



## Solar Collector Installations on Part 3 Buildings Documentation Submission Checklist

### A. Project Information

Municipal Address:

### B. For use by City of Ottawa

Application No:

Date Received:

Building permit applications for the installation of solar collector systems on roofs of Part 3 Buildings are to be accompanied by this submission checklist, drawings and other applicable documents which clearly describe the proposed construction. This checklist identifies information and confirmations required to be provided along with the building permit application and documentation. Completion of this checklist does not ensure automatic approval of the submitted documentation.

### C. Design Load Information For Solar Collector Assembly

**Section C shall be completed by the structural engineer responsible for the design of the solar collector system (layout, racking, attachments, etc.).** The design loads and compliance information indicated below are to be shown on the drawings and / or documentation submitted with the building permit application.

Items	P. Eng. Initial
<p><i>Dead Load:</i> Loads associated with the weight of solar panels, racking system, ballast, electrical wiring and any other appurtenant components.</p>	
<p><i>Snow Load:</i> Snow load parameters <math>I_s</math>, <math>S_s</math>, <math>S_r</math>, design snow load(s), <math>S</math>, and snow accumulation diagrams and extent, where applicable.</p>	
<p><i>Wind Load:</i> Wind load parameters <math>I_w</math>, <math>q_{1/50}</math>, <math>c_g</math>, <math>c_p/c_f</math> and design wind load(s), <math>p</math>, used for the design of the various solar collector assembly components and their connections. Where the wind load has been established through experimental studies: i) Where the wind load has been established through experimental studies, provide: title, reference numbers, authors and issuance dates of the experimental study reports, and ii) a statement that the design wind load has been reviewed by the structural engineer based on the information provided in the referenced studies.</p>	
<p><i>Earthquake Compliance:</i> Note indicating that earthquake loads have been considered and the proposed solar collector installation complies with the objectives of Article 4.1.8.18 of the 2012 Ontario Building Code.</p>	

### D. General Information to be Submitted

**Section D shall be completed by the structural engineer responsible for the design of the solar collector system (layout, racking, attachments, etc.).** The information indicated below is to be shown on the drawings and / or documentation submitted with the building permit application.

Items	P. Eng. Initials
Roof plan showing layout of solar collector assembly.	
Typical cross-section including but not limited to panel dimensions, row spacing, overall height of system, tilt angle, and other pertinent information.	
Type and location of ballast and / or anchorage points, including anchorage details to existing structure.	
Note indicating that the solar panels and their connections (include manufacturer and model number) are structurally adequate to resist the indicated loads.	
Note indicating that the racking system (include manufacturer and model number) is structurally adequate to resist the indicated loads.	

Name of professional engineer: (Please print) \_\_\_\_\_

Name of consulting firm: (Please print) \_\_\_\_\_

Date: (Please print) \_\_\_\_\_

**E. Verification of Existing Structure**

**Section E shall be completed by the structural engineer responsible for the design of the solar collector system (layout, racking, attachments, etc.).** The information indicated below are to be shown on the drawings and/or documentation submitted with the building permit application.

<i>Items</i>	<i>P. Eng. Initials</i>
The structural engineer responsible for the verification of the existing structure confirms that the design load criteria, as specified in Section C, are appropriate for the local climatic conditions.	
An evaluation of the building components affected by the proposed solar collector installation has been carried out.	
Construction details which require field verification have been clearly identified on the drawings.	
Upgrading works for the building structure have been included on the drawings, where applicable.	
Note indicating that the effect of the solar panel installation on the existing snow distribution has been evaluated.	
All existing structural members and connections affected by the proposed solar system installation have been reviewed for all applicable loads (including lateral loads) and meet (with upgrading works where applicable) the objectives of the 2012 Ontario Building Code.	
The function of the building for its intended use (serviceability) will not be adversely affected by the proposed installation, including roof drainage.	

Name of professional engineer: (Please print) \_\_\_\_\_

Name of consulting firm: (Please print) \_\_\_\_\_

Date: (Please print) \_\_\_\_\_

**F. Commitment to General Reviews**

**Section F shall be completed by the structural engineer responsible for the general review of the solar collector system installation.**

<i>Items</i>	<i>P. Eng. Initials</i>
Commitment to general reviews by engineers, including the final inspection report.	

Name of professional engineer: (Please print) \_\_\_\_\_

Name of consulting firm: (Please print) \_\_\_\_\_

Date: (Please print) \_\_\_\_\_