GRAVENHURST
GATEWAY TO MUSKOKA

Permit Application Guide
For a Garage, Gazebo, Sauna, Pump House or Shed

The following pages contain the permit application, as well as other forms that may be required for your permit application.

Approvals required:

1. If you are doing any new construction or additions to any existing structure you may require **Planning approval.**

Building Permit Process:

1. An Application for a Permit to Construct or Demolish is to be fully completed including Roll No.;
2. The following plans are required, depending on the scope of your project.
    - Site plan to scale in metric showing all structures, proposed structures, wells, overhead hydro lines, septic system, with dimensions and setbacks;
    - Building plans to scale in imperial (2 sets of each) including;
    - Floor plans
    - Cross sections (including air barrier location and details)
    - Elevations
    - Truss plans
    - Engineered floor systems
    - Plumbing
    - Heating systems, duct work plans(including Heat loss calculations)
    - Any engineered documents
    - Energy Efficiency
3. Ensure that the Schedule 1 " Designer" sheet is completed by each individual who has completed any of the above noted designs, ie) plumbing, heating, floor plans, etc.
4. Permit fees;
5. A completed septic calculation sheet, if applicable. The performance level of a septic system must be evaluated if one or more of the following are proposed.
    - Adding Bedrooms
    - Adding fixture units, or
    - Increasing the floor area by 15% or greater

    The daily design flow of the septic system must meet Division B 8.2.1.3 of the Ontario Building Code.
    - A separate application will be required for a new sewage system or upgrade.

Contents:

Application Worksheet
Energy Efficient Design Summary Sheet
Electrical Components Checklist

The Building Department can only accept and review complete applications and plans. The review is to ensure that they meet Ontario Building Codes, Municipal by-laws and other applicable law. If the project requires a septic approval, the building permit will not be issued until such approval is granted.

Application Worksheet

The following documents must be provided with your completed permit application. To ensure that the permit can be processed as efficiently as possible, the application will not be accepted if any documents are missing or incomplete. For further clarification, reference can be made to the Building Code Act.

ALL FIELDS OF APPLICATION ARE FILLED IN ☐ YES or ☐ NO and REASON

DESIGNER SHEET	YES	NO	REASON
HOUSE			
PLUMBING			
HVAC			
OTHER			

Incomplete drawings create long delays in obtaining a building permit. Please ensure that all drawings provide sufficient detail to allow the design to be assessed for compliance with the Building Code Act and Ontario Building Code. [BCA S. 1.1(2)] Drawings must be to scale and accurately dimensioned. Below is a checklist to help ensure that the drawings are complete.

DRAWINGS	YES	NO	REASON
Site plan to scale (metric) (2 copies)			
House drawings (imperial) (2 copies)			
Plumbing drawings (2 copies)			
HVAC design and drawings (2 copies)			
Complete floor plans with all rooms labelled			
Foundation plans detailing all footings and foundations with reinforcing details.			
Cross section detailing all building elements, including details and location of air barrier.			
Framing plans for all floors and roof			
Engineered product layout and design			
Building elevation drawings			
Electrical information			
Energy Efficiency			
OTHER REQUIRED DOCUMENTS	**YES**	**NO**	**REASON**
Letter of Authorization for Agent (If applicable)			
Deed or survey			
Entrance permit			
Development Standards By-Law (grading plan)			
District water/sewer permit (Permit #)			
Site plan control applies			
Zoning compliance			
Lake Flood Elevation Requirement met			
Other Agency Approvals (MNR, DFO, MTO)			
Compliance with other applicable law			
Fees			
District Development Fee (If required)			
Township Development Fee (If required)			

Energy Efficiency Design Summary

(Part 9 Residential)

This form is used to summarize the energy efficiency design of the project. Information on completing this form is on the reverse.

For use by Principal Authority	

A. Project Information

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

B. Compliance Option

□ *SB-12 Prescriptive* [SB-12 – 2.1.1.]	Table: Package: A B C D E F G H I J K L M (circle one)
□ *SB-12 Performance** [SB-12 – 2.1.2.]	*Attach energy performance calculations using an approved software
□ *Energy Star*®* [SB-12 – 2.1.3.]	*Attach BOP form. House must be labelled on completion by Energy Star
□ *EnerGuide 80*®*	*House must be evaluated by NRCan advisor and meet a rating of 80

C. Project Design Conditions

Climatic Zone (SB-1):				
□ Zone 1 (< 5000 degree days) □ Zone 2 (≥ 5000 degree days	□ ≥ 90% AFUE □ ≥ 78% < 90% AFUE	□ Gas □ Oil	□ Propane □ Electric	□ Solid Fuel □ Earth Energy
Gross Wall Area = m^2 Gross Window+ Area = m^2	% Windows + _____%	□ ICF Basement □ ICF Above Grade	□ Walkout Basement □ Slab on Grade	□ Log/Post&Beam

D. Building Specifications

Building Component			
Thermal Insulation		**Windows & Doors**[1]	
Ceiling with Attic Space		Windows/Sliding Glass Doors	
Ceiling without Attic Space		Skylights	
Exposed Floor		**Mechanicals**	
Walls Above Grade		Space Heating Equip.[2]	
Basement Walls		HRV Efficiency (%)	
Slab (all >600mm below grade)		DHW Heater (EF)	
Slab (edge only ≤600mm below grade)		NOTES 1. Provide U-Value in W/m2.K, or ER rating 2. Provide AFUE or indicate if condensing type combined system used	
Slab (all ≤600mm below grade, or heated)			

E. Performance Design Verification [complete applicable sections if *SB-12 Performance, Energy Star or EnerGuide 80* options used]

SB-12 Performance:
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.

Energy Star: BOP form attached. The house will be labelled on completion by:

Energy Star and EnerGuide80:
Evaluator/Advisor/Rater Name: Evaluator/Advisor/Rater Licence #:

F. Declaration [names of designers who are responsible for the building code design and whose plans accompany the permit application]

I certify that I have reviewed the design documents submitted with the permit application, that the information contained on this form is consistent with the design documents, and that information used in any annual energy use calculations, if applicable, is a true representation of the design documents.

Architectural	Mechanical

Guide to the Energy Efficiency Design Summary Form

The *Energy Efficiency Design Summary* form summarizes the compliance path used by a house designer to comply with energy efficiency requirements of the Ontario Building Code. This form is completed by the person responsible for the energy efficiency design of the project, and must be submitted with the building permit application. The information on this form MUST reflect the drawings and specifications being submitted, or the building permit will be refused. 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 at www.mah.gov.on.ca, or the municipal building department.

Beginning January 1, 2012, a house designer must use one of four energy efficiency compliance options in the building code:

Comply with the *SB-12 Prescriptive* design tables,
Use the SB-12 Performance compliance method, and model the design against the prescriptive standards,
Design to *Energy Star* standards, or
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.
SB-12 Performance refers to the alternative method of compliance set out in Subsection 2.1.2. of SB-12. Using this approach the designer must use recognized energy simulation software (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 be labelled on completion by Enerquality or other agency. 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 and 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.

AIRTIGHTNESS REQUIREMENTS FOR 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. A blower door test to verify the air tightness of the house must be conducted during construction if the NRCan EnerGuide80 option is used, or if the SB-12 Performance or Energy Star options are 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.

ENERGY EFFICIENCY LABELING FOR NEW HOUSES

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

GRAVENHURST
GATEWAY TO MUSKOKA

Electrical Components Checklist for Building Permit

(see OBC Section 9.34. Electrical Facilities)

****Residential ****

OK	N/A	Site Plan
☐		Proximity to buildings, overhead and buried, voltage of hydro-electric transmission lines (9.1.1.5. and 3.1.19.)
		Show Location of:
☐	☐	Location of Smoke Alarms (9.10.19 & 3.2.4.22.)
☐	☐	Location of Carbon Monoxide Detectors (9.33.4. and 6.2.12)
		Lighting Outlet Locations:
☐	☐	Exterior lighting at entrances (9.34.2.1(1)) Must meet the requirements of the Town of Gravenhurst Dark Sky By-Law
☐	☐	Lighting outlets in kitchen, bedrooms, living rooms, utility rooms, laundry rooms, dining rooms, bathrooms, water closet, vestibules and hallways(9.34.2.2.(1))
		Stairway lighting Locations (9.34.2.3)
☐	☐	3 way wall switch at head and foot of each stairs where more than 4 risers on stairs (9.34.2.3.(2))
☐	☐	Single light switch at head and foot of stairs for unfinished basement(9.34.2.3.(3))
☐	☐	Single light switch leading to built in garage (9.34.2.6.(1))
☐	☐	Outlet for every 30 m² sq of unfinished basement space(9.34.2.4.(1))
	☐	Lighting outlet near doorway in storage room, attached, built in or detached garage or carport, ((9.34.2.5.(1), 9.34.2.6.(1))
		Public and Service Areas
☐	☐	Lighting outlets controlled by a wall switch (see Table 9.34.2.7 if required for minimum, light requirements) (9.34.2.7.)