



DUPAGE COUNTY

BUILDING & ZONING DEPARTMENT

Residential Solar Energy Systems



The following are guidelines and requirements to assist when installing residential solar energy systems. This information is provided to identify minimal requirements in the County's adopted Building Code and Zoning Ordinance. These guidelines are not all inclusive, but cover the most critical requirements involved in this type of project. Feel free to contact our department if you have further questions.

Requirements to submit: (must be submitted in person) approximate review time - 8-15 business days

1. Application form for accessory structures - Type I (All applications are required to have the owner's signature or a notarized owner authorization form signed by the owner of the property to submit for permit - we cannot accept the submittal without either one of those documents)
2. Non-refundable application fee
3. Plat of Survey
4. Construction plans
5. Trust Disclosure form for properties in a trust

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1. The [Type I application](#) form shall be filled out completely. The owner's name, address and phone number, site address if different, cost of proposed work, whether the property is on water/sewer or well/septic, contractor's name and registration number (all contractors doing work in the unincorporated areas of DuPage County must be registered with our department prior to permit issuance), signature of owner. A notarized [Owner Authorization](#) form is required if the owner of the property has not signed the application form.
 2. A non-refundable application fee will be required – this portion of the fee is credited toward the final permit fee (reference the [Schedule of Fees](#) for specifics), a Drainage Review fee and a Health fee if the property is on well and/or septic. If payment is by check a separate check will be necessary to pay the Health review fee portion. We accept exact cash, checks or Master Card and Visa.
 3. Provide 6 copies of the scalable Plat of Survey wherever the installation (ground or roof). If on the ground draw panels to scale in the exact proposed location with dimensions and dimensions to the nearest lot lines. The survey must show all existing structures with the Illinois Licensed Land

Surveyor's seal and signature visible. According to the Building Code the accepted scales are 1"=10', 20', 30', 40' or 50'. Reduced/enlarged copies **WILL NOT** be accepted.

4. Two (2) copies of spec sheets and diagrams on **all** the equipment being installed (structural, electrical, manufacturer's spec sheets, site plan for location of the panels, an orientation detail, UL certification, etc.) Please provide a disconnect at equipment on the roof as well.
5. For any property that is in a trust (bank or trust company) will need a notarized [Trust Disclosure](#) form completed by the trust company stating the beneficiary of the trust. For properties in a family trust we need some paperwork showing the beneficiary for signing the application.

Requirements at permit issuance:

6. Utility Easement form
7. Drainage Easement Agreement form
8. Entrance permit
9. Fees
10. Performance Bond
11. Contractor Registration

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6. Solar panels located in any part of a drainage/utility easement will required a [notarized affidavit](#). This gives the applicant the responsibility to contact the utility companies that are in that easement so they are aware of a structure being installed in that easement.
 7. Also for solar panels located in any part of a drainage and utility easement a [Drainage Easement Agreement](#) must be filled out and all individuals listed on the deed will need their signature notarized.
 8. Prior to permit issuance an [Entrance Permit](#) (bond receipt) from whoever maintains the roadway (Township Highway Commissioner, Du Page County Department of Transportation, Illinois Department of Transportation or municipality).
 9. [Permit fees](#) are due at the time of issuance. We accept exact cash, check or Master Card and Visa. (The building application fee will have been credited toward the final permit fee)
 10. The [Performance Bond](#) insures code compliance and is included in your permit fee. This portion of the fee is fully refunded once the final inspection has been approved.
 11. All [contractors](#) working on the project are required to be registered with Du Page County Building Division and must be current when the permit is issued.

Zoning Requirements:

Must meet the county's height requirements. Single Family Construction: (Ordinance Sections - 37-704):

- Height for solar panels on the roof: In all single family residential zones:
No taller than 36 feet from grade to top of roof. (Exception: On properties 40,000 square feet in size or greater the height of the principal building, {house} may exceed 36 feet by 1 foot for every 1 foot all of the required setbacks are increased).

(If you have a system installed on the ground and separate from the principal building)

- Height:
Maximum of 15 feet in height from the average grade on the property where the zoning lot is 40,000 sq. ft. or less in size

Maximum of 24 feet in height from the average grade on the property where the zoning lot is over 40,000 sq. ft. in size

R-1 Single Family Residence District: Front yard = forty (40) ft.; Corner Side yard = forty (40) ft.; Side yard = twenty (20) ft.; Rear yard = fifty (50) ft.

R-2, R-3 and R-4 Single Family Residence District: Front yard = thirty (30) ft.; Corner Side yard = thirty (30) ft. (where a zoning lot is less than seventy-five (75) ft. wide the Corner Side yard is twenty (20) ft.); Side yard = ten % of the average lot width but does not need to exceed ten (10) ft.; Rear yard = twenty-five (25) ft.

For information regarding General Residence Districts (R-5, R-6 and R-7), please consult the DuPage County Zoning Ordinance or contact the Zoning Staff at 630.407.6700.

Building/Electrical Requirements:

All work performed within the unincorporated area of DuPage County shall comply with the following adopted codes and regulations:

- **DuPage County Building Code** – [Residential requirements](#)
- **2015 International Building Code** - [Article VII, Section 8-700](#) with local amendments
- **2014 National Electric Code** - [Article VI, Section 8-600](#) with local amendments
- **2015 International Mechanical Code** - [Article VIII, Section 8-800](#) with local amendments
- **2015 International Fuel Gas Code** - [Article X, Section 8-1000](#)
- **2015 International Fire Code** - [Article XI, Section 8-1100](#)
- **Current Illinois Energy Efficient Building Code** - [Article V, Section 8-500](#)

Submit 2 sets of plans consisting of information on the PV system: Include a roof plan showing location of solar panels, location of disconnects/ rapid shut down, system size, electrical equipment, and control panel. Submittal to include wiring diagram (2014 NEC), equipment cut sheets, information on signage / labeling and structural analysis if applicable. Indicate what type of roof structure is on the dwelling. If roof structure is pre-engineered roof trusses, provide structural analysis of existing roof sealed by IL. Registered Architect or Structural Engineer (No P.E stamp). If dwelling roof structure is stick built, a structural analysis maybe required if the Building official deems necessary. Indicate on the plans how many layers of roofing the roof has. Indicate what type of disconnects is proposed. Unless a Rapid Shut Down is used, all disconnects must be at roof top equipment in plain site without removing any live equipment. All disconnects/shut down controls must be properly labeled and/or direct to the locations of such disconnects/shut down controls.

Drainage Requirements: BMP's if required ([Best Management Practices](#)) Only if installing solar panels on the ground.

In most cases, a topographic survey is not required. A marked-up plat of survey showing the following:

- Any required/needed sediment protection (such as silt fence) along the downslopes, along with construction location. At times a construction fence is allowed.
- Location and discharge point for all proposed drainlines (sump pump and downspouts). The discharge point for these lines will need to be a minimum of 10-ft from any property line.
- A runoff diversion, such as a swale may need to be shown and installed to direct runoff as to not have a negative impact on drainage for the neighboring property. This may require a detail such as a cross-section be provided.

Disclaimers: If there are any special management areas (including any of the following; floodplain, wetland and wetland buffer) on the property additional permit requirements may be needed. See Sec.8-128.2 of the County's Building Code for Minimum Plan Requirements.

- Pursuant to 8-128.2.E of the Building Code, any development in the floodplain must obtain an Elevation Certificate. Where a development, structure or property has substantial damage, has or will have substantial

improvement or is the subject of repetitive loss regulations, the development, structure or property shall comply with the requirements of the Building Code and the DuPage County Countywide Stormwater And Flood Plain Ordinance, which includes the need to obtain an Elevation Certificate. (Ord. No. DC-O-0030-15, 8-11-2015)

- The FEMA 2015 Elevation Certificate is available from FEMA (<https://www.fema.gov/medialibrary/assets/documents/160>). It is a fillable PDF form.

Inspections: (a minimum of 24 hours advance notice required for inspection scheduling) Please contact the Building Division at 630-407-6700 to schedule inspections. (Where no work has been started within 90 days after the issuance of a permit, or when more than 90 days lapses between required inspections, such permit shall be void. No work shall commence prior to issuance of permit). Feel free to contact our office if you have any questions regarding the permit or inspection process at 630-407-6700. The office location is 421 N. County Farm Road, Wheaton, IL 60187. You can visit our web site at www.dupageco.org/building.

CALL BEFORE YOU DIG – CONTACT [J.U.L.I.E.](http://www.julie.org) - 1-800-892-0123 FOR UNDERGROUND UTILITY LOCATIONS