

Telephone: 519-845-5420 Toll-free: 1-866-324-6912

Fax: 519-845-3817

# **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. <u>Schedule 1: Designer Information</u>

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	Class of Building	Time Period
Number		
1	(a). A detached house, semi-detached house, townhouse or row house where no dwelling unit is located above another dwelling unit.	10 days
	(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.	
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.	15 days
	(b). Farm buildings that do not exceed 600 m <sup>2</sup> in building area.	
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.	20 days
	(b). Farm buildings exceeding 600 m <sup>2</sup> in building area.	
4	(a) Post-disaster buildings.	30 days
	(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.	
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  In this project a commercial agricultural or industrial application?	Yes	No					
Is this project a commercial, agricultural, or industrial application?  Does the proposal involve fuel handling/storage ≥15,000 litres?	Yes	No					
	163						
Section B							
Are there any hydro poles/hydro easements on this property?	Yes	No					
Is there any gas or oil or any other utility easement on this property?	Yes	No					
Are there any Right-of-Way accesses on this property?	Yes	No					
Are there any easements (of any nature) on this property?	Yes	No					
Are there any closed private/municipal drains on this property?	Yes	No					
Are there any agreements/leases attached to title (i.e. wind, gas/oil etc.)-	Yes	No					
If you answered <u>YES</u> to any of the questions in <u>Section B</u> - you are requisite/plot/lot diagram the location of such items and provide sufficient docu <u>applicable/requested</u> .							
Section C I understand that property locates are my sole responsibility. I understand it is my sole responsibility to ensure all substantial completio the issued permit) are requested with 48 hours' notice, carried out and ap the next stage of construction.		•					
I understand that I will be responsible to remit all applicable fees prior to n issued and further I may be subject to the said fees if my application is de myself), as per the applicable building permit by-law.							
l,	certif	y that:					
<ul><li>(Print name)</li><li>The information contained in this declaration, application, attached plans and specifi</li></ul>	cations, a	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 fede	ral, provir	ncial and municipal					
legislation and or regulations prior to, during and after construction.							
permit, revoking of a permit, civil action and or possible fine.	zii i <del>c</del> ouilli	ig iii, iiuii-issualice ui d					
4. I have authority to bind the corporation or partnership (if applicable).							

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.

(Date)

(Signature of Applicant)

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
  - o 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
  - o 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 us	e by F	Principa	Authority			
Application number:			Permit r	number (if diffe	rent):		
Date received:			Roll nun	nber:			
Application submitted to:(Name of municipal	ity, upper-tie	er muni	cipality, bo	ard of health or o	conservatio	on authority)	
A. Project information							
Building number, street name						Unit number	Lot/con.
Municipality	Postal c	ode		Plan number		scription	
Project value est. \$				Area of work	(m <sup>2</sup> )		
B. Purpose of application							
☐ New construction ☐ Addition to existing b				tion/repair		Demolition	Conditional Permit
Proposed use of building		Curre	ent use of	building			
Description of proposed work							
C. Applicant Applicant is:							
Last name	First nar	me		Corporation of	or partners	•	
Street address						Unit number	Lot/con.
Municipality	Postal c	ode		Province		E-mail	
Telephone number ( )	Fax ( )					Cell number	
D. Owner (if different from applicant)							
Last name	First nar	me		Corporation of	or partners	ship	
Street address						Unit number	Lot/con.
Municipality	Postal c	ode		Province		E-mail	
Telephone number ( )	Fax ( )					Cell number	

E. Builder (optional)							
Last name	First name	Corporation or partnersh	nip (if applicabl	e)			
Street address Unit number Lot/con.							
Municipality	Postal code	Province	E-mail				
Walterpairty	1 ostar code	Trovince	Linaii				
Telephone number	Fax		Cell number				
( )	( )		( )				
F. Tarion Warranty Corporation (Ontario	New Home Warra	nty Program)					
<ul> <li>i. Is proposed construction for a new hom Plan Act? If no, go to section G.</li> </ul>	e as defined in the <i>On</i>	tario New Home Warranties		Yes		No	
ii. Is registration required under the Ontar	io New Home Warranti	es Plan Act?		Yes		No	
			Į.				
iii. If yes to (ii) provide registration number	(s):						
G. Required Schedules							
i) Attach Schedule 1 for each individual who rev	iews and takes respon	sibility for design activities.					
ii) Attach Schedule 2 where application is to con-	struct on-site, install or	repair a sewage system.					
H. Completeness and compliance with a	applicable law						
i) This application meets all the requirements of				Yes		No	
Building Code (the application is made in the applicable fields have been completed on the							
schedules are submitted).	application and require	ed sorieddies, and an require	54				
Payment has been made of all fees that are r				Yes		No	
regulation made under clause $7(1)(c)$ of the <i>E</i> application is made.	sullaing Code Act, 1992	2, to be paid when the					
ii) This application is accompanied by the plans			·law,	Yes		No	
resolution or regulation made under clause 7			L —				
<ul><li>iii) This application is accompanied by the inform law, resolution or regulation made under clau</li></ul>				Yes		No	
the chief building official to determine whethe	r the proposed building	, construction or demolition	will				
contravene any applicable law.	ition will not continue	- any angliaghla law					
iv) The proposed building, construction or demol	illon will not contravend	e any applicable law.		Yes		No	
I. Declaration of applicant							
				حاء حاء			
(print name)				_uecia	re that:		
1. The information contained in this applic	ation, attached schedu	les, attached plans and spec	cifications, 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 o	of applicant					
<del></del>	0.9						

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 descript	ion			
B. Individual who reviews and takes	responsibilit	y 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 in Division C]	ndividual ider	ntified in Section B. [Bui	Iding Code Table	3.5.2.1. of		
☐ House	☐ HVAC -	- House	☐ Building Stru			
☐ Small Buildings		g Services	☐ Plumbing – I			
☐ Large Buildings		on, Lighting and Power	☐ Plumbing – /	O .		
Complex Buildings	☐ Fire Pro	otection	☐ On-site Sew	age Systems		
Description of designer's work						
D. Declaration of Designer						
		de	clare that (choose o	ne as appropriate):		
(print name	•)	0	oraro mar (orreces o	no do appropriato).		
(print name	,					
☐ I review and take responsibility C, of the Building Code. I am of Individual BCIN:	qualified, and the	e firm is registered, in the app				
Firm BCIN:						
☐ I review and take responsibility under subsection 3.2.5.of Division Individual BCIN:	sion C, of the Bu	uilding Code.	priate category as a	n "other designer"		
maividuai Boliv.						
Basis for exemption from	registration:					
☐ The design work is exempt fro Basis for exemption from	-		ents of the Building (	Code.		
I certify that:						
The information contained in this so	chedule is true t	to the best of my knowledge.				
2. I have submitted this application wi						
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%.

A I' I' NI -			For use by P						
Application No:	ion			Model/	Certification Number				
A. Project Informat  Building number, street name	1011					Unit number	Lot/Con		
Salaring Humbor, of Cot Humb						STATE HOLLING	250 5511		
Municipality		Postal o	code	Reg. Pl	an number / other descri	ption	1		
B. Prescriptive C	omplian	ICE [indicate	the building cod	de complia	nce package being e	employed in this hous	se design1		
<u>-</u>									
SB-12 Prescriptive (ii			Package: _		I	able:			
C. Project Design C	onaitio		uipment Effi	ciency	Space Heating	Fuel Source			
☐ Zone 1 (< 5000 degree day	rs)	□ ≥ 92% AF		Clefficy	□ Gas	□ Propane	□ Solid Fuel		
☐ Zone 2 (≥ 5000 degree day		□ ≥ 84% < 9			□ Gas □ Oil	□ Electric	□ Earth Energy		
Ratio of Windows, Skylight						Characteristics			
Area of walls = $_{m^2}$ or $_{t^2}$ Area of W, S & G = $_{m^2}$			averaging: □\	Yes □No	<ul><li>□ Slab-on-grour</li><li>□ Air Conditionii</li><li>□ Air Sourced H</li></ul>	am □ ICF Above on □ Walkout Bateng □ Combo Unit leat Pump (ASHP) ared Heat Pump (G	t )		
D. Building Specific		provide values	and ratings of	the energ	y efficiency compone	ents proposed]			
Energy Efficiency Subs	titutions								
□ ICF (3.1.1.2.(5) & (6) / 3.1.									
□ Combined space heating a	and domest	ic water hea	ting systems	(3.1.1.2.	(7) / 3.1.1.3.(7))				
☐ Airtightness substitution(s)									
Airtightness test required	□ Table 3.	1.1.4.B Red	quired:		Permi	itted Substitution:			
(Refer to Design Guide Attached)	□ Table 3.	1.1.4.C Red	quired:	Permitted Substitution:					
		Red	quired:			itted Substitution:_			
Building Compone	nt	Minimum Ri	SI / R values m U-Value <sup>(1)</sup>		Building Comp	oonent	Efficiency Ratings		
Thermal Insulation		Nominal	Effective		ws & Doors Pro	vide U-Value <sup>(1)</sup> or ER	rating		
Ceiling with Attic Space				Windo	ws/Sliding Glass	Doors			
Ceiling without Attic Space	)			Skyligh	nts/Glazed Roofs	3			
Exposed Floor				Mecha	Mechanicals				
Walls Above Grade				Heating	g Equip.(AFUE)				
Basement Walls					fficiency (SRE% a	ut 0° C)			
Slab (all >600mm below grade)					Heater (EF)	<u> </u>			
Slab (edge only ≤600mm below	,				CSA B55.1 (min. 4	#			
Slab (all ≤600mm below grade,					ned Heating Syst				
(1) U value to be provided in eith	ner W/(m²•K)	or Btu/(h•ft²•F	) but not both.				•		
E. Designer(s) [name(s)	, ,	,		idina infor	mation herein to sub	stantiate that design	meets the building codel		
Qualified Designer Declarati									
Name				BCIN		Signature			
						3			
		·	· · · · · · · · · · · · · · · · · · ·	·	·		·		

## 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 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 <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)

Desilation of Terror	Airtightness Targets						
Building Type	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 <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.

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 Princip	al Authority					
Application No:		Model/Certification Number	el/Certification Number				
A. Project Information							
Building number, street name			Unit number	Lot/Con			
Municipality	Postal code	Reg. Plan number / other descript	ion				
B. Compliance Option [indicate to	the building code compliance o	ption being employed in this	house design]				
☐ SB-12 Performance* [SB-12 -	* Attach energy perfo	ormance results using	an approved softwa	re (see guide)			
☐ ENERGY STAR®* [SB-12 - 3.1.3.	* Attach Builder Option	on Package [BOP] for	m				
☐ <i>R-2000</i> ® *[SB-12 - 3.1.3.]	* Attach R-2000 HOT	Γ2000 Report	00 Report				
C. Project Building Design C	Conditions						
Climatic Zone (SB-1):	leating Equipment Efficie	ncy   Space Heating Fu	el Source				
□ Zone 1 (< 5000 degree days)	ı ≥ 92% AFUE	□ Gas □	Propane	Solid Fuel			
□ Zone 2 (≥ 5000 degree days) □	ı ≥ 84% < 92% AFUE	□ Oil □	Electric	Earth Energy			
Ratio of Windows, Skylights & Glass (W	, S & G) to Wall Area	Other Building Ch	Other Building Characteristics				
Area of walls =m <sup>2</sup>		□ Log/Post&Beam	□ ICF Above Grade	□ ICF Basement			
orft²		□ Slab-on-ground	□ Walkout Basemen	t			
	W, S & G % =	□ Air Conditioning	□ Combo Unit				
Area of W, S & G = $_{m}^{2}$		□ Air Source Heat	Pump (ASHP)				
orft²		☐ Ground Source H	□ Ground Source Heat Pump (GSHP)				
SB-12 Performance Reference Building	Design Package indicatin	g the prescriptive pack	age to be compared	for compliance			
SB-12 Referenced Building Package (input design package): Package:							

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

Building Component	Minimum R or Maximu	SI / R values m U-Value <sup>(1)</sup>	Building Component	Efficiency Ratings
Thermal Insulation	Nominal	Effective	Windows & Doors 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			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))	#
Slab (all ≤600mm below grade, or heated)			Combined Space / Dom. Water Heating	

<sup>(1)</sup> 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. Sl	3-12 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 baseli	ne of:							
☐ OBC reference ACH, NLA or NLR default values (no	depressurization test re	equired)						
☐ Targeted ACH, NLA or NLR. Depressurization test to	meetAC	CH50 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	1.6.2)							
☐ Reduced Operating Conditions for Zero-rated homes	Applied (A-3.1.2.1 - 4.0	6.2.5)						
☐ On Site Renewable(s): Solar:								
Other Types:	<del></del>							
F. ENERGY STAR or R-2000 Performance Des	ign Verification [Sul	osection 3.1.3. Other Acceptable Compliance						
☐ The NRCan "ENERGY STAR for New Homes Standa design result in the building performance meeting or e Supplementary Standard SB12 (A-3.1.3.1).								
	performance meeting or exceeding the prescriptive performance requirements of the Supplementary Standard SB12							
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 L	icense #						
G. Designer(s) [name(s) & BCIN(s), if applicable, of person(s) p	roviding information herein to	substantiate that design meets the building code						
Qualified Designer: Declaration of designer to have reviewed and take								
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.

- <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 <u>ENERGY STAR</u> requirements and verified on completion by a licensed energy evaluator and/or service organization. The <u>ENERGY STAR</u> 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 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.)

Г	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 <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.

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

## SCHEDULE 'A'

### **Plumbing Information**

Owner Name: Address of Proposed Work:								
Plumber:								
Piuliber.				ınicipality	<b>'</b> -			
Please list the number of fixtures per floor on the following chart. (new or relocated)								
FLOOR	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								
TOTAL								
No. of Dwelling Units	R.W.L.				V	Vater	Lines	
Soil Vent Stacks Sanitary Later		ateral			(	Oil Interceptor		
Catch Basin	Storm Late	eral			E	Backf	low Prev	venter
Lawn Sprinkler System								
Signature	_						Date	<u> </u>