



Township of
Leeds and the
Thousand Islands

Single Family Dwelling

Building Permit Application and Information Guide

Municipal Office

1233 Prince Street
P.O. Box 280
Lansdowne, Ontario
K0E 1L0
Phone: 613-659-2415
www.leeds1000islands.ca

Office Hours

Mon – Fri 9:00 am – 4:30 pm

Inspections

buildinginspections@townshireeds.on.ca

General Inquiries and Application Submissions

Building Assistant
Ext. 206
buildingassistant@townshireeds.on.ca

Building Code Inquiries

Chief Building Official
Ext. 210
cbo@townshireeds.on.ca

Building Permit Application Checklist

Items Required for a Complete Building Application Submission

- Completed Application
- Copy of Deed (if not registered owner on file)
- Agent Authorization Form (required if the property owner is not submitting the application)
- Owner/Authorized Agent Responsibility Form (attached)
- Plot Plan (sample attached). A plot plan may be hand drawn but it must be clear and drawn to scale.
- One set of construction drawings (maximum paper size – 11"x17"), and one PDF version for the proposed structure. Details may include but may not be limited to:
 - Foundation plan
 - Floor plan layout (including finished basements)
 - Building elevations
 - Cross section view indicating dimensions, heights and construction materials.
 - Engineered Stamped Truss Layouts of both roof and floor (if engineered floor joists are to be used). Engineered details must be certified/stamped by a Professional Engineer who must be licenced in Ontario.
- Approved Entrance Permit from the applicable Road Authority (does not apply to private lanes)
- Approved Civic Address Number – completion of attached civic address application form is required if one has not been obtained.
- Tarion Warranty Information to be completed on application were applicable
- Heat loss/gained calculations as well as, heating and ventilation designs
- Schedule 1 completed by the designer, or homeowner (if they complete the designs) not required if prepared by a licensed Professional Engineer or Architect) (attached)
- Energy Efficiency Design Sheet (EEDS) completed and signed as per SB-12 (attached)
- Residential Mechanical Ventilation Record (attached)

- If applicable, Completion of Temporary Living Accommodations Agreement (attached)
- Approvals from these agencies may be required prior to the issuance of a building permit. Agencies include:

Agency and Contact Information	Permit Requirement
Cataraqui Region Conservation Authority 613-546-4228 https://cataraquiconservation.ca/pages/planning-staff	Development is within a regulated area of a waterbody, watercourse, wetland, etc.
St Lawrence Parks Commission 613-543-3704	Proximity to, and entrances on the 1000 Islands Parkway
United Counties of Leeds and Grenville 1-613-342-3840 https://www.leedsgrenville.com/en/government/entranceway-and-pre-severance-requests.aspx	Permit for an entrance on a County Road
Ministry of Transportation – Eastern Region (MTO) https://www.hcms.mto.gov.on.ca/	Proximity to, and entrances on a Provincial Highway
Ministry of Environment, Conservation and Parks Attn: Natalie Matthews, Environmental Compliance Officer natalie.matthews@ontario.ca	For sewage systems over 10,000 L

- Approvals from Other Township Departments which may be required prior to the issuance of a building permit:
 - Planning Department – Proposed structure is in compliance with the Township's Zoning By-Law. If not, provide a detailed plot plan demonstrating the location of the proposed structure in relation to the property lines, well, sewage system, high water mark of waterbodies, wetlands etc. See sample attached.
 - Operations Department – Approved entrance permit on a Township Road if required.
 - Civic Address Department – A civic address has been assigned to the property/entrance.

Important Information included in this package

Radon mitigation measures must be installed in accordance with SB-9 of the Supplement to the Ontario Building Code. Radon mitigation measures are mandatory (information attached)

Items included in this package for future use by the owner/agent

- Memorandum – HVAC installation Verification Certificate (attached)
- Memorandum – Plumbing System, DMV and Potable Water Tests (attached)

Application for a Permit to Construct or Demolish

This form is authorized under subsection 8(1.1) of the Building Code Act.

For use by Principal Authority			
Application number:	Permit number (if different):		
Date received:	Roll number:		
Application submitted to: <u>The Township of Leeds and the Thousand Islands</u>			
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
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
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"/> No
ii) Is registration required under the <i>Ontario New Home Warranties Plan Act</i> ?		<input type="checkbox"/> Yes	<input type="checkbox"/> No
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 (See the attached guide for assistance)			
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).		<input type="checkbox"/> Yes	<input type="checkbox"/> No
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"/> No
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"/> No
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"/> No
iv) The proposed building, construction or demolition will not contravene any applicable law.		<input type="checkbox"/> Yes	<input type="checkbox"/> No
I. Declaration of applicant			
I _____ declare that: (print name)			
<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. 			
Date	Signature of applicant		

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.

Applicable Law Requirements

J. Email Authorization

All contacts with email addresses provided in this application have agreed to their email addresses being added to the Municipality's Contact List.

K. Heritage Designation (for alterations, repair, renovation, demolition projects only)

Has this property been designated under the Ontario Heritage Act? Yes No

L. Agricultural Operation – New or Expansion of a Livestock Facility

Is this application for a new or expanded livestock facility? Yes No

If yes, have you provided the Minimum Distance Separation Calculation or Nutrient Management Plan? Yes No

M. Agency Approvals

Cataraqui Region Conservation Authority approval required if construction is within the regulatory boundary defined by the CRCA. Yes No

St. Lawrence Parks Commission approval required if the construction is within 150 feet of, or fronts or backs onto, the 1000 Islands Parkway. Yes No

Ministry of Transportation approval required if construction is within the MTO area of control. Yes No

Leeds, Grenville and Lanark District Health Unit approval is required if the new proposal relates to food services. Yes No

Other Agency Indicate Agency: _____ Yes No

N. Entrance Permit Approval

An approved Entrance Permit from the applicable road authority is required to be submitted with the application for any property that is vacant and being developed or if a new entrance is proposed to access the new construction. This does not include private lanes. Yes No

O. Civic Address Approval – Required prior to the Issuance of a Building Permit

Does this property have a civic address? If no, please contact staff for an application form. Yes No

Does this property have a blue civic address blade installed on the property? If no, one must be purchased upon the issuance of the building permit. Installation of the blade/post on site is required prior to the first inspection. Yes No

P. Owner's Authorization

I, _____ am the owner of the land that is subject to this application for a building permit and I authorize _____ to make this application on my behalf.

Date: _____ Signature of Owner(s): _____

Important Information

The Municipality notifies the following agencies concerning the approval of your building permit:

- Municipal Property Assessment Corporation
- Leeds, Grenville and Lanark District Health Unit
- Statistics Canada
- Canada Mortgage and Housing

It is your responsibility to notify the following agencies concerning the approval of your building permit and obtain all required permits from their office prior to starting construction.

- Tarion New Home Warranty (New Dwellings)
- Electrical Safety Authority (All project involving electrical)
- Ministry of Labour (projects valued \$50,000 and greater)

**** Failure to submit any of the required information may result in the application being returned. ****

Records of Site Condition O.Reg. 153/04

When a property is being proposed for a more sensitive land use than its current or most recent use then a Record of Site Condition (RSC) per the Environmental Protection Act (EPA) is required prior to land use change.

Please indicate ('x') if the lands in respect of which the building permit application is made have been used for any of the following uses:

X	Potentially Contaminating Activity	X	Potentially Contaminating Activity
	Acid and Alkali Manufacturing, Processing and Bulk Storage		Importation of Fill Material of Unknown Quality
	Adhesives and Resins Manufacturing, Processing and Bulk Storage		Ink Manufacturing, Processing and Bulk Storage
	Airstrips and Hangars Operation		Iron and Steel Manufacturing and Processing
	Antifreeze and De-icing Manufacturing and Bulk Storage		Metal Treatment, Coating, Plating and Finishing
	Asphalt and Bitumen Manufacturing		Metal Fabrication
	Battery Manufacturing, Recycling and Bulk Storage		Mining, Smelting and Refining; Ore Processing; Tailings Storage
	Boat Manufacturing		Oil Production
	Chemical Manufacturing, Processing and Bulk Storage		Operation of Dry Cleaning Equipment (where chemicals are used)
	Coal Gasification		Ordnance Use
	Commercial Autobody Shops		Paints Manufacturing, Processing and Bulk Storage
	Commercial Trucking and Container Terminals		Pesticides (including Herbicides, Fungicides and Anti-Fouling Agents) Manufacturing, Processing, Bulk Storage and Large-Scale Applications
	Concrete, Cement and Lime Manufacturing		Petroleum-derived Gas Refining, Manufacturing, Processing and Bulk Storage
	Cosmetics Manufacturing, Processing and Bulk Storage		Pharmaceutical Manufacturing and Processing
	Crude Oil Refining, Processing and Bulk Storage		Plastics (including Fibreglass) Manufacturing and Processing
	Discharge of Brine related to oil and gas production		Port Activities, including Operation and Maintenance of Wharves and Docks
	Drum and Barrel and Tank Reconditioning and Recycling		Pulp, Paper and Paperboard Manufacturing and Processing
	Dye Manufacturing, Processing and Bulk Storage		Rail Yards, Tracks and Spurs
	Electricity Generation, Transformation and Power Stations		Rubber Manufacturing and Processing
	Electronic and Computer Equipment Manufacturing		Salt Manufacturing, Processing and Bulk Storage
	Explosives and Ammunition Manufacturing, Production and Bulk Storage		Salvage Yard, including automobile wrecking
	Explosives and Firing Range		Soap and Detergent Manufacturing, Processing and Bulk Storage
	Fertilizer Manufacturing, Processing and Bulk Storage		Solvent Manufacturing, Processing and Bulk Storage
	Fire Retardant Manufacturing, Processing and Bulk Storage		Storage, maintenance, fuelling and repair of equipment, vehicles, and material used to maintain transportation systems
	Fire Training		Tannery
	Flocculants Manufacturing, Processing and Bulk Storage		Textile Manufacturing and Processing
	Foam and Expanded Foam Manufacturing and Processing		Transformer Manufacturing, Processing and Use
	Garages and Maintenance and Repair of Railcars, Marine Vehicles and Aviation Vehicles		Treatment of Sewage equal to or greater than 10,000 litres per day
	Gasoline and Associated Products Storage in Fixed Tanks		Vehicles and Associated Parts Manufacturing
	Glass Manufacturing		Waste Disposal and Waste Management, including thermal treatment, landfilling and transfer of waste, other than use of biosoils as soil conditioners
			Wood Treating and Preservative Facility and Bulk Storage of Treated and Preserved Wood Products

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]			
<input type="checkbox"/> House	<input type="checkbox"/> HVAC – House	<input type="checkbox"/> Building Structural	
<input type="checkbox"/> Small Buildings	<input type="checkbox"/> Building Services	<input type="checkbox"/> Plumbing – House	
<input type="checkbox"/> Large Buildings	<input type="checkbox"/> Detection, Lighting and Power	<input type="checkbox"/> Plumbing – All Buildings	
<input type="checkbox"/> Complex Buildings	<input type="checkbox"/> Fire Protection	<input type="checkbox"/> On-site Sewage Systems	
Description of designer's work			
D. Declaration of Designer			
I _____ declare that (choose one as appropriate):			
(print name)			
<input type="checkbox"/> 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. Individual BCIN: _____			
Firm BCIN: _____			
<input type="checkbox"/> 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. Individual BCIN: _____			
Basis for exemption from registration: _____			
<input type="checkbox"/> The design work is exempt from the registration and qualification requirements of the Building Code. Basis for exemption from registration and qualification: _____			
I certify that:			
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.			
_____ Date		_____ Signature of Designer	

NOTE:

1. For the purposes of this form, "individual" means the "person" referred to in Clause 3.2.4.7(1) d) 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.

Plot Plan

****Required for all new construction and demolitions****

All structures and buildings in the Municipality must conform to the Township's Zoning By-Law as it is applicable law. In order to ensure that the proposed structure is in compliance with the Zoning By-Law, a complete plot plan with the following information is required for review:

Plot Plan Check List - Property Information

<input type="checkbox"/> Dimensions of the property	<input type="checkbox"/> Dimensions and area of existing and proposed structures
<input type="checkbox"/> Location of existing or proposed septic system and well	<input type="checkbox"/> Height of the proposed structure
<input type="checkbox"/> Approximate location of all natural and artificial features	<input type="checkbox"/> Name of any road/private right-of-way within or abutting property

From the nearest point of the new construction:

<input type="checkbox"/> Setbacks to centerline of adjacent roads	<input type="checkbox"/> Distance to all property lines
<input type="checkbox"/> Distance to the edge of adjacent right-of-ways	<input type="checkbox"/> Distance from accessory structure to main use

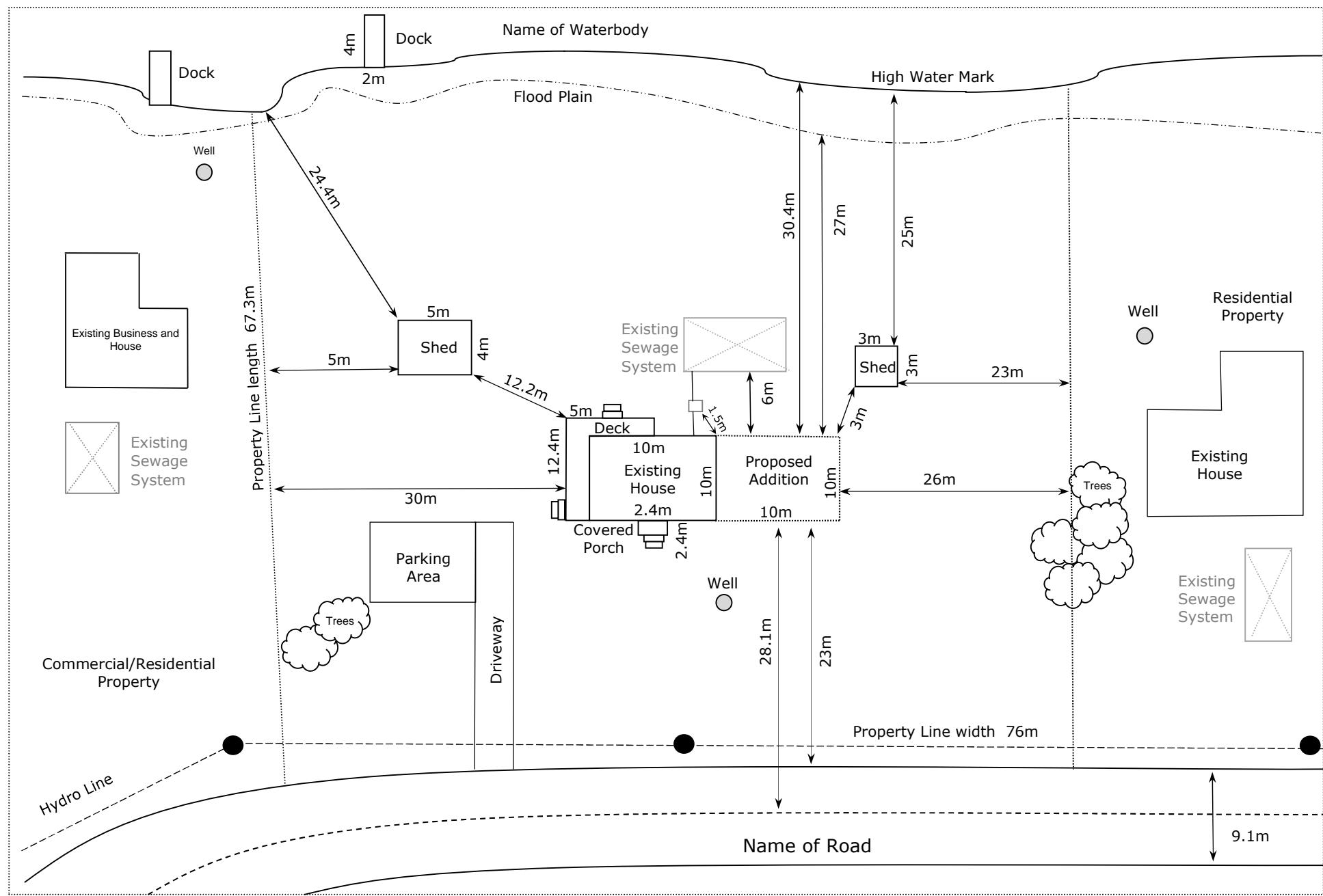
Check here if the Plot Plan is on a separate piece of paper and is attached to this application.

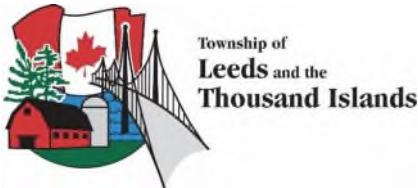
New Construction is to be a minimum of 5 ft from septic tank 17 ft from tile bed
 16 ft from hydro lines. Please Indicate the distances on the plot plan.

Address of Property:

Owner:

Sample Plot Plan





Owner/Authorized Agent Responsibilities

Project Location and Contact Information:

Property Owner(s): _____

Authorized Agent(s): _____

Property Roll Number: _____

Project Address: _____

Project: _____

Phone Number: _____ Email Address: _____

Declaration

To the Township of Leeds and the Thousand Islands:

I declare that I am the: owner

authorized agent of the property owner listed above

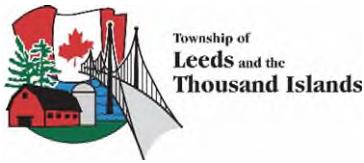
As the owner/agent I hereby acknowledge:

- That the issuance of a building permit and/or a general site review by the Building Department Staff is not confirmation that all zoning setbacks have been adhered to. This includes but is not limited to separation of structures to the high water mark, lot lines, sewage systems and other structures. It is understood that it is the sole responsibility of the owner/agent to meet the setback requirements as set out in the Township of Leeds and the Thousand Islands Zoning By-Law;
- That an Occupancy Permit must be issued by a Township Building Official prior to any occupancy of a seasonal or permanent residence;
- The owner(s) are obligated to arrange for the inspections indicated on the permit placard issued for the project, and that no work will proceed until the Building Inspector has inspected the various stages of construction indicated on the permit placard;
- Permit drawings and documents submitted with errors or omissions contained therein do not relieve the owner and/or authorized agent from the responsibility of completing all work to meet or exceed the requirements of the Ontario Building Code; and
- If the owner is a corporation or partnership, I have the authority to bind the corporation or partnership.

Signature

Date

Note: The Ontario Building Code Act requires that requests for inspections are made a minimum of 2 regular business days in advance of the regular business day upon which the inspection is needed.



Temporary Living Accommodations Agreement

By-Law 2025-015 provides for an exemption from the prohibition against placing trailers on properties and residing in a trailer provided a Complete Building Permit has been issued. The Township agrees to permit the Property Owner identified below to place a trailer on the property identified in this agreement for a period of time not to exceed the maximum period listed below, provided that the Property Owner complies with the terms of this agreement.

In exchange for permission to place and occupy a trailer on the Property, the Property Owner agrees that the trailer shall only be occupied by the Property Owner and their immediate family members and only for the period of time while a dwelling unit is being constructed on the Property (as further specified below).

The Property Owner further agrees to pay the fee specified below and to deposit with the Township the Deposit Fee. The Property Owner agrees that the Township may remove the trailer from the Property in circumstances where the trailer remains on the Property beyond the time agreed to by the parties for its removal. Where the trailer remains on the Property after the expiry of the deadline established for its removal in this agreement, the Property Owner hereby irrevocably gives the Township and its agents' license to enter on the Property and to remove the trailer and any contents within the trailer. If the Property Owner does not take possession of the trailer (and pay any fees associated with the removal and storage of the trailer) within 30 days of removal, the Township has full and unfettered discretion to dispose of the trailer and its contents. Any costs incurred by the Township to remove, store or dispose of the trailer and its contents shall be reimbursed by the Property Owner. The Property Owner agrees that it remains liable for any costs incurred.

Under no circumstances shall the Township or its agents be liable for any costs, damages, losses or claims associated with the removal and disposal of the trailer and its contents.

Property Owner(s): _____

Owner's Address: _____

Property Roll Number: _____

Phone Number: _____

Email Address: _____

Building Permit Number: _____

Address of property where trailer is located: _____

A trailer is permitted to remain on the Property for a limited period of up to 24 months, commencing upon the date this agreement is executed provided that:

- (1) An appropriate sewage handling system is provided;
- (2) A building permit for a dwelling has been issued and remains in force; and
- (3) The trailer is located in accordance with the required yards and setbacks applicable to a dwelling in the Township Zoning By-law.

Chief Building Official Signature

Property Owner Signature

Date: _____

Date: _____



Township of Leeds and the Thousand Islands Civic Address – Application Form

Office Use Only

Date Received:		File Number:	
Application Fee: \$50	<input type="checkbox"/> Cheque	<input type="checkbox"/> Cash	<input type="checkbox"/> Interac

Application Information

Applicant Information	
Name:	Company Affiliation:
Mailing Address:	
Email:	Phone Number:

Property Information

Roll Number:	
Civic Address:	
Legal Description:	
Closest Major Intersection	

Civic Address Request Information

Reason for obtaining a civic address. Check all that apply.

<input type="checkbox"/> Replacement Blade Only	<input type="checkbox"/> Building Permit
<input type="checkbox"/> Site Plan	<input type="checkbox"/> Severance
<input type="checkbox"/> Subdivision	<input type="checkbox"/> Other:

Application Submission Requirements

<input type="checkbox"/> Complete Application Form	
<input type="checkbox"/> Detailed Plot Plan	
<input type="checkbox"/> Transfer/Deed – If property is land locked to verify legal access to property	
<input type="checkbox"/> Entrance Permit from Applicable Authority – Not required for water or private street	
<input type="checkbox"/> Fee – See Current General Rates and Fees By-Law	

Change of Civic Address Request

New Civic Address Requested (if known):

Reason for Change of/New Civic Address:

DECLARATION OF APPLICANT

I _____ declare that:
(Print Name)

1. That the information contained in this application, plot plan and other documents is accurate.
2. If the owner is a corporation or partnership, I have the authority to bind it.

Date

Signature

Submit Application to Amanda Werner-Mackeler, Planning Technician:

Email: planningtechnician@townshireleeds.on.ca

In Person: Please call for an appointment 613-659-2415 x 203

Date Approved: _____ Address: _____

Township of Leeds and the Thousand Islands

Civic Address - Sample Plot Plan

Island or Water Access Only Property

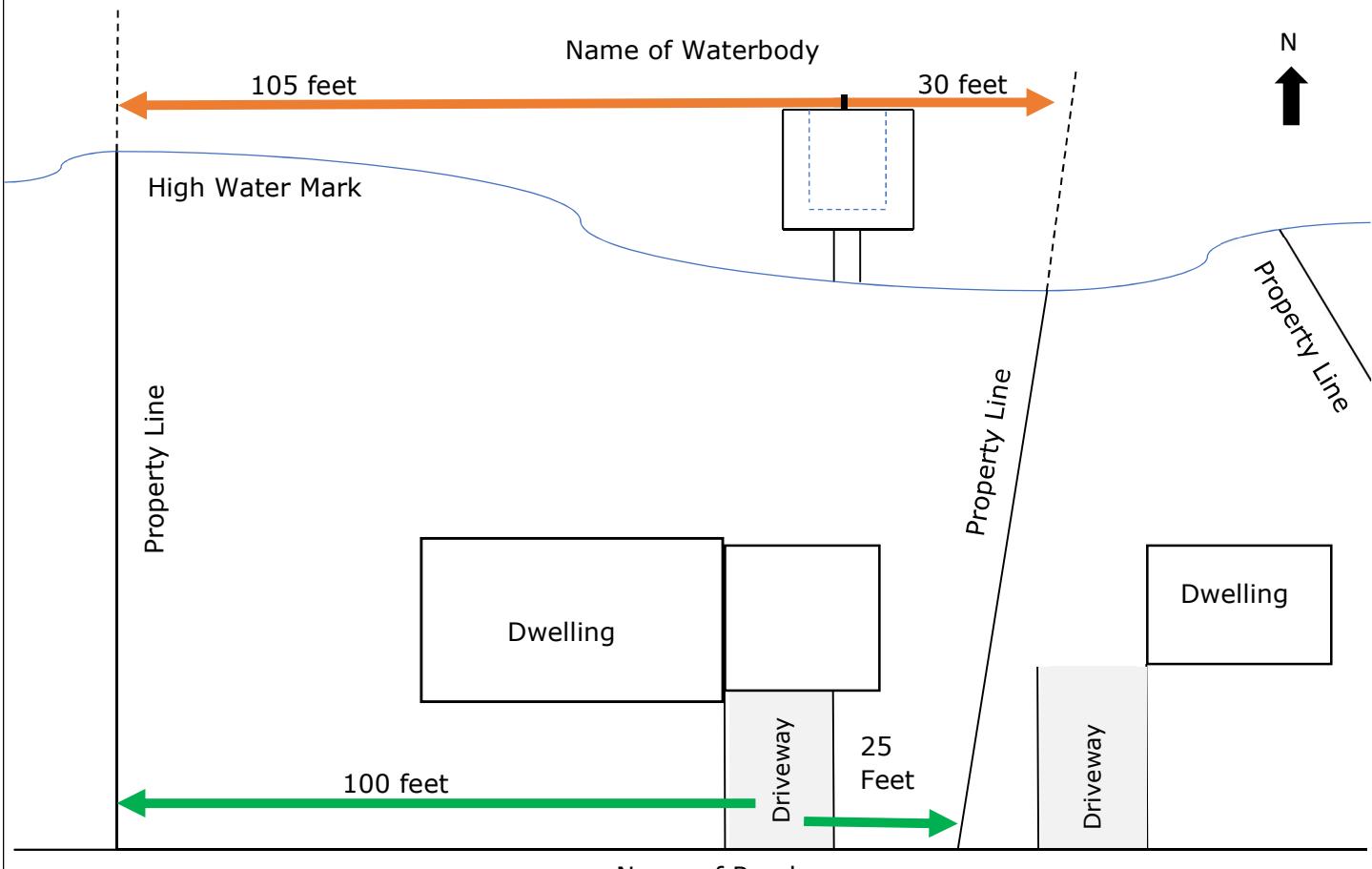
Please indicate the setback from the centre point of the boathouse, dock, or access area to each property line. If the property is on an island by itself, please draw the entire island and indicate the location of the boathouse, dock or access area. See Example 1 - Measurement for Islands and Water Access Only below. (Orange Arrows)

Street Access Property

Please indicate the setback from the centre point of the driveway to each property line. If the property has access to multiple streets, please indicate the street which will be your primary access point. See Example 2 – Measurement for Street Access below. (Green Arrows)

Sample Plot Plan

Example 1: Measurement for Islands and Water Access Only (Orange Arrows)



Example 2 Measurement for Street Access (Green Arrows)

RESIDENTIAL MECHANICAL VENTILATION RECORD

For Certification of Design and Performance of Residential Ventilation Systems (CSA F326)

W2										
A	<div style="display: flex; justify-content: space-between; align-items: center;"> Forced Air <input type="checkbox"/> Non Forced air </div> <div style="display: flex; justify-content: space-between; align-items: center;"> Electric <input type="checkbox"/> Gas <input type="checkbox"/> Oil <input type="checkbox"/> Other </div> <div style="display: flex; justify-content: space-between; align-items: center;"> No Combustion Appliances <input type="checkbox"/> No Depressurization Limit </div> <div style="display: flex; justify-content: space-between; align-items: center;"> Solid Fuel (including Fireplaces) <input type="checkbox"/> 5 Pa. Depressurization Limit </div> <div style="display: flex; justify-content: space-between; align-items: center;"> Direct Vent (sealed combustion) <input type="checkbox"/> No Depressurization Limit </div> <div style="display: flex; justify-content: space-between; align-items: center;"> Positive Venting Induced Draft <input type="checkbox"/> 5 Pa. Depress. Limit </div> <div style="display: flex; justify-content: space-between; align-items: center;"> Natural Draft or B-Vent Atmospheric <input type="checkbox"/> 5 Pa. depressurization limit </div> <div style="display: flex; justify-content: space-between; align-items: center;"> Lowest Depressurization Limit <input type="checkbox"/> Pa. </div>					H				
B	<div style="display: flex; justify-content: space-between; align-items: center;"> Clothes Dryer(s) <input type="checkbox"/> (150 cfm default) </div> <div style="display: flex; justify-content: space-between; align-items: center;"> Downdraft Cook Top <input type="checkbox"/> (220 cfm default) </div> <div style="display: flex; justify-content: space-between; align-items: center;"> Other (exhaust) <input type="checkbox"/> (over 150 cfm) </div>					I		C	J	
C	<div style="display: flex; justify-content: space-between; align-items: center;"> Depressurization test/Calc. Required? <input type="checkbox"/> Yes <input type="checkbox"/> No </div> <div style="display: flex; justify-content: space-between; align-items: center;"> Bsmt & Master Bedroom <input type="checkbox"/> @ 20 cfm <input type="checkbox"/> cfm </div> <div style="display: flex; justify-content: space-between; align-items: center;"> Other Bedrooms <input type="checkbox"/> @ 10 cfm <input type="checkbox"/> cfm </div> <div style="display: flex; justify-content: space-between; align-items: center;"> Bathrooms & Kitchens <input type="checkbox"/> @ 10 cfm <input type="checkbox"/> cfm </div> <div style="display: flex; justify-content: space-between; align-items: center;"> Other Hab. Rooms <input type="checkbox"/> @ 10 cfm <input type="checkbox"/> cfm </div> <div style="display: flex; justify-content: space-between; align-items: center;"> Total Ventilation Capacity (TVC) <input type="checkbox"/> cfm </div>					K		D	L	
D	<div style="display: flex; justify-content: space-between; align-items: center;"> Continuous Minimum Continuous Exhaust </div> <div style="display: flex; justify-content: space-between; align-items: center;"> Kitchen(s) <input type="checkbox"/> @ 60 cfm <input type="checkbox"/> = <input type="checkbox"/> cfm </div> <div style="display: flex; justify-content: space-between; align-items: center;"> Bathroom(s) <input type="checkbox"/> @ 20 cfm <input type="checkbox"/> = <input type="checkbox"/> cfm </div> <div style="display: flex; justify-content: space-between; align-items: center;"> Total <input type="checkbox"/> cfm </div>					M		E	N	
E	<div style="display: flex; justify-content: space-between; align-items: center;"> Intermittent Minimum Intermittent Exhaust </div> <div style="display: flex; justify-content: space-between; align-items: center;"> Kitchen(s) <input type="checkbox"/> @ 100 cfm <input type="checkbox"/> = <input type="checkbox"/> cfm </div> <div style="display: flex; justify-content: space-between; align-items: center;"> Bathroom(s) <input type="checkbox"/> @ 50 cfm <input type="checkbox"/> = <input type="checkbox"/> cfm </div> <div style="display: flex; justify-content: space-between; align-items: center;"> Total <input type="checkbox"/> cfm </div>					O		F	P	
F	<div style="display: flex; justify-content: space-between; align-items: center;"> TVC SYSTEM Location: <input type="checkbox"/> Manufacturer/Model: HVI rated </div> <div style="display: flex; justify-content: space-between; align-items: center;"> Design Airflow <input type="checkbox"/> cfm high <input type="checkbox"/> cfm low </div> <div style="display: flex; justify-content: space-between; align-items: center;"> HRV/ERV <input type="checkbox"/> % Sensible Efficiency @ 0°C <input type="checkbox"/> watts </div> <div style="display: flex; justify-content: space-between; align-items: center;"> HRV/ERV <input type="checkbox"/> % Sensible Efficiency @ -25°C <input type="checkbox"/> watts </div>					Q		G	R	
G	<div style="display: flex; justify-content: space-between; align-items: center;"> ADDITIONAL (exhaust) EQUIPMENT 1 Location: <input type="checkbox"/> cfm <input type="checkbox"/> Sones </div> <div style="display: flex; justify-content: space-between; align-items: center;"> Manufacturer/Model: <input type="checkbox"/> TVC <input type="checkbox"/> HVI </div> <div style="display: flex; justify-content: space-between; align-items: center;"> 2 Location: <input type="checkbox"/> cfm <input type="checkbox"/> Sones </div> <div style="display: flex; justify-content: space-between; align-items: center;"> Manufacturer/Model: <input type="checkbox"/> TVC <input type="checkbox"/> HVI </div> <div style="display: flex; justify-content: space-between; align-items: center;"> 3 Location: <input type="checkbox"/> cfm <input type="checkbox"/> Sones </div> <div style="display: flex; justify-content: space-between; align-items: center;"> Manufacturer/Model: <input type="checkbox"/> TVC <input type="checkbox"/> HVI </div> <div style="display: flex; justify-content: space-between; align-items: center;"> 4 Location: <input type="checkbox"/> cfm <input type="checkbox"/> Sones </div> <div style="display: flex; justify-content: space-between; align-items: center;"> Manufacturer/Model: <input type="checkbox"/> TVC <input type="checkbox"/> HVI </div>					S		H	T	
H	<div style="display: flex; justify-content: space-between; align-items: center;"> HEATING SYSTEM/ COMBUSTION APPLIANCES Roll #: <input type="checkbox"/> Permit #: </div> <div style="display: flex; justify-content: space-between; align-items: center;"> Lot & Plan: <input type="checkbox"/> </div> <div style="display: flex; justify-content: space-between; align-items: center;"> Civic address: <input type="checkbox"/> </div> <div style="display: flex; justify-content: space-between; align-items: center;"> Name: <input type="checkbox"/> House ID#: </div> <div style="display: flex; justify-content: space-between; align-items: center;"> Address: <input type="checkbox"/> </div> <div style="display: flex; justify-content: space-between; align-items: center;"> City: <input type="checkbox"/> P.C. </div> <div style="display: flex; justify-content: space-between; align-items: center;"> Phone: <input type="checkbox"/> Fax: </div> <div style="display: flex; justify-content: space-between; align-items: center;"> Email Address: <input type="checkbox"/> </div>					U		I	V	
I	<div style="display: flex; justify-content: space-between; align-items: center;"> EXHAUST EQUIPMENT Builder: <input type="checkbox"/> </div> <div style="display: flex; justify-content: space-between; align-items: center;"> Address: <input type="checkbox"/> </div> <div style="display: flex; justify-content: space-between; align-items: center;"> City: <input type="checkbox"/> P.C. </div> <div style="display: flex; justify-content: space-between; align-items: center;"> Phone: <input type="checkbox"/> Fax: </div> <div style="display: flex; justify-content: space-between; align-items: center;"> Email Address: <input type="checkbox"/> </div>					W		J	X	
J	<div style="display: flex; justify-content: space-between; align-items: center;"> LOCATION Designer: <input type="checkbox"/> </div> <div style="display: flex; justify-content: space-between; align-items: center;"> Address: <input type="checkbox"/> </div> <div style="display: flex; justify-content: space-between; align-items: center;"> City: <input type="checkbox"/> P.C. </div> <div style="display: flex; justify-content: space-between; align-items: center;"> Phone: <input type="checkbox"/> Fax: </div> <div style="display: flex; justify-content: space-between; align-items: center;"> Email Address: <input type="checkbox"/> </div>					Y		K	Z	
K	<div style="display: flex; justify-content: space-between; align-items: center;"> TOTAL VENTILATION CAPACITY (TVC) Email Address: <input type="checkbox"/> Other #: </div> <div style="display: flex; justify-content: space-between; align-items: center;"> I certify this ventilation system design to be in accordance with: <input type="checkbox"/> CSA F326 M-91 </div> <div style="display: flex; justify-content: space-between; align-items: center;"> <input type="checkbox"/> R-2000 </div> <div style="display: flex; justify-content: space-between; align-items: center;"> Signature: <input type="checkbox"/> Date: </div>					AA		L	BB	
L	<div style="display: flex; justify-content: space-between; align-items: center;"> EXHAUST CAPACITY CONTINUOUS CONTROLS FUNCTIONING <input type="checkbox"/> FANS OPERATING AND CLEAN </div> <div style="display: flex; justify-content: space-between; align-items: center;"> INTERMITTENT MINIMUM CONTINUOUS EXHAUST FILTERS CLEAN <input type="checkbox"/> FLOW MEASURING STATIONS </div> <div style="display: flex; justify-content: space-between; align-items: center;"> KITCHEN(S) <input type="checkbox"/> @ 60 cfm <input type="checkbox"/> DAMPERS ACCESSIBLE </div> <div style="display: flex; justify-content: space-between; align-items: center;"> BATHROOM(S) <input type="checkbox"/> @ 20 cfm <input type="checkbox"/> DRAIN LOOP AND CONNECTION </div> <div style="display: flex; justify-content: space-between; align-items: center;"> TOTAL <input type="checkbox"/> CFM <input type="checkbox"/> DISTRIBUTION TO ALL HABITABLE ROOMS (NON FORCED AIR) </div> <div style="display: flex; justify-content: space-between; align-items: center;"> FORCED AIR SYSTEM <input type="checkbox"/> CONTINUOUS MODE <input type="checkbox"/> INTERLOCKED </div> <div style="display: flex; justify-content: space-between; align-items: center;"> KITCHEN INTAKE GREASE FILTER <input type="checkbox"/> KITCHEN EXH. 40" TO RANGE </div> <div style="display: flex; justify-content: space-between; align-items: center;"> EXHAUST 4" ABOVE GRADE <input type="checkbox"/> SUPPLY 18" ABOVE GRADE </div> <div style="display: flex; justify-content: space-between; align-items: center;"> SUPPLY INTAKE 6' FROM EXHAUST (RECOMMENDED) <input type="checkbox"/> </div> <div style="display: flex; justify-content: space-between; align-items: center;"> SUPPLY INTAKE 3' FROM OTHER EXHAUST <input type="checkbox"/> </div>					CC		M	DD	
M	<div style="display: flex; justify-content: space-between; align-items: center;"> INSTALLED CHECKLIST TVC SYSTEMS MEASURED </div> <div style="display: flex; justify-content: space-between; align-items: center;"> TVC SYSTEM SUPPLY AIRFLOW MEASURED <input type="checkbox"/> CFM HIGH <input type="checkbox"/> CFM LOW </div> <div style="display: flex; justify-content: space-between; align-items: center;"> TVC SYSTEM EXHAUST AIRFLOW MEASURED <input type="checkbox"/> CFM HIGH <input type="checkbox"/> CFM LOW </div> <div style="display: flex; justify-content: space-between; align-items: center;"> NAME: <input type="checkbox"/> HRAI #: </div> <div style="display: flex; justify-content: space-between; align-items: center;"> ADDRESS: <input type="checkbox"/> </div>					EE		N	FF	
N	<div style="display: flex; justify-content: space-between; align-items: center;"> INSTALLED INSTALLER </div> <div style="display: flex; justify-content: space-between; align-items: center;"> 1 LOCATION: <input type="checkbox"/> CFM <input type="checkbox"/> SONES </div> <div style="display: flex; justify-content: space-between; align-items: center;"> MANUFACTURER/MODEL: <input type="checkbox"/> TVC <input type="checkbox"/> HVI </div> <div style="display: flex; justify-content: space-between; align-items: center;"> 2 LOCATION: <input type="checkbox"/> CFM <input type="checkbox"/> SONES </div> <div style="display: flex; justify-content: space-between; align-items: center;"> MANUFACTURER/MODEL: <input type="checkbox"/> TVC <input type="checkbox"/> HVI </div> <div style="display: flex; justify-content: space-between; align-items: center;"> 3 LOCATION: <input type="checkbox"/> CFM <input type="checkbox"/> SONES </div> <div style="display: flex; justify-content: space-between; align-items: center;"> MANUFACTURER/MODEL: <input type="checkbox"/> TVC <input type="checkbox"/> HVI </div> <div style="display: flex; justify-content: space-between; align-items: center;"> 4 LOCATION: <input type="checkbox"/> CFM <input type="checkbox"/> SONES </div> <div style="display: flex; justify-content: space-between; align-items: center;"> MANUFACTURER/MODEL: <input type="checkbox"/> TVC <input type="checkbox"/> HVI </div>					GG		O	HH	
O	<div style="display: flex; justify-content: space-between; align-items: center;"> I CERTIFY THIS VENTILATION SYSTEM INSTALL TO BE IN ACCORDANCE WITH: <input type="checkbox"/> CSA F326 M-91 </div> <div style="display: flex; justify-content: space-between; align-items: center;"> <input type="checkbox"/> R-2000 </div> <div style="display: flex; justify-content: space-between; align-items: center;"> SIGNATURE: <input type="checkbox"/> DATE: </div>					II		P	QQ	

Prepared By:	HRAI #:	Job Name:	
Signature:	Date:	Job #:	Official Use:

Energy Efficiency Design Summary: Prescriptive Method

(Building Code Part 9, Residential)

This form is used by a designer to demonstrate that the energy efficiency design of a house complies with the building code using the prescriptive method described in Subsection 3.1.1. of SB-12. This form is applicable where the ratio of gross area of windows/sidelights/skylights/glazing in doors and sliding glass doors to the gross area of peripheral walls is not more than 22%.

For use by Principal Authority	
Application No:	Model/Certification Number

A. Project Information

Building number, street name		Unit number	Lot/Con
Municipality	Postal code	Reg. Plan number / other description	

B. Prescriptive Compliance

[indicate the building code compliance package being employed in this house design]

SB-12 Prescriptive (input design package):	Package: _____	Table: _____
--	----------------	--------------

C. Project Design Conditions

Climatic Zone (SB-1):	Heating Equipment Efficiency	Space Heating Fuel Source		
<input type="checkbox"/> Zone 1 (< 5000 degree days)	<input type="checkbox"/> ≥ 92% AFUE	<input type="checkbox"/> Gas	<input type="checkbox"/> Propane	<input type="checkbox"/> Solid Fuel
<input type="checkbox"/> Zone 2 (≥ 5000 degree days)	<input type="checkbox"/> ≥ 84% < 92% AFUE	<input type="checkbox"/> Oil	<input type="checkbox"/> Electric	<input type="checkbox"/> Earth Energy
Ratio of Windows, Skylights & Glass (W, S & G) to Wall Area	Other Building Characteristics			
Area of walls = _____ m ² or _____ ft ²	W, S & G % = _____	<input type="checkbox"/> Log/Post&Beam	<input type="checkbox"/> ICF Above Grade	<input type="checkbox"/> ICF Basement
Area of W, S & G = _____ m ² or _____ ft ²	Utilize window averaging: <input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Slab-on-ground	<input type="checkbox"/> Walkout Basement	<input type="checkbox"/> Air Conditioning
		<input type="checkbox"/> Air Conditioning	<input type="checkbox"/> Combo Unit	<input type="checkbox"/> Air Sourced Heat Pump (ASHP)
		<input type="checkbox"/> Ground Sourced Heat Pump (GSHP)		

D. Building Specifications

[provide values and ratings of the energy efficiency components proposed]

Energy Efficiency Substitutions			
<input type="checkbox"/> ICF (3.1.1.2.(5) & (6) / 3.1.1.3.(5) & (6))			
<input type="checkbox"/> Combined space heating and domestic water heating systems (3.1.1.2.(7) / 3.1.1.3.(7))			
<input type="checkbox"/> Airtightness substitution(s)	<input type="checkbox"/> Table 3.1.1.4.B Required: _____	Permitted Substitution: _____	
Airtightness test required (Refer to Design Guide Attached)	<input type="checkbox"/> Table 3.1.1.4.C Required: _____	Permitted Substitution: _____	
	Required: _____	Permitted Substitution: _____	

Building Component	Minimum RSI / R values or Maximum U-Value ⁽¹⁾	Building Component	Efficiency Ratings	
Thermal Insulation	Nominal	Effective	Windows & Doors Provide U-Value ⁽¹⁾ or ER rating	
Ceiling with Attic Space			Windows/Sliding Glass Doors	
Ceiling without Attic Space			Skylights/Glazed Roofs	
Exposed Floor			Mechanicals	
Walls Above Grade			Heating Equip.(AFUE)	
Basement Walls			HRV Efficiency (SRE% at 0°C)	
Slab (all >600mm below grade)			DHW Heater (EF)	
Slab (edge only ≤600mm below grade)			DWHR (CSA B55.1 (min. 42% efficiency))	# Showers _____
Slab (all ≤600mm below grade, or heated)			Combined Heating System	

(1) U value to be provided in either W/(m²·K) or Btu/(h·ft²·F) but not both.

E. Designer(s)

[name(s) & BCIN(s), if applicable, of person(s) providing information herein to substantiate that design meets the building code]

Qualified Designer Declaration of designer to have reviewed and take responsibility for the design work.		
Name	BCIN	Signature

Guide to the Prescriptive Energy Efficiency Design Summary Form

This form must accurately reflect the information contained on the drawings and specifications being submitted. Refer to Supplementary Standard SB-12 for details about building code compliance requirements. Further information about energy efficiency requirements for new buildings is available from the provincial building code website or the municipal building department.

The building code permits a house designer to use one of four energy efficiency compliance options:

1. Comply with the SB-12 Prescriptive design tables (this form is for this option (Option 1)),
2. Use the SB-12 Performance compliance method, and model the design against the prescriptive standards,
3. Design to Energy Star, or
4. Design to R2000 standards.

COMPLETING THE FORM

B. Compliance Options

Indicate the compliance option being used.

- SB-12 Prescriptive requires that the building conforms to a package of thermal insulation, window and mechanical system efficiency requirements set out in Subsection 3.1.1. of SB-12. Energy efficiency design modeling and testing of the building is not required under this option. Certain substitutions are permitted. In which case, the applicable airtightness targets in Table 3.1.1.4.A must be met.

C. Project Design Conditions

Climatic Zone: The number of degree days for Ontario cities is contained in Supplementary Standard SB-1. **Windows, Skylights and Glass Doors:** If the ratio of the total gross area of windows, sidelights, skylights, glazing in doors and sliding glass doors to the total gross area of walls is more than 17%, higher efficiency glazing is required. If the ratio is more than 22%, the SB-12 Prescriptive option may not be used. The total area is the sum of all the structural rough openings. Some exceptions apply. Refer to 3.1.1.1. of SB-12 for further details.

Fuel Source and Heating Equipment Efficiency: The fuel source and efficiency of the proposed heating equipment must be specified in order to determine which SB-12 Prescriptive compliance package table applies.

Other Building Conditions: These construction conditions affect SB-12 Prescriptive compliance requirements.

D. Building Specifications

Thermal Insulation: Indicate the RSI or R-value being proposed where they apply to the house design. Under the SB-12 Prescriptive option, alternative ICF wall insulation is permitted in certain conditions where other design elements meet higher standards. Refer to SB-12 for further details. Where effective insulation values are being used, the Authority Having Jurisdiction may require supporting documentation.

BUILDING CODE REQUIREMENTS FOR AIRTIGHTNESS IN NEW HOUSES

All houses must comply with increased air barrier requirements in the building code. Notice of air barrier completion must be provided and an inspection conducted prior to it being covered.

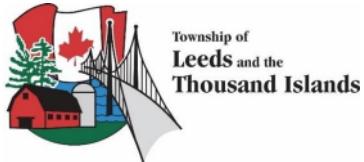
The air leakage rates in Table 3.1.1.4.A are not requirements. This provision is a voluntary provision for when credits for airtightness are claimed. Credit for air tightness allows the designer to substitute the requirements of compliance packages as set out in Table 3.1.1.4.B or 3.1.1.4.C. Neither the air leakage test nor compliance with airtightness targets given in Table 3.1.1.4.A are required, unless credit for airtightness is claimed. Table 3.1.1.4.A provides airtightness targets in three different metrics; ACH, NLA, NLR. Any one of them can be used. OBC Reference Default Air Leakage Rates (Table 3.1.1.4.A)

Building Type	Airtightness Targets			
	ACH @ 50 Pa	NLA @ 10 Pa	NLR @ 50 Pa	
Detached dwelling	2.5	1.26 cm ² /m ²	1.81 in ² /100ft ²	0.93 L/s/m ²
Attached dwelling	3.0	2.12 cm ² /m ²	3.06 in ² /100ft ²	1.32 L/s/m ²

The building code requires that a blower door test be conducted to verify the air tightness of the house during construction if the SB-12 Prescriptive option with airtightness credit being applied. Results of the airtightness test may need to be submitted to the Authority Having Jurisdiction. Airtightness of less than 2.5 ACH @ 50 Pa (or NLA or NLR equivalent) in the case of detached houses, or 3.0 ACH @ 50 Pa (or NLA or NLR equivalent) in the case of attached houses is necessary to meet the required energy efficiency standard.

E. House Designer

The building code requires designers providing information about whether a building complies with the building code to have a BCIN. Exemptions apply to architects, engineers and owners designing their own house.



Township of Leeds and the Thousand Islands
1233 Prince St, PO Box 280
Lansdowne, ON K0E 1L0
Phone: 613-659-2415

Memorandum

Plumbing System, DMV and Potable Water Tests

Memo to: Paul Nixon, Chief Building Official

From: _____

Date: _____

RE: Owner Name: _____

Site Civic Address: _____

Permit Number: _____

Project Type: _____

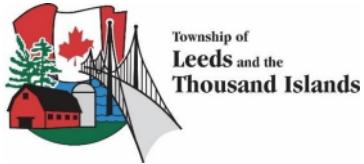
This will confirm that the plumbing system for the above-mentioned project has been tested and has successfully passed the requirements for testing under Subsections 7.3.6 and 7.3.7 of the Ontario Building Code:

a) Drainage and Venting Systems

- All components of the drainage and venting system have passed the following tests:
 1. Pressure test using air or water at the rough-in stage in accordance with OBC sentence 7.3.6.1.(1)
 2. Final test using smoke or air pressure after the installation of all fixtures, in accordance with OBC sentence 7.3.6.1.(2).

b) Potable Water Systems

- The entire potable water systems has successfully passed the pressure test using water or air on the complete system after the Installation of all fixtures, in accordance with OBC subsection 7.3.7.
- This will also confirm that all components of the plumbing system are marked in accordance with the relevant Canadian Standards Association (CSA), as detailed under article 7.2.1.3., and that no cross connections exist that would render the potable water systems non-potable, as detailed under article 7.6.2.1., and all fixtures meet the water efficiency requirements detailed under OBC subsection 7.6.4.



Township of Leeds and the Thousand Islands
1233 Prince St, PO Box 280
Lansdowne, ON K0E 1L0
Phone: 613-659-2415

- The plumbing system is complete and ready for operation by the building occupants.

I have an Ontario "Certificate of Qualification" (C of Q) in plumbing:

Yes No

Plumbing Company Name: _____

Plumber's Name: _____

Signature: _____

Date: _____



Memorandum

Heating, Ventilation and Air-Conditioning Installation, Verification Certificate (HVAC)

Memo to: Paul Nixon, Chief Building Official

Name of Heating Contractor: _____

Owner Name: _____

Site Address: _____

This is to certify that _____ has completed the installation, at the above-referenced project, of the following;

- Heating system
- Ventilation system
- Air-conditioning system
- Gas fireplace

This will further certify that the system(s) have been installed in accordance with the drawings and designs supplied to the Building Department, which formed the basis for which the Building Permit was issued, including any changes thereto authorized by the Chief Building Official.

Minor changes to the system, which do not adversely affect its operation, are as follows:

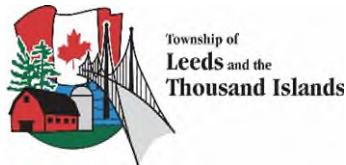
Signature of Heating Contractor

Date



Paperwork required for Final Occupancy of Single Family and Seasonal Dwellings

Approvals Required for Occupancy		Req'd	Rec'd
Ontario Hydro (ESA)	Final ESA approval required for all electrical work	<input type="checkbox"/>	<input type="checkbox"/>
Plumbers Sign Off	Required to be completed by plumber with a "Certificate of Qualification" in Ontario. Not required if owner completed plumbing and all "tests" were witnessed by building inspector as required in 7.3.6	<input type="checkbox"/>	<input type="checkbox"/>
HVAC	Sign off required to be completed by HVAC installer	<input type="checkbox"/>	<input type="checkbox"/>
HRAI Balancing	Balancing form to be submitted by contractor. Contractor must have Level 1 HRAI Certification	<input type="checkbox"/>	<input type="checkbox"/>
T.S.S.A. Completion/ Testing Form	All gas installers must complete sign off form indicating all gas installations have been tested	<input type="checkbox"/>	<input type="checkbox"/>
Potable Water	Proof of potable water must be submitted. Water testing bottles to be taken to L&G Health Unit in Brockville/Smiths Falls or Gananoque	<input type="checkbox"/>	<input type="checkbox"/>
Well Record	Well record is required for all new wells from Ministry of Environment	<input type="checkbox"/>	<input type="checkbox"/>
Entrance Permit	Entrance permit final inspection required. Contact Public Work Department when entrance installed/completed: (613) 659-2415 ext. 234	<input type="checkbox"/>	<input type="checkbox"/>
Energy Efficiency	Ensure Energy Efficiency requirements match submitted EEDS	<input type="checkbox"/>	<input type="checkbox"/>
Septic Final	Septic final inspection required for new systems or alterations to existing systems. Contact Health unit at (613) 345-5685	<input type="checkbox"/>	<input type="checkbox"/>
CRCA Final	Final sign off from CRCA required where a permit has been issued. Contact CRCA at (613) 546-4228	<input type="checkbox"/>	<input type="checkbox"/>



Guideline: Soil Gas Mitigation

1. Purpose

The purpose of this guide is to clarify information required on drawing submissions and installation requirements in new buildings for soil gas mitigation in the 2024 OBC.

2. Background Information

Radon is an odorless, invisible and tasteless radioactive gas that occurs naturally from the breakdown of uranium in the soil and rock. This “soil gas” is present across Ontario but varies in concentration levels depending on the area. Radon is released from the ground into the atmosphere and gas can enter buildings through openings that are in contact with the ground.

[Health Canada guidelines](#) dictate that radon gas concentrations above 200 Becquerel's per cubic meter (Bq/m³) require remediation. As such, this strategy requires soil gas control as per the Ontario Building Code (OBC) to minimize the ingress of airborne radon and other soil gases from the ground aiming to control concentrations of these gases to an acceptable level and allow for future protection of conditioned spaces.

3. Application and Permit Requirements

Except for garages and unenclosed portions of new buildings; walls, roof and floor assemblies separating conditioned space from the ground shall be constructed to resist the leakage of soil from the ground into the building.

Dwelling units and buildings containing residential occupancies shall be provided with a subfloor depressurization rough-in. Buildings used for other occupancies shall conform to the same requirements as residential occupancies or Parts 5 and 6, with exception for buildings intended to be occupied for less than 4 hours a day (Appendix note 9.13.4.2.(3)).

4. Construction Requirements

Building permit drawings shall clearly indicate details associated with one of the following radon gas mitigation options to be constructed on site:

Option 1: Subfloor depressurization rough-in

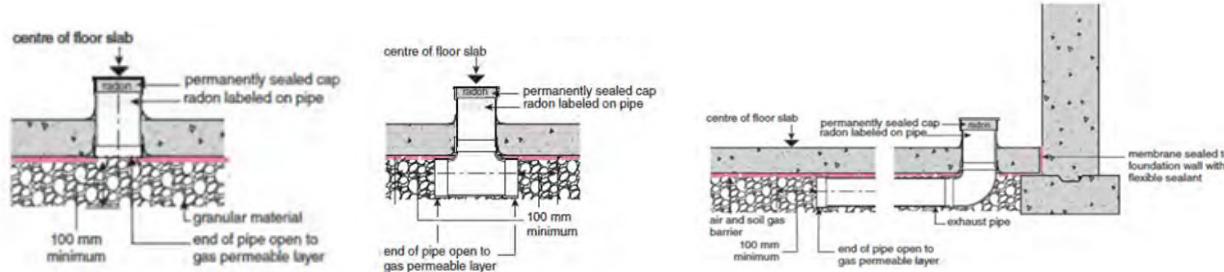
A 100mm inside diameter PVC pipe rough-in through the floor slab with one end terminating near the center below the floor slab and the other end projecting above the floor slab,

- a. A soil gas barrier consisting of 6 mil poly conforming to CAN/CGSB-51-34-M installed between the granular and the concrete slab lapped not less than 300mm.
- b. Pipe installed through the floor slab such that its bottom end opens central of the slab into a minimum 100mm coarse clean granular containing not more than 10% of material that will pass a 4mm sieve for a radius not less than 100mm projecting beyond the terminus of the pipe measured along its axis.
- c. The upper end of the pipe in the conditioned space shall be sealed to maintain the integrity of the air barrier system, be provided with an airtight cap, and labeled “soil gas removal only” near the cap, at every 1.8m and at every change of direction (if applicable).

- d. Floors on ground to be sealed around its perimeter to the inner surfaces of adjacent walls using a flexible sealant.
- e. All penetrations through the floor to be sealed against soil gas leakage, and penetrations for floor drains shall be sealed to prevent upward flow of soil gas without preventing downward flow of liquid.

Please note:

- a. Spray foam may be substituted for 6mil poly under basement floor slabs where installed in conformance with CCMC evaluation reports 14073-R and 14152-R.
- b. Where concentration levels exceed 200 Bq/m³, a subsoil depressurization system is to be installed in conformance with Option 2.



Option 2: Subsoil depressurization system

Installation of a sub slab depressurization system shall be installed in accordance with Health Canada guidelines,

- a. In addition to the subfloor depressurization rough in requirements above the pipe shall extend through the roof or the rim joist and shall have a continuous duty centrifugal inline radon fan,
- b. Provisions to provide make-up air in accordance with 9.32.3.8. to protect against depressurization as well as measures to ensure that any resultant decrease in soil temperature will not adversely affect the foundation,
- c. The pipe shall be insulated where it passes through an unconditioned space and be protected from accidental damage where the pipe penetrates a wall assembly. If the pipe penetrates a fire-separation, an approved firestoppping collar is required to maintain the fire resistance rating, and
- d. Pipe terminations to the exterior should be fitted with a corrosion-resistant grille for the protection against the entry of animals and be capable of equivalent air flow performance. Distances from pipe termination to conform to the table below:

Vertical distance from Termination:	
Above driveway or sidewalk and to openable window or door	2m
Below soffit; permanently closed windows, above grade, porch, deck	1m
From a mechanical air supply inlet	1.8m
Above the roof at the point of penetration	0.3m
Above windows and doors	0.6m
Above mechanical air supply inlet (air intake)	0.9m
Horizontal distance from Termination:	
From windows, doors or mechanical air supply inlet	3m
From property line	1.8m

5. Inspections

Owners or their authorized agent shall ensure the following inspections as part of the installation in conformance with subsection 9.13 OBC. As these are not prescribed inspections under the OBC, Building Officials will perform spot checks when onsite, if visible only.

1. The installation of the rough-in soil gas pipe, granular material and soil gas barrier under floor slab (6 mil poly) prior to covering or pouring the basement slab
2. Sealing of the perimeter of the slab adjacent to the foundation wall and any slab penetrations (polyurethane caulking) prior to covering.
3. Pipe cap and labelling, and inline fan and radon vent pipe termination and clearances prior to occupancy (where applicable).

6. Testing

It is the Owners responsibility to conduct the radon test to determine radon concentration in the building after occupancy has taken place. Radon testing should be done as per HC Pub 4171 and consist of long-term tests (minimum 91 days) completed during the winter season, when windows and doors are generally closed, following health Canada's guidelines and are recommended to be carried out by a [Canadian National Radon Proficiency Program \(C-NRPP\)](#) certified professional.

7. Testing Results and mitigation

Where radon gas testing results come back over 200 Becquerel's per cubic metre (Bq/m³), the Owner is responsible for mitigation and installation of a subfloor depressurization system.

Health Canada recommends that you hire a C-NRPP certified professional as lowering radon levels in a home requires specific technical knowledge and skills to ensure the job is done properly. To find a list of certified professionals contact the Canadian National Radon Proficiency Program (C-NRPP) at 1-855-722-6777, go to <https://c-nrpp.ca/> or email radon@hc-sc.gc.ca.

8. Tarion Warranty

New homes in Ontario come with a new home warranty that is provided by your builder and backed by [Tarion](#). This warranty also covers excessive radon gas levels in new homes for seven years from the date of occupancy.

9. Related Policies, Legislation and Bylaws

- 2024 Ontario Building Code
- [CAN/CGSB-149.11-2019 Radon Control Options for New Construction in Low-Rise Residential Buildings](#)
- [CAN/CGSB-149.12-2017 Radon Mitigation Options for Existing Low-Rise Residential Buildings](#)
- [EPA 625-R-92-016 Radon Prevention in the Design & Construction of Schools & Other Large Buildings](#)