



OFFICE OF THE CLERK ADMINISTRATOR

DISTRICT OF PARRY SOUND

56 ONTARIO STREET
PO BOX 533
BURK'S FALLS, ON

(705) 382-3332
(705) 382-2954
Fax: (705) 382-2068

Email: clerk@armourtownship.ca
Website: www.armourtownship.ca

Paul Schaefer, C.B.C.O
Office Hours: Monday: 9:00 a.m. - 12:00 p.m.
Thursday: 2:00 p.m. - 4:30 p.m.

CHECKLIST FOR ALL BUILDING APPLICATIONS

The following items are required to be submitted as a complete application. If all the appropriate information is not provided, the application will be returned as incomplete.

1. The completed Ontario Application Form and all applicable schedules.
2. Two (2) sets of all drawings and plans. All drawings must be legible and to scale.
3. Return this Checklist with the appropriate boxes checked next to the drawings etc. you have submitted.
4. For a Change of Use, plumbing or other permit not listed below, contact the Building Department.

New Building, Addition and Renovation:

Also include items from above: __1 __ 2 __ 3

It may be possible to combine certain drawings with others, as long as all the necessary design information is provided (e.g. Plumbing, mechanical and electrical services).

- Site Plan Building Elevations Floor Plan
- Framing Plan Electrical Services Plan Sections & Details Plan
- Roof Plan Plumbing Plan Foundation Plan
- Heating Ventilation Air-Conditioning Plan

Deck Attached or Unattached to a Structure

Also include items from above: __ 1 __ 2 __3

- Site Plan: Detailed legible plan showing all existing and proposed buildings, their square footage, location to lot lines, septic system, water and shore road allowance or crown reserve.
- Foundation, Piers, Floor & Section Plans: Drawings that show size and spacing of piers or foundation, beams, joists, decking and railing details.

Sewage System

Approval is required from North Bay Mattawa Conservation Authority for waste disposal systems for a new house, cottage, sleeping cabin, addition or change of use prior to the issuance of a building permit. Proof of this approval by North Bay Mattawa Conservation Authority is required before a building permit is issued. Please contact North Bay Mattawa Conservation Authority at 1-705-474-5420 for more information.

Applications for septic systems are available in the Armour Township Office.

REQUIRED PERMIT DRAWINGS

The following list of required drawings should be used as a guide when preparing drawings for submission for a building permit, for a project designed under Part Nine of the Ontario Building Code, which does not require professional design. Any project that requires design by an Architect and/or a Professional Engineer (Part Three buildings, such as assembly, institutional or large buildings over 600 square meters and multiple dwellings), will require more comprehensive drawings to illustrate compliance with the Ontario Building Code.

The Designer that prepares the permit drawings is responsible to ensure that they provide sufficient information to the Builder to ensure compliance with the requirements of the Ontario Building Code. As of January 1, 2006, all Designers will be required to show proof of meeting qualifications required by the Ministry of Housing.

1. Site Plan

- ✓ The location of all existing buildings as well as the proposed, location and design of access routes must be illustrated.
- ✓ The setbacks to lot lines must be clearly shown.
- ✓ The existing and proposed drainage patterns should be illustrated (provide geodetic elevations if in a flood plain, or plan of subdivision)
- ✓ The proposed means of storm water disposal (from foundation drains and rainwater leaders) must be illustrated.
- ✓ The plan must be to scale and show all property boundaries, adjacent road and water bodies, easements and right-of-ways. The location of site services should be added to the site plan as well.
- ✓ A copy of the deed is required if the site plan has not been prepared by an Ontario Land Surveyor. Should include the location and dimensions of all buildings and septic systems.

2. Floor Plans

- ✓ All rooms must be labeled to illustrate their intended use.
- ✓ The location of doors, windows, plumbing fixtures, and stairs must be clear.
- ✓ Structural information for the roof or floor above may also be illustrated on the floor plan for simple projects, as well as mechanical and electrical information. The

plans must be to scale, with a separate plan for each storey, including basement. If the project is an addition, the layout of the existing floor plan is also required.

3. Foundation Plans

- ✓ The size and type of materials used for the foundation must be specified.
- ✓ The location of all footings, including column and pier footings must be illustrated.
- ✓ The location and type of any required drainage should be illustrated. The location of plumbing and electrical services can be added on this drawing.
- ✓ The soil conditions on the proposed building site must be indicated.

4. Framing Plans

For simple projects, the framing can be shown on the floor plans.

- ✓ The size and location of all structural members must be clear. The spans for beams should be indicated.
- ✓ The specifications for engineered lumber must be provided (e.g. truss drawings)
- ✓ All loads must be safely transferred to the foundations; sufficient information must be provided on the drawings to verify this.
- ✓ The type of framing materials must be specified (e.g. S.P.F. metal, etc.)

5. Roof Plans

- ✓ May be illustrated on the floor plans for simple projects. Roof slope and any roof mounted equipment must be shown.

6. Sections and Details

- ✓ Cross-sections will illustrate all the materials that make up the wall, floor and roof systems.
- ✓ Adequate information shall be included to be able to determine the location of insulation, air barrier, vapor barrier, structural members, sheeting, stairs, fireplaces, backfill height, bracing and required connections, for example.

7. Building Elevations

- ✓ Show proposed grade at each elevation of the building. Windows, doors, roof slopes, decks, chimneys, etc., should be clearly illustrated.

8. Electrical Drawings

- ✓ Show location of lights, smoke alarms, carbon monoxide detectors, switching and other electrical components required under the Ontario Building Code.
- ✓ Note: Contact Hydro One for permits required under the Electrical Code.

9. Heating, Ventilation and Air Conditioning Drawings

- ✓ Indicate the locations of supply and return air openings for heating and ventilation.
- ✓ Provide heat loss calculations and duct design information.
- ✓ Provide location and description of HVAC (Heating, Ventilation and Air Conditioning) units and ventilation design summary.
- ✓ Provide wood stove and fireplace locations and required clearance measurements.

10. Plumbing Drawings

- ✓ Show all plumbing fixtures, including rough-ed fixtures.
- ✓ Provide information on pipe sizing, material, appliances, devices and fixtures used.

ADDENDUM TO BUILDING PERMIT APPLICATION
TOWNSHIP OF ARMOUR

The following additional pieces of information must be completed in order for the building permit to be issued:

Size of Lot: _____ (This information may be indicated on the on the drawing)

Zoning: _____ Official Plan Designation: _____

WATERFRONT PROPERTY:

FLOOD PLAIN ELEVATION MUST BE ESTABLISHED, VERIFIED, INDICATED ON THE PROPERTY AND ON THE SITE PLAN DRAWINGS.

SHORE ROAD ALLOWANCE OWNED YES___ NO___

Ministry of Transportation Permit Required: YES___ NO___

Entrance Permit Required: YES___ NO___

PERMIT FEE: _____ PERMIT #: _____

DATE ISSUED: _____ PERMIT ISSUED BY: _____

DECLARATION

I, _____ am the authorized owner/agent in the above application and I understand that the issuance of a permit shall not be deemed a waiver of any of the provisions of any by-laws or requirements of building code, act, regulations made thereunder, notwithstanding anything included in or omitted from the plans or other material filed in support of or in connection with the above application or building proposed in the above application is prohibited and such could result in the permit being revoked.

I further acknowledge that in the event the permit is revoked for any cause of irregularity or non-conformity with by-laws or requirements of the Building Code or regulations made thereunder, there shall be no right of claim whatsoever against the municipal corporation or any official thereof and any such claim is hereby expressly waived.

_____, Ontario, 20____

Signature of Owner or Authorized Agent

BUILDING INSPECTION LIST

PERMIT NUMBER: _____

NAME OF OWNER: _____

NAME OF BUILDER: _____

I declare and confirm that the Intended Use of the construction authorized by this permit is as indicated on this application form. I understand that any Change of Use from what is contained in this application may not comply with the provisions of the applicable zoning by-law in effect for the subject property.

I declare that the Intended Use of the Building being constructed under the above mentioned Permit will be used for:

I also declare that I have an obligation to contact the Chief Building Official at 705-382-3332 at least two (2) business days in advance of all of the following construction phases which require an inspection:

- Completion of Excavation
- Prior to Backfilling: drain tiles, crushed stone, damp proofing, footings, foundation wall
- Framing : sub floor, lintels bridging, studs, partitions, trusses , rafters, sill plates sealed to foundation
- Insulation: vapour barrier, wall corners, doors, windows, electrical, attic ventilation
- Plumbing and Heating
- Exterior Finish
- Final Inspection

Sworn before me at the Township of Armour in the District of Parry Sound, this _____ day of

_____, 20_____

Applicant

C.B.C.O.

Application for a Permit to Construct or Demolish

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

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

E. Builder (optional)				
Last name		First name	Corporation or partnership (if applicable)	
Street address			Unit number	Lot/con.
Municipality		Postal code	Province	E-mail
Telephone number ()		Fax ()	Cell number ()	
F. Tarion Warranty Corporation (Ontario New Home Warranty Program)				
i. Is proposed construction for a new home as defined in the <i>Ontario New Home Warranties Plan Act</i> ? If no, go to section G.			<input type="checkbox"/> Yes	<input type="checkbox"/> No
ii. Is registration required under the <i>Ontario New Home Warranties Plan Act</i> ?			<input type="checkbox"/> Yes	<input type="checkbox"/> No
iii. If yes to (ii) provide registration number(s): _____				
G. Required Schedules				
i) Attach Schedule 1 for each individual who reviews and takes responsibility for design activities.				
ii) Attach Schedule 2 where application is to construct on-site, install or repair a sewage system.				
H. Completeness and compliance with applicable law				
i) This application meets all the requirements of clauses 1.3.1.3 (5) (a) to (d) of Division C of the Building Code (the application is made in the correct form and by the owner or authorized agent, all applicable fields have been completed on the application and required schedules, and all required schedules are submitted). Payment has been made of all fees that are required, under the applicable by-law, resolution or regulation made under clause 7(1)(c) of the <i>Building Code Act, 1992</i> , to be paid when the application is made.			<input type="checkbox"/> Yes	<input type="checkbox"/> No
ii) This application is accompanied by the plans and specifications prescribed by the applicable by-law, resolution or regulation made under clause 7(1)(b) of the <i>Building Code Act, 1992</i> .			<input type="checkbox"/> Yes	<input type="checkbox"/> No
iii) This application is accompanied by the information and documents prescribed by the applicable by-law, resolution or regulation made under clause 7(1)(b) of the <i>Building Code Act, 1992</i> which enable the chief building official to determine whether the proposed building, construction or demolition will contravene any applicable law.			<input type="checkbox"/> Yes	<input type="checkbox"/> No
iv) The proposed building, construction or demolition will not contravene any applicable law.			<input type="checkbox"/> Yes	<input type="checkbox"/> No
I. Declaration of applicant				
I _____ declare that: (print name)				
1. The information contained in this application, attached schedules, attached plans and specifications, and other attached documentation is true to the best of my knowledge.				
2. If the owner is a corporation or partnership, I have the authority to bind the corporation or partnership.				
_____		_____		
Date		Signature of applicant		

Personal information contained in this form and schedules is collected under the authority of subsection 8(1.1) of the *Building Code Act, 1992*, and will be used in the administration and enforcement of the *Building Code Act, 1992*. Questions about the collection of personal information may be addressed to: a) the Chief Building Official of the municipality or upper-tier municipality to which this application is being made, or, b) the inspector having the powers and duties of a chief building official in relation to sewage systems or plumbing for an upper-tier municipality, board of health or conservation authority to whom this application is made, or, c) Director, Building and Development Branch, Ministry of Municipal Affairs and Housing 777 Bay St., 2nd Floor. Toronto, M5G 2E5 (416) 585-6666.

Schedule 1: Designer Information

Use one form for each individual who reviews and takes responsibility for design activities with respect to the project.

A. Project Information			
Building number, street name		Unit no.	Lot/con.
Municipality	Postal code	Plan number/ other description	
B. Individual who reviews and takes responsibility for design activities			
Name		Firm	
Street address		Unit no.	Lot/con.
Municipality	Postal code	Province	E-mail
Telephone number ()	Fax number ()	Cell number ()	
C. Design activities undertaken by individual identified in Section B. [Building Code Table 3.5.2.1. of Division C]			
<input type="checkbox"/> House	<input type="checkbox"/> HVAC – House	<input type="checkbox"/> Building Structural	
<input type="checkbox"/> Small Buildings	<input type="checkbox"/> Building Services	<input type="checkbox"/> Plumbing – House	
<input type="checkbox"/> Large Buildings	<input type="checkbox"/> Detection, Lighting and Power	<input type="checkbox"/> Plumbing – All Buildings	
<input type="checkbox"/> Complex Buildings	<input type="checkbox"/> Fire Protection	<input type="checkbox"/> On-site Sewage Systems	
Description of designer's work			
D. Declaration of Designer			
I _____ declare that (choose one as appropriate):			
(print name)			
<input type="checkbox"/> I review and take responsibility for the design work on behalf of a firm registered under subsection 3.2.4. of Division C, of the Building Code. I am qualified, and the firm is registered, in the appropriate classes/categories. Individual BCIN: _____ Firm BCIN: _____			
<input type="checkbox"/> I review and take responsibility for the design and am qualified in the appropriate category as an "other designer" under subsection 3.2.5. of Division C, of the Building Code. Individual BCIN: _____ Basis for exemption from registration: _____			
<input type="checkbox"/> The design work is exempt from the registration and qualification requirements of the Building Code. Basis for exemption from registration and qualification: _____			
I certify that:			
1. The information contained in this schedule is true to the best of my knowledge. 2. I have submitted this application with the knowledge and consent of the firm.			
_____		_____	
Date		Signature of Designer	

NOTE:

1. For the purposes of this form, "individual" means the "person" referred to in Clause 3.2.4.7(1) (c) of Division C, Article 3.2.5.1. of Division C, and all other persons who are exempt from qualification under Subsections 3.2.4. and 3.2.5. of Division C.
2. Schedule 1 is not required to be completed by a holder of a license, temporary license, or a certificate of practice, issued by the Ontario Association of Architects. Schedule 1 is also not required to be completed by a holder of a license to practise, a limited license to practise, or a certificate of authorization, issued by the Association of Professional Engineers of Ontario.

Schedule 2: Sewage System Installer Information

A. Project Information			
Building number, street name		Unit number	Lot/con.
Municipality	Postal code	Plan number/ other description	
B. Sewage system installer			
Is the installer of the sewage system engaged in the business of constructing on-site, installing, repairing, servicing, cleaning or emptying sewage systems, in accordance with Building Code Article 3.3.1.1, Division C?			
<input type="checkbox"/> Yes (Continue to Section C) <input type="checkbox"/> No (Continue to Section E) <input type="checkbox"/> Installer unknown at time of application (Continue to Section E)			
C. Registered installer information (where answer 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 (where answer to section B is "Yes")			
Name of qualified supervisor(s)		Building Code Identification Number (BCIN)	
E. Declaration of Applicant:			
<p>I _____ declare that:</p> <p style="margin-left: 40px;">(print name)</p> <p><input type="checkbox"/> I am the applicant for the permit to construct the sewage system. If the installer is unknown at time of application, I shall submit a new Schedule 2 prior to construction when the installer is known;</p> <p>OR</p> <p><input type="checkbox"/> I am the holder of the permit to construct the sewage system, and am submitting a new Schedule 2, now that the installer is known.</p> <p>I certify that:</p> <ol style="list-style-type: none"> 1. The information contained in this 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. <p style="margin-left: 40px;">_____</p> <p style="margin-left: 40px;">Date</p> <p style="margin-left: 300px;">_____</p> <p style="margin-left: 300px;">Signature of applicant</p>			

Energy Efficiency Design Summary: Performance & Other Acceptable Compliance Methods

(Building Code Part 9, Residential)

This form is used by a designer to demonstrate that the energy efficiency design of a house complies with the building code using the Performance or Other Acceptable Compliance Methods described in Subsections 3.1.2. and 3.1.3. of SB-12,

This form must accurately reflect the information contained on the drawings and specifications being submitted. Refer to Supplementary Standard SB-12 for details about building code compliance requirements. Further information about energy efficiency requirements for new buildings is available from the provincial building code website or the municipal building department.

For use by Principal Authority	
Application No:	Model/Certification Number

A. Project Information

Building number, street name		Unit number	Lot/Con
Municipality	Postal code	Reg. Plan number / other description	

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

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

C. Project Building Design Conditions

Climatic Zone (SB-1):	Heating Equipment Efficiency	Space Heating Fuel Source
<input type="checkbox"/> Zone 1 (< 5000 degree days)	<input type="checkbox"/> ≥ 92% AFUE	<input type="checkbox"/> Gas <input type="checkbox"/> Propane <input type="checkbox"/> Solid Fuel
<input type="checkbox"/> Zone 2 (≥ 5000 degree days)	<input type="checkbox"/> ≥ 84% < 92% AFUE	<input type="checkbox"/> Oil <input type="checkbox"/> Electric <input type="checkbox"/> Earth Energy
Ratio of Windows, Skylights & Glass (W, S & G) to Wall Area		Other Building Characteristics
Area of walls = _____m ² or _____ft ²	W, S & G % = _____	<input type="checkbox"/> Log/Post&Beam <input type="checkbox"/> ICF Above Grade <input type="checkbox"/> ICF Basement <input type="checkbox"/> Slab-on-ground <input type="checkbox"/> Walkout Basement <input type="checkbox"/> Air Conditioning <input type="checkbox"/> Combo Unit <input type="checkbox"/> Air Source Heat Pump (ASHP) <input type="checkbox"/> Ground Source Heat Pump (GSHP)
Area of W, S & G = _____m ² or _____ft ²		
SB-12 Performance Reference Building Design Package indicating the prescriptive package to be compared for compliance		
SB-12 Referenced Building Package (input design package): Package:_____ Table:_____		

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

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

(1) U value to be provided in either W/(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. SB-12 Reference Building Package is _____ GJ (1 GJ =1000MJ)

The annual energy consumption of this house as designed is _____ GJ

The software used to simulate the annual energy use of the building is: _____

The building is being designed using an air tightness baseline of:

- OBC reference ACH, NLA or NLR default values (no depressurization test required)
- Targeted ACH, NLA or NLR. Depressurization test to meet _____ ACH50 or NLR or NLA

- Reduction of overall thermal performance of the proposed building envelope is not more than 25% of the envelope of the compliance package it is compared against (3.1.2.1.(6)).
- Standard Operating Conditions Applied (A-3.1.2.1 - 4.6.2)
- Reduced Operating Conditions for Zero-rated homes Applied (A-3.1.2.1 - 4.6.2.5)

- On Site Renewable(s): Solar: _____
Other Types: _____

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

- The NRCan “ENERGY STAR for New Homes Standard Version 12.6 ” technical requirements, applied to this building design result in the building performance meeting or exceeding the prescriptive performance requirements of the Supplementary Standard SB12 (A-3.1.3.1).
- The NRCan, “2012 R-2000 Standard ” technical requirements, applied to this building design result in the building performance meeting or exceeding the prescriptive performance requirements of the Supplementary Standard SB12 (A-3.1.3.1).

Performance Energy Modeling Professional

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

Accreditation or Evaluator/Advisor/Rater License #

ENERGY STAR or R-2000

Energy Evaluator/Advisor/Rater/ Name and company:

Evaluator/Advisor/Rater License #

G. Designer(s) [name(s) & BCIN(s), if applicable, of person(s) providing information herein to substantiate that design meets the building code]

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

Name	BCIN	Signature

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

COMPLETING THE FORM

B. Compliance Options

Indicate the compliance option being used.

- *SB-12 Performance* refers to the method of compliance in Subsection 3.1.2. of SB-12. Using this approach the designer must use recognized energy simulation software (such as HOT2000 V10.51 or newer), and submit documents which show that the annual energy use of the proposed building is equal to or less than a prescriptive (referenced) building package.
- *ENERGY STAR* houses must be designed to *ENERGY STAR* requirements and verified on completion by a licensed energy evaluator and/or service organization. The *ENERGY STAR* BOP form must be submitted with the permit documents.
- *R-2000* houses must be designed to the *R-2000 Standard* and verified on completion by a licensed energy evaluator and/or service organization. The HOT2000 report must be submitted with the permit documents.

C. Project Design Conditions

Climatic Zone: The number of degree days for Ontario cities is contained in Supplementary Standard SB-1 *Windows, Skylights and Glass Doors:* If the ratio of the total gross area of windows, sidelights, skylights, glazing in doors and sliding glass doors to the total gross area of walls is more than 17%, higher efficiency glazing is required. The total area is the sum of all the structural rough openings. Some exceptions apply. Refer to 3.1.1.1. of SB-12 for further details.

Fuel Source and Heating Equipment Efficiency: The fuel source and efficiency of the proposed heating equipment must be specified in order to determine which *SB-12 Prescriptive* compliance package table applies.

Other Building Conditions: These construction conditions affect *SB-12 Prescriptive* compliance requirements.

D. Building Specifications

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

E. Performance Design Summary

A summary of the performance design applicable only to the *SB-12 Performance* option.

F. ENERGY STAR or R-2000 Performance Method

Design to ENERGY STAR or R-2000 Standards.

G. House Designer

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

BUILDING CODE REQUIREMENTS FOR AIRTIGHTNESS IN NEW HOUSES

All houses must comply with increased air barrier requirements in the building code. Notice of air barrier completion must be provided and an inspection conducted prior to it being covered.

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

OBC Reference Default Air Leakage Rates (Table 3.1.2.1.)

Detached dwelling	3.0 ACH50	NLA 2.12 cm 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 *SB-12 Performance* option is used and an air tightness of less than 3.0 ACH @ 50 Pa (or NLA or NLR equivalent) in the case of detached houses, or 3.5 ACH @ 50 Pa (or NLA or NLR equivalent) in the case of attached houses is necessary to meet the required energy efficiency standard.

ENERGY EFFICIENCY LABELING FOR NEW HOUSES

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

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

Building number, street name	Unit number	Lot/Con
Municipality	Postal code	Reg. Plan number / other description

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

SB-12 Prescriptive (input design package): Package: _____ Table: _____

C. Project Design Conditions

Climatic Zone (SB-1):	Heating Equipment Efficiency	Space Heating Fuel Source
<input type="checkbox"/> Zone 1 (< 5000 degree days)	<input type="checkbox"/> ≥ 92% AFUE	<input type="checkbox"/> Gas <input type="checkbox"/> Propane <input type="checkbox"/> Solid Fuel
<input type="checkbox"/> Zone 2 (≥ 5000 degree days)	<input type="checkbox"/> ≥ 84% < 92% AFUE	<input type="checkbox"/> Oil <input type="checkbox"/> Electric <input type="checkbox"/> Earth Energy
Ratio of Windows, Skylights & Glass (W, S & G) to Wall Area		Other Building Characteristics
Area of walls = _____ m ² or _____ ft ²	W, S & G % = _____	<input type="checkbox"/> Log/Post&Beam <input type="checkbox"/> ICF Above Grade <input type="checkbox"/> ICF Basement <input type="checkbox"/> Slab-on-ground <input type="checkbox"/> Walkout Basement <input type="checkbox"/> Air Conditioning <input type="checkbox"/> Combo Unit <input type="checkbox"/> Air Sourced Heat Pump (ASHP) <input type="checkbox"/> Ground Sourced Heat Pump (GSHP)
Area of W, S & G = _____ m ² or _____ ft ²	Utilize window averaging: <input type="checkbox"/> Yes <input type="checkbox"/> No	

D. Building Specifications [provide values and ratings of the energy efficiency components proposed]

Energy Efficiency Substitutions			
<input type="checkbox"/> ICF (3.1.1.2.(5) & (6) / 3.1.1.3.(5) & (6))			
<input type="checkbox"/> Combined space heating and domestic water heating systems (3.1.1.2.(7) / 3.1.1.3.(7))			
<input type="checkbox"/> Airtightness substitution(s) Airtightness test required (Refer to Design Guide Attached)	<input type="checkbox"/> Table 3.1.1.4.B Required: _____	Permitted Substitution: _____	
	<input type="checkbox"/> Table 3.1.1.4.C Required: _____	Permitted Substitution: _____	
	Required: _____	Permitted Substitution: _____	
Building Component	Minimum RSI / R values or Maximum U-Value ⁽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 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), if applicable, of person(s) providing information herein to substantiate that design meets the building code]

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

Guide to the Prescriptive Energy Efficiency Design Summary Form

This form must accurately reflect the information contained on the drawings and specifications being submitted. Refer to Supplementary Standard SB-12 for details about building code compliance requirements. Further information about energy efficiency requirements for new buildings is available from the provincial building code website or the municipal building department.

The building code permits a house designer to use one of four energy efficiency compliance options:

1. Comply with the SB-12 Prescriptive design tables (this form is for this option (Option 1)),
2. Use the SB-12 Performance compliance method, and model the design against the prescriptive standards,
3. Design to Energy Star, or
4. Design to R2000 standards.

COMPLETING THE FORM

B. Compliance Options

Indicate the compliance option being used.

- SB-12 Prescriptive requires that the building conforms to a package of thermal insulation, window and mechanical system efficiency requirements set out in Subsection 3.1.1. of SB-12. Energy efficiency design modeling and testing of the building is not required under this option. Certain substitutions are permitted. In which case, the applicable airtightness targets in Table 3.1.1.4.A must be met.

C. Project Design Conditions

Climatic Zone: The number of degree days for Ontario cities is contained in Supplementary Standard SB-1
Windows, Skylights and Glass Doors: If the ratio of the total gross area of windows, sidelights, skylights, glazing in doors and sliding glass doors to the total gross area of walls is more than 17%, higher efficiency glazing is required. If the ratio is more than 22%, the SB-12 Prescriptive option may not be used. The total area is the sum of all the structural rough openings. Some exceptions apply. Refer to 3.1.1.1. of SB-12 for further details.

Fuel Source and Heating Equipment Efficiency: The fuel source and efficiency of the proposed heating equipment must be specified in order to determine which SB-12 Prescriptive compliance package table applies.

Other Building Conditions: These construction conditions affect SB-12 Prescriptive compliance requirements.

D. Building Specifications

Thermal Insulation: Indicate the RSI or R-value being proposed where they apply to the house design. Under the SB-12 Prescriptive option, alternative ICF wall insulation is permitted in certain conditions where other design elements meet higher standards. Refer to SB-12 for further details. Where effective insulation values are being used, the Authority Having Jurisdiction may require supporting documentation.

BUILDING CODE REQUIREMENTS FOR AIRTIGHTNESS IN NEW HOUSES

All houses must comply with increased air barrier requirements in the building code. Notice of air barrier completion must be provided and an inspection conducted prior to it being covered.

The air leakage rates in Table 3.1.1.4.A are not requirements. This provision is a voluntary provision for when credits for airtightness are claimed. Credit for air tightness allows the designer to substitute the requirements of compliance packages as set out in Table 3.1.1.4.B or 3.1.1.4.C. Neither the air leakage test nor compliance with airtightness targets given in Table 3.1.1.4.A are required, unless credit for airtightness is claimed. Table 3.1.1.4.A provides airtightness targets in three different metrics; ACH, NLA, NLR. Any one of them can be used. OBC Reference Default Air Leakage Rates (Table 3.1.1.4.A)

Building Type	Airtightness Targets				
	ACH @ 50 Pa	NLA @ 10 Pa		NLR @ 50 Pa	
Detached dwelling	2.5	1.26 cm 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 SB-12 Prescriptive option with airtightness credit being applied. Results of the airtightness test may need to be submitted to the Authority Having Jurisdiction. Airtightness of less than 2.5 ACH @ 50 Pa (or NLA or NLR equivalent) in the case of detached houses, or 3.0 ACH @ 50 Pa (or NLA or NLR equivalent) in the case of attached houses is necessary to meet the required energy efficiency standard.

E. House Designer

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



Township of



McMurrich/Monteith

Township of Armour
Township of McMurrich / Monteith

Letter of Authorization

AUTHORIZATION FOR AN APPLICATION FOR A BUILDING PERMIT BY A PERSON OTHER THAN THE LEGAL OWNER

I, _____, being the legal owner of property described as Lot _____, Concession _____, Parcel # _____, Plan _____, located in the Township of:

Township of Armour

Township of McMurrich / Monteith

In the District of Parry Sound, located at:

Civic Address: _____

Tax Assessment Roll #: _____

Authorize _____, to submit an application for a building permit at the above noted property.

Signature of Legal Owner(s)

Date