



Village of West Milwaukee

4755 West Beloit Road
 West Milwaukee, WI 53214
 Phone (414) 645-1530
 general@westmilwaukee.gov

Plan Review Fee \$100.00
 Date Paid _____ TR# _____

Solar Worksheet Application

Project Address: _____

Spec Sheets and Install Manuals

Specification sheets and installation manuals (if available) for all manufactured components included, but not limited to, PV or SHW modules, inverter(s), combiner box, disconnects, pump station, and mounting system. **Explanation:** *This is referring to the brief versions of manuals that are reviewed by the listing agency certifying the product. Please supply at the time of application.*

Required spec sheets and manuals are attached. List all below:

Roof Information

- | | | |
|--|-------------------------------|-------------------------------|
| 1) Is the array to be mounted on a defined, permitted roof structure? | <input type="checkbox"/>
Y | <input type="checkbox"/>
N |
| 2) Is the roofing type lightweight (Yes = composition, lightweight masonry, metal, wood shake, etc. No=heavy masonry, slate, etc.).
If no, submit completed worksheet for roof structure. | <input type="checkbox"/>
Y | <input type="checkbox"/>
N |
| 3) If a composition shingle roof, how many layers are present? _____ | | |
| 4) Provide method and type of weather proofing for roof penetrations supporting the array (e.g. flashing, caulk). | | |

Mounting Information

Is the mounting structure an engineered product designed to mount modules with no more than 18" gap beneath solar electric modules, or solar hot water panels, and frames? *If no, provide details of structural attachment certified by design professional.*
Y
N

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

- a. Mounting System Manufacturer: _____
- b. Product Name and Model #: _____
- c. Total Weight of PV Modules (or SHW panels) and Rails: _____ lbs. (include total weight of all hardware used along with module weight).
- d. Total Number of Attachment Points: _____
- e. Weight per Attachment Point (c÷d) _____. If greater than 45 lbs. will require plan review fee and submittal of additional materials for review.
- f. Maximum Spacing between attachment points on rail: _____ inches (see product manual for maximum spacing allowed based on wind loading).
- g. Total Surface Area of PV Modules (or SHW panels) (sq. ft.) _____ ft²
- h. Distributed Weight of PV Modules (or SHW panels) on Roof (c÷g) _____ lbs./ft². If distributed weight of the PV (or SHW) system is greater than 5 lbs./ft² will require plan review fee and submittal of additional materials for review.

Roof Mounted Array

This section is for evaluating roof structural members that are site built. Manufactured truss systems, when engineered to accommodate the load, meet the roof structure requirements covered in item 2 below. Any modification of an existing roof to accommodate a solar array will require a building permit, Review, and Inspection.

1. Roof construction: Rafters Trusses Other: _____

2. Describe site-built rafter or truss system:

a. Rafter Size: _____ inches

b. Rafter Spacing: _____ inches

c. Maximum unsupported span: _____ feet, _____ inches

d. Are the rafters over-spanned? (See SPS 321 Appendix A)

Yes No

e. If **YES**, complete the rest of this section.

3. If roof system has:

a. over-spanned rafters or trusses,

b. the array over 5 lbs./ft² on any roof construction, or

c. the attachments with a dead load exceeding 45 lbs. per attachment;

Contractor shall provide one of the following:

(i) A framing plan that shows details for strengthening rafters in accordance with SPS 321 Appendix A rafter span tables

~or~

(ii) Designed through structural analysis per SPS 321.02(2).

Ground Mounted Array

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.

I _____ certify that the work inaccessible for inspection meets or exceeds all adopted Building Codes by the State of Wisconsin

License # _____

Signature _____