



RESIDENTIAL DECK PERMIT GUIDE

2020

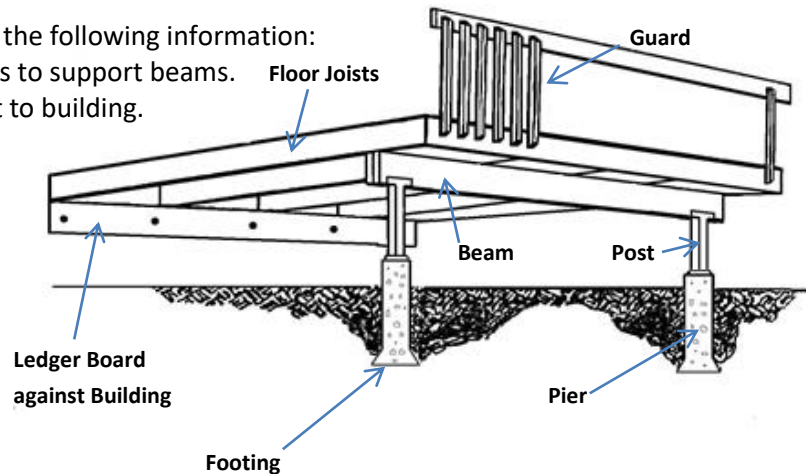
BUILDING PERMIT APPLICATION REQUIREMENTS

For any new, repair, or replacement of an exterior deck in the Town of Perth which is attached to the house, or is a free-standing deck that exceeds 108 ft² (10m²) in area, a building permit is required to be issued prior to starting your construction or repair.

1. Two copies of a Site Plan (based off a survey) showing:
 - a) The location of proposed deck in relation to the house, other buildings, septic system, a water body, easements, or overhead power lines, and in relation to your property lines.
 - b) The overall dimensions of the proposed deck. (Depth, width, stair and landing locations).

2. Two copies of Deck Construction Drawings providing the following information:

- a) Footing sizes and locations of piers and/or posts to support beams.
- b) Size of ledger board and method of attachment to building.
- c) Floor joist sizes and spans.
- d) Beam sizes and spans between support posts.
- e) Height of guard railings above deck surface.
- f) Stair construction details.
- g) Dimensions of all components.
- h) **PVC or composite decking and guard systems must have either Minister Ruling or BMEC approval accompanied with CCMC report.**



RESIDENTIAL WOOD DECK DESIGN WORKSHEET

A supplemental information sheet to accompany construction drawings

Permit Application Number _____

The technical information contained herein is based from the prescriptive requirements of the 2012 Ontario Building Code, as amended, utilizing the climatic design limitations listed for the Town of Perth, Ontario.

A. GENERAL INFORMATION

1. Location of Property: _____

2. Overall Deck size: Length: _____ Width: _____ Height: _____
(highest measurement from ground level to decking)

B. DECK FRAME

3. Decking (flooring) material: 2" x 4 2" x 6 5/4" x 6" (deck board) Composite decking

4. Floor Joist

Size = _____ X _____ @ _____ o/c

5. Max. span (length) of Joist = _____ between supports

6. Max. overhang = _____ of joist over beam
(2" x 8" = 16" max overhang – 2" x 10"/12" = 24" max overhang)

TYPICAL FLOOR JOIST SPANS *	
Maximum span of Joist	Minimum joist required
11' - 0" (3.36m)	2" x 8" @ 16" o/c
11' - 7" (3.54m)	2" x 8" @ 12" o/c
13' - 0" (3.96m)	2" x 10" @ 16" o/c
13' - 8" (4.17m)	2" x 10" @ 12" o/c
14' - 9" (4.52m)	2" x 12" @ 16" o/c

7. Ledger board size: _____ X _____ attached with $\frac{1}{2}$ " dia X _____ long bolts @ _____ on center
 (If Ledger board attachment is to engineered floor joists systems (ie. wood "I"s) in the home, then install direction from the manufacturer of that floor system, or an engineers review and attachment recommendations is required)

8. Beam
Size: _____ ply _____ X _____, spanning _____ post to post

8a. Max beam overhang = _____ over end post
 (2ply laminated beam max overhang is 8", 3 ply beam max overhang is 12")
 (0" overhang permitted for 2ply box or sandwich beam)

9. Wood post size: 6" x 6" other: _____
 (If 4"x 4" posts are desired you must provide loading calculations)

9a. Total number of Posts: _____ spaced at: _____ o.c

TYPICAL BEAM SPANS *	
2 - 2"x 8"	5' - 10" (1.8m)
2 - 2"x10"	7' - 2" (2.2m)
2 - 2"x12"	8' - 4" (2.56m)
3 - 2"x 8"	7' - 3" (2.21m)
3 - 2"x10"	8' - 10" (2.7m)
3 - 2"x 12"	10' - 3" (3.13m)

*SPAN CHARTS The spans noted in both tables above are for Spruce, Pine, Fir (SPF) or Pressure Treated Pine (PTP) lumber. Spans for Cedar or other lumber species may be less than those shown in these tables.

C. FOOTING SYSTEM

10. Type of Pier: Sonotubes: _____ inch diameter _____
 (min 9" only permitted if 4"x 4" post allowed) Other – describe and size

11. Size of Footing:

_____ " X _____ " X _____ " deep Square pad size proposed
 _____ " dia. X _____ " deep Round Form or belled out base proposed
 12"x12" Deck Blocks proposed Helical Pile proposed

Typical Deck Footing Base/Pad Sizing						
For max 2.0kPa loading and a min. 75kPa (1560psf) bearing soil conditions						
Determining footing size: Use the clear span of beam (max. pier spacing) and half of the clear span of the joist + any joist overhang (max. supported joist length)	Max. Pier Spacing					
	4'	6'	8'	10'	12'	
Max. Supported Joist Length	4'	9 or DB	11 or DB	13	13x13	16x16
	6'	11 or DB	12x12 or DB	16x16	20x20	24x24
	8'	13	16x16	21x21	26x26	
	10'	13x13	20x20	26x26		
	12'	16x16	24x24			
Base Size	Footing details and options					
9	means a minimum 9" concrete form tube only – if 6"x 6" posts used increase to 10" form tube					
11	means a minimum 11" wide bell out at the base of a 9" concrete form tube – if 6"x 6" posts used increase to 10" form tube					
13	means a minimum 13" wide bell out at the base of a 10" concrete form tube					
12x12	means a minimum 12"x12"x4" square pad, or a 14" wide bell out at the base of a 10" concrete form tube					
13x13	means a minimum 13"x13"x4" square pad, or a 15" wide bell out at the base of a 12" concrete form tube					
16x16	means a minimum 16"x16 x4" square pad, or a 24" prefab footing base					
20x20	means a minimum 20"x20"x5" square pad, or a 24" prefab footing base					
21x21	means a minimum 21"x21"x6" square pad, or a 24" prefab footing base					
24x24	means a minimum 24"x24"x7" square pad, or a 28" prefab footing base					
26x26	means a minimum 26"x26"x8" square pad, – round prefab forms require a engineers design					
DB	means a deck block with a minimum 12"x12" base may be only approved for use as footings where: (1) The deck area is less than 592 ft ² (55 m ²) (2) A deck of any area is not attached to any other structure (3) A deck of any area does not support a roof (4) The max height of the underside of the deck joists is 23 5/8" (600mm) above ground level for any deck.					

D. Guard Systems

12. Proposed Guard Height = _____

12a. Not required

MINIMUM GUARD REQUIREMENTS	
Openings in guards must not exceed 4" (100mm) and designed to be non-climbable (vertical pickets only) If a bench is incorporated into the guard, the required the required guard height is measured from the bench surface.	
Deck Surface Above Ground	Min. Guard Height
More than 23 5/8" (600mm)	35" (900mm)
More than 5' 11" (1800mm.)	42" (1070mm)
More than 32' 10" (10 metres)	59" (1500mm)

13. Guard Type: Wood Cantilevered pickets per SB- 7 of code Wood Post and rail per SB- 7 of code Other – See Important Notes below

Visit our web-site to view the SB-7 details and provide copy of the details you have selected to use.

IMPORTANT NOTES: Regarding Non-Wooden Guard parts & systems

Any parts of a guard or railing system made of steel, aluminum and glass must be designed in accordance with the structural requirements of Part 4, Div. B of the Building Code, there are three ways to confirm such guards meet this requirement:

- ✓ Designed by an Engineer – site specific drawings
- ✓ Manufactured per Ministers Ruling – report document
- ✓ Manufactured with Building Materials Evaluation Commission (BMEC) authorization – report document

Prior to purchase of any such components, ensure that your supplier can provide you with one of the three documents noted above. Carefully review a Ministers Ruling, or a BMEC authorization as it may require additional site specific design by an Engineer, which is an additional cost to consider at time of purchase.

E. Stair Systems

Limits of rise and run for stairs

14. Overall Proposed vertical height of stairs: _____

15. Overall Width of Stairs: _____

16. Number of risers: _____ at what height: _____

17. Number of treads: _____ at what run: _____ plus a nosing of, _____, total width: _____

18. Tread material: 2" x 4 2" x 6 5/4" x 6" (deck board) Composite decking

19. Handrail Required: Yes No Not Certain

20. Guard Required: Yes No Not Certain It will be the same guard system as proposed above .

Rise height = 4 7/8" to 7 7/8"
Run width = 8 1/4" to 14"
Tread width = 9 1/4" to 14"