Building a Deck Information Guide for Ontario

When is a building permit required for a deck in Ontario?

If the deck (new or replacement) is 24" high or greater above finished grade.

A permit is also required if structural renovations will be made to an existing deck.

Drawing requirements for a building permit application

1. A copy of the property survey or site plan of your lot. a. Please draw on location of deck with dimensions to lot lines
2. Deck drawings (Building centre drawings or hand drawn to scale and dimensioned)

a.) Plan view showing posts, floor joists, beams, stairs, landings

b.) Side view showing height or deck and guard

The construction plans must show the overall size of the deck, the size and spacing of the beams, posts, and deck joists, the species and grade of the wood material being used, (eg. SPF #2; species – spruce, grade - #2) the type of foundation you have chosen to support the deck and the location of any stairs leading to or from the deck.

The elevation plan must show the height of the deck floor above finished ground level at its highest point and the height and type of guardrail being used around the perimeter of the deck.

Guards/Railings (for decks 24" or higher)

The Ontario Building Code permits the installation of wood guards/railings. Should you plan on installing anything other than a wood guard/railing, please submit a copy of the Pre-Engineered guard/railing details with your building permit application.

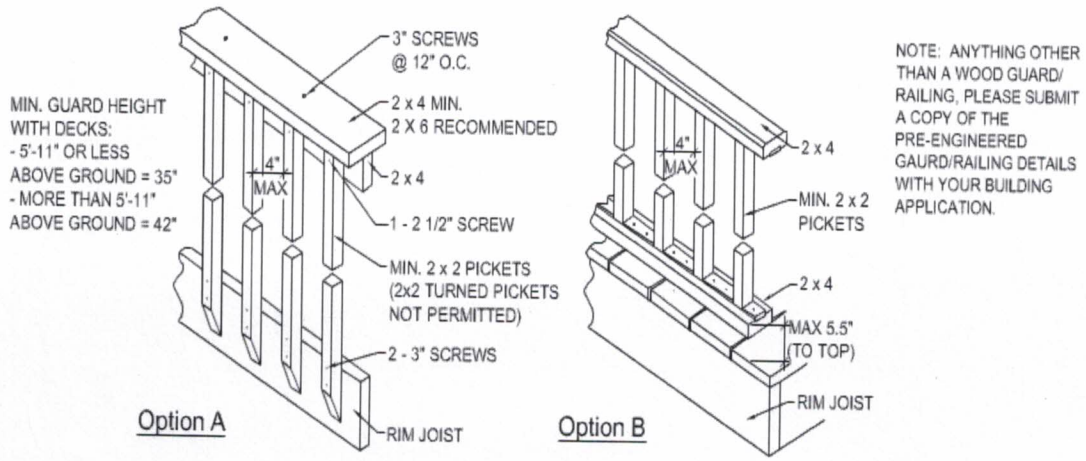
Typically you can receive this package of details from the supplier.

NOTE: Hollow plastic or vinyl guards/railing are not permitted

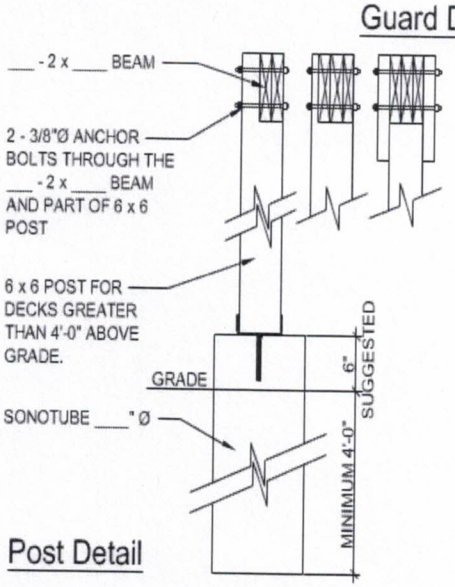
Required Building Inspections

1. Excavation/Footing inspection - Once the holes have been dug, but prior to concrete being poured
2. Structural Wood Frame inspection - Once the framing is complete (posts, beams, joists)
3. Final Building inspection - When the deck and guard/railing are complete

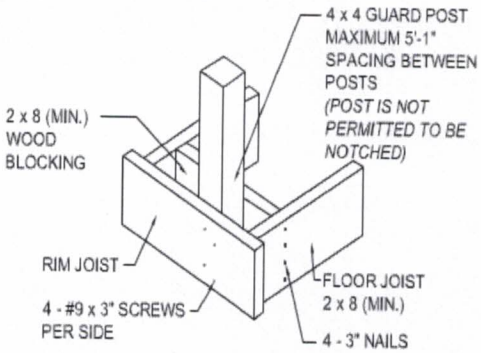
Guard, Post, Beam
Footings and Ledger Board



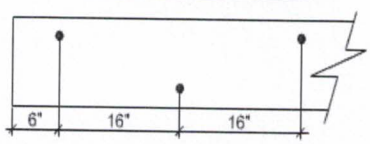
Guard Details



Post Detail



Guard Post Detail



MINIMUM 3/8"Ø ANCHOR BOLTS @ 16" CENTERS STAGGERED. ANCHOR BOLTS MUST BE INTO WOOD FRAMING OR FOUNDATION WALL. DO NOT SECURE INTO BRICK VENEER ALONE.

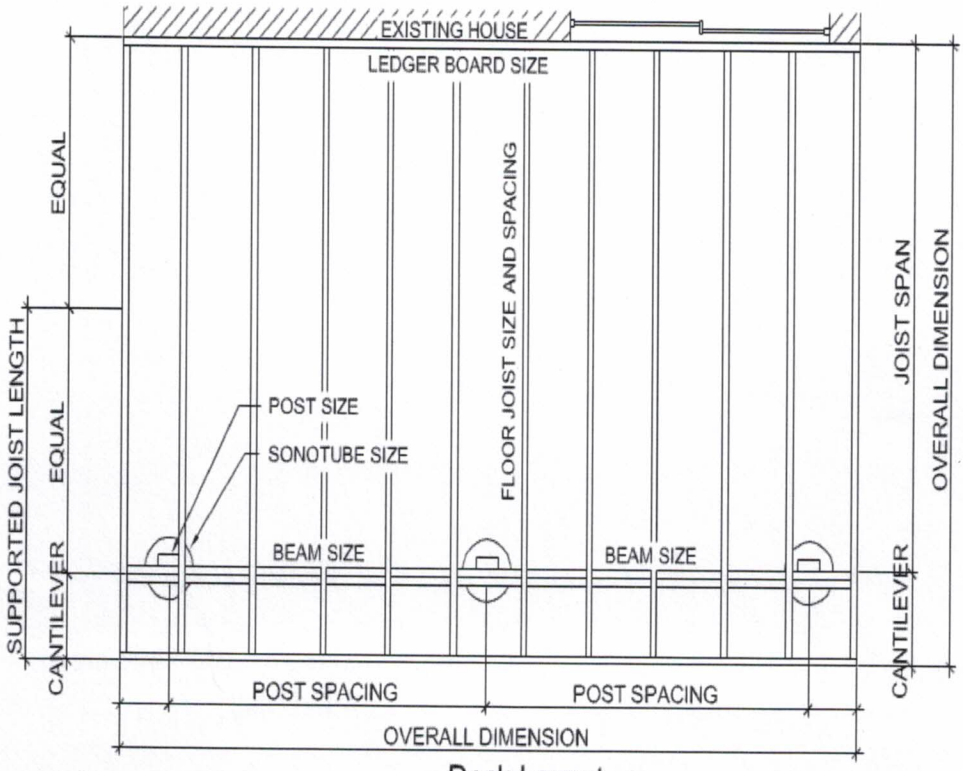
Ledger Board Detail

*SOLID BLOCKING REQUIRED FOR BEAMS @ 18" O.C.

*ADDITIONAL LATERAL BRACING MAY BE REQUIRED. CONFIRM WITH BUILDING INSPECTOR @ FRAMING INSPECTION.

Deck

Layout And Span Tables



Deck Layout

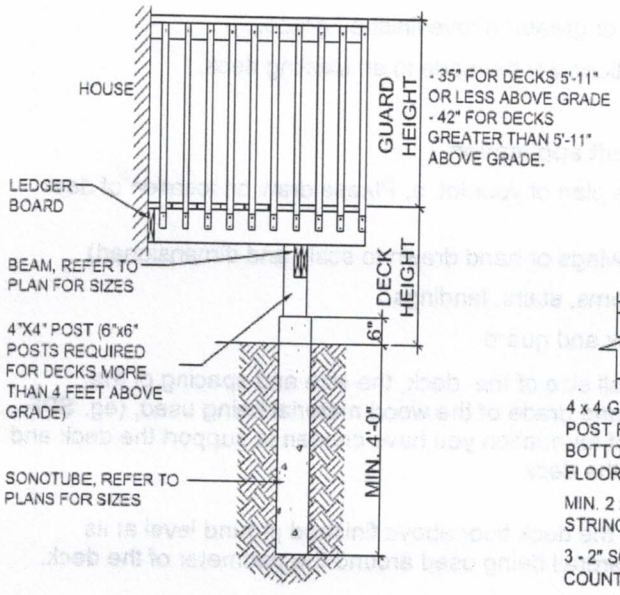
**All decking is to be 5/4 x 6 wood material or approved equal

Maximum 2-Ply Beam Length			
Supported Joist Length	2 x 8	2 x 10	2 x 12
4'-0"	11'-7"	14'-10"	17'-4"
6'-0"	9'-10"	12'-1"	14'-0"
8'-0"	8'-7"	10'-6"	12'-3"
10'-0"	7'-8"	9'-4"	10'-8"
Maximum 3-Ply Beam Length			
8'-0"	10'-8"	13'-0"	15'-1"
10'-0"	9'-6"	11'-8"	13'-6"

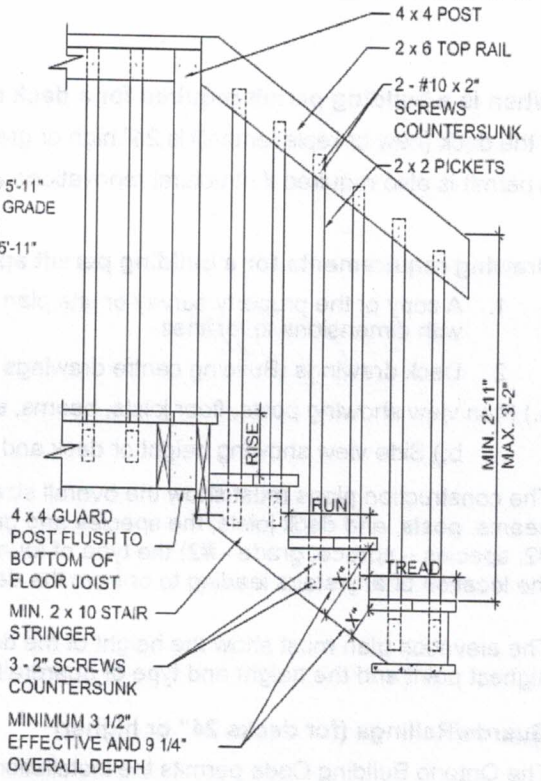
Maximum Floor Joist Length		
Joist Size	Max. Span	Max. Cantilever
2x8 @ 12" O.C.	12'-6"	20"
2x8 @ 16" O.C.	11'-9"	16"
2x8 @ 24" O.C.	11'-0"	14"
2x10 @ 12" O.C.	14'-6"	28"
2x10 @ 16" O.C.	13'-8"	24"
2x10 @ 24" O.C.	12'-10"	20"
2x12 @ 12" O.C.	16'-5"	28"
2x12 @ 16" O.C.	15'-6"	24"
2x12 @ 24" O.C.	14'-6"	20"

Deck

Elevation and Details



Deck Elevation



Stair Detail

Sonotube Sizes

Diameter	*Weight
8"Ø	1047 lbs
10"Ø	1635 lbs
12"Ø	2355 lbs
14"Ø	3207 lbs
16"Ø	4189 lbs

*Weight = (supported joist length each side of post x half beam length each side of post) x 40 lbs/SF.

Stair Dimensions		
Type	Max.	Min.
Rise	7 7/8"	4 7/8"
Run	14"	8 1/4"
Tread	14".	9 1/4"

max 1" nosing

*Risers shall have a uniform height in any one flight of stairs.

*Treads shall have a uniform run and tread depth in any one flight of stairs.