

# Solar Collector Installations on Low Rise Residential Buildings

## Building Permit and Submission Requirements

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### Building Permit Requirements

A Building Permit is required for the installation of solar collector systems mounted on a building having a face area equal to or greater than 5 m<sup>2</sup>. For purposes of clarity "face area" shall include the aggregate area of all panels or modules either in a series or an array mounted on a building. This includes:

- Photovoltaic (PV) Solar System, converting sunlight to electricity generation.
- Photovoltaic (PV) or non-PV Solar Panels (SP), used for potable water heating.
- Photovoltaic (PV) or non-PV Solar Panels (SP), used for space heating or swimming pool heating.

The design of solar collector systems and the on-site field review of their installation shall be undertaken by a professional engineer licensed in the Province of Ontario.

### Submission Requirements

Submissions shall include:

- A roof plan or wall elevation 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.
- Where an engineered proprietary racking system is used, documentation shall be submitted certifying compliance of the pre-manufactured system to the applicable design standard for aluminum or steel construction in compliance to the Ontario Building Code 2006 and any conditions or limitations of the installation appended to the manufacturers installation manual.
- 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 collector and racking system including dead load, wind load and snow accumulation.
- Solar panels used for the production of heat for water shall include mechanical drawings (plumbing schematic) detailing any connection to the potable water system.

### Application Form

- Building Permit applications must be submitted on the provincial [Application Form](http://www.mah.gov.on.ca/Page8491.aspx): <http://www.mah.gov.on.ca/Page8491.aspx>.
- Application Forms are also available at [Client Service Centres](#) located throughout the City.
- We recommend that you take the time required to read and carefully complete the application form and schedules. It is important that you ensure that your applications are complete, accurate and signed.

### Fee payment

- The Building Permit fee is based on the approved rate calculated against the value of the proposed construction. See [Fee Schedule](#) for more information: <http://ottawa.ca/e/CON016788>.

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