

# Building a wood deck

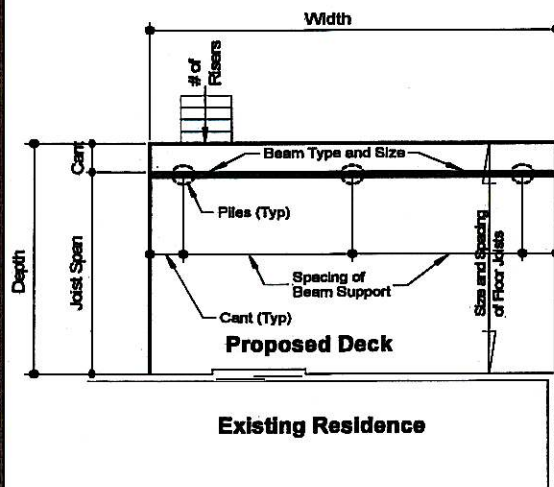
## Site plan (required information)

- Show north with an arrow and indicate the size of the property through proper dimensioning.
- Indicate distances from the deck to property lines and to any existing buildings on site.
- Show location of deck steps (if any).

## Deck floor plan (required information)

- Indicate deck size (length, width and height) through proper dimensioning.
- Provide deck layout, indicating the joist direction on the plan as well as size, spacing of joists and span between joist supports.
- Show size, location and height of columns.
- Specify beam size.
- Show the type of foundation and depth below grade.
- Describe the location, size and depth of piles (if any).
- Provide details of stairs (if any). For example, the width, height, rise, run, handrails, etc.

## Deck floor plan illustration



## Guardrail protection

Open sides of a deck must be protected by a guardrail on each side not protected by a wall:

- for the length where there the elevation is more than 600 mm (24") between the deck and ground; or
- if the adjacent ground, within 1.2 m (47") of the deck, has a severe slope.

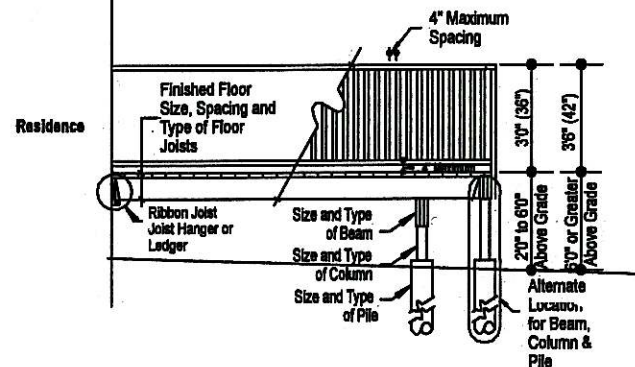
Openings in guards in all non-industrial buildings shall be small enough that a spherical object with a diameter of 100 mm (4") won't fit through.

Guardrails must be designed so no part, including ornamental fixtures, will facilitate climbing. There are specific code guidelines to ensure this requirement is met.

Guardrails must be at least 1.07 m (42") high, from the deck surface to the top of the guardrail. Guardrails serving one home can be 0.9 m (3') high if the deck surface is not more than 1.8 m (6') above the ground.

## Cross-section illustration

NOTE: These sample plans are intended for illustration purposes and will not be accepted as plans for a building permit application.



## Surface foundations

If your deck is built on a foundation that is supported on a surface other than rock or coarse-grained soil with good drainage, access to the foundation for re-leveling shall be provided:

- by passageways with a clear height under the deck of at least 600 mm (24") and a width of at least 600 mm (24"); or
- by installing the deck surface in a way that allows easy removal.

## Weight support requirements

Decks must be designed to hold a 1.9 kPa (40 lb/sq. ft.) load. They must be able to support the load in addition to the weight of the deck itself.

## Clearances to Overhead Power Lines

Wood decks beneath overhead power lines must maintain a minimum 3.5 m vertical clearance. Consult with your Electrical Utility regarding distances between metering and deck surfaces.

## Subsurface foundation requirements

- The foundation system must be at least 1.2 m (4') below grade and extend at least 150 mm (6") above grade.
- Wood piles must be treated with an acceptable preservative to at least 300 mm (12") above ground level.
- Footings are not required under piles if the safe load-bearing capacity of the soil is not exceeded. Your safety codes officer may require additional verification.

NOTE: Concrete pile design is not provided in the Alberta Building Code and may require the seal and signature of a Professional Engineer.

This will be determined by the safety codes officer issuing permits in your area.