## BUILDING APPLICATION CHECKLIST - MAJOR PROJECTS <br> (Ex: Single detached dwelling or Seasonal dwelling) <br> NOTE: Applications may be refused if the first seven (7) documents are not submitted. <br> Building permit application <br> A separate sewage system application (when constructing a new dwelling on vacant land) <br> 2 sets of full-size construction drawings including: all structural framing, floor plans, elevations, cross sections, footings/foundation wall details, truss layout

$\square$ Plot plan is required to include:

- setbacks from all property lines, from existing structures and proposed structures
- setback from high water mark/all waterbodies
- setback from the sewage system and septic tank
- setback from overhead power lines
- the dimensions and area of the lot and a North arrow
- the location, dimension, and area of the dwelling in relation to the building lot
- the street name and address
- the driveway location
- the private lane or public road
- Right-of-way, easements, ditches


## $\square$ Setback Waiver/Inspection and Occupancy Notice form

Heat loss/gain calculations with ventilation design (not required for a seasonal dwelling)Energy Efficiency Design Summary (not required for a seasonal dwelling)Approved entrance permit from Public Services (if driveway is on a public road)$\square$ Conservation Authority - provide email from CA as to whether an approval is required or not (If project is located near any waterbody)Zoning approval/Site Plan or Development Agreement (provide a copy if required)Copy of tax bill or deed (proof of land ownership - if required)Survey of property (upon request)Well record (upon request)
An in-depth plans examination may reveal that further information may be required from the applicant to satisfy compliance with the Ontario Building Code or other applicable law. Total fees will be determined during the Building Inspectors review.

## Potential additional fees:

Development Charges $=\$ 13,484.88$ (As per DC Bylaw)
Lot Grading Deposit = \$3000.00 (As per Subdivision/Development Agreement)

## For use by Principal Authority

| Application number: | Permit number (if different): |
| :--- | :--- |
| Date received: | Roll number: |
|  | $1029-$ |

Application submitted to: ___ Township of South Frontenac $\qquad$

## A. Project information

| Building number, street name |  | Unit number | Lot/con. |
| :--- | :--- | :--- | :--- |
| Municipality | Plan number/other description |  |  |


| Municipality South Frontenac Township |  | Postal code | Plan number/other description |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Project value est. \$ |  |  | Area of work (m²) |  |  |
| B. Purpose of application |  |  |  |  |  |
| New construction | Addition to an existing building |  | Alteration/repair | Demolition | Conditional Permit |
| Proposed use of building |  | Current use of building |  |  |  |


| C. Applicant | Applicant is: O Owner or | O 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 ( ) | $\begin{aligned} & \text { Fax } \\ & \left(\begin{array}{l} \text { l } \end{array}\right) \end{aligned}$ |  | $\begin{aligned} & \text { Cell number } \\ & (\quad) \end{aligned}$ |  |
| D. Owner (if dif | rom applicant) |  |  |  |
| Last name | First name | Corporatio |  |  |
| Street address |  |  | Unit number | Lot/con. |
| Municipality | Postal code | Province | E-mail |  |
| Telephone number ( ) | $\begin{aligned} & \text { Fax } \\ & \left(\begin{array}{ll} \text { ( } \end{array}\right) \end{aligned}$ |  | $\begin{aligned} & \text { Cell number } \\ & (\quad) \end{aligned}$ |  |

E. Builder (optional)

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 Building Code Act, 1992, to be paid when the application is made.
ii) This application is accompanied by the plans and specifications prescribed by the applicable by-law, resolution or regulation made under clause 7(1)(b) of the Building Code Act, 1992.
iii) This application is accompanied by the information and documents prescribed by the applicable bylaw, resolution or regulation made under clause 7(1)(b) of the Building Code Act, 1992 which enable the chief building official to determine whether the proposed building, construction or demolition will contravene any applicable law.
iv) The proposed building, construction or demolition will not contravene any applicable law.


## I. Declaration of applicant

$\qquad$
(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

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


Description of designer's work

## D. Declaration of Designer

I $\qquad$ declare that (choose one as appropriate): (print name)

$\bigcirc$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: $\qquad$
Firm BCIN: $\qquad$

$\bigcirc$
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: $\qquad$
Basis for exemption from registration: $\qquad$

$\bigcirc$
The design work is exempt from the registration and qualification requirements of the Building Code.
Basis for
for exemption
from
registration
and
qualification: $\qquad$ 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.

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
2 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.

## SETBACK WAIVER and INSPECTION and OCCUPANCY NOTICE REQUIREMENTS

Project location information:
Permit \#: $\qquad$
Property owner(s): $\qquad$
Municipal address: $\qquad$
Phone \#: $\qquad$ Email: $\qquad$
Roll \#: $\qquad$
Concession: $\qquad$ Lot: $\qquad$ Part: $\qquad$ R Plan \#: $\qquad$
To the Township of South Frontenac,
I declare that; I am owner listed above , or; $\bigcirc$
I am the authorized agent of the property owner listed above $\bigcirc$
As the owner/agent I hereby acknowledge;

- That the issuance of a Building Permit and/or a general site review by the Building Department Staff is not confirmation that all zoning setbacks have been adhered to. This includes but is not limited to separation of structures to the high water mark, lot lines, septic systems and other structures. It is understood that it is the sole responsibility of the owner/agent to meet the setback requirements as set out in the Township Zoning By-law, and;
- The owner(s) are obligated to arrange for the inspections indicated on the permit card issued for the project, and that no work will proceed until the Building Inspector has inspected the various stages of construction indicated on the permit card, and;
- Permit Drawings and documents submitted with errors or omissions contained therein do not relieve the owner and/or authorized agent from the responsibility of completing all work to meet or exceed the requirements of the Ontario Building Code.
- If the owner is a corporation or partnership, I have the authority to bind the corporation or partnership.


## Signature

## Date

Note: The Ontario Building Code Act requires that request for inspections are made a minimum 2 regular business days in advance of the regular business day upon which the inspection is needed.

## Agent/Owner Authorization Form

## A. Project Information

Street Address: $\qquad$
Proposed project:
$\qquad$

## B. Party to be authorized

Name: $\qquad$
Corporation or Partnership: $\qquad$
Address: $\qquad$ Lot/Con: $\qquad$
Phone \#: $\qquad$ Cell \#: $\qquad$ Email: $\qquad$

## C. Declaration of Owner

I, $\qquad$ , being the Registered Owner of the above property hereby authorize the party stated in Section B of this form to make application for permit on my behalf to Building Services of the Township of South Frontenac in accordance with the applicable requirements of the Ontario Building Code for the purpose of the identified project.

Date: $\qquad$ Signature: $\qquad$

The Ontario Building Code states that "owner includes, in respect of the property on which the construction or demolition will take place, the registered owner, a lessee or mortgagee in possession".

Note: This form is valid only for one access to Building Permit record application. Subsequent applications by an authorized agent will require a new agent authorization form completed by the current property owner.

# 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


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

$$
\text { SB-12 Prescriptive (input design package): Package: } \quad \text { Table: }
$$

## C. Project Design Conditions

| Climatic Zone (SB-1): | ency | Space Heating Fuel Source |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\square$ Zone 1 ( $<5000$ degree days) | $\square \geq 92 \%$ AFUE <br> - $\geq 84 \%$ < $92 \%$ AFUE | $\begin{aligned} & \square \mathrm{Gas} \\ & \square \mathrm{Oil} \end{aligned}$ | $\square$ Propane $\square$ Electric | $\begin{aligned} & \hline \square \text { Solid Fuel } \\ & \square \text { Earth Energy } \end{aligned}$ |  |
| $\square$ Zone 2 ( $\geq 5000$ degree days) |  |  |  |  |  |
| Ratio of Windows, Skylights \& Glass (W, S \& G) to Wall Area |  | Other Building Characteristics |  |  |  |
| Area of walls $=\ldots \ldots \mathrm{m}^{2}$ or___ $\mathrm{Ht}^{2}$ | W, S\&G\% = $\qquad$ <br> Utilize window averaging: $\square$ Yes $\square$ No | $\square$ Log/Post\&Beam $\square$ ICF Above Grade <br> $\square$ Slab-on-ground $\quad$ Walkout Basement <br> $\square$ Air Conditioning $\quad$ Combo Unit <br> $\square$ Air Sourced Heat Pump (ASHP) <br> $\square$ Ground Sourced Heat Pump (GSHP) |  |  |  |
| Area of W, S \& G = ___m $\mathrm{m}^{2}$ or___ft $\mathrm{f}^{2}$ |  |  |  |  |  |  |  |  |

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

| Energy Efficiency Substitutions |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ```ICF (3.1.1.2.(5) & (6) / 3.1.1.3.(5) & (6)) C Combined space heating and domestic water heating systems (3.1.1.2.(7) / 3.1.1.3.(7))``` |  |  |  |  |  |
| $\begin{aligned} & \square \text { Airtightness substitution(s) } \\ & \text { Airtightness test required } \\ & \text { (Refer to Design Guide Attached) } \end{aligned}$ | $\square$ Table 3.1.1.4.B Required: |  |  | Permitted Substitution: |  |
|  | $\square$ 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 $0^{\circ} \mathrm{C}$ ) |  |
| Slab (all >600mm below grade) |  |  |  | DHW Heater (EF) |  |
| Slab (edge only $\leq 600 \mathrm{~mm}$ below grade) |  |  |  | DWHR (CSA B55.1 (min. 42\% efficiency)) | \#Showers |
| Slab (all 5600 mm below grade, or heated) |  |  |  | Combined Heating System |  |

(1) $U$ value to be provided in either $W /\left(\mathrm{m}^{2} \cdot \mathrm{~K}\right)$ or $\mathrm{Btu} /\left(\mathrm{h} \bullet \mathrm{ft}^{2} \cdot \mathrm{~F}\right)$ 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 | $1.26 \mathrm{~cm}^{2} / \mathrm{m}^{2}$ | $100 \mathrm{ft}^{2}$ | $0.93 \mathrm{~L} / \mathrm{s} / \mathrm{m}^{2}$ | $0.18 \mathrm{cfm} 50 / \mathrm{ft}^{2}$ |
| Attached dwelling | 3.0 | $2.12 \mathrm{~cm}^{2} / \mathrm{m}^{2}$ | $3.06 \mathrm{in}^{2} / 100 \mathrm{ft}^{2}$ | $1.32 \mathrm{~L} / \mathrm{s} / \mathrm{m}^{2}$ | $0.26 \mathrm{cfm} 50 / \mathrm{ft}^{2}$ |

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 $2.5 \mathrm{ACH} @ 50 \mathrm{~Pa}$ (or NLA or NLR equivalent) in the case of detached houses, or $3.0 \mathrm{ACH} @ 50 \mathrm{~Pa}$ (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, LM CBO. Revised November 30, 2016.

## Radon Gas Mitigation Program - Compliance Options

Building Code Requirements (Iow-rise residential dwellings)

| $>$ Option \#1: pipe, mandatory testing | Advantages / Opportunities | Challenges |
| :---: | :---: | :---: |
| Provide for subfloor depressurization (pipe rough-in), in accordance with SB-9, 3.2.(1)-(5). Ref.: Division B, 9.13.4.2.(2)(c) <br> - Mandatory testing required. Ref.: SB-9, 3.2.(6) <br> - Subfloor depressurization system required to be installed only if concentration levels exceed $200 \mathrm{~Bq} / \mathrm{m}^{3}$. Ref.: SB-9, 3.2.(9) | - Establish a database for monitoring test results. <br> - Radon levels will be reduced to less than Health Canada Guidelines of $200 \mathrm{~Bq} / \mathrm{m}^{3}$, and occupant safety will be ensured. <br> - Pipe rough-in present for future depressurization system. <br> - Most cost effective for builder. (if depressurization system not required) <br> Testing will be carried out by a certified C-NRPP professional. (Canadian National Radon Proficiency Program) | - Building permits will remain open for between 3-12 months while testing is being done. <br> - Lack of slab sealing or vapour barrier below slab, and lack of wall sealing, could make remediation expensive, particularly if basement is finished. |
| > Option \#2: soil gas barrier, no pipe | Advantages / Opportunities | Challenges |
| - Sealing of walls. Ref.: Division B, 9.13.4.2.(3) <br> - Bituminous damproofing. (i.e.: tar foundation walls) <br> Sealing of floors. Ref.: Division B, 9.13.4.2.(4)(a) <br> - Polyethylene under slab ( 6 mil), and <br> - Caulk all slab penetrations above slab, and perimeter of slab. <br> - Approved spray foam | Relatively easy to depressurize below slab should radon levels be found to exceed $200 \mathrm{~Bq} / \mathrm{m}^{3}$. (not difficult to install pipe after construction) <br> Limits difficulties of retrofit slab sealing if basement space is finished and elevated radon levels are found thereafter. Permit can be closed after construction is complete. (not dependent on testing results) | - Separate inspection of poly / spray foam below slab. <br> - Additional construction costs for materials and labour. <br> - Presence of radon will remain unknown if voluntary testing not done. <br> - There's no guarantee that radon levels will be less than Health Canada Guidelines of $200 \mathrm{~Bq} / \mathrm{m}^{3}$, and occupant safety is not guaranteed. <br> - No pipe rough-in for future depressurization system. |
| $>$ Option \#3: depressurization system, partial soil gas barrier | Advantages / Opportunities | Challenges |
| - Sealing of walls. Ref.: Division B, 9.13.4.2.(3) <br> - Bituminous damproofing. (i.e.: tar foundation walls) <br> - Provide subfloor depressurization pipe in accordance with SB9, 3.2.(1)-(5). <br> Install active subfloor depressurization system (fan). Ref.: Division B, 9.13.4.2.(4)(b). | - Radon levels will be likely be reduced to less than Health Canada Guidelines of $200 \mathrm{~Bq} / \mathrm{m}^{3}$, and occupant safety will likely be ensured, however no guarantee as no testing is required. <br> Permit can be closed after construction is complete. (not dependent on testing results) | - Additional construction costs for materials and labour. <br> - Presence of radon will remain unknown if voluntary testing not done. <br> Increased electricity use due to fan, even though fan may not be necessary. <br> Excessive air leakage (heat loss) may occur through slab due to the lack of vapour barrier below and slab sealing. |

Note: For further information, please see the South Frontenac Township website - www.southfrontenac.net

Soil Gas Mitigation Strategy Declaration

| Date received: | Permit number: |  |
| :---: | :---: | :---: |
| Project Location: |  |  |
| Building number, street name: |  | Lot/con. |
| Telephone number: ${ }^{\text {E-mail: }}$ |  |  |
| Owner or Authorized Agent: |  |  |
| Last name: ${ }^{\text {L }}$ First name: |  |  |
| Telephone number: | E-mail: |  |
| Declaration of applicant: |  |  |
| I $\qquad$ declare that I will implement: (print name) <br> (Please circle one of the three following radon gas mitigation options, to be constructed on site): Option 1: Sub-Slab (mandatory radon testing is required) ption 2: Soil Gas Barrier (radon testing is not required) Option 3: Soil Gas Barrier and Sub-Slab Depressurization - Sub-slab depressurization design by qualified designer required. (radon testing is not required) |  |  |
| I certify that: <br> 1. Building permit drawings shall clearly indicate details associated with radon gas mitiger Option \# $\qquad$ to be constructed on site: <br> 2. It is my responsibility to conduct the radon test, if required, to determine the radon concentration in the building and submit the results to the Township of South Fronteac, Building Services. |  |  |

