

BLUEPRINT

CALIFORNIA ENERGY COMMISSION
EFFICIENCY DIVISION

IN THIS ISSUE

- Nonresidential Acceptance Testing Reminder
- HERS Registry Project Status Report
- 2019 Compliance Software Update
- New Resources on the ORC
- Solar Assessment Tools Updated
- Q&A
 - Solar Ready for Mixed Use Occupancies
 - Electric Resistance Water Heaters

For additional help with the 2019 Energy Code see Energy Code Ace's **online offerings** of trainings, tools, and resources.



Nonresidential Acceptance Testing Reminder

The California Energy Commission (CEC) expects authorities having jurisdiction (AHJ) to enforce the mechanical systems acceptance test technician (ATT) requirements for all nonresidential permit applications submitted on or after October 1, 2021. The six-month period for training and implementation of additional ATTs has come to an end. The mandatory requirement that any person performing a mechanical systems acceptance test in a nonresidential building must be certified as an ATT took effect on April 14, 2021.

Mechanical and lighting ATTs must be trained, certified, and overseen by an acceptance test technician certification provider (ATTCP) to perform nonresidential acceptance testing for lighting controls or

mechanical systems. Lighting controls acceptance testing by a certified ATT became mandatory on July 1, 2014.

The AHJ should only accept nonresidential certificates of acceptance (NRCA) that have an ATTCP logo for mechanical and lighting projects permitted on or after October 1, 2021. The ATTs are required to use the ATTCP database system to record testing results and generate NRCAs. All NRCA forms ending in -A (Figure 1) will need to be completed by a certified ATT through an ATTCP website.

The CEC offers training on the lighting and mechanical ATTCP programs. The course provides a basic overview of the responsibilities and benefits to the builder, contractor, ATT, and building inspector.

Additional information is available on the [ATTCP FAQ webpage](#).

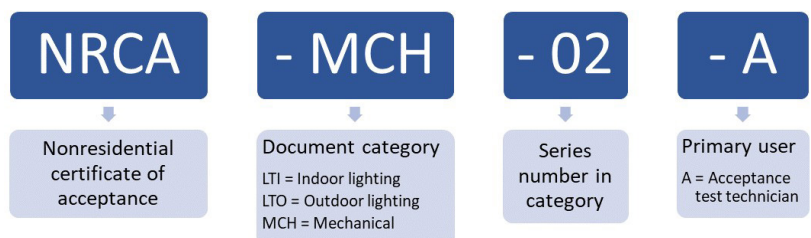


Figure 1: Nonresidential Form Name Example

HERS Registry Project Status Report

The project status report (PSR) is available for any residential project that is registered with an approved HERS Provider. The PSR summarizes the status of all compliance documents for the project, including the certificates of compliance (CF1R), installation (CF2R), and verification (CF3R). Enforcement agencies can access the PSR directly through the HERS registries. This provides enforcement agencies the opportunity to verify the completion of the CF1R, CF2R, and CF3R documents online. Enforcement agencies can request that applicants submit a printed PSR prior to final inspection.

To determine if a project is ready for a final inspection, both the overall compliance and HERS measures status should be marked complete. If the project is marked complete, this indicates that all the compliance documents have been completed and signed in the registry. The PSR can help reduce the number of documents submitted to the enforcement agency and assist with compliance verification.

CalCERTS (Figure 2) and CHEERS (Figure 3) registries have this report available. For more information visit the [CalCERTS web site](#) and the [CHEERS web site](#).













PROJECT STATUS REPORT		CalCERTS, Inc	
Effective 09/23/2021 11:09		(Page 1 of 3)	
GENERAL INFORMATION			
Energy Standards Code Year:	2019		Easy to Verify @ calcerts.com
Project Name:	Smith Residence SFR		
Project Type:	New Construction SFR		
Address:	1111 Unicorn Lane		
City/State/Zip:	CalCERTSville / CA / 00000		
Enforcement Agency:	City of CalCERTSville		
Permit Number:	Permit 888		
OVERALL STATUS:	COMPLETE		
HERS VERIFIABLE MEASURES:	COMPLETE		
CF1R INFORMATION - Certificate of Compliance (Document Lists Required Energy Features)			
Certificate Type	Compliance		
Registered Form	CF1R-PRF-01		
Registered Date	2021-09-23 10:40:39		
Registration Number	221-P010199851A-000-000-0000000-0000		
CF2R INFORMATION - Certificate of Installation (Documents the proper installation of required energy features)			
System	Form	Registered Date	Registration Number
	CF2R-ENV-01-E Fenestration Installation	2021-09-23 10:57:46	221-P010199851A-000-001-E01001A-0000 Johnny Installer (DEV INSTALLERS &)
	CF2R-ENV-03-E Insulation Installation	2021-09-23 10:57:46	221-P010199851A-000-001-E03001A-0000 Johnny Installer (DEV INSTALLERS &)
	CF2R-ENV-21-H Oil-Framing Stage	2021-09-23 10:57:46	221-P010199851A-000-001-E21001A-0000 Johnny Installer (DEV INSTALLERS &)
	CF2R-ENV-22-H Oil-Insulation Installation	2021-09-23 10:57:46	221-P010199851A-000-001-E22001A-0000 Johnny Installer (DEV INSTALLERS &)
	CF2R-LTG-01-E Lighting	2021-09-23 10:57:47	221-P010199851A-000-001-L01001A-0000 Johnny Installer (DEV INSTALLERS &)


Figure 2: CalCERTS PSR

PROJECT SUMMARY		HERS VERIFIABLE MEASURES	
Project Name:	ADU Example HERS D-oiro	HERS VERIFIABLE MEASURES	COMPLETE 
Address:	1516 Ninth St	ENERGY CODE COMPLIANCE	INCOMPLETE 
City, State, Zip:	Sacramento, CA, CA 95814		
Building Department:	Sacramento, City of		
Permit Number:	permit20		
Building Energy Code:	2019 Standards		

CERTIFICATE OF COMPLIANCE (CF1R)				
DATE	DOCUMENT	TITLE	REGISTRATION NUMBER	STATUS
09/16/2020	CF1R-PRF-01-E	Performance Compliance	420-P010116592A-000-000-0000000-0000	

CERTIFICATE OF INSTALLATION (CF2R)				
DATE	DOCUMENT	TITLE	REGISTRATION NUMBER	STATUS
	CF2R-ENV-01-E	Fenestration		
	CF2R-ENV-03-E	Insulation Installation		
	CF2R-ENV-04-E	Roofing Radiant Barrier		
	CF2R-LTG-01-E	Lighting		
	CF2R-MCH-01d-E	HVAC, Ducts and Fans		
	CF2R-MCH-32-H	Local Mechanical Exhaust		
09/16/2020	CF2R-PLB-22a-H	Hot Water Distribution	420-P010116592A-000-001-B22001A-0000	

CERTIFICATE OF VERIFICATION (CF3R)				
DATE	DOCUMENT	TITLE	REGISTRATION NUMBER	STATUS
09/16/2020	CF3R-PLB-22a-H	Hot Water Distribution	420-P010116592A-000-001-B22001A-B22A	

 NOTICE: This compliance summary report has been generated by a registration platform provided by CHEERS using information that has been updated to that registration platform by third parties that are not affiliated or related to CHEERS. Therefore, CHEERS is not responsible for, and cannot guarantee, the accuracy or completeness of the information contained in this certificate.

Page 1 of 1

Figure 3: CHEERS PSR

2019 Compliance Software Update

Updated versions of CBECC-Res 2019.2.0 and CBECC-Com 2019.2.0 were approved September 1, 2021, for demonstrating performance compliance with the 2019 Building Energy Efficiency Standards (Energy Code). Permit applications made on or after January 1, 2022, must use CBECC-Res 2019.2.0 or CBECC-Com-2019.2.0. More information for CBECC-Res 2019.2.0 or CBECC-Com 2019.2.0 updates are available on the [2019 approved computer compliance programs webpage](#).

Previous software versions are approved for demonstrating

performance compliance with the 2019 Energy Code until December 31, 2021. Please see all of the CBECC and third-party **residential software expiration dates** and **nonresidential software expirations dates**.

New Resources on the ORC

The Online Resource Center (ORC) has a new 2019 Energy Design Rating fact sheet on the [overview webpage](#).

The ORC has new 2019 Energy Code lighting videos on the [lighting webpage](#).

The videos are designed to increase knowledge and implementation of code-compliant lighting in nonresidential and residential buildings.

Nonresidential

- Indoor Lighting Controls Requirements and Technologies – Multi-level Lighting Controls
- Acceptance Testing Compliance Process
- Outdoor Lighting Alterations

Residential

- Reference Joint Appendix JA8

The videos were developed by the University of California, Davis, California Lighting Technology Center (CLTC) with funding from Southern California Edison, in collaboration with RMS Energy Consulting, LLC, and the CEC.

Solar Assessment Tools Updated

The **solar assessment tools webpage** has been updated with additional approved tools and links. These tools can be used to verify and document the shading conditions of an installed solar photovoltaic (PV) system as part of the PV requirements for the 2019 Energy Code. The tools may also confirm an exception to the PV requirements has been met.

Q&A

Solar Ready for Mixed Use Occupancies

Does a nonresidential building with 1-story of habitable space and a 12-story parking garage need to meet solar ready requirements?

Yes. Per **Section 110.10(a)**, solar ready is required since there is only 1 habitable story in the 12-story building.

The habitable space is a 2,000 square foot office with 1,000 square feet of roof area. The parking garage is 12 stories high, and the entire 12th floor is 50,000 square feet of parking area. Is solar ready area calculated based on the entire roof square footage on the building?


No. **Exception 5 to 110.10(b)1B** applies to areas that are designed and approved

**ENERGY
STANDARDS**

HOTLINE

Available to help with
Energy Code
(Title 24, Part 6) questions.

 EMAIL
title24@energy.ca.gov

 CALL
800-772-3300 | 916-654-5106
Toll free in CA | Outside CA

HOURS 8 a.m.–12 p.m. and 1 p.m.–4:30 p.m.

for vehicular traffic and parking exempting the 50,000 square foot garage roof area. The required solar ready access area should be no less than 15 percent of the total roof area of the 1,000 square foot roof at the lower habitable floor.

Electric Resistance Water Heaters

Can electric resistance water heaters be used prescriptively in newly constructed low-rise residential buildings?

No. Per prescriptive **Section 150.1(c)8** electric resistance water heaters are not allowed. However, the performance approach allows trade-offs of more efficient items that may make up for the large penalty that will occur. All water heaters need to meet the mandatory efficiency requirement in the **2019 Water Heater Efficiency Guide**. Heat pump water heaters are the 2019 prescriptive baseline for all-electric construction, as this is the most efficient option.

Can electric resistance water heaters be used prescriptively in additions to low-rise residential additions?

No. If the project includes adding another water heater as part of the addition, then the requirement under **Section 150.2(a)1D** is triggered, which refers to **Section §150.1(c)8**.

Can electric resistance water heater be used prescriptively for low-rise residential alterations?

Yes, if natural gas is not connected to the location of the existing water heater per **Section 150.2(b)1Hiiid**. If gas is connected, the water heater must be a gas, propane, or heat pump water heater per **Section 150.2(b)1Hiiia-c**. Electric resistance water heaters may be used through the performance approach if the compliance penalty can be overcome through trade-offs. See the **Residential Water Heater Alterations Guide** for more information.

FOR MORE INFORMATION

Online Resource Center (ORC):
www.energy.ca.gov/orc

Home Energy Rating System (HERS):
www.energy.ca.gov/HERS

Acceptance Test Technician Certification Provider Program (ATTCP): www.energy.ca.gov/ATTCP

2019 Approved Compliance Software:
<https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/2019-building-energy-efficiency-2>

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The CEC welcomes feedback on Blueprint.
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