CERTIFICATE OF COMPLIANCE

This document is used to demonstrate compliance with prescriptive PV and battery requirements in §140.10/§170.2 for low-rise multifamily and low-rise mixed-use buildings and prescriptive solar thermal requirements in §170.2(d)3C for low-rise multifamily and hotel/motel occupancies. When PV/battery/solar thermal requirements don't apply or are traded using the performance approach, this document demonstrates compliance with mandatory solar readiness requirements in §110.10/ §160.8 for newly constructed buildings which are low-rise multifamily or low-rise mixed-use. It is also used to demonstrate compliance with solar readiness in §160.8 for additions to low-rise multifamily which add more than 2,000 ft^2 of roof area. Alterations, or additions of less than 2,000 ft^2 of roof area, are not required to comply with solar readiness, solar PV and battery requirements and do not need to complete this document.

Project Name:	Enforcement Agency:
Dwelling Address:	Permit Number:
City and Zip Code:	Date Permit Issued:

A. GENERAL INFORMATION

01	Project Location (city)		04	Building Occupancies	
02	Climate Zone		05	Construction Type	
03	Square Footage of Building (ft^2)		06	Number of Stories	

STOP! Alterations, or additions that increase roof area by ≤ 2,000 ft2, are not required to comply with requirements in §110.10/§140.10/§170.2(g and h) and do not need to complete this compliance document.

STOP! Healthcare facilities are not required to comply with the requirements of §110.10/§140.10/§170.2(g and h) and do not need to complete this compliance document.

B. PROJECT SCOPE

The compliance path the project is using to comply per §110.10(b)1B/§140.10/§170.2(g and h) is indicated below.

Compliance with Solar Readiness Requirements in §110.10(b)1B

		01	
☐	Provide Solar Ready Area no exceptions	The project has allocated a solar zone on the roof plan per requirements in §110.10(b), as documented in Table F.	
☐	Exception to Solar Ready Area: Installed Solar Photovoltaic System	The project includes a permanently installed solar electric system having a nameplate DC power rating, measured under Standard Test Conditions, of no less than one watt per square foot of roof area, as documented in Table G.	
☐	Exception to Solar Ready Area: Installed Solar Water Heating System	The project is a hotel/motel or high-rise multifamily occupancy and includes a permanently installed domestic solar water-heating system complying with §170.2(d)2Bii and Reference Residential Appendix RA4, as documented in Table H.	
☐	Exception to Solar Ready Area: Smart Thermostat and Alternative Energy Efficiency Measure	The project is a multifamily occupancy where all thermostats in each dwelling unit comply with §110.12(a) AND at least one additional measure listed in Exception 4 to §110.10(b)1B is installed, as documented in Table I.	
☐	Exception to Solar Ready Area: Roof is designed for vehicular traffic, parking or for heliport	Plan sheet showing roof designed for vehicular traffic, parking, or heliport:	
☐	Exception to Solar Ready Area: Roof too small	The project is new construction and has a total roof area <= 533 square feet.[1]	
☐	Exception to Solar Ready Area: Number of building stories	The project is nonresidential > 3 stories or multifamily/hotel/motel > 10 stories.	

[1] FOOTNOTE: Buildings with roof area <= 533 ft^2 would have a required solar zone < 80ft^2 and are therefore exempt per §110.10(b)1.

Compliance with Solar Photovoltaic (PV) and Battery Requirements in §140.10/§170.2 (g & h)

		01
☐	Provided PV system and battery storage sized per §140.10/§170.2 (g & h)	The project has included an installed PV system and battery storage system per requirements in §140.10/ §170.2(g & h), as documented in Table J.
☐	Exception to PV & Battery: Not enough Solar Access Roof Area	The total of all available Solar Access Roof Area(s) of the project site is less than three percent of the conditioned floor area as documented in Table J per Exception 1 to Section 140.10(a) & Exception 1 to Section 170.2(g).
☐	Exception to PV & Battery: Required PV < 4kW	The required PV system capacity is less than 4 kWdc as documented in Table J per Exception 2 to Section 140.10(a) & Exception 2 to Section 170.2(g).
☐	Exception to PV & Battery: No contiguous Solar Access Roof Area	The Solar Access Roof Area(s) of the project site contains less than 80 contiguous square feet as documented in Table J per Exception 3 to Section 140.10(a) & Exception 3 to Section 170.2(g)
☐	Exception to PV & Battery: Can't meet snow load	The project has a roof design where the enforcement authority has verified it is not possible for the PV system, including panels, modules, components, supports, and attachments to the roof structure, to meet ASCE 7-16, Chapter 7, Snow Loads per Exception 4 to Section 140.10(a) & Exception 4 to 170.2(g)
☐	Exception to PV & Battery: Multifamily without virtual energy credits	The project is a multifamily building in an area where a load serving entity does not provide a program where PV generation is compensated through virtual energy bill credits. Also, there is no community solar program and the utility does not support a virtual energy bill program per exception 5 to 170.2(g).
☐	Exception to PV & Battery: < 80% of Occupancy listed in Table 140.10-A	The project has a building where < 80% of the floor area is an occupancy in Table 140.10-A

Compliance with Solar Thermal Water Heating Requirements in §170.2(d)Bii(Multifamily and Hotel/motel occupancies only)

	01
☐	The project includes a hotel/motel or multifamily occupancy with a gas or propane central water-heating system (serves 2+ dwelling units) and includes a permanently installed domestic solar water-heating system to comply with §170.2(d)Bii and Reference Residential Appendix RA4, as documented in Table H. Compliance meets Exception 2 to solar ready requirements in §110.10(b).

C. COMPLIANCE RESULTS

Results in this table are automatically calculated from data input and calculations in Tables F through I.
Note: If any cell on this table says "COMPLIES with Exceptional Conditions" refer to Table D. Exceptional Conditions for guidance or see the applicable Table referenced below.

Allocated Solar Zone				**Installed PV System**				**Installed SWH System**				**Smart Tstat and Alternative EE Measure**		**Compliance Results**
01		02		03		04		05		06		07	08	09
Required Minimum Area (ft^2)	≤	Designated Area (ft^2)	OR	Required Minimum DC Power Rating (Watts)	≤	Designed DC Power Rating (Watts)	OR	Required Minimum Solar Savings Fraction	≤	Designed/ Rated Solar Savings Fraction	OR	JA5 Compliant Thermostat Specified?	Alternative Energy Efficiency Measure	**COMPLIES or DOES NOT COMPLY or COMPLIES with Exceptions**
(See Table F)				(See Tables G or J)				(See Table H)				(See Table I)		
	≤		**OR**		≤		**OR**		≤		**OR**			

	Location in construction documents showing the location for inverters and metering equipment and a pathway for the routing of conduit/ plumbing to the electrical service/ water heating system per §110.10(c).	**COMPLIES or DOES NOT COMPLY or Not Applicable**
Battery storage system design meets the minimum requirements in Joint Appendix JA12 and the minimum energy (kWh)/ power (kW) capacity per Table J.		**COMPLIES or DOES NOT COMPLY or Not Applicable**

D. EXCEPTIONAL CONDITIONS

This table is auto-filled with uneditable comments because of selections made or data entered in tables throughout the form.

E. ADDITIONAL REMARKS

This table includes remarks made by the permit applicant to the Authority Having Jurisdiction.

F. ALLOCATED SOLAR ZONE

This table is completed if the project is designating a solar zone to comply with §110.10(b)1B. New construction considers the total roof area; Additions consider only newly added roof area.

This table demonstrates that the project has designated the minimum area required for the Allocated Solar Zone, and also that the requirements for Solar Zone Subareas have been met. Each subarea must be shown on a roof plan or documented in construction documents. The solar zones must also comply with fire code requirements, including, but not limited to, setback and pathway requirements. Requirements for interconnection pathways must also be included in construction documents, and the location is specified in this table.

Required Minimum Solar Zone

01	02	03	04	05	06			07	08
Minimum Solar Zone Area Calculation Method	Total New or Added Roof Area (ft^2)	Total New or Added Roof Area Covered with Skylights (ft^2)	Minimum Solar Zone Based on Total or Added Roof Area (0.15 x (Roof-Skylit)) (ft^2)	Method/Tool(s) Used to Determine Annual Solar Access for Potential Zones[1]	**Potential Solar Zone Areas: Roof Areas with ≥ 70% Solar Access**			Minimum Solar Zone Based on Potential Zone (0.5 x (Total Potential Zone)) (ft^2)	Required Minimum Solar Zone Area (ft^2)
					Low-Sloped Area (≤ 2:12 pitch) (ft^2)	Steep-Sloped Area (> 2:12 pitch), Oriented 90° - 300° (ft^2)	Total Potential Solar Zone Area (ft^2)		

Designated Solar Zone Subareas

09	10	11	12	13	14	15	16	17	18	19
Subarea Name or Tag	Building Plan Reference	Roof or Overhang Slope (Low ≤ 2:12 pitch) (Steep > 2:12 pitch)	Is Steep-Sloped Roof or Overhang between 90 and 300 degrees?	Subarea Complies with Title 24, Part 9	Solar Zone Subarea Free of Obstructions per §110.10(b)3A	Subarea is Required Distance from Potential Obstructions per §110.10(b)3B	Is the Smallest Dimension 5 feet or greater?	Min. Area Required per Subarea (ft^2)	Designated Area (ft^2)	Subarea Complies?
								Total Designated Solar Zone Area (ft^2):		

Interconnection Pathways	
Location in construction documents showing the location for inverters and metering equipment and a pathway for the routing of conduit/ plumbing to the electrical service/ water heating system per §110.10(c).	

[1] FOOTNOTE: This field is used to document how the percentage of annual solar access was determined per §110.10(b)1B. Solar access is the ratio of solar insolation including shade to the solar insolation without shade. Shading from obstructions located on the roof or any other part of the building shall not be included in the determination of annual solar access.

G. PERMANENTLY INSTALLED SOLAR PV FOR SOLAR READY EXCEPTION

This table is completed if the project is installing a PV system to comply with §110.10(b)1B Exception 1.

01	02	03	04	05	
Total Roof Area[1] (ft^2)	Required Minimum DC Power Rating (Watts)	Designed System DC Power Rating (Watts)	Location in Construction Documents showing PV System/ Components	Field Inspector	
				Pass	Fail
				☐	☐

[1] FOOTNOTES: Newly Constructed Projects should report total roof area; Additions should report newly added roof area.

H. PERMANENTLY INSTALLED SOLAR HOT WATER SYSTEM

This table is completed if the project is installing a solar water heating (SWH) system to comply with §110.10(b)1B Exception 2 or for multifamily/ hotel/ motel occupancies to demonstrate compliance with §170.2(d)2Bii.

OG-100 Certified Collectors			The SWH system is built-up and specifies collectors certified by the Solar Rating & Certification Company (SRCC) or the International Association of Plumbing & Mechanical Officials (IAPMO) as OG-100.		
☐	Drain Water Heat Recovery		A drain water heat recovery system that is field verified by a HERS Rater as specified in the Reference Appendix RA3.6.9 is being used to lower the required Solar Savings Fraction per §170.2(d)2Bii.		
01	02	03	04	05	
SRCC # or IAPMO File #	Certification #	Designed Solar Savings Fraction for OG-100	Output from CEC's T24 SWH Calculator Attached[1]	Field Inspector	
				Pass	Fail
				☐	☐

[1] FOOTNOTES:-Built-up SWH systems using OG-100 collectors must calculate the Designed Solar Savings Fraction using the SWH module in the CEC's CBECC software. The calculation output must be included within the permit application.

I. SMART THERMOSTATS AND ALTERNATIVE EFFICIENCY MEASURE FOR SOLAR READY EXCEPTION

This table indicates thermostats compliant with §110.12(a) have been specified and which additional energy efficiency measure has been included in the design for high-rise multifamily occupancies complying with Exception 4 to §110.10(b)1B.

01		
Smart Thermostats		
☐	The contract documents clearly specify that all thermostats in each dwelling unit comply with §110.12(a) prior to granting of an occupancy permit by the enforcing agency.	
Location in contract documents:		
02		
Alternative Efficiency Measure		
In addition, my project consists of (check at least one):		
☐	Energy Star Appliances and EC Motor	The contract documents include an ENERGY STAR dishwasher AND EITHER an ENERGY STAR refrigerator OR a whole house fan driven by an electronically commutated motor.
☐	Home Automation System	The contract documents include a home automation system that is capable of, at a minimum, controlling the appliances and lighting of the dwelling and responding to demand response signals.
☐	Greywater irrigation system	The contract documents include alternative plumbing piping to permit the discharge from the clothes washer and all showers and bathtubs to be used for an irrigation system in compliance with the California Plumbing Code and any applicable local ordinances.
☐	Rainwater Catchment System	The contract documents include a rainwater catchment system designed to comply with the California Plumbing Code and any applicable local ordinances, and that uses rainwater flowing from at least 65% of the available roof area.
☐	Part 11: Electric Vehicle Charging Space	The contract documents demonstrate compliance with Title 24, Part 11, §A4.106.8.2 requirements for electric vehicle charging spaces.
Location in contract documents:		

J. PHOTOVOLTAIC (PV) AND BATTERY ENERGY STORAGE SYSTEMS

This table documents compliance with prescriptive photovoltaic and battery system requirements in §140.10/§170.2(g & h). Unless the project meets one of the listed exceptions or trades-off PV in an energy model using the performance path, §140.10/§170.2(g & h) requires installed photovoltaic and battery systems for newly constructed buildings. The installed PV systems must meet the minimum requirements in Joint Appendix 11.

Photovoltaic (PV) System

01	02	03		04
Building Type	Conditioned Floor Area (ft^2)	Tenant Space Exception to §140.10(a)/§170.2(g)		Min Size of PV System Required (kWdc)
		☐	- Tenant space is served by HVAC system that does not serve other tenant spaces in the building	
		☐	- Tenant space has individual utility meter that does not include electric consumption of other tenant spaces in the building	
		☐	- Commission has not approved community solar program applicable to this project	
		☐	- Load serving entity does not provide program for virtual energy bill credits	

SARA Calculation Method

05	06	07	08	09	10	11	12
Roof Name	Roof Slope	Area of New Roof[1] (ft^2)	Roof Area < 70% Solar Access[2] (ft^2)	Plansheet or Document showing Solar Access Calculations	Roof area occupied, no structural support, not available due to other state codes, < 80 contiguous ft^2	Solar Access Roof Area (SARA) (ft^2)	Min Capacity of PV System Required (kW_{dc})
					Total Min Size PV System Required for all Spaces (kW_{dc}):		
					Total Size PV System in Design (kW_{dc}):		

[1] FOOTNOTES: Includes the area of the building's roof space capable of structurally supporting a PV system, and the area of all roof space on covered parking areas, carports, and all other newly constructed structures on the site that are compatible with supporting a PV system per Title 24, Part 2, Section 1511.2.

[2] Solar access must be determined using CEC approved solar access calculation tools found at: https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/solar-assessment-tools

[3] As specified by CBC Section 503.1.4

Battery Energy Storage System

Installed battery energy storage systems must meet the minimum requirements in Joint Appendix JA12.

01	02	03	04	05
Building Type	Min Size of PV System Required (kW_{dc})	Rated Single Charge-Discharge AC Efficiency of Battery System[1]	Min Battery Rated Energy Capacity Required (kWh)	Min Power Capacity of Battery Required (kW_{dc})
		Total Min Energy (kWh) and Power (kW) Capacity Required:		
		Total Energy (kWh) and Power (kW) Capacity in Design:		

[1] FOOTNOTE: Rated single charge-discharge cycle AC to AC (round-trip) efficiency of the battery storage system

K. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION

Selections have been made based on information provided in this document. If any selections have been changed by the permit applicant, an explanation should be included in Table E. Additional Remarks. These documents must be provided to the building inspector during construction and can be found online.

YES	NO	Form/Title	Field Inspector	
			Pass	Fail
❍	❍	NRCI-SAB-E - Must be submitted for all buildings that must comply with solar readiness or PV/Battery requirements.	☐	☐
❍	❍	NRCI-PLB-E - Must be submitted for all buildings that must comply with solar water heating requirements.	☐	☐

L. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE

There are no Certificates of Acceptance applicable to solar readiness or PV/battery requirements.

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

1. I certify that this Certificate of Compliance documentation is accurate and complete.

Documentation Author Name:	Documentation Author Signature:
Company:	Signature Date:
Address:	CEA/AEA/ECC 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 Compliance is true and correct.
2. I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer).
3. The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations.
4. The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.
5. I understand that a completed signed copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building and shall be made available to the enforcement agency for all applicable inspections. I will take the necessary steps to fulfill this requirement.
6. I understand that a completed signed copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy. I will take the necessary steps to fulfill this requirement.

Responsible Designer Name:	Responsible Designer Signature:
Company :	Date Signed:
Responsible Person Scope:	
Address:	License:
City/State/Zip:	Phone:

A. General Information

1. Enter the City the project is located in.
2. Climate Zone: Select from dropdown.
3. Enter the Conditioned Floor Area.
4. Building Occupancies: Select from dropdown.
5. Construction Type: Select from dropdown.
6. Number of Stories: Select from dropdown.

B. Project Scope

Compliance with Solar Readiness Requirements in §110.10(b)1B

1. Select the project scope.

Compliance with Solar Photovoltaic (PV) and Battery Requirements in §140.10/§170.2 (g & h)

1. Select the project scope.

Compliance with Solar Thermal Water Heating Requirements in §170.2(d)3C (Multifamily and hotel/motel occupancies only)

1. Select if your project meets the requirements.

C. Compliance Results

1. Results in this table are automatically calculated from data input and calculations in Tables F through I.

D. Exceptional Conditions

1. This table is auto-filled with uneditable comments because of selections made or data entered in tables throughout the form.

E. Additional Remarks

1. Enter any notes or comments for the AHJ.

F. Allocated Solar Zone

Required Minimum Solar Zone

1. Minimum Solar Zone Area Calculation Method: Select from dropdown.
2. Enter the Total New or Added Roof Area.
3. Enter the Total New or Added Roof Area Covered with Skylights.
4. This field is filled out automatically.
5. Enter the Method/Tools(s) Used to Determine Annual Solar Access for Potential Zones.
6. Enter the Low-Sloped Area

Enter the Steep-Sloped Area

The Total Potential Solar Zone Area is filled out automatically.

7. This field is filled out automatically.
8. This field is filled out automatically.

Designated Solar Zone Subareas

9. Enter the Subarea Name or Tag.
10. Enter the Building Plan Reference.
11. Roof or Overhang Slope: Select from dropdown.
12. Is Steep-Sloped Roof or Overhang between 90 and 300 degrees?: Select Yes or No.
13. Subarea Complies with Title 24, Part 9: Select Yes or No.
14. Solar Zone Subarea Free of Obstructions: Select Yes or No.
15. Subarea is Required Distance from Potential Obstructions: Select Yes or No.
16. Is the Smallest Dimension 5 feet or greater?: Select Yes or No.
17. This field is filled out automatically.
18. Enter the Designated Area.
19. This field is filled out automatically.

Interconnection Pathways

Enter the location in construction documents showing the location for inverters and metering equipment and a pathway for the routing of conduit/ plumbing to the electrical service/ water heating system.

G. Permanently Installed Solar PV for Solar Ready Exception

1. Enter the Total Roof Area.
2. This field is filled out automatically.
3. Enter the Designed System DC Power Rating.
4. Enter the Location in Construction Documents showing PV System/Components.
5. This is a Pass or Fail checkbox for the field inspector.

H. Permanently Installed Solar Hot Water System

1. SRCC # or IAPMO File #: Select from dropdown.
2. Enter the Certification #.
3. Enter the Designed Solar Savings Fraction for OG-100.

4. Output from CEC's T24 SWH Calculator Attached: Select Yes to confirm.
5. This is a Pass or Fail checkbox for the field inspector.

I. Smart Thermostat and Alternative Efficiency Measure for Solar Ready Exception

1. Confirm that the contract documents specify that all thermostats comply with the requirements.
2. Select which measures apply to the project.

J. Photovoltaic (PV) and Battery Systems

Photovoltaic (PV) System

1. Enter the Multifamily Building Name.
2. Enter the Conditioned Floor Area (ft2).
3. Enter the Tenant Space Exception.
4. Enter Min Capacity of PV System Required (kW_{dc}).

SARA Calculation Method

5. Enter the Roof Name
6. Enter the Roof Slope.
7. Enter the Area of New Roof (ft^2).
8. Enter the Roof Area < 70% Solar Access (ft^2).
9. This field is filled out automatically.
10. This field is filled out automatically.
11. This field is filled out automatically.
12. This field is filled out automatically.

Battery Storage System

1. This field is filled out automatically.
2. This field is filled out automatically.
3. Enter the Rated Single Charge-Discharge AC Efficiency of Battery System.
4. This field is filled out automatically.
5. This field is filled out automatically.

K. Declaration of Required Certificates of Installation

1. Selections have been automatically made based on information provided in this document. If any selections have been changed by the permit applicant, an explanation should be included in Table E. Additional Remarks.

L. Declaration of Required Certificates of Acceptance

1. Selections have been made based on information provided in this document. If any selections have been changed by the permit applicant, an explanation should be included in Table E. Additional Remarks.

Documentation Declaration Statements

1. The person who prepared the NRCC will sign and complete the fields for their name, company (if applicable), address, phone number, certification information (if applicable), date and signature.
2. The person who is assuming responsibility for the project being built to comply with Title 24, Part 6, will complete the fields for their name, company (if applicable), address, phone number, license number (if applicable), date and signature.