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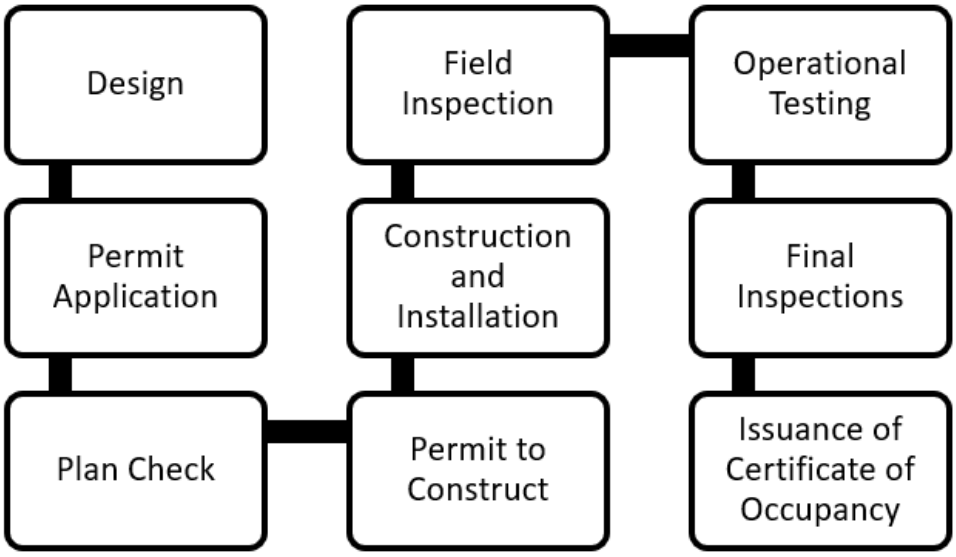
Compliance and Enforcement

Overview

The Building Energy Efficiency Standards (Energy Code) are written in Part 6 of Title 24 of the California Code of Regulations. All twelve parts of Title 24 comprise the California Building Standards Code, which is enforced by local authorities having jurisdiction (AHJ). Primary responsibility for compliance with the Energy Code rests with the builder and building owner. The builder or building owner must demonstrate compliance with the Energy Code to an enforcement agency. The California Energy Commission (CEC) does not directly enforce the Energy Code. Enforcement agencies have the primary responsibility to issue a building permit for newly constructed buildings or additions and alterations to existing buildings and enforcement of all parts of Title 24, including the Energy Code.

Most enforcement agencies are associated with a city or county government but can also include agencies such as the California Division of the State Architect (for public schools). This chapter (Chapter 2) of the Nonresidential Compliance Manual is intended to show how compliance and enforcement of the Energy Code are achieved in the typical building project permitting process. Most enforcement agencies follow some version of the permitting process recommended by the International Code Council (ICC). Figure 2.1-1 shows an idealized version of the ICC permitting process.

Figure 2-1: Idealized International Code Council Permitting Process for Building Permit Applications



Source: California Energy Commission staff

To assist the builder, building owner, and enforcement agency, the CEC created four categories of compliance documents used to demonstrate compliance with the Energy Code for nonresidential construction projects:

- Certificates of compliance (NRCC) are completed by the project proponent then submitted to the enforcement agency during the plan check phase.

- Certificates of installation (NRCI) are completed by the installing technician or contractor during construction then submitted to the enforcement agency during field inspections phase.
- Certificates of acceptance (NRCA) are completed by the technician (may be in-house or third-party) who checks compliance of the installation with the CEC's acceptance testing requirements then submitted to the enforcement agency during the final inspection phase and prior to the enforcement agency issuing the certificate of occupancy. For lighting controls and mechanical systems, the NRCA must be completed by a technician certified by a CEC-approved certification provider to perform the acceptance tests.
- Certificates of verification (NRCV) are required in some instances. They are completed by an independent, third-party agent certified by a CEC-approved Energy Code Compliance (ECC)-Rater on a residential data registry then submitted to the enforcement agency ahead of the final inspection phase and prior to the enforcement agency issuing the certificate of occupancy.

The certified technician responsible for the NRCAs are made available through the CEC's Acceptance Test Technician Certification Provider (ATTCP) program. Certified technicians are referred to as acceptance test technicians (ATTs) and are required to perform the NRCA acceptance tests for lighting controls and mechanical systems. Unlike ECC Raters, ATTs are not required to be independent, third-party agents from the builder. ATTs can (and often do) perform the installation work, as well as acceptance testing of the lighting controls or mechanical systems.

This chapter describes the overall compliance and enforcement process and responsibilities throughout the permitting process. The scope of the Nonresidential Compliance Manual includes newly constructed buildings, as well as addition and alterations to existing buildings. Building types covered in this manual include all of the following occupancy groups:

- Group A: Assembly. This occupancy is a used for gatherings such as civic, social, religious function, recreation, food and drink consumption, or waiting for transportation.
- Group B: Business. This occupancy is a used for functions such as an office or a professional or a service-type transaction.
- Group E: Educational. This occupancy is typically where six or more persons at any one time occupy a space for educational purposes through the twelfth grade.
- Group F: Factory and Industrial. This occupancy involves assembling, disassembling, fabricating, finishing, manufacturing, packaging, repair, and processing operations that would not be otherwise classified as a Group H or Group S occupancy.
- Group H: High Hazard. This occupancy includes manufacturing, processing, generation, or storage of materials that can constitute a physical or health hazard. Group H occupancies are classified into five high-hazard areas that identify the type of hazard for each group.
- Group I: Institutional, where care or supervision is provided to people who are or are not capable of self-preservation without physical assistance or in which people are detained for penal or correctional purposes or in which the liberty of the occupants is restricted.

- Group L: Laboratory, where hazardous materials are used for activities such as testing, analysis, instruction, research, or developmental activities. Group L includes occupancy space within a building or structure, which may include laboratory suites, multiple laboratories, offices, storage, equipment rooms, or similar support functions.
- Group M: Mercantile, involving the display and sale of merchandise, stocking of goods, and is accessible to the public.
- Group S: Storage. This occupancy involves a building that is used for storage purposes.
- Group U: Utility and Miscellaneous. This occupancy involves a building or structure that is used as an accessory or miscellaneous use not classified as any other specific occupancy.
- Hotel/Motels have six or more guest rooms or a lobby serving six or more guest rooms, where the guest rooms are intended or designed to be used, or which are used, rented, or hired out to be occupied, or which are occupied for sleeping purposes by guests, and all conditioned spaces within the same building envelope. Hotel/motel also includes all conditioned spaces that are (1) on the same property as the hotel/motel, (2) served by the same central heating, ventilation, and air-conditioning system as the hotel/motel, and (3) integrally related to the functioning of the hotel/motel as such, including, but not limited to, exhibition facilities, meeting and conference facilities, food service facilities, lobbies, and laundries. Hotel/motel also includes:
    - Group R-1. Sleeping units in this occupancy group are primarily transient in nature including vacation timeshare properties. This occupancy group is most often associated with hotels and motels.
    - Group R-2. Sleeping units or more than two dwelling units where the occupants are primarily permanent. For example: convents, dormitories, nontransient hotels, or vacation timeshare properties.
    - The following types of Group R-3:
        - Congregate residences for transient use
        - Boarding houses of more than six guests
        - Alcohol or drug abuse recovery homes of more than six guests.

Manufacturer Certification for Equipment, Products, and Devices

During the permit application development phase, certain equipment, products, and devices must be selected for installation or use that are certified to be compliant with the Energy Code. These items are identified on the NRCC and are verified during inspection by the enforcement agency.

The equipment, products, and devices must be certified to the CEC by the manufacturer that it meets requirements under the Energy Code. The CEC makes no claim that the listed equipment, products, or devices meet the indicated requirements or, if tested, will confirm the indicated results. Inclusion on these lists confirms only that a manufacturer certification has been submitted to and accepted by the CEC. See the Energy Commission's website for additional information about the required information for manufacturers to certify products and for lists of certified products, https://www.energy.ca.gov/rules-and-regulations/building-energy-efficiency/manufacturer-certification-building-equipment.

In nonresidential buildings, the following are examples of products that must be certified by the manufacturer:

- Air economizers (NA7)
- Airflow measurement apparatus — ventilation systems (NA2)
- Air-to-water heat pump systems
- Economizer fault detection and diagnostics (JA6)
- Intermittent mechanical ventilation systems
- Low-leakage air-handling unit (JA9)
- Occupant-controlled smart thermostats (JA5)
- Demand-responsive control receptacles and lighting
- Ducted variable-capacity heat pump
- Battery and energy storage systems (JA12)

Compliance Phases

Design Phase

Please refer to Chapter 2.2.1 of the *2022 Nonresidential and Multifamily Compliance Manual.*

Building Commissioning

Section 10-103(a); Section 120.8

Building commissioning is a general industry term and a defined term (with associated regulations in Section 120.8) within the Energy Code. Originally, the term "commissioning" came from the shipbuilding industry, with the intent of that commissioning transferring to the concept of building commissioning. When a building is commissioned, it is intended to undergo a quality assurance process that begins during design and continues through construction, occupancy, and operations. Commissioning is intended to ensure that the newly constructed buildings perform initially as intended and that building staff is prepared to operate and maintain the systems and equipment to continue that performance.

The Energy Code defines "building commissioning" as a systematic quality assurance process that spans the entire design and construction process, including verifying and documenting that building systems and components are planned, designed, installed, tested, operated, and maintained to meet the owner's project requirements.

The CEC does not require certification to perform building commissioning for the Energy Code. Although a "commissioning agent" is not a defined term within the Energy Code, there are many professionals who are trained and certified by a variety of professional organizations to perform building commissioning. The CEC is aware of these certification programs but does not endorse them.

Title 24, Part 1, Section 10-103(a)1 does require that the person(s) reviewing and signing the commissioning compliance documents must be a licensed professional engineer or a licensed architect (as specified in the provisions of Division 3 of the Business and Professions Code). A licensed contractor that is representing services performed by or under the direct supervision

of a licensed engineer or architect is also eligible to sign. The signatory is further restricted by Section 10-103(a)1 as follows:

- For buildings less than 10,000 square feet, this signatory may be the engineer or architect of record.
- For buildings greater than 10,000 square feet but less than 50,000 square feet, this signatory 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 (as defined by the Energy Code) serving more than 10,000 square feet, the signatory shall be a third-party engineer, architect, or contractor.

The square footage referenced in Section 10-103(a)1 refers to the total square footage of the project. This is an important distinction from the square footage used by the building commissioning triggers below.

Building commissioning (Section 120.8) applies to newly constructed nonresidential and hotel/motel buildings and is based on the square footage of the nonresidential spaces as opposed to the total square footage of these buildings. For example, the corridors, meeting rooms, lobbies, and other public spaces within a newly constructed hotel/motel or high-rise multifamily building count toward the nonresidential space, but the dwelling units themselves do not. Healthcare facilities are also not required to meet the Energy Code building commissioning requirements but must comply with Chapter 7, Safety Standards for Health Facilities of the California Administrative Code (Title 24, Part 1).

From Section 120.8, the explicit triggers for building commissioning are as follows:

- Newly constructed nonresidential buildings, including nonresidential spaces within hotel/motels and excluding healthcare facilities, are required to comply with applicable requirements of Section 120.8.
    - Such buildings with conditioned space of 10,000 square feet or more of nonresidential space are required to comply with the applicable requirements of Section 120.8(a) through Section 120.8(i).
    - Such buildings with conditioned space of less than 10,000 square feet must comply with only Section 120.8(d) and Section 120.8(e).
    - All building systems and components covered by Section 110.0, Section 120.0, Section 130.0, and Section 140.0 are required to be included in the scope of the commissioning process, excluding those related solely to covered processes.

Building commissioning requires the completion and documentation of the following items (Section 120.8(a) lists the coded sections within Section 120.8 that require compliance — Section 120.8(b) through Section 120.8(i)):

Section 120.8(b) Owner's or owner representative's project requirements (OPR)

- Required for projects with 10,000 square feet or more of conditioned nonresidential space.
    - OPR is the energy-related expectations and requirements of the building that are documented before the design phase of the project begins.
    - Compliance documentation: 2025-NRCC-CXR-E, Table G.

Section 120.8(c) Basis of design (BOD)

- Required for projects with 10,000 square feet or more of conditioned nonresidential space.
- BOD is a written explanation of how the design of the building systems and components meets the OPR and is completed at the design phase of the building project and updated as necessary during the design and construction phases. The BOD document at a minimum covers the following systems and components:
    - Heating, ventilation, air conditioning (HVAC) systems and controls
    - Indoor lighting system and controls
    - Water heating systems and controls
    - Any other building equipment or system listed in the OPR
    - Any building envelope component considered in the OPR
    - Compliance documentation: 2025-NRCC-CXR-E, Table H

Section 120.8(d) Design Phase Design Review.

- The design reviewer is the signatory of the Design Review Kickoff Certificate(s) of Compliance and Construction Document Design Review Checklist Certificate(s) of Compliance.
- Required for all projects with conditioned nonresidential space.
    - Design review kickoff. During the schematic design phase of the building project, the owner or owner's representative, design team, and design reviewer must meet to discuss the project scope, schedule, and ways that the design reviewer will coordinate with the project team.
    - Compliance documentation: 2025-NRCC-CXR-E, Table F
    - Construction documents design review. The Construction Document Design Review Checklist Certificate of Compliance lists the items checked by the design reviewer during the construction document review.
    - Compliance documentation: 2025-NRCC-CXR-E, Table I

Section 120.8(e) Commissioning measures shown in the construction documents

- Required for all projects with conditioned nonresidential space.
    - These documents are complete descriptions of all measures or requirements necessary for commissioning included in the construction documents (plans and specifications).
    - Compliance documentation: 2025-NRCC-CXR-E, Table I

Section 120.8(f) Commissioning plan

- Required for projects with 10,000 square feet or more of conditioned nonresidential space.
    - Prior to permit issuance, a commissioning plan is completed to document how the project will be commissioned and is started during the design phase of the building project.
    - Compliance documentation: 2025-NRCC-CXR-E, Table J

Section 120.8(g) Functional performance testing

- Required for projects with 10,000 square feet or more of conditioned nonresidential space.
    - Functional performance tests demonstrate the correct installation and operation of each component, system, and system-to-system interface in accordance with the acceptance test requirements in the Energy Code.
    - Compliance documentation: 2025-NRCC-CXR-E, Table K

Section 120.8(h) Documentation and training

- Required for projects with 10,000 square feet or more of conditioned nonresidential space.
- This is a systems manual and systems operations training to be provided prior to the owner or owner's representative post-construction.
    - Compliance documentation: 2025-NRCC-CXR-E, Table L

Section 120.8(i) Commissioning report

- Required for projects with 10,000 square feet or more of conditioned nonresidential space.
- This is a complete report of commissioning process activities undertaken through the design, construction, and reporting recommendations for post-construction phases of the building project and is provided to the owner or owner's representative.
    - Compliance documentation: 2025-NRCC-CXR-E, Table-M

The compliance document NRCC-CXR-E is the minimum that the Energy Code requires. Certified commissioning agents will typically provide far more support and organization to a construction project as a matter of their certification training and industry best practices. The CEC encourages but does not require a building commissioning process and documentation beyond the minimum requirements of the Energy Code Section 120.8.

Integrated Design

Please refer to Chapter 2.2.2.1 of the *2022 Nonresidential and Multifamily Compliance Manual*.

Permit Application

Reference: Section 10-103(a), Section 10-103(a)2

Certificates of Compliance

Nonresidential certificates of compliance (NRCC) are required for newly constructed buildings, as well as additions and alterations to existing buildings. The design team (architects, engineers, designers, or other specialty contractors) is responsible for ensuring that the building designs comply with the California Building Standards Code, including the Energy Code. Once the design team has settled on a code-compliant design, it is required (Section 10-

103(a)1) to document the compliance with the Energy Code by completing and signing the NRCCs. Appendix A of this manual lists all the possible NRCCs that the design team may need to use.

These NRCCs were available from the CEC (via Energy Code Ace) for 2019 Energy Code compliance and were designed to be dynamic forms that would expand and contract as needed to describe the proposed project. The CEC adopted the Energy Code Ace Virtual Compliance Assistance (VCA) tool instead of the individual NRCCs for 2022 and 2025 Energy Code compliance.

The VCA tool uses an interrogatory method to determine which NRCCs are necessary for a specific project, completes the necessary NRCCs based on the information entered, and makes them ready for review and signature. The VCA can make recommendations only for projects that use the prescriptive path. (See Chapter 1 of the Nonresidential Compliance Manual) To complete the necessary NRCCs for projects using the performance path, the design team must use a CEC-approved compliance model. The CEC maintains a list of these approved compliance models on the 2025 Building Energy Efficiency Standards Approved Computer Compliance Programs website. The compliance model will create an NRCC-PRF-01 form with the necessary information for the design team to complete the required NRCCs.

Regardless of which compliance path or what compliance tool is used, the builder or building owner is solely responsible for selecting and completing the correct NRCCs and designing a code-compliant project. Once the design team has completed the required project design details, NRCCs, and any other documentation required by the enforcement agency, it can begin the permitting phase by submitting a complete application for a permit to construct to the enforcement agency.

All applicable NRCCs must be signed by a document author and a responsible person. While there are no requirements for the document author, the responsible person must be eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on each NRCC (Section 10-103(a)1). For example, a technician may complete the NRCC-MCH-E, but only the engineer of record (that was on the design team) can review and sign as the responsible person. The responsible person can also act as the document author. Once reviewed and by the responsible person, each NRCC must be included with the permit application.

Commissioning Design Review

Please refer to Chapter 2.2.3.2 of the *2022 Nonresidential and Multifamily Compliance Manual*.

Preparation and Incorporation Onto the Plans

Please refer to Chapter 2.2.3.3 of the *2022 Nonresidential and Multifamily Compliance Manual*.

Plans and Specifications

Enforcement agencies are required to check submitted building plans to determine compliance with the California Building Code, including the Energy Code. Vague, missing, or incorrect information on the NRCCs may be identified by the plans examiner as requiring correction by the permit applicant. The permit applicant would then resubmit the revised building plans and specifications. When the permit applicant submits comprehensive, accurate, clearly defined

building plans and specifications, the submission may help speed plan review. Because the enforcement agency bears responsibility for code enforcement, only it may pursue corrections to approved plans and compliance documents.

During plan review, the enforcement agency must verify that the building design details specified on the construction documents conform to the applicable energy code features information specified on the submitted NRCCs. This conformance is necessary since materials-purchasing personnel and building-construction craftsmen in the field may rely solely on a copy of the building plans and specifications for direction in performing their responsibilities.

Energy Plan Review

The enforcement agency is responsible for verifying that all required NRCCs have been submitted for plan review, are consistent with the submitted plans, and do not contain errors. When the compliance documents are produced by a CEC-approved compliance software application or the VCA, it is unlikely that there will be computational errors on the NRCCs. Some examples of how the plans examiner will verify that the energy efficiency features detailed on the NRCCs are consistent with the building plans include:

- Verifying the lighting fixtures and associated wattages, lighting controls, and so forth from NRCC-LTI-E are consistent with the electrical plans in a lighting schedule, lighting fixture legend for the floor plan, and so forth.
- Verifying the window and skylight U-factor and SHGC values from NRCC-ENV-E are consistent with the structural/architecture plans in a window/skylight schedule, window/skylight legend for the floor plan, and so forth.
- Verifying the wall, floor, and roof/ceiling insulation R-values from the NRCC-ENV-E are consistent with the structural/architecture plans in a framing plan, structural details, and so forth.
- Verifying the HVAC equipment SEER, EER, AFUE, and other efficiency values from the NRCC-MCH-E are consistent with the mechanical plans in an equipment schedule.

The enforcement agency should clearly articulate to the builder/designer the acceptable methods of specifying energy features on the building plans for approval.

Permit to Construct

Reference: Section 10-103(d)1

After the plans examiner has reviewed and approved the building plans, specifications, and NRCCs for the project, the enforcement agency may issue a building permit at the builder's request. Issuance of the building permit is the first significant milestone in the compliance and enforcement process. The building permit is the green light for the contractor to begin work. In many cases, building permits are issued in phases. Sometimes, there is a permit for site work and grading that precedes the permit for actual construction. In large office or institutional buildings, the permit may be issued in phases, such as site preparation or structural steel.

Construction and Installation

Reference: Section 10-103(a)3

Certificates of Installation

As construction begins and progresses, the installing contractor, general contractor, specialty contractor, or other qualified person is required to complete the nonresidential certificates of installation (NRCI) for each category of the energy efficiency features being installed. The NRCIs show that the installed and constructed building features match the features described in the NRCC and the comply with Energy Code.

NRCIs are required to be completed and submitted to demonstrate compliant installation of regulated energy efficiency features such as windows and skylights, water heaters, plumbing, HVAC ducts and equipment, lighting fixtures and controls, and building envelope insulation. The licensed contractor responsible for the building construction or the installation of a regulated energy efficiency feature must ensure the work is done in accordance with the approved building plans, specifications, and NRCC for the project. The installing contractor (and document author) must sign the NRCI.

The responsible persons must also sign the NRCI and are expected to verify that the installed features, materials, components, or manufactured devices for which they are responsible conform to the building plans, specifications, and NRCC approved by the enforcement agency for the project. A copy of the completed, signed, and dated NRCI must be posted at the building site for review by the enforcement agency before the final project inspection.

If construction of any regulated portion of the project will be impossible to inspect once subsequent construction is completed, the enforcement agency may require the NRCI to be posted upon completion of that feature/portion of the project and before completion of any subsequent construction.

A listing of NRCI documents is provided in Appendix A. A copy of the NRCIs must be included with the documentation the builder provides to the building owner at occupancy as specified in Section 10-103(b). The NRCIs are available through the VCA tool and the NRCIs are linked to the NRCCs. The NRCI identifies each energy efficiency feature that the contractor must install and provides a check box (if that exact feature is installed). If the feature is changed out for another feature, the NRCI provides data entry fields for the new feature and will automatically indicate if the change needs to be approved by the enforcement agency.

Change Orders

A "change order” is an industry term for a formal amendment to a construction contract that changes the contractor's scope of work. Not all changes to a construction project result in a formal change order. In many instances, the project owner can change the scope of work without a formal agreement. Most change orders modify the work, materials, or time to complete the work. For there to be a valid change order, the owner and contractor must both agree on all terms. Change orders exist because construction plans, although very detailed, cannot possibly anticipate every nuance or issue that may arise on a construction project. Some change orders will affect the plans approved by the enforcement agency and will require a separate approval. For example, changing the finish on an interior wall is unlikely to affect the approved plans, but adding or removing a window will.

For the energy efficiency features recorded on the approved NRCCs, generally any change that reduces the energy efficiency will require a new NRCC to be completed, signed, submitted (to the enforcement agency), and approved. These actions may also result in a special inspection by the enforcement agency. For example, switching to more efficient lighting will not likely result in a change order that is required to be approved, but changing which lights are daylighting-controlled will.

To help track what change orders should result in an enforcement agency approval, the CEC requires that the installing contractor complete the NRCIs using the VCA tool or paper forms from the CEC website. If the enforcement agency approval is required for the change order, the responsible person must update and resubmit the affected NRCC or both to the enforcement agency.

It is the responsibility of the builder and building owner to determine if a change order needs to be approved by the enforcement agency. Additionally, many enforcement agencies have a stricter policy when it comes to change orders and want them all submitted for review and possible approval regardless of the scope of the change.

Operational Testing

Reference: Section 10-103(a)4; Section 10-103.1; Section 10-103.2

Operational testing is part of the competency of workmanship that any installing contractor will perform to verify that their own work is up to industry standards and complies with the project design and California Building Standards Code (including the Energy Code). Formal operational testing is typically referred to as *acceptance testing* or *acceptance criteria verification*. The Energy Code requires specific acceptance testing (performed by the installing contractor) for lighting controls, HVAC controls, air distribution ducts, envelope features, and special purpose equipment, referred to as *covered processes*. 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 controls and mechanical systems are required by 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 classrooms 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 NRCAs (Nonresidential Certificates of Acceptance) 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 keeps a link to all ATTCP at its ATTCP website, https://www.energy.ca.gov/programs-and-topics/programs/acceptance-test-technician-

certification-provider-program/acceptance. Appendix A lists the Energy Code required NRCAs and indicates which are to be completed by ATTs through the ATTCP program. For more information of the ATTCP program, see Chapter 14 of the Nonresidential Compliance Manual.

Final Inspection by the Enforcement Agency and Issuance of the Certificate of Occupancy

Please refer to Chapter 2.2.9 of the *2022 Nonresidential and Multifamily Compliance Manual*.

Certificate of Occupancy

Please refer to Chapter 2.2.10 of the *2022 Nonresidential and Multifamily Compliance Manual*.

Occupancy – Compliance, Operating, and Maintenance Information

Reference: Section 10-103(b)

At the occupancy phase, the general contractor or design team or both are required to provide the owner with copies of the energy compliance documents, including NRCCs, NRCIs, NRCAs, and NRCVs. Documents for the construction/installation, operating, maintenance, ventilation information and instructions for operating and maintaining the features of the building efficiently are also included.

Compliance Documentation

Compliance documentation includes the documents, reports, and other information that are submitted to the enforcement agency with an application for a building permit. Compliance documentation also includes documentation completed by the installing contractor, engineer/architect of record, owner's agent, or certified technician to verify that certain systems and equipment have been correctly installed and commissioned.

Each portion of the applicable compliance documentation must be completed and/or submitted during:

- The building permit phase (NRCCs).
- The construction phase (NRCIs).
- The acceptance testing (NRCAs).
- The final inspection phase (all compliance documents include building commissioning documents).

All submitted compliance documentation is required to be compiled by the builder or general contractor. A copy of the compliance documentation is required to be provided to the building owner so that the end user has information describing the energy features installed in the building.

Roles and Responsibilities

Please refer to Chapter 2.4 of the *2022 Nonresidential and Multifamily Compliance Manual*.

Designer

Please refer to Chapter 2.4.1 of the *2022 Nonresidential and Multifamily Compliance Manual*.

Documentation Author

Please refer to Chapter 2.4.2 of the *2022 Nonresidential and Multifamily Compliance Manual*.

Builder or General Contractor

The term *builder* refers to the general contractor responsible for construction. During construction, the builder usually hires specialty subcontractors to provide specific services, such as installing insulation and designing and installing HVAC systems. The builder must ensure that the certificate(s) of installation is submitted to the enforcement agency by the person(s) responsible for construction/installation of regulated features, materials, components, or manufactured devices.

The builder may sign the NRCIs (as the responsible person) on behalf of the specialty subcontractors they hire, but generally, preparation and signature responsibility reside with the specialty subcontractor who provided the installation services. The NRCIs identify the installed features, materials, components, or manufactured devices detailed in the building plans and the NRCCs. A copy of each NRCI is required to be posted at the building site for review by the enforcement agency in conjunction with requests for final inspection.

At final inspection, the builder is required to leave all applicable completed and signed compliance documents for the building owner at occupancy in the building. Such information must, at a minimum, include information indicated on the following documents: NRCCs, NRCIs, NRCAs, NRCVs. These documents may be in paper or electronic format and must conform to the applicable requirements of Section 10-103(a).

Specialty Subcontractors

Please refer to Chapter 2.4.4 of the *2022 Nonresidential and Multifamily Compliance Manual*.

Enforcement Agency

Reference: Section 10-103(a); Section 10-103(b); Section 10-103(d)

The enforcement agency is the local authority that issues building permits, verifies compliance with applicable codes and standards, and issues the final certificate of occupancy. The enforcement agency performs several key roles in the compliance and enforcement process.

- Plan check: The enforcement agency performs the plan review of the permit application, NRCCs, and building plans and specifications. During plan review, the NRCCs are compared to the plans and specifications for the building design to confirm that the building is specified consistently in all the submitted documents. If the building design features shown on the NRCCs do not conform to the specifications shown on the designer's submitted plans and specifications for the building, the submitted documents must be revised to make the design specification consistent in all documents. Thus, if the features on the NRCCs are consistent with the features given in the plans and specifications for the building design and indicates that the building complies, then the enforcement agency may issue a building permit.
- Construction inspection: During building construction, the enforcement agency should make several visits to the construction site to verify that the building is being constructed in accordance with the approved plans and specifications and Energy Code compliance documentation, including supportive documentation. At each site visit, the enforcement

agency should review any applicable NRCIs that have been posted or made available with the building permit(s). The enforcement agency should confirm that:

- The energy efficiency features installed in the building are consistent with the requirements given in the plans and specifications for the building approved during plan review.
- The installed features are described accurately on the NRCIs.
- All applicable sections of the NRCIs have been signed by the responsible licensed person(s).

The enforcement agency does not issue final certificate of occupancy until it has received all applicable NRCIs.

- Final approval: The enforcement agency may approve the building at the final inspection phase if the enforcement agency field inspector determines that:
    - The building conforms to the requirements of the building plans and specifications.
    - The building meets the requirements of all other applicable codes and standards.

For buildings that have used an energy efficiency compliance feature that requires an NRCI, the enforcement agency shall not issue the final certificate of occupancy until it has received an NRCI that meets the requirements of Section 10-103(a) and has been completed and signed by the builder or subcontractor for each compliance feature. The builder must ultimately take responsibility to ensure that all required energy compliance documentation has been completed and posted at the job site or submitted to the enforcement agency in conjunction with any of the enforcement agency's required inspections.

However, the enforcement agency, in accordance with Section 10-103(d), must examine all required copies of NRCIs and NRCAs made available for the required inspections. It must confirm that these documents have been properly prepared and are consistent with the plans, specifications, and NRCCs approved by the enforcement agency for the building at plan review.

Corroboration of information provided for the owner at occupancy

At final inspection, the enforcement agency shall require the builder to leave energy compliance, operating, maintenance, and ventilation information documentation in the building (for the building owner at occupancy) as specified by Section 10-103(b). The information may be provided in a paper or electronic format.

Compliance information includes:

- Certificates of compliance.
- Certificates of installation.
- Certificates of acceptance.

- Certificates of verification

These documents are copies of the documentation submitted to or approved by the enforcement agency, and the copies must conform to the applicable requirements of Section 10-103(a).

Operating information includes instructions on how to operate or maintain the energy features, materials, components, and mechanical devices of the building correctly and efficiently. Such information shall be provided in paper or electronic format and contain all information specified in Section 10-103(b).

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

Maintenance information is provided for all features, materials, components, and manufactured devices that require routine maintenance for efficient operation. Required routine maintenance actions are clearly stated and incorporated on a readily accessible label. The label may be limited to identifying, by title or publication number or both, the operation and maintenance manual for that particular model and type of feature, material, component, or manufactured device.

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

Ventilation information for nonresidential and hotel motel buildings includes a description of the quantities of outdoor and recirculated air that the ventilation systems are designed to provide to each area. The ventilation information is provided to the building owner. If the building or tenant spaces are not individually owned and operated, or are centrally operated, the ventilation information is provided to the person(s) responsible for operating the equipment.

For buildings or tenant spaces that are not individually owned and operated, or are centrally operated, such information is provided to the person(s) responsible for operating and maintaining the feature, material, component, or mechanical ventilation device installed in the building.

Permit Applicant

Please refer to Chapter 2.4.6 of the *2022 Nonresidential and Multifamily Compliance Manual*.

Plans Examiner

Please refer to Chapter 2.4.7 of the *2022 Nonresidential and Multifamily Compliance Manual*.

Field Inspector

The field inspector is responsible for:

- Verifying that the building or system is constructed according to the plans.
- Checking off appropriate items on the summary document at each relevant inspection.

- Verifying that all the required compliance documentation (NRCIs and NRCAs are completed, dated, and signed).

The NRCCs may be used by the building permit applicant, the plans examiner, and the field inspector. This way, the permit application can call the plans examiner's attention to the relevant drawing sheets and other information, and the plans examiner can call the field inspector's attention to items that may require special attention in the field. The compliance documents and worksheets encourage communications and coordination within each discipline.