

Building Application Protocol

- 1. Application for Building Permit is completed and delivered to the Building Inspector at the Municipal Office.
- 2. Notification will be given from the Building Inspector that the application has been completed satisfactorily and the applicant will then be given the amount of the Building/Sewage Permit fee.
- 3. The Building Inspector will notify the Township Office of the amount of the fee(s) and the Office can then accept payment.
- 4. After payment is received by the Township Office the Building Inspector will be notified.

MPAC notifies the municipality of all new assessments added to properties. Once this information is received by the municipality they will produce and mail a **supplementary** tax bill.

Township of Greater Madawaska

19 Parnell Street, P.O. Box 180 Calabogie, ON K0J 1H0 Phone: 613-752-2222 Fax: 613-752-2617

BUILDING PERMIT APPLICATIONS

A building permit application and attached forms must be completed prior to obtaining a building permit. Building permit application packages are available at the Municipal Office for pickup or mail out.

PROCEDURE FOR OBTAINING A BUILDING PERMIT

- The building permit application is to be completed and delivered to the Building Inspector or left at the Municipal Office.
 Building permit requirements No. 1 to No. 8 that are outlined below must be met prior to submitting a completed building permit application.
- 2. Building Form B <u>MUST</u> be completed and <u>MUST</u> be dated and signed. (Refer to back of Form B for instructions and examples)
- 3. Notification will be given from the Building Inspector that the application has been completed satisfactorily and the applicant will then be given the amount of the building permit fee, sewage permit fee and lot development fee.
- 4. The Building Inspector will notify the Municipal Office of the amount of the fee (s) owing by the applicant and they will accept payment of these.
- 5. After payment is received by the Municipal Office the Building Inspector will be notified.

REQUIREMENTS FOR SECURING A BUILDING PERMIT

The following steps are required to be completed prior to the issuance of a building permit:

SOME OF THESE STEPS MAY NOT BE NECESSARY FOR AN ACCESSORY BUILDING.

1. DEED FOR YOUR PROPERTY

This must be shown to the Chief Building Official to establish your ownership of the property.

2. ENTRANCE PERMIT

Permission must be obtained by the road authorities for you to make an entrance from the road into your property. For residences, even if there is an existing entrance in place a permit is still required.

PRIVATE ROAD: Requires deeded access. Entrance Permit not required.

TOWNSHIP ROAD: Contact Township Office 613-752-2222 Extension 204

COUNTY ROAD: Contact the County of Renfrew

9 International Dr. Pembroke, ON K8A 6W5 613-732-4353

PROVINCIAL HIGHWAY: Contact the Ministry of Transportation 613-332-3220

3. PROPERTY IDENTIFICATION SIGNS (911)

PRIVATE ROAD: Contact Township Office 613-752-2222 Extension 204 **TOWNSHIP ROAD:** Contact Township Office 613-752-2222 Extension 204, please note, an application will be made when obtaining your entrance permit.

COUNTY ROAD: Contact Township Office 613-752-2222 Extension 204

PROVINCIAL HIGHWAY: Contact Township Office 613-752-2222 Extension 304

4. SEPTIC SYSTEM APPROVAL

Please contact Chris Vereyken, Chief Building Official and Sewage Inspector at 613-752-2277. Sewage systems must be approved before residential building permits are obtained. The fee for a standard sewage system is \$500.00.

5. BLUEPRINT PLANS

Please contact Chris Vereyken, Chief Building Official and Sewage Inspector at 613-752-2277 for details.

6. ZONING BY-LAW CONFIRMATION

The proposed construction must conform to the Township's Zoning By-Law where applicable. Building Form "B" must be completed, signed, and dated upon submission. All proposed structures, dimensions and setbacks must be indicated on the site plan.

7. LAND SURVEY AND/OR ELEVATION SURVEY

Certain circumstances (i.e. small lot, constructing close to setback limits etc.) may require a surveyor to establish the lot lines.

8. LOT DEVELOPMENT FEE

The Township of Greater Madawaska requires that a Lot Development Fee be paid for any new residential construction.

SOME OF THESE STEPS MAY NOT BE NECESSARY FOR AN ACCESSORY BUILDING

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	number (if differen	t):			
Date received:			nber:				
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	е	Plan number/oth	er des	cription		
Project value est. \$			Area of work (m ²	2)			
B. Purpose of application							
☐ New construction ☐ Addition t existing b	uilding		ition/repair		Demolition		Conditional Permit
Proposed use of building	С	current use of	building				
Description of proposed work							
C. Applicant Applicant is:	Owner o	or 🗆	Authorized a				
Last name	First name)	Corporation or p	artners	<u>.</u>		
Street address					Unit number		Lot/con.
Municipality	Postal code	e	Province		E-mail		
Telephone number	Fax				Cell number		
D. Owner (if different from applicant)	•						
Last name	First name	•	Corporation or p	artners	ship		
Street address	1				Unit number		Lot/con.
Municipality	Postal code	e	Province		E-mail		
Telephone number	Fax				Cell number		

E. Builder (optional)						
Last name	First name	Corporation or partners	hip (if applicable	:)		
Street address			Unit number	number Lot/con.		
		Τ= .				
Municipality	Postal code	Province	E-mail			
Talanhana numbar	Fox		Call number			
Telephone number	Fax		Cell number			
F. Tarion Warranty Corporation (Ontario	New Home Warran	ty Program)				
i. Is proposed construction for a new hom		· · · · · · · · · · · · · · · · · · ·	5 🔲	Yes		No
Plan Act? If no, go to section G. ii. Is registration required under the Ontar	io New Home Warrantie	s Plan Δct?		Vac		No
ii. Is registration required under the <i>Orital</i>		STIAITACL!		Yes		No
iii. If yes to (ii) provide registration number	·(e)·					
G. Required Schedules	(3).					
i) Attach Schedule 1 for each individual who rev	 views and takes respons	ibility for design activities.				
ii) Attach Schedule 2 where application is to con-	•	-				
H. Completeness and compliance with a						
•		(1) (1):			Τ =	
Building Code (the application is made in the applicable fields have been completed on the schedules are submitted).	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).					No
Payment has been made of all fees that are r regulation made under clause 7(1)(c) of the E is made.				Yes		No
ii) This application is accompanied by the plans resolution or regulation made under clause 7			r-law,	Yes		No
iii) This application is accompanied by the inform	nation and documents pro	escribed by the applicable		Yes		No
law, resolution or regulation made under clau the chief building official to determine whethe						
contravene any applicable law.	i the proposed building,	construction of demontion	I WIII			
iv) The proposed building, construction or demol	ition will not contravene	any applicable law.		Yes		No
I. Declaration of applicant						
1				decla	re that:	
(print name)						
The information contained in this applic	ation attached schedule	s attached plans and spe	ecifications and	other	attached	
documentation is true to the best of my	knowledge.			oo.		
If the owner is a corporation or partners	hip, 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 descrip	tion				
B. Individual who reviews and takes	responsibili	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 i Division C]	ndividual ide	ntified in Section B. [Bu	ilding Code Tab	le 3.5.2.1. of			
☐ House		- House	Building St				
☐ Small Buildings		g Services	Plumbing -				
☐ Large Buildings		on, Lighting and Power		- All Buildings			
Description of designer's work	☐ Fire Pro	otection	☐ On-site Se	wage Systems			
Description of designers work							
D. Daalanatian of Daainnan							
D. Declaration of Designer							
		de	eclare that (choose	one as appropriate):			
(print name	2)		Joian Carros	one as appropriate).			
(print ricini	• /						
I review and take responsibility	for the design	work on behalf of a firm regis	tered under subsec	ction 3.2.4.of Division			
C, of the Building Code. I am of							
Individual BCIN:							
Firm BCIN:							
☐ I review and take responsibility under subsection 3.2.5.of Divi	/ for the design	and am qualified in the appro	priate category as	an "other designer"			
Individual BCIN:	Sion C, or the bi	uliding Code.					
individual Bonv.							
Basis for exemption from	registration:						
☐ 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:							
	,						
I have submitted this application w	2. I have submitted this application with the knowledge and consent of the firm.						
		Signature of Designer					

NOTE:

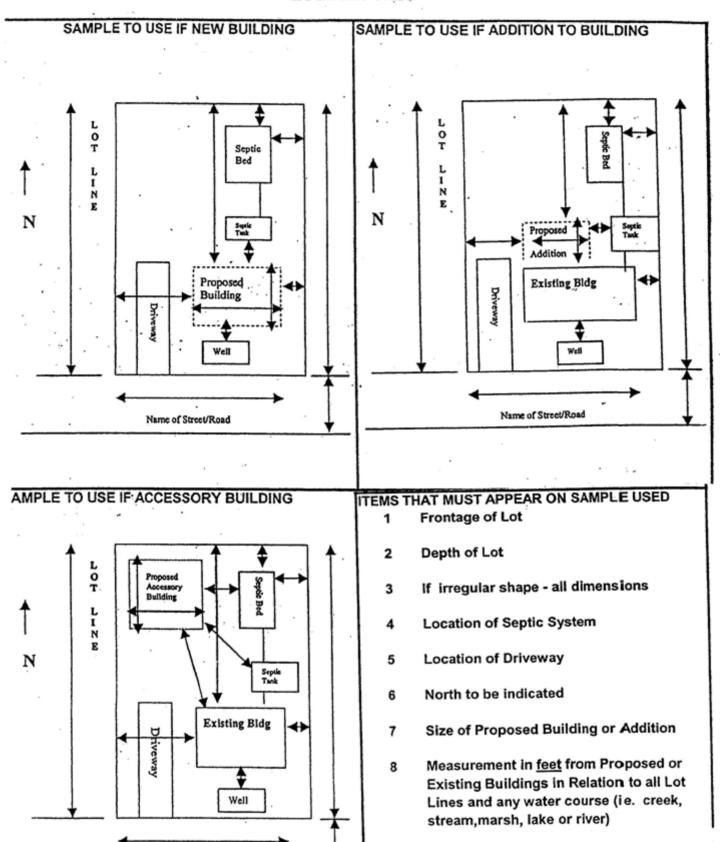
- 1. For the purposes of this form, "individual" means the "person" referred to in Clause 3.2.4.7(1) d).of Division C, Article 3.2.5.1. of Division C, and all other persons who are exempt from qualification under Subsections 3.2.4. and 3.2.5. of Division C.
- Schedule 1 is not required to be completed 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.

THIS DOCUMENT CONSTITUTES BUILDING FORM 'B' WHICH IS REQUIRED & MUST BE COMPLETED PRIOR TO THE ISSUANCE OF A BUILDING PERMIT IN THE MUNICIPALITY SPECIFIED ON FORM 'A'. (Refer to back of this Form for instructions & Examples)

For Office Use Only Conc Permit No. Lot

THE ACCURANCY OF THE INFORMATION APPEARING ON BUILDING FORM 'B' IS THE RESPONSIBILITY OF THE APPLICANT AND IS HEREBY MADE PART OF THIS APPLICATION. I HEREBY CERTIFY THAT THE INFORMATION APPEARING ON BUILDING FORM 'B' IS TRUE AND ACCURATE TO BEST OF MY ABILITY. OWNER OR AUTHORIZED AGENT

DATE



9

Form "B"

Do not forget to sign Building

Name of Street/Road

RESIDENTIAL MECHANICAL VENTILATION DESIGN SUMMARY

LOCATION OF INSTALLATION **TOTAL VENTILATION CAPACITY 9.32.3.3.(1)** Bsmt & Master Bdrm _____ @ 10 L/S _____ L/S Lot # Plan # ____ Other Bedrooms @ 5 L/S _____ L/S Township ____ Roll #___ Bathrooms & Kitchen _____ @ 5L/S _____ L/S Address ____ Other Rooms ______ @ 5L/S _____L/S L/S TOTA BUILDER PRINCIPAL VENTILATION CAPACITY 9.32.3.4.(1) Name ____ Master Bedroom ______ @ 15 L/S _____L/S Address ____ Other Bedrooms ______ @ 7.5 L/S _____ L/S TOTAL L/S City ____ ____ Fax ____ Tel PRINCIPAL EXHAUST FAN CAPACITY INSTALLING CONTRACTOR Model: Location ____ ___L/S _____Sones ____ Name ____ Address _____ HEAT RECOVERY VENTILATOR City ____ Model: _____ Tel _____ Fax _____ ____ L/S High _____ L/S Low % Sensible Efficiency @ - 25C ____HVI COMBUSTION APPLICANCES 9..32..3..1.(1) SUPPLEMENTAL VENTILATION CAPACITY Direct vent (sealed combustion only) Total Ventilation Capacity _____L/S Positive venting induced draft _____ (except fireplaces) Less Principal Vent. Capacity _____L/S Natural draft, B-Vent or Required Supplemental Vent. Cap _____L/S Induced draft fireplace __ Solid fuel (including fireplaces) SUPPLEMENTAL FANS 9.32.3.5 HEATING SYSTEM Location Model L/S Sones Forced Air __ Non Forced Air _____ Electric Space Heat _____ SYSTEM DESIGN OPTION HOUSE TYPE 9.32.3.2.(2) Exhaust Only/Forced Air System I Type a) or b) appliances, no solid fuel HRV with Exhaust Ducts/Forced Air System ____ II Type I except with solid fuel HRV Simplifed Connection to 3 (including fireplace) Air System III Any Type c) appliance HRV - Full Ducting/Not Coupled IV Type I, or II with electric space heat ___ To Forced Air System OTHER: Type I, II, or IV no forced air Part 6 Design DESIGNER CERTIFICATION I hereby certify that this ventilation system has been designed in accordance with the Ontario Building Code. Name ____

Date _____

Signature _____

c)

HRAI#___

VENTILATION SYSTEM DECISION TREE

Dwelling has electric service?

Dwelling intended for occupancy on a continuing basis in winter?

Yes to both

No to either

Mechanical Ventilation is Required
Part 9 Residential occupancy?
4 or less bedrooms?

Self contained ventilation system serving single
dwelling unit?
Builder wants to use Part 9 Design?

Mechanical Ventilation is not Required Provide Natural Ventilation as per 9.32.1.2 and 9.32.2 of Code.

Yes to All Above

No to Any of Above

Non solid fuel fireplaces are direct vent? Other non solid fuel appliances are direct vent or induced draft? Design to Part 6

Yes to Both

No to Either

Part 9 of the Code applies Select one of the System Options described? Type III dwelling Design to Part 6

Yes

No

Some electric space heat?
Solid fuel fired appliances present?

Design to Part 9

Yes to Either

No to Both

Type II or Type IV dwelling HRV required Couple ventilation to F/A heating system?

Type I dwelling. Couple ventilation to FF/A system?

Yes

No

Yes

No

Options 2 and 3

Option 4

Options 1, 2, 3

Option 4

CO sensors required If house contains solid fuel-fired combustion appliance

HOUSE TYPES

Type 1

Only direct vented or mechanically induced draft fuel-fired combustion appliance: no solid fuel-fired combustion applicances: only direct vented fuel-fired fireplaces; no electric space heat.

Type II

Type I houses which contain solid fuel-fired combustion appliances.

Type III

All houses containing natural draft non-solid fuel-fired combustion appliances or mechanically vented induced draft non-solid fuel-fired fireplaces.

OPTIONS

OPTION 1

Exhaust only ventilation

OPTION 2

HRV coupled to a forced air heating system.
Extended exhaust ductwork

OPTION 3

HRV coupled to a forced air heating system. Simplified exhaust ductwork.

OPTION 4

HRV not coupled to a forced air heating system.

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:	Mo	odel/Certification Number				
A. Project Information						
Building number, street name			Unit number	Lot/Con		
Municipality	Postal code Re	g. Plan number / other descript	tion	1		
B. Compliance Option [indicate	the building code compliance option	being employed in this ho	ouse design]			
☐ SB-12 Performance* [SB-12 - 3.	1.2.] * Attach energy perform	mance results using	an approved softwa	are (see guide)		
☐ ENERGY STAR®* [SB-12 - 3.1.3	* Attach Builder Option	Package [BOP] form				
☐ R-2000® *[SB-12 - 3.1.3.]	* Attach R-2000 HOT2	000 Report				
	,					
C. Project Building Design C	onditions					
Climatic Zone (SB-1):	Heating Equipment Efficience					
□ Zone 1 (< 5000 degree days)	4	□ Gas □		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				
		□ Log/Post&Beam	□ ICF Above Grade	□ ICF Basement		
Area of walls =m ² orft ²		□ Slab-on-ground	□ Walkout Basemer	nt		
	W, S & G % =	□ Air Conditioning □ Combo Unit				
	W, 3 & G % =	□ Air Source Heat				
Area of W, S & G =m ² orft ²			Heat Pump (GSHP)			
SB-12 Performance Reference Buildin	SB-12 Performance Reference Building Design Package indicating the prescriptive package to be compared for compliance					
				•		
SB-12 Referenced Building Package	SB-12 Referenced Building Package (input design package): Package: Table:					

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

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

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

E. Performance Design Verification [Subsection 3.1.2. Performance Compliance]								
The annual energy consumption using Subsection 3.1.1. S	B-12 Reference Building	Package is	GJ (1 GJ =1000MJ)					
The annual energy consumption of this house as designed	isGJ							
The software used to simulate the annual energy use of the	e building is:							
The building is being designed using an air tightness basel	ine of:							
☐ OBC reference ACH, NLA or NLR default values (no	depressurization test r	equired)						
☐ Targeted ACH, NLA or NLR. Depressurization test to	o meetAC	CH50 or NLR or N	ILA					
☐ Reduction of overall thermal performance of the pro- envelope of the compliance package it is compared		pe is not more tha	an 25% of the					
☐ Standard Operating Conditions Applied (A-3.1.2.1 -	4.6.2)							
☐ Reduced Operating Conditions for Zero-rated home	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	Verification [Subsection	3.1.3. Other Acceptal	ble Compliance Methods]					
☐ 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).	rd Version 12.6 " technic	cal requirements,	applied to this building					
□ The NRCan, "2012 R-2000 Standard " technical requir performance meeting or exceeding the prescriptive p (A-3.1.3.1).								
Performance Energy Modeling Professional								
Energy Evaluator/Advisor/Rater/CEM Name and company:	Accreditation or Evaluator	r/Advisor/Rater Licens	e #					
ENERGY STAR or R-2000								
Energy Evaluator/Advisor/Rater/ Name and company:	Evaluator/Advisor/Rater I	License #						
G. Designer(s) [name(s) & BCIN(s), if applicable, of person(s) pro	viding information herein to s	ubstantiate that design	n meets the building codel					
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 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 <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.)

OBO Notorono Boldati / ili Edukago Natos (Tablo C.1.2.1.)				
	Detached dwelling	3.0 ACH50	NLA 2.12 cm ² /m ²	NLR 1.32 L/s/m ²
	Attached dwelling	3.5 ACH50	NLA 2.27 cm ² /m ²	NLR 1.44 L/s/m ²

The building code requires that a blower door test be conducted to verify the air tightness of the house during construction if the <u>SB-12 Performance</u> option is used and an air tightness of less than 3.0 ACH @ 50 Pa (or NLA or NLR equivalent) in the case of detached houses, or 3.5 ACH @ 50 Pa (or NLA or NLR equivalent) in the case of attached houses is necessary to meet the required energy efficiency standard.

ENERGY EFFICIENCY LABELING FOR NEW HOUSES

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

Energy Efficiency Design Summary: Prescriptive Method (Building Code Part 9, Residential)

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

For use by Principal Authority

Application No:			Model/	Certification Number			
A. Project Information	n						
Building number, street name					Unit number	Lot/Con	
Municipality		Postal code	Reg. Pl	an number / other descrip	tion		
B. Prescriptive Cor	npliance [ind	licate the building code co	mpliance	package being empl	oyed in this house de	esign]	
SB-12 Prescriptive (input	age): Package:		Tabl	e:	_		
C. Project Design Co							
Climatic Zone (SB-1):		ating Equipment Effic	ciency	Space Heating			
□ Zone 1 (< 5000 degree day	,	≥ 92% AFUE		□ Gas	□ Propane	□ Solid Fuel	
□ Zone 2 (≥ 5000 degree day	,	≥ 84% < 92% AFUE		□ Oil	□ Electric	□ Earth Energy	
Ratio of Windows, Skylights	s & Glass (W,	S & G) to Wall Area		Other Building) de LOE Deservent	
Area of walls =m ² or	ft²	W, S & G % =		□ Slab-on-groun	m □ ICF Above G d □ Walkout Bas ng □ Combo Unit	Grade □ ICF Basement ement	
Area of W, S & G =m^2 o	rft² Utiliz	re window averaging: □Y	′es □No	□No □ Air Sourced Heat Pump (ASHP) □ Ground Sourced Heat Pump (GSHP)			
D. Building Specifications [provide values and ratings of the energy efficiency components proposed]							
Energy Efficiency Subs	titutions						
□ ICF (3.1.1.2.(5) & (6) / 3.1. □ Combined space heating a		ater heating systems (3.1.1.2.(7) / 3.1.1.3.(7))			
□ Airtightness substitution(s)							
	□ Table 3.1.1.	4.B Required:		Permi	tted Substitution:		
Airtightness test required (Refer to Design Guide Attached)	□ Table 3.1.1.	3.1.1.4.C Required:		Permi			
		Required:	Permitted Substitution:				
Building Componer	nt Min or	imum RSI / R values Maximum U-Value ⁽¹⁾		Building Comp	onent	Efficiency Ratings	
Thermal Insulation	No	minal Effective			vide U-Value ⁽¹⁾ or ER r	ating	
Ceiling with Attic Space			Windo	ws/Sliding Glass	Doors		
Ceiling without Attic Space			Skyligh	ts/Glazed Roofs	i		
Exposed Floor			Mecha	nicals			
Walls Above Grade			Heating	g Equip.(AFUE)			
Basement Walls			HRV E	fficiency (SRE% a	t 0°C)		
Slab (all >600mm below grade)			DHW H	Heater (EF)			
Slab (edge only ≤600mm below	grade)	DWHR (CSA B5			R (CSA B55.1 (min. 42% efficiency)) # Showers_		
Slab (all ≤600mm below grade, or heated)			Combir	ned Heating Syste	em		
(1) U value to be provided in eith	er W/(m ² •K) or B	tu/(h•ft²•F) but not both.					
E. Designer(s) [name(s)						meets the building code]	
Qualified Designer Declaration	on of designer to	have reviewed and take r	responsib	ility for the design wo	ork.		
Name			BCIN		Signature		

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

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 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 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)

Duilding Tune	Airtightness Targets						
Building Type	ACH @ 50 Pa	NLA @) 10 Pa	NLR @ 50 Pa			
Detached dwelling	2.5	1.26 cm ² /m ²	1.81 in ² /100ft ²	0.93 L/s/m ²	0.18 cfm50/ft ²		
Attached dwelling	3.0	2.12 cm ² /m ²	3.06 in ² /100ft ²	1.32 L/s/m ²	0.26 cfm50/ft ²		

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

E. House Designer

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

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

		FOR OFFICE USE ONLY INSPECTION REPORT	
INSPECTION	DATE	REMARKS	INSPECTED BY
EXCAVATION			
FTGS. & FDNS.			
FRAMING			
INSULATION V.B & A.B			
-			
FIREPLACES CHIMNEYS			
INTERIOR FINISHING			
	<u> </u>		
EXTERIOR FINISHING			
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PLUMBING			
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H.V.A.C.			
OCCUPANCY			
FINAL INSP.			
]		
FILED		NOTES	
OUTSTANDING ORDERS -			