



# Frequently Asked Questions

## 2013 California Title 24, Part 6

### Can a **radiant barrier** be installed over the deck?

The code references radiant barriers installed below the roof deck in the attic. To qualify, the radiant barrier must have an emittance of 0.05 or less and be certified by the California Bureau of Electronic and Appliance Repair, Home Furnishings and Thermal Insulation and listed in their Consumer Guide and Directory of Certified Insulation material, at [www.bhfti.ca.gov/industry/tinsulation.shtml](http://www.bhfti.ca.gov/industry/tinsulation.shtml).

### What is the cutoff date for **permits** that would comply with the 2008 code?

The date of application and submission needs to be before July 1, 2014.

### What are the requirements for **lift and relay**?

As long as you do not replace more than 1,000 sq. ft. or 50% of the roofing material (whichever is the smaller), then cool roof compliance is not required. However, if the roof sheathing is being replaced, the project would be considered an alteration that would need to follow the prescriptive path as stated by the code.

### What if I am using **multiple colors** on the roof? How do **hand blended tiles** comply?

There is nothing in the code that states you can average the cool roof values of different colors. All products would need to comply with the code individually.

### What qualifies as a **cool roof**?

A cool roof is a roofing material with an Aged Solar Reflective Index (SRI) of 16 or greater, actual or calculated. The products must be listed on the Cool Roof Rating Council website.

### What is a “**solar ready**” roof?

A “solar ready” roof design makes it easier to install photovoltaic or solar thermal panels at a future date. The requirements includes a 250 sq. ft. solar zone (free of penetrations and shade) on single family roof oriented between 100° and 270° of true North, structural design for dead and live loads, locations for inverters and metering equipment, pathway for routing conduit, pathway for routing plumbing, electronic panel requirements, and copy of CD's provided to occupant.

### If a product is listed on **ENERGY STAR®**, does it comply with the code?

No. Energy Star has different requirements for reflectance and NO requirements for emittance. Per Section 10-113 of the Energy Building Regulations, the Cool Roof Rating Council ([www.coolroofs.org](http://www.coolroofs.org)) is the only entity currently recognized by the Energy Commission to determine what qualifies as a cool roof.

### Does a **cool roof** cost more?

Concrete and clay tile have a wide variety of cool roof colors at no added cost.

**Are standard battens an exception to the cool roof requirement?**

No. The batten must elevate the tile at least 1 inch above the deck from the underside of the tile. Elevated battens exceed the new code by lifting the tile more than an inch.

**Are there any lightweight cool roof tiles?**

Yes, there are many cool roof options in sub 600 tiles.

**Are there any alternatives to a cool roof in Climate Zones 10-15?**

- 1) High profile tile
- 2) Elevated battens
- 3) Alterations with less than 50% of the roof being replaced
- 4) Additions of less than 300 square feet
- 5) Insulated and sealed duct work or no ducts in the attic
- 6) R38 insulation in the attic or R4 insulation above the deck

**Can I use the Performance Method with a reroof project?**

Yes, although it may be difficult and expensive for a single project in an existing home.

**Does low-rise residential include 2-story homes?**

Low-rise residential includes:

- 1) All single family dwellings of any number of stories
- 2) All duplex buildings of any number of stories
- 3) All multifamily buildings with 3 or fewer habitable stories
- 4) Additions and alterations to all of the above buildings

**What is the difference between an addition and an alteration?**

Additions are changes to an existing building that increase both conditioned floor area and volume. Additions include conditioning a sunroom, garage, or enclosed patio area. Alterations, that are not additions, are changes to a building's envelope, space conditioning system, water heating system or lighting. Alterations include adding ceiling or roof insulation to an existing roof, constructing a new roof on an existing roof, replacing part or all of roof surface on an existing building, and replacing or adding skylights.

**What is the difference between prescriptive and mandatory requirements in the code?**

The prescriptive path includes installed features as prescribed by climate zone. Mandatory provisions are a set of minimum requirements to which ALL projects must adhere. No trade-offs.

**Is eave-to-ridge venting required with elevated battens?**

No, but if chosen the homeowner could benefit from further energy savings from the roof system.

**Does attic ventilation qualify for a cool roof?**

No. This exception was removed from the 2013 code revision.

**What is a high profile tile, and why is that considered a cool roof option?**

Roofing product profile ratio of rise-to-width is at least 1:5 for >50% of the roofing product width. High profile tile allows free airflow between the tile and the deck.