DOCKETED	
Docket Number:	15-BSTD-02
Project Title:	Residential Compliance Manual and Documents
TN #:	232817-3
Document Title:	2016-CF2R-SPV-01a-PVSystems-ComplianceCreditspdf
Description:	N/A
Filer:	Corrine Fishman
Organization:	California Energy Commission
Submitter Role:	Public Agency
Submission Date:	4/22/2020 9:28:33 AM
Docketed Date:	4/22/2020

CERTIFICATE OF INSTALLATION		CF2R-SPV-01-E
Photovoltaic Systems		(Page 1 of 2)
Project Name:	Enforcement Agency:	Permit Number:
Dwelling Address:	City:	Zip Code:

The installer is required to fill out this compliance document for all newly installed Photovoltaic Systems (PV) when the CF1R shows PV as required for compliance. Single family and multifamily residences may install a PV system for compliance purposes. The performance compliance approach must be utilized and the project must be located in climate zones 1-5 or 8-16. Procedures for verifying compliance are described in Reference Residential Appendix RA4.6.

The installer is required to fill out this compliance document for all newly installed Photovoltaic Systems (PV) when the PV system is being used to claim an exception to the Solar Ready requirements of Section 110.10, specifically Exception 1 to Section 110.10(b)1A for single family residences or Exception 1 to Section 110.10(b)1B for low-rise multifamily buildings. High-rise Multifamily buildings and Hotel/Motel Occupancies with fewer than 10 stories and nonresidential buildings with 3 stories or fewer must use the NRCI-SPV-01-E to claim Exception 1 to Section 110.10(b)1B.

A. General Information		
01	Is this PV system being used to claim a Compliance Credit for PV installation in a single family residence?	
02	Is this PV system being used to comply with the Solar Ready Area Exception?	

SPV-01a Photovoltaic Compliance Credit

B. PV System Eligibility for Compliance Credit		
01	Module Manufacturer Name	
02	Module Model Number	
03	Inverter Manufacturer Name	
04	Inverter Model Name	
05	Enter Module Nameplate DC Power Rating Measure Under Standard Test Conditions (Watts)	
06	Enter Number of Modules used in the PV System	
07	Installed PV System Nameplate DC Power Rating (Watts)	
08	Compliance Statement:	
09	PV array installed at either: • A roof pitch no greater than 2.4° (ratio of rise to run no greater than 0.5:12); or • A roof pitch greater than 2.4° and no greater than 30.3° (ratio of rise to run no greater than 7:12) and with an orientation between 110° and 270° relative to true north.	
10	The PV System is equipped with one of the following: • A system energy production meter that is integral to the inverter; • A standalone system energy production meter; • An energy production monitoring system.	
11	Any obstruction that projects above a PV array shall be located twice the distance, measured in the horizontal plane, of the height difference between the highest point of the obstruction and the horizontal projection of the nearest point of the PV array, measured in the vertical plane.	
The responsible person's signature on this compliance document affirms that all applicable requirements in this table have been met.		

CERTIFICATE OF INSTALLATION		CF2R-SPV-01-E
Photovoltaic Systems		(Page 2 of 2)
Project Name:	Enforcement Agency:	Permit Number:
Dwelling Address:	City:	Zip Code:

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT	
1. I certify that this Certificate of Installation documentation is accurate and complete.	
Documentation Author Name:	Documentation Author Signature:
Documentation Author Company Name:	Date Signed:
Address:	CEA/HERS Certification Identification (if applicable):
City/State/Zip:	Phone:

RESPONSIBLE PERSON'S DECLARATION STATEMENT

I certify the following under penalty of perjury, under the laws of the State of California:

1. The information provided on this Certificate of Installation is true and correct.
2. I am either: a) a responsible person eligible under Division 3 of the Business and Professions Code in the applicable classification to accept responsibility for the system design, construction, or installation of features, materials, components, or manufactured devices for the scope of work identified on this Certificate of Installation, and attest to the declarations in this statement, or b) I am an authorized representative of the responsible person and attest to the declarations in this statement on the responsible person's behalf.
3. The constructed or installed features, materials, components or manufactured devices (the installation) identified on this Certificate of Installation conforms to all applicable codes and regulations and the installation conforms to the requirements given on the Certificate of Compliance, plans, and specifications approved by the enforcement agency.
4. I will ensure that a registered copy of this Certificate of Installation shall be posted or made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections. I understand that a registered copy of this Certificate of Installation is required to be included with the documentation the builder provides to the building owner at occupancy.

Responsible Builder/Installer Name:	Responsible Builder/Installer Signature:	
Company Name: (Installing Subcontractor or General Contractor or Builder/Owner)	Position With Company (Title):	
Address:	CSLB License:	
City/State/Zip:	Phone:	Date Signed:

CF2R-SPV-01a-E User Instructions

A. General Information

01 Is this PV system being used to claim a Compliance Credit for PV installation in a single family residence? User selects from available options: No compliance credit claimed, Credit Claimed

02 Is this PV system being used to comply with the Solar Ready Area Exception? User selects from available options: No exception claimed, Exception Claimed: Single family residence, Exception Claimed: Low-rise Multifamily building

B. PV System Eligibility for Compliance Credit

01 Enter the module manufacturer name.

02 Enter the module model name.

03 Enter the inverter manufacturer name.

04 Enter the inverter model name.

05 Enter the module's nameplate DC power rating under Standard Test Conditions in units of Watts.

06 Enter the number of modules used in the PV system.

07 The installed PV system's DC power rating will be calculated by multiplying the module DC nameplate power rating by the number of modules used in the PV system. The PV system complies if the installed system's DC power rating is greater than or equal to 2,000 Watts.

08 By signing the compliance document, the applicant acknowledges that all requirements listed in B09 thru B11 have been met.

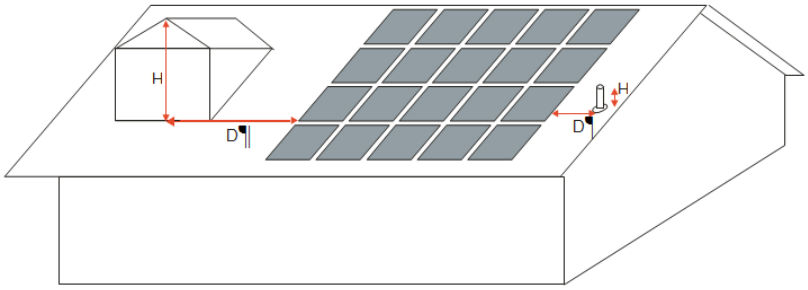
Shading. §110.10(b)3

For both single family residences and low-rise multi-family buildings, the solar zone shall be free from roof penetrations and shall not have any obstructions such as vents, chimneys, architectural features, or roof mounted equipment located in the solar zone. This requirement is so that the solar zone remains clear and open for the future installation of a solar energy system.

For both single family residences and low-rise multi-family buildings, any obstruction, located on the roof or any other part of the building that projects above the solar zone shall be located at a sufficient horizontal distance away from the solar zone, in order to reduce the resulting shading of the solar zone. For each obstruction, the horizontal distance ("D") from the obstruction to the solar zone shall be at least two times the height difference ("H") between the highest point of the obstruction and the horizontal projection of the nearest point of the solar zone.

Figure 7.1 Artistic Depiction of "H" and "D"

$$D \geq 2 \times H$$



Source:·California·Energy·Commission¶

Any obstruction oriented north of all points of the solar zone is not subject to these requirements. Any obstruction which is not located on the roof or another part of the building, such as landscaping or a neighboring building is not subject to these requirements.