

BLUEPRINT

EFFICIENCY DIVISION

JANUARY- FEBRUARY 2014

2013 Energy Efficiency Standards Revised Implementation Date

New Effective Date will be July 1, 2014

The Energy Commission has established an “early adopter” program to assist those members of the industry who, for logistical or marketing purposes, would like to show compliance with the 2013 Building Energy Efficiency Standards prior to July 1, 2014.

Specifically, the Energy Commission is offering assistance to early adopters of the 2013 Building Energy Efficiency Standards that are using the new certified residential compliance software programs (CBECC-Res or EnergyPro v6.0). Until a Home Energy Rating Service (HERS) Provider is approved by the Energy Commission, registered certificates of compliance (CF-1R's) that are required by the 2013 code will not be available. Unregistered residential certificates of compliance can be submitted to building departments now. However, for final permit, the unregistered CF-1R forms must be replaced with a HERS Provider registered CF-1R as soon as one or more HERS Providers are approved by the Energy Commission. It is anticipated that this will happen in early spring of 2014.

Until that time, for early adopter assistance from the Energy Commission, please contact Pedro Gomez, Manager at the Standards Implementation Office, at (916) 654-4045 or Pedro.Gomez@energy.ca.gov.

2013 Title 24 Training Webinars

This month, the Energy Commission is conducting two, all-day webinars on Energy Efficiency Standards for residential and nonresidential buildings. The Building Standards are important requirements that homeowners, building owners, and the construction industry need to understand. All types of buildings, new construction or alterations, are required to comply with the California Building Standards.

This training series is free and highly recommended by the Energy Commission. This training:

- Summarizes the major changes to the 2013 Building Standards effective on July 1, 2014
- Simplifies compliance and enforcement for the new standards during the plan review and field inspection processes
- Details all compliance approaches

Register your attendance at title24training@energy.ca.gov.

January 23, 2014

Nonresidential Buildings

8:00AM - 5:00PM

12:00PM - 1:00PM Lunch Break

<https://energy.webex.com/ec>

Meeting number: 921 329 118

Meeting password: meet@8am

CALBO Education Weeks



The Energy Commission's Efficiency Division team members Daniel Johnson, Chris Olvera, Brian Samuelson and Suzie Chan participated at CALBO's Ontario and San Ramon Education weeks. Chris provided two full days of classroom training on the new 2013 Residential and Nonresidential Energy Standards. The Energy Commission distributed more than 500 CDs containing the 2013 Standards, Compliance Manuals, and Reference Appendices. Look for us at upcoming statewide events to obtain your copies or you can request a copy by writing us at title24@energy.ca.gov. You can also access information on the Standards online at: www.energy.ca.gov/title24/2013standards/supporting_docs.html.

Mandatory Solar Ready Area Requirement

All single family subdivisions and low-rise multi-family projects must submit a copy of the Solar Ready Area – New Construction (CF1R-SRA-01-E) form showing how the home or building is complying with the solar ready requirements. The user will select one of six options for showing compliance and depending on which compliance path is chosen, additional documents may be required. For compliance paths that require additional documentation, the CF1R-SRA-01-E lists the names of the forms that will have to be submitted.

All high-rise multifamily buildings and hotel/motel occupancies with 10 stories or fewer and nonresidential buildings with three stories or fewer must submit a copy of the Solar Ready Areas (NRCC-SRA-01-E) form showing how the building is complying with the solar ready requirements. The user will select one of five options for showing compliance and depending on which compliance path is chosen, additional documents may be required. For those compliance paths that require additional documentation, the NRCC-SRA-01-E lists the names of the forms that will have to be submitted.

Required Occupancy Types

- Subdivisions with 10 or more single-family residences with a subdivision map deemed complete after 1/1/14. These types of developments must comply with the requirements of Section 110.10(b) through 110.10(e).
- Low-rise multifamily buildings must comply with the requirements of Section 110.10(b) through 110.10(d).

- Hotel/Motel Occupancies and high-rise multifamily buildings with 10 stories or fewer must comply with the requirements of Section 110.10(b) through 110.10(d).
- All other nonresidential buildings with three stories or fewer must comply with the requirements of Section 110.10(b) through 110.10(d).

The Solar Ready requirements DO NOT apply to additions or alteration of single-family residences or low-rise multifamily buildings. Additions or alterations to non-residential buildings, high-rise multifamily buildings or hotel/motel occupancies that increase the area of the roof by 2000 square feet or more must comply with the Solar Ready requirements per Section 141.0(a) of the Standards.

Solar Zone Area Requirements

Section 110.10 (b)

For single-family residences, the solar zone must be located on the roof or overhang of the building and have a total area no less than 250 square feet for a single-family residence.

For low-rise and high-rise multifamily buildings, Hotel/Motel occupancies and nonresidential buildings, the solar zone must be located on the roof or overhang of the building, the roof or overhang of another structure located within 250 feet of the building, or on covered parking installed with the building. The solar zone must have a total area of no less than 15 percent of the total roof area of the building excluding any skylight area.

There are several exceptions that apply to the solar zone requirements. Claiming some exceptions will reduce the required size of the solar zone on a building while other claiming other exceptions will eliminate the need to comply with any of the Solar Ready requirements.

All sections of the solar zone located on steep-sloped roof (ratio of rise to run of greater than 2:12) must be oriented between 110 degrees and 270 degrees of true north.

No obstruction shall be located in the solar zone. Any obstruction located on the roof or any other part of the building that projects above a solar zone must be located a sufficient horizontal distance away from the solar zone in order to reduce the resulting shading of the solar zone.

Construction drawings must indicate the structural roof dead load and roof live load of all areas of the roof designated as solar zones.

Section 110.10(c)

The construction documents must indicate location for inverters and metering equipment and a pathway for routing of conduit from the solar zone to the point of interconnection with the electrical service.

The construction documents must also indicate a pathway for routing of plumbing from the solar zone to the water-heating system.

Section 110.10(d)

A copy of the construction document or a comparable document indicating the information from the Section 110.10(b) through 110.10(e) must be provided to the occupant.

Section 110.10(e)

The main electric panel shall have a minimum busbar rating of 200 amps.

The main electrical service panel must have space to allow for the installation of a double pole circuit breaker for a future solar installation.

The reserved space shall be positioned at the opposite (load) end from the input feeder location or main circuit location.

The reserved space must be permanently marked as “For Future Solar Electric”.

Builder Energy Code Training (BECT) Program

Pacific Gas and Electric Company (PG&E) has contracted with ConSol, a third-party energy efficiency implementation specialist, to implement the Builder Energy Code Training (BECT) Program. The BECT Program provides in-depth codes and compliance education at no cost to help the residential new construction and alterations building industry understand and comply with California's 2013 Title 24 Energy Code. BECT focuses on the most comprehensive and cost-effective ways to bring a home up to and above the CA Energy Code requirements through building science techniques, effective application of the compliance documentation workflow, and the operational interaction of different construction trades.

The BECT Program is sponsored by PG&E and funded by California utility customers and administered by PG&E under the auspices of the California Public Utilities Commission (CPUC). The number of classes are limited and offered on a first-come, first-serve basis. Eligible attendees include residential builders, subcontractors for builders, architects, building department staff and other local government staff throughout PG&E's Service Territory.

The trainings can be held in a classroom, on-site at a builder job location, or online via webinar. If you or someone in your organization would like to host a BECT class or if you would like to attend the next scheduled class or learn more about the BECT Program, please contact Lynne Martinez via email at lmartinez@consol.ws or visit the BECT Program website at www.bect.ws.

The California Energy Commission welcomes your feedback on the Blueprint. Please contact Daniel Johnson at (916) 651-3746 or daniel.johnson@energy.ca.gov.

CALIFORNIA ENERGY COMMISSION

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Need Help? Energy Standards Hotline
(800) 772-3300 (toll-free in CA)

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