

Permit Application Guide

For a Dwelling, Cottage, Sleeping Cabin or Additions to Dwelling or Cottage

The following pages contain the permit application, as well as other forms that may be required for your permit application. The applications have been inserted into this document from the Ministry of Housing and Municipal Affairs and may be updated from time to time.

Approvals required:

- 1. If you are doing any new construction or additions to any existing structure you may require **Planning approval.**
- 2. Other Agency and Town Department approvals in place. i:e. Hydro One, Veridan, Public Works-Development Standards By-Law, Entrance Permit etc.

Building Permit Process:

- 1. A building permit application fully completed including Roll Number.
- 2. The following plans are required:
 - Site plan to scale in metric showing all structures, proposed structures, wells, overhead hydro lines, septic system, with dimensions and setbacks;
 - o Building plans to scale in imperial (2 sets of each) including
 - o Floor plans
 - o Cross sections (including air barrier location and details)
 - o Elevations
 - o Truss plans
 - Engineered floor systems
 - o Plumbing
 - Heating systems, duct work plans(including Heat loss calculations)
 - Any engineered documents
 - o Energy Efficiency
- 3. Ensure that the Schedule 1 " Designer" sheet is completed by each individual who has completed any of the above noted designs, ie) plumbing, heating, floor plans, etc.
- 4. Permit fees;
- 5. A separate application will be required for a new sewage system or upgrade.
- 6. Development charges, if applicable.
- 7. Cottage Declaration signed by the property owner if applicable.

Contents:

Application Worksheet Application for a Permit to Construct or Demolish Schedule 1: Designer Information Energy Efficiency Design Summary Guide and Forms Cottage Declaration Electrical Components Checklist

The Building Department can only accept and review complete applications and plans. The review is to ensure that they meet Ontario Building Codes, Municipal by-laws and other applicable law. If the project requires a septic approval, the building permit will not be issued until such approval is granted.

Application Worksheet

The following documents *must* be provided with your completed permit application. To ensure that the permit can be processed as efficiently as possible, the application will not be accepted if any documents are missing or incomplete. For further clarification, reference can be made to the Building Code Act.

ALL FIELDS OF APPLICATION ARE FILLED IN _ YES or _ NO and REASON

DESIGNER SHEET	YES	NO	REASON
HOUSE			
PLUMBING			
HVAC			
OTHER			

Incomplete drawings create long delays in obtaining a building permit. Please ensure that all drawings provide sufficient detail to allow the design to be assessed for compliance with the Building Code Act and Ontario Building Code. [BCA S. 1.1(2)] Drawings must be to scale and accurately dimensioned. Below is a checklist to help ensure that the drawings are complete.

DRAWINGS	YES	NO	REASON
Site plan to scale (metric) (2 copies)			
House drawings (imperial) (2 copies)			
Plumbing drawings (2 copies)			
HVAC design and drawings (2 copies)			
Complete floor plans with all rooms labelled			
Foundation plans detailing all footings and			
foundations with reinforcing details.			
Cross section detailing all building elements, including details and location of air barrier.			
Framing plans for all floors and roof			
Engineered product layout and design			
Building elevation drawings			
Electrical information			
Energy Efficiency			
OTHER REQUIRED DOCUMENTS	YES	NO	REASON
Letter of Authorization for Agent (If applicable)			
Deed or survey			
Entrancepermit			
Development Standards By-Law (grading plan)			
District water/sewer permit (Permit #)			
Site plan control applies			
Zoningcompliance			
Lake Flood Elevation Requirement met			
Lake Flood Elevation Requirement met Other Agency Approvals (MNR, DFO, MTO)			
Lake Flood Elevation Requirement met Other Agency Approvals (MNR, DFO, MTO) Compliance with other applicable law			
Lake Flood Elevation Requirement met Other Agency Approvals (MNR, DFO, MTO) Compliance with other applicable law Fees			
Lake Flood Elevation Requirement met Other Agency Approvals (MNR, DFO, MTO) Compliance with other applicable law Fees District Development Fee (If required)			
Lake Flood Elevation Requirement met Other Agency Approvals (MNR, DFO, MTO) Compliance with other applicable law Fees District Development Fee (If required) Township Development Fee (If required)			

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 <u>SB-12 Prescriptive</u> design tables (this form is for this option (Option 1)),
- 2. Use the <u>SB-12 Performance</u> 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.

• <u>SB-12 Prescriptive</u> 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 <u>SB-12 Prescriptive</u> compliance package table applies. *Other Building Conditions:* These construction conditions affect <u>SB-12 Prescriptive</u> compliance requirements.

D. Building Specifications

Thermal Insulation: Indicate the RSI or R-value being proposed where they apply to the house design. Under the <u>SB-12 Prescriptive</u> 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)

Duilding Turne	Airtightness Targets						
Building Type	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	0.18 cfm50/ft ²		
Attached dwelling	3.0	2.12 cm ² /m ²	3.06 in ² /100ft ²	1.32 L/s/m ²	0.26 cfm50/ft ²		

The building code requires that a blower door test be conducted to verify the air tightness of the house during construction if the <u>SB-12 Prescriptive</u> 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.

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/0	Certification Number			
A. Project Information							
Building number, street name						Unit number	Lot/Con
Municipanty		Postar	code	Reg. Pl	an number / other descripti	011	
B. Prescriptive Compliance [indicate the building code compliance package being employed in this house design]							
SB-12 Prescriptive (input	t design p	ackage): F	ackage:		Table):	_
C. Project Design Con	ditions						
Climatic Zone (SB-1):		Heating Ec	uipment Effi	ciency	Space Heating F	uel Source	
□ Zone 1 (< 5000 degree days)	□ ≥ 92% AF	FUE		□ Gas	Propane	Solid Fuel
□ Zone 2 (≥ 5000 degree days)	□ ≥ 84% < 9	92% AFUE		🗆 Oil	Electric	Earth Energy
Ratio of Windows, Skylights	& Glass	(W, S & G) te	o Wall Area		Other Building C	haracteristics	
	u ²				□ Log/Post&Bean	n □ ICF Above G	rade □ ICF Basement
Area of walls =m or	π	W, S & G	6 % =		Slab-on-ground Air Conditioning		ement
		I Itiliza wiadaw				at Pump (ASHP)	
Area of W, S & G = $_\m^2$ or	ft ²	Utilize window	averaging.	res Lino	Ground Sourced Heat Pump (GSHP)		
D. Building Specificat	ions (pro	vide values an	d ratings of the	energy eff	iciency components p	proposed]	,
Energy Efficiency Substi	tutions						
□ ICF (3.1.1.2.(5) & (6) / 3.1.1	.3.(5) & (6	5))					
Combined space heating an	d domest	ic water hea	ting systems	(3.1.1.2.(7) / 3.1.1.3.(7))		
□ Airtightness substitution(s)							
	□ Table 3.	1.1.4.B Red	quired:		Permitt	ed Substitution:	
Airtightness test required (Refer to Design Guide Attached)	□ Table 3.	.1.1.4.C Re	quired:		Permitt	ed Substitution:	
(Rec	nuired:		Permitt	ed Substitution	
Building Componen	t	Minimum R	SI / R values m U-Value ⁽¹⁾		Building Compo	onent	Efficiency Ratings
Thermal Insulation		Nominal	Effective	Windo	ws & Doors Prov	ide U-Value ⁽¹⁾ or ER ra	ating
Ceiling with Attic Space				Window	ws/Sliding Glass [Doors	
Ceiling without Attic Space				Skyligh	ts/Glazed Roofs		
Exposed Floor				Mecha	nicals		
Walls Above Grade		Heating Equip.(AFUF)					
Basement Walls		HRV Efficiency (SRE% at 0°C)					
Slab (all >600mm below grade)		DHW Heater (EF)					
Slab (edge only ≤600mm below g	rade)	DWHR (CSA B55.1 (min. 42% efficiency)) # Showers				# Showers	
Slab (all ≤600mm below grade, or	r heated)			Combir	ned Heating System	m	L
(1) U value to be provided in eithe	er W/(m²•K)	or Btu/(h•ft ² •F) but not both.				
E. Designer(s) [name(s) &	& BCIN(s).	if applicable. o	f person(s) prov	iding infor	mation herein to subs	tantiate that design r	neets the buildina codel
			,				g

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

 Name
 BCIN
 Signature

Guide to the Energy Efficiency Design Summary Form for Performance & Other Acceptable Compliance Methods

COMPLETING THE FORM

B. Compliance Options

Indicate the compliance option being used.

- <u>SB-12 Performance</u> refers to the method of compliance in Subsection 3.1.2. of SB-12. Using this approach the designer must use recognized energy simulation software (such as HOT2000 V10.51 or newer), and submit documents which show that the annual energy use of the proposed building is equal to or less than a prescriptive (referenced) building package.
- <u>ENERGY STAR</u> houses must be designed to ENERGY STAR requirements and verified on completion by a licensed energy evaluator and/or service organization. The ENERGY STAR BOP form must be submitted with the permit

documents.

• *R-2000* houses must be designed to the *R-2000 Standard* and verified on completion by a licensed energy evaluator and/or service organization. The HOT2000 report must be submitted with the permit documents.

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. 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 <u>SB-12 Prescriptive</u> compliance package table applies. *Other Building Conditions:* These construction conditions affect <u>SB-12 Prescriptive</u> compliance requirements.

D. Building Specifications

Thermal Insulation: Indicate the RSI or R-value being proposed where they apply to the house design. Refer to SB-12 for further details.

E. Performance Design Summary

A summary of the performance design applicable only to the <u>SB-12 Performance</u> option.

F. ENERGY STAR or R-2000 Performance Method

Design to ENERGY STAR or R-2000 Standards.

G. 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.

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 3.1.2.1. are not requirements. The Table is not intended to require or suggest that the building meet those airtightness targets. They are provided only as default or reference values for the purpose of annual energy simulations, should the builder/owner decide to perform such simulations. They are given in three different metrics; ACH, NLA, NLR. Any one of them can be used. They can be used as a default values for both a reference and proposed building or, where an air leakage test is conducted and credit for airtightness is claimed, the airtightness values in Table 3.1.2.1. can be used for the reference building and the actual leakage rates obtained from the air leakage test can be used as inputs for the proposed building.

OBC Reference Default Air Leakage Rates (Table 3.1.2.1.)

Detached dwelling	3.0 ACH50	NLA 2.12 cm ² /m ²	NLR 1.32 L/s/m ²
Attached dwelling	3.5 ACH50	NLA 2.27 cm ² /m ²	NLR 1.44 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 <u>SB-12 Performance</u> option is used and an air tightness of less than 3.0 ACH @ 50 Pa (or NLA or NLR equivalent) in the case of detached houses, or 3.5 ACH @ 50 Pa (or NLA or NLR equivalent) in the case of attached houses is necessary to meet the required energy efficiency standard.

ENERGY EFFICIENCY LABELING FOR NEW HOUSES

ENERGY STAR and R-2000 may issue labels for new homes constructed under their energy efficiency programs. The building code does not currently regulate or require new home labeling.

Energy Efficiency Design Summary:

Performance & Other Acceptable Compliance Methods

(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 Performance or Other Acceptable Compliance Methods described in Subsections 3.1.2. and 3.1.3. of SB-12,

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.

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	on	

B. Compliance Option [indicate the building code compliance option being employed in this house design]

SB-12 Performance* [SB-12 - 3.1.2.]	* Attach energy performance results using an approved software (see guide)
ENERGY STAR®* [SB-12 - 3.1.3.]	* Attach Builder Option Package [BOP] form
□ <i>R-2000</i> ® *[SB-12 - 3.1.3.]	* Attach R-2000 HOT2000 Report

C. Project Building Design Conditions

Climatic Zone (SB-1):	Heating Equipment Efficiency	Space Heating F	Fuel Source			
□ Zone 1 (< 5000 degree days)	□ ≥ 92% AFUE	□ Gas	Propane	Solid Fuel		
□ Zone 2 (≥ 5000 degree days)	□ ≥ 84% < 92% AFUE	🗆 Oil	Electric	Earth Energy		
Ratio of Windows, Skylights & Glass	(W, S & G) to Wall Area	Other Building C	Characteristics			
		Log/Post&Bear	m 🗆 ICF Above Gra	ade 🛛 ICF Basement		
Area of walls = $m^2 \text{ or} ft^2$		Slab-on-ground Walkout Basement				
	W. S & G % =	Air Conditioning Combo Unit				
		Air Source Hea	at Pump (ASHP)			
Area of W, S & G =m ² orft ²		Ground Source	e Heat Pump (GSHP	?)		
SB-12 Performance Reference Building Design Package indicating the prescriptive package to be compared for compliance						
SB-12 Referenced Building Package (input design package): Package: Table:						

D. Building Specifications [provide values and ratings of the energy efficiency components proposed, or attach ENERGY STAR BOP form

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 Space / Dom. Water Heating	

(1) U value to be provided in either $W/(m^2 \cdot K)$ or $Btu/(h \cdot ft^2 \cdot F)$ but not both.

E. Performance Design Verification [Subsection 3.1.2. Performance Compliance]								
The annual energy consumption using Subsection 3.1.1. SB-12 Reference Building Package isGJ (1 GJ =1000MJ)								
The annual energy consumption of this house as designed isGJ								
The software used to simulate the annual energy use of the building is:								
The building is being designed using an air tightness baseline of:								
OBC reference ACH, NLA or NLR default values (no depressurization test required)								
□ Targeted ACH, NLA or NLR. Depressurization test to meetACH50 or NLR or NLA								
Reduction of overall thermal performance of the proposed building envelope is not more than 25% of the envelope of the compliance package it is compared against (3.1.2.1.(6)).								
Standard Operating Conditions Applied (A-3.1.2.1 - 4.6.2)								
Reduced Operating Conditions for Zero-rated homes Applied (A-3.1.2.1 - 4.6.2.5)								
On Site Renewable(s): Solar:								
Other Types:								

F. ENERGY STAR or R-2000 Performance Design Verification [Subsection 3.1.3. Other Acceptable Compliance Methods]

□ The NRCan "ENERGY STAR for New Homes Standard Version 12.6" technical requirements, applied to this building design result in the building performance meeting or exceeding the prescriptive performance requirements of the Supplementary Standard SB12 (A-3.1.3.1).

The NRCan, "2012 R-2000 Standard " technical requirements, applied to this building design result in the building performance meeting or exceeding the prescriptive performance requirements of the Supplementary Standard SB12 (A-3.1.3.1).

ENERGY STAR or R-2000 Energy Evaluator/Advisor/Rater/ Name and company:

Performance Energy Modeling Professional Energy Evaluator/Advisor/Rater/CEM Name and company:

Evaluator/Advisor/Rater License #

Accreditation or Evaluator/Advisor/Rater License #

G. 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						

Form authorized by OHBA, OBOA, LMCBO. Revised December 1, 2016



COTTAGE DECLARATION

Office Use Section		
Date:	Property Owner : (Print)	
Permit #	Roll #	
Address of Proposed Dwelling:		

Tarion (Ontario New Home Warranty) www.tarion.com

Ontario Building Code Excerpt:

Div B 9.36 Cottages 9.36.1.1.

(1) This section applies to buildings of residential occupancy used or intended to be used as seasonal recreational buildings.

1. Ontario New Home Warranties Plan Act R.S.O. 1990, CHAPTER 0.31

Definition "home" means,

.... (d) any other dwelling of a class prescribed by the regulations as a home to which this Act applies, and includes any structure or appurtenance used in conjunction therewith,

but does not include a dwelling built and sold for occupancy for temporary periods or for seasonal purposes;

I, (print name) _ _am the owner of the above mentioned cottage AND FURTHER, I am applying for a building permit to construct a **cottage** as described in 1 above AND FURTHER, the building use is for temporary periods or seasonal purposes as per 2 above AND FURTHER, I hereby acknowledge that this dwelling will not be covered by Tarion (Ontario New Home Warranty Program)

Owners Signature

Date

Note: Do not sign this section if Tarion (New Home Warranty) is applicable.

Compliance to Ontario Building Code SB12 Energy Efficiency

OBC Excerpt SB 12 1.2.1.1. (1)

(1) The energy efficiency of a building or part of a building of residential occupancy that is within the scope of Part 9 and is intended for occupancy of a continuing basis during the winter months shall comply with this Supplementary Standard in accordance with Sentences 12.2.1.1. (3) and 12.2.1.2. (3) of Division B in the Building code.

I, (print name)_ _am the owner of the above mentioned cottage, AND FURTHER, I am aware this cottage is designed, reviewed and constructed under the exemption SB12 1.2.1.1.(1) for energy efficiency

AND FURTHER, this cottage is not intended for Occupancy on a continuing basis in winter months.

Owners Signature

Date

Note: Do not sign this section if the use of the cottage is intended for Occupancy on a continuing basis in winter months.



Electrical Components Checklist for Building Permit (see OBC Section 9.34. Electrical Facilities)

**Residential **

OK	N/A	Site Plan	
		Proximity to buildings, overhead and buried, voltage of hydro-electric transmission	
		lines (9.1.1.5. and 3.1.19.)	
Show Location of:			
		Location of Smoke Alarms (9.10.19 & 3.2.4.22.)	
		Location of Carbon Monoxide Detectors (9.33.4. and 6.2.12)	
Lighting Outlet Locations:			
		Exterior lighting at entrances (9.34.2.1(1))	
		Must meet the requirements of the Town of Gravenhurst Dark Sky By-Law	
		Lighting outlets in kitchen, bedrooms, living rooms, utility rooms, laundry rooms,	
		dining rooms, bathrooms, water closet, vestibules and hallways(9.34.2.2.(1))	
Stairway lighting Locations (9.34.2.3)			
		3 way wall switch at head and foot of each stairs where more than 4 risers on	
		stairs (9.34.2.3.(2))	
		Single light switch at head and foot of stairs for unfinished basement(9.34.2.3.(3))	
		Single light switch leading to built in garage (9.34.2.6.(1))	
		Outlet for every 30 m ² sq of unfinished basement space(9.34.2.4.(1))	
		Lighting outlet near doorway in storage room, attached, built in or detached garage	
		or carport, ((9.34.2.5.(1), 9.34.2.6.(1))	
		Public and Service Areas	
		Lighting outlets controlled by a wall switch (see Table 9.34.2.7 if required for	
		minimum, light requirements) (9.34.2.7.)	