This project guide has no legal status and cannot be used as an official interpretation of the various codes and regulations currently in effect. Users are advised to contact the Municipal Office for assistance, as the Rural Municipality of Arborfield No. 456 accepts no responsibility for persons relying solely on this information.

CREATED JANUARY 2024