

DECKS DECKS

DESIGN AND PERMIT APPLICATION GUIDE FOR DECKS

WHEN IS A BUILDING PERMIT REQUIRED FOR A DECK?

A Building Permit is required for the construction or replacement of a deck that is:

- Attached to the dwelling or structure
OR
- Over 108 sq.ft (10 sq.meters) in area
OR
- Walking surface is more than 24" (600mm) above the ground

WHAT ZONING REGULATIONS ARE THERE RELATING TO DECKS?

All decks must adhere to the City's Zoning By-Law 50-88. Each area within the City's limits is within a Zone. Each Zone consists of regulations for lot setbacks. Please check with the Planning Department at 519-633-2560 to ensure you understand the zoning requirements and lot setbacks for your project prior to submitting for a permit.

WHERE TO APPLY FOR A BUILDING PERMIT FOR A DECK?

Completed Building Permit applications and drawings can be submitted to the Planning and Building Department located at

9 Mondamin Street, St. Thomas ON
Monday – Friday 8:30am to 4:30pm

HOW LONG WILL IT TAKE?

Once a completed application and plans are submitted, a building permit for your deck will be issued within approximately 10 business days. The more accurate your submission, the quicker the review process can be.

HOW MUCH WILL IT COST AND WHEN DO I PAY?

A building permit for a deck is a flat rate cost of \$150. This amount is dictated by the City's current Building By-Law 150-2016. You will be contacted via the email address that is on your application and informed when your permit is ready to be picked up. You can pay with cash, cheque or debit at the Treasury Desk at City Hall on the main floor and bring your receipt to the counter at the Planning and Building Department to pick up your copy of the permit.

CAN I DO MY OWN DRAWINGS?

As the property owner, you may design and produce your own drawings. This guide is designed to assist you with that process. It includes example drawings and details which illustrate the quality of submission necessary for a permit review by the building department. Deck designs from a lumber yard may be used, but are not acceptable as a standalone submission. All of the information from the [**DECK DESIGN CHECKLIST**](#) must be provide

Drawings do not have to be done with a computerized design program, but however, they do need to be to scale (graph paper is recommended). All materials must be labeled, all dimensions included and the submission must be legible. Please be aware that the responsibility of the Building Department is to ensure the deck proposal meets or exceeds the minimum requirements of The Ontario Building Code and will comply with City's Zoning By-Laws. It is not the responsibility of the Building Department to design the deck. Complete the [**DECK DESIGN CHECKLIST**](#) to ensure a complete submission.

CAN I USE DECK BLOCKS?

Deck blocks may be used ONLY when:

- The deck is not attached to the dwelling or any other structure
AND
- The deck does not exceed 592 sq.ft. (55 sq.meteres)
AND
- The distance from the finished ground and the underside of the floor joists does not exceed 24" (600mm)

CAN I USE PLASTIC, GLASS OR ALUMINUM GUARDS/HANDRAILS?

A guard (to prevent falls) is required where the walking surface of a deck/stair exceeds 24" (600mm) above grade. The Ontario Building Code permits the installation of wood guards and handrails only. Should you plan on installing anything other than a wood guard, please submit a copy of the Pre-Engineered guard details with your Building Permit application. Typically a standard Engineers letter of approval from the Manufacturer is available from the Supplier.

CAN I USE HELICAL Piles or PIERS?

Helical Piles/Piers also called Screw Pile Foundations are drilled into the ground and are a great solution when the disruption of digging for concrete piers is not desired. There must be an engineer sealed Post Conformity Report provided to the municipality of any project using any brand or Helical piers. Be sure to ask your supplier if that information will be available.

REMEMBER TO WAIT FOR YOUR BUILDING PERMIT!

It is your responsibility to ensure that a building permit is obtained prior to construction. Building without a permit is against the law and could result in fines or penalties as set out in the Building Code Act.

Please review the permit package in its entirety before starting construction. If you order materials prior to obtaining your permit, please be aware that the plans examiner may have made structural changes to your design (i.e. joist size, columns, beams or spacing) Post your orange permit at the front of your home (in a front window is a good place for it). Permits are valid for 1 year from date of issue.

REQUIRED INSPECTIONS FOR A DECK:

It is the responsibility of the permit holder to call at least 24 hours in advance for required inspections.

1. Excavation/Footing Inspection - When the holes are dug BUT prior to pouring concrete
2. Framing Inspection - Once framing is complete (posts, beams, joists)
3. Final Inspection - When the project is complete including deck boards, guards, stairs and railings

DECK DESIGN CHECKLIST

To help you ensure submission of a complete and accurate deck permit application, please fill out this check list. There are examples of drawings and details on the following pages

Application Forms:

1. Complete the Building Permit Application form
 2. Complete the Designer's Schedule 1 form
 3. If you are applying on behalf of a property owner, the owner must complete the Authorized Agent Authorization form
- *Ensure all forms are complete, dated and signed

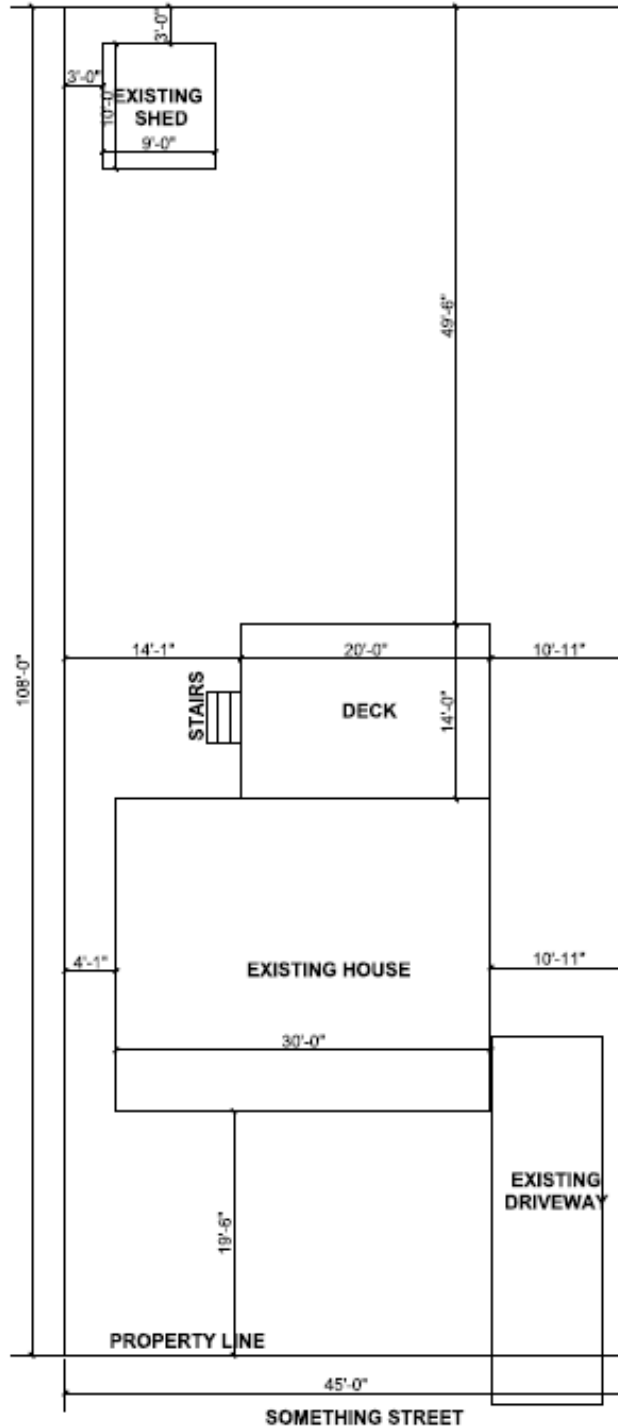
Plans:

- 1) Site plan (2 copies) – site plan must include the following information:
(see page 4 for example)
 - a. Location of dwelling
 - b. Location of proposed deck and stairs
 - c. Dimension of proposed deck to adjacent property lines
- 2) Building plans (2 copies) – these plans must include all of the following information:
(see pages 5-7 for examples – these drawings can be used as part of your submission)
 - a. Ledger board size
 - b. Joist size
 - c. Beam size (note all beams are min 2 ply)
 - d. Column / Post size (4x4 or 6x6)
 - e. Size of concrete sono tube support (min depth is 48")
 - f. Spacing between columns
 - g. Ledger board connection to house (to concrete foundation or through brick veneer to floor rim joist)
 - h. Connection detail of joists to ledger board
 - i. Connection detail of joists to beam
 - j. Connection of beams to post (sitting on top in a galvanized bracket or split on either side of the post)
 - k. Post support detail (are you using sono tubes & post brackets or is the post in the ground encased in concrete)
 - l. Height of deck from grade

NOTE: Lumber yard material and supply lists are not acceptable. If you have included these in the package, please remove them prior to submitting your application. Drawings may be done to scale on graph paper.

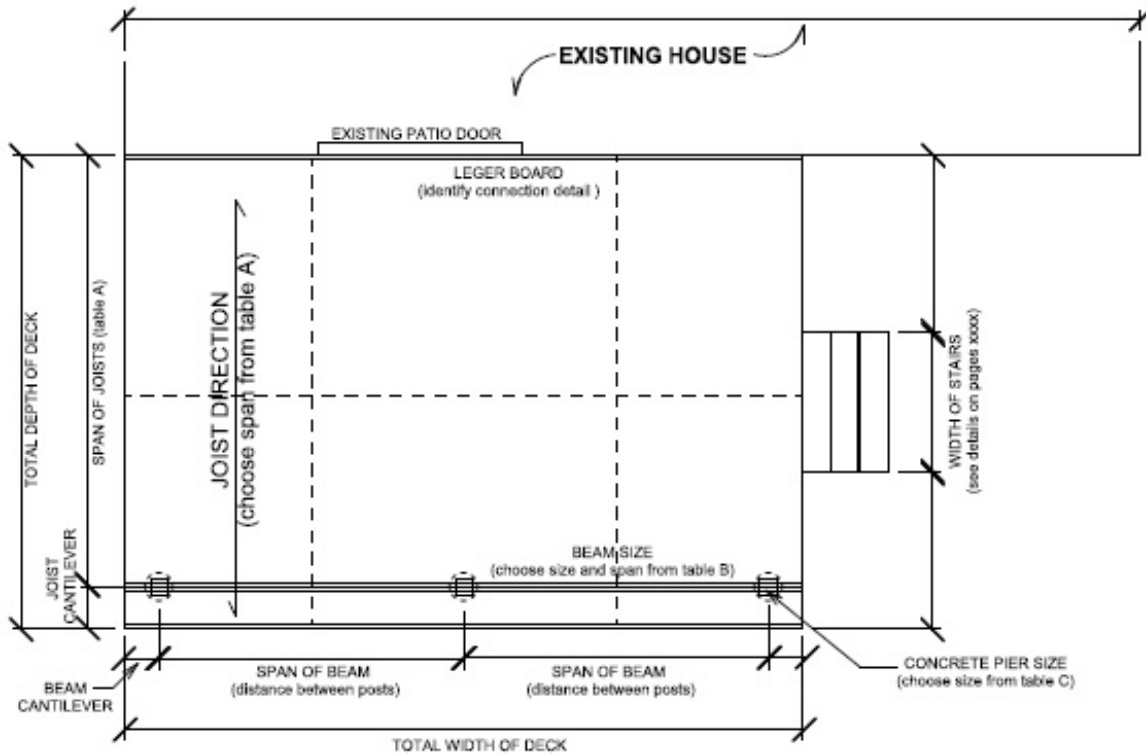
EXAMPLE SITE PLAN:

The site plan is a drawing showing the boundaries of your property, and should show the dwelling and any existing structures as well as the size and location of the proposed deck. Check with your paperwork from your house and see if there is a site plan you could make a copy and add the deck to that existing drawing.



EXAMPLE DECK PLAN:

The deck plan is a drawing showing the top down view of your deck. It should show the dwelling and outline of the deck. This drawing should also include the information from **DECK DESIGN CHECKLIST** items "a" to "f". Tables A, B and C will help you select the appropriate lumber and pier sizes for your deck.



JOIST SPAN (Table - A)

MAXIMUM JOIST SPAN	JOIST SPACING		
	12" o.c. (300 mm)	16" o.c. (400 mm)	24" o.c. (600 mm)
6'-6" (2.0 m)	2 x 6	2 x 6	2 x 6
8'-2" (2.5 m)	2 x 6	2 x 6	2 x 8
9'-10" (3.0 m)	2 x 6	2 x 8	2 x 8
11'-6" (3.5 m)	2 x 8	2 x 8	2 x 10
13'-1" (4.0 m)	2 x 10	2 x 10	2 x 12

SUPPORTED JOIST LENGTH & BEAM SIZE & SPAN (Table - B)

SUPPORTED JOIST LENGTH	POST SPACING		
	6'-6" (2.0 m)	9'-10" (3.0 m)	13'-1" (4.0 m)
4'-11" (1.5 m)	(2)-2 x 6	(2)-2 x 8	(2)-2 x 10
6'-6" (2.0 m)	(2)-2 x 6	(2)-2 x 8	(2)-2 x 10
8'-2" (2.5 m)	(2)-2 x 8	(2)-2 x 10	(2)-2 x 12
9'-10" (3.0 m)	(2)-2 x 8	(2)-2 x 10	(2)-2 x 12
11'-6" (3.5 m)	(2)-2 x 8	(2)-2 x 10	(2)-2 x 10
13'-1" (4.0 m)	(2)-2 x 8	(2)-2 x 10	(2)-2 x 12

CONCRETE PIER or FOOTING SIZE (Table - C)

	SUPPORTED DECK AREA	MIN DIAMETER
4x4 POST (max 36" high)	17 SQ.FT (1.6 m ²)	8" (200 mm)
6x6 POST (min 10" concrete pier)	27 SQ.FT (2.5 m ²)	10" (250 mm)
	39 SQ.FT (3.6 m ²)	12" (300 mm)
	53 SQ.FT (4.9 m ²)	14" (350 mm)
	70 SQ.FT (6.5 m ²)	16" (400 mm)

NOTE: posts are to be centered on piers

NOTES:

- Info in tables from TACBOC 2012 (min Live load 1.9 kPa)
- Cantilevered Joists are limited to 1/6th the members length to a maximum of: 24" for 2x10
15 3/4" for 2x8
- Lumber to to No.2 SPF or better
- Joists spanning more than 6'-10" (2100 mm) shall have bridging at least every 6'-10"(2100 mm)
- A deck is not permitted to be suprted on brick veneer
- Supported joist length is half the span plus the cantilever
- 6x6 posts must be suded of deck is mote than 36" above grade
- Concrete piers must extend to a minimum of 48" below grade AND rest on native undisturbed soils

CONSTRUCTION DETAILS:

The construction details are needed to show how you plan to put the structural connections of the deck together. You may draw them yourself, ensuring they are clearly labeled OR you may circle the detail below and submit it with your permit application package. These details should

**WALL ANCHORAGE DETAILS FOR DECKS
(SERVING NOT MORE THAN ONE DWELLING UNIT)**

- 1) Identify Wall Construction
- 2) Choose Anchorage detail to be used (circle detail proposed)

SOLID MASONRY WALL DETAIL(TYPICAL)

USING JOIST HANGERS CARRY JOISTS



USING LEDGER BOARD TO SUPPORT JOISTS

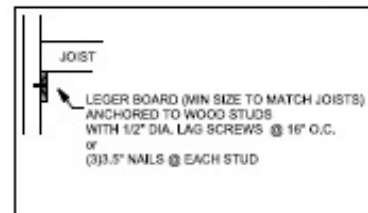


WOOD FRAMED WALL DETAIL(TYPICAL)

USING JOIST HANGERS CARRY JOISTS

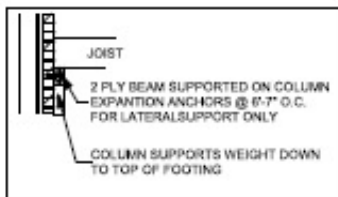


USING LEDGER BOARD TO SUPPORT JOISTS

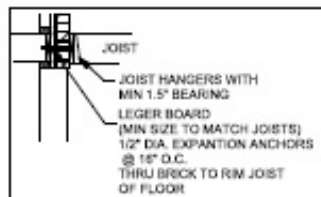


BRICK VENEER WALL DETAIL(TYPICAL)

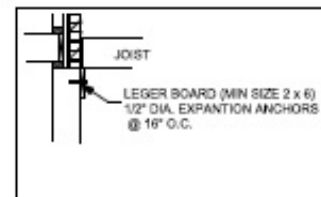
USING BEAM SUPPORTED ON COLUMNS



USING LEDGER BOARD TO SUPPORT JOISTS AT FLOOR RIM



USING LEDGER BOARD TO SUPPORT JOISTS ON FOUNDATION



also include the information from [DECK DESIGN CHECKLIST](#) items "g" to "k".