



SOLAR PHOTOVOLTAIC (PV) SYSTEM PERMIT APPLICATION CHECKLIST

This Permit Application Checklist is intended to be used as a best management practice when establishing local government requirements for residential and commercial solar photovoltaic (PV) system permits.

1. REQUIRED INFORMATION

Type of Application

- Residential
- Commercial (Also see Part 2: Commercial Building Requirements)

Type of Solar PV System

- Roof Top
- Ground Mount
- Other: _____
- Size of System (kW): _____
- Completed permit applications: Building and Electric Service (available in office or online at: www.cityofbatavia.net).
- ICC DGA Certificate
- Illinois State Licensed Roofing Contractor name, license number and contact information.
- Proof of valid Homeowner's Insurance policy.
- Copy of Installer/Contractor's comprehensive general liability insurance. Min. \$2,000,000. City of Batavia must be listed as an additional insured.

Construction Documents: Minimum of (4) copies of construction documents shall include, but are not limited to, the following items:

- Site specific, structural drawings (for roof top systems) designed and sealed by an Illinois state licensed professional engineer, assembly installation plans, manufacturer's installation instructions, and/or equipment manufacturer's data sheets.

(City of Batavia Wind Load – 90MPH, Snow Load – 30PSF)

- Make, model, and quantity of module, inverter, and racking system certified to the UL 2703, UL 62109, or UL 1741 standard by a Nationally Recognized Testing Laboratory as appropriate.
- Framing plans
- Method of sealing/flushing for roof penetrations
- Connection details to building or ground mount
- Structural calculations or load diagram (stamped by an Illinois state licensed professional engineer).
- Data cut sheets for battery storage if applicable (including type of battery)

Site Plan: Include the PV array layout in compliance with the local government design criteria including:

Roof plan showing location of equipment and fire setbacks

RESIDENTIAL: Roof top setbacks include: Min. 36" width at rakes and ridges, min. 36" at hips and valleys or 18"/18" on each side of hip/valley. Panels may not be located under emergency egress windows, etc.

COMMERCIAL:

Roof top setbacks include:

- Min. 4 feet (4') clear to skylights and/or ventilation hatches.
- Straight line not less than 4 feet (4') clear to roof standpipes
- Min. 4 feet (4') clear around roof access hatch with at least one not less than 4 feet (4') clear pathway to parapet or roof edge.

Smoke Ventilation

- Arrays - Max. 150 by 150 feet in distance in either axis
- Ventilation options between array sections should be either:
 - An 8 feet (8') or greater in width
 - 4 feet (4') or greater in width pathway and bordering on existing roof skylights or ventilation hatches
 - 4 feet (4') or greater in width pathway and bordering four feet (4') x 8 feet 8' "venting cutouts" every 20 feet (20') on alternating sides of the pathway

Existing site easements, property lines, building setback lines, zoning setbacks. (Setback and height limitations for both principal & accessory structures apply.)

Typical side view detail of the solar PV system mount on the roof.

Location of all existing structures and proposed PV system equipment (including modules, disconnects, inverters, panel boards, combiner boxes, storage batteries, utility meters, etc.)

Plumbing vent termination: Vent termination is not allowed under solar installations and must be relocated or modified, or an air admittance valve may be utilized in accordance with the International Plumbing Code (IPC) and/or the International Residential Code (IRC).

Fire Code Requirements: Installation complies with Section 605.11 of the 2012 International Fire Code (IFC), or a more recent IFC version.

Electrical Plans: In addition to the construction documents, include a line diagram that meets the requirements of Batavia Electric Utility and the currently adopted electric code of the City of Batavia (currently, 2005 NPFA 70, **with the exception of Articles 690 and 705 from 2020 NPFA 70**). A proper line diagram should include:

AC and/or DC circuit arc fault protection as required by the NEC or ordinance (if any)

- Inverter listed to the UL 62109 or UL 1741 Safety Standard; photovoltaic module(s) listed to the UL 1703 safety standard. Listings conducted by a Nationally Recognized Testing Laboratory.
- Inverter AC output disconnect location, utility disconnect location, and AC output over-current protection device rating.
- Location of combiner box(es), disconnect switch, size of source circuit overcurrent protection, if required
- Service panel bus rating and main circuit breaker/fuse ampere rating
- Circuit diagram with conduit, wire type and sizes, and/or cable type and wire sizes
- Equipment grounding and bonding conductors and grounding electrode conductor, if applicable
- Battery disconnect and overcurrent protection, if applicable
- List of all appropriate labels and marking per NEC and IFC requirements

2. ADDITIONAL COMMERCIAL BUILDING INFORMATION

- Building Information: Information about the building the PV system will be attached to:
- Occupancy Group: _____
- Number of Stories: _____
- Year Built: _____
- Construction Type: _____
- Area (Square Feet): _____
- Roof Type: _____
- Fire Sprinkler System (as applicable).

Permit Fees:

Residential Building Permit - \$85.00

Electric Meter - \$364.38

Commercial Building Permit – Based on improvement value (\$32.00/1st \$1k plus \$11/each additional \$1k)

Electric Meter – Based on required alteration

Questions? Please contact City of Batavia Building Department at (630)454-2700 for construction-related inquiries. Please contact City of Batavia Electric Utility at (630) 454-2350 for interconnection and utility-related inquiries.