#### Table 2 - Joist Size & Spacing

		_			
Table 2 - Joist Size and Spacing (H, I & J)					
Joist	Joist Spacing			Maximum	
Size	12"	16"	24"	Cantilever	
2" x 6"	9'-0"	8'-0"	7'-0"	2'-0"	
2" x 8"	12'-0"	11'-0"	9'-0"	2'-6"	
2" x 10"	15'-0"	13'-0"	11'-0"	3'-0"	
2" x 12"	18'-0"	15'-0"	12'-0"	3'-6"	

#### Table 3 - Beam Size and Spacing

Table 3 - Wood Beam Size & Span (K, L & O)						
Wood	*Supported Joist Length					Maximum
Beam	6'-0"	8'-0"	10'-0"	12'-0"	14'-0"	Beam
Size	Max. Span of Beam Between Columns				Cantilever	
3 - 2" x 8"	8'-0"	7'-0"	6'-3"	5'-9"	5'-4"	2'-0"
3 - 2" x 10"	10'-0"	8'-6"	7'-6"	7'-0"	6'-6"	2'-6"
3 - 2" x 12"	11'-0"	10'-0"	9'-0"	8'-3"	7'-9"	3'-0"
4 - 2" x 8"	9'-0"	8'-0"	7'-3"	6'-6"	6'-0"	2'-0"
4 - 2" x 10"	11'-0"	9'-9"	8'-9"	8'-0"	7'-6"	2'-6"
4 - 2" x 12"	13'-0"	11'-3"	10'-0"	9'-3"	8'-6"	3'-0"
*Supported Joist Length is the sum of half of the joist span on						
either side of the beam plus any cantilevered section.						

#### Notes

- Lumber must be SPF Grade No. 1 or 2, pressure treated or approved alternate.
- Provide solid blocking at mid span of joists spanning 10ft or more.
- Joist spacing over 16" c/c and up to 24" c/c shall utilize 1<sup>1</sup>/<sub>2</sub>" thick decking boards.
- Beam span and Joist span between supports shall not be less than 3 x the cantilevered span, and uplift shall be prevented at the non-cantilevered end of the span.
- Joists shall be adequately fastened to resist movement and uplift by toe nailing, joist hangers, hurricane clips or other mechanical fasteners.
- Post to beam hot dip galvanized connectors must be used.
- Ledger boards shall be fastened in a manner to prevent premature decay.
- Beam sizing is based on a simple span. Continuous beams shall be built in accordance with NBC 9.23.8.3.
- All footings shall bear on solid non-organic soils below the frost line (min. 5ft), and all soils in augured holes shall be fully tamped or otherwise compacted.
- Footing sizes assume 3,000 psf soil bearing capacity.
- Concrete shall have a strength of 3000 psi meeting class F-2.

## Notes Continued...

- Deck footings shall be at least 5ft below grade and must bear below a 45° line from an adjacent deeper footing.
- Concrete sonotubes must be minimum 8" in diameter and be supported on a footing.
- Wood post size shall be minimum 6" x 6" pressure treated and be centered on footing.
- Posts must be anchored to footing and/or concrete piers using a galvanized premanufactured post base with post anchor.
- Columns / Posts for decks over 2ft high must be laterally supported to resist racking.
- Decks located between 2'-0" and 5'-11" above grade require a 36" guard/railing.
- Decks 6ft or greater above grade require a 42" guard/railing.
- Stair stringers to be approx. 16" c/c. Stairs with 3 rises or more require a handrail.
- Decks intended to support hot tubs require an engineered stamped design.
- Minimum sizes for footings in Table 4 assume no roof system is supported. An engineered stamped design is required for deck foundations supporting a roof system.
- Helical pile systems may be used upon submission of engineered stamped design.

## Table 4 - Footing Size

	Table 4 - Footing Sizes				
Beam Span (O)	**Joist Length (B)	Square Footing (R)	Round Footing (R)	Footing Thickness (Q)	
6'	10'	12"	14"	6"	
	14'	14"	16"	6"	
	18'	16"	16"	6"	
8'	10'	12"	14"	6"	
	14'	16"	18"	6"	
	18'	18"	20"	6"	
10'	10'	16"	18"	8"	
	14'	18"	20"	8"	
	18'	20"	22"	8"	
12'	10'	16"	18"	8"	
	14'	18"	20"	8"	
	18'	22"	24"	8"	
14'	10'	18"	20"	8"	
	14'	20"	22"	8"	
	18'	22"	26"	10"	
**Joist Length is the sum of the joist span and cantilevered section.					



# DECKS

## **Contact Information**

Name:		
Date:		
Address:		
Permit Num	ber:	



234 Shakespeare Drive Stratford, PE C1B 2V8

 Phone:
 902.569.6255

 Fax:
 902.569.1845

 E-mail:
 info@townofstratford.ca

## **Application Process**

Applications are only accepted once all required information is submitted and the fee is paid.

Development Applications are reviewed by the Development Officer for conformance with the Town's Zoning and Development Bylaw and by the Building Official for conformance with the 2015 National Building Code of Canada and the Town's Building Bylaw.

Permits are valid for a 12 month period and are normally issued within seven to ten (7-10) business days.

# **Required Documents**

- 1. Application Fee \$100.<sup>00</sup>
- 2. Application Form
- 3. Letter of Authorization (if applicant is not landowner)
- 4. Site Plan (drawn to scale) See Fig. 1 showing:
  - Lot dimensions
  - Dimensions of <u>all</u> existing and proposed buildings and structures on the lot. i.e. main dwelling, private detached garage, accessory buildings and structures (decks, mini-barns, swimming pool, driveway, fence, etc.)
  - Setbacks of <u>all</u> existing and proposed buildings and structures from the front, side and rear lot lines.
  - Location of <u>all</u> existing and proposed water systems (on-site well, private or municipal connection) and sewerage systems (on-site septic or municipal connection).

5. Building Plans (drawn to scale) - showing:

\* You may use this brochure as part of your application by filling out **Table 1** if the proposed deck is of the same design as the following example drawings and tables. Otherwise submit the following plans specific to your proposed development;

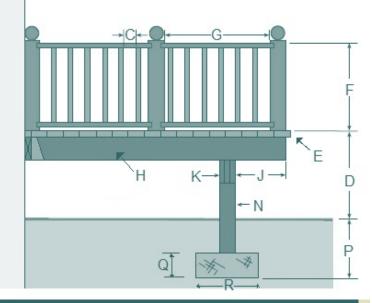
- Cross-section See Fig. 2.
- Structural Plan See Fig 3.

# Table 5 - Ledger Anchor Size & Spacing

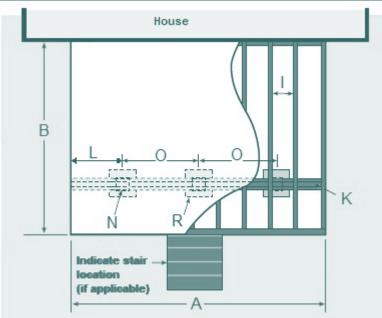
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Table 5 - Ledger Anchors (V)					
Joist Span	Option #1	Option #2			
6'	1/2" @ 18" c/c	5/8" @ 22" c/c			
8'	1/2" @ 16" c/c	5/8" @ 18"c/c			
10'	1/2" @ 12" c/c	5/8" @ 16" c/c			
12'	5/8" @ 12" c/c	3/4" @ 14" c/c			
14'	5/8" @ 10" c/c	3/4" @ 12" c/c			
18'	3/4" @ 10" c/c	n/a			

# Sample Site Plan - Fig. 1

# Example Cross-Section - Fig. 2



# Example Structural Plan - Fig. 3



#### **OFFICE USE ONLY: Inspections & Occupancy**

- Occupancy Permit Issued: \_\_\_\_\_\_

Street

Street

Setbacks

1 =

2 =

3 =

4 =

2

## Specifications - Table 1

A Deck Length (measured along house) B Deck Width (measured out from house) C Openings in Guard/Railing (max. 4") D Height of Deck Above Finished Grade (max) E Decking Thickness Guard/Railing Height F G Distance Between Guard/Railing Posts H Joist Size Joist Spacing J Joist Cantilever K Beam Size Beam Cantilever L M Post/Column Type (Wood or Concrete) N Post/Column Size O Post/Column Spacing Footing Depth (min. 1.5m/5ft) Ρ Q Footing Thickness R Footing Width □ Square □ Round S Stair Width (min. 2'-10") Stair Riser Height (min. 5" max. 8") U Stair Tread Depth (min. 10" max. 14") Ledger Anchor Size and Spacing V