SOLAR PANEL GUIDELINES

The following are general guidelines to install solar panels:
A permit is required, Submit a completed application along with, a plat of survey, site plan, manufactures' installation instructions, and registered contractors electronically at www.oak-park.us

INSTALLERS: Provide a copy of the Certified State of Illinois Distribution Generation Installer Certification to issue a Solar Panel/photovoltaic cell/solar collectors permits pursuant to the State of Illinois-ICC Title part 468.30. The certificate is to be scanned and placed in the permit file as well as in the contractor's registration file.

HISTORIC DISTRICT: If your proposal is in a Historical District the following must be submitted; All efforts have been made to install the panels in areas not readily visible from the street, such as behind a dormer or on the garage

- Panels should stand off from the wall or roof of the building
- Panels shall be "readily reversible". This means that their installation allows for future removal of the panels without any damage or alteration of the original historic structure.
- No damage or removal of any historic feature of the home shall take place as part of the installation of the solar panels
- Panels are not to be placed on the slope of the roof or wall of the home that faces the street on which the home is situated.
- (If the above are met this construction shall be approved by staff. If the above is not met this construction requires an application to get a Certificate of appropriateness from the Historic Preservation Commission)
- Any proposal on an Historical Landmark shall require a Certificate of Appropriateness from the Historic Preservation Commission

STRUCTURAL DETAILS:

Provide a structural detail; showing the mounting details and of how the roof or wall shall be constructed to support the loads imposed by the roof-mounted or wall-mounted solar device as it will not affect the structural stability of the existing structure. This drawing must be signed and sealed by a licensed architect or structural engineer. Provide a detailed framing plan indicating any work involving modification to the building's structural framing system.

IRC & NEC REGULATIONS: Provide the manufacture's installation instructions which may include:

- The entire manufactured system shall be listed and labeled.
- The collectors and supporting structure shall be constructed of noncombustible materials or fire-retardant-treated wood equivalent materials.
- System components containing fluids shall be protected with pressure- and temperature-relief valves.
- System components that might be subject to pressure drops below atmospheric pressure during operation or shutdown shall be protected by a vacuum-relief valve.
- Freeze protection is required
- Closed fluid loops that contain heat transfer fluid shall have an expansion tank The system's valves shall be labeled for open/closed operations The maximum temperature shall be limited to 180 degrees.
- Flammable gases are prohibited
  - A backflow device is required if connected to the potable water supply.

- Provide an electrical power plan indicating location of all proposed electrical.
- The photovoltaic source circuits and photovoltaic output circuits shall not be in the same raceway
- The connections to a module or panel shall be arranged so that removal of a module or panel from a photovoltaic source circuit does not interrupt a grounded conductor to another photovoltaic source circuit.
- The equipment shall be identified and listed
- The grounded system shall be GFCI protected
- The Faulted Circuits shall be isolated

- A warning label is required on the utility-interactive inverter o Refer to the adopted National Electric Code for details.

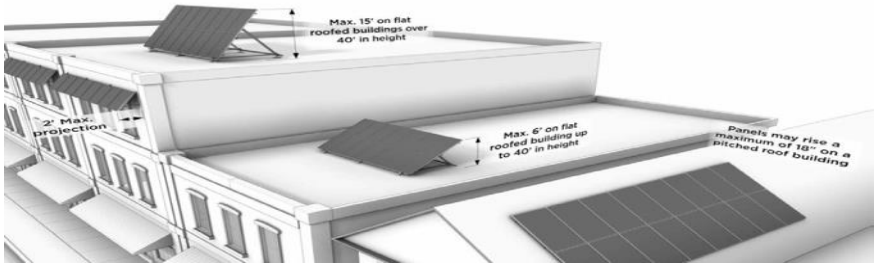
ZONING REGULATIONS:

- A solar panel may be building-mounted or freestanding.
- Solar panels must be placed so that concentrated solar radiation or glare is not directed onto nearby properties or roadways.
- Solar panels to be installed within a historic district must meet the Architectural Review Guidelines of the Historic Preservation Commission.

Building-Mounted Systems: A building-mounted system may be mounted on the roof or wall of a principal building or accessory structure. On pitched roof buildings, the maximum height a roof-mounted solar panel may rise is 18 inches. On flat roofed buildings up to 40 feet in height, the roof-mounted solar panel system is limited to a maximum height of six feet above the surface of the roof. On flat roofed buildings over 40 feet in height, the roof-mounted solar panel system is limited to 15 feet above the height of such structure. Roof-mounted solar energy systems are excluded from the calculation of building height. Wall-mounted solar panels may project up to two feet from a building façade and must be integrated into the structure as an architectural feature.

Solar Panel Guideline

BUILDING-MOUNTED SOLAR PANELS



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3. **Freestanding Systems**

   a. A freestanding system is prohibited in the front or corner side yard.

   b. The maximum height of a freestanding system is eight feet.

4. **Co-Location**

Solar panels may be co-located on structures such as wireless communication towers and light poles.

ROUGH & FINAL INSPECTIONS REQUIRED

- Solar contractors are to have a rough electrical inspection. This inspection will take place the day of the install. This allows us inspectors to confirm all solar material being placed on the roof as per print. Other items that are checked on the rough are as follows.

1- safety issues that solar crews may be working around
2- approved plans matching what is actually being installed
3- electrical service or grounding issues to existing system
4- verifying that the solar crews are qualified and certified to install system
5- equipment clearance issues

Note: This guideline is not all inclusive of the related codes and laws that pertain to this construction refer to the actual code book for details. The permit process is a check and balance system that normally involves a designer, plans examiner, contractor, and inspector to ensure the best quality and safest construction possible. As much as the mentioned professionals attempt to achieve full code compliance every effort has been made to identify all code deficiencies however; failure to identify a code deficiency during plan review and inspection does not alleviate any obligation to comply with all applicable code provisions.

TO PURCHASE CODE BOOKS, CONTACT THE INTERNATIONAL CODE COUNCIL AT: 800-214-4321
www.intlcode.org

IN EMERGENCY CALL:

Police/Fire @911 NICOR@ 888-642-6748 Com Ed@ 800-344-7661 J.U.L.I.E. 811

In general, nothing should be concealed unless a passing inspection has been issued.
TO SCHEDULE AN INSPECTION e-mail at permits@oak-park.us or CALL 708-358-5430