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INTRODUCTION

This chapter covers the major compliance and enforcement requirements of the Energy Code, primarily Title 24, Part 1, Section 10-103. This chapter helps the building construction industry during project development address compliance requirements ahead of plan check and inspections. Furthermore, the information provided in this chapter is to help authorities having jurisdiction (AHJ), or enforcement agencies, better understand how the Energy Code can be more effectively enforced.

SECTION 10-103 – PERMIT, CERTIFICATE, INFORMATIONAL, AND ENFORCEMENT REQUIREMENTS FOR DESIGNERS, INSTALLERS, BUILDERS, MANUFACTURERS, AND SUPPLIERS

Section 10-103(a) - Documentation

- (a) Documentation.** For all buildings other than healthcare facilities, the following documentation is required to demonstrate compliance with Part 6. This documentation shall meet the requirements of Section 10-103(a) or alternatives approved by the Executive Director. Healthcare facilities shall instead comply with the applicable provisions of Chapter 7.

«» Commentary for Section 10-103(a):

Section 10-103(a) refers to all buildings, but this chapter applies to multifamily buildings and will only give commentary for that application. Multifamily buildings are defined in the Energy Code and in many instances are still divided into low-rise and high-rise. Low-rise multifamily buildings are buildings with three or fewer habitable stories, and high-rise multifamily buildings are buildings with four habitable stories or more. These stories do not include parking structures. The residential dwelling units in low-rise multifamily buildings generally still use Energy Code Compliance (ECC)-Raters (formerly known as HERS Raters) for field verification and diagnostic testing and must still comply with many single-family residential requirements with some exceptions or differences. Typically referred to as "common use areas," spaces such as laundry rooms, meeting rooms, and halls must comply with the nonresidential requirements. For nonresidential requirements in low-rise multifamily buildings that address lighting controls or independent heating, ventilation, or air conditioning (HVAC), Acceptance Test Technicians (ATTs) must be used. High-rise multifamily may use ATTs or ECC-Raters to address some of the residential dwelling unit requirements.

The second sentence in this code section refers to the certificates of compliance or alternatives approved by the Energy Commission. «»

Section 10-103(a)1 – Certificate of Compliance

Certificate of Compliance. For all buildings, the Certificate of Compliance described in Section 10-103 shall be signed by the person who is eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design (*responsible person*); and submitted in accordance with Sections 10-103(a)1 and 10-103(a)2 to certify conformance with Part 6. If more than one person has responsibility for the building design, each person shall sign the Certificate of

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Compliance document(s) applicable to that portion of the design for which the person is responsible. Alternatively, the person with chief responsibility for the building design shall prepare and sign the Certificate of Compliance document(s) for the entire building design. Subject to the requirements of Sections 10-103(a)1 and 10-103(a)2, persons who prepare Certificate of Compliance documents (*documentation authors*) shall sign a declaration statement on the documents they prepare to certify the information provided on the documentation is accurate and complete. In accordance with applicable requirements of 10-103(a)1, the signatures provided by *responsible persons* and *documentation authors* shall be original signatures on paper documents or electronic signatures on electronic documents conforming to the electronic signature specifications in Reference Joint Appendix JA7.

For all Nonresidential buildings, the Design Review Kickoff Certificate(s) of Compliance and the Construction Document Design Review Checklist Certificate(s) of Compliance shall be reviewed and signed by a licensed professional engineer or licensed architect, or a licensed contractor representing services performed by or under the direct supervision of a licensed engineer or architect, as specified in the provisions of Division 3 of the Business and Professions Code. For buildings less than 10,000 square feet, this signer may be the engineer or architect of record. For buildings greater than 10,000 square feet but less than 50,000 square feet, this signer shall be a qualified in-house engineer or architect with no other project involvement or a third-party engineer, architect, or contractor. For buildings greater than 50,000 square feet and all buildings with complex mechanical systems serving more than 10,000 square feet, this signer shall be a third-party engineer, architect, or contractor.

«» Commentary for Section 10-103(a)1:

The applicable certificates of compliance have to be signed by the responsible person either with an original signature on paper or via electronic signatures on electronic documents consistent with JA7. The Certificates of Compliance can be completed by any person. That person must also sign as the documentation author. However, the certificates of compliance are not valid until it is signed by the responsible person.

To clarify who may sign as the responsible person, it is important to understand that the certificates of compliance are documentation of the intended design that must be approved by the authority having jurisdiction. As such, the responsible person must hold a credential to justify their signature on the certificates of compliance. The qualifications are specified in Division 3 of the Business and Professions Code. However, Division 3 will not speak to who may sign as a responsible person on the certificates of compliance. Division 3 specifies who, as a licensed individual, can design and build structures or building components in California.

For newly constructed buildings, this typically means that the architect responsible for overall design will likely act as the responsible person. For additions and alterations to existing buildings, the responsible person is typically the installing licensed contractor.

However, in many instances the responsible person can also be the general contractor, design engineer, or specialized contractor for specific components of the build. In general, whomever is signing the plans and specifications to be approved by the AHJ can also sign as the responsible person on the Certificates of Compliance for that building component.

It is very common for different aspects of the building to be designed by different licensed persons. For example, a structural engineer might sign the structural plans, while an HVAC engineer may independently design the HVAC system for the build. Similarly, different trades, such as lighting, electric, plumbing, photovoltaic, and others, may independently design other building components. It is permissible for each of these licensed trades to sign as the responsible person for their design component of the build and this can be the case for smaller projects. However, for larger projects, this approach is typically cumbersome. Therefore, it is also permitted for one person, appropriately licensed, who has chief responsibility for overall design or compliance to sign all of the Certificates of Compliance as the responsible person.

The Certificate of Compliance related to commissioning design review (i.e., the Design Review Kickoff Certificates of Compliance and the Construction Document Design Review Checklist Certificates of Compliance) only applies to newly constructed projects which require commissioning per Section 120.8. Commissioning is not required for additions and alterations to existing buildings. For a more detailed discussion of required and voluntary commissioning, please refer to Chapter 2 of the Nonresidential Compliance Manual. For multifamily projects, commissioning requirements apply only to the nonresidential spaces within the multifamily building. Such spaces include meeting rooms, laundry rooms, and any other such spaces that are not expected to be used as a residential space.

While it is very unlikely to apply to multifamily buildings, there are additional restrictions on who may sign as the responsible person under specific conditions. These restrictions are only covered here for the very unlikely event that they might apply to a multifamily building. These restrictions are shown in the last paragraph of Section 10-103(a)1, and are summarized in Table 2-1 Potential Additional Requirements for the Responsible Person.

Table 2-1 Potential Additional Requirements for the Responsible Person

Total Square footage of Nonresidential-Space in a Multifamily Building	Additional Requirements for the Responsible Person
Under 10,000	No additional requirements
10,000 and above but below 50,000	The responsible person is additionally restricted to be a qualified in-house engineer or architect with no other project involvement or a third-party engineer, architect, or contractor.
50,000 and above	The responsible person is additionally restricted to be a third-party engineer, architect, or contractor.
10,000 square feet and above and has complex mechanical systems (see definitions)	The responsible person is additionally restricted to be a third-party engineer, architect, or contractor.

Source: California Energy Commission

«»

Section 10-103(a)1A

- A. All Certificate of Compliance documentation shall conform to a format and informational order and content approved by the Energy Commission.

These documents shall:

- i. Identify the energy features, performance specifications, materials, components, and manufactured devices required for compliance with Part 6.
- ii. Identify the building project name and location. The building project name and location identification on the Certificate of Compliance shall be consistent with the building project name and location identification given on the other applicable building design plans and specifications submitted to the enforcement agency for approval with the building permit application.
- iii. Display the unique registration number assigned by the data registry if Section 10-103(a)1 requires the document to be registered.
- iv. Include a declaration statement to the effect that the building energy features, performance specifications, materials, components, and manufactured devices for the building design identified on the Certificate of Compliance indicate the building is in compliance with the requirements

- of Title 24, Parts 1 and 6, and the building design features identified on the Certificate of Compliance are consistent with the building design features identified on the other applicable compliance documents, worksheets, calculations, plans, and specifications submitted to the enforcement agency for approval with the building permit application.
- v. Be signed by the *documentation author* to certify the documentation is accurate and complete. When document registration is required by Section 10-103(a)1, the signature shall be an electronic signature on an electronic document in accordance with the electronic signature specifications in Reference Joint Appendix JA7.
 - vi. Be signed by the *responsible person* eligible under Division 3 of the Business and Professions Code to accept responsibility for the design to certify conformance with Part 6. When document registration is required by Section 10-103(a)1, the signature shall be an electronic signature on an electronic document in accordance with the electronic signature specifications in Reference Joint Appendix JA7.

«» Commentary for Section 10-103(a)1A:

Section 10-103(a)1A describes the requirements for the Certificates of Compliance, the requirements for them to be completed, and the required signatories. It specifically requires that they conform to a format, informational order, and content approved by the Energy Commission. This also allows the Energy Commission to approve alternative Certificates of Compliance. The responsible person and to a lesser extent, the documentation author are responsible to ensure that the Certificates of Compliance match or are at least consistent with the permit application (i.e., compliance documents, worksheets, calculations, plans, and specifications submitted to the AHJ for approval through the construction permit application process). Table 2-2: Certificates of Compliance by Application and Number of Stories shows the Certificates of Compliance documents available, based on the application and number of stories (low-rise vs. high-rise). When the performance approach is used for low-rise multifamily (LRMF) buildings, the LMCC-PRF-01 will report additional prescriptive Low-rise Multifamily Certificates of Compliance (LMCCs) that must also be completed.

LMCCs may be produced by completing the relevant forms on a number of platforms. These sources will be listed on the 2025 Building Energy Efficiency Standards web page. The options include using a residential data registry, a downloaded blank form, or a document generator. Which source may be used depends on the following: if the project does not require field verification and diagnostic testing (FV&DT), the documents may be produced without being registered in an Energy Commission approved residential data registry. Table 2-2: Certificates of Compliance by Application and Number of Stories shows compliance documents based on the application and number of stories. If no data registry is capable of producing registered certificates, the compliance documents must be generated using an alternative method as they are still necessary to facilitate FV&DT and the production of applicable compliance documents.

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High-rise multi-family (HRMF) Certificates of Compliance use the Nonresidential Certificates of Compliance (NRCCs). They can be completed using compliance software.

Table 2-2: Certificates of Compliance by Application and Number of Stories

Application	Documentation Required for Buildings up to Three Habitable Stories when Applicable	Able to be registered in a Residential Data Registry¹	Documentation Required for Buildings Four or more Habitable Stories when Applicable
Performance Approach	LMCC-PRF-01	Yes	NRCC-PRF-01
Electrical Power Distribution	LMCC-ELC-01-E	See note	NRCC-ELC-E
Envelope	LMCC-ENV-01-E	See note	NRCC-ENV-E
Commissioning	LMCC-CXR-01-E	See note	NRCC-CXR-E
Lighting – Indoor	LMCC-LTI-01-E	See note	NRCC-LTI-E
Lighting – Outdoor	LMCC-LTO-01-E	See note	NRCC-LTO-E
Lighting - Sign	LMCC-LTS-01-E	See note	NRCC-LTS-E
Mechanical Systems	LMCC-MCH-01-E	See note	NRCC-MCH-E
Prescriptive Alterations HVAC	LMCC-MCH-02-E	Yes	NRCC-MCH-E
Water Heating Systems/ Plumbing	LMCC-PLB-01-E	See note	NRCC-PLB-E
Covered Processes	LMCC-PRC-01-E	See note	NRCC-PRC-E
Solar and Battery	LMCC-SAB-01-E	See note	NRCC-SAB-E

Source: California Energy Commission

«»

Section 10-103(a)1B:

- B. For all low-rise residential buildings for which compliance requires field verification, the person(s) responsible for the Certificate(s) of Compliance shall submit the Certificate(s) and their associated Compliance Registration Packages for registration and retention to an ECC-provider data registry in compliance with Section 10-103.3. The submittals to the ECC-provider data registry shall be made electronically in accordance with the specifications in Reference Joint Appendix JA7.

Contingent upon availability and approval of an electronic document repository by the Executive Director, Certificate of Compliance documents and their associated Compliance Registration Packages that are registered and retained by an ECC-provider data registry shall also be automatically transmitted by the data registry Section 10-103.3, to an electronic document repository for retention in accordance with the specifications in Reference Joint Appendix JA7.

«» Commentary for Section 10-103(a)1B:

Section 10-103(a)1B refers to low-rise residential buildings, which includes both single-family and multifamily buildings. For information on single-family residential buildings, please review the 2025 Single-family Residential Compliance Manual. LRMF projects that are also required to comply with the FV&DT regulations must register the one or more LMCCs with an Energy Commission-approved residential data registry (see Table 2-2). Note that different LMCC forms are available to address prescriptive new construction, additions, and alterations by category. These categories include mechanical systems, building envelope features, and water heating systems. Alternatively, a performance LMCC may be generated using approved compliance software. The LMCC-PRF-01-E will indicate if additional prescriptive LMCCs are required. These may include solar and battery systems, lighting and lighting controls, and others that apply more to the nonresidential-occupancy areas of the building.

The persons responsible for the LMCCs are also responsible for ensuring that this registration happens. This person is the responsible person as designated in Section 10-103(a)1. In the event that it is not possible to register the LMCC (see Table 2-2), the responsible person has the responsibility to ensure that the LMCCs are completed in compliance with the Energy Code requirements.

The remainder of Section 10-103(a)1B refers to a central document repository that is still in development at the time of this writing and does not impact the compliance or enforcement of the Energy Code. «»

Section 10-103(a)1C

- C. For alterations to existing residential buildings for which field verification is not required, including but not limited to water heater and window replacements, and for additions to existing residential buildings that are less than 300 square feet for which field verification is not required, the enforcement agencies may at their discretion not require any Certificate of

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Compliance documentation, or may develop simplified Certificate of Compliance documentation for demonstrating compliance with the Standards.

Allowances by enforcement agencies to not require compliance documentation shall not be deemed to grant authorization for any work to be done in any manner in violation of this code or other provisions of law.

«» Commentary for Section 10-103(a)1C:

Section 10-103(a)1C refers to existing residential buildings which includes both single-family and LRMF buildings. For information on single-family residential buildings please review the 2025 Single-family Residential Compliance Manual. For LRMF addition and alteration projects that do require FV&DT, Section 10-103(a)1C allows the AHJ, at its discretion, to either not require any LMCCs or develop its own Certificates of Compliance. The AHJ need not seek Energy Commission approval prior to implementing this option. If an AHJ develops its own Certificates of Compliance for these types of projects, it must ensure compliance with the Energy Code. «»

Section 10-103(a)1D

- D. Contingent upon approval of data registry(s) by the Commission, all nonresidential buildings, high-rise residential buildings, and hotels and motels, when designated to allow use of an occupancy group or type regulated by Part 6 the person(s) responsible for the Certificate(s) of Compliance shall submit the Certificate(s) and their associated Compliance Registration Packages for registration and retention to a data registry approved by the Commission. The submittals to the approved data registry shall be made electronically in accordance with the specifications in Reference Joint Appendix JA7.

Contingent upon availability and approval of an electronic document repository by the Executive Director, Certificate of Compliance documents and their associated Compliance Registration Packages that are registered and retained by an approved data registry shall also be automatically transmitted by the data registry to an electronic document repository for retention in accordance with the specifications in Reference Joint Appendix JA7.

«» Commentary for Section 10-103(a)1D:

Until a nonresidential data registry is approved by the California Energy Commission, there is no requirement to register compliance documents for high rise multifamily projects. A data registry could be approved mid-code cycle and, upon approval, registration of NRCC documents would be required. If a nonresidential data registry is approved, the California Energy Commission will issue a Regulatory Advisory. «»

Section 10-103(a)2 – Application for a Building Permit

2. **Application for a building permit.** Each application for a building permit subject to Part 6 shall contain at least one copy of the documents specified in Sections 10-103(a)2A, 10-103(a)2B, and 10-103(a)2C.

- A. For all newly constructed buildings, additions, alterations, or repairs regulated by Part 6 the applicant shall submit the applicable Certificate(s) of Compliance to the enforcement agency for approval. The certificate(s) shall conform to the requirements of Section 10-103(a)1, and shall be approved by the local enforcement agency, in accordance with all applicable requirements of Section 10-103(d), by stamp or authorized signature prior to issuance of a building permit. A copy of the Certificate(s) of Compliance shall be included with the documentation the builder provides to the building owner at occupancy as specified in Section 10-103(b).

For alterations to existing residential buildings for which field verification is required, and when the enforcement agency does not require building design plans to be submitted with the application for a building permit, the applicable Certificate of Compliance documentation specified in Section 10-103(a)1 is not required to be approved by the enforcement agency prior to issuance of a building permit, but shall be approved by the enforcement agency prior to final inspection of the dwelling unit, and shall be made available to the enforcement agency for all applicable inspections, or made available for viewing on an approved data registry.

When the enforcement agency requires building design plans to be submitted with the application for a building permit, the applicable Certificate of Compliance documents shall be incorporated into the building design plans. When Section 10-103(a)1 requires document registration, the certificate(s) that are incorporated into the building design plans shall be copies of the registered Certificate of Compliance documents from an ECC-provider data registry, or a data registry approved by the Commission.

- B. When the enforcement agency requires building design plans and specifications to be submitted with the application for a building permit, the plans shall conform to the specifications for the features, materials, components, and manufactured devices identified on the Certificate(s) of Compliance, and shall conform to all other applicable requirements of Part 6. Plans and specifications shall be submitted to the enforcement agency for any other feature, material, component, or manufactured device that Part 6 requires be indicated on the building design plans and specifications. Plans and specifications submitted with each application for a building permit for Nonresidential buildings, High-rise Residential buildings and Hotels and Motels shall provide acceptance requirements for code compliance of each feature, material, component or manufactured device when acceptance requirements are required under Part 6. Plans and specifications for Nonresidential buildings, High-rise Residential buildings and Hotels and Motels shall require, and indicate with a prominent note on the plans, that within 90 days after the Enforcement Agency issues a permanent final occupancy permit, record drawings be provided to the building owner.

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For all buildings, if the specification for a building design feature, material, component, or manufactured device is changed before final construction or installation, such that the building may no longer comply with Part 6 the building must be brought back into compliance, and so indicated on amended plans, specifications, and Certificate(s) of Compliance that shall be submitted to the enforcement agency for approval. Such characteristics shall include the efficiency (or other characteristic regulated by Part 6) of each building design feature, material, component, or device.

- C. The enforcement agency shall have the authority to require submittal of any supportive documentation that was used to generate the Certificate(s) of Compliance, including but not limited to the electronic input file for the compliance software tool that was used to generate performance method Certificate(s) of Compliance; or any other supportive documentation that is necessary to demonstrate that the building design conforms to the requirements of Part 6.

«» Commentary for Section 10-103(a)2 – Application for a Building Permit:

Section 10-103(a)2 is the first point at which the Certificates of Compliance are required to be submitted to the AHJ for approval. The scope for this action includes newly constructed buildings as well as additions, alterations, and repairs to existing buildings. In general, when the AHJ requires a permit to construct for a project and that project includes elements regulated by the Energy Code, the responsible person must submit the required Certificates of Compliance with the permit application. The responsible person must incorporate the Certificates of Compliance into the plans with an application for a permit to construct. Additionally, the responsible person must submit a registered copy of the Certificates of Compliance, when they are required to be registered with an Energy Commission approved data registry.

Once the permit application is reviewed and approved by the AHJ, the Certificates of Compliance are approved as well. It is at this approval that the Certificates of Compliance are considered to have met all of the Energy Code requirements pertaining to the filling out the Certificate of Compliance. Only an agent of the AHJ, such as a field inspector, can overturn that approval. ECC-Raters and ATTs do not have the authority to declare an AHJ approved Certificate of Compliance does not meet all of the form requirements of the Energy Code. ECC-Raters and ATTs can only pass or fail a project regarding the Energy Code required FV&DT or acceptance testing. A copy of the AHJ approved Certificates of Compliance is also required to be given to the building owner within 90 days following the AHJ issuance of the certificate of occupancy.

In some instances the AHJ might not require building design plans to be submitted with the permit application; this is typically limited to small alteration projects at existing buildings, such as an HVAC change out. However, when these projects require FV&DT, the appropriate Certificates of Compliance must still be completed and approved by the AHJ. In such a case, the Certificates of Compliance are not required to be approved by the AHJ until the AHJ is ready to issue the certificate of occupancy, as opposed to the

permit to construct. The Certificates of Compliance must be completed and made available to the AHJ during all inspections. This is, of course, augmented by the ultimate authority of the AHJ to require the submittal of all compliance documents, including supporting documents, at any point during the permitting process, including at the application for a permit to construct. Therefore, it is highly recommended that project proponents discuss the submission requirements with the AHJ directly.

The AHJ is intended to review and verify that all elements (specifications for the features, materials, components, and manufactured devices) of the Certificates of Compliance are included correctly in the plans and specifications submitted for the permit application. This would typically be done at plan review. The AHJ Plan Review must also review the permit application for compliance with the Energy Code for elements that are not included on the Certificates of Compliance as well. The plans and specifications that are submitted for the permit application must include indications where FV&DT and/or acceptance testing is required by the Energy Code for the project.

Change-Orders

If a change from the original design is still compliant with the Energy Code, then there is no requirement to make changes to the Certificate(s) of Compliance. The issue arises when the change is not in compliance with the Energy Code. In that case, the project design must be brought back into compliance, the Certificate(s) of Compliance must be updated with the project plans, and the plans must be re-approved by the AHJ. The AHJ may have a specific process for handling change-orders, which should be followed and will generally address the Energy Code requirements. «»

Section 10-103(a)3 – Certificate of Installation

3. **Certificate of Installation.** For all buildings, the person in charge of the construction or installation, who is eligible under Division 3 of the Business and Professions Code to accept responsibility for the construction or installation of features, materials, components, or manufactured devices regulated by Part 6 or the Appliance Efficiency Regulations (*responsible person*) shall sign and submit Certificate of Installation documentation as specified in Section 10-103(a)3 to certify conformance with Part 6. If more than one person has responsibility for the construction or installation, each person shall sign and submit the Certificate of Installation documentation applicable to the portion of the construction or installation for which they are responsible; alternatively, the person with chief responsibility for the construction or installation shall sign and submit the Certificate of Installation documentation for the entire construction or installation scope of work for the project. Subject to the requirements of Section 10-103(a)3, persons who prepare Certificate of Installation documentation (*documentation authors*) shall sign a declaration statement on the documents they prepare to certify the information provided on the documentation is accurate and complete. In accordance with applicable requirements of 10-103(a)3, the signatures provided by *responsible persons* and *documentation authors* shall be original signatures on paper documents or electronic signatures on electronic documents

conforming to the electronic signature specifications in Reference Joint Appendix JA7.

«» **Commentary for Section 10-103(a)3:**

The responsible person indicated under Section 10-103(a)3 to sign the Certificate of Installation is not typically the same as person that signs on the Certificates of Compliance, unless that person is qualified for that trade under Division 3 of the Business and Professions Code. The installing contractor or technician in the employ of the contractor typically acts as the responsible person for the Certificates of Installation. The Energy Commission may refer to the Certificates of Installation responsible person signatory as the installing contractor signatory. «»

Section 10-103(a)3A – Delegation of Signature Authority

- A. **Delegation of Signature Authority.** Except where prohibited by law, including but not limited to any requirements under Division 3 of the Business and Professions Code, the *Responsible Person* may delegate signature authority to third parties (*Authorized Representatives*) provided that there is a written agreement:
- i. Between the *Responsible Person* and the person to be designated as the *Authorized Representative*.
 - ii. Specifying that the *Authorized Representative* may sign Certificates of Installation on behalf of the *Responsible Person*.
 - iii. Specifying that the legal responsibility for construction or installation in the applicable classification for the scope of work specified on the Certificate of Installation document(s) remains with the Responsible Person.
 - iv. That is signed by both the *Responsible Person* and the *Authorized Representative*.
 - v. That is retained by the ECC-provider to which all compliance documents are submitted for the building to which the Certificate of Installation documentation pertains.
 - vi. That is maintained in the ECC-provider data registry such that it is accessible for verification by, including but not limited to, the Energy Commission and enforcement agencies.

«» **Commentary for Section 10-103(a)3A:**

The delegation of signature authority was originally set up to encourage the completion of the Certificates of Installation by allowing the Rater to complete the form. The Certificates of Installation were generally being ignored by installing contractors and AHJs and, when completed, were generally completed incorrectly. This was most often the case for when FV&DT was required and very consistently the case when sampling was used. To combat this issue, it was decided that the Rater would be allowed to complete the Certificates of Installation for the installing contractors, with some

restrictions. It had to be a written agreement between the contractors acting as the Certificate of Installation responsible person and the 'Authorized Representative, in almost all case, the Rater. However, the responsibility for the scope of work remains with the responsible person. Both parties must sign the agreement, and the agreement must be retained by the Provider where the Certificates of Installation are registered. To date, only Raters have acted as Authorized Representatives for Certificates of Installation responsible persons. «»

Section 10-103(a)3B – Format of Certificate of Installation

- B. **Format.** All Certificate of Installation documentation shall conform to a format and informational order and content approved by the Energy Commission.

These documents shall:

- i. Identify the features, materials, components, manufactured devices, and system performance diagnostic results required to demonstrate compliance with Part 6 and the Appliance Efficiency Regulations.
- ii. State the number of the building permit under which the construction or installation was performed.
- iii. Display the unique registration number assigned by the data registry if Section 10-103(a)3 requires the document to be registered.
- iv. Include a declaration statement indicating that the constructed or installed features, materials, components or manufactured devices (the installation) identified on the Certificate of Installation conforms to all applicable codes and regulations, and the installation conforms to the requirements given on the plans and specifications approved by the enforcement agency.
- v. Be signed by the *documentation author* to certify the documentation is accurate and complete. When document registration is required by Section 10-103(a)3, the signature shall be an electronic signature on an electronic document in accordance with the electronic signature specifications in Reference Joint Appendix JA7.
- vi. Be signed by the *Responsible Person* eligible under Division 3 of the Business and Professions Code to accept responsibility for construction or installation in the applicable classification for the scope of work specified on the Certificate of Installation document(s), or shall be signed by their *Authorized Representative*. When document registration is required by Section 10-103(a)3, the signature shall be an electronic signature on an electronic document in accordance with the electronic signature specifications in Reference Joint Appendix JA7.

«» Commentary for Section 10-103(a)3B:

Section 10-103(a)3B describes the requirements for the Certificates of Installation which includes the low-rise multifamily Certificate of Installation (LMCI) and nonresidential

Certificate of Installation (NRCI). It specifically requires that they conform to a format, informational order, and content approved by the Energy Commission. This also allows the Energy Commission to approve alternative compliance documents. The responsible person, and to a lesser extent the documentation author, are responsible to ensure that the compliance documents match or are at least consistent with the permit application (i.e., compliance documents, worksheets, calculations, plans, and specifications submitted to the AHJ for approval through the construction permit application process).

Construction Phase Documentation

The Certificates of Installation are separated into envelope, lighting, mechanical, plumbing, and solar categories. Most compliance features have a separate Certificate of Installation form that is specific to a particular trade (e.g. electrical, plumbing, HVAC, etc.). The Certificates of Installation forms are completed during the construction or installation phase by the contractors responsible for installing regulated energy features such as fenestration, air distribution ducts and other requirements that affect building energy performance. The Certificates of Installation must be posted at the job site, kept with the building permit, or otherwise submitted to the enforcement agency.

Certificates may be produced using a residential data registry, using a downloaded blank form, or by using a document generator. «»

Section 10-103(a)3C

- C. For all low-rise residential buildings, the person(s) responsible for the Certificate(s) of Installation, or their *Authorized Representative(s)*, shall submit the following Certificate of Installation documentation and their associated Compliance Registration Packages that is applicable to the building to an ECC-provider data registry for registration and retention in accordance with Section 10-103.3 and procedures specified in Reference Residential Appendix RA2:
 - i. All Certificates of Installation for which compliance requires field verification.
 - ii. All other Certificates of Installation, except those not required by the Energy Commission.

The submittals to the ECC-provider data registry shall be made electronically in accordance with the specifications in Reference Joint Appendix JA7.

Contingent upon availability and approval of an electronic document repository by the Executive Director, Certificate of Installation documents and their associated Compliance Registration Packages that are registered and retained by an ECC-provider data registry in compliance with Section 10-103.3 shall also be automatically transmitted by the data registry to an electronic document repository for retention in accordance with the specifications in Reference Joint Appendix JA7.

«» Commentary for Section 10-103(a)3C:

Section 10-103(a)3C refers to low-rise residential buildings, which includes both single-family and LRMF buildings. For a discussion on single-family residential buildings please review the Single Family Residential Compliance Manual. LRMF projects that are also required to comply with the FV&DT regulations must register the associated LMCIs with an Energy Commission approved residential data registry. When field verification of a feature is required, the builder or subcontractor performs the diagnostic test (Reference Residential Appendix RA3) of the installation to confirm compliance with the approved design requirements and the Energy Code. The Certificates of Installation for multifamily buildings with three or fewer habitable stories are registered with an ECC-Provider's data registry and made available to the enforcement agency. Table 2-3: Certificates of Installation by Application and Number of Stories shows compliance documents based on the application and number of stories.

Table 2-3: Certificates of Installation by Application and Number of Stories

Application	Documentation Required for Buildings up to Three Habitable Stories when Applicable	Able to be registered in a Residential Data Registry¹	Documentation Required for Buildings Four or more Habitable Stories when Applicable
Electric Ready Requirements	LMCI-ELC-01-E	Yes	NRCI-ELC-E
Electrical Power Distribution	LMCI-ELC-E	See note	NRCI-ELC-E
Envelope – Non-FV&DT	LMCI-ENV-E	See note	NRCI-ENV-E
Envelope – QII	LMCI-ENV-21-H LMCI-ENV-22-H	Yes	Not Applicable
Indoor Lighting	LMCI-LTI-E	No	NRCI-LTI-E
Outdoor Lighting	LMCI-LTO-E	No	NRCI-LTO-E
Sign Lighting	LMCI-LTS-E	No	NRCI-LTS-E
Mechanical – Common Spaces	LMCI-MCH-E	No	NRCI-MCH-E
Mechanical – FV&DT	LMCI-MCH-01(a-d)-E LMCI-MCH-(20-29)-H LMCI-MCH-(32-33)-H	Yes, except for LMCI-MCH-01c-E (See note)	NRCI-MCH-20(a-e)-F NRCI-MCH-(22-23)-F NRCI-MCH-25(a-c, f)-F

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Application	Documentation Required for Buildings up to Three Habitable Stories when Applicable	Able to be registered in a Residential Data Registry¹	Documentation Required for Buildings Four or more Habitable Stories when Applicable
Plumbing – Multifamily central hot water system distribution	LMCI-PLB-21-H LMCI-PLB-22-H	Yes	NRCI-PLB-E
Plumbing – Non-FV&DT	LMCI-PLB-01-E LMCI-PLB-02-E	Yes	NRCI-PLB-E
Plumbing – Non-FV&DT Domestic Water	LMCI-PLB-E	No	NRCI-PLB-E
Plumbing – Pools and Spas	LMCI-PLB-03-E	Yes; Not required to be registered	Not Applicable
Covered Process	LMCI-PRC-E	No	NRCI-PRC-E
Solar and Battery	LMCI-SRB-E	No	NRCI-SAB-E

Source: California Energy Commission

«»

Section 10-103(a)3D – Certificate of Installation - Alterations

- D. For alterations to existing residential buildings for which field verification is not required, including but not limited to water heater and window replacements, and for additions to existing residential buildings that are less than 300 square feet for which field verification is not required, the enforcement agencies may, at their discretion, not require any Certificate of Installation documentation, or may develop simplified Certificate of Installation documentation for demonstrating compliance with the Standards.

Allowances by enforcement agencies to not require compliance documentation shall not be deemed to grant authorization for any work to be done in any manner in violation of this code or other provisions of law.

«» Commentary for Section 10-103(a)3D:

Section 10-103(a)3D refers to existing residential buildings which includes both single-family and LRMF buildings. For a discussion on single-family residential buildings please review the Single Family Residential Compliance Manual. For LRMF addition and

alteration projects that do require FV&DT, Section 10-103(a)3D allows the AHJ, at its discretion, to either not require any LMCIs or develop its own Certificates of Installation. The AHJ need not seek Energy Commission approval prior to implementing this option. If an AHJ develops its own Certificates of Installation for these types of projects, it must ensure compliance with the Energy Code. <>>

Section 10-103(a)3E – Nonresidential Data Registry

- E. Contingent upon approval of data registry(s) by the Commission, all nonresidential buildings, high-rise residential buildings, and hotels and motels, when designated to allow use of an occupancy group or type regulated by Part 6 the person(s) responsible for the Certificate(s) of Installation, except those documents not required by the Energy Commission, shall submit the Certificate(s) and their associated Compliance Registration Packages for registration and retention to a data registry approved by the Commission. The submittals to the approved data registry shall be made electronically in accordance with the specifications in Reference Joint Appendix JA7.

Contingent upon availability and approval of an electronic document repository by the Executive Director, Certificate of Installation documents and their associated Compliance Registration Packages that are registered and retained by an approved data registry shall also be automatically transmitted by the data registry to an electronic document repository for retention in accordance with the specifications in Reference Joint Appendix JA7.

<>> Commentary for Section 10-103(a)3E:

Until a nonresidential data registry is approved by the California Energy Commission, there is no requirement to register multifamily buildings with four or more habitable stories, compliance documents. A data registry could be approved mid-code cycle, and upon approval registration of NRCI documents would be required. If a nonresidential data registry is approved, the California Energy Commission will issue a Regulatory Advisory. <>>

Section 10-103(a)3F - Availability

- F. **Availability.** For all buildings, a copy of the Certificate(s) of Installation shall be posted, or made available with the building permit(s) issued for the building, or made available for viewing on an approved data registry, and shall be made available to the enforcement agency for all applicable inspections. When document registration is required by Section 10-103(a)3, registered copies of the Certificate(s) of Installation from an ECC-provider data registry or a data registry approved by the Commission shall be posted or made available with the building permit(s) issued for the building, and shall be made available to the enforcement agency for all applicable inspections. If construction on any portion of the building subject to Part 6 will be impossible to inspect because of subsequent construction, the enforcement agency may require the Certificate(s) of Installation to be posted upon completion of that

portion. A copy of the Certificate(s) of Installation shall be included with the documentation the builder provides to the building owner at occupancy as specified in Section 10-103(b).

«» **Commentary on Section 10-103(a)3F:**

Section 10-103(a)3F is a simple requirement to make the completed Certificates of Installation available to the AHJ. This can be done in many ways and when a data registry is involved, it can include a link to the registered documents within the registry. For compliance with this section, we advise that the builder discuss the preferred options with the AHJ. «»

Section 10-103(a)4A

4. **Certificate of Acceptance.** For all nonresidential buildings, high-rise residential buildings, and hotels and motels, when designated to allow use of an occupancy group or type regulated by Part 6 the person in charge of the acceptance testing, who is eligible under Division 3 of the Business and Professions Code to accept responsibility for the applicable scope of system design, or construction, or installation of features, materials, components, or manufactured devices regulated by Part 6 or the Appliance Efficiency Regulations (*responsible person*), shall sign and submit all applicable Certificate of Acceptance documentation in accordance with Section 10-103(a)4 and Reference Nonresidential Appendix NA7 to certify conformance with Part 6. If more than one person has responsibility for the acceptance testing, each person shall sign and submit the Certificate of Acceptance documentation applicable to the portion of the construction or installation, for which they are responsible; alternatively, the person with chief responsibility for the system design, construction, or installation, shall sign and submit the Certificate of Acceptance documentation for the entire construction or installation scope of work for the project. Subject to the requirements of Section 10-103(a)4, persons who prepare Certificate of Acceptance documentation (*documentation authors*) shall sign a declaration statement on the documents they prepare to certify the information provided on the documentation is accurate and complete. Persons who perform acceptance test procedures in accordance with the specifications in Reference Nonresidential Appendix NA7, and report the results of the acceptance tests on the Certificate of Acceptance (*field technicians*) shall sign a declaration statement on the documents they submit to certify the information provided on the documentation is true and correct. In accordance with applicable requirements of Section 10-103(a)4, the signatures provided by *responsible persons*, *field technicians*, and *documentation authors* shall be original signatures on paper documents or electronic signatures on electronic documents conforming to the electronic signature specifications in Reference Joint Appendix JA7.

- A. All Certificate of Acceptance documentation shall conform to a format and informational order and content approved by the Energy Commission.

These documents shall:

- i. Identify the features, materials, components, manufactured devices, and system performance diagnostic results required to demonstrate compliance with the acceptance requirements to which the applicant must conform as indicated in the plans and specifications submitted under Section 10-103(a)2, and as specified in Reference Nonresidential Appendix NA7.
- ii. State the number of the building permit under which the construction or installation was performed.
- iii. Display the unique registration number assigned by the data registry if Section 10-103(a)4 requires the document to be registered.
- iv. Include a declaration statement indicating that the features, materials, components or manufactured devices identified on the Certificate of Acceptance conform to the applicable acceptance requirements as indicated in the plans and specifications submitted under Section 10-103(a), and with applicable acceptance requirements and procedures specified in the Reference Nonresidential Appendix NA7, and confirms that Certificate(s) of Installation described in Section 10-103(a)3 has been completed and is posted or made available with the building permit(s) issued for the building, or made available for viewing on an approved data registry.
- v. Be signed by the *documentation author* to certify the documentation is accurate and complete. When document registration is required by Section 10-103(a)4, the signature shall be an electronic signature on an electronic document in accordance with the electronic signature specifications in Reference Joint Appendix JA7.
- vi. Be signed by the *field technician* who performed the acceptance test procedures and reported the results on the Certificate of Acceptance. When document registration is required by Section 10-103(a)4, the signature shall be an electronic signature on an electronic document in accordance with the electronic signature specifications in Reference Joint Appendix JA7.
- vii. Be signed by the *responsible person* in charge of the acceptance testing who is eligible under Division 3 of the Business and Professions Code to accept responsibility for the system design, construction or installation in the applicable classification for the scope of work identified on the Certificate of Acceptance, or shall be signed by their authorized representative. When document registration is required by Section 10-103(a)4, the signature shall be an electronic signature on an electronic document in accordance with the electronic signature specifications in Reference Joint Appendix JA7.

«» **Commentary for Section 10-103(a)4A:**

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The Energy Code requires specific acceptance testing for lighting controls, HVAC controls, air distribution ducts, envelope features, and special purpose equipment, referred to as covered processes. The Energy Code allows the installing contractor to perform this acceptance testing if they are certified as described below. However, the Energy Code acceptance testing procedures do not alleviate the installing contractor from performing any manufacturer required startup and commissioning tests for the installed energy efficiency feature.

Certified technicians who conduct acceptance testing for lighting and mechanical systems are required to be trained and certified by a CEC-approved Acceptance Test Technician Certification Provider (ATTCP). These certified technicians are referred to as acceptance test technicians (ATTs). The CEC verifies that the ATTCP provides the required classroom and hands-on training to perform the required acceptance tests and complete the required documentation (Section 10-103.1 or Section 10-103.2). Builders and installers will need to ensure that an ATT conducts the required acceptance testing and completes the required Nonresidential Certificates of Acceptance (NRCA) for lighting controls and mechanical systems. For this purpose, the ATTCPs provide publicly available lists of ATTs certified by the ATTCP. Enforcement agency field inspectors can verify that the submitted NRCAs are signed by an ATT using the same public lists and by inspection of the NRCA itself. Each NRCA is watermarked by the ATTCP that certified the ATT for authentication. The NRCA itself can also be verified by the ATTCP as valid by contacting the ATTCP by phone or email. The CEC maintains a link to all ATTCPs at its ATTCP web page (<https://www.energy.ca.gov/programs-and-topics/programs/acceptance-test-technician-certification-provider-program/acceptance>). Table 2-4: Nonresidential Certificate of Acceptance lists the Energy Code required NRCAs and indicates which are to be completed by ATTs through the ATTCP program. For more information on the ATTCP program, see Chapter 14 of the Nonresidential Compliance Manual.

Table 2-4: Nonresidential Certificate of Acceptance

Certificate of Acceptance	Description	ATTCP Required	ATT-Alternative to Rater FV&DT
NRCA-ENV-02-A	Envelope – Fenestration	No	No
NRCA-ENV-03-A	Envelope – Daylight PAFs	No	No
NRCA-LTI-02-A	Lighting Controls - Shutoff	Yes	No
NRCA-LTI-03-A	Lighting Controls – Daylighting	Yes	No
NRCA-LTI-04-A	Lighting Controls – Demand Response	Yes	No

Certificate of Acceptance	Description	ATTCP Required	ATT-Alternative to Rater FV&DT
NRCA-LTI-05-A	Lighting Controls – Institutional Tuning	Yes	No
NRCA-LTO-02-A	Lighting Controls – Outdoor	Yes	No
NRCA-MCH-02-A	Mechanical – Outdoor Air	Yes	No
NRCA-MCH-03-A	Mechanical – Constant Volume	Yes	No
NRCA-MCH-04-A	Mechanical – Duct Leakage	Yes	No
NRCA-MCH-05-A	Mechanical – Economizer	Yes	No
NRCA-MCH-06-A	Mechanical – Demand Control	Yes	No
NRCA-MCH-07-A	Mechanical – Supply Control	Yes	No
NRCA-MCH-08-A	Mechanical -Valve Leakage	Yes	No
NRCA-MCH-09-A	Mechanical – Supply Water	Yes	No
NRCA-MCH-10-A	Mechanical – Hydronic System	Yes	No
NRCA-MCH-11-A	Mechanical – Demand Shed Control	Yes	No
NRCA-MCH-12-A	Mechanical – FDD Package Direct	Yes	No
NRCA-MCH-13-A	Mechanical – FDD AHU/ZTU	Yes	No
NRCA-MCH-14-A	Mechanical – Energy Storage	Yes	No
NRCA-MCH-15-A	Mechanical – Thermal Energy Storage	Yes	No
NRCA-MCH-16-A	Mechanical – Supply Air Temp.	Yes	No
NRCA-MCH-17-A	Mechanical – Condenser Water Temp.	Yes	No
NRCA-MCH-18-A	Mechanical — EMCS	Yes	No
NRCA-MCH-19-A	Mechanical – Occupancy Sensor	Yes	No
NRCA-MCH-20a-H	Mechanical – Multi-Family Dwelling Inspection	Yes	Alternative
NRCA-MCH-20b-H	Mechanical – MF Kitchen Exhaust	Yes	Alternative
NRCA-MCH-20c-H	Mechanical – MF IAQ System	Yes	Alternative

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Certificate of Acceptance	Description	ATTCP Required	ATT-Alternative to Rater FV&DT
NRCA-MCH-20d-H	Mechanical – MF Dwelling HRV/ERV System	Yes	Alternative
NRCA-MCH-21-H	Mechanical – MF Dwelling Leakage	Yes	Alternative
NRCA-MCH-22-A	Mechanical – MF Duct Leakage	Yes	No
NRCA-MCH-23-A	Mechanical – MF HRV/ERV Verification	Yes	No
NRCA-MCH-24-A	Cooling Tower Conductivity Controls	Yes	No
NRCA-PRC-01-F	Covered Process – Compressed Air	No	No
NRCA-PRC-02-F	Covered Process – Kitchen Exhaust	No	No
NRCA-PRC-03-F	Covered Process – Garage Exhaust	No	No
NRCA-PRC-04-F	Covered Process – Refrigerated Warehouse Evaporator and Fan Controls	No	No
NRCA-PRC-05-F	Covered Process – RW Evaporator Controls	No	No
NRCA-PRC-06-F	Covered Process – Air Cooled Condensers	No	No
NRCA-PRC-07-F	Covered Process – Variable Speed Condensers	No	No
NRCA-PRC-08-F	Covered Process - RW Underslab Heating	No	No
NRCA-PRC-12-F	Covered Process – Elevator Lighting and Ventilation	No	No
NRCA-PRC-13-F	Covered Process – Escalator Speed Control	No	No
NRCA-PRC-14(a-c3)-F	Covered Process – Lab Exhaust	No	No
NRCA-PRC-15-F	Covered Process – Fume Hood	No	No
NRCA-PRC-16-F	Covered Process – Adiabatic Condenser	No	No

Certificate of Acceptance	Description	ATTCP Required	ATT-Alternative to Rater FV&DT
NRCA-PRC-17-F	Transcritical Refrigeration	No	No

Source: California Energy Commission

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Section 10-103(a)4B

- B. Contingent upon approval of data registry(s) by the Commission, for all nonresidential buildings, high-rise residential buildings, and hotels and motels, when designated to allow use of an occupancy group or type regulated by Part 6 the person(s) responsible for the Certificate(s) of Acceptance shall submit the Certificate(s) and their associated Compliance Registration Packages for registration and retention to a data registry approved by the Commission, excluding all Certificates of Acceptance recorded by an acceptance test technician certification provider (10-103.1 and 10-103.2). The submittals to the approved data registry shall be made electronically in accordance with the specifications in Reference Joint Appendix JA7.

Contingent upon availability and approval of an electronic document repository by the Executive Director, Certificate of Acceptance documents and their associated Compliance Registration Packages that are registered and retained by an approved data registry shall also be automatically transmitted by the data registry, to an electronic document repository for retention in accordance with the specifications in Reference Joint Appendix JA7.

«» Commentary for Section 10-103(a)4B:

Until a nonresidential data registry is approved by the California Energy Commission, there is no requirement to register high rise multifamily buildings with four or more habitable stories compliance documents. A data registry could be approved mid-code cycle, and upon approval registration of NRCA documents would be required. If a nonresidential data registry is approved, the California Energy Commission will issue a Regulatory Advisory. «»

Section 10-103(a)4C

- C. A copy of the Certificate(s) of Acceptance shall be posted, or made available with the building permit(s) issued for the building, and shall be made available to the enforcement agency for all applicable inspections. If construction on any portion of the building subject to Part 6 will be impossible to inspect because of subsequent construction, the enforcement agency may require the Certificate(s) of Acceptance to be posted upon completion of that portion. A copy of the Certificate(s) of Acceptance shall be included with the

documentation the builder provides to the building owner at occupancy as specified in Section 10-103(b).

«» **Commentary for Section 10-103(a)4C:**

Section 10-103(a)4C is similar to Section 10-103(a)3F, a simple requirement to make the completed Certificate(s) of Acceptance available to the AHJ. In the case of high rise multifamily buildings, this may also involve acceptance tests from the ATTCPs when lighting controls or HVAC acceptance testing is required. The ATTCP uses a central system to verify and normalize the NRCAs completed by the ATTs. Each page of the NRCAs produced by the ATTCPs will include the ATTCP-Logo, as well as a watermark. The NRCAs are published in a PDF format and can be submitted to the AHJ either hardcopy or e-copy. It is strongly recommended that the ATT verify exactly how the NRCA are to be made available to the AHJ. «»

Section 10-103(a)5 – Certificates of Verification

5. **Certificate of Field Verification and Diagnostic Testing (Certificate of Verification).** For all buildings for which compliance requires field verification, a certified ECC-Rater shall conduct all required field verification and diagnostic testing in accordance with applicable procedures specified in Reference Appendices RA2, RA3, NA1, and NA2. All applicable Certificate of Verification documentation shall be completed, signed, and submitted by the certified ECC-Rater who performed the field verification and diagnostic testing services (*responsible person*) in accordance with the requirements of Section 10-103(a)5, and Reference Appendices RA2, and NA1, to certify conformance with Part 6. If more than one rater has responsibility for the verification for the building, each rater shall sign and submit the Certificate of Verification documentation applicable to the portion of the building for which they are responsible. Subject to the requirements of Section 10-103(a)5, persons who prepare Certificate of Verification documentation (*documentation authors*) shall sign a declaration statement on the documents they prepare to certify the information provided on the documentation is accurate and complete. The signatures provided by *responsible persons* and *documentation authors* shall be electronic signatures on electronic documents.

- A. **Format.** All Certificate of Verification documentation shall conform to a format and informational order and content approved by the Energy Commission.

These documents shall:

- i. Identify the installed features, materials, components, manufactured devices, or system performance diagnostic results that require verification for compliance with Part 6 as specified on the Certificate(s) of Compliance for the building.
- ii. State the number of the building permit under which the construction or installation was performed,

- iii. Display the unique registration number assigned by the ECC-provider data registry, and provide any additional information required by Reference Appendices RA2, RA3, NA1, and NA2.
 - iv. Include a declaration statement indicating that the installed features, materials, components or manufactured devices requiring verification conform to the applicable requirements in Reference Appendices RA2, RA3, NA1, NA2, and the requirements specified on the Certificate(s) of Compliance approved by the local enforcement agency, and confirms the same features, materials, components or manufactured devices are identified on the applicable Certificate(s) of Installation signed and submitted by the person(s) responsible for the construction or installation as described in Section 10-103(a)3.
 - v. Be signed by the *documentation author* to certify the documentation is accurate and complete. The signatures shall be electronic signatures on electronic documents in accordance with the electronic signature specifications in Reference Joint Appendix JA7.
 - vi. Be signed by the ECC-Rater who performed the field verification and diagnostic testing services (*responsible person*). The signatures shall be electronic signatures on electronic documents in accordance with the electronic signature specifications in Reference Joint Appendix JA7.
- B. For all buildings for which compliance requires field verification, the certified ECC-Rater responsible for the Certificate(s) of Verification shall submit the Certificates and their associated Compliance Registration Packages for registration and retention to a ECC-provider data registry in accordance with the applicable procedures in Reference Appendices RA2 and NA1, and in compliance with Section 10-103.3.

The submittals to the ECC-provider data registry shall be made electronically in accordance with the specifications in Reference Joint Appendix JA7.

Contingent upon availability and approval of an electronic document repository by the Executive Director, Certificate of Verification documents and their associated Compliance Registration Packages that are registered and retained by an ECC-provider data registry in accordance with Section 10-103.3 shall also be automatically transmitted by the data registry, to an electronic document repository for retention in accordance with the specifications in Reference Joint Appendix JA7.

- C. **Availability.** For all buildings, a copy of the registered Certificate(s) of Verification shall be posted, or made available with the building permit(s) issued for the building, or made available for viewing on an approved data registry, and shall be made available to the enforcement agency for all applicable inspections. If construction on any portion of the building subject to Part 6 will be impossible to inspect because of subsequent construction, the

enforcement agency may require the Certificate(s) of Verification to be posted upon completion of that portion. A copy of the registered Certificate(s) of Verification shall be included with the documentation the builder provides to the building owner at occupancy as specified in Section 10-103(b).

EXCEPTION to Section 10-103(a): Enforcing agencies may not require nonresidential buildings that have no more than 1,000 square feet of conditioned floor area in the entire building and an occupant load of 49 persons or less to comply with the documentation requirements of Section 10-103(a), provided a statement of compliance with Part 6 is submitted and signed by a licensed engineer or the licensed architect with chief responsibility for the design.

«» **Commentary for Section 10-103(a)5:**

Section 10-103(a)5 makes a slightly different statement of scope concerning the building projects that require FV&DT. Prior sections (10-103(a)1 and 3) made reference to “residential buildings,” which include single-family as well as LRMF buildings. Section 10-103(a)5 makes reference to “all buildings,” which include not only single-family and LRMF, but HRMF, hotel/motels, and nonresidential buildings. That is because the Energy Code requires select FV&DT on nonresidential construction and for the results to be registered and the appropriate certificates of verification completed. For a discussion on single-family residential buildings, please review the *2025 Single-Family Residential Compliance Manual*.

Section 10-103(a)5A identifies the requirements that must be followed to create the LRMF Certificates of Verification (LMCV), nonresidential certificates of Verification (NRCV) and nonresidential Certificates of Acceptance (NRCA). This section also requires that the LMCV be completed and signed by the documentation author as well as the Rater that completed the work regarding specific projects. Table 2-5: Certificates of Verification shows compliance documents based on the application.

Table 2-5: Certificates of Verification

Application (Residential)	LRMF Compliance Documents	HRMF Compliance Documents	HRMF Alternative Certificate of Acceptance Documents
MF Envelope Leakage	Not Applicable	NRCA-MCH-21-A	Not Applicable
QII Air infiltration sealing – Frame Stage	LMCV-ENV-21-H	Not Applicable	None
QII Insulation Installation	LMCV-ENV-22-H	Not Applicable	None

Application (Residential)	LRMF Compliance Documents	HRMF Compliance Documents	HRMF Alternative Certificate of Acceptance Documents
Duct Leakage Testing	LMCV-MCH-20(a-e)-H	NRCV-MCH-04(a-e)-H	
Duct Location	LMCV-MCH-21-H	Not Applicable	Not Applicable
Space Conditioning System Fan Efficacy	LMCV-MCH-22(a,b)-H LMCV-MCH-23(a-d)-H	Not Applicable	Not Applicable
Dwelling Unit Air Leakage Diagnostic Test Worksheet	LMCV-MCH-24(a,b)-H	NRCV-MCH-24(a,b)-H	Not Applicable
Refrigerant Charge Verification	LMCV-MCH-25(a-d)-H	Not Applicable	Not Applicable
Rated Space Conditioning System Equipment Verification	LMCV-MCH-26-H	Not Applicable	Not Applicable
Indoor Air Quality and Mechanical Ventilation – Total Vent Rate Method	LMCV-MCH-27b-H	NRCV-MCH-27-H	NRCA-MCH-20-H
Return Duct Design and Filter Device Sizing	LMCV-MCH-28-H	Not Applicable	Not Applicable
Duct Surface Area Reduction; R-Value, Buried Ducts Compliance Credit	LMCV-MCH-29-H	Not Applicable	Not Applicable
Local Mechanical Exhaust	LMCV-MCH-32-H	NRCV-MCH-32-H	NRCA-MCH-20-H

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Application (Residential)	LRMF Compliance Documents	HRMF Compliance Documents	HRMF Alternative Certificate of Acceptance Documents
Variable Capacity Heat Pump Compliance Credit	LMCV-MCH-33-H	Not Applicable	Not Applicable
Verified Multifamily Central Hot Water System Distribution	LMCV-PLB-21-H LMCV-PLB-22-H	NRCV-PLB-21-H NRCV-PLB-22-H	None

Source: California Energy Commission

Registration of certificates of compliance, installation, and verification is required for all multifamily buildings up to three habitable stories (low rise multifamily buildings) for which compliance requires field verification. When registration is required, compliance documents are electronically completed using an approved ECC-Provider's residential data registry for registration and retention.

Compliance documents completed on an ECC-Provider data registry must be certified, by electronic signature, by the appropriate responsible person (Section 10-103). The registry will assign a unique registration number to each document when completed. The ECC-Provider data registry will retain the registered documents, which are available via secure internet access to authorized users. This allows authorized users to provide copies of registered documents for enforcement agencies or other purposes, as needed.

ECC-Raters produce a registered certificate of verification for each ECC-verified measure in each dwelling unit that the ECC-Rater determines has met the verification and/or diagnostic requirements for compliance. The ECC-Rater must not sign a certificate of verification for a measure that does not have a registered certificate of installation. If the installer placed a dwelling unit into a sample group, the certificates of verification will include additional information that identifies whether the measures were tested or not tested. The registry will indicate which dwelling unit was randomly selected by the ECC-Rater for testing. The certificates of verification for the tested measures will include the field verification results, while the certificates of verification for nontested measure will not include the field verification results. Refer to Reference Residential Appendix RA2 for more details on the field verification and certificate of verification documentation procedures.

Table 2-5: Certificates of Verification lists certificates of verification by the application and number of habitable stories. <>>

Section 10-103(b) – Information Provided by the Builder

(b) Compliance, Operating, Maintenance, and Ventilation Information to be provided by Builder.

1. Compliance information.

- A. For low-rise residential buildings, at final inspection, the enforcement agency shall require the builder to leave in the building, copies of the completed, signed, and submitted compliance documents for the building owner at occupancy. For low-rise residential buildings, such information shall, at a minimum, include copies of all Certificate of Compliance, Certificate of Installation, and Certificate of Verification documentation submitted. These documents shall be in paper or electronic format and shall conform to the applicable requirements of Section 10-103(a).
- B. For nonresidential buildings, high-rise residential buildings and hotels and motels, at final inspection, the enforcement agency shall require the builder to leave in the building, copies of the completed, signed, and submitted compliance documents for the building owner at occupancy. For nonresidential buildings, high-rise residential buildings and hotels and motels, such information shall include copies of all Certificate of Compliance, Certificate of Installation, Certificate of Acceptance and Certificate of Verification documentation submitted. These documents shall be in paper or electronic format and shall conform to the applicable requirements of Section 10-103(a).

- 2. Operating information.** At final inspection, the enforcement agency shall require the builder to leave in the building, for the building owner at occupancy, operating information for all applicable features, materials, components, and mechanical devices installed in the building. Operating information shall include instructions on how to operate the features, materials, components, and mechanical devices correctly and efficiently. The instructions shall be consistent with specifications set forth by the Executive Director. For low-rise residential buildings, such information shall be contained in a folder or manual which provides all information specified in Section 10-103(b). This operating information shall be in paper or electronic format.

For dwelling units, buildings or tenant spaces that are not individually owned and operated, or are centrally operated, such information shall be provided to the person(s) responsible for operating the feature, material, component or mechanical device installed in the building. This operating information shall be in paper or electronic format.

- 3. Maintenance information.** At final inspection, the enforcement agency shall require the builder to leave in the building, for the building owner at occupancy, maintenance information for all features, materials, components, and manufactured devices that require routine maintenance for efficient operation. Required routine maintenance actions shall be clearly stated and incorporated on a readily accessible label. The label may be limited to identifying, by title and/or

publication number, the operation and maintenance manual for that particular model and type of feature, material, component or manufactured device. For low-rise residential buildings, this information shall include a schedule of all interior luminaires and lamps installed to comply with Section 150.0(k).

For dwelling units, buildings or tenant spaces that are not individually owned and operated, or are centrally operated, such information shall be provided to the person(s) responsible for maintaining the feature, material, component or mechanical device installed in the building. This information shall be in paper or electronic format.

4. Ventilation information.

- A. For low-rise and high-rise residential buildings, the enforcement agency shall require the builder to leave the following information in the building, for the building owner at occupancy:
 - i. A description of the quantities of outdoor air that the whole-dwelling unit ventilation system(s) are designed to provide to the building's conditioned space, and instructions for proper operation and maintenance of the ventilation system.
 - ii. Instructions for proper operation and maintenance of local exhaust systems, including instructions for conditions for which any occupant-controlled systems such as kitchen range hoods and bathroom exhaust fans should be used.
 - iii. For systems in buildings or tenant spaces that are not individually owned and operated by the dwelling unit occupants, the building's owner or their representative shall provide a copy of the ventilation system information to dwelling occupants at the beginning of their occupancy. For systems in buildings or tenant spaces that are centrally operated, all applicable ventilation system information shall be provided to the person(s) responsible for operating and maintaining the feature, material, component, or mechanical ventilation device installed in the building. This information shall be in paper or electronic format.
- B. For nonresidential buildings, hotels, and motels, the enforcement agency shall require the builder to provide the building owner at occupancy a description of the quantities of outdoor and recirculated air that the ventilation systems are designed to provide to each area. For buildings or tenant spaces that are not individually owned and operated, or are centrally operated, such information shall be provided to the person(s) responsible for operating and maintaining the feature, material, component or mechanical device installed in the building. This information shall be in paper or electronic format.

Section 10-103(c) – Information Provided by the Manufacturer

- (c) Equipment Information to be Provided by Manufacturer or Supplier.** The manufacturer or supplier of any manufactured device shall, upon request, provide to

building designers and installers information about the device. The information shall include the efficiency (and other characteristics regulated by Part 6). This information shall be in paper or electronic format.

Section 10-103(d) – Enforcement Agency Requirements

(d) Enforcement Agency Requirements.

1. **Permits.** An enforcement agency shall not issue a building permit for any construction unless the enforcement agency determines in writing that the construction is designed to comply with the requirements of Part 6 that are in effect on the date the building permit was applied for. The enforcement agency determination shall confirm that the documentation requirements of Sections 10-103(a)1 and 10-103(a)2 have been met.

If a building permit has been previously issued, there has been no construction under the permit, and the permit has expired, the enforcement agency shall not issue a new permit unless the enforcement agency determines in writing that the construction is designed to comply with the requirements of Part 6 in effect on the date the new permit is applied for. The enforcement agency determination shall confirm that the documentation requirements of Sections 10-103(a)1 and 10-103(a)2 have been met.

“Determines in writing” includes, but is not limited to, approval of a building permit with a stamp normally used by the enforcement agency.

2. **Inspection.** The enforcement agency shall inspect newly constructed buildings and additions, and alterations to existing buildings to determine whether the construction or installation is consistent with the agency's approved plans and specifications, and complies with Part 6. Final certificate of occupancy shall not be issued until such consistency and compliance is verified. For Occupancy Group R-3, final inspection shall not be complete until such consistency and compliance is verified.

Such verification shall include determination that:

- A. All installed features, materials, components, or manufactured devices, regulated by the Appliance Efficiency Regulations or Part 6 are indicated, when applicable, on the Certificate(s) of Installation, Certificate(s) of Acceptance and Certificate(s) of Verification, and are consistent with such features, materials, components, or manufactured devices given in the plans and specifications and the Certificate(s) of Compliance approved by the local enforcement agency.
- B. All required Certificates of Installation are posted, or made available with the building permit(s) issued for the building, or made available for viewing on an approved data registry, and are made available to the enforcement agency for all applicable inspections, and that all required Certificates of Installation conform to the specifications of Section 10-103(a)3.

- C. All required Certificates of Acceptance are posted, or made available with the building permit(s) issued for the building, and are made available to the enforcement agency for all applicable inspections, and that all required Certificates of Acceptance conform to the specifications of Section 10-103(a)4.
- D. All required Certificates of Verification are posted, or made available with the building permit(s) issued for the building, or made available for viewing on an approved data registry, and are made available to the enforcement agency for all applicable inspections, and that all required Certificates of Verification conform to the specifications of Section 10-103(a)5.

«» Commentary for Section 10-103(d):

Section 10-103(d) relies on the building inspector to review all certificates of compliance to some degree throughout the permit process. Registered certificates are available on the registry or can be shared electronically. Electronic copies are easily authenticated by inspecting the digital signature of a document. The ECC-Provider offers verification methods for paper copies.

In addition, the data registry produces and updates the project status report of a building to outline required compliance documents per dwelling unit and per mechanical system and indicates whether the documents are registered, pending completion, and if any tested measures failed compliance. This project status report is intended to supplement field inspections. Certificates that have form numbers ending with an -H or -A have been tested by installers, raters, and testers. Certificates with form numbers that end with -E are completed by the builder or installer.

The building inspector should compare the contents of these documents with field conditions during construction and before final inspection. Inconsistencies that would present noncompliance without rework or revision to the certificates of compliance is intended be used to delay issuance of the certificate of occupancy. «»