#### THE CORPORATION OF THE CITY OF SARNIA



**Building Services** 

# Solar Panels - Application Submission Checklist

The following permit application information applies to solar collectors that are being installed on the roof of a house (detached or semi-detached dwellings, townhomes, row houses, duplexes etc.)

The City of Sarnia requires a permit be obtained for any solar panel system with a face area over 5 sq. m. that is mounted to a building or structure.

Existing buildings must be evaluated for additional loading that the solar panels may apply to the roof assembly. Solar panels may not only add dead loads to the structure, but they can also cause live loads (snow accumulation due to placement of panels). Additionally, the transfer of loads through the panel mounting systems may cause a relocation of how and where the loads are applied to the roof assembly (uniform and/or point loads).

Even if the structural support system has some amount of additional capacity, a review is necessary to determine the amount of that additional capacity compared to all loads being applied with the installation of panels. Trusses are typically designed to meet the minimum design loads as specified in the Ontario Building Code for the specific building they are to be installed on. Any additional loads could exceed the structural capacity of these trusses.

If insufficient capacity is identified systems would have to be strengthened. Some building owners may be tempted to install a system without proper review however proper steps must be taken to ensure the protection of your building and the safety of its occupants.

#### 1. Permit to Construct or Demolish Application Form

A standardized application form prescribed by the Ministry of Municipal Affairs and Housing.

#### 2. Commitment to General Review Form

#### 3. Plans

All plans must be sealed by the reviewing engineer. Engineering review is required for: fastening details, loading of existing structural systems and the addition of bracing/support.

#### Fastening System Info:

- 1. Panel mounting detail
- 2. Spacing of fasteners/rails/supports
- 3. Location of panels on existing structure along with corresponding location of supporting elements in these areas

#### **Building System Review:**

- 1. Identify existing structural system including sizes and spacing
- 2. Provide loading diagram for structural elements (live and/or dead loads and identify all point loads created by panel mounting system)

- 3. Ensure review of loads due to snow, wind and rain as outlined in OBC Div. B 4.1.6.16 and 4.1.7.13 values for these loads should be included in loading.
- 4. A Structural Analysis may be required for more complex roofs (multiple valleys, ridges, obstructions, etc.)

# **Supplementary Construction:**

- 1. Identify size and location of any supports or bracing to be provided to existing systems
- 2. Prescribe size and location of all new supports
- 3. Confirm all loads are sufficiently transferred to footings

#### 4. Specifications

Solar Panel Data Sheet from manufacturer.

#### **Electrical Safety Authority**

Doing electrical work? A notification must be filed with the <u>Electrical Safety Authority</u>. Hiring someone to do Electrical work? They must be a Licensed Electrical Contractor. For more information, go to esasafe.com or call 1-877-372-7233



# THE CORPORATION OF THE CITY OF SARNIA

# Building Services Application for a Permit to Construct or Demolish This form is authorized under subsection 8(1.1) of the Building Code Act, 1992

For use by Principal Authority								
Application number:		Permit r	Permit number (if different):					
Date received:		Roll nun	Roll number:					
Application submitted to:(Name of munic	cipality, upper-tiel	r municipality, bo	ard of health or conserv	ation authority)				
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								
New construction existing	existing building		tion/repair Demolition Conditiona Permi					
Proposed use of building Curre		Current use of	ent use of building					
Description of proposed work								
C. Applicant Applicant	is: Owne	eror Au	uthorized agent of owner					
Last name	First nam	ne	Corporation or partnership					
Street address				Unit number	Lot/con.			
Municipality	Postal co	ode	Province	E-mail *				
Telephone number	Fax			Cell number	Cell number			
D. Owner (if different from applicant	)							
Last name	First nam	ne	Corporation or partnership					
Street address				Unit number	Lot/con.			
Municipality	Postal co	ode	Province	E-mail *	E-mail *			
Telephone number	Fax			Cell number				

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

# SARNIA ONTARIO

#### THE CORPORATION OF THE CITY OF SARNIA

**Building Services** 

## **Permit Process Guide**

### **Submitting a Complete Application**

An application is considered "complete" where the proposed construction conforms with all Applicable Laws, includes the required Application Forms, and the required Construction Plans as outlined in the City of Sarnia Building By-law. Refer to the Submission Checklist attached.

Applications can be submitted electronically by e-mailing the documents to building@sarnia.ca. Please refer to the Electronic Submission Standards when preparing your submission.

Alternatively, documents can be dropped off at the City Hall drop box, located near the South facing, Christina St. entrance.

#### Complete Applications, Review Timelines and Building Permit Issuance

Applicants will be notified if the application submitted is not considered a "complete application" and will be provided with a list of the outstanding approvals/documents. The review timeline will not apply to in-complete applications.

Applications that are deemed a "complete application" will be reviewed and will be issued or refused within 10 Business Days for a House, Accessory Building, Deck, Tent or Sign. A time frame of 15 days applies to other Small Buildings, Residential Secondary Unit's, and Farm Buildings less than 600 Sq M.

If the application is refused, the applicant will be contacted and provided with all reasons why the application has been refused. The application is circulated to multiple departments, and comments may be received separately. The applicant can then address all outstanding items, make necessary modifications, or obtain missing information, and submit them to building@sarnia.ca for review.

If the application is not acceptable due to zoning non-compliance, the applicant can either apply to the Committee of Adjustment for a Minor Variance to zoning requirements or apply for a Zoning Amendment (rezoning). These applications should be submitted to the Planning Department at planning@sarnia.ca.

If the application is approved, the applicant will be contacted regarding permit fees, development charges, payment methods, and a permit will be issued. The Building Permit must be posted on the project site in a location visible from the street.

#### **Inspections**

After the Building Permit has been issued, and the payment has been made, the applicant will be provided with the Approved Drawings, Building Permit and Required Inspections list. Construction may only begin once a Building Permit has been issued.

All construction must conform the Ontario Building Code and the approved drawings. The approved drawings may contain key notes/changes from the Plans Examiner.

It is the Permit Holder's responsibility to call and request inspections at the various stages listed on the Required Inspections sheet PRIOR to continuing construction and Final inspection after all work is complete. The inspection request must be made, allowing 48 hours advance notice, excluding weekends and statutory holidays.

Changes/Revisions to the Approved Drawings, must be submitted for re-review through revised drawings. Revised drawings and related information must be submitted to building@sarnia.ca, noting the building permit number. Construction related to the revisions cannot continue until the revisions have been approved, and any additional fees have been paid.

When all work and required inspections have been completed, and the conditions of the Minor Variance have been completed (if applicable), the building permit will be closed. An open building permit is an order against the property and may cause a problem when selling the property or during a re-financing process.