

Solar Submittal Checklist

For: Thermal, Photovoltaic, and Hybrid Systems

Additional information may be required depending upon the project scope. All drawings must be to scale, sealed and signed by the Design Professional

Submittal Documents

Solar Thermal:

- Solar Permit Application
- Plumbing Worksheet
- Three sets of construction documents and plans
- Three sets of roof plans indicating the location of the panel installations

Photovoltaic:

- Solar Permit Application
- Electrical Worksheet
- Three sets of construction documents and plans
- Three sets of roof plans indicating the location of the panel installations

Hybrid System:

- Solar Permit Application
- Plumbing Worksheet
- Electrical Worksheet
- Three sets of construction documents and plans
- Three sets of roof plans indicating the location of the panel installations

Required Construction Documents and Plans

- For All Systems:
 - Report with structural calculations from an Illinois State Licensed Architect or Structural Engineer verifying that the roof structure can support all imposed loads. If the roof is found to be structurally inadequate, reinforcement drawings by an architect or an engineer, and framing details are required.
 - Specification sheets and installation manuals for all components, such as recirculation pumps, panels, supporting frames and mounting.
 - Provide the attachment details, flashing details, construction design for the unit and any supporting frame members for the Wind Zone, additional loading, and any site conditions.
 - All documentation must be sealed and signed by the Design Professional.
- Solar Thermal Systems:
 - Plumbing riser diagram showing the piping system schematic.
 - Specifications for the storage tank, heat exchanger (double wall), expansion tank, thermostatic mixing valve and controller module.
- Photovoltaic Systems:
 - 1-line electric schematic of the PV array configuration, inverter, power supply, disconnect, overcurrent protection, electrical panel, meter and ground.
 - For battery backup systems, summarize the standby load
 - Electrical calculations showing that all wire sizing has been determined with proper ampacity, conduit fill and ambient derating factors.
 - Written specifications for the inverter and power supply.
 - Proof of the system's compliance with NEC Article 690.
- Hybrid Photovoltaic-Thermal Systems: *Please complete all of the above portions.*

All electrical services must comply with the code sections listed below. Any electrical service that fails to meet those requirements must be brought into compliance prior to or at the same time the PV system is installed. For additional clarification please call 847 448-4311 to schedule an onsite consultation or contact Claude Garesche Electrical Inspector (847 448-8018). Also see ComEd 's Residential Electric Service Installation Guide (Redbook).

- E1 2011 NEC 110.26 Working clearances at electrical panel and meter fitting must be maintained.
- E2 2011 NEC 250.50 The Electrical Service shall have a compliant Grounding Electrode System.
- E3 2011 NEC 230 and ComEd red book Electrical service drop, service riser, weather head, drip loop, point of attachment, meter must meet the minimum required clearances from structures, roofs, above walkways, driveways, operable windows and pools.
- E4 Service entrance cable not permitted for riser and service entrance to panel. Evanston amendment
- E5 A Base and ring style meter fittings must be upgraded to ring less style meter fitting. ComEd requirement
- E6 Electrical meters, PV inverters, disconnects switches cannot be located over stairs or in areas subject to physical damage.

If all submittal documents are complete and revisions are not required, the permit shall be issued within 3 business days. Residential permits only. Projects in historical districts may require additional review time.

Revisions

In order to facilitate prompt review, revisions will be accepted only after all plans examiners have completed reviewing the previous submittal.

- Submit only the sheets that are being revised (3 copies of each sheet).
- Narrative – Identifying purpose of revision and what is being revised (attached to each set) on company's letterhead paper.
- Provide permit number or address of project.
- All revisions shall be identified and clouded.

Contractors

- Solar Contractor- Provide contact information
- Plumbing Contractor - Provide a State of Illinois Plumbing License and contact information
- Electric Contractor - Provide a license from testing municipality and contact information

Inspections

More than one inspection may be performed during any inspection visit (by inspector properly licensed in the trade they are inspecting).

Solar Thermal:

- Plumbing - Final

Photovoltaic:

- Electrical - Rough and Final

Hybrid System:

- Electrical - Rough and Final
- Plumbing - Final

Solar Permit Application

For: Thermal, Photovoltaic and Hybrid Systems

Please type or print in ink. All applicable lines must be completed.

General Information

Property Address (1234 Main Street format only, please): _____ Floor/Unit #: _____

Scope of Work: _____

Applicant Name: _____ Email Address: _____ Phone Number: _____ X _____

Property Owner: _____ Phone #: _____ Address (if different): _____

Email Address: _____ Work Valuation (required): \$ _____

Architecture Firm: _____ Phone #: _____

Architect Email Address: _____

Building Use

(Check all that apply)

- Multi-Family Rental: # of units _____
- Single Family Commercial Addition
- Garage Office Condo
- Restaurant Educational Retail
- Exterior Reno. Interior Reno. Health Care
- Other: _____

24 HOUR EMERGENCY CONTACT <i>DURING CONSTRUCTION HOURS</i>
NAME: _____
PHONE NUMBER _____

Contractor Information

Please enter the contractors necessary for this job. If the contracts are out to bid, this portion can be completed prior to permit issuance

General Contractor: _____ Phone #: _____

Address: _____ Email: _____

Evanston License #: _____ ---- Expiration Date: _____

Plumber Contractor: _____ Phone #: _____

Address: _____ Email: _____

IL State License #: _____

Electrical Contractor: _____ Phone #: _____

Address: _____ Email: _____

City Where Licensed: _____ ---- License #: _____

Landmark or Historic District

This section is to be completed only if the property where the panel(s) is to be installed is a landmark or is in a historic district.

Are there any exterior modifications to the property?

If YES, you must apply for a Certificate of Appropriateness

If no, sign and print your name here: _____

SIGN HERE PRINT NAME HERE

I have completed this application honestly and to the best of my knowledge. I understand that all work performed pursuant to this application shall be in strict compliance with all provisions of the City of Evanston statutes, laws, rules, regulations and ordinances.

Applicant Signature: _____ Date: _____

FOR OFFICE USE ONLY PERMIT # _____
