



# **Building & Plumbing Permit** **Application - Residential**

## **A. Time Frame for Building Permit Issuance**

This table is for information only to explain the time allowed for review of a building permit application for a permit to be issued or refused.

## **B. Declaration of Applicant**

The Declaration of Applicant must be completed to obtain a permit.

## **C. Checklist for Building Permit Applications**

Please ensure that the Checklist For Building Permit Applications is reviewed, completed & signed.

## **D. Application for a Permit to Construct or Demolish**

The Application for a Permit to Construct or Demolish must be completed. Also required is a site plan, lot grading plan & two copies of blueprints and/or plans.

## **E. Schedule 1: Designer Information**

Schedule 1 – Designer Information must be completed by every person engaged in the business of providing design activities unless exempt from the requirement under Section. 2.17.4.1 (3).

## **F. Energy Efficiency Design Summary**

Please complete either the Prescriptive Method or the Performance & Other Acceptable Compliance Methods, depending on your construction plans.

## **G. Schedule A: Plumbing Permit Application**

This schedule, as well as the Application for a Permit to Construct or Demolish, must be completed to obtain a plumbing permit.

January, 2017

## TIME FRAME FOR THE ISSUANCE OF BUILDING PERMITS

A building permit shall be issued in accordance with Table 2.4.1.1B of the Building Code unless:

- (a). the proposed building, construction or demolition will contravene the Building Code Act, the Building Code, or any other applicable law;
- (b). the applicant is a builder or vendor as defined in the Ontario New Home Warranties Plan Act and is not registered under that Act;
- (c). a person who prepared drawings, plans, specifications or other documents or gave an opinion concerning the compliance of the proposed building or construction with the building code does not have the applicable qualifications, if any, set out in the building code or does not have the insurance, if any, required by the building code;
- (d). the plans review certificate, if any, required for the application does not contain the prescribed information;
- (e). the application for the permit is not complete; or
- (f). any fees due have not been paid.

**Table 2.4.1.1B**

The period within which a building permit shall be issued or refused.

Row Number	Class of Building	Time Period
1	(a). A detached house, semi-detached house, townhouse or row house where no dwelling unit is located above another dwelling unit.  (b). A detached structure that serves a building described in Clause (a) and does not exceed 50 m <sup>2</sup> in building area.  (c). A tent to which Section 3.13 of the building code applies.  (d). A sign to which Section 3.14 of the building code applies.	10 days
2	(a). Buildings described in Clauses 2.1.1.3.(1)(a),(b) and (c) (Part 9 buildings) other than buildings described in Column 2 of any of Rows 1 and 4 of this table.  (b). Farm buildings that do not exceed 600 m <sup>2</sup> in building area.	15 days
3	(a). Buildings described in Clause 2.1.1.2.(1)(a) or (b) (Part 3 buildings), other than buildings in Column 2 of any of Rows 1 and 4 of this table.  (b). Farm buildings exceeding 600 m <sup>2</sup> in building area.	20 days
4	(a) Post-disaster buildings.  (b). Buildings to which Subsection 3.2.6. (high buildings and Group B buildings) or any provision in articles 3.2.8.2 to 3.2.8.11 applies.	30 days
Column 1	Column 2	Column 3

The time period above begins on the day on which a permit for the construction of a sewage system serving the building (if required) is issued as per 2.4.1.1B. (9)(c). The period within which a permit for a septic system shall be issued or refused is based on the class of building in the above table as per 2.4.1.1B. (8)(b).

## Declaration of Applicant

### Section A

Is this project a commercial, agricultural, or industrial application?	<b>Yes</b>	<b>No</b>
Does the proposal involve fuel handling/storage ≥15,000 litres?	<b>Yes</b>	<b>No</b>

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### Section B

Are there any hydro poles/hydro easements on this property?	<b>Yes</b>	<b>No</b>
Is there any gas or oil or any other utility easement on this property?	<b>Yes</b>	<b>No</b>
Are there any Right-of-Way accesses on this property?	<b>Yes</b>	<b>No</b>
Are there any easements (of any nature) on this property?	<b>Yes</b>	<b>No</b>
Are there any closed private/municipal drains on this property?	<b>Yes</b>	<b>No</b>
Are there any agreements/leases attached to title (i.e. wind, gas/oil etc.)-	<b>Yes</b>	<b>No</b>

If you answered **YES** to any of the questions in **Section B** - you are required to clearly indicate on your site/plot/lot diagram the location of such items and provide sufficient documentation where applicable/requested.

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### Section C

I understand that property locates are my sole responsibility.	<b>Yes</b>	<b>No</b>
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I understand it is my sole responsibility to ensure all substantial completion inspections (as outlined in the issued permit) are requested with 48 hours' notice, carried out and approved prior to proceeding to the next stage of construction.	<b>Yes</b>	<b>No</b>
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I understand that I will be responsible to remit all applicable fees prior to my permit being officially issued and further I may be subject to the said fees if my application is denied, revoked or cancelled (by myself), as per the applicable building permit by-law.	<b>Yes</b>	<b>No</b>
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I, \_\_\_\_\_ certify that:  
(Print name)

1. The information contained in this declaration, application, attached plans and specifications, and other attached documentation is true to the best of my knowledge.
2. As the Owner/Agent/Contractor I take responsibility to ensure compliance to all federal, provincial and municipal legislation and or regulations prior to, during and after construction.
3. I will not hold The County of Lambton or its employees liable for any actions by myself resulting in; non-issuance of a permit, revoking of a permit, civil action and or possible fine.
4. I have authority to bind the corporation or partnership (if applicable).

\_\_\_\_\_  
(Date)

\_\_\_\_\_  
(Signature of Applicant)

*Personal information contained in this form and schedules is collected under the authority of Section 7 Subsections 8(2) of the Building Code Act, 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 to which this application is being made.*

**Please Note: This declaration must be completed in its entirety prior to the issuance of a building/plumbing/septic permit, no exceptions.**

## **Building Permit Application Checklist**

- Completed Building Permit Application, including plumbing and septic (as applicable), this includes all Designer Schedules and Energy Efficiency Design summary
- Completed Declaration
- Site/Lot/Plot Plan/Diagram (2 copies) clearly demonstrating the following:
  - Location of proposed building
  - All other buildings on the property (including dimensions)
  - Setbacks to property lines
  - Include all easements, right-of-way, septic, wells, hydro wires (overhead and underground) etc.
  - Driveway location and dimensions
- Construction Plans including all structural/architectural/design details (2 copies)
  - Foundation plan, showing type, wall height and height of backfill
  - Footing size and location
  - Elevations including top of finished ground to highest point on building
  - Floor plan of each floor
  - Finished basement plan if applicable
  - Typical wall cross section
  - Longitudinal cross section, if applicable
  - Beam and lintel sizes and span, joist sizes, rafters, headers etc
  - Professional Engineered components (i.e. roof truss, joists) layouts submitted, reviewed and signed off by your designer
  - Heat loss and design summary calculations and layout (applies to all methods of heat: infloor, electric, forced air, etc.)
- Proposed Grading Plan (new construction, infill lots etc.) - as required (2 copies)
- External Approvals
  - Minor Variance Approval - 1 copy
  - Conservation Authority Approval - 1 copy
  - Driveway/Access Approval - 1 copy
  - Any other applicable law approval documents - 1 copy

**Please Note: Incomplete applications will be subject to delay and prescribed time frames for the issuance of said permits will not be applicable.**

**Exception: Permit fees will be calculated by staff and will be applicable at time of permit issuance and are not required to be attached to the application.**

# Application for a Permit to Construct or Demolish

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

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

<b>E. Builder (optional)</b>				
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 (     )	
<b>F. Tarion Warranty Corporation (Ontario New Home Warranty Program)</b>				
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): _____				
<b>G. Required Schedules</b>				
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.				
<b>H. Completeness and compliance with applicable law</b>				
i) This application meets all the requirements of clauses 1.3.1.3 (5) (a) to (d) of Division C of the Building Code (the application is made in the correct form and by the owner or authorized agent, all applicable fields have been completed on the application and required schedules, and all required schedules are submitted). Payment has been made of all fees that are required, under the applicable by-law, resolution or regulation made under clause 7(1)(c) of the <i>Building Code Act, 1992</i> , to be paid when the application is made.			<input type="checkbox"/> Yes	<input type="checkbox"/> 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
<b>I. Declaration of applicant</b>				
I _____ declare that: (print name)				
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

## 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) (c) of Division C, Article 3.2.5.1. of Division C, and all other persons who are exempt from qualification under Subsections 3.2.4. and 3.2.5. of Division C.
2. Schedule 1 is not required to be completed by a holder of a license, temporary license, or a certificate of practice, issued by the Ontario Association of Architects. Schedule 1 is also not required to be completed by a holder of a license to practise, a limited license to practise, or a certificate of authorization, issued by the Association of Professional Engineers of Ontario.

# 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	
<b>A. Project Information</b>			
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 <sup>2</sup> or _____ ft <sup>2</sup>	W, S & G % = _____  Utilize window averaging: <input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Log/Post&Beam <input type="checkbox"/> ICF Above Grade <input type="checkbox"/> ICF Basement
Area of W, S & G = _____ m <sup>2</sup> or _____ ft <sup>2</sup>		<input type="checkbox"/> Slab-on-ground <input type="checkbox"/> Walkout Basement <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)  Airtightness test required (Refer to Design Guide Attached)	<input type="checkbox"/> Table 3.1.1.4.B Required: _____ Permitted Substitution: _____			
	<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 <sup>(1)</sup>		Building Component	Efficiency Ratings
<b>Thermal Insulation</b>	Nominal	Effective	<b>Windows &amp; Doors</b> Provide U-Value <sup>(1)</sup> or ER rating	
Ceiling with Attic Space			Windows/Sliding Glass Doors	
Ceiling without Attic Space			Skylights/Glazed Roofs	
Exposed Floor			<b>Mechanicals</b>	
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))	#
Slab (all ≤600mm below grade, or heated)			Combined Heating System	

(1) U value to be provided in either W/(m<sup>2</sup>·K) or Btu/(h·ft<sup>2</sup>·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 <sup>2</sup> /m <sup>2</sup>	1.81 in <sup>2</sup> /100ft <sup>2</sup>	0.93 L/s/m <sup>2</sup>	0.18 cfm50/ft <sup>2</sup>
Attached dwelling	3.0	2.12 cm <sup>2</sup> /m <sup>2</sup>	3.06 in <sup>2</sup> /100ft <sup>2</sup>	1.32 L/s/m <sup>2</sup>	0.26 cfm50/ft <sup>2</sup>

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.

Form authorized by OHBA, OBOA, LMCBO. Revised November 30, 2016.

# 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

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

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

## C. Project Building 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 <sup>2</sup> or _____ ft <sup>2</sup>	W, S & G % = _____	<input type="checkbox"/> Log/Post&Beam <input type="checkbox"/> ICF Above Grade <input type="checkbox"/> ICF Basement <input type="checkbox"/> Slab-on-ground <input type="checkbox"/> Walkout Basement <input type="checkbox"/> Air Conditioning <input type="checkbox"/> Combo Unit <input type="checkbox"/> Air Source Heat Pump (ASHP) <input type="checkbox"/> Ground Source Heat Pump (GSHP)
Area of W, S & G = _____ m <sup>2</sup> or _____ ft <sup>2</sup>		
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 <sup>(1)</sup>	Building Component	Efficiency Ratings
<b>Thermal Insulation</b>	Nominal    Effective	<b>Windows &amp; Doors</b> Provide U-Value <sup>(1)</sup> or ER rating	
Ceiling with Attic Space		Windows/Sliding Glass Doors	
Ceiling without Attic Space		Skylights/Glazed Roofs	
Exposed Floor		<b>Mechanicals</b>	
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))	#
Slab (all ≤600mm below grade, or heated)		Combined Space / Dom. Water Heating	

(1) U value to be provided in either W/(m<sup>2</sup>•K) or Btu/(h•ft<sup>2</sup>•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 is \_\_\_\_\_ GJ (1 GJ =1000MJ)

The annual energy consumption of this house as designed is \_\_\_\_\_ GJ

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 meet \_\_\_\_\_ ACH50 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).

**Performance Energy Modeling Professional**

Energy Evaluator/Advisor/Rater/CEM Name and company:

Accreditation or Evaluator/Advisor/Rater License #

**ENERGY STAR or R-2000**

Energy Evaluator/Advisor/Rater/ Name and company:

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

# 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.

- SB-12 Performance 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.
- ENERGY STAR 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 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. Refer to SB-12 for further details.

### E. Performance Design Summary

A summary of the performance design applicable only to the SB-12 Performance 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 <sup>2</sup> /m <sup>2</sup>	NLR 1.32 L/s/m <sup>2</sup>
Attached dwelling	3.5 ACH50	NLA 2.27 cm <sup>2</sup> /m <sup>2</sup>	NLR 1.44 L/s/m <sup>2</sup>

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 Performance 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.

**SCHEDULE 'A'**  
**Plumbing Information**

Owner Name:	Address of Proposed Work:
<b>Plumber:</b>	Municipality:

Please list the number of fixtures per floor on the following chart. (new or relocated)

<b>FLOOR</b>	Basement	1	2	3	4	Total Number
Toilet						
Bath tub						
Wash basin						
Kitchen sink						
Laundry tubs						
Floor drain						
Showers						
Urinal						
Clothes washer						
Dish washer - domestic						
Other sinks						
Drinking fountain						
Hot water heater						
Sewage Pump						
Grease Interceptor						
<b>TOTAL</b>						

No. of Dwelling Units	R.W.L.	Water Lines
Soil Vent Stacks	Sanitary Lateral	Oil Interceptor
Catch Basin	Storm Lateral	Backflow Preventer
Lawn Sprinkler System		

\_\_\_\_\_ Signature

\_\_\_\_\_ Date