



# **SOLAR PANELS**

## **MOUNTED ON BUILDINGS**

### **ONTARIO BUILDING CODE**

Section 1.3.1.1 (f) Div A of the Ontario Building Code <u>requires</u> a Building Permit to be issued **prior** to the installation of any solar collector that is mounted on a building and has a face area equal to or greater than 5 sq m (50 sq ft). For the purpose of clarity "face area" shall include the aggregate area of all panels or modules.

#### **BUILDING PERMITS**

Applications for Building Permit shall be accompanied with 2 sets plans and specifications of the proposed installation designed by a Professional Engineer licensed in the Province of Ontario. An on-site field review of their installation shall be undertaken. Submissions are reviewed to ensure that the weight of the collector system including additional roof loads due to wind uplift, snow accumulation and their anchorage connections can be safely accommodated. It is important to note that reinforcement of existing structural components may be required to ensure the structural adequacy of the existing building.



A Building Permit is **NOT** required for solar collector system installations where:

- 1. The panel is less than 5 sq m (50 sq ft) in area.
- 2. The panel is not installed on a building
- 3. Is not connected to a plumbing system
- 4. Is not connected to a Mechanical heating system

#### NOTE:

Electrical permits and/or inspections available from the Electrical Safety Authority (ESA) may also be required where there are electrical connections as part of the system.

Proof of Electrical Safety Authority (ESA) compliance will be required by the Building Division; prior to finalizing the permit.

### **SUBMISSION REQUIREMENTS**

Submissions shall include:

- ✓ 2 copies of a roof plan indicating the layout and spacing of the solar collectors on the roof of the building.
- ✓ Typical cross-section including but not limited to system height, tilt angle and attachments.

- ✓ Panel or module dimensions and manufacturers specifications including panel dead load and ballast where applicable.
- Mounting details clearly specifying panel attachment and specifications including framing reinforcement as may be required.
- Verification of existing roof or wall framing components affected by the proposed installation and the ability of the affected building structural system to accommodate all loads associated with the solar collector system including dead load, wind load, snow accumulation and seismic load.
- ✓ Solar collector systems used for the production of heat for water shall include mechanical drawings (plumbing schematic) detailing any connection to the potable water system.
- ✓ A Commitment to General Review Form completed by a Professional Engineer

Building Permit Fees will be based upon the approved rate calculated against the total construction value of the entire installation.

#### **BUILDING INSPECTION**

After your solar collector system is installed a building inspector needs to inspect and sign off on your system. A copy of the Building Permit **MUST** be posted on the building.

If you have a grid-connected PV system, in most cases the Electrical Safety Authority must inspect your system before it is turned on.

Depending upon the inspection, your system may need corrections or modifications to satisfy the inspector's requirements.



Always make sure that permitting costs and responsibilities are addressed with your installer at the start of the process. Whatever you do, DO NOT short cut the Building Permit process. Remember, the building permit helps insure that the grid and your home are safe for everyone.

For further information please contact our Building Division at (519) 426-4377 Simcoe Office or (519) 875-4485 Langton Office

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