

Application for a Permit to Construct or Demolish This form is authorized under subsection 8(1.1) of the Building Code Act.

•								
For use by Principal Authority								
Application number:			Permit r	Permit number (if different):				
Date received: Roll				nber:				
Application submitted to:	Township	of Otona	abee-S	South Mo	nagh	an		
A. Project information								
Building number, street nan	ne					Unit number	Lot/con.	
Municipality of Otonabee-S	outh Monaghan	Postal code		Plan number/other description				
Project value est. \$				Area of work (r	n²)			
B. Purpose of applicat	tion							
□ New constructio	n		☐ Altera	ation/repair	□ D	emolition	☐ Conditional Permit	
Proposed use of building		Curr	ent use of	building				
C. Applicant	Applicant is:							
Last name		First name		Corporation or	partners	hip		
Street address						Unit number	Lot/con.	
Municipality		Postal code		Province		E-mail		
Telephone number ()	one number Fax ()			Cell number ()				
D. Owner (if different f	from applicant)							
Last name		First name		Corporation or	partners	hip		
Street address		l		<u> </u>		Unit number	Lot/con.	
Municipality		Postal code		Province		E-mail		
Telephone number ()		Fax ()				Cell number ()		

E. Builder (optional)							
Last name	First name	Corporation or partners	hip (if applicabl	e)			
Street address			Unit number	Lo	ot/con.		
M. vainin ality	Doctol code	Dravinas	E mail				
Municipality	Postal code	Province	E-mail				
Telephone number	Fax		Cell number				
()	()		()				
F. Tarion Warranty Corporation (Ontario	New Home Warrant	v Program)					
i. Is proposed construction for a new hom Plan Act? If no, go to section G.			B [Yes		No	
ii. Is registration required under the Ontar	io New Home Warranties	s Plan Act?		Yes		No	
			1		1		
iii. If yes to (ii) provide registration number	(s):						
G. Required Schedules							
i) Attach Schedule 1 for each individual who rev	riews and takes responsi	bility for design activities.					
ii) Attach Schedule 2 where application is to con-	struct on-site, install or re	epair a sewage system.					
H. Completeness and compliance with a	applicable law						
Building Code (the application is made in the applicable fields have been completed on the							
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</i> , 1992, to be paid when the						No	
ii) This application is accompanied by the plans	application is made. 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> .						
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</i> , 1992 which enable the chief building official to determine whether the proposed building, construction or demolition will contravene any applicable law.					No		
iv) The proposed building, construction or demol	ition will not contravene	any applicable law.		Yes		No	
I. Declaration of applicant							
эссинином стиррисам							
1				_declar	e that:		
(print name)							
 The information contained in this application, attached schedules, attached plans and specifications, and other attached documentation is true to the best of my knowledge. If the owner is a corporation or partnership, I have the authority to bind the corporation or partnership. 							
Date	Signature of a	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		<u>, , , , , , , , , , , , , , , , , , , </u>		
Building number, street name			Unit no.	Lot/con.
Municipality	Postal code	Plan number/ other descrip	otion	
B. Individual who reviews and takes	responsibilit	ty 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 idei	ntified in Section B. [Bui	Iding Code Table	3.5.2.1. of
 ☐ House ☐ Small Buildings ☐ Large Buildings ☐ Complex Buildings 		Services on, Lighting and Power	□ Building Struct□ Plumbing – Ho□ Plumbing – All□ On-site Sewage	use Buildings
Description of designer's work				
D. Declaration of Designer				
1		d	eclare that (choose o	ne as appropriate):
(print name)			
☐ I review and take responsibility C, of the Building Code. I am of Individual BCIN:	ualified, and the	e firm is registered, in the app		
Firm BCIN:				
☐ I review and take responsibility under subsection 3.2.5.of Divis	for the design a sion C, of the Bu	and am qualified in the appropulation and code.	oriate category as an	"other designer"
Basis for exemption from	egistration:			
☐ The design work is exempt from Basis for exemption from	-	n and qualification requireme qualification:	_	
certify that:				
The information contained in this s		-		
I have submitted this application v	ith the knowled	ige 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.
- 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/glazing in doors and sliding glass doors to the gross area of peripheral walls is not more than 22%.

		For use by P	rincipal Au	uthority			
Application No:			Model/0	Certification Number			
A. Project Information							
Building number, street name					Unit number	Lot/Con	
Municipality	Postal	code	Reg. Pl	an number / other description	on	1	
D. Duca animativa Campuliana							
B. Prescriptive Complianc						jn]	
SB-12 Prescriptive (input design	<u> </u>	'ackage:		Table	:		
C. Project Design Conditions Climatic Zone (SB-1): Heating Equipment Efficiency Space Heating Fuel Source							
Climatic Zone (SB-1): Zone 1 (< 5000 degree days)	□ ≥ 92% AF		ciency	Space Heating For Gas		□ Solid Fuel	
☐ Zone 2 (≥ 5000 degree days)	□ ≥ 92 % Al				□ Propane □ Electric	□ Earth Energy	
Ratio of Windows, Skylights & Glass				Other Building C		= Lanin Energy	
Area of walls =m² orft²	W, S & G	6 % =	∕es □No	□ Log/Post&Beam □ Slab-on-ground □ Air Conditioning □ Air Sourced Hea	n □ ICF Above Gra □ Walkout Basem □ Combo Unit at Pump (ASHP)		
Area of W, S & G =ft² Utilize window averaging: □Yes □No □ Air Sourced Heat Pump (ASHP) □ Ground Sourced Heat Pump (GSHP)							
D. Building Specifications [pr	ovide values an	d ratings of the	energy eff	iciency components p	roposed]		
Energy Efficiency Substitutions							
□ ICF (3.1.1.2.(5) & (6) / 3.1.1.3.(5) &							
□ Combined space heating and domes	tic water hea	ting systems ((3.1.1.2.(7) / 3.1.1.3.(7))			
□ Airtightness substitution(s)							
	3.1.1.4.B Re	quired:		Permitte	ed Substitution:		
Airtightness test required (Refer to Design Guide Attached) □ Table 3	3.1.1.4.C Re	quired:		Permitte	ed Substitution:		
	Red	quired:		Permitte	ed Substitution:		
Building Component	Minimum R	SI / R values m U-Value ⁽¹⁾		Building Compo		Efficiency Ratings	
Thermal Insulation	Nominal	Effective	Windo	ws & Doors Provi	de U-Value ⁽¹⁾ or ER ratir	ng	
Ceiling with Attic Space			Windo	ws/Sliding Glass D	Doors		
Ceiling without Attic Space			Skyligh	its/Glazed Roofs			
Exposed Floor			Mecha	nicals			
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) DW HR (CSA B55.1 (min. 42% efficiency)) # Showers_					# Showers		
Slab (all ≤600mm below grade, or heated) Combined Heating System							
	(1) U value to be provided in either W/(m²•K) or Btu/(h•ft²•F) but not both.						
E. Designer(s) [name(s) & BCIN(s)						ets the building code]	
Qualified Designer Declaration of designer to have reviewed and take responsibility for the design work.							

BCIN

Signature

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

Name

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.

• <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 Tons	Airtightness Targets						
Building Type	ACH @ 50 Pa	NLA @	2 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.

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:	Not also by 1 million	Model/Certification Number					
A. Project Information							
Building number, street name			Unit number	Lot/Con			
Municipality	Reg. Plan number / other descript	ion					
B. Compliance Option [indicate the	building code compliance option	n being employed in this ho	use design]				
☐ SB-12 Performance* [SB-12 - 3.1.2	* Attach energy perfo	rmance results using	an approved softwa	re (see guide)			
☐ <i>ENERGY STAR</i> ®* [SB-12 - 3.1.3.]	* Attach Builder Optio	n Package [BOP] for	Package [BOP] form				
☐ <i>R-2000</i> ® *[SB-12 - 3.1.3.]	* Attach R-2000 HOT	2000 Report	000 Report				
C. Project Building Design Cor							
Climatic Zone (SB-1):	Heating Equipment Efficien	cy Space Heating Fu	el Source				
	□ ≥ 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 Characteristics					
Area of walls = m^2 or t^2 Area of W, S & G = m^2 or t^2	□ Slab-on-ground□ Air Conditioning□ Air Source Heat	 □ Log/Post&Beam □ ICF Above Grade □ ICF Basement □ Slab-on-ground □ Walkout Basement □ Air Conditioning □ Combo Unit □ Air Source Heat Pump (ASHP) □ Ground Source 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	sasement Walls		HRV Efficiency (SRE% at 0°C)		
Slab (all >600mm below grade)	ow 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/(m²•K) or Btu/(h•ft²•F) but not both.

E. Performance Design Verification [Subsection 3.1.2. Per	formance Compliance]							
The annual energy consumption using Subsection 3.1.1. SI =1000MJ)	3-12 Reference Building	Package isGJ (1 GJ						
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		equired)						
☐ Targeted ACH, NLA or NLR. Depressurization test to	•	• •						
·	☐ 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	4.6.2)							
☐ Reduced Operating Conditions for Zero-rated homes	s 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 V	erification [Subsection 3	3.1.3. Other Acceptable Compliance Methods]						
☐ The NRCan "ENERGY STAR for New Homes Standa building design result in the building performance mee of the Supplementary Standard SB12 (A-3.1.3.1).								
☐ The NRCan, "2012 R-2000 Standard " technical require performance meeting or exceeding the prescriptive per 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 Li	cense #						
G. Designer(s) [name(s) & BCIN(s), if applicable, of person(s) provi	ding information herein to sul	ostantiate 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.

- <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 <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.

Schedule 2: Sewage System Installer Information

A. Project Information						
Building number, street name			Unit number	Lot/con.		
Municipality	Postal code	Plan number/ other descr	iption			
B. Sewage system installer						
Is the installer of the sewage system enga emptying sewage systems, in accordance				ervicing, cleaning or		
☐ Yes (Continue to Section C) ☐ No (Continue to Section E) ☐ Installer unknown at time of application (Continue to Section E)						
C. Registered installer informatio	n (where answ	ver to B is "Yes")				
Name			BCIN			
Street address			Unit number	Lot/con.		
Municipality	Postal code	Province	E-mail			
Telephone number	Fax ()		Cell number			
D. Qualified supervisor information	on (where ansv	wer to section B is "Yes	")			
Name of qualified supervisor(s)		Building Code Identification	Number (BCIN)			
		-				
E. Declaration of Applicant:						
I.				declare that:		
(print name)						
 I am the applicant for the permit to submit a new Schedule 2 prior to 			er is unknown at time	e of application, I shall		
<u>OR</u>						
 I am the holder of the permit to continuous known. 	onstruct the sewa	age system, and am submitti	ng a new Schedule 2	2, now that the installer is		
I certify that:						
The information contained in this	s schedule 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						