



CLEARVIEW

## Solar Collectors Mounted to Buildings or Structures Information Guide and Process

### Overview

The Township of Clearview requires a permit be obtained for any solar collector with an aggregate face area of 5 sq. m. or greater that is mounted to a building or structure.

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

### Requirements for a building permit application

#### Single Family Installations

1. Plan View:

- Location of panels on building

2. Building system review: (By Professional Engineer of Ontario)

- Identify existing structural system including sizes and spacing
- Provide loading diagram for structural elements (live and/or dead loads and identify all point loads created by panel mounting system)
- Ensure review of loads due to snow and rain as outlined in 4.1.6 values for these loads are included in loading.

3. Supplementary construction (if upgrades are required): (By Professional Engineer of Ontario)

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

4. Fastening system info: (By Professional Engineer of Ontario)

- Panel mounting detail.
- Size and spacing of fasteners/rails/supports
- Location of panels on existing structure along with corresponding location of supporting elements in these areas

5. Pre-manufactured mounting rail system manufacture specifications

6. Solar panel manufacture specifications

**\*All documentation must bear the seal of the Professional Engineer, including submission of completed "Commitment to General Review by Architect and Engineers" form.**

7. Upon completion of the solar installation a Professional Engineer of Ontario is required to review the installation and provide a certification letter to the Building Inspector.

## **Requirements for a building permit application Multi-residential, Institutional, Commercial, and Industrial**

### **1. Plan View:**

- Location of panels on building
- 2. Building system review: (By Professional Engineer of Ontario)
- Identify existing structural system including sizes and spacing
- Provide loading diagram for structural elements (live and/or dead loads and identify all point loads created by panel mounting system)
- Ensure review of loads due to snow and rain as outlined in 4.1.6 values for these loads are included in loading.

### **3. Supplementary construction (if upgrades are required): (By Professional Engineer of Ontario)**

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

### **4. Fastening system info: (By Professional Engineer of Ontario)**

- Panel mounting detail.
- Size and spacing of fasteners/rails/supports.
- Location of panels on existing structure along with corresponding location of supporting elements in these areas.

### **5. Mounting rail system details: (By Professional Engineer of Ontario)**

### **6. Solar panel manufacture specifications.**

**\*All documentation must bear the seal of the Professional Engineer, including submission of completed “Commitment to General Review by Architect and Engineers” form.**

7. Upon completion of the solar installation a Professional Engineer of Ontario is required to review the installation and provide a certification letter to the Building Inspector.

## **How to apply for a building permit**

To apply for a building permit, visit our website [www.clearview.ca/portal](http://www.clearview.ca/portal) Please create an account which can also be used to pay for your building permit application, download permit documents and schedule inspections.

Alternatively, you can apply for the permit in person by visiting our offices, please ensure to bring all required documents in a detailed and legible format.

## **Cost of building permit**

The cost of the permit is \$463.00, you can pay for your permit through your online CityView account, we also accept cash, cheque, and debit as methods of in person payment. The permit fee includes the administrative process, the review of drawings, the building permit and building inspections.

## **Time**

Once a complete permit application is made the permit will be reviewed within a maximum of 10 business days.

## **Required Building Inspections**

Building inspections are booked online through your CityView account, or by contacting the Building Department 705-428-6230 ext. 232.

When requesting inspections, please quote Building Permit Number and allow a minimum of 48 hours' notice.

Required inspections include.

- Structural Wood Frame inspection
- Final Building inspection (Final certification letter from Professional Engineer required)

- Note that the above inspections may be completed in a combined inspection.

**Any Questions?**

Phone: 705-428-6230 ext. 232

Web: [www.clearview.ca](http://www.clearview.ca)

**Office hours.**

Monday to Friday

8:30am – 4:30pm