

Plan Review Requirements for California Energy Code

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Part 1 – Reference to Part 6

Chapter 7, Article 1 General

7-103. Jurisdiction. The following are within the jurisdiction of Office of Statewide Health Planning and Development:

...

(c) For hospital buildings, skilled nursing facilities and intermediate care facilities, the Office shall also enforce the regulations of the California Building Standards Code as adopted by **the California Energy Commission**, the Office of the State Fire Marshal and the Division of the State Architect/Access Compliance Section, for **Energy Conservation**, fire and life safety and accessibility compliance for persons with disabilities, respectively.

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Part 1 - Building Energy Efficiency Program

CAC 7-118. Building Energy Efficiency Program.

~~Projects that consist of any new elements related to A thru D shall include a Building Energy Efficiency Program with the submittal. The Program shall describe how the design of the building systems meets the owner's project requirements and include the associated Basis of Design (BOD) document required under Title 24, Part 6. The BOD shall describe the building systems to be commissioned, outline design assumptions, describe how the building systems design meets the owner's project requirements, and why the systems were selected. The BOD shall cover the following systems and components as described in the Building Energy Efficiency Standards, Nonresidential Compliance Manual:~~

- ~~A. HVAC systems efficiencies~~
- ~~B. Indoor lighting systems efficiencies~~
- ~~C. Water heating systems efficiencies~~
- ~~D. Building envelope considerations~~



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Part 6 – California Energy Code (CEC)

SUBCHAPTER 6

NONRESIDENTIAL, HIGH-RISE RESIDENTIAL AND HOTEL/MOTEL OCCUPANCIES—ADDITIONS, ALTERATIONS AND REPAIRS

Section 141.0: Additions, alterations, and repairs to existing nonresidential, high-rise residential, and hotel/motel buildings, existing outdoor lighting for these occupancies, and internally and externally illuminated signs, shall meet the requirements specified in Sections 100.0 through 110.10, and 120.0 through 130.5

Exception to Section 141.0: Alterations to healthcare facilities are not required to comply with this Section.

HEALTHCARE FACILITY is any building or portion thereof licensed pursuant to California Health and Safety Code Division 2, Chapter 1, §1204 or Chapter 2, §1250.

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Energy Opportunities for Remodels

Energy Savings Opportunities:

- **Revisit HVAC loads based on new occupancy:**
 - Air Changes per Hour vs Actual Loads
 - Ventilation Rates
- **Review Filtration Requirements**
- **Consider converting to Variable Volume**
- **Determine Lighting Levels**



Evaluate overall impact of Part 6 compliance for new occupancy.

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LEARNING OBJECTIVES *for* Energy Code

- **CEC *versus* OSHPD “Addition”**
- **What’s Regulated**
- **Enforcement**
- **Application to Additions and Expansions**
- **Resources, Training & Software**
- **Plan Review**

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Part 6 – California Energy Code (CEC)

Applications to Building Envelope and Other Features

OSHPD versus CEC Definition of “Addition”

What’s the Difference?

OSHPD:

[A] ADDITION. An extension or increase in floor area or height of a building or structure. *[DSA-AC] An expansion, extension or increase in the gross floor area or height of a building or facility.*

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Part 6 – Applications to Building Envelope

CEC:

ADDITION is any change to a building **that increases conditioned floor area and conditioned volume**. See also, **“newly conditioned space.”** Addition is also any change that increases the floor area and volume of an unconditioned building of an occupancy group or type regulated by Part 6. Addition is also any change that increases the illuminated area of an outdoor lighting application regulated by Part 6.

NEWLY CONDITIONED SPACE is **any space being converted from unconditioned to directly conditioned or indirectly conditioned space**. Newly conditioned space must comply with the requirements for an addition. See Section 141.0 for nonresidential occupancies and Section 150.2 for residential occupancies.

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What's Regulated?

- **Envelope**, including walls, windows, roof, floors and other elements of the enclosure of a healthcare building
- **Mechanical Systems**, limited mostly to the minimum efficiency requirements of equipment, most controls do not apply
- **Domestic hot water systems** regulating efficiency of equipment and controls
- **Lighting systems** with exceptions for specialty lighting like surgery and exam lighting among others, most controls do not apply
 - Outdoor Lighting?



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Part 6 – Enforcement

Required Verifications

- LED Lighting
- Equipment Efficiency Ratings
- Building Envelope
 - Insulation/Leakage
 - Fenestration
 - ✓ Glazing Type
 - ✓ % Fenestration
 - ✓ Orientation

2019 Nonresidential Appendices Appendix NA7-1

Nonresidential Appendix NA7

Appendix NA7 – Installation and Acceptance Requirements for Nonresidential Buildings and Covered Processes

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Appendix NA7 – Installation and Acceptance Requirements for Nonresidential Buildings and Covered Processes

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Part 6 – Enforcement

OSHPD Systems

Plan Review:

- ✓ Exterior Assemblies & Detailing
- ✓ Electrical Lighting Design & Specifications
- ✓ Mechanical Systems Design & Specifications
- ✓ Energy Code Modeling

Construction:

- ✓ Continuous Inspection & Observation
- ✓ Verified Reports
- ✓ Commissioning & Occupancy

CHAPTER 10
ADMINISTRATIVE REGULATIONS FOR THE
CALIFORNIA ENERGY COMMISSION (CEC)

**ARTICLE 1
ENERGY BUILDING REGULATIONS**

10-101. Scope.

(a) This article contains administrative regulations relating to the energy building regulations in Title 24, Part 6. This article applies to all residential and nonresidential buildings.

(b) Nothing in this article lessens any necessary qualifications or responsibilities of licensed or registered building professionals or other designers or builders, or the duties of enforcement agencies, that exist under state or local law.

(c) If any provision of the regulations in this article or the Building Energy Efficiency Standards, Title 24, Part 6, of the California Code of Regulations is found invalid by a court of competent jurisdiction, the remainder of those regulations shall remain in effect.

Authority: Sections 25402 and 25402.1, Public Resources Code.

Reference: Sections 25402 and 25402.1, Public Resources Code.

REVISIONS:

1. New Article 1 (Section 1001) filed 5-3-76, effective March 01, December Register No. 36, 19.
2. Amendment filed 8-17-77, designated effective 3-11-78 (Register 11, No. 39).
3. Repeal of Article 1 (Section 1001) and new Article 1 (Section 10-101) filed 12-18-81, designated effective 1-1-82 (Register 6, No. 1).
4. Amendment filed 12-27-81, designated effective 1-1-82 pursuant to Government Code Section 13963.2 (Register 66, No. 52).

10-102. Definitions. In this article the following definitions apply:

ACCEPTANCE REQUIREMENTS are acceptance requirements for code compliance as defined in Section 100.1(b) of Part 6.

ACCEPTANCE TEST TECHNICIAN is a Field Technician as defined in Section 10-102.1 who is certified by an authorized Acceptance Test Technician Certification Provider pursuant to the requirements of Section 10-103.1 or 10-103.2.

LIGHTING CONTROLS ACCEPTANCE TEST TECHNICIAN is a professional certified by an authorized Lighting Controls Acceptance Test Technician Certification Provider to perform nonresidential lighting controls acceptance tests and complete the documentation required for nonresidential lighting controls acceptance tests as required by the Building Energy Efficiency Standards.

MECHANICAL ACCEPTANCE TEST TECHNICIAN is a professional certified by an authorized Mechanical Acceptance Test Technician Certification Provider to perform nonresidential mechanical acceptance tests and complete the documentation required for nonresidential mechanical acceptance tests as required by the Building Energy Efficiency Standards.

ACCEPTANCE TEST EMPLOYER is a person or entity who employs an Acceptance Test Technician and is certified by an authorized Acceptance Test Technician Certification Provider.

LIGHTING CONTROLS ACCEPTANCE TEST EMPLOYER is a person or entity who is the employer of a Lighting Controls Acceptance Test Technician and is certified by an authorized Lighting Controls Acceptance Test Technician Certification Provider.

MECHANICAL ACCEPTANCE TEST EMPLOYER is a person or entity who is the employer of a Mechanical Acceptance Test Technician and is certified by an authorized Mechanical Acceptance Test Technician Certification Provider.

ACCEPTANCE TEST CERTIFICATION PROVIDER is an agency, organization or entity approved by the Energy Commission to train and certify Acceptance Test Technicians and Acceptance Test Employers according to the requirements of Section 10-103.1 or 10-103.2.

LIGHTING CONTROLS ACCEPTANCE TEST TECHNICIAN CERTIFICATION PROVIDER is an agency, organization or entity approved by the Energy Commission to train and certify Lighting Controls Acceptance Test Technicians and Lighting Controls Acceptance Test Employers according to the requirements of Section 10-103.1.

MECHANICAL ACCEPTANCE TEST TECHNICIAN CERTIFICATION PROVIDER is an agency, organization or entity approved by the Energy Commission to train and certify Mechanical Acceptance Test Technicians and Mechanical Acceptance Test Employers according to the requirements of Section 10-103.2.

NOTE: Authority cited: Sections 25402, 25402.1, and 25402.1(a)-(b), 25402.4, 25402.5, 25402.8 and 25403, Public Resources Code. Reference: Sections 25407, 25402(a)-(b), 25402.1, 25402.4, 25402.5, 25402.8 and 25403, Public Resources Code.

ACM (also ALTERNATIVE CALCULATION METHOD) are compliance software, or alternative component packages, or accepted methods approved by the Commission under Section 10-109. ACMs all also refer to a Compliance Software.

ACM APPROVAL MANUALS are the documents establishing the requirements for Energy Commission approval of Compliance Software used to demonstrate compliance with the Building Energy Efficiency Standards for Residential and Nonresidential Buildings currently adopted by the Energy Commission.

2018 CALIFORNIA ADMINISTRATIVE CODE 187

Part 6 – Enforcement

2019 TIO:

- Tab E added to address Energy Certificates of Installation (NRCI)

SECTION E		REQUIRED COMPLIANCE FORMS			
Facility #	Facility Name	Project #	Sub #		
DURING CONSTRUCTION DOCUMENT SUBMITTAL		DURING CONSTRUCTION			
FORM # (REQUIRED)	DOCUMENT NAME	RESPONSIBLE DESIGNER OR INSTALLING CONTRACTOR	COMPLIANCE VERIFICATION BY ICR (Initials)	OSHPD/DIO USE (Initials)	
CALIFORNIA ENERGY CODE					
- NON-RESIDENTIAL CERTIFICATE OF INSTALLATION (NRCI)					
NRCI-E-01-E	ENVELOPE				
NRCI-E-02-E	MECHANICAL				
NRCI-E-03-E	PLUMBING				
NRCI-E-04-E	INDOOR LIGHTING (conditioned, processed spaces)				

Page 1

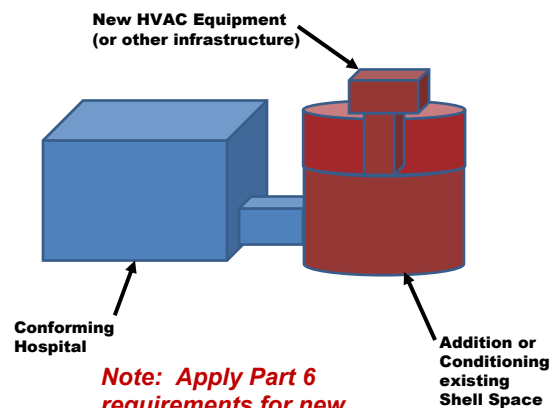
LEARNING OBJECTIVES for Energy Code

- CEC *versus* OSHPD “Addition”
- What’s Regulated
- Enforcement
- **Application to Additions and Expansions**
- Resources, Training & Software
- Plan Review

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Energy Practices for Expansions

- **New Interior Lighting**
 - ❑ Meets Part 6
- **New HVAC Equipment**
(units, chillers, etc.)
 - ❑ Meets Part 6 (SEER)
- **New Building Envelope**
 - ❑ Meets Part 6
- **(E) Domestic Hot Water**
 - ❑ Served from (E) building ok as is

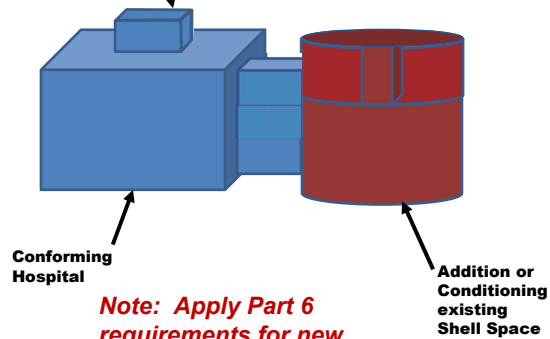


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Energy Practices for Expansions

- **New Interior Lighting**
 - ☐ Meets Part 6
- **(E) HVAC Equipment**
(units, chillers, etc.)
 - ☐ Served from (E) building ok as is
- **New Building Envelope**
 - ☐ Meets Part 6
- **(E) Domestic Hot Water**
 - ☐ Served from (E) building ok as is

Existing HVAC Equipment
(or other infrastructure)



Note: Apply Part 6 requirements for new elements servicing newly conditioned space at time of construction.

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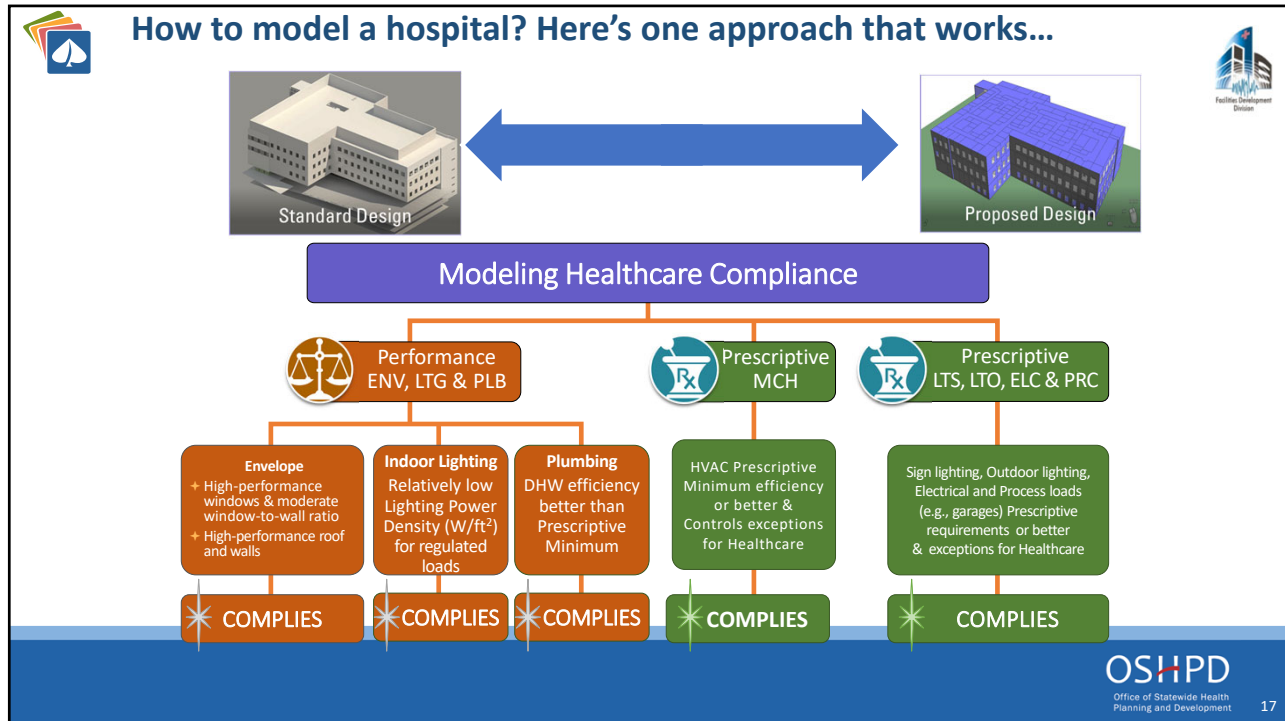
LEARNING OBJECTIVES for Energy Code

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A “real world” example: Large Acute Care Tower construction completed 2017


- + 250,000 SF, 9 Stories, Patient Rooms, Surgery Suites, Imaging
- + 25% Window-to-Wall Ratio (WWR)
- + Window Performance: 0.51 U-Factor, 0.27–0.29 SHGC (2019 U = 0.36-0.41)
- + R-30 Total Thermal Performance Roof
- + R-16 Total Thermal Performance Walls
- + 0.65 Watts/ft² of regulated lighting load

Exempt Lighting Loads :


- ✦ Surgical Lighting
- ✦ Exam Lighting
- ✦ Low Ambient Night-Lights
- ✦ Lighting Integral to Medical Equipment

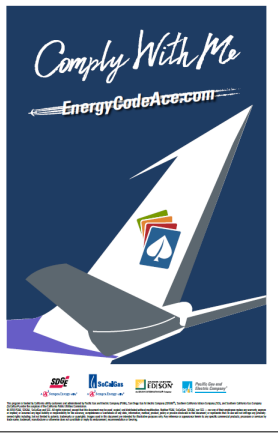
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All approved by CA Energy Commission

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- **Fact Sheet:** What's Changed in 2019 —
 - [Healthcare Facilities](#), Nonresidential, High-rise Residential, Hotel/Motel
 - Residential
- **Training:** Decoding What's New: Let's Talk 2019 Title 24, Part 6 – Nonresidential and Residential
 - On-demand webinar
- **Training:** 2019 Title 24, Part 6: Where We're Headed with the Nonresidential and Residential Standards
 - Traditional classroom and on-demand webinar
- **Tool:** 2019 Title 24, Part 6 Reference Ace
 - Navigate Standards documents with keyword searches and hyperlinks



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LEARNING OBJECTIVES for Energy Code

- CEC *versus* OSHPD “Addition”
- What’s Regulated
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- Resources, Training & Software
- **Plan Review**



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Plan Review

Mandatory Measures:

Mandatory measures establish the minimum level of energy efficiency and/or performance of a building. All regulated nonresidential buildings, including licensed healthcare facilities, must be designed and built to comply with all applicable Mandatory measures of the Energy Code.

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Plan Review

Compliance Approaches:

In addition to meeting the Mandatory requirements, buildings must also comply with Prescriptive requirements of the Energy Code, or use the Performance approach to gain flexibility beyond Prescriptive measures for specific building features.

Prescriptive Approach

The Prescriptive Approach is considered the most direct path to compliance. It is a set of prescribed performance levels for various building components, where each component must meet specific requirements. Prescriptive measures for new construction projects may differ from those for additions.

Performance Approach

The Performance Approach builds on the Prescriptive Approach by allowing “trade-offs” between building systems. Mandatory measures always apply and set the minimum allowable efficiency standards of a building feature. The Prescriptive compliance approach “sets the bar” that will be used as the basis for comparison when using the Performance approach. If your design cannot meet the Prescriptive approach requirements, you may use the Performance method to allow design flexibility through trade-offs with Prescriptive measures down to the Mandatory minimums.

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Plan Review

NRCC:

Non-Residential Certificates of Compliance

Non-Residential Certificates of Compliance (**NRCC**) are submitted with the design documents at time of permit application to the OSHPD Plans Examiner to demonstrate that the proposed building design meets Energy Code requirements.

For new licensed healthcare projects, you should always expect to submit the NRCC forms for sign lighting (LTS), outdoor lighting (LTO) and electrical power distribution (ELC). These forms must be submitted to OSHPD if the healthcare facility includes the applicable scope.


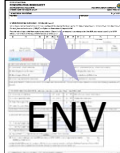

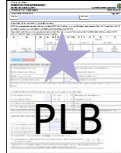

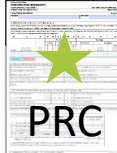




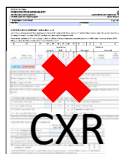
Only those forms that apply to building components in your scope of work need to be submitted.

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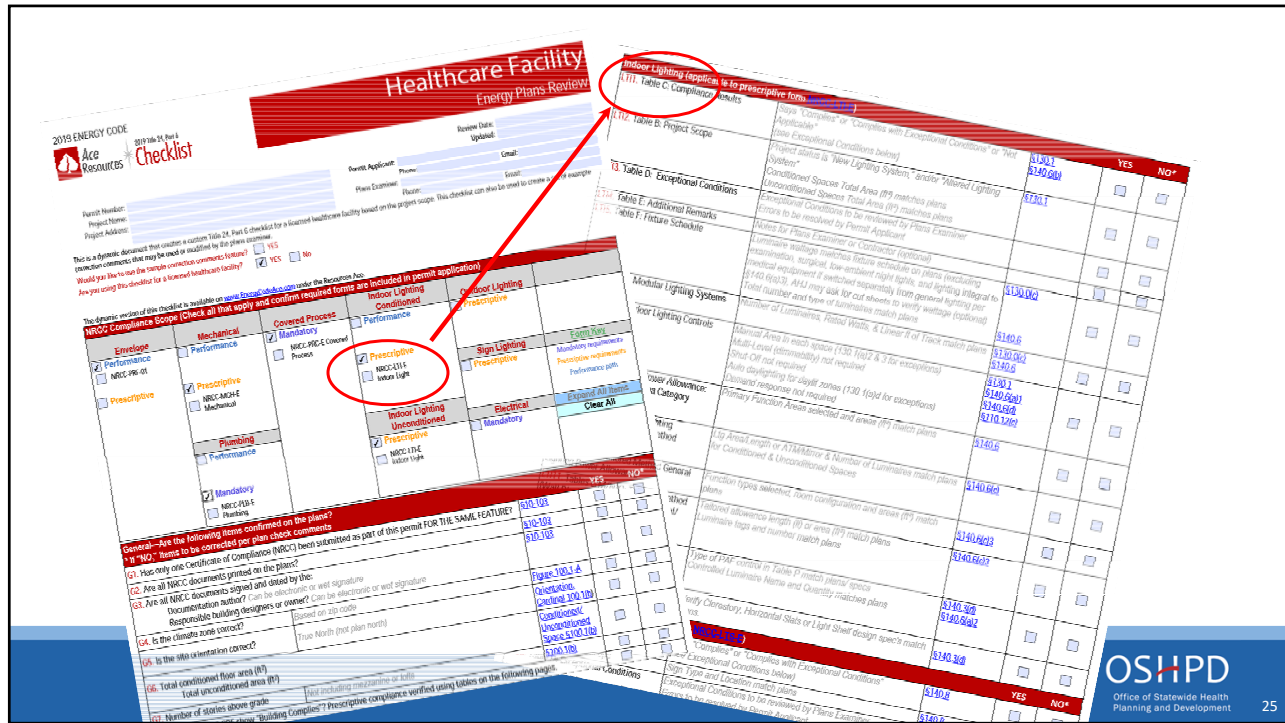
2019 NRCC (Nonresidential Certificates of Compliance)



 LTI Indoor Lighting	 ENV Envelope	 MCH Mechanical	 PLB Plumbing	 PRF Performance	 PRC Process
 LTS Sign Lighting	 LTO Outdoor Lighting	 ELC Electrical	 SRA Solar Ready	 CXR Commissioning	

- ★ You'll **always** use this form for any project that includes these measures
- ✖ You'll **never** use this form; it does not apply to Healthcare projects
- ★ You'll likely use this form a lot
- ★ You might use this form for some projects

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COMPLIES

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PRESCRIPTIVE APPROACH

STATE OF CALIFORNIA
Indoor Lighting

NRCC-LTI-E

CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE

NRCC-LTI-E

This document is used to demonstrate compliance with requirements in [§110.9](#), [§110.12\(c\)](#), [§130.0](#), [§130.1](#), [§140.6](#) and [§141.0\(b\)2](#) for indoor lighting scopes using the prescriptive path.

Project Name: Valley Hospital: New Addition	Report Page: (Page 1 of 7)
Project Address:	Date Prepared: 5/26/2020

A. GENERAL INFORMATION

01 Project Location (city): Sonoma	04 Total Conditioned Floor Area (ft ²): 0
02 Climate Zone: 2	05 Total Unconditioned Floor Area (ft ²): 203
03 Occupancy Types Within Project (select all that apply):	06 # of Stories (Habitable Above Grade): 2
<input checked="" type="checkbox"/> Office <input type="checkbox"/> Retail <input type="checkbox"/> Warehouse <input type="checkbox"/> Hotel/Motel <input type="checkbox"/> School <input checked="" type="checkbox"/> Support Areas <input type="checkbox"/> Parking Garage <input type="checkbox"/> High-Rise Residential <input type="checkbox"/> Relocatable <input checked="" type="checkbox"/> Healthcare <input type="checkbox"/> Other (Write in) See Table I	

B. PROJECT SCOPE

This table includes any lighting systems that are within the scope of the permit application and are demonstrating compliance using the prescriptive path outlined in [§140.6](#) or [§141.0\(b\)2](#) for alterations.

Scope of Work	Conditioned Spaces		Unconditioned Spaces	
01	02	03	04	05
My Project Consists of (check all that apply):	Calculation Method	Area (ft ²)	Calculation Method	Area (ft ²)
<input checked="" type="checkbox"/> New Lighting System	Area Category Method	0	Area Category Method	203
<input type="checkbox"/> New Lighting System - Parking Garage				
Total Area of Work (ft²)	0		203	

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STATE OF CALIFORNIA
Indoor Lighting

NRCC-LTI-E

CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE

NRCC-LTI-E

Project Name: Valley Hospital: New Addition	Report Page: (Page 2 of 7)
Project Address:	Date Prepared: 5/26/2020

C. COMPLIANCE RESULTS

If any cell on this table says "DOES NOT COMPLY" or "COMPLIES with Exceptional Conditions" refer to Table D, for guidance.

Lighting in conditioned and unconditioned spaces must not be combined for compliance per §140.6(b)1	Allowed Lighting Power per §140.6(b) (Watts)					=	≥	Adjusted Lighting Power per §140.6(a) (Watts)			=	≥	Compliance Results	
	01	02	03	04	05			06	07	08				
Complete Building §140.6(c)1 (See Table I)	Area Category §140.6(c)2 (See Table I)	Area Category Additional §140.6(c)2G (+) (See Table J)	Tailored §140.6(c)3 (+) (See Table K)	=	Total Allowed (Watts)	=	≥	Total Designed (Watts) (See Table F)	Adjustments PAF Lighting Control Credits §140.6(a)2 (-) (See Table P)	=	Total Adjusted (Watts) *Includes Adjustments	=	≥	05 must be >= 08 §140.6
Conditioned														COMPLIES
Unconditioned														COMPLIES
Controls Compliance (See Table H for Details)														COMPLIES
Rated Power Reduction Compliance (See Table Q for Details)														

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PERFORMANCE APPROACH

Project Name:	Valley Hospital Addition	NRCC-PRF-01-E	Page 1 of 34
Project Address:	Sonoma 95107	Calculation Date/Time:	20:33, Tue, May 26, 2020
Input File Name:	SVH-001 West Addition EPv8 gr2.cibd19x		

A. GENERAL INFORMATION			
1. Project Location (city)	Sonoma	8. Standards Version	Compliance2019
2. CA Zip Code	95107	9. Compliance Software (version)	EnergyPro 8.1
3. Climate Zone	2	10. Weather File	NAPA-CO_724955_CZ2010.epw
4. Total Conditioned Floor Area in Scope	13,046 ft ² (13,046 ft ² Building Total)	11. Building Orientation (deg)	(N) 0 deg
5. Total Unconditioned Floor Area	203 ft ²	12. Permitted Scope of Work	NewComplete
6. Total # of Stories (Habitable Above Grade)	2	13. Building Type(s)	Nonresidential
7. Total # of dwelling units	0	14. Gas Type	NaturalGas

B. PROJECT SUMMARY			
Table Instructions: Table B shows which building components are included in the performance calculation. If indicated as not included, the project must show compliance prescriptively if within permit application.			
Building Components Complying via Performance		Building Components Complying Prescriptively	
Envelope	<input checked="" type="checkbox"/> Performance <input type="checkbox"/> Not Included	Covered Process: Commercial Kitchens	<input type="checkbox"/> Performance <input checked="" type="checkbox"/> Not Included
Mechanical	<input checked="" type="checkbox"/> Performance <input type="checkbox"/> Not Included	Covered Process: Computer Rooms	<input type="checkbox"/> Performance <input checked="" type="checkbox"/> Not Included
Domestic Hot Water	<input checked="" type="checkbox"/> Performance <input type="checkbox"/> Not Included	Covered Process: Laboratory Exhaust	<input type="checkbox"/> Performance <input checked="" type="checkbox"/> Not Included
Lighting (Indoor Conditioned)	<input checked="" type="checkbox"/> Performance <input type="checkbox"/> Not Included	Mandatory Measures	
Solar Thermal Water Heating	<input type="checkbox"/> Performance <input checked="" type="checkbox"/> Not Included	Electrical power systems, commissioning and solar ready requirements are mandatory and should be documented on the NRCC form listed if applicable (i.e. compliance will not be shown on the NRCC-PRF-E.)	
		Indoor Lighting (Unconditioned) §140.6	NRCC-LTI-E is required
		Outdoor Lighting §140.7	NRCC-LTO-E is required
		Sign Lighting §140.8	NRCC-LTS-E is not required
		Electrical Power Distribution §110.11	NRCC-ELC-E is required
		Commissioning §120.8	NRCC-CXR-E is not required
		Solar Ready §110.10	NRCC-SRA-E is not required



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Project Name:	Valley Hospital Addition	NRCC-PRF-01-E	Page 2 of 34
Project Address:	Sonoma 95107	Calculation Date/Time:	20:33, Tue, May 26, 2020
Input File Name:	SVH-001 West Addition EPv8 gr2.cibd19x		

C1. COMPLIANCE RESULTS FOR PERFORMANCE COMPONENTS (Annual TDV Energy Use, kWh/(ft ² -yr)			
COMPLIES			
Energy Component	Standard Design (TDV)	Proposed Design (TDV)	Compliance Margin (TDV) ¹
Space Heating	103.45	103.15	0.30
Space Cooling	257.43	254.25	3.18
Indoor Fans	288.54	274.73	13.81
Heat Rejection	--	--	--
Pumps & Misc.	2.13	2.10	0.03
Domestic Hot Water	6.58	2.94	3.64
Indoor Lighting	67.45	71.33	-3.88
ENERGY STANDARDS COMPLIANCE TOTAL	725.58	708.50	17.08 (2.4%)

¹ Notes: The number in parenthesis following the Compliance Margin in column 4, represents the Percent Better than Standard.

C2. RESULTS FOR 'ABOVE CODE' QUALIFICATIONS ¹			
<input type="checkbox"/> This project is pursuing CalGreen Tier 1		<input type="checkbox"/> This project is pursuing CalGreen Tier 2	
Miscellaneous Energy Component	Standard Design (TDV)	Proposed Design (TDV)	Compliance Margin (TDV) ¹
Receptacle	88.02	88.02	--
Process	103.48	103.48	--
Other Ltg	0.71	0.71	--
Process Motors	--	--	--
COMPLIANCE TOTAL PLUS MISCELLANEOUS COMPONENTS	917.79	900.71	17.1 (1.9%)

¹ Notes: This table is used to document compliance with programs OTHER THAN Title 24 Part 6, if applicable.

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2019 ENERGY CODE
Ace Resources Checklist

2019 Title 24, Part 6

Healthcare Facility

Energy Plans Review

Review Date: _____
Updated: _____

Permit Number: _____ Permit Applicant: _____
Project Name: _____ Phone: _____ Email: _____
Project Address: _____ Plans Examiner: _____
Phone: _____ Email: _____

This is a dynamic document that creates a custom Title 24, Part 6 checklist for a licensed healthcare facility based on the project scope. This checklist can also be used to create a set of example correction comments that may be used or modified by the plans examiner.

Would you like to use the sample correction comments feature? YES NO
Are you using this checklist for a licensed healthcare facility? YES NO

The dynamic version of this checklist is available on www.EnergyCodeAcademy.com under the Resources Area.

NRCC Compliance Scope (Check all that apply and confirm required forms are included in permit application)					
<input checked="" type="checkbox"/> Performance <input type="checkbox"/> NRCC-PF-01	<input type="checkbox"/> Performance <input checked="" type="checkbox"/> Prescriptive NRCC-MCH-E Mechanical	<input checked="" type="checkbox"/> Mandatory <input type="checkbox"/> NRCC-PRC-E Covered Process	<input type="checkbox"/> Performance <input checked="" type="checkbox"/> Prescriptive NRCC-LTI-E Indoor Light	<input type="checkbox"/> Performance <input type="checkbox"/> Prescriptive Sign Lighting	<input type="checkbox"/> Form Key <input type="checkbox"/> Mandatory requirements <input type="checkbox"/> Prescriptive requirements <input type="checkbox"/> Performance path
<input type="checkbox"/> Prescriptive	<input type="checkbox"/> Performance <input checked="" type="checkbox"/> Mandatory NRCC-PB-E Plumbing		<input checked="" type="checkbox"/> Prescriptive NRCC-LTI-E Indoor Light	<input type="checkbox"/> Electrical <input type="checkbox"/> Mandatory	<input type="checkbox"/> Expand All Items <input type="button" value="Clear All"/>

**General—Are the following items confirmed on the plans?
If "NO," items to be corrected per plan check comments**

Item	Code	YES	NO*
G1. Has only one Certificate of Compliance (NRCC) been submitted as part of this permit FOR THE SAME FEATURE?	\$100.103	<input type="checkbox"/>	<input type="checkbox"/>
G2. Are all NRCC documents printed on the plans?	\$100.103	<input type="checkbox"/>	<input type="checkbox"/>
G3. Are all NRCC documents signed and dated by the: Documentation author? <i>Can be electronic or wet signature</i> Responsible building designers or owner? <i>Can be electronic or wet signature</i>	\$100.103	<input type="checkbox"/>	<input type="checkbox"/>
G4. Is the climate zone correct?	Based on zip code Figure 100.1-A	<input type="checkbox"/>	<input type="checkbox"/>
G5. Is the site orientation correct?	True North (not plan north) Orientation, Cardinal 100.1(b)	<input type="checkbox"/>	<input type="checkbox"/>
G6. Total conditioned floor area (ft ²) Total unconditioned area (ft ²)	Conditioned, Unconditioned, Space \$100.1(b)	<input type="checkbox"/>	<input type="checkbox"/>
G7. Number of stories above grade	Not including mezzanine or lofts \$100.1(b)	<input type="checkbox"/>	<input type="checkbox"/>
G8. Does the NRCC-PF show "Building Complexes"? Prescriptive compliance verified using tables on the following pages.		<input type="checkbox"/>	<input type="checkbox"/>

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Plan Review

What are we comparing between Certification and Drawings?

1. Current version of software was used (2019 Code)
2. Verify square feet are the same as on the drawings
3. Verify glazing percentage is the same as on the drawings
4. Make sure the number of floors is the same
5. Verify which forms must be on the plans
6. Verify required certification correlate to what is on the TIO (NRCIs)
7. Verify window U-factor matches drawings/specifications
8. Spot check details – do wall /roof details match energy calcs

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Plan Review

What's on the Plans?

1. Required NRCC forms (must COMPLY)
 - a) Typically on the Mechanical Drawings
2. All Certifications Required

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Project Name:	Valley Hospital Addition	NRCC-PRF-01-E	Page 1 of 34
Project Address:	Sonoma 95107	Calculation Date/Time:	20:33, Tue, May 26, 2020
Input File Name:	SVH-001 West Addition EPv8 gr2.cibd19x		

A. GENERAL INFORMATION					
1.	Project Location (city)	Sonoma	8.	Standards Version	Compliance2019
2.	CA Zip Code	95107	9.	Compliance Software (version)	EnergyPro 8.1
3.	Climate Zone	2	10.	Weather File	NAPA_CO_724955_CZ2010.epw
4.	Total Conditioned Floor Area in Scope	13,046 ft2 (13,046 ft2 Building Total)	11.	Building Orientation (deg)	(N) 0 deg
5.	Total Unconditioned Floor Area	203 ft ²	12.	Permitted Scope of Work	NewComplete
6.	Total # of Stories (Habitable Above Grade)	2	13.	Building Type(s)	Nonresidential
7.	Total # of dwelling units	0	14.	Gas Type	NaturalGas

B. PROJECT SUMMARY
 Table Instructions: Table B shows which building components are included in the performance calculation. If indicated as not included, the project must show compliance prescriptively if within permit application.

Building Components Complying via Performance			Building Components Complying Prescriptively		
Envelope	<input checked="" type="checkbox"/> Performance	Covered Process: Commercial Kitchens	<input type="checkbox"/> Performance	<i>The following building components are ONLY eligible for prescriptive compliance and should be documented on the NRCC form listed if within the scope of the permit application (i.e. compliance will not be shown on the NRCC-PRF-E).</i>	
	<input type="checkbox"/> Not Included		<input checked="" type="checkbox"/> Not Included		
Mechanical	<input checked="" type="checkbox"/> Performance	Covered Process: Computer Rooms	<input type="checkbox"/> Performance	Indoor Lighting (Unconditioned)\$140.6	NRCC-LTI -E is required
	<input type="checkbox"/> Not Included		<input checked="" type="checkbox"/> Not Included	Outdoor Lighting \$140.7	NRCC-LTO-E is required
Domestic Hot Water	<input checked="" type="checkbox"/> Performance	Covered Process: Laboratory Exhaust	<input type="checkbox"/> Performance	Sign Lighting \$140.8	NRCC-LTS-E is not required
	<input type="checkbox"/> Not Included		<input checked="" type="checkbox"/> Not Included	Mandatory Measures	
Lighting (Indoor Conditioned)	<input checked="" type="checkbox"/> Performance		<i>Electrical power systems, commissioning and solar ready requirements are mandatory and should be documented on the NRCC form listed if applicable (i.e. compliance will not be shown on the NRCC-PRF-E.)</i>		
	<input type="checkbox"/> Not Included		Electrical Power Distribution S110.11	NRCC-ELC-E is required	
Solar Thermal Water Heating	<input type="checkbox"/> Performance		Commissioning S120.8	NRCC-CXR-E is not required	
	<input checked="" type="checkbox"/> Not Included		Solar Ready S110.10	NRCC-SRA-E is not required	

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Plan Review

What's on the Plans?

1. Required NRCC forms (must COMPLY)
 - a) Typically on the Mechanical Drawings
2. All Certifications Required
3. Signature Sheet
4. Mandatory Measures
5. Power Distribution with signature sheet
6. Outdoor Lighting with signature sheet
7. Indoor Lighting with signature sheet

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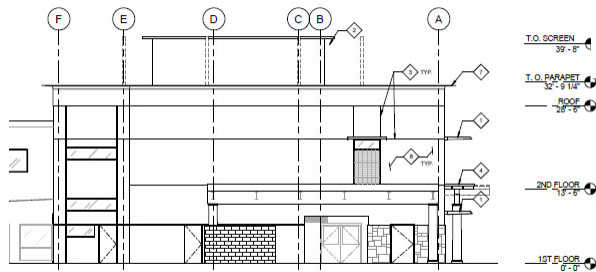
Don't forget to show it on the plans.

FENESTRATION PERFORMANCE

NFRC U-FACTOR 0.32

NFRC SHGC-0.26

NFRC VLT -0.62



DATE
JOB NO.
SHEET TITLE
EXTERIOR ELEVATIONS
SHEET NO.
A3.01
100% CONSTRUCTION DOCUMENT

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TIO: Verify all NRCCs have Energy Certificates of Installation (NRCI)

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 www.oshpd.ca.gov/tio Sacramento, CA 95833 Los Angeles, California 90071
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Testing, Inspection and Observation Program
 2019 California Building Standards Code – OSHPD 1

SECTION E		REQUIRED COMPLIANCE FORMS		
FORM #	DOCUMENT NAME	RESPONSIBLE DESIGNER OR INSTALLING CONTRACTOR	COMPLIANCE CERTIFICATE NOT PROVIDED	COMPOSITE USE (Indicate)
CALIFORNIA ENERGY CODE				
NON-RESIDENTIAL CERTIFICATE OF INSTALLATION (NRCI)				
NRCI-EV-1	X ENVELOPE			
NRCI-ME-1	X MECHANICAL			
NRCI-PL-1	PLUMBING			
NRCI-LI-1	X INDOOR LIGHTING (Conditioned, enclosed spaces)			

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Only You Can Prevent Bad Codes

Get Involved With the Process

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- Any Questions?
- Any Additional Thoughts or Discussion?

Thank You!

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