

Application Date:

Fee: **\$120.00**

SOLAR PERMIT SUPPLIMENTAL QUESTIONS

| | | | |
|---|-------------------|------------------|------|
| PROPERTY INFORMATION <small>If multiple properties, attach separate sheet</small> | PARCEL ID #: | | |
| | LOT SIZE | ZONING DISTRICT: | |
| | PROJECT ADDRESS: | | |
| OWNER INFORMATION | NAME: | | |
| | ADDRESS: | | |
| | CITY: | STATE: | ZIP: |
| | PHONE: | EMAIL: | |
| INSTALLATION CONTRACTOR | NAME: | PHONE: | |
| | STATE LICENSE NO: | | |
| | ADDRESS: | | |
| | EMAIL: | | |

Submittal Materials

The following materials must be submitted with your BUILDING PERMIT in order to be considered a complete application. If you have any questions or concerns regarding the necessary materials, please contact the Community Development Department.

REQUIRED MATERIALS

- 1. Site plan showing location of major components on the property and a framing cross section that identifies type of support (rafter or truss), spacing, span dimension, and approximate roof slope. The drawing need not be exactly to scale, but it should represent relative location of components. PV arrays on dwelling with a 3' perimeter space at ridge and sides may not need separate fire service review
- 2. Specification sheets and installation manuals for all manufactured components including, but not limited to, PV modules, inverter(s), combiner box, disconnects and mounting system.
- 3. Electric Permit application and fee to submitted to the State, including Electrical diagram showing PV array configuration, wiring system, overcurrent protection, inverter, disconnects, required signs, and AC connection to building.
- 4. City Building Permit and fee including completed supplemental questions below.

Step 1: Structural Review of PV Installation Mounting System – Circle an answer after each question

1. Is the roof supporting the installation a pitched roof in good condition, without visible sag or deflection, no cracking or splintering of support or other potential structural defect? **Yes No**
2. Is the roof a rafter system? **Yes No**
3. Is the equipment to be flush mounted to the roof such that the collector surface is parallel to the roof? **Yes No**
4. Is the roofing type lightweight? **Yes** (composition, lightweight masonry, metal, etc.) **No**
5. Does the roof have a single layer of roof covering? **Yes No**

If "No" to any of questions 1-5 above, additional documentation may be required. Documentation may need to demonstrate the structural integrity of the roof and all necessary structural modifications needed to maintain integrity. A statement stamped by a Minnesota Licensed/Certified Structural Engineer certifying integrity may be needed.

6. Identify method and types of weatherproofing for roof penetrations:

Mounting System Information

1. Is the mounting structure an engineered product designed to mount PV modules with no more than an 18" gap beneath the module frames? **Yes No**
2. For manufactured mounting systems, complete information below:
 - a. Mounting System Manufacturer:
 - b. Product Name and Model:
 - c. Total Weight of PV Modules and Rails (lbs):
 - d. Total Number of attachment Points (attachment points must be equally distributed across the array):
 - e. Weight per attachment point (c÷d) (lbs):
 - f. Maximum Spacing between Attachment Points on a Rail (Inches):
 - g. Total Surface Area of PV Modules (square feet):
 - h. Distributed Weight of PV Module on Roof (c÷g) (lbs/ft2):

Electrical Review of PV System – Electrical Permits are submitted to the Minnesota Department Of Labor

Please document the following information with submission of an electrical permit. If the installation does not meet the following thresholds, additional information may be needed, as requested by the permit official.

1. PV Modules, utility-interactive inverters and combiner boxes are identified for use in PV systems.
2. The PV array is composed of 4 series strings or less per inverter
3. The total inverter capacity has a continuous AC power output 13,440 watts or less
4. The AC interconnection point is on the load side of service disconnecting means (NEC 2011 705.12(D), NEC2008 690.64(B)).
5. A standard electrical diagram should be used to accurately represent the PV system. Acceptable diagrams, in interactive PDF format, are available at www.solarabcs.org/permitting.

Fill out the standard electrical diagram completely. A guide to the electrical diagram is provided at www.solarabcs.org/permitting to help the applicant understand each blank to fill in. if the electrical system is more complex than the standard electrical diagram can effectively communicate, provide an alternative diagram with appropriate detail.

I HEREBY CERTIFY that I have completed and examined this application and certify that the information contained herein is correct. If a permit is issued, I agree all work will be done in conformance with all applicable ordinances and codes of this City and laws of the State of Minnesota.

Signature of Applicant

Date

Signature of Applicant

Date

Signature of Owner (if different than Applicant)

Date