

# 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 number (if different): |                                |                       |
| Date received:   | Roll number:                  |                                |                       |
| Application submitted to <u>THE CITY OF BELLEVILLE</u><br><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 <sup>2</sup> ) |                       |
| B. Purpose of application  |                               |                                |                       |
| <input type="checkbox"/> New construction <input type="checkbox"/> Addition to an existing building <input type="checkbox"/> Alteration/repair <input type="checkbox"/> Demolition <input type="checkbox"/> Conditional Permit |                               |                                |                       |
| Proposed use of building   |                               | Current use of building        |                       |
| Description of proposed work   |                               |                                |                       |
| C. Applicant      Applicant is: <input type="checkbox"/> Owner or <input type="checkbox"/> Authorized agent of owner   |                               |                                |                       |
| Last name  | First name                    | Corporation or partnership     |                       |
| Street address   |                               | Unit number                    | Lot/con.              |
| Municipality   | Postal code                   | Province                       | E-mail                |
| Telephone number<br>(    )   | Fax<br>(    )                 |                                | Cell number<br>(    ) |
| 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<br>(    )   | Fax<br>(    )                 |                                | Cell number<br>(    ) |

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

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

## Schedule 1: Designer Information

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

| <b>A. Project Information</b>  |  |   |          |
|--|--|---|----------|
| Building number, street name   | Unit no.   | Lot/con.  |          |
| Municipality   | Postal code  | Plan number/ other description                    |          |
| <b>B. Individual who reviews and takes responsibility for design activities</b>  |  |   |          |
| Name   |  | Firm  |          |
| Street address   |  | Unit no.  | Lot/con. |
| Municipality   | Postal code  | Province  | E-mail   |
| Telephone number<br>(     )  | Fax number<br>(     )                                  | Cell number<br>(     )                            |          |
| <b>C. Design activities undertaken by individual identified in Section B. [Building Code Table 3.5.2.1. of Division C]</b>   |  |   |          |
| <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   |  |   |          |
| <b>D. Declaration of Designer</b>  |  |   |          |
| 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) 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.
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

| <b>A. Project Information</b>   |               |   |   |
|---|---------------|---|---|
| Building number, street name  |               | Unit number   | Lot/con.  |
| Municipality  | Postal code   | Plan number/ other description                      |   |
| <b>B. Sewage system installer</b>   |               |   |   |
| 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) |
| <b>C. Registered installer information (where answer to B is "Yes")</b>   |               |   |   |
| Name  |               | BCIN  |   |
| Street address  |               | Unit number   | Lot/con.  |
| Municipality  | Postal code   | Province  | E-mail  |
| Telephone number<br>(    )  | Fax<br>(    ) | Cell number<br>(    )                               |   |
| <b>D. Qualified supervisor information (where answer to section B is "Yes")</b>   |               |   |   |
| Name of qualified supervisor(s)   |               | Building Code Identification Number (BCIN)          |   |
|   |               |   |   |
| <b>E. Declaration of Applicant:</b>   |               |   |   |
| <p>I _____ declare that:</p> <p style="text-align: center;">(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><u>OR</u></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"> <li>1. The information contained in this schedule is true to the best of my knowledge.</li> <li>2. If the owner is a corporation or partnership, I have the authority to bind the corporation or partnership.</li> </ol> <p style="text-align: center;">_____</p> <p style="display: flex; justify-content: space-between;"> <span>Date</span> <span>Signature of applicant</span> </p> |               |   |   |



**AUTHORIZATION FROM PROPERTY OWNER for AGENT TO APPLY FOR BUILDING PERMIT ON THEIR BEHALF**

I/we \_\_\_\_\_,  
 (Property Owner/s)

Hereby authorize \_\_\_\_\_,  
 (Agent)

To apply, on my/our behalf, for a Building Permit on my/our property located in the City of Belleville at:

\_\_\_\_\_

Property Description (legal, civic address)

\_\_\_\_\_  
 Signature of Owner                      Date                      Signature of Owner                      Date

**DECLARATION OF VACANCY**

Where the application is for demolition of a building I/we hereby confirm that the building at

\_\_\_\_\_ is vacant.  
 Property Description (legal, civic address)

\_\_\_\_\_  
 Signature of Owner/Agent                      Date                      Signature of Owner /Agent                      Date

**PLANNING SECTION APPROVAL (Required PRIOR TO application submission)**

Planning Approval: \_\_\_\_\_ Date: \_\_\_\_\_  
 Signature of Planner

**FEES Office use Only**

|                 |                 |              |                  |           |               |
|-----------------|-----------------|--------------|------------------|-----------|---------------|
| Building Permit | Plumbing Permit | Sewer Permit | Occupancy Permit | Surcharge | <b>Totals</b> |
| \$ _____        | \$ _____        | \$ _____     | \$ _____         | \$ _____  | \$ _____      |

**Development Charges**

|                    |                       |                         |          |
|--------------------|-----------------------|-------------------------|----------|
| City Wide \$ _____ | Stanley Park \$ _____ | South Loyalist \$ _____ | \$ _____ |
|                    |                       | <b>Deposit</b>          | \$ _____ |

**GRAND TOTAL \$ \_\_\_\_\_**

## Applicable Law Compliance

The following questions must be answered in order to complete your application for building permit and to determine if approvals are required from any other agency before your building permit can be issued.

**Completing this form accurately and providing any other required approvals at application time will help expedite the processing of your building permit.**

| Question  | Yes | No | Comments |
|---|-----|----|----------|
| Is the building used as a daycare?  |     |    |          |
| Is the permit for the demolition of a school?   |     |    |          |
| Is the building used as a funeral home?   |     |    |          |
| Is the building used for processing milk?   |     |    |          |
| Is the building used to house farm animals?   |     |    |          |
| Is there a farm, feedlot or manure storage within 500m?                                   |     |    |          |
| Is the building used for manure storage?  |     |    |          |
| Is the building located on public land?   |     |    |          |
| Are Development Charges applicable?   |     |    |          |
| Is conservation authority approval required?  |     |    |          |
| Is there a lake, river, creek, stream, pond or wetland on or within 500m of the property? |     |    |          |
| Is there a provincial highway within 800m?  |     |    |          |
| Is there a railway within 500m of the property?   |     |    |          |
| Is Health Unit approval required (food)?  |     |    |          |
| Is the building used as a charitable institution?   |     |    |          |
| Is the building used as a seniors home?   |     |    |          |
| Is the building used as a seniors centre?   |     |    |          |
| Is the building used as a nursing home?   |     |    |          |
| Is the property use changing to residential?  |     |    |          |
| Is Ministry of Environment approval required?   |     |    |          |
| Was the property used as a disposal site?   |     |    |          |
| Is there a septic system on the property?   |     |    |          |
| Is the building a designated heritage building?   |     |    |          |
| Is the permit to demolish a heritage building?  |     |    |          |
| Is site plan approval required?   |     |    |          |
| Is the permit for a mobile, park model or modular home?                                   |     |    |          |
| Is zoning by-law relief required?<br>(Confirm with Planning Section)                      |     |    |          |

# Statement Regarding Required Inspections

To: City of Belleville Building Inspection Department

Re: \_\_\_\_\_  
(civic address)

I \_\_\_\_\_ (owner / authorized agent) understand that it is my responsibility to call the City of Belleville Building Inspection department for the required inspections listed below. I also understand the person in charge of the construction of the building shall have the permit or a copy of the permit posted at all times during the construction or demolition in a conspicuous place on the property and shall keep and maintain on the site of the construction at least one copy of the drawings and specifications stamped as site copy by the City of Belleville Building department. I further acknowledge and understand that my failure to do so may result in work orders being levied against the property and further that I will be required to uncover any and all work that is covered or enclosed prior to the work being inspected by the City. Further I also understand that all expenses related to the uncovering or exposing of work for the purposes of inspection will be at my expense. It is further acknowledged that I will not expect or knowingly allow City Building Officials to enter or remain in any place or situation deemed unsafe according to the Occupational Health & Safety Act that I am responsible for and that this does not relieve me from having the required inspections conducted and completed by the City Building Division.

## Required Inspections:

**\*\* Minimum 48 Hours notice required for each inspection**

**\*\* Ensure that plans are on site for all inspections**

1. Services (prior to covering)
2. Excavation (prior to pouring footings)
3. Foundation (prior to backfilling)
4. Underground Plumbing (prior to covering)
5. Framing, Plumbing and Mechanical Rough-in (prior to insulation)  
\*framing inspection will not be conducted separately.
6. Septic system 1) Prior to covering; 2) Final
7. Wood Burning Appliance
8. Insulation & vapour barrier (prior to drywall)
9. Fire Separations & Fire stopping
10. Prior to filling a swimming pool with water
11. Prior to Occupancy Union Energy and Electrical Safety Authority Inspection required before  
Occupancy will be permitted.
12. Other \_\_\_\_\_

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature

**NOTE: INSPECTIONS WILL NOT BE CONDUCTED WHERE PERMIT HAS NOT BEEN PICKED UP**

**PLUMBING INFORMATION** Plumbing Contractor must have a current City of Belleville Plumbing Licence-By-law 2006-140 Schedule F

Plumbing Contractor Name: \_\_\_\_\_ Master Plumber Name: \_\_\_\_\_  
 Licence No.: \_\_\_\_\_ Licence No.: \_\_\_\_\_

|   |  |
|---|--|
| <p><b>NUMBER OF FIXTURES</b></p> <p><b>SINKS</b> _____</p> <p><b>BASINS</b> _____</p> <p><b>SHOWERS</b> _____</p> <p><b>TOILETS</b> _____</p> <p><b>BATH TUBS</b> _____</p> <p><b>LAUNDRY TUBS</b> _____</p> <p><b>DISHWASHERS</b> _____</p> <p><b>HOT WATER TANKS</b> _____</p> <p><b>FLOOR DRAIN</b> _____</p> <p><b>ROOF DRAIN</b> _____</p> <p><b>OTHER (SPECIFY)</b> _____</p> <p><b>TOTAL FIXTURES:</b> _____</p> | <p><b>FEES: *</b></p> <p><b>TOTAL FIXTURES:</b> ( _____ ) X \$7.00 = \$ _____</p> <p><b>Plus</b></p> <p><b>Residential \$15.00/unit</b> \$ _____</p> <p><b>OR</b></p> <p><b>Instit., Comm., Indust., Gov't. \$75.00</b> \$ _____</p> <p><b>Plus</b></p> <p><b>INGROUND PLUMBING: \$50.00</b> \$ _____</p> <p><b>(ONLY Instit., Comm., Indust., Gov't., Mtpl. Dwellings)</b></p> <p><b>TOTAL FEES:</b> \$ _____</p> <p style="text-align: right;"><b>* MINIMUM FEE: \$50.00</b></p> |
|---|--|

**SEWER INFORMATION**

| DIAMETER (INCHES) | LENGTH (METRES) | FEE *    | PER UNIT CHARGE             | NO. OF                     | TOTAL FEE |
|-------------------|-----------------|----------|-----------------------------|----------------------------|-----------|
| 4 INCHES          | _____           | \$ _____ | <b>CATCHBASINS \$40.00</b>  | _____                      | \$ _____  |
| 6 INCHES          | _____           | \$ _____ | <b>MANHOLES \$40.00</b>     | _____                      | \$ _____  |
| _____             | _____           | \$ _____ | <b>TOTAL FEES: \$</b> _____ | <b>* MIN. FEE: \$25.00</b> |           |

- \$6.00 PER 25MM OF PIPE DIAMETER FOR EACH 30 METRES OF LENGTH OR PART THEREOF
- ROAD CUT PERMITS ARE REQUIRED FOR ALL WORK WITHIN CITY ROAD ALLOWANCES (PERMITS AVAILABLE FROM PUBLIC WORKS AT 75 WALLBRIDGE CRESCENT)

**SEPTIC INFORMATION – CLASS 2 TO 5**

|                           |                      |        |               |         |            |                     |  |
|---------------------------|----------------------|--------|---------------|---------|------------|---------------------|--|
| State Number Of           | Bedrooms/Motel Units | People | Flush Toilets | Urinals | Washbasins | Showers or Bathtubs | <p><b>Water Supply</b></p> <p><input type="checkbox"/> Proposed or Existing</p> <p><input type="checkbox"/> Dug or bored well</p> <p><input type="checkbox"/> Drilled Well</p> <p><input type="checkbox"/> Municipal</p> <p><input type="checkbox"/> Other</p> |
| Total Fixture Units _____ |                      |        |               |         |            |                     |  |

Attach completed sketch on Page 2. List other attachments.

|  |   |
|--|---|
| <p><b>Relationship to severance (if applicable)</b></p> <p><input type="checkbox"/> Lot approval pending</p> <p><input type="checkbox"/> Lot approved, under Severance Application No. _____</p> | <p><b>Directions to lot (Highway No., Secondary Roads, Signs to Follow, etc.)</b></p> |
|--|---|

**REQUIRED TEST:** (Article 8.2.1.2. of the O.B.C. requires one of the following tests)

**Percolation Test:**      **Hole 1**                      **Hole 2**                      **Hole 3**                      **Highest Perc. Time**

\_\_\_\_\_

**OR**

**Unified Soil Classification:** \_\_\_\_\_





# CALCULATION SHEET

## Ontario Building Code Proposed Requirements Residential Sewage Disposal System

Name: \_\_\_\_\_ Address: \_\_\_\_\_ Tel: ( ) \_\_\_\_\_

### 1. Sewage Flow

a) Number of bedrooms: \_\_\_\_\_ = \_\_\_\_\_ Litres (1)

#### ADD

b) Living Space: \_\_\_\_\_ m<sup>2</sup>  
 Each 10 m<sup>2</sup> over 200m<sup>2</sup> up to 400 m<sup>2</sup>: \_\_\_\_\_ x 100 = \_\_\_\_\_ Litres  
 Each 10 m<sup>2</sup> over 400m<sup>2</sup> up to 600 m<sup>2</sup>: \_\_\_\_\_ x 75 = \_\_\_\_\_ Litres

Total: \_\_\_\_\_ Litres (2)

#### OR ADD (whichever is the larger flow)

c) Total Fixture Units: \_\_\_\_\_  
 Each Fixture Unit Over 20: \_\_\_\_\_ x 50 = \_\_\_\_\_ Litres (3)

Total Sewage Flow: (Q) (Add 1 + 2 or 3) \_\_\_\_\_ Litres

### 2. Septic Tank Size

Residential Occupancy: Sewage Flow: \_\_\_\_\_ x 2 = \_\_\_\_\_ Litres (Minimum – 3600 Litres)  
 Recommend \_\_\_\_\_ Litre Tank

### 3. Leaching Bed Size

Length of Pipe =  $\frac{\text{Sewage Flow} \times \text{Percolation Time}}{200}$

$L = \frac{QT}{200} = \frac{\quad}{200} = \quad$  m. of trench  $\quad$  ft. of trench  
 Rounded to:  $\quad$  m. of trench  $\quad$  ft. of trench

### 4. Loading Rate for Fill-Based Absorption Trenches and Filter Beds

| Loading Rates | Percolation Time | Loading Rate (L/ m <sup>2</sup> /day) |
|---------------|------------------|---------------------------------------|
|               | 1-20             | 10                                    |
|               | 20-35            | 8                                     |
|               | 35-50            | 6                                     |
|               | > 50             | 4                                     |

Sewage Flow ÷ Loading Rate = \_\_\_\_\_ m<sup>2</sup> of contact area  
 \_\_\_\_\_ ÷ \_\_\_\_\_ = \_\_\_\_\_ m<sup>2</sup> of contact area

### 5. Filter Bed Size

Sewage Flow < 3000 Litres/Day: Sewage Flow ÷ 75 = m<sup>2</sup>  
 \_\_\_\_\_ ÷ 75 = \_\_\_\_\_ m<sup>2</sup> of filter bed

Sewage Flow > 3000 Litres/Day: Sewage Flow ÷ 75 = m<sup>2</sup>  
 \_\_\_\_\_ ÷ 50 = \_\_\_\_\_ m<sup>2</sup> of filter bed

### 6. Filter Bed Contact Area of Filter Sand

Area =  $\frac{\text{Sewage Flow} \times \text{Percolation Rate}}{850} = \quad$  m<sup>2</sup> of contact area

$A = \frac{QT}{850} = \frac{\quad \times \quad}{850} = \quad$  m<sup>2</sup> of contact area

Expanded contact area is to be no less than the filter bed size.

Owner/Contractor/Designer's Name: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

| SOIL CONDITION       |               |
|----------------------|---------------|
| Depth (metres)       | Soil Type     |
| 0 _____              | _____         |
| 0.5 _____            | _____         |
| 1.0 _____            | _____         |
| 1.5 _____            | _____         |
| Show Rock Elevations | _____         |
| Show Water Table     | _____ W _____ |

# Energy Efficiency Design Summary

(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

For use by Principal Authority

|                 |                            |
|-----------------|----------------------------|
| Application No: | Model/Certification Number |
|-----------------|----------------------------|

## A. Project Information

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

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

|   |   |
|---|---|
| <input type="checkbox"/> <b>SB-12 Prescriptive</b> (circle one): <b>A B C D E F G H I J K L M</b> or <input type="checkbox"/> Table 2.1.1.10. (Additions) |   |
| <input type="checkbox"/> prescriptive trade-offs used (Specify 2.1.1.2. or 2.1.1.3. sentences being employed):  |   |
| <input type="checkbox"/> <b>SB-12 Performance*</b> [SB-12 - 2.1.2.]   | * Attach energy performance calculations using an approved software |
| <input type="checkbox"/> <b>Energy Star®*</b> [SB-12 - 2.1.3.]  | * Attach Builder Option Package [BOP] form                          |
| <input type="checkbox"/> <b>EnerGuide 80®*</b>  | * House must be evaluated by NRCan advisor and meet a rating of 80  |

## 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"/> ≥ 90% 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"/> ≥ 78% < 90% 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 Conditions  |
| Area of walls = _____ m <sup>2</sup>                        | W, S & G % = _____                        | <input type="checkbox"/> ICF Basement <input type="checkbox"/> Walkout Basement <input type="checkbox"/> Log/Post&Beam |
| Area of W, S & G = _____ m <sup>2</sup>                     |   | <input type="checkbox"/> ICF Above Grade <input type="checkbox"/> Slab-on-ground                                       |

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

| Building Component                       | RSI / R values | Building Component  | Efficiency Ratings |
|--|----------------|---|--------------------|
| <b>Thermal Insulation</b>                |                | <b>Windows &amp; Doors</b> Provide U-Value in W/m <sup>2</sup> .K, or ER rating |                    |
| Ceiling with Attic Space                 |                | Windows/Sliding Glass Doors   |                    |
| Ceiling without Attic Space              |                | Skylights/Glazed Roofs  |                    |
| Exposed Floor                            |                | <b>Mechanicals</b>  |                    |
| Walls Above Grade                        |                | Heating Equip.(AFUE or condensing type)   |                    |
| 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 Efficiency)   |                    |
| Slab (all ≤600mm below grade, or heated) |                |   |                    |

## E. Performance Design Verification [complete applicable sections if SB-12 Performance, Energy Star or EnerGuide80 options used]

|   |                                    |
|---|------------------------------------|
| <b>SB-12 Performance:</b>   |                                    |
| The annual energy consumption using Subsection 2.1.1. SB-12 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 leakage of _____ air changes per hour @50Pa.              |                                    |
| <b>Energy Star:</b> Submit the BOP form with Energy Advisor's certification on completion.            |                                    |
| <b>Energy Star and EnerGuide80:</b>   |                                    |
| Evaluator/Advisor/Rater Name:   | Evaluator/Advisor/Rater Licence #: |

## F. House Designer [name & BCIN, if applicable, of person providing information herein to substantiate that design meets the building code]

|      |      |           |
|------|------|-----------|
| Name | BCIN | Signature |
|------|------|-----------|

# Guide to the 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,
2. Use the SB-12 Performance compliance method, and model the design against the prescriptive standards,
3. Design to Energy Star standards, or
4. Evaluate the design according to EnerGuide technical procedures and achieve a rating of 80 or more.

## 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 2.1.1. of SB-12. Energy efficiency design modeling and testing of the building is not required under this option. Certain trade-off options are permitted.
- SB-12 Performance refers to the method of compliance in Subsection 2.1.2. of SB-12. Using this approach the designer must use recognized energy simulation software (such as HOT2000 V9.34c1.2 or newer), and submit documents which show that the annual energy use of the building is equal to a prescriptive 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.
- EnerGuide80 houses are validated by NRCan authorized energy advisors and must achieve a rating of 80 or more when evaluated in accordance with EnerGuide administrative and technical procedures.

### 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 2.1.1.1. 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, RSI 3.52 wall insulation is permitted in certain conditions where other design elements meet higher standards. Refer to SB-12 for further details.

### E. Performance Design Summary

This section is not required to be completed if the SB-12 Prescriptive option is being used.

### F. 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 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 2.5 ACH @ 50 Pa in the case of detached houses, or 3.0 ACH @ 50 Pa in the case of attached houses is necessary to meet the required energy efficiency standard. A blower door test must also be conducted if the EnerGuide 80 option is used.

## ENERGY EFFICIENCY LABELING FOR NEW HOUSES

Energy Star and EnerGuide may issue labels for new homes constructed under their energy efficiency programs. The building code does not currently regulate or require new home labelling.