ELECTRICAL POWER DISTRIBUTION

FOR PROJECTS THAT DO NOT REQUIRE FIELD VERIFICATION AND DIAGNOSTIC TESTING

CERTIFICATE OF COMPLIANCE

This document is used to demonstrate compliance with mandatory requirements in §130.5 for electrical systems in newly constructed nonresidential and hotel/motel occupancies in low-rise multifamily mixed-use buildings and §160.6 and §160.9 for electrical systems in newly constructed low-rise multifamily occupancies. Additions and alterations to electrical service systems in nonresidential & hotel/motel occupancies in low-rise multifamily mixed-use buildings will also use this document to demonstrate compliance per §141.0(a) or §141.0(b)2P for alterations. For low-rise multifamily addition or alterations compliance will be documented per §180.1(a) or §180.2(b)4Bvii.

Note: This table completed by HERS Registry.

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

A. GENERAL INFORMATION

01	Project Location (city)					02	Climate Zone				
						03	Occupancy Types Within Project:				
☐	Office	☐	Retail	☐	Warehouse	☐	Hotel/ Motel	☐	School	☐	Support Areas
☐	Multifamily/ MF Mixed-use < 4 stories (new construction)	☐	Multifamily/ MF Mixed-use < 4 stories (Addition or Alteration)	☐	Healthcare Facilities	☐	Parking Garage				
				☐	Relocatable	☐	All Others	☐	Theater	☐	Sports Arena
☐	Auditorium	☐	Commercial/ Industrial	☐	Grocery Store	☐	Religious Facility	☐	Data Center	☐	Convention Center
☐	Classroom	☐	Library	☐	Gymnasium	☐	Restaurant/ Commercial Kitchen	☐	Financial Institution	☐	Medical Clinic

Registration Number: Registration Date/Time: HERS Provider:

B. PROJECT SCOPE

This table includes electrical service systems that are within the scope of the permit application.

01	02	03	04	05	06	07
Electrical Service Designation/ Description	Scope of Work[1]	Rating[2] (kVA)	Utility Provided Metering System Exception to §130.5(a)/§160.6(a)[3]	System subject to CA Elec Code Article 517 Exception to §130.5(a)&(b)	Demand Response Controls	Provides power to dwelling units/common living areas only in multifamily occupancy
					Where required, demand response controls must be specified which are capable of receiving and automatically responding to at least one standard based messaging protocol which enables demand response after receiving a demand response signal. Sections §120.2/§160.3, §130.1/§160.5 and §130.3/§160.5 and mechanical, indoor lighting, and sign lighting Certificate of Compliance documents-will indicate when demand response controls are required.	
			☐	☐		☐

[1]FOOTNOTES: Adding only new feeders and branch circuits triggers Voltage Drop 130.5(c)/160.6(c), no other requirements from 130.5/160.6 are required.

[2] If common use areas in a multifamily occupancy are submetered, rating is for submeter size serving common use areas.

[3] Applicable if the utility company is providing a metering system that indicates instantaneous kW demand and kWh for a utility-defined period.

C. COMPLIANCE RESULTS

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

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.

01		02		03		04		05	06
Service Electrical Metering §130.5(a)/ §160.6(a)	AND	Separation for Monitoring §130.5(b)/ §160.6(b)	AND	Voltage Drop §130.5(c)/ §160.6(c)	AND	Controlled Receptacles §130.5(d)/ §160.6(d)	AND	Electric Ready §160.9	Compliance Results
(See Table F)		(See Table G)		(See Table H)		(See Table I)		(See Table J)	
Yes/No	**AND**	Yes/No	**AND**	Yes/No	**AND**	Yes/No	**AND**	Yes/No	**COMPLIES, DOES NOT COMPLY, Or COMPLIES with Exceptional Conditions**

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. SERVICE ELECTRICAL METERING

This table includes new or replacement electrical service systems OR equipment to demonstrate compliance with §130.5(a)/§160.6(a). For multifamily occupancies, submetered systems that provide power to common use areas must meet the following metering requirements. Submetered systems providing power to dwelling units do not.

01	02	03				04	05	
Electrical Service Designation/ Description	Rating[1] (kVA)	Required Metering Capabilities per Table 130.5-A				Location of Requirements in Construction Documents	Field Inspector	
		Instantaneous Demand (kW)	Historical Peak Demand (kW)	Tracking kWh for user-defined period	kWh per rate period		Pass	Fail
		☐	☐	☐	☐		☐	☐
		☐	☐	☐	☐		☐	☐

[1]*FOOTNOTES: If common use areas in a multifamily occupancy are submetered, rating is for submeter size serving common use areas.*

G. SEPARATION OF ELECTRICAL CIRCUITS FOR ENERGY MONITORING

This table includes entirely new or complete replacement electrical power distribution systems to demonstrate compliance with §130.5(b)/§160.6(b). Any load types that are not included in the service do not need to be shown. For multifamily occupancies, submetered systems that provide power to dwelling units do not need to meet these separation requirements and therefore load types on those submetered systems also do not need to be shown.

Electrical Service Designation/ Description:						
01	02	03	04	05		
Load Type per Table 130.5-B[1]	Minimum Required Separation of Load per Table 130.5-B	Compliance Method[2]	Location of Requirements in Construction Documents	Field Inspector		
				Pass	Fail	
				☐	☐	

**NOTES If "Other*" is selected under Compliance Method above, please indicate how compliance has been achieved in the space provided below.*

[1] FOOTNOTES: For each separate load type, up to 10% of the connected load may be of any type.

[2] Method 1: Switchboards/ motor control centers/ panelboard loads disaggregated for each load type

Method 2: Switchboards/ motor control centers/ panelboard supply other distribution equipment with loads disaggregated for each load type

Method 3: Branch circuits serve load types individually & provisions for adding future branch curcuit monitoring
Method 4: Complete metering system measures and reports loads by type
See Chapter 8 of the Nonresidential Compliance Manual for more detail on Compliance Methods.

H. VOLTAGE DROP

This table includes entirely new or complete replacement electrical power distribution systems, or alterations that add, modify or replace both feeders and branch circuits to demonstrate compliance with §130.5(c)/§160.6(c). For alterations, only the altered circuits must demonstrate compliance per §141.0(b)2Piii/§180.2(b) 4Bviic.

01	02		03	04	05	
Electrical Service Designation/ Description	Combined Voltage Drop on Installed Feeder/Branch Circuit Conductors Compliance Method		Location of Voltage Drop Calculations[1]	Sheet Number for Voltage Drop Calculations in Construction Documents	Field Inspector	
					Pass	Fail
	☐ Voltage drop ≤ 5%	☐ Permitted by CA Elec Code (Exception to §130.5(c))*			☐	☐

**NOTES If "Permitted by CA Elec Code*" is selected under Compliance Method above, please indicate where the exception applies in the space provided below.*

[1] FOOTNOTES: Voltage drop calculations may be attached to the permit application outside the construction documents if allowed by the Authority Having Jurisdiction. Select "attached" if applicable. If calculations will be the responsibility of the installing contractor, select "Contractor Responsible".

ELECTRICAL POWER DISTRIBUTION

I. CIRCUIT CONTROLS FOR 120-VOLT RECEPTACLES AND CONTROLLED RECEPTACLES

This table includes entirely new or complete replacement electrical power distribution systems to demonstrate compliance with §130.5(d)/§160.6(d). Both controlled and uncontrolled receptacles must be provided in office areas, lobbies, conference rooms, kitchen areas in office spaces, copy rooms and hotel/motel guest rooms.

01	02	03	04	05	06	07	
Room Name or Description	Location/ Type of Controlled Receptacles[1]	Shut-Off Controls	Demand Responsive Controls	Permanent Durable Marking Will be Used	Location of Requirements in Construction Documents	Field Inspector	
						Pass	Fail
				☐		☐	☐

**NOTES: If "Other*" is selected under Shut-Off Controls above, please indicate how compliance has been achieved in the space provided below.*

1 FOOTNOTES: Receptacles dedicated to refrigerators and water dispensers in kitchens, located a minimum of 6ft above the floor specifically for clocks, network copiers, fax machines, A/V and data equipment other than personal computers in copy rooms, circuits rated more than 20 Amps, or connected to a UPS that are intended to be in continuous use and are marked to differentiate them from other receptacles or circuits are excepted from the requirements.

J. ELECTRIC READY BUILDINGS

This table includes electrical system requirements that must be met when using gas or propane heating, cooking or clothes drying in multifamily occupancies to demonstrate compliance with §160.9.

01	Systems serving multifamily occupancy that use gas or propane include:	☐ Furnaces serving individual dwelling units	☐ Cooktops serving individual dwelling units	☐ Clothes dryers serving individual dwelling units	☐ Clothes dryers in common areas	☐ None of these

Gas/ Propane Furnaces Serving Individual Dwelling Units (Heat Pump Space Heater Ready)

	Yes	Requirement
02	☐	A dedicated 240 volt branch circuit shall be installed within 3 feet from the furnace and accessible to the furnace with no obstructions. The branch circuit shall be rated at 30 amps minimum. The blank cover shall be identified as “240V ready”. All electrical components shall be installed in accordance with the California Electrical Code.
03	☐	The main electrical service panel shall have a reserved space to allow for the installation of a double pole circuit breaker for a future heat pump space heater installation. The reserved space shall be permanently marked as “For Future 240V use”.

Gas/ Propane Cooktops Serving Individual Dwelling Units

	Yes	Requirement
04	☐	A dedicated 240 volt branch circuit shall be installed within 3 feet from the cooktop and accessible to the cooktop with no obstructions. The branch circuit shall be rated at 50 amps minimum. The blank cover shall be identified as “240V ready”. All electrical components shall be installed in accordance with the California Electrical Code.
05	☐	The main electrical service panel shall have a reserved space to allow for the installation of a double pole circuit breaker for a future electric cooktop installation. The reserved space shall be permanently marked as “For Future 240V use”.

Gas/ Propane Clothes Dryers Serving Individual Dwelling Units

	Yes	Requirement
06	☐	A dedicated 240 volt branch circuit shall be installed within 3 feet from the clothes dryer and accessible to the clothes dryer with no obstructions. The branch circuit shall be rated at 30 amps minimum. The blank cover shall be identified as “240V ready”. All electrical components shall be installed in accordance with the California Electrical Code.
07	☐	The main electrical service panel shall have a reserved space to allow for the installation of a double pole circuit breaker for a future electric clothes dryer installation. The reserved space shall be permanently marked as “For Future 240V use”.

Gas/ Propane Clothes Dryers In Common Areas

	Yes	Requirement
08	☐	Conductors or raceway shall be installed with termination points at the main electrical panel, via subpanels panels if applicable, to a location no more than 3 feet from each gas outlet or a designated location of future electric replacement equipment. Both ends of the conductors or raceway shall be labelled “Future 240V Use.” The conductors or raceway and any intervening subpanels, panelboards, switchboards, and busbars shall be sized to meet the future electric power requirements, at the service voltage to the point at which the conductors serving the building connect to the utility distribution system, as specified below. The capacity requirements may be adjusted for demand factors in accordance with the California Electric Code. Gas flow rates shall be determined in accordance with the California Plumbing Code. Capacity shall be one of the following: - 24 amps at 208/240 volts per clothes dryer; - 2.6 kVA for each 10,000 Btu per hour of rated gas input or gas pipe capacity; or - The electrical power required to provide equivalent functionality of the gas-powered equipment as calculated by the responsible person.

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
●	❍	LMCI-ELC-01-E - Must be submitted for all buildings.	☐	☐

L. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE

There are no Certificates of Acceptance applicable to electrical power distribution requirements.

ELECTRICAL POWER DISTRIBUTION

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:	Date Signed:
Address:	CEA/ HERS Certification Identification (if applicable):
City/State/Zip:	Phone:

RESPONSIBLE PERSON'S DECLARATION STATEMENT

2. 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 registered copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections, and I will take the necessary steps to accomplish this requirement.
    6. I understand that a registered copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy, and I will take the necessary steps to accomplish these requirements.

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

For assistance or questions regarding the Energy Standards, contact the Energy Hotline at: 1-800-772-3300

Registration Number: Registration Date/Time: HERS Provider:

A. General Information

1. Enter the City the project is located in.
2. Climate Zone: Select from dropdown.
3. Select the applicable Occupancy Types within the Project.

B. Project Scope

1. Enter the Electrical Service Designation/Description.
2. Scope of Work: Select from dropdown.
3. Enter the kVA Rating.
4. Check if the Utility Provided Metering System meets Exception to §130.5(a)/§160.6(a)3.
5. Check if the System is subject to CA Elec Code Article 517 Exception to §130.5(a)&(b).
6. Demand Response Controls static text.
7. Check if power is provided to dwelling units/common living areas only in a multifamily occupancy.

C. Compliance Results

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

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. Service Electrical Metering

1. This field is filled out automatically.
2. This field is filled out automatically
3. Instantaneous Demand checkbox is always checked
   Historical Peak Demand checkbox is checked automatically.
   Tracking kWh for user-defined period checkbox is always checked.
   kWh per rate period is checked automatically.

4. Enter the Location of Requirements in Construction Documents.
5. This is a Pass or Fail checkbox for the field inspector.

G. Separation of Electrical Circuits for Energy Monitoring

1. Load Type per Table 130.5-B: Select from dropdown.
2. This field is filled out automatically.
3. Compliance Method: Select from dropdown.
4. Enter the Location of Requirements in the Construction Documents.
5. This is a Pass or Fail checkbox for the field inspector.

H. Voltage Drop

1. This field is filled out automatically.
2. Select the Combined Voltage Drop on Installed Feeder/Branch Circuit Conductors Compliance Method.
3. Location of Voltage Drop Calculation: Select from dropdown.
4. Enter the Sheet Number for Voltage Drop Calculation in Construction Documents.
5. This is a Pass or Fail checkbox for the field inspector.

I. Circuit Controls for 120-Volt Receptacles and Controlled Receptacles

1. Enter the Room Name or Description.
2. Location/Type of Controlled Receptacles: Select from dropdown.
3. Shut-Off Controls: Select from dropdown.
4. Demand Responsive Controls: Select from dropdown.
5. Check if a Permanent Durable Marking Will be Used
6. Enter the Location of Requirements in the Construction Documents
7. This is a Pass or Fail checkbox for the field inspector.

J. Electric Ready Buildings

1. Select the applicable systems serving multifamily occupancy that use gas or propane.
   2-8. Check Yes to verify your project meets the requirements.

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 LMCC 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.