

TOWNSHIP OF WHITEWATER REGION 44 Main Street, PO Box 40 Cobden, ON K0J 1K0 P: 613-646-2282 F: 613-646-2283 www.whitewaterregion.ca

DOCUMENTS REQUIRED FOR NEW HOME CONSTRUCTION

PLANS AND SPECIFICATIONS

- 1. Complete set of blue prints, drawings
- 2. A Plot Plan accurately showing the location of the building on the lot and distances from lot lines and proposed entrance location
- 3. Building Permit Application and attached schedules completed in full

HOME WARRANTIES PROGRAM

1. Complete "Declaration of Applicant for Building Permit"

HEALTH APPROVALS

1. Septic System – complete schedule 2

ENTRANCES

- 1. Kings Highway Ministry of Transportation Entrance Permit
- County Roads (Achray Road, County Road #17, Laurentian Drive, Murphy Road) County of Renfrew Entrance Permit
- 3. Municipal Roads entrance location to be approved by the Town and Culvert Permit if required

<u>OWNERSHIP</u>

Proof of ownership or unconditional offer to purchase duly accepted

ZONING

All proposed uses shall conform to the appropriate Zoning By-law and Official Plan

FEES AND CHARGES

In compliance with the Town By-law, all fees for building permits and any other applicable charges shall be paid in full before the permit is issued

THE CORPORATION OF THE TOWNSHIP OF WHITEWATER REGION NOTICE

Annual Indexing of Development Charges

Pursuant to The Corporation of the Township of Whitewater Region's By-Law 21-05-1382 development charges will be adjusted annually on January 1, without amendment to the by-law, in accordance with the second quarter of the prescribed index in the *Development Charges Act, 1997*.

Effective May 1, 2021, the following Development Charges apply:

| | RESIDENTIAL NON-RESIDENTIA | | | | | |
|--|---------------------------------------|-----------------|------------------------------|---|---|-------------------------------------|
| Service/Class of Service | Single and Semi- Detached Dwelling | Other Multiples | Apartments - 2 Bedrooms + | Apartments - Bachelor and 1 Bedroom | Special Care/Special Dwelling Units | (per sq.ft. of Gross Floor Area) |
| Township Wide Services/Classes of Services: | | | | | | |
| Services Related to a Highway | 992 | 718 | 573 | 391 | 391 | 0.27 |
| Fire Protection Services | 447 | 324 | 258 | 176 | 176 | 0.12 |
| Parks & Recreation Services | 1,305 | 945 | 754 | 515 | 515 | 0.07 |
| Library Services | 132 | 95 | 76 | 52 | 52 | 0.01 |
| Growth Studies | 101 | 73 | 58 | 40 | 40 | 0.03 |
| Waste Diversion | 24 | 17 | 13 | 9 | 9 | 0.00 |
| Total Township Wide Services/Classes of Services | 3,000 | 2,173 | 1,733 | <mark>1</mark> ,183 | 1,183 | 0.50 |
| Urban Services | | | | | | |
| Wastewater Services | 1,500 | 1,087 | 867 | 591 | 591 | 1.00 |
| Water Services | 1,000 | 724 | 578 | 394 | 394 | 0.50 |
| Total Urban Services | 2,500 | 1,811 | 1,444 | 986 | 986 | 1.50 |
| GRAND TOTAL RURAL AREA | 3,000 | 2,173 | 1,733 | 1,183 | 1,183 | 0.50 |
| GRAND TOTAL URBAN AREA - PARTIAL SERVICES (WATER ONLY) | 4,000 | 2,897 | 2,311 | 1,577 | 1,577 | 1.00 |
| GRAND TOTAL URBAN AREA - FULL SERVICES (WATER AND WASTEWATER) | 5,500 | 3,984 | 3,178 | 2,169 | 2,169 | 2.00 |

Schedule B By-law Number 21-05-1382 Schedule of Development Charges



Application for a Permit to Construct New Home (Custom)

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

| For use by Principal Authority | | | | | | | |
|--|-------------------------|-----------------|---|--------------------------|--------------------|--|--|
| Application number: | Dication number: Permit | | | t number (if different): | | | |
| Date received: | | Roll nur | nber: | | | | |
| ***ALL INFORMATION WITH A | N ** IS REQUIRI | | MATION FOR NEW HO | ME CONSTRUCTIO | <mark>)N***</mark> | | |
| **Inco | mplete application | ns will NOT | be accepted** | | | | |
| Application submitted to: | Township | of Whitewate | er Region - Building Departr | nent | | | |
| (Name of munici | pality, upper-tier mu | unicipality, bo | pard of health or conservation | on authority) | | | |
| A. Project information ** | | | | | | | |
| Building number, street name | | | | Unit number | Lot/con. | | |
| | | | | | | | |
| Municipality | Postal code | | Plan number/other des | cription | 1 | | |
| | | | | | | | |
| Project value est. \$ | | | Area of work to be cor | npleted (sq ft): | | | |
| | | | Main Floor: | | 🗆 yes 🗆 no | | |
| | | | Basement: | | 🗆 yes 🗆 no | | |
| | | | Garage: | | 🗆 yes 🗆 no | | |
| B. Purpose of application ** | | | | | | | |
| | n to an g building | Altera | ation/repair 🛛 | Demolition | Conditional Permit | | |
| Proposed use of building | Cur | rrent use of | building | | | | |
| | | | | | | | |
| | | | | | | | |
| Description of proposed work | | | | | | | |
| C. Applicant** Applicant is: | □ Owner or | | Authorized agent of a sector of the secto | of owner | | | |
| Last name | First name | | Corporation or partners | | | | |
| | | | | | | | |
| 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 partners | ship | | | |
| Street address | | | | Unit number | Lot/con. | | |
| Municipality | Postal code | | Province | E-mail | 1 | | |
| Telephone number () | Fax () | | | Cell number () | | | |

Application for a Permit to Construct - Effective January 1, 2021

| E. Builder (if different from applicant)** | | | | | | | |
|--|-------------------------------|-------------------------------|-------------|---------------------------------------|-------|-----------|----|
| Last name | First name | Corporation or partners | hip (if a | pplicable |) | | |
| Street address | | | Unit n | number | L | _ot/con. | |
| Municipality | Postal code | Postal code Province E-mail | | | | | |
| Telephone number () | Fax () | | Cell n (| iumber) | | | |
| F. Tarion Warranty Corporation (Ontario | o New Home Warrant | y Program) ** | | | | | |
| i. Is proposed construction for a new hor <i>Plan Act</i> ? If no, go to section G. | | | s | | Yes | | No |
| ii. Is registration required under the Onta | rio New Home Warrantie | s Plan Act? | | | Yes | | No |
| iii. If yes to (ii) provide registration numbe | er(s): | | | | | | |
| G. Required Schedules | | | | | | | |
| i) Attach Schedule 1 for each individual who rev | views and takes responsil | bility for design activities. | | | | | |
| ii) Attach Schedule 2 where application is to con | struct on-site, install or re | pair 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). | | | | | No | | |
| 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. | | | | | No | | |
| resolution or regulation made under clause 7(1)(b) of the Building Code Act, 1992. | | | | | No | | |
| | | | | No | | | |
| iv) The proposed building, construction or demolition will not contravene any applicable law. | | | | No | | | |
| I. Declaration of applicant ** | | | | | | | |
| | | | | | | | |
| | | | | | decla | are that: | |
| (print name) | | | | | | | |
| The information contained in this applic documentation is true to the best of my | | s, attached plans and spe | ecificatio | ons, and | other | attached | |
| 2. If the owner is a corporation or partners | hip, I have the authority t | o bind the corporation or | partner | ship. | | | |
| Date | Signature of a | applicant | | · · · · · · · · · · · · · · · · · · · | | | |

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



Schedule 1: Designer Information

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

| A. Project Information | | | | · |
|--|--------------------|----------------------------------|-----------------------|---------------------------------------|
| Building number, street name | | | Unit no. | Lot/con. |
| Municipality | Postal code | Plan number/ other descrip | tion | |
| B. Individual who reviews and takes | responsibilit | ty for design activities | | |
| Name | | Firm | | |
| Street address | | | Unit no. | Lot/con. |
| Municipality | Postal code | Province | E-mail | |
| Telephone number () | Fax number () | | Cell number () | |
| C. Design activities undertaken by i Division C] | ndividual ide | ntified in Section B. [Bui | ilding Code Table | 3.5.2.1. of |
| | HVAC - | - House | Building Stru | ctural |
| Small Buildings | | g Services | Plumbing – H | |
| Large Buildings | Detection | on, Lighting and Power | Plumbing – A | |
| Complex Buildings Description of designer's work | | | On-site Sewa | age Systems |
| | | | | |
| | | | | |
| | | | | |
| D. Declaration of Designer | | | | |
| | | de | clare that (choose or | ne as appropriate): |
| (print name | e) | | | · · · · · · · · · · · · · · · · · · · |
| , , , , , , , , , , , , , , , , , , , | | | | |
| I review and take responsibility C, of the Building Code. I am of Individual BCIN: | ualified, and the | e firm is registered, in the app | | |
| Firm BCIN: | | | | |
| I review and take responsibility 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: | | | |
| 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 s | | | | |
| 2. I have submitted this application w | In the knowledg | ge and consent of the firm. | | |
| Date | | Signature of Designer | | |
| NOTE: | | | | |

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



Please complete drawing below – this is your property. Draw intended location of proposed building(s), distances from lot lines and proposed entrance location as requested on this application. If applicable, complete septic drawing on separate plot plan.

Scale is: _____

$\leftarrow \leftarrow \leftarrow \mathsf{Street} \text{ is here} \rightarrow \rightarrow \rightarrow \rightarrow$

Comment: _____



Schedule 2: Sewage System Installer Information

| A. Project Information | | | | | |
|--|----------------|--------------------------|---------------------|---------------|--|
| Building number, street name | | | Unit number | Lot/con. | |
| Municipality | Postal code | Plan number/ other descr | iption | | |
| B. Sewage system installer | • | | | | |
| Is the installer of the sewage system 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? Yes (Continue to Section C) No (Continue to Section E) Installer unknown at time of application (Continue to Section E) | | | | | |
| C. Registered installer information | on (where answ | ver to B is "Yes") | | | |
| Name | | | BCIN | | |
| Street address | | | Unit number | Lot/con. | |
| Municipality | Postal code | Province | E-mail | | |
| Telephone number () | Fax () | - | Cell number () | | |
| D. Qualified supervisor information | on (where ans | wer to section B is "Yes | ") | | |
| Name of qualified supervisor(s) Building Code Identification Number (BCIN) | | | | | |
| E. Declaration of Applicant: | | | | | |
| | | | | | |
| | | | | | |
| print name) | | | | declare that: | |
| 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; OR 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. | | | | | |
| I certify that: | | | | | |
| 1. The information contained in thi | | | | | |
| 2. If the owner is a corporation or p | | | | | |
| Date | | Signature of applicant | | | |



CONTACT INFORMATION

| NAME: | |
|------------------|--|
| MAILING ADDRESS: | |
| PHONE #: | |
| EMAIL: | |

PROPERTY INFORMATION

| STREET/ROAD: | | |
|--------------------|-------------|--|
| LOT: | CONCESSION: | |
| REGISTERED PLAN #: | | |
| ROII #· | | |

Applicant Signature

<u>Date</u>

Entrance Requirements
Top Width:
Length of Pipe:

Special Conditions/Comments: _____

Surface Type: ______ Diameter of Pipe: _____

911 Civic Address Assigned: _____

Road Superintendent

Date

*Fee Paid:*_____

Staff Initials: _____



SEPTIC SYSTEM INSTALLER FORM

| Description | Total # | X | Fixture Units | - | Total Fixture Units | |
|---|--|-------------------------------|---|----------|---------------------|--|
| Flush Tank Toilet | | | 4 | - | | |
| Each Sink, Bathtub or Shower | | | 1 1/2 | - | | |
| Dishwasher if direct connect | | | 1 1/2 | - | | |
| Clothes Washing Machine | | | 1 1/2 | - | | |
| Single or Double Laundry Tub | | | 1 1/2 | - | | |
| Other | | | . , = | - | | |
| | | | | | | |
| Total Fixtures | | | | | | |
| | | | | | | |
| Total floor area of all dwellin Total fixture units within all E Total # of bedrooms on the p Existing soil conditions in se | gs Buildings on property | the property | GE SYSTEM*** (from section above) daily flow ra | | liters/day | |
| Depth to bedrock/hardpan _ Depth to high water table Vegetation 5. Describe mantel (down-slop | Soil Type Depth to bedrock/hardpan Depth to high water table Vegetation 5. Describe mantel (down-slope area below sewage system) Existing Vegetation Soil Type DepthOR soil must be imported: Yes No | | | | | |
| CLASS OF SYS | STEM (Co | mplete on | e-refer to the Ontai | rio Bui | Iding Code) | |
| Class 4 - Filter Bed (Proof of ap | proved Filte | er Material m | nust be provided): | | | |
| Area of Filter Medium (sq.M) | | | | | | |
| No. of runs of tile | | | Header | | | |
| OR Distribution Box | | | Use of Existing Tanl | ĸ | | |
| OR Distribution Box OR New Gov't approved | Co | ncrete | Polyethylen | e | Size (L) | |
| Class 4 – Trench Bed: Dug into existing soil Total length of tile (M) OR Distribution Box OR New Gov't approved | OI No | R Imported S b. of runs of | Soil tile f existing tank Polyethylen | De He | escribeeader | |
| | | | | | | |
| Class 4 – Aerobic: Manufacture | er & Model | | | | | |
| Daily Flow Rate Capacity (L) | | | _ Primary Tank | | | |
| Size (L)Second | lary Tank Si | ze (L) | Bed | Size (S | Sq.M.) | |
| <u>Class 4 – Other:</u> Manufacturer & | Model | | | | | |
| Other details | | | _ Daily Capacity (L) | | | |

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/0 | Certification Number | | |
| | | | | | | | |
| A. Project Information | | | | | | | |
| Building number, street name | | | | | | Unit number | Lot/Con |
| Municipality | | Postal co | ode | Reg. Pla | an number/other description | on | |
| | | | | | | | |
| B. Prescriptive Comp | oliance | [indicate the l | building code co | ompliance | package being emplo | oyed in this house de | esign] |
| SB-12 Prescriptive (input design package): Package: | | | | | Table | e: | _ |
| C. Project Design Cond | | | | | | | |
| Climatic Zone (SB-1): | | | uipment Effi | ciency | Space Heating F | | |
| □ Zone 1 (< 5000 degree days) | | □ ≥ 92% AF | - | | □ Gas | • | □ Solid Fuel |
| □ Zone 2 (≥ 5000 degree days) | | □ ≥ 84% < 9 | | | | | Earth Energy |
| Ratio of Windows, Skylights & | Glass (| W, S & G) to | o Wall Area | | Other Building (| | |
| | n ² | | | | • | m □ ICF Above (| |
| Area of walls =m ² or | π | W, S & G | i % = | | 0 | d □ Walkout Bas g □ Combo Unit | sement |
| | | | N | | eat Pump (ASHP) | | |
| Area of W, S & G = \m^2 or | ft ² | Jtilize window | averaging: | Yes ⊡No | | ed Heat Pump (GS | SHP) |
| D. Building Specification | | | | | iciency components | proposed] | |
| Energy Efficiency Substitu | utions | | | | | | |
| □ ICF (3.1.1.2.(5) & (6) / 3.1.1.3 | 8.(5) & (6 |)) | | | | | |
| Combined space heating and | domesti | c water heat | ting systems | (3.1.1.2.(| 7) / 3.1.1.3.(7)) | | |
| Airtightness substitution(s) | | | | | | | |
| - | Table 3 | 1.1.4.B Red | nuired [.] | | Permit | ted Substitution: | |
| Airtightness test required | | | | | | | |
| Refer to Design Guide Attached) | Table 3. | 1.1.4.C Red | quired: | | Permit | ted Substitution: | |
| | | Rec | quired: | | | ted Substitution: | |
| Building Component | | | SI / R values m U-Value ⁽¹⁾ | | Building Comp | onent | Efficiency Ratings |
| Thermal Insulation | | Nominal | Effective | Windo | ws & Doors Prov | vide U-Value ⁽¹⁾ or ER | rating |
| Ceiling with Attic Space | | | | Window | vs/Sliding Glass | Doors | |
| Ceiling without Attic Space | | | | Skyligh | ts/Glazed Roofs | | |
| Exposed Floor | | | | Mecha | nicals | | |
| Walls Above Grade | | | Heating Equip.(AFUE) | | | | |
| Basement Walls | | | | HRV Efficiency (SRE% at 0° C) | | | |
| Slab (all >600mm below grade) | | | DHW Heater (EF) | | | | |
| Slab (edge only ≤600mm below gra | ade) | | | DWHR | (CSA B55.1 (min. 42 | 2% efficiency)) | # Showers |
| Slab (all ≤600mm below grade, or h | neated) | | | Combir | ed Heating Syste | m | |
| (1) U value to be provided in either E. Designer(s) [name(s) & | | | | viding infor | mation herein to sub | stantiate that design | meets the building code] |
| Qualified Designer Declaration | of designe | er to have revi | ewed and take | responsib | lity for the design wo | rk | |

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

COMPLETING THE FORM

B. Compliance Options

Indicate the compliance option being used.

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

C. Project Design Conditions

Climatic Zone: The number of degree days for Ontario cities is contained in Supplementary Standard SB-1 *Windows, Skylights and Glass Doors:* If the ratio of the total gross area of windows, sidelights, skylights, glazing in doors and sliding glass doors to the total gross area of walls is more than 17%, higher efficiency glazing is required. If the ratio is more than 22%, the *SB-12 Prescriptive* option may not be used. The total area is the sum of all the structural rough openings. Some exceptions apply. Refer to 3.1.1.1. of SB-12 for further details. *Fuel Source and Heating Equipment Efficiency:* The fuel source and efficiency of the proposed heating equipment must be specified in order to determine which <u>SB-12 Prescriptive</u> compliance package table applies. *Other Building Conditions:* These construction conditions affect <u>SB-12 Prescriptive</u> compliance requirements.

D. Building Specifications

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

BUILDING CODE REQUIREMENTS FOR AIRTIGHTNESS IN NEW HOUSES

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

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

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

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

E. House Designer

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

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]

| SB-12 Performance* [SB-12 - 3.1.2.] | * Attach energy performance results using an approved software (see guide) |
|--|--|
| ENERGY STAR®* [SB-12 - 3.1.3.] | * Attach Builder Option Package [BOP] form |
| □ <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 F | Fuel Source | |
|---|------------------------------|----------------------------------|-------------------|--------------------|
| □ Zone 1 (< 5000 degree days) | □ ≥ 92% AFUE | 🗆 Gas | Propane | Solid Fuel |
| □ Zone 2 (≥ 5000 degree days) | □ ≥ 84% < 92% AFUE | □ Oil | Electric | Earth Energy |
| Ratio of Windows, Skylights & Glass | (W, S & G) to Wall Area | Other Building Characteristics | | |
| | | • | | ade 🛛 ICF Basement |
| Area of walls = $m^2 \text{ or} _{ft^2}$ | | Slab-on-ground Walkout Basement | | |
| | W, S & G % = | Air Conditionin | g 🛛 Combo Unit | |
| | , | Air Source Hea | at Pump (ASHP) | |
| Area of W, S & G =m ² orft ² | | Ground Source | e Heat Pump (GSHP | P) |
| 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 $W/(m^2 \cdot K)$ or $Btu/(h \cdot ft^2 \cdot F)$ 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 isGJ (1 GJ =1000MJ) | | | | | | |
| The annual energy consumption of this house as designed isGJ | | | | | | |
| The software used to simulate the annual energy use of the building is: | | | | | | |
| The building is being designed using an air tightness baseline of: | | | | | | |
| OBC reference ACH, NLA or NLR default values (no depressurization test required) | | | | | | |
| □ Targeted ACH, NLA or NLR. Depressurization test to meetACH50 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 | | |
| | | | | |
| | | | | |

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

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

COMPLETING THE FORM

B. Compliance Options

Indicate the compliance option being used.

- <u>SB-12 Performance</u> refers to the method of compliance in Subsection 3.1.2. of SB-12. Using this approach the designer must use recognized energy simulation software (such as HOT2000 V10.51 or newer), and submit documents which show that the annual energy use of the proposed building is equal to or less than a prescriptive (referenced) building package.
- <u>ENERGY STAR</u> houses must be designed to 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 <u>SB-12 Prescriptive</u> compliance package table applies. *Other Building Conditions:* These construction conditions affect <u>SB-12 Prescriptive</u> compliance requirements.

D. Building Specifications

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

E. Performance Design Summary

A summary of the performance design applicable only to the <u>SB-12 Performance</u> option.

F. ENERGY STAR or R-2000 Performance Method

Design to ENERGY STAR or R-2000 Standards.

G. House Designer

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

BUILDING CODE REQUIREMENTS FOR AIRTIGHTNESS IN NEW HOUSES

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

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

OBC Reference Default Air Leakage Rates (Table 3.1.2.1.)

| Detached dwelling | 3.0 ACH50 | NLA 2.12 cm ² /m ² | NLR 1.32 L/s/m ² |
|-------------------|-----------|--|-----------------------------|
| Attached dwelling | 3.5 ACH50 | NLA 2.27 cm ² /m ² | NLR 1.44 L/s/m ² |

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

ENERGY EFFICIENCY LABELING FOR NEW HOUSES

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



TOWNSHIP OF WHITEWATER REGION 44 Main Street, PO Box 40 Cobden ON K0J 1K0 P: 613-646-2282 F: 613-646-2283 www.whitewaterregion.ca

Letter of Authorization

To Whom It May Concern:

| l, | of | | do hereby permit |
|----------------|-------------------|-------------------|------------------|
| (Owner's name) | (Owner's Address) | | 5 1 |
| | | | |
| | of | | |
| (Agent's name) | 01 | (Agent's address) | |

to act as Authorized Agent in regards to applying for, and receiving of Building Permits for the following project;

(Project Address)

(Owner's signature)

(Agent's signature)

(Date)