



COMMUNITY DEVELOPMENT AGENCY
BUILDING AND SAFETY DIVISION

CONTRACTOR'S PERMIT APPLICATION for Residential PV Installation with e-Inspection

CA Health and Safety Code Section 19825 V 11-10-12 6p2s

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Permit # _____

Issued Date: _____

System Design

Utility Connection

Array Location

Mounting System

Central Inverter

Meter Panel Buss

Roof Mount

Flush

Micro-Inverter

Supply-side Tap

Ground Mount

Elevated Rack

AC Module

Other _____

Other _____

Are other alternative energy systems at this site?

YES

NO

If so, please describe:

Does this PV system utilize storage batteries? YES NO

How much is this project going to cost? TOTAL contract amount or dollar value of all work to be performed under this permit:

Project Location

Address of Project _____

City, State, Zip _____

Locality _____ Nearest Cross Street _____

Assessor Parcel Number _____ Number of Dwelling Units _____

Property Owner Contact Information:

Property Owner Information _____ Telephone _____

Mailing Address _____

City, State, Zip _____ Email _____

#2 IDENTIFY WHO WILL PERFORM THE WORK, WORKERS' COMPENSTATION COVERAGE AND LENDING AGENCY

This permit is to be issued in the name of the Licensed Contractor as the permit holder of record who will be responsible and liable for the construction and all inspection requirements.

CALIFORNIA LICENSED CONTRACTOR'S DECLARATION

I hereby affirm under penalty of perjury that I am licensed under provisions of Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code, and my license is in full force and effect.

Contractor Name: _____ Telephone Number _____

Mailing Address: _____

City, State, Zip: _____ Email Address: _____

License Class and No. _____ Contractor Signature _____

WARNING: FAILURE TO SECURE WORKERS' COMPENSATION COVERAGE IS UNLAWFUL, AND SHALL SUBJECT AN EMPLOYER TO CRIMINAL PENALTIES AND CIVIL FINES UP TO ONE HUNDRED THOUSAND DOLLARS (\$100,000), IN ADDITION TO THE COST OF COMPENSATION, DAMAGES AS PROVIDED FOR IN SECTION 3706 OF THE LABOR CODE, INTEREST, AND ATTORNEY'S FEES.

WORKERS' COMPENSATION DECLARATION

I hereby affirm under penalty of perjury the following declarations:

() I have and will maintain workers' compensation insurance, as required by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued. My workers' compensation insurance carrier and policy number are:

Carrier _____ Policy No _____ Expiration Date _____

Name of Agent _____ Tel No _____

DECLARATION REGARDING CONSTRUCTION LENDING AGENCY

I hereby affirm under penalty of perjury that there is a construction lending agency for the performance of the work for which this permit is issued (Section 3097, Civil Code).

Lender's Name and Address _____

#3 CONFIRMATIONS BY CONTRACTOR IN ACCEPTANCE OF THE TERMS AND RESPONSIBILITIES ASSUMED UNDER THIS VOLUNTARY PERMIT APPLICATION

I hereby affirm under penalty of perjury by my initials below, I certify to each of the following:

1. _____ I understand, as the California licensed contractor in whose name this permit may be issued and who will be performing the work authorized by this permit, that I am solely responsible and liable for the quality of work performed under this permit, and for knowing and complying with all applicable State laws, Marin County Code requirements and manufacturer's specifications; and I agree to fulfill these aforementioned responsibilities.

2. _____ I understand, as the California licensed contractor in whose name this permit may be issued, that I am solely responsible for satisfying all *electronic Inspection* requirements and obtaining necessary Marin County approvals to finalize and close this permit.

3. _____ I understand and agree, as the permit applicant, that my application to this *electronic Inspection* permit program is elective and purely voluntary, and that I have the option to choose a traditional site-inspection permit application for this proposed scope of work, but willingly choose to participate in this optional permit program. **I further agree to fully disclose the terms of this *electronic Inspection* permit to the property owner indicated in this permit application.**

4. _____ I understand and agree that the *electronic Inspection* permit issued as a result of this application, or any or all of the permissions granted to me under this permit, may be denied, voided or revoked by the County of Marin on the basis of incomplete or inaccurate information or my failure to demonstrate compliance with any of the specific requirements of this permit. I further understand and agree that approvals necessary to issue and finalize this application and permit are not guaranteed and are subject to review of information provided by me and my evidence of work performed in compliance with the requirements of this permit.

5. _____ In the event Marin County representatives desire to perform on-site inspection of work performed under this permit, I authorize representatives of the County to enter the above-identified property for inspection purposes pursuant to Section 19825(a) of the California Health and Safety Code as a condition of granting this permit.

6. _____ I understand failure on my part to observe or fulfill my obligations under this permit may result in disciplinary measures initiated by the California Contractors State License Board against my license.

7. _____ I recognize this construction permit application expires in 365 days if permit is not issued and I further understand that a construction permit issued as a result of this application will expire 365 days after issuance for failure to commence construction, or 2 years after issuance for failure to successfully finalize construction.

8. _____ I agree to save, indemnify and keep harmless the County of Marin against liabilities, judgments, costs and expenses which may in any way accrue against said County in consequence of the granting of this permit.

9. _____ I understand I must satisfy the following Marin County requirements in order for this permit to be issued and finalized:

1. Completed **CONTRACTOR'S PERMIT APPLICATION for Residential PV Installation with *e-Inspection***
2. Approved plans conforming to **Minimum Mandatory PV Plans Checklist**
3. Completed and submitted **Residential PV *e-Inspection* Compliance and Certification Form** including **PHOTO/VIDEO EVIDENCE OF COMPLIANCE** with applicable State laws, Marin County Code requirements and manufacturer's specifications.

I hereby affirm under penalty of perjury by my signature below, I have read, understood and agree to the requirements contained in this construction permit application and the information I have provided herein is correct.

California Licensed Contractor:

Signature _____ Date _____

Directions for using this *electronic Inspection Residential PV Installation Permit Program*

1. **Obtain permit** and **Residential PV e-Inspection Compliance and Certification Form** from Marin County Community Development Agency – Building and Safety Division prior to starting work.
 - a. Completed permit application, permit fee payment* and plans conforming to **Minimum Mandatory PV Plans Checklist** may be submitted in-person, by mail or by email.
***We currently only accept cash or check submitted in person or via mail**
2. **Review the Code requirements** in the **Residential PV Installation Code Reference Guide** that are applicable to your PV project prior to starting construction.
3. Using your smart phone, smart device or digital camera **photograph or video the existing installation location** before any work has begun.
4. Using your **e-Inspection Compliance and Certification Form** as your guide:
 - a. **Perform each inspection** as soon as the corresponding work has been performed to ensure each applicable code and/or manufacturer's requirement is satisfied.
 - b. **Photograph/video each inspection** you perform to establish clear evidence that each corresponding code and/or manufacturer's requirement is satisfied. **Email each photograph/video to buildinginspection@marincounty.org as soon as you take it.** CDA-Building & Safety will catalog each photo/video to your permit file.
 - c. **Initial each inspection** on your **e-Inspection Compliance and Certification Form** to certify you performed the inspection and that the work performed complies with the applicable code and/or manufacturer's requirement. *NOTE: Write NA in the initialing space for any inspection provision that is not applicable to your PV installation scope of work.*
 - d. **Sign the bottom** of your completed **e-Inspection Compliance and Certification Form**.
5. **Photograph/video the FRONT AND BACK** of your Permit and completed **e-Inspection Compliance and Certification Form** and email to buildinginspection@marincounty.org
6. **Photograph/video the finished installation** after all work is completed and email to buildinginspection@marincounty.org
7. **Each photograph/video email** must include your PERMIT NUMBER in the subject line of the email: *Example: PN 736550 e-Inspection.* Your **final** email must include the word **“Final”** in the subject line: *Example: PN 736550 e-Final.*

IMPORTANT!

- I. *E-Inspections* will be reviewed by County technical staff in the order in which they are received. Photographic/video inspection evidence that is incomplete and/or illegible will not be accepted as having satisfied our *e-Inspection* requirements. Participation in our *e-Inspection* program does not guarantee CDA – Building & Safety will approve your *e-Inspections* and finalize your permit. CDA – Building & Safety retains authority to require corrections and/or perform on-site inspections as deemed necessary to verify code compliance.
- II. You will be notified by return email regarding the status of your *e-Inspection* permit after your photographic/video inspection evidence has been reviewed.

Minimum Mandatory PV Plans Checklist

- ___ a. Basic site plan provided showing property lines, easements, locations of structures and equipment. *
- ___ b. Layout of array configuration and placement of equipment and modules with dimensioned access and pathways (roof mount) or vegetative clearance (ground mount). *
- ___ c. Electrical single line drawing including:
 - Size and location of main electrical panel and sub panels
 - Equipment grounding
 - Combiner/junction box location
 - AC / DC disconnect box
 - Conduit size from the array to the power source
 - Inverter string sizing or micro inverter branch circuit details
 - Conductor wiring methods and insulation rating, system and solar panel grounding methods per inverter and solar panel manufacturer's listings, and PV system DC and AC disconnects
 - Listing information, including mounting, wire type, method of grounding, of PV modules and mounting racks
- ___ d. Marking and signage (on panel(s), disconnects and transmission line conductors).
- ___ e. Provide cut sheets for all PV equipment and mounting systems including, but not limited to:
 - PV modules
 - Rack mounting system
 - Mounting brackets
 - Grounding hardware
 - Inverters or micro inverters
 - Panel and rack attachment details
- ___ f. Equipment type, listing, testing agency approvals, etc.
- ___ g. Plans must show compliance with Marin County Fire Standard 523 (see **Residential PV Installation Code Reference Guide**).
- ___ h. Permanent labels and signage with a red background and white lettering resistant to fading pursuant to UL 969 and California Electrical Code Article 690 and permanently affixed.
- ___ i. Elevation view showing maximum height of PV installation above ground (ground mount only) or roof plane with structural cross-section identifying adequate roof support.

*a. and b. may be listed on the same diagram.

Residential PV Installation Code Reference Guide

All residential PV system installations must demonstrate compliance with:

1. 2010 California Electrical Code Article 690 for solar photovoltaic systems, and
2. Marin County Fire Department Standard 523 for alternate energy systems

Useful guidelines for streamlined submittal documentation and review are available through:

- A. Residential Rooftop Photovoltaic Systems prepared by Redwood Empire Association of Code Officials and Solar Sonoma County,
- B. Expedited Permit Process for PV Systems prepared by Bill Brooks, P.E. for the Solar America Board for Codes and Standards, and
- C. California Solar Permitting Guidebook developed by Solar Permitting Workgroup, The Governor's Office of Planning and Research, Office of Governor Edmund G. Brown, Jr.

NOTE: This application form and the reference documents listed on this page are available for review and download at www.marincounty.org/bldg

PHOTO/VIDEO DOCUMENTATION GUIDELINES

Contractors must be prepared to **provide photographic evidence** showing conformance with all technical and code requirements that apply to their PV installation. The inspector must be able to review the photographic evidence and determine the installation is in conformance with applicable code requirements and with the approved plans.

Below are common points of PV Installation photo-inspection with which the contractor should be prepared to demonstrate compliance through photographs:

- Number of PV modules and model number match plans, and specification sheets
- Array conductors and components are installed in a neat and workman-like manner and conform to Marin County Fire Standard 523
- PV array is properly grounded
- Electrical boxes are accessible and connections are suitable for environment
- Array is fastened and sealed according to attachment detail and Marin County Fire Standard 523
- Conductors ratings and sizes match plans
- Appropriate signs are properly constructed, installed, and displayed, including:
 - Signs identifying PV power source system attributes at DC disconnect and AC point of connection
 - Marking identifying conduit and Sign identifying switch for alternative power system
- Equipment ratings are consistent with application and installed signs on the installation, including:
 - Inverter has a rating as high as max voltage on PV power source sign
 - DC-side overcurrent circuit protection devices (OCPDs) are DC rated at least as high as max voltage on sign
 - Switches and OCPDs are installed according to the manufacturer's specifications (i.e. many 600VDC switches require passing through the switch poles twice in a specific way)
 - Inverter is rated for the site AC voltage supplied and shown on the AC point of connection sign
 - OCPD connected to the AC output of the inverter is rated at least 125% of maximum current on sign, and is no larger than the maximum OCPD on the inverter listing label
 - Sum of the main OCPD and the inverter OCPD is rated for not more than 120% of the bus-bar rating