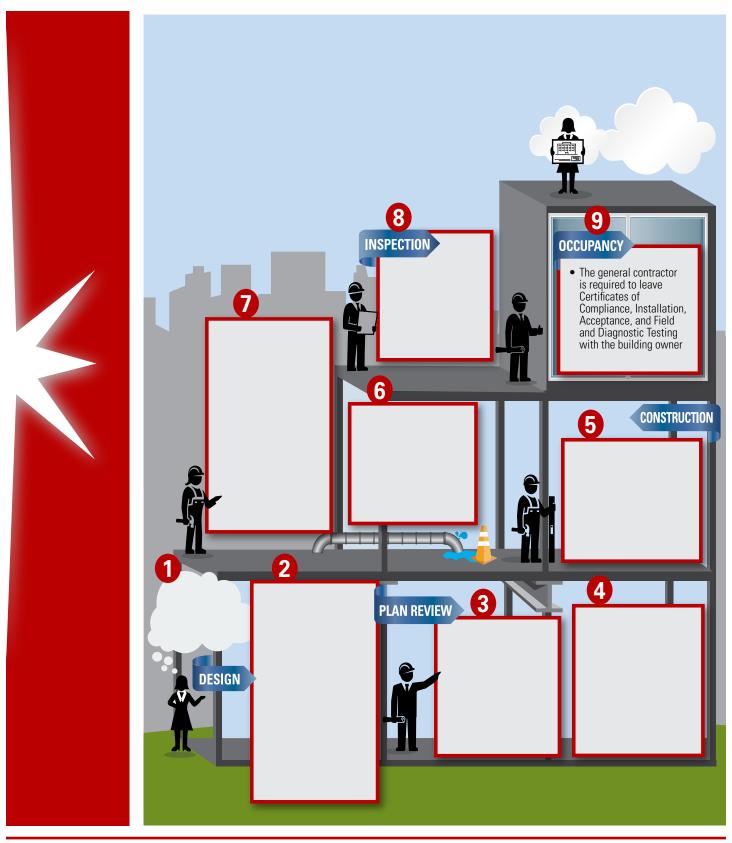
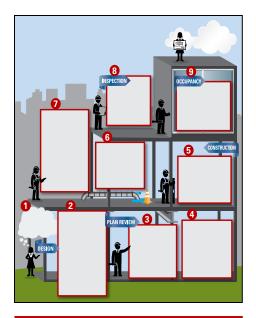
2016 ENERGY CODE



Residential and Nonresidential **Permit Process for Contractors**







TIP: Even though the building code is developed at the state level, permit requirements vary by jurisdiction. Contact your local building department to ensure that all code compliance requirements are being met. Use your local building department as a resource.

What is the Permit Process?

Whether the project is residential or nonresidential, many construction processes will require that a permit is obtained from the local Building Department. Work on new construction or existing buildings that require permitting include installation, additions, and alterations of systems such as building envelope, plumbing, mechanical, and electrical. The complexity of the permit process generally depends on the complexity of the construction project.

Permits for some types of simple projects may be issued at the building department counter with minimal documentation, while other more extensive projects require longer review by a plans examiner. In addition to regular field inspections by a building inspector, verification of specific systems may be needed by a Home Energy Rating System (HERS) Rater, and testing of certain equipment by an Acceptance Test Technician may be necessary when triggered by the code. To learn more about the HERS program visit the California Energy Commission's HERS Information page.

Why?

Permits Can Save Energy – Statewide gross savings from the Energy Standards realized between now and 2020 is approximately equivalent to:

- Deferring the need to run a 500 MW power plant for 16 years
- Removing 2.6 million cars from the road

Permits Can Save Money – and protect you from potential fines

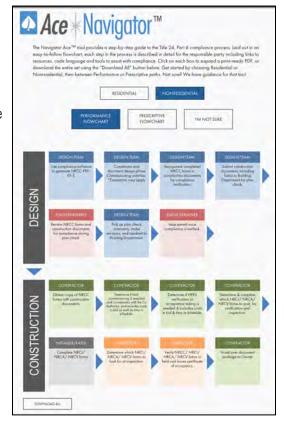
Contractors that don't pull a permit can face fines up to \$5,000 per violation

Permits Can Save Reputations – Clients value quality and integrity.

- Pulling a permit means you are doing it right and can be trusted as a quality contractor who doesn't take shortcuts.
- Not pulling a permit is breaking the law and can cost you your contractor's license.

Permit Process Overview

Always check with your building department for specifics on your project's permit process. Additionally, Energy Code Ace's Navigator Ace tool can help guide you step-by-step through the Title 24, Part 6 compliance process.



Getting Ready for a Permit Application:

- Assemble complete documentation
 - Scope of work
 - Plan set (or equipment schedule depending on building department and scope of work)
 - Title 24 part 6 compliance paperwork (included within plan set if plans are submitted)
- Budget for services
 - Permit fees
 - Energy Consultant, if needed
 - Fees for third-party verifications if needed

- Schedule considerations
 - Building Department inspections scheduling
 - Permit application turnaround time
 - Energy Consultant to complete paperwork (helpful but not mandatory)
 - Contact HERS Rater, Acceptance Testing Technician, or commissioning contractor to incorporate verification into schedule



Permit Application

Depending on the scope of the project, obtaining a permit can be as simple as visiting the counter technician at your building department office, while larger projects will require an appointment with a plans examiner to look at detailed plans and forms. Permits can be pulled by either the contractor or the customer, this will need to be decided before the permitting process begins. During the permit application certificates of compliance are required. If a plan review is required, proper preparation saves significant time.

TIP: Some jurisdictions have online permitting available for common small projects such as changing out a water heater.

Installation & Inspection

Once construction is underway the general contractor and specialty contractors are responsible for completing and submitting applicable Certificates of Installation that certify regulated energy features, such as windows, skylights, water heater and plumbing, insulation, and HVAC systems, are installed according to code. If a change order occurs it is the responsibility of the permit applicant to verify that the change does not affect code compliance.

TIP: Getting the Certificates of Installation from specialty contractors such as HVAC, plumbing, or insulation prior to their leaving the site is strongly recommended.

Additional Residential Requirements. When HERS verification is required, all compliance forms (CF1R, CF2R, CF3R) must be registered with an approved HERS Provider data registry. The builder or installing contractor must electronically sign the CF2R form and provide a copy to the HERS Rater and homeowner, as well as post onsite for review by the local enforcement agency's inspector.

Additional Nonresidential Requirements. Building Commissioning is required for all new nonresidential buildings. For buildings with less than 10,000ft² of conditioned space, only the design phase requirements apply. There are a few nonresidential HERS measures as well. For nonresidential projects, only the NRCV forms must be registered with a HERS Provider data registry.





Acceptance Testing & Field Verification

Certain systems and equipment must be field tested to ensure proper calibration, installation, and operational efficiency. These requirements differ between residential and nonresidential projects, as outlined below.

 $\label{lem:completed} \textbf{Residential} - \textbf{Called "Field Verification and/or Diagnostic Testing," these must be completed by a HERS Rater and reported to a HERS registry.$

All newly constructed homes must have tested:

- Duct Sealing (leakage testing)
- Fan Watt Draw
- Duct System Airflow (and installed hspp/pspp)
- Whole House Ventilation

And some Alterations and some Additions may need to be verified.

Nonresidential – "Acceptance Testing," "Diagnostic Testing" and "Commissioning" are processes of field verification used in the Energy Standards. Field verification must be completed by an Acceptance Test Technician, HERS Rater or Installer. A completed Certificate of Acceptance or Verification is provided by the installing contractor, Acceptance Test Technician or HERS Rater.

TIP: It is very important to have Certificate of Acceptance available onsite before the inspector arrives for final inspection.



- Lighting
- · Air Distribution Ducts
- HVAC
- Envelope Features
- Controls

The final step in the permit process is issuance of an Occupancy Permit. Upon project completion, the general contractor or design team is required to leave Certificates of Compliance, Installation, Acceptance, and Verification with the building owner.

Form Names

Compliance form names can seem like a foreign language. The chart below can help you "translate" their meanings.

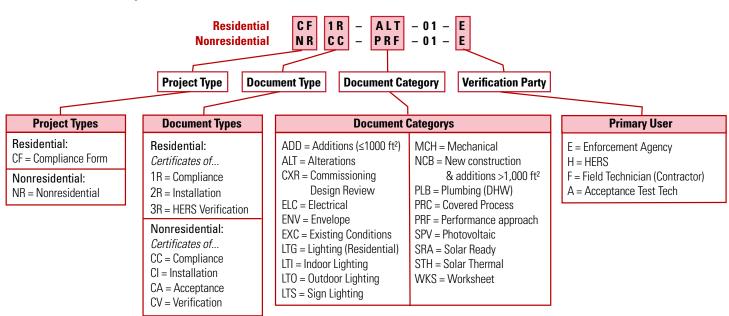


Figure 1: Form Naming Conventions



For More Information

California Energy Commission Information & Services

- Energy Standards Hotline: 1-800-772-3300 (Free) or Title24@energy.ca.gov
- Online Resource Center:
 - energy.ca.gov/title24/orc/
 - The Energy Commission's main web portal for Energy Standards, including information, documents, and historical information

Find A...

- HERS Provider:
 - energy.ca.gov/HERS/providers.html
- Acceptance Test Technician: energy.ca.gov/title24/attcp/
- Building Department:
 - mybuildingdepartment.com/california/california.html

Additional Resources

- Contractors State License Board: 1-800-321-2757 (Free) cslb.ca.gov
 - Licenses and regulates the state's construction industry
- Energy Code Ace:
 - EnergyCodeAce.com
 - An online "one-stop-shop" providing free resources and training to help appliance and building industry professionals decode and comply with Title 24, Part 6 and Title 20. The site is administered by California's investor-owned utilities
 Please register with the site and select an industry role for your profile in order to receive messages about all our free offerings!











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