

Building Division

Residential Deck Structure Application Guide



Description

A building permit for a deck, porch, veranda, or balcony.

General Information

A building permit is required for any deck or porch attached to a building regardless of area or height above grade. A building permit is not required if a deck does not exceed 60 centimeters (approximately 23.6 inches) above grade and is not attached to another structure. All decks, regardless of size and height above grade must comply with all applicable law and all Zoning By-laws.

Required Drawings

Survey or Site Plan

Survey or Site Plan, referenced to a current survey, showing the size and location of all existing structures, the new proposed deck or structure(s) and distances to property lines. Location of septic tank and bed to be shown where applicable. Site plan to include Zoning Matrix which contains but not limited to; zone, lot coverage, setbacks and heights as well as pervious surface percentages for the entire lot and front yard where applicable.

Construction Drawings - Plans

Foundation plan to show location of footings, footing size and spacing, as well as, details for concrete slab(s) where applicable. Deck plan to show all construction material types including decking, size and spacing of deck joists, beams, columns, posts and location of stairs. Plans to be fully dimensioned indicating all spans for joists and beams. Elevations to show every side of the deck, porch, veranda or balcony and should indicate height above average grade.

Sections & Details

Section(s) to show footing depth, deck height above average grade and guard or railing height. Deck connection specifications and details to show how the deck will be attached to the existing structure. Stair and landing construction details including height and depth of stair treads, handrails heights and guard and railing connection specifications. Show headroom above stairs (where applicable).

Note: Drawings prepared by a qualified Designer as defined by the Ontario Building Code, must include designer's name, Building Code Identification Number (BCIN), signature, and statement that the designer has reviewed and takes responsibility for the design and meets the qualifications set out in the Ontario Building Code as a Designer or other/independent Designer

Required Forms

- **Application for a Permit to Construct or Demolish**
- **Zoning Review Declaration**
- **Schedule 1 Designer Information * if required**
- **Letter of Authorization / Owner's Authorization Form * if required**
- **For homes in Unassumed Subdivisions:**
 - Deck Waiver from Developer
 - Lot Grading Certificate
 - Grading Plan Stamped by Developers Engineer

Exemptions - Schedule 1

If drawings are prepared, stamped and signed by a qualified Engineer or Architect, they are exempt from submitting a Schedule 1. Property owners may prepare and submit drawings for a residential deck however must fill-in the form to specify the reason for exemption. Note: concrete slabs that do not meet the requirements of Part 9 will need to be designed in accordance with Part 4.

Required Fees – Residential

Residential attached deck, porch, unheated enclosed porch:

Permit Fee	\$ per By-Law
Road Damage Deposit - all Municipal roadways will require a deposit prior to permit issuance.	\$500 - \$5000

Additional Requirements/Approvals/ Applicable Law

The Building Code Act prohibits the issuance of a Building permit if the proposed construction or demolition will contravene and applicable law as defined in the Ontario Building Code.

Please verify all approvals that may be necessary prior to submitting your application to construct. The following are examples:

- **Site Plan Development Approval/Agreement** (King Townships Planning Department)
- **Approval or Permit from Lake Simcoe Region Conservation Authority or Toronto Region Conservation Authority**
- **Committee of Adjustments – Minor Variance Approval**

Should you have any questions or require clarification please contact the Building Division, King Township, 2585 King Road, King City, L7B 1A1 (905) 833-5321

Application for a Permit to Construct or Demolish

This form is authorized under subsection 8(1.1) of the *Building Code Act, 1992*

For use by Principal Authority				
Application number:		Permit number (if different):		
Date received:		Roll number:		
Application submitted to: Township of King (Name of municipality, upper-tier municipality, board of health or conservation authority)				
A. Project information				
Building number, street name			Unit number	Lot/con.
Municipality	Postal code	Plan number/other description		
Project value est. \$		Area of work (m ²)		
B. Purpose of application				
<input type="checkbox"/> New construction	<input type="checkbox"/> Addition to an existing building	<input type="checkbox"/> Alteration/repair	<input type="checkbox"/> Demolition	<input type="checkbox"/> Conditional Permit
Proposed use of building		Current use of building		
Description of proposed work				
C. Applicant				
Applicant is: <input type="checkbox"/> Owner or <input type="checkbox"/> Authorized agent of owner				
Last name		First name	Corporation or partnership	
Street address			Unit number	Lot/con.
Municipality	Postal code	Province	E-mail	
Telephone number	Fax	Cell number		
D. Owner (if different from applicant)				
Last name		First name	Corporation or partnership	
Street address			Unit number	Lot/con.
Municipality	Postal code	Province	E-mail	
Telephone number	Fax	Cell number		

E. Builder (optional)				
Last name	First name	Corporation or partnership (if applicable)		
Street address		Unit number	Lot/con.	
Municipality	Postal code	Province	E-mail	
Telephone number	Fax		Cell number	
F. Tarion Warranty Corporation (Ontario New Home Warranty Program)				
i. Is proposed construction for a new home as defined in the <i>Ontario New Home Warranties Plan Act</i> ? If no, go to section G.		<input type="checkbox"/>	Yes	<input type="checkbox"/>
ii. Is registration required under the <i>Ontario New Home Warranties Plan Act</i> ?		<input type="checkbox"/>	Yes	<input type="checkbox"/>
iii. If yes to (ii) provide registration number(s): _____				
G. Required Schedules				
i) Attach Schedule 1 for each individual who reviews and takes responsibility for design activities.				
ii) Attach Schedule 2 where application is to construct on-site, install or repair a sewage system.				
H. Completeness and compliance with applicable law				
i) This application meets all the requirements of clauses 1.3.1.3 (5) (a) to (d) of Division C of the Building Code (the application is made in the correct form and by the owner or authorized agent, all applicable fields have been completed on the application and required schedules, and all required schedules are submitted). Payment has been made of all fees that are required, under the applicable by-law, resolution or regulation made under clause 7(1)(c) of the <i>Building Code Act, 1992</i> , to be paid when the application is made.		<input type="checkbox"/>	Yes	<input type="checkbox"/>
ii) This application is accompanied by the plans and specifications prescribed by the applicable by-law, resolution or regulation made under clause 7(1)(b) of the <i>Building Code Act, 1992</i> .		<input type="checkbox"/>	Yes	<input type="checkbox"/>
iii) This application is accompanied by the information and documents prescribed by the applicable by-law, resolution or regulation made under clause 7(1)(b) of the <i>Building Code Act, 1992</i> which enable the chief building official to determine whether the proposed building, construction or demolition will contravene any applicable law.		<input type="checkbox"/>	Yes	<input type="checkbox"/>
iv) The proposed building, construction or demolition will not contravene any applicable law.		<input type="checkbox"/>	Yes	<input type="checkbox"/>
I. Declaration of applicant				
<p>I _____ declare that:</p> <p style="text-align: center;">(print name)</p> <ol style="list-style-type: none"> 1. The information contained in this application, attached schedules, attached plans and specifications, and other attached documentation is true to the best of my knowledge. 2. If the owner is a corporation or partnership, I have the authority to bind the corporation or partnership. <p style="margin-top: 20px;"> _____ _____ </p> <p style="clear: both; margin-top: 5px;"> Date Signature of applicant </p>				

Personal information contained in this form and schedules is collected under the authority of subsection 8(1.1) of the *Building Code Act, 1992*, and will be used in the administration and enforcement of the *Building Code Act, 1992*. Questions about the collection of personal information may be addressed to: a) the Chief Building Official of the municipality or upper-tier municipality to which this application is being made, or, b) the inspector having the powers and duties of a chief building official in relation to sewage systems or plumbing for an upper-tier municipality, board of health or conservation authority to whom this application is made, or, c) Director, Building and Development Branch, Ministry of Municipal Affairs and Housing 777 Bay St., 2nd Floor. Toronto, M5G 2E5 (416) 585-6666.

Building Division Zoning Review Declaration



General Information

Zoning review is a detailed review of proposed construction, demolition and/or development intended to support a building permit application. This review determines zoning compliance and confirms compliance with other applicable law and by-laws. Zoning review is completed by the Planning Department.

Project Information: ☐ AGENT/ APPLICANT ☐ OWNER

OWNER NAME:

First Last

APPLICANT NAME:

(IF DIFFERENT THAN ABOVE)

First Last

PROPERTY ADDRESS:

Street No. and Name City Postal Code

LEGAL DESCRIPTION:

Lot No. Plan No. Concession

MAILING ADDRESS

(IF DIFFERENT THAN ABOVE)

Street No. and Name City Postal Code

TELEPHONE NUMBER: _____ **EMAIL ADDRESS:** _____

Declaration and Acknowledgement of Applicant

I hereby declare and acknowledge the following:

- I am, ☐ the owner as stated above
☐ the owner's authorized agent
☐ an officer/employee of _____ which is an authorized agent of the owner

The time period for building permit application review according to OBC 1.3.1.3. Part 1, Division C, cannot be established until all required applicable law approvals, including zoning review, are complete and the approved documents are returned to the Building Division.

The Building Code Act prohibits the issuance of a building permit if proposed construction or demolition will contravene applicable law as defined in the Building Code.

This review does not relieve the owner from complying with the Ontario Building Code, the Act, all applicable by-laws and regulations.

I hereby certify that I have read and agree to the information presented on this page.

Name (please print) Signature Date

Personal information collected on this form is under the authority of the Municipal Act, s. 11. The purpose of this collection is to administer the Service Connection Permit Application Process. Personal information provided on this form is protected in accordance with Municipal Freedom of Information and Protection of Privacy Act (MFIPPA) Part II. Should you have any questions or concerns regarding the collection of personal information, please contact the Building Division, King Township, 2585 King Road, King City, ON L7B 1A1 (905) 833-4078.

Schedule 1: Designer Information

Use one form for each individual who reviews and takes responsibility for design activities with respect to the project.

A. Project Information				
Building number, street name			Unit no.	Lot/con.
Municipality	Postal code	Plan number/ other description		
B. Individual who reviews and takes responsibility for design activities				
Name		Firm		
Street address			Unit no.	Lot/con.
Municipality	Postal code	Province	E-mail	
Telephone number	Fax number		Cell number	
C. Design activities undertaken by individual identified in Section B. [Building Code Table 3.5.2.1. of Division C]				
<div style="display: flex; justify-content: space-between;"> <div style="width: 30%;"> <input type="checkbox"/> House <input type="checkbox"/> Small Buildings <input type="checkbox"/> Large Buildings <input type="checkbox"/> Complex Buildings </div> <div style="width: 30%;"> <input type="checkbox"/> HVAC – House <input type="checkbox"/> Building Services <input type="checkbox"/> Detection, Lighting and Power <input type="checkbox"/> Fire Protection </div> <div style="width: 30%;"> <input type="checkbox"/> Building Structural <input type="checkbox"/> Plumbing – House <input type="checkbox"/> Plumbing – All Buildings <input type="checkbox"/> On-site Sewage Systems </div> </div>				
Description of designer's work				
D. Declaration of Designer				
<p>I _____ declare that (choose one as appropriate): <div style="text-align: center;">(print name)</div> <p style="margin-top: 10px;">I review and take responsibility for the design work on behalf of a firm registered under subsection 3.2.4. of Division C, of the Building Code. I am qualified, and the firm is registered, in the appropriate classes/categories.</p> <p>Individual BCIN: _____</p> <p>Firm BCIN: _____</p> <p style="margin-top: 10px;">I review and take responsibility for the design and am qualified in the appropriate category as an "other designer" under subsection 3.2.5. of Division C, of the Building Code.</p> <p>Individual BCIN: _____</p> <p>Basis for exemption from registration: _____</p> <p style="margin-top: 10px;">The design work is exempt from the registration and qualification requirements of the Building Code.</p> <p>Basis for exemption from registration and qualification: _____</p> <p>I certify that:</p> <ol style="list-style-type: none"> 1. The information contained in this schedule is true to the best of my knowledge. 2. I have submitted this application with the knowledge and consent of the firm. <div style="display: flex; justify-content: space-between; margin-top: 20px;"> <div style="width: 30%; text-align: center;"> _____ Date </div> <div style="width: 60%; text-align: center;"> _____ Signature of Designer </div> </div> </p>				

NOTE:

1. For the purposes of this form, "individual" means the "person" referred to in Clause 3.2.4.7(1) (c). of Division C, Article 3.2.5.1. of Division C, and all other persons who are exempt from qualification under Subsections 3.2.4. and 3.2.5. of Division C.
2. Schedule 1 is not required to be completed by a holder of a license, temporary license, or a certificate of practice, issued by the Ontario Association of Architects. Schedule 1 is also not required to be completed by a holder of a license to practise, a limited license to practise, or a certificate of authorization, issued by the Association of Professional Engineers of Ontario.

Building Division

Letter of Authorization



Information

Property Address: _____

Legal Description: _____

Roll Number: _____

Personal Information

Name: _____

Phone No.: _____

Address: _____

Email: _____

Authorizing Letter

To Whom it May Concern:

I/We, the above, do give _____ permission to act as our agent in applying to the Township of King for a building permit for the following projects:

(check all that apply)

- ☐ Demolition of Accessory Structure
- ☐ Demolition of Residential Building
- ☐ Demolition of Commercial/Industrial Building
- ☐ Construction of Dwelling
- ☐ Addition to Dwelling
- ☐ Construction of Accessory Structure
- ☐ Construction of a Deck
- ☐ Construction of Commercial/Industrial Building
- ☐ Renovation to Existing Building
- ☐ Other: (please specify) _____

Property Owner Signature: _____ Date: _____

Property Owner Signature: _____ Date: _____

Authorized Agent Signature: _____ Date: _____

Building Division Deck Application Guide



Property Address: _____

Deck Size: Width: _____ Length: _____ Material: _____

Deck Height: Ground to top of decking: _____

Stair Steps (pg. 5): Rise: _____ Run: _____

Decking: Size: _____ Material: _____

Guard: Height: _____

Type: ☐1. Cantilevered pickets system (see page 5)
☐2: Post and rail system (see page 6)
☐3: Other, please specify: _____

Steel, aluminum, and glass railing systems must be designed in accordance with the structural requirements of Part 4 Div. B of the OBC and an engineered design must be submitted. PVC or composite decking with guard system **must have Minister ruling or BMEC approval accompanied with CCMC report.** A copy of all approvals is required.

Joists: Size: ____ x ____ @ ____ on center Span: ____ Overhang: ____ (max. 2')

Beam 1: Size: ____ x ____ x ____ ply Span: ____ Overhang: ____ (max. 2')

Beam 2: Size: ____ x ____ x ____ ply Span: ____ Overhang: ____ (max. 2')

Post: Size: _____ (min. 4x4)

Footing: Sonotube: ____ diameter minimum 4' below grade

Deck Ledger (for attached decks):

Ledger board size: _____ Lag bolt size: _____ (min. 1/2") Spacing: _____

Lag bolt length: _____ (long enough to pass through brick veneer and into rim joist or structural framing of house)

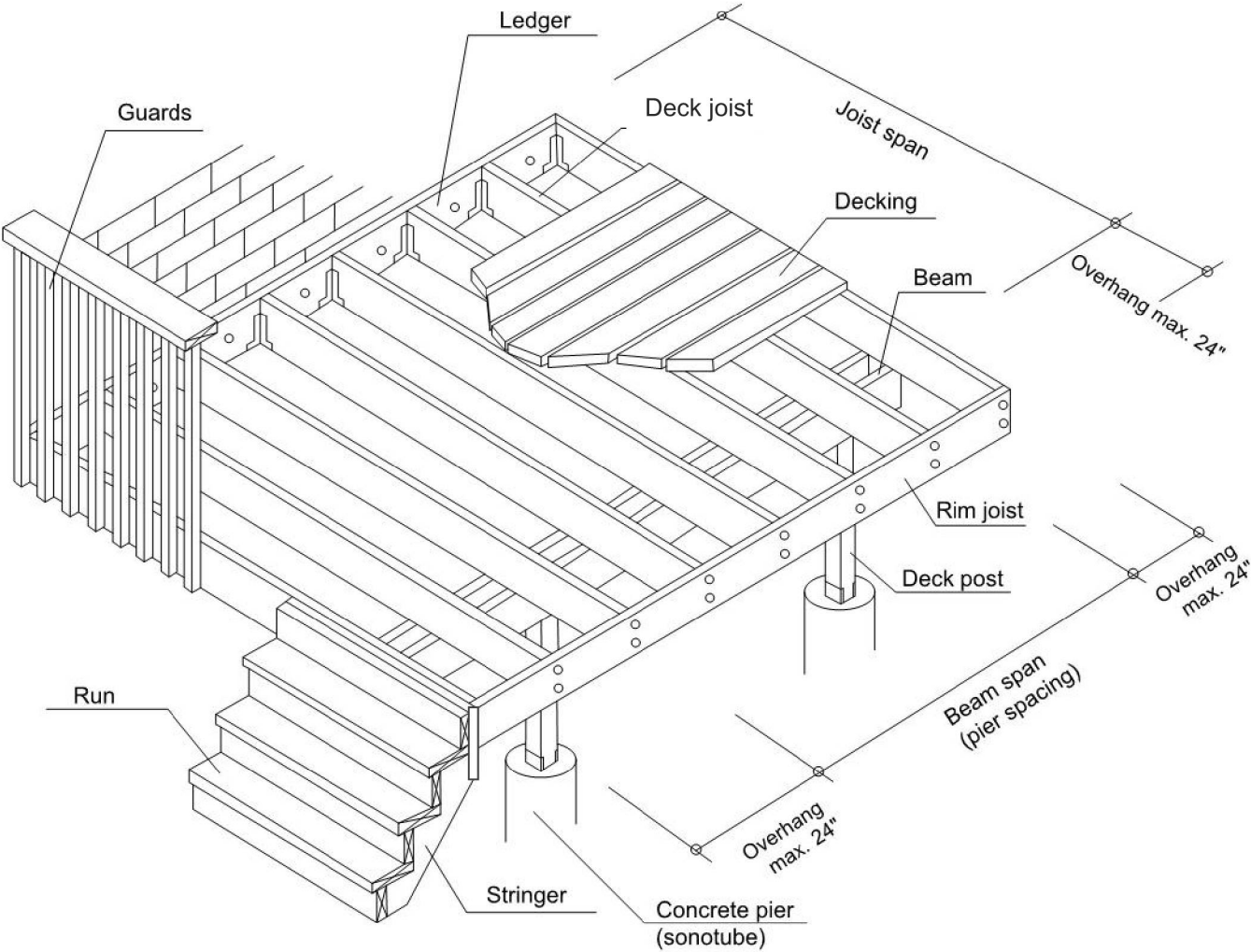
GENERAL NOTES:

1. All work detailed on plans or not is subject to field review of a building inspector
2. Footings/sonotubes must bear on undisturbed soil a minimum of 48" below grade
3. Deck foundation/sonotubes shall extend not less than 6" above grade
4. Decks attached to a house cannot be supported on brick veneer - they shall be attached to the structural framing of the house
5. Provide lateral support (diagonal knee bracing) to deck posts when posts are more than 600mm (24") in height
6. Provide mid span solid blocking where joists span over 6'-11"
7. Guards are required if deck height is 600mm (23 5/8") or greater in height from average grade measured 1.2m (47 1/4") out from edge of deck
8. Decks greater than 600 mm above average grade to 1800 mm above average grade shall be protected by a guard not less than 900 mm high. Decks greater than 1800mm above average grade shall be protected by a guard 1070mm high. All guards shall have no climbable attachments and no openings greater than 100mm.
9. Provide solid blocking between joists at guard rail posts where guard is parallel to joist direction

10. Guards shall meet requirements set out in Div. B Subsection 9.8.8 and/ or SB-7 of the Supplemental Standards of 2012 OBC
11. Stairs with more than 3 risers shall have a handrail
12. Wood stair stringers shall be a minimum size of 2"x10" and the space between stringers shall not be more than 2'11".
13. Existing grade and surface drainage shall not be altered without approval. All excess material to be removed. Site grading (if applicable) shall not adversely affect adjacent properties.

Note: If the property is located within the regulated area of Conservation Authority (LSRCA or TRCA), the applicant shall obtain a permit or exemption letter from the applicable Conservation authority.

Designer Qualification: The legal registered owner of a dwelling is permitted to design a deck without being qualified under the OBC. **However, the design is required to provide sufficient detail and demonstrate the proposed construction will comply with all requirements set out in the Ontario Building Code including applicable law.**



Note: Deck design based on a maximum soil bearing capacity of 75 kPa.

TOWNSHIP OF KING - BUILDING DIVISION
King Township 2075 King Road King City, Ontario Canada L7B 1A1

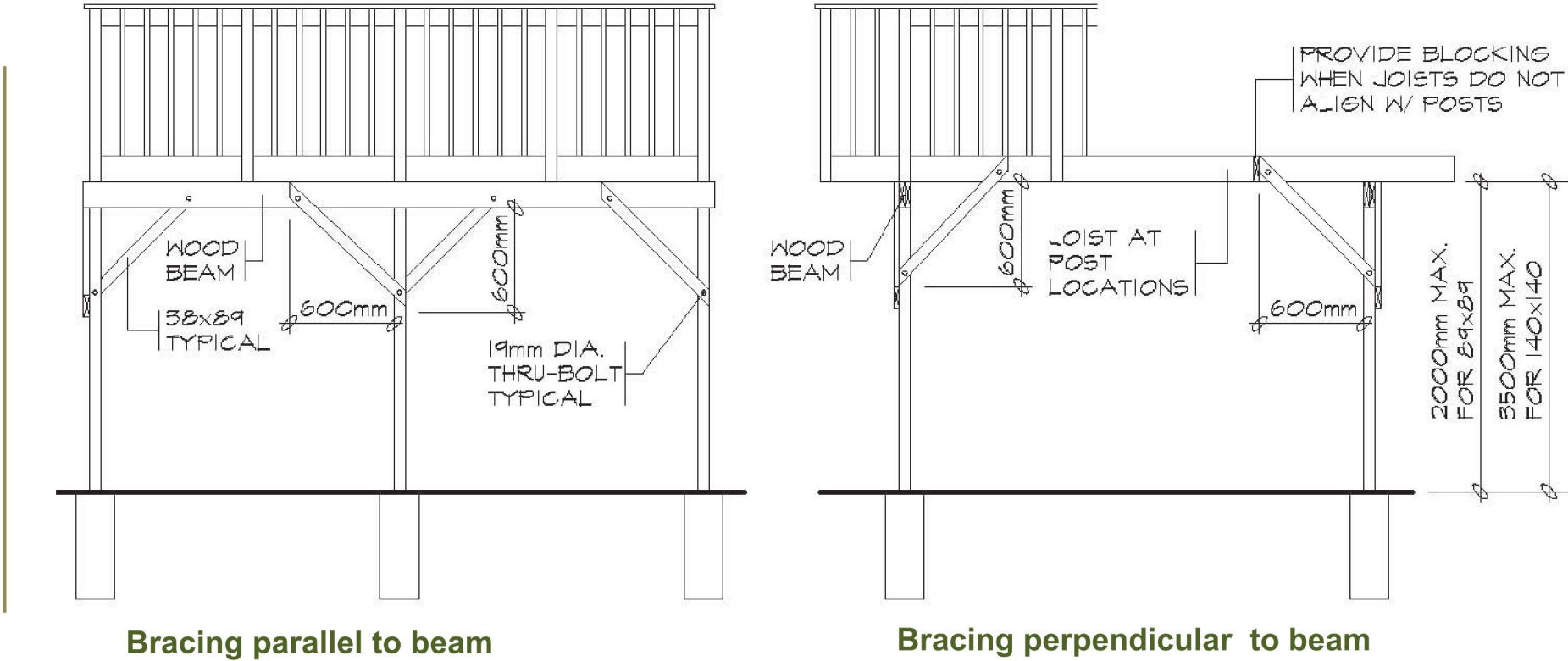
To book an inspection:
PHONE: 905-833-4098 or
inspections@king.ca



TYPICAL CONSRUCTION DETAILS
STRUCTURAL SIZING TABLES

JOIST SIZING TABLE				
Live Load 1.9 kPa				
Joist Span		Joist Spacing		
mm	inches	(11.875") 300 mm	(15.75") 400 mm	(23.625") 600 mm
2000	78.75"	2"x6"	2"x6"	2"x6"
2500	98.50"	2"x6"	2"x6"	2"x8"
3000	118.125"	2"x6"	2"x8"	2"x8"
3500	137.75"	2"x8"	2"x8"	2"x10"
4000	157.50"	2"x10"	2"x10"	2"x12"
BEAM SIZING TABLE				
Live Load 1.9 kPa				
Supported Joist Length		Pier Spacing		
mm	inches	(78.75") 2000 mm	(118.125") 3000 mm	(157.5") 4000 mm
1500	59.00"	2/2"x6"	2/2"x8"	2/2"x10"
2000	78.75"	2/2"x6"	2/2"x8"	2/2"x10"
2500	98.50"	2/2"x8"	2/2"x10"	2/2"x12"
3000	118.125"	2/2"x8"	2/2"x10"	2/2"x12"
3500	137.75"	2/2"x8"	2/2"x10"	2/2"x12"
4000	157.50"	2/2"x8"	2/2"x10"	2/2"x12"
Post Size mm	Max. Height meters	Maximum Supported Deck Area		
		Live Load (kPa)		
		1.90		
89x89/ 3.5"x3.5"	1.00	10.86		
	1.50	5.93		
140x140/ 5.5"x5.5"	2.00	3.15		
	2.50	13.67		
	3.00	9.32		
	3.50	6.35		
		4.41		

PIER SIZES	
Dia. (mm)	Area in M²
200	0.03
250	0.05
300	0.08
350	0.10
400	0.13
500	0.20
600	0.30



- Construction Notes:
- 1. Decks must be attached to house foundation or structural framing (**not brick veneer**) with minimum ½“ lag bolts at maximum 24” on center
 - 2. All fasteners shall be resistant to corrosion (galvanized)
 - 3. No member or attachment between the height of 4” and 2’11” on the guard shall facilitate climbing
 - 4. **All lumber shall be decay resistant** No. 2 SPF (spruce, pine, fir) or better and all end cuts of pressure treated lumber shall be treated to prevent decay

Mandatory Inspections – Once a permit is obtained all work must be inspected at mandated stages of construction to ensure all work is carried out in accordance with the approved permit drawings and complies with the Ontario Building Code and all applicable law.

- 1. Footing Inspection (Before Pouring Concrete): holes are inspected to verify depth, diameter, and spacing of piers prior to placement of concrete.
- 2. Framing Inspection: completion of framing components, posts, beams, joist and ledger board including the structural connection to the house.
- 3. Final Inspection: required at completion of decking, guards, and stairs.

TOWNSHIP OF KING - BUILDING DIVISION
King Township 2075 King Road King City, Ontario Canada L7B 1A1

To book an inspection:
PHONE: 905-833-4098 or
inspections@king.ca



LEDGER BOARD FASTENING NOTES:

Note:

For the purpose of ledger board fastening, there are a number of scenarios to consider when applying the appropriate attachment solution.

Brick Veneer:

Ledger board must bear directly on surface of brick veneer. Fastening shall be made with 1/2" diameter through-bolts spaced at 16" O.C. and staggered top and bottom on ledger with connections made through the rim joist in all cases. An interior and exterior bolt/nut connection inspection is required prior to covering.

Siding:

Siding material must be removed so the ledger board can attach directly to structural framing/sheathing. Connection may be made:

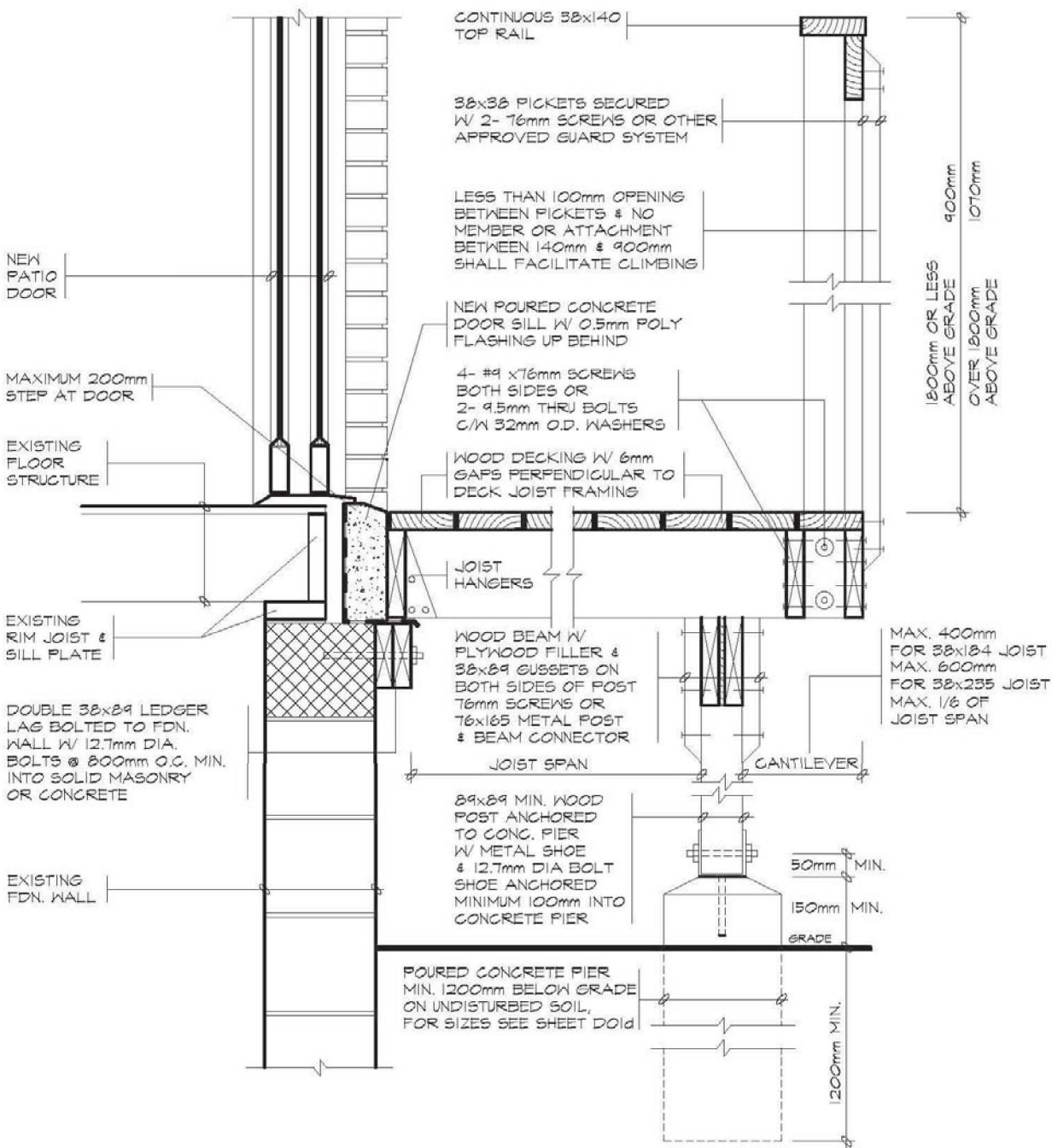
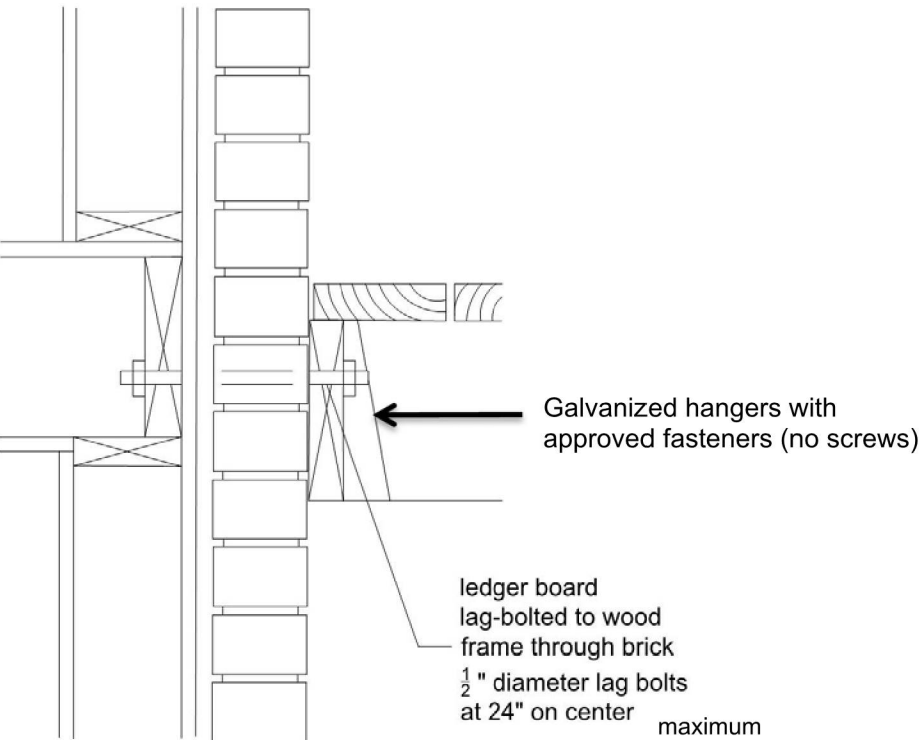
- As prescribed by the Ontario Building Code Table 9.23.3.4. or
- With minimum one 1/2" lag screw spaced at 16" O.C. and staggered top and bottom on ledger
- Suitable sized pilot holes must be drilled through ledger and into structural framing. Lags must be screwed in, not hammered.

Concrete Walls:

Ledger board is directly connected to a structural concrete wall. Fastened with minimum 1/2" diameter:

- Threaded stud/expansion anchor, or
- Through-bolt

WALL CONNECTION - THROUGH BOLT BRICK DETAIL



SAMPLE – DECK SECTION DETAIL

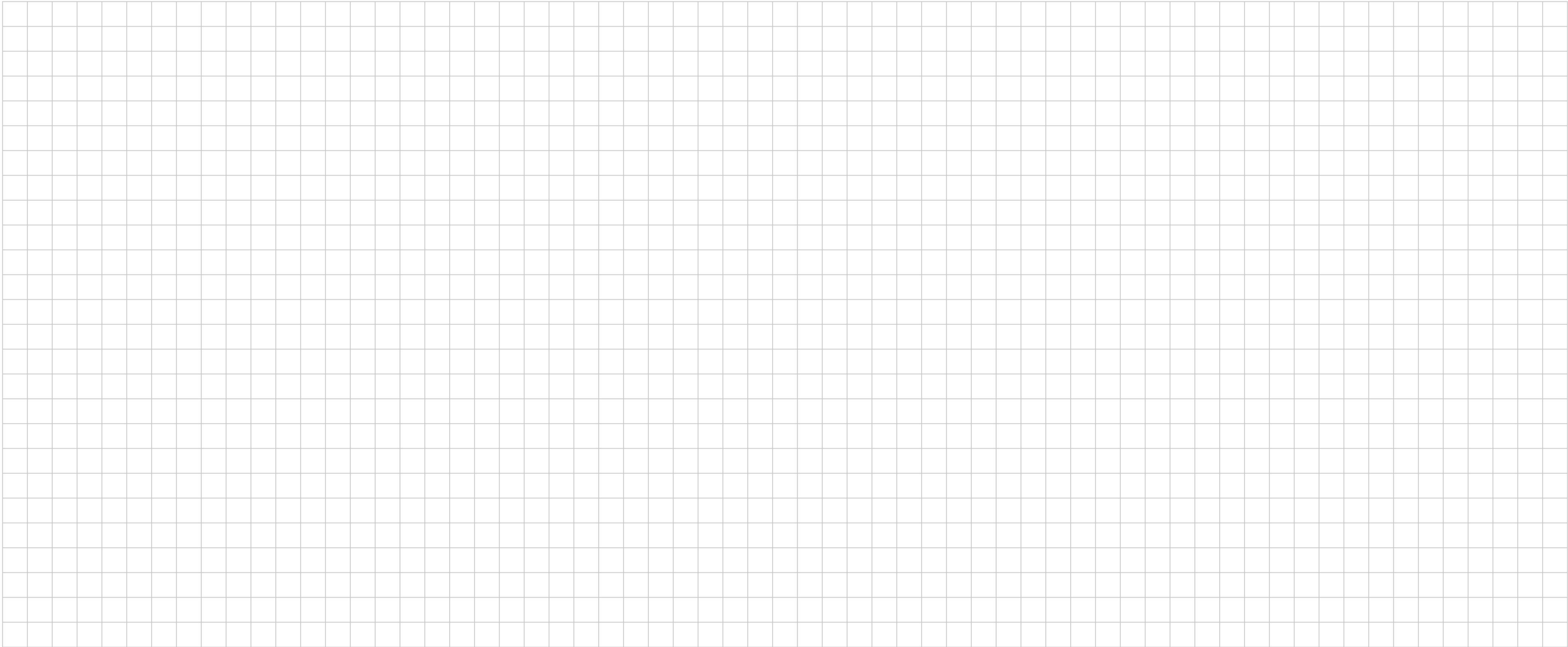
TOWNSHIP OF KING - BUILDING DIVISION

King Township 2075 King Road King City, Ontario Canada L7B 1A1

To book an inspection:
PHONE: 905-833-4098 or
inspections@king.ca



DECK PLAN DRAWINGS



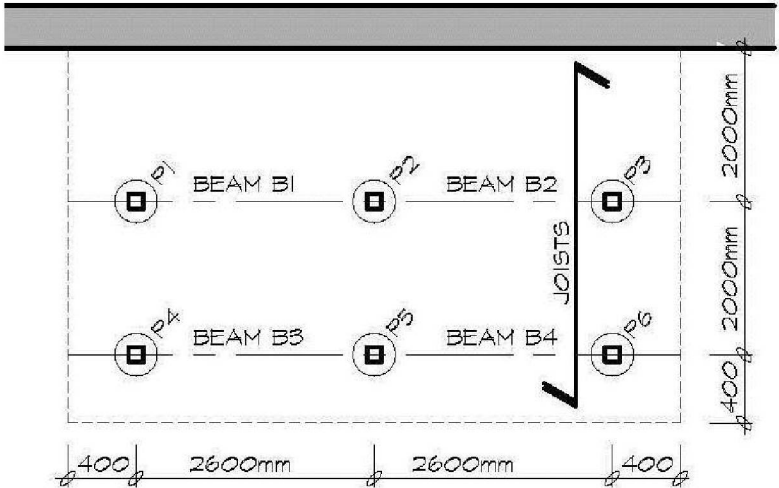
Scale: 1'-0" = 1/4"

DRAW DECK PLAN(S)

Use the information within the package to draw the **Foundation Plan** and **Floor Plan** of the deck including the structural components and items listed below:

- Shape of Deck
- Joists
- Footings /Sonotubes
- Beam
- Location of stairs * if applicable

EXAMPLE FLOOR PLAN



Note: Pier size (m2) =

Supported deck area in (m2) x 1.9 kPa Live Load
Soil bearing capacity

TOWNSHIP OF KING - BUILDING DIVISION

King Township 2075 King Road King City, Ontario Canada L7B 1A1

To book an inspection:

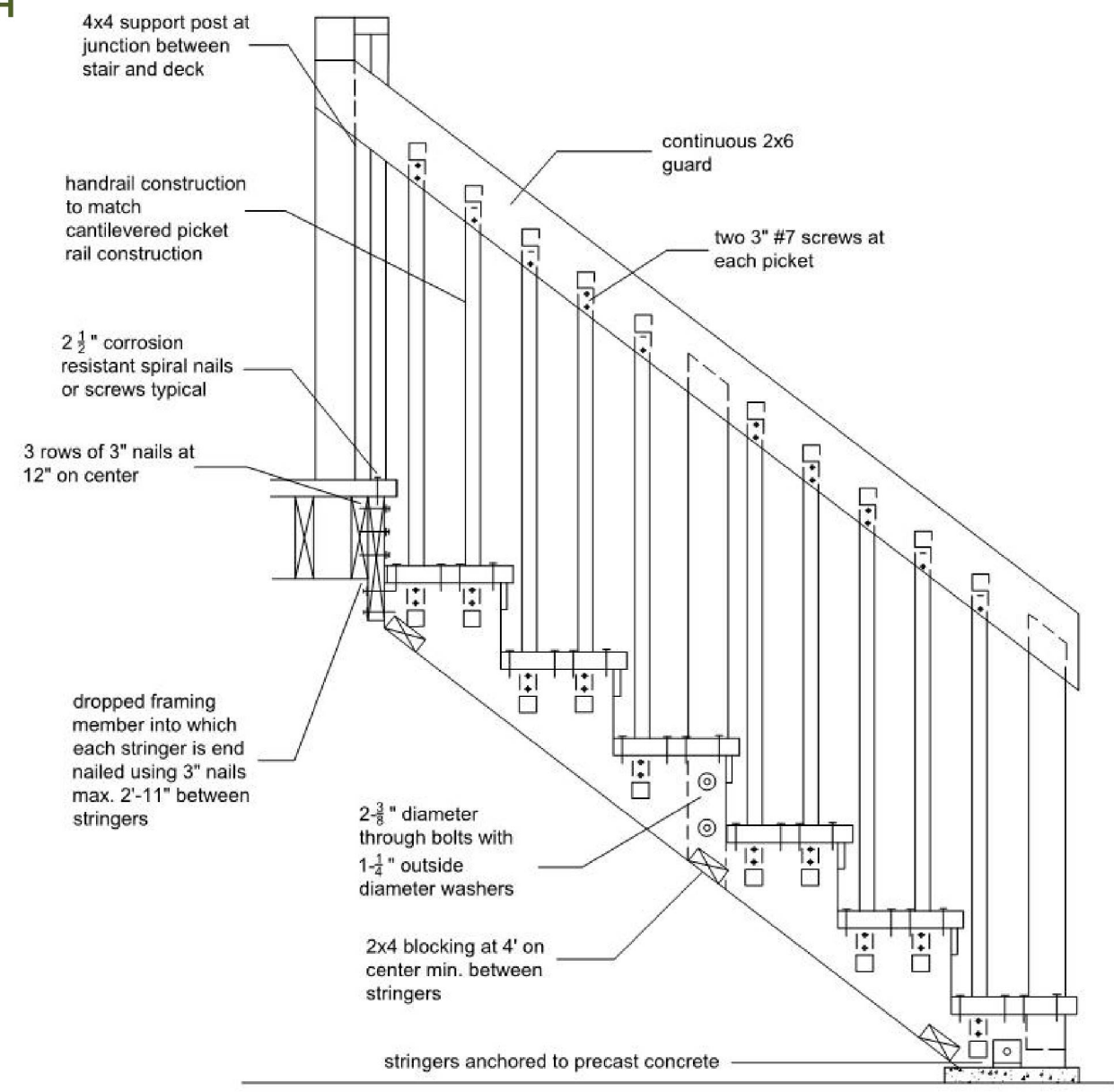
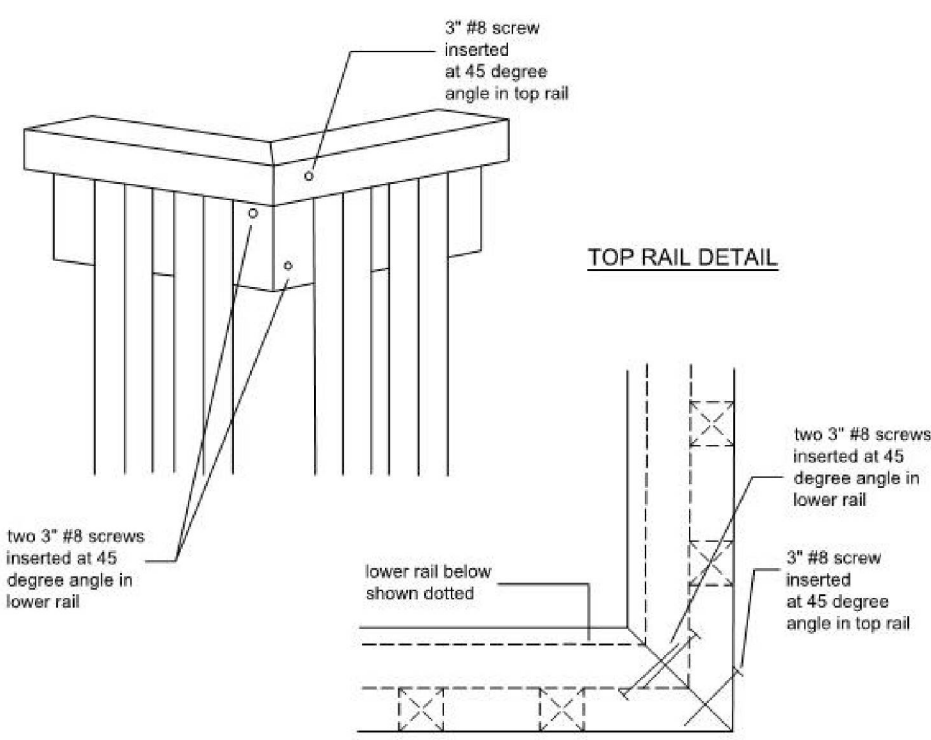
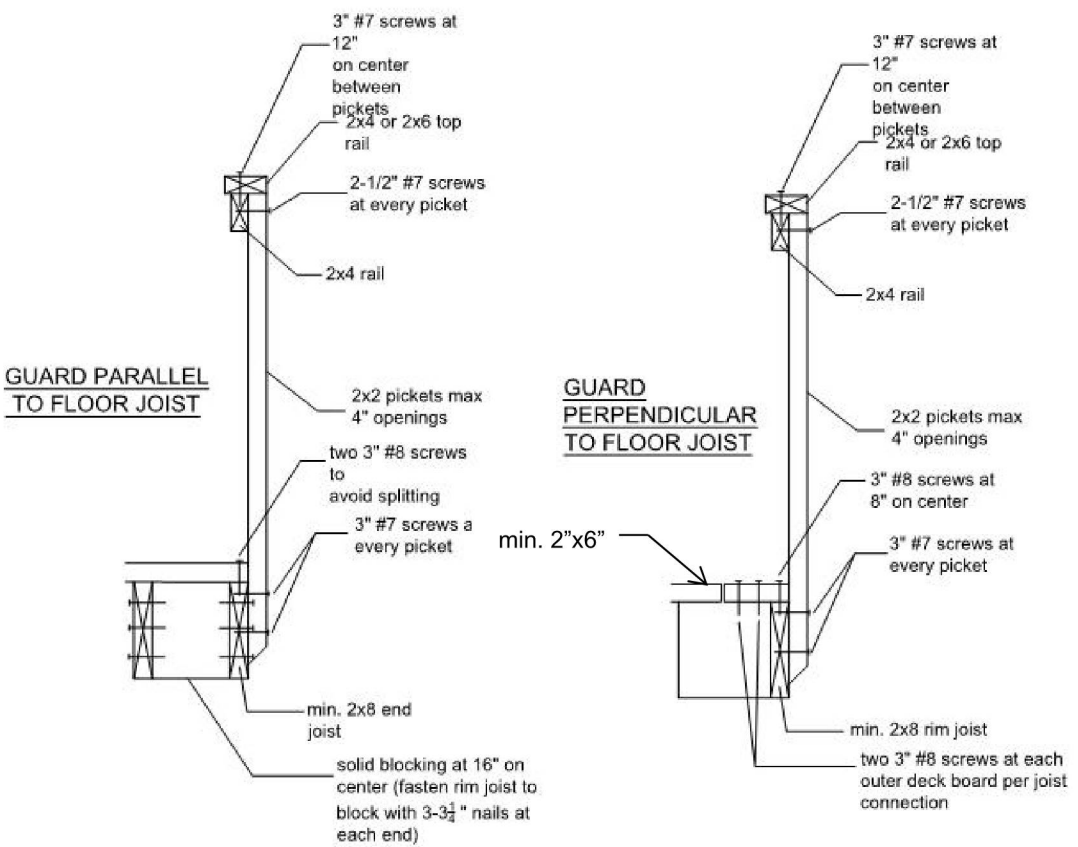
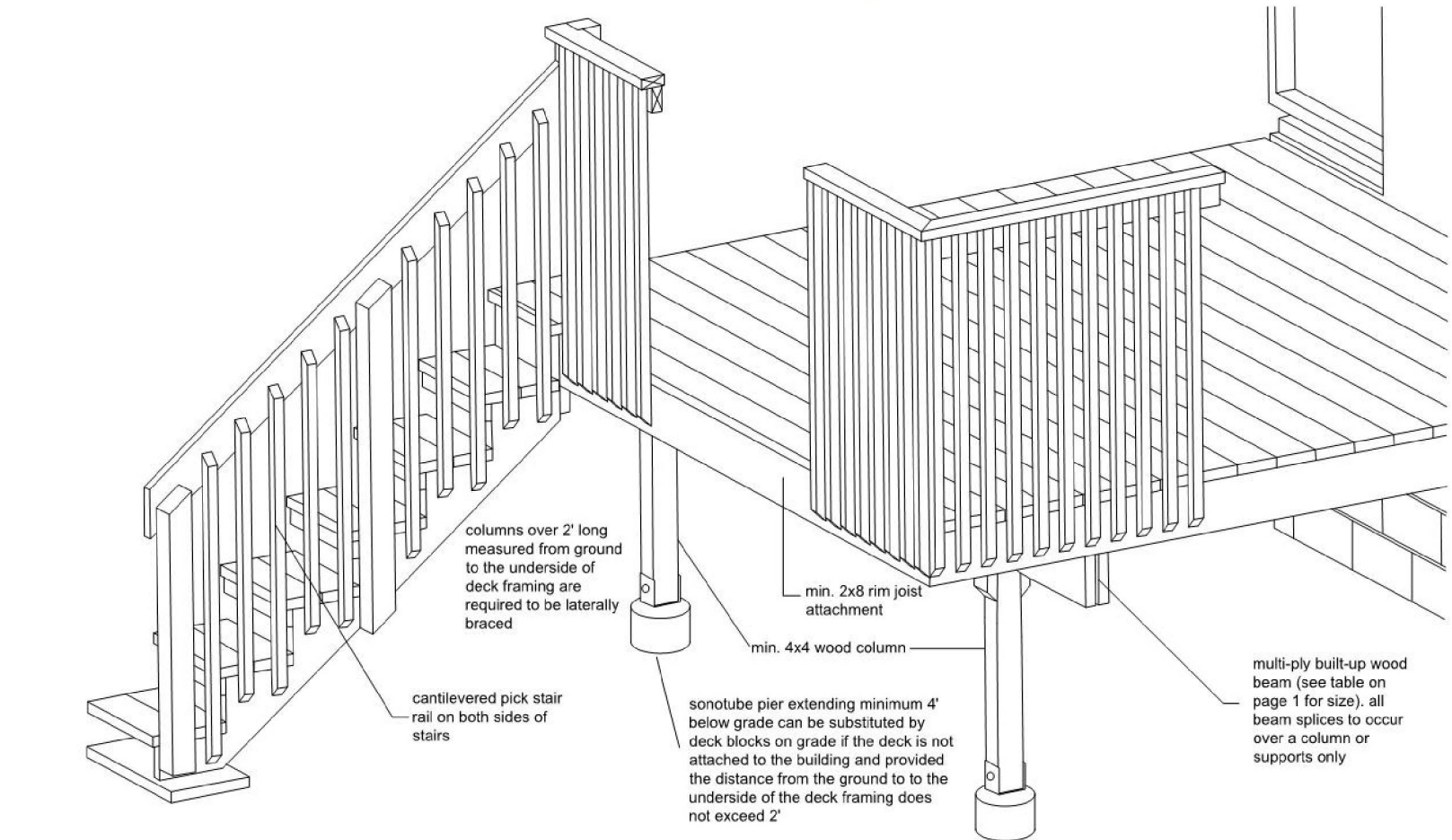
PHONE: 905-833-4098 or

inspections@king.ca



WOOD PICKET SYSTEM DETAILS

Note: Example Only. Refer to OBC Volume 2, MMAH Supplementary Standards SB-7 to select specific guard attachment detail.



Cantilevered Picket Notes:

1. Provide a minimum of 10 pickets beyond the return if end restraint of the guard is provided by this return detail only. Otherwise a post is required (see post attachment detail on page 4).
2. Pre-drill pilot holes in pickets to avoid splitting

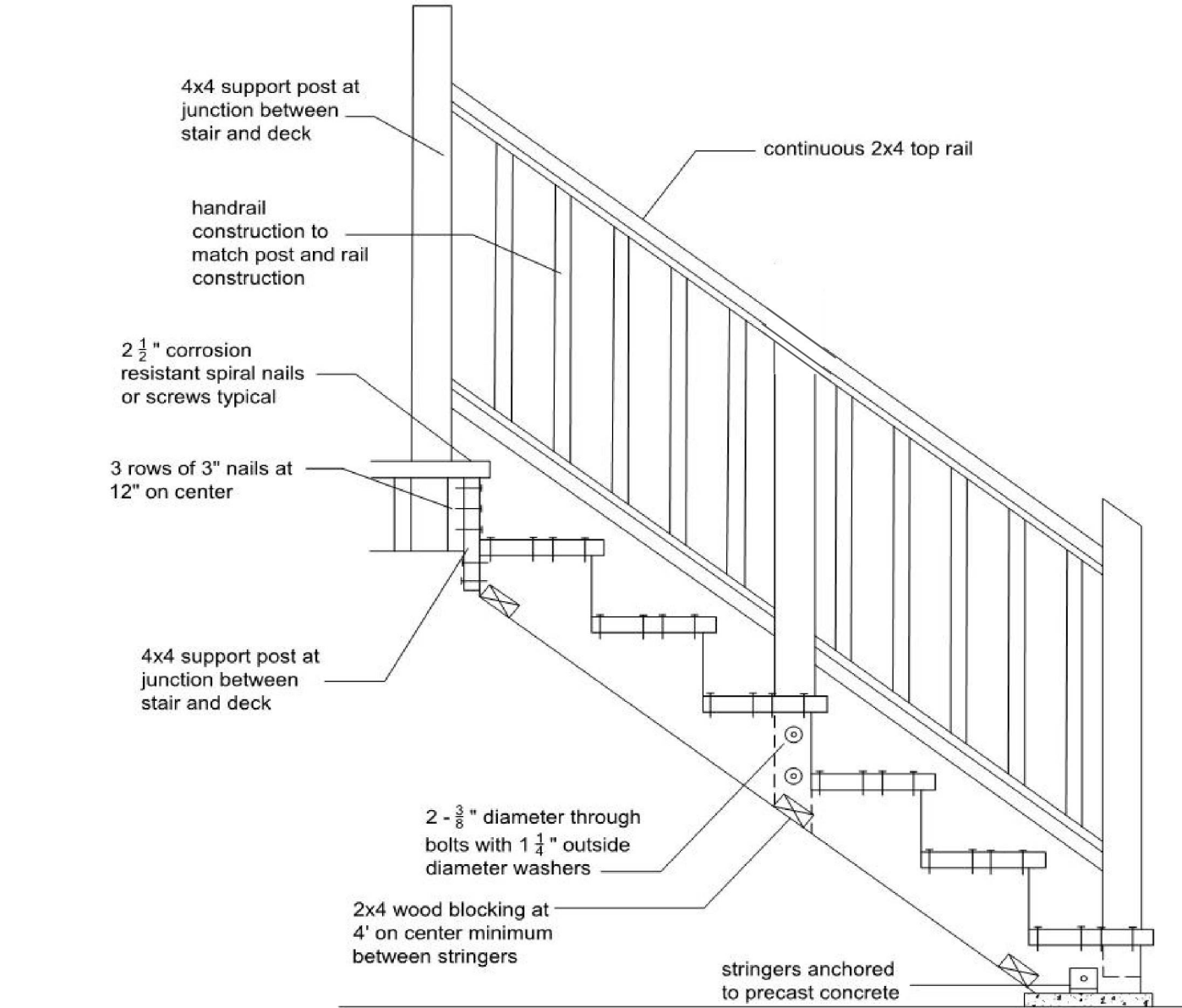
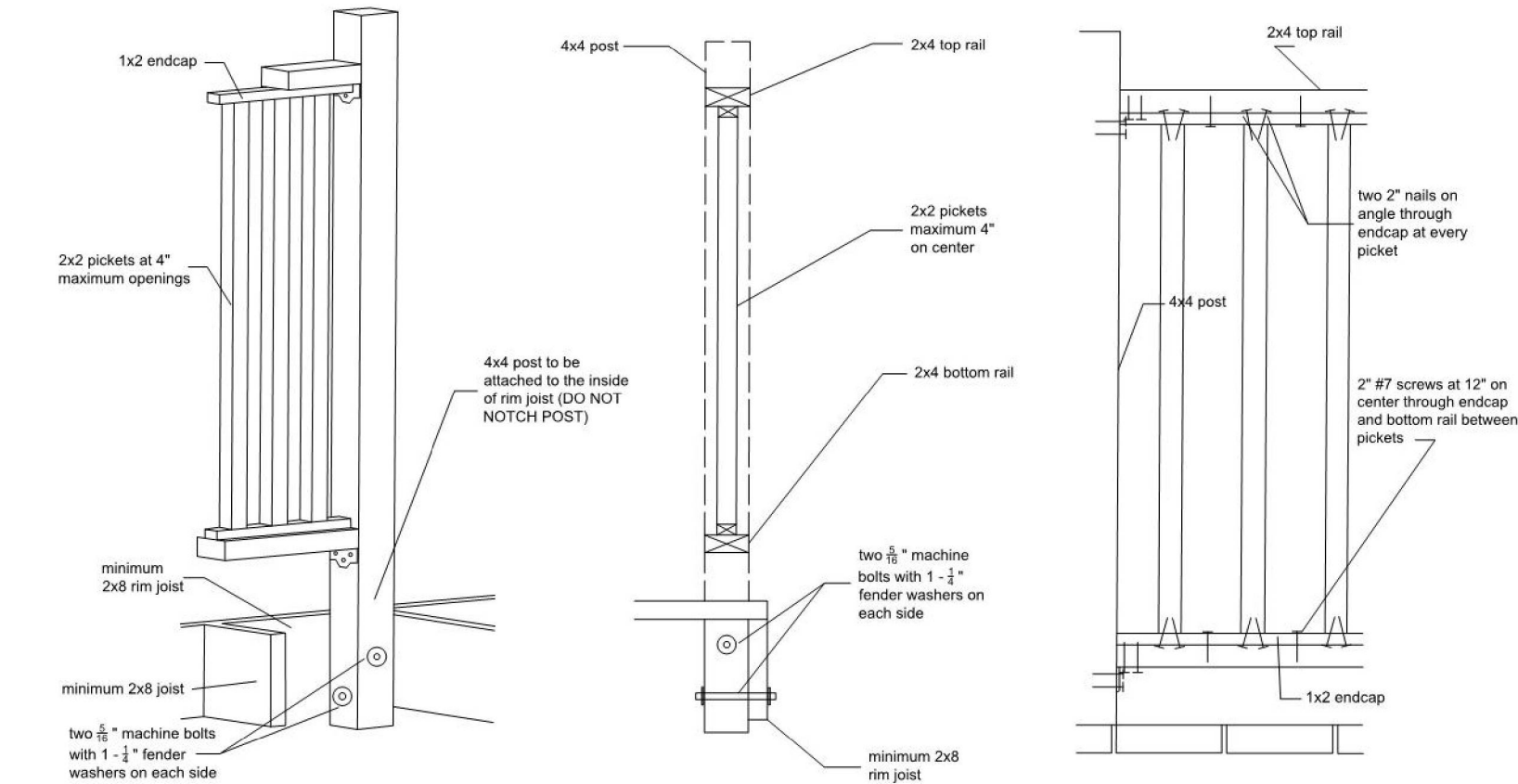
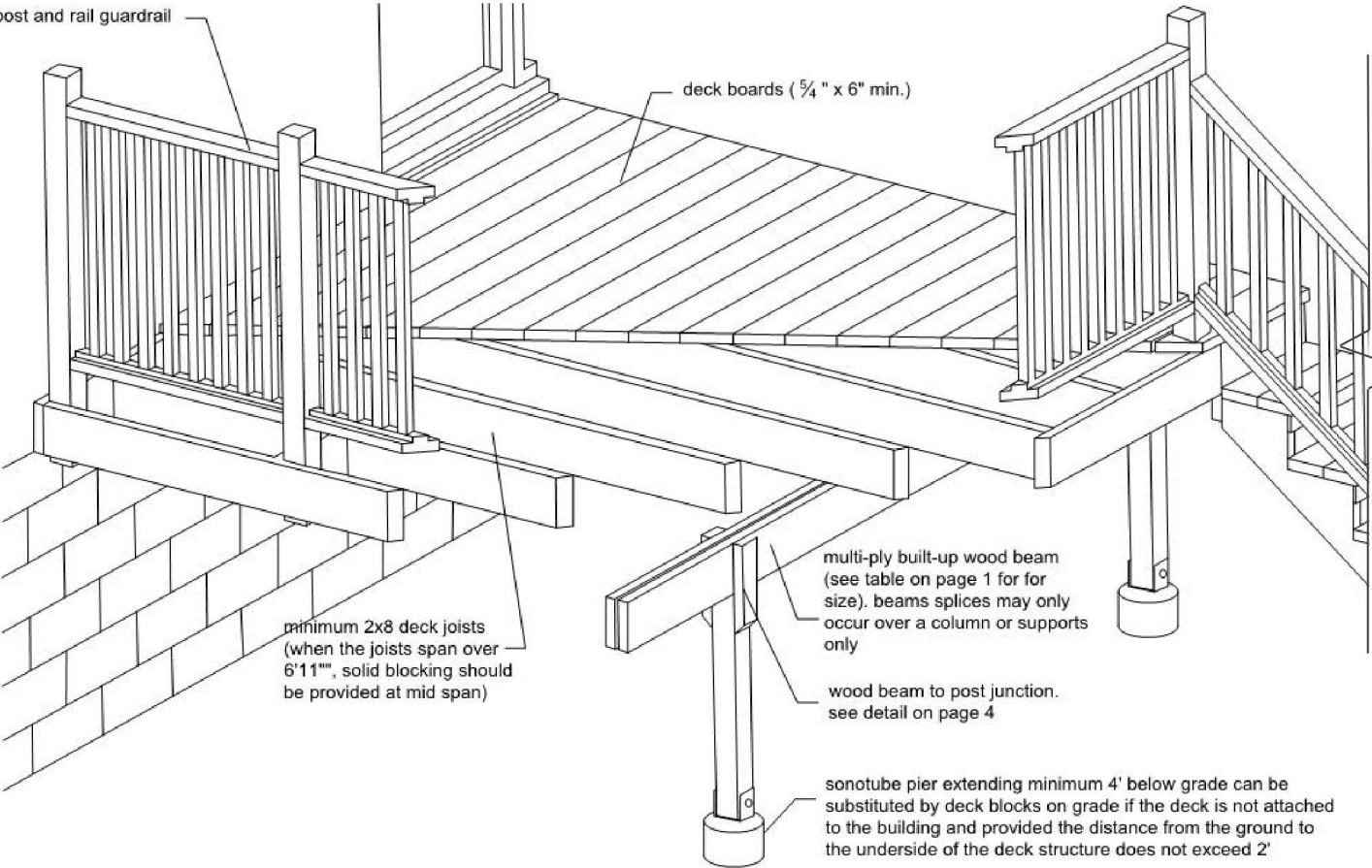
TOWNSHIP OF KING - BUILDING DIVISION
King Township 2075 King Road King City, Ontario Canada L7B 1A1

To book an inspection:
PHONE: 905-833-4098 or
inspections@king.ca



GUARDS & HANDRAIL - POST AND RAIL SYSTEM DETAILS

Note: Example Only. Refer to OBC Volume 2, MMAH Supplementary Standards SB-7 to select specific guard attachment detail.



Typical Stair Construction Details:

1. Provide a guardrail if finished deck floor height is greater than 600mm (23 5/8") or more above average grade. See Note '8' on page 1 for required guardrail heights.
2. When guardrail is not required, provide a handrail 31"-38" high on stairs if more than two risers.
3. All steps to have equal rise and run between landings.

Minimum rise = 4 7/8" vertically, Maximum rise = 7 7/8" vertically
Minimum tread = 9 1/4" horizontally, Maximum tread = 14" horizontally

TOWNSHIP OF KING - BUILDING DIVISION

King Township 2075 King Road King City, Ontario Canada L7B 1A1

To book an inspection:
PHONE: 905-833-4098 or
inspections@king.ca

