

# Streamlined Permit Process for Solar PV: Park City Municipal

## Required Information for Permit:

1. Site plan showing location of major components on the property. This drawing need not be exactly to scale, but it should represent relative location of components at site. PV arrays on dwellings with a 3' perimeter space at ridge and sides may not need separate fire service review.
2. Electrical diagram showing PV array configuration, wiring system, overcurrent protection, inverter, disconnects, required signs, and ac connection to building.
3. Specification sheets and installation manuals (if available) for all manufactured components including, but not limited to, PV modules, inverter(s), combiner box, disconnects, and mounting system.

## Step 1: Structural Review of PV Array Mounting System

Is the array to be mounted on a defined, permitted roof structure? Yes  No

If No due to non-compliant roof or a ground mount, submit completed details for the structure (see WKS1 on page 2).

### Roof Information:

1. Is the roofing type lightweight (Yes = composition, lightweight masonry, metal, etc...) \_\_\_\_\_

If No, submit completed worksheet for roof structure, see WKS1 on page 2 (No = heavy masonry, slate, etc...).

2. Does the roof have a single roof covering? Yes  No

If No, submit completed worksheet for roof structure WKS1 on page 2.

3. Provide method and type of weatherproofing roof penetrations (e.g. flashing, caulk). \_\_\_\_\_

### Mounting System Information:

1. Is the mounting structure an engineered product designed to mount PV modules? Yes  No

If No, provide details of structural attachment certified by a design professional.

2. For manufactured mounting systems, fill out information on the mounting system below:

- a. Mounting System Manufacturer \_\_\_\_\_ Product Name and Model# \_\_\_\_\_
- b. Total Weight of PV Modules and Rails \_\_\_\_\_ lbs.
- c. Total Number of Attachment Points \_\_\_\_\_
- d. Weight per Attachment Point (b÷c) \_\_\_\_\_ lbs. (if greater than 45 lbs., see WKS1)
- e. Maximum Spacing Between Attachment Points on a Rail \_\_\_\_\_ inches (see product manual for maximum spacing allowed based on maximum design wind speed)
- f. Total Surface Area of PV Modules (square feet) \_\_\_\_\_ ft<sup>2</sup>
- g. Distributed Weight of PV Module on Roof (b÷f) \_\_\_\_\_ lbs./ft<sup>2</sup>

If distributed weight of the PV system is greater than 5 lbs./ft<sup>2</sup>, see WKS1.

### Snow and Wind Information

Please refer to Park City snow load chart ([click here](#))

1. What is the ground snow load at the system location? \_\_\_\_\_
2. What is the designed wind load of the system? \_\_\_\_\_

Calculate snow and wind potential load from WKS1 on page 2 and attach the calculations to this application

3. For rooftop systems, does the top chord have sufficient capacity to hold point loads produced by the ground snow and wind loads combined with the dead loads of the system and the roofing material? Yes  No
4. What is the excess capacity remaining in the top chord taking into consideration dead loads and wind and snow point loads? \_\_\_\_\_

Express the excess capacity as a percentage of the IRC live load requirements (20 psf): \_\_\_\_\_

If the percentage is less than 100, please refer to WKS1 on page 2

## Step 2: Electrical Review of PV System (Calculations for Electrical Diagram)

**In order for a PV system to be considered for an expedited permit process, the following must apply:**

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, and 15 kWSTC or less.
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 (690.64(B)).
5. The electrical diagram can be used to accurately represent the PV system.

*Fill out the standard electrical diagram completely. A guide to the electrical diagram is provided 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.*

### Structure Worksheet—WKS1

*If array is roof mounted*

This section is for evaluating roof structural members that are site built. This includes rafter systems and site built trusses. Manufactured truss and roof joist systems, when installed with proper spacing, meet the roof structure requirements covered in item 2 below.

1. Roof construction:  **Rafters**  **Trusses**  **Other:** \_\_\_\_\_
2. Describe site-built rafter or site-built truss system.
  - a. Rafter Size: \_\_\_\_\_ X \_\_\_\_\_ inches
  - b. Rafter Spacing: \_\_\_\_\_ inches
  - c. Maximum unsupported span: \_\_\_\_\_ feet, \_\_\_\_\_ inches
  - d. Are the rafters over-spanned? (see IRC span tables in **B.2.** of Solar ABCs)  **Yes**  **No**
  - e. If **Yes**, complete the rest of this section.
3. If the roof system has
  - a. over-spanned rafters or trusses,
  - b. the array over 5 lbs./ft<sup>2</sup> on any roof construction, or
  - c. the attachments with a dead load exceeding 45 lbs. per attachment or
  - d. Excess capacity after the summation of dead loads, with snow and wind loads of less than IRC requirements for live loads;

It is recommended that you provide one of the following:

- i. A framing plan that shows details for how you will strengthen the rafters using the supplied span tables in B.2. (see Solar ABCs website)
- ii. Confirmation certified by a design professional that the roof structure will support the array.

*If array is ground mounted:*

1. Show array supports, framing members, and foundation posts and footings.
2. Provide information on mounting structure(s) construction. If the mounting structure is unfamiliar to the local jurisdiction and is more than six (6) feet above grade, it may require engineering calculations certified by a design professional.
3. Show detail on module attachment method to mounting structure.

## Zoning Related Items

1. Does the property have zoning restrictions due to its location (e.g., Historic District, Historic Home, Forest, Canyon, etc.)?  **Yes**  **No**

*If Yes, please explain the restrictions and circumstances:*

2. Are there any private covenants (For example Homeowners Associations) that can claim jurisdiction over the property?  **Yes**  **No**

*If Yes, please provide a written letter of approval from the governing body of the covenant for the solar panel system.*