



VILLAGE OF GLENCOE

PUBLIC WORKS DEPARTMENT

675 Village Court, Glencoe, Illinois 60022
p: (847) 835-4111 | publicworks@villageofglencoe.org | Follow Us: @VGlencoe

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www.villageofglencoe.org

Solar Installation Checklist Information Required for Permit Application

Owner: _____	Parcel Number: _____
Address: _____	<input type="checkbox"/> Residential Use (2015 IRC) <input type="checkbox"/> Commercial Use (2015 IBC)
Installation Co: _____	Contact Name: _____
Address: _____	City, State: _____
Phone Number: _____	E-mail: _____

References: 2015 International Residential Code/2015 International Building Code, Village of Glencoe Zoning Ordinances, 2014 National Fire Prevention Electric Code

1. Building Permit application must be completed.

A. Applies to new structures and existing structures with remodeling/additions

2. Two copies of the construction documents for all structures to be erected on premise. All construction documents are to be sealed by an Illinois licensed architect or structural engineer, as applicable and dated. Construction documents will include complete drawings and specifications of all new and existing conditions.

Each copy should include the following:

A. One copy of the sealed structural layouts, foundations, sections, and calculations for the Solar Panel System. Design drawings to be submitted with permit application.

B. One copy of each of the required submittals.

3. Three copies of the site improvement plans, including all lot lines, building setbacks, existing structures, parking layouts, landscaping plan/privacy fence, and general grading.

4. Plat of survey of the property involved.

5. Answer questions where indicated below:

A. Detailed explanation of the use of the structure (height of the Solar Panel/s) (highest point):

Type of Solar System Being Proposed:

A. Photovoltaic: _____

Type of Inverter:

_____ Grid Tie Inverter: PV System tied directly to the electrical grid (Remote Disconnect Required for Fire Personnel)

_____ Off Grid Inverter: PV System is stand alone or off electrical grid (Remote Disconnect Required)

_____ On/Off Grid Inverter: PV is tied to the electrical grid and has battery backup (Remote Disconnect Required)

B. Thermal: _____

The Location of Solar Panel System:

A. _____ Ground Mounted (Provide 2 copies of the site plans showing the distances to all buildings, and the set-backs to all property lines.)

B. _____ Roof Mounted (Provide a plan showing the location that the panels are installed on the roof following the latest edition of International Fire Code requirements.

Required Installation Submittals To Be Include With The Construction Drawings:

1. Provide a copy of the complete cut-sheets of the system to be installed.
2. Provide wiring diagrams of the system showing the interior/exterior locations of the automatic disconnect for COM ED and the remote disconnect for fire department. These disconnects are to be marked per the 2014 NEC requirements. Indicate the locations of the plaques and directories required per the 2014 NEC requirements (Article 690 and 705).
3. Indicate if the system contains an automatic disconnect if the grid system loses power. If the system contains batteries it will have to have a remote disconnect, accessible by the fire department, to prevent back
-feeds to the rest of the electrical system during an emergency.
4. Provide a copy of the application for the required Interconnect Agreement from COM ED (Appendix B).
<https://www.comed.com/customer-service/rates-pricing/interconnection/Pages/transmission.aspx>

5. Provide a letter from the Public Safety Department that they have reviewed and approved the installation of the system. The Public Safety Department should also give their approval of any required remote disconnects.
6. Provide a floor plan of the location the electrical panel/s will be installed in the structure or a utility room.
7. Provide the location of the new wiring for the panels. Indicate whether the wiring is on the exterior or interior of the structure and that it will be installed per the 2014 NEC.
8. Does this installation contain a storage battery system? If it does, supply the installation requirements for the batteries and the location of the batteries per the 2015 IBC/IRC.
9. For a roof mounted system, provide a review of the existing structure, the panels, and the panel anchorage by a State of Illinois licensed architect or structural engineer. This review is to be based on the requirements of the 2015 IBC / 2015 IRC (which every is applicable)

Required Code Sections to be reviewed (For Reference):

2015 International Building Code

Sections 1510.7 – 1510.7.4

Section 1510.9

Required Code Sections to be reviewed (For Inspections):

If the contractor is prepared, only two inspections (a rough and a final) are required to complete solar panel installation. Below are the following NEC Code Sections that the inspector will review as part of the installation.

2014 National Electric Code – Article 690- Solar Photovoltaic (PV) Systems

- 690.5 Section (C) Labels and Markings
- 690.6 Section (C) Disconnecting Means
- 690.9 Section (B) Overcurrent Device Ratings
- 690.10 Section (C) Single 120-Volt Supply
- 690.11 Arc-Fault Circuit Protection
- 690.13 Building Or Other Structure Supplied by a Photovoltaic System, Section (A) Location
- 690.17 Section (A) Manually Operable
- 690.17 Section (B) Simultaneous Opening of Poles
- 690.17 Section (E) Interrupting Rating
- 690.31 Methods Permitted, Section (A) Wiring Systems, Section (B) Identification and Group, Section (B)(4) Grouping, Section (G) Direct-Current Photovoltaic Source, Section (G)(2) Flexible Wiring Methods
- 690.34 Access to Boxes
- 690.35 Underground Photovoltaic Power Systems, Section (A) Disconnects, Section (B) Overcurrent Protection, Section (C) Ground-Fault Protection
- 690.43 Section (A) Equipment Grounding Required, Section (B) Equipment Grounding Conductor Required, Section (D) Photovoltaic Mounting Systems and Devices
- 690.45 Size of Equipment Grounding Conductors
- 690.47 Section (C) Systems with Alternative Current and Direct Current Grounding Requirements, Section (C)2 Common Direct Current and Alternating Current Grounding Electrode
- 690.53 Direct Current Photovoltaic Power Source

- 690.71 Installation Section (B)(1) Operating Voltage, Section (B)2 Guarding of Live Parts, Section (E) Disconnection of Series Battery Circuits, Section (F) Battery Maintenance Disconnecting Means

Permitting Cost for Solar Installations

Construction cost includes cost of materials and labor. The Village may request submittal of a signed contract. The cost to install photovoltaic solar panels is 3% of the construction cost.

Sample Formula: \$20,000 (Construction Cost) x 3% = \$600 (Permit Fee)